

DoD
FLIGHT INFORMATION PUBLICATION

AREA PLANNING

MILITARY TRAINING ROUTES

NORTH AND SOUTH AMERICA

20 NOV 2008

NEXT ISSUE 15 JAN 2009

Consult NOTAMS for latest information.



Published by
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
ST. LOUIS, MISSOURI

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NSN 7641014109670
NGA REF. NO. PLANXAP1BBOOK



EFF. DATE 08325

SPECIAL NOTICE

SPECIAL NOTICES: Special Notices pertaining to AP/1B will be carried in this section for two issues. Unless specific written justification for continuance of the Special Notice is received by NGA STL prior to the cut-off for the third issue, the item will be incorporated with other data, if appropriate, or dropped.

INTRODUCTION

GENERAL - AP/1B provides textual and graphic descriptions and operating instructions for all military training routes (IR, VR, SR) and refueling tracks/anchors. Complete and more comprehensive information relative to policy and procedures for IRs and VRs is published in FAA Handbook 7610.4 (Special Military Operation) which is agreed to by DoD and therefore directive for all military flight operations. AP/1B is the official source of route data for military users.

A ++ symbol following Z time hours of operation indicates that during periods of daylight saving time, hours will be one hour earlier than shown. Consult the applicable Enroute Supplement for areas and dates daylight saving time is observed.

POLICY

- A. Avoidance Locations. All IR, VR and SR route segments on which flight below 1500 feet AGL is permitted shall be aligned so that the route width is clear of nuclear power plants which are listed in Chapter 5 of this section.
- B. Special Use Airspace. Route users must obtain permission from the using or controlling agency before entering a MOA or restricted area. Filing a flight plan that penetrates or terminates in special use airspace does not constitute entry clearance.

REVISION CYCLE - AP/1B is revised every 56 days. The schedule, including cutoff and effective dates, is listed in General Planning (GP) Chapter 11.

INTERNET - DAFIF, E-CHUM, Enroute Supplements and Planning Documents available at: <https://www.geointel.nga.mil>

CUSTOMER HELP - For questions concerning this or other NGA products or services, please phone the NGA Operational Help Desk C314-676-0684, DSN 846-0684 or C301-227-7335 or DSN 287-7335.

AMENDMENTS - There are no scheduled Planning Change Notices (PCNs) for this publication.

NEW OR MODIFIED DATA - A vertical line appearing in the margin identifies data added or modified data.

REVISIONS AND QUALITY REPORTS - Forward revisions and quality reports through the appropriate channels shown in GP Chapter 10.

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IFR MILITARY TRAINING ROUTES (IR)

I. General. FAA Order 7610.4 (Special Military Operations) has specific guidance on Military Training Routes. FAA Order 7610.4 is applicable to all DoD personnel including the Reserve Forces and National Guard. The Order is available from the FAA's website at <http://www.faa.gov/atpubs>. Pilots should be familiar with this Order. IR MTRs are mutually developed by DoD and the FAA to provide for military training/RDT&E requirements that cannot be met under the terms of FAR 91.117 (Aircraft Speed). Accordingly, the FAA has issued a speed authorization to DoD to permit aircraft to exceed 250 knots IAS (below 10,000' MSL) within the lateral and vertical confines of published IR MTRs. Each service component (USAF, USN, USMC, USA, and USCG) issues written guidance, procedures, regulations, or instructions (OPNAVINST 3710.S by the USN for example), which cover MTR flying. Pilots are expected to comply with FARs, FAA Order 7610.4, and applicable service guidance when flying IR MTRs. FAA Regional Air Traffic Division Managers may authorize deviations from the provisions of FAA Order 7610.4. These deviations meet an appropriate level of safety and will be explained in the Route Description, Remarks, or Special Operating Procedures.

II. Route Development. IR Routes shall be developed using the procedures and criteria specified in FAA Order 7610.4. IR MTRs that include one or more segments above 1500 feet AGL shall be identified by three number characters, (for example IR-XXX). IR MTRs with no segment above 1500 feet AGL shall be identified by four number characters, (for example IR-XXXX). Developers/Route Originators will ensure that all IR MTRs are displayed on VFR Sectionals, VFR Terminal Area Charts and Area Planning AP/1B Military Training Route Charts (IR routes 1500 feet and above should be charted on Enroute Low and Area Charts). Route Originators will review IR MTR data published in AP/1B and will immediately inform the appropriate authorities when a disparity exists. Route Developers should specify route entry windows in the Remarks/Special Operating Procedures (for example, plus or minus five minutes) in order to ensure aircraft enter on time and provide maximum route deconfliction for other military and civilian pilots.

III. Scheduling and Coordination.

A. Routes shall not be flown unless properly scheduled through the designated originating/scheduling activity listed for that MTR. Normally, a minimum of 2 hours notice is required to ensure civilian and other military users are notified of MTR activation. When scheduling an IR MTR, Automated Flight Service Stations (AFSS) within 100 NM (in some cases more than 100 NM) of the scheduled MTR are notified to provide information to civilian pilots affording the opportunity to avoid the scheduled IR MTR. Military pilots can benefit from this information by contacting the servicing AFSS to view routes that have been activated. On a daily basis and to the maximum extent possible, the MTR Scheduler will confirm (via the tie-in AFSS) the planned utilization of the route. Route Schedulers will confirm that FAA Order 7110.10 (Tie-in AFSS) is complied with. Route Schedulers will provide an hourly schedule for each MTR (route number, aircraft type and number, proposed

entry/exit times, and altitude) and pass changes to the tie-in AFSS if a route closes or aircraft cancellations occur. Route Schedulers shall maintain records of IR MTR usage for the preceding calendar year. Schedulers/Originators of IR MTRs will ensure that users are knowledgeable of route procedures. Pilots are ultimately responsible for compliance with route procedures.

B. Pilots will consult FLIP Area Planning and AP/1B Military Training Route Charts to view route conflicts. This chart is the single source document (IR, VR, SR routes) depicting potential route conflicts. Pilots may consult VFR Sectionals for additional planning information (SR not displayed). Routes displayed on the MTR Chart and Sectionals are "route centerline" only and route widths are not to scale. Enroute low IFR charts do not show 4 digit MTRs or SRs; therefore, do not use enroute IFR charts to deconflict IR MTRs. Pilots should be aware of other MTR users (that pose a hazard to the IR MTR) and associated route times to ensure deconfliction. Pilots will make every effort to contact the Originating/Scheduling Activity for routes that conflict with the planned route. If unable to properly plan/deconflict the IR MTR, **DO NOT FLY THE ROUTE.**

IV. Flight Plans.

A. All IR MTR operations shall be conducted on IFR flight plans or an approved altitude reservation (ALTRV) regardless of weather conditions.

B. Unless agreed to by the ARTCC area where the route originates, each flight plan shall include the following specific information:

1. The published entry/alternate entry fix in terms of fix/radial/distance (FRD), route designator, the published exit/alternate exit fix in terms of FRD, followed by the balance of the route of flight.

Example: SAT263043 IR149 LRD040028

2. The remarks portion (Field 11) of the flight plan shall contain the IR designator, the letter E and a four digit group indicating the Zulu entry time, the letter X and a four digit group indicating the Zulu exit time, and remarks (if applicable). Use no spaces on the first group.

Example: IR149E1520X1600 Exiting Golf

C. When filing IFR flight plans, only place "MARSA" in the remarks section (Field 11) if proper authorization has been received and aircrews intend to accept reduced separation criteria on the route (pre-planning with another aircraft). Base Operations personnel will not add "MARSA" unless requested by the aircrew.

Example: IR148E1617X1705 MARSA

IR ROUTES

- D. Refer to FAA Order 7610.4 for additional procedures and examples for complex routes such as Strategic Training Range sites with multiple reentries or flights that cross a center boundary after completion of an IR MTR.

V. In Flight.

A. Entry/Exit.

1. All entries and exits shall be accomplished at published entry/exit points or alternate entry/exit points.
2. Pilots shall:
 - a. Obtain a specific ATC clearance prior to entering the route.
 - b. Obtain an ATC exit clearance prior to exiting the route where ATC radio coverage is available. If ATC radio coverage is not available do not exceed the last assigned or expected IFR clearance until contact is available. An IFR exit clearance may be contained in a letter of agreement between the Route Originator and the associated ATC facility.
 - c. Inform the ATC facility if any action on the part of the controller compromises entry procedures for the route. For example, if unable to enter the route within established time limits, it shall be the responsibility of the pilot to inform the ATC facility of potential impact to other aircraft and advise of intentions. ATC facilities should not deny the use of IR MTRs.

B. Route Adherence.

1. Pilots shall remain within the lateral and vertical confines of the published route at all times. IR MTRs are one-way routes and course reversals are not authorized (LOWAT ROE in paragraph 6 below).
2. When practicable, avoid flight within 1500 feet AGL or 3 NM of airports. Always comply with Special Operating Procedures or Remarks.
3. Pilots flying an IR MTR are responsible for maintaining obstacle clearance, terrain avoidance and compliance with applicable service directions regardless of the route's published altitudes.
4. Unless the route segment is annotated "For use in VMC conditions only," each route segment shall contain an altitude that is suitable for flight in IMC. This shall be referred to as the IFR altitude and may be contrary to FAR 91.177 (Minimum Altitude for IFR Operations). For example, when specifically authorized by appropriate military authority, altitudes below MEA or standard obstacle clearance may be used. In no case will flight operations, be conducted at altitudes less than those specified in FAR 91.119 (Minimum Safe Altitudes; General). In the absence of a specified IFR altitude, it is defined as the top of published block of altitudes.
5. Altitudes at which "Terrain Following" is authorized **MAY NOT** guarantee obstacle clearance (regardless of weather conditions) or permit compliance with applicable service guidance. Pilots intending to terrain follow in IMC should consult their command guidance

and the route scheduler to determine the lowest permissible altitude at which the flight may be safely conducted.

6. LOWAT (Low Altitude Air-to Air Training). Do not conduct LOWAT on IR MTRs unless the route is clearly identified as a LOWAT route. LOWAT provisions must be on file in a letter of agreement between the ATC facility and the military unit. No more than a 90-degree turn will be performed and LOWAT maneuvers will be terminated as soon as visual and/or radio contact is established. Ceiling and visibility minimums at the maneuvering altitude shall be 1500 feet and 3 miles. Aircraft will only perform LOWAT training if equipped with sophisticated operating airborne radar systems.
 7. Route users must obtain permission from the using or controlling agency before entering a restricted area. Pilots will ensure an IFR flight plan and permission has been coordinated if flying an IR MTR that terminates in a restricted area.
- C. Speed. Flights shall be conducted at the minimum speed compatible with mission requirements. When not established on the published route, comply with FAR 91.117 (Aircraft Speed) or the current exemption granted to DoD (FAA Order 7610.4, Appendix 18).
- D. Weather. Routes may be flown in IMC conditions unless otherwise specified in the route description or as required for MARSAs/other mission requirements.
- E. Communications.
1. Maintain the frequency assigned by the ATC facility during the IR MTR or as directed in the Remarks/Special Operating Procedures for the MTR.
 2. In the event of communications failure (unless otherwise agreed to in a letter of agreement) the pilot shall:
 - a. If VMC and able to maintain VFR cloud clearances after the failure, continue the flight VFR and land as soon as practicable.
 - b. If IMC or if paragraph a. cannot be complied with, maintain route to the exit fix, the higher of the following:
 - (1) The IFR altitude for each of the remaining route segments.
 - (2) The highest altitude assigned in the last ATC clearance.
 - c. Depart the filed exit point at the altitude determined above, then climb/descend to the altitude filed in the flight plan for the remainder of the flight.
 - d. Squawk Mode 3 Code 7600 until communications are reestablished and comply with the Flight Information Handbook.
- F. Transponder. Pilots will squawk the ATC assigned code for IR MTRs.

VI. Aircraft Separation.

- A. To the maximum extent practicable, IR MTRs should be established for standard ATC services and separation. Expect standard IFR separation between two or more aircraft on the same or intersecting IR MTRs within controlled airspace. ATC radio coverage may not always be provided. If flying IR MTRs below or outside radio coverage, aircrews should be aware that there is reduced opportunity to avoid other traffic (VFR/IFR, military or civilian) that may also be operating below ATC radio/radar coverage. Separation from VFR aircraft, VR MTR, or SR users will always be provided on a controller workload-permitting basis. Pilots are always responsible to “see and avoid” when on an IR MTR in VMC.

- B. If paragraph A. cannot be complied with, a route may be designated for MARSAs operations. These MARSAs procedures will be contained in a letter of agreement and published in the narrative description of the route. ATC does not invoke or deny MARSAs and ATC’s sole responsibility is to provide separation between participating MARSAs military aircraft and the non-participating (usually civilian) IFR aircraft. If flying a MARSAs route and a time is not entered (or as specified in the Remarks/Special Operating Procedures) the pilot is responsible to advise ATC of intentions.

IR ROUTES

IR-002

ORIGINATING ACTIVITY: 20 OSS/OSOA, Shaw AFB, SC 29152-5000 DSN 965-1121/1122, C 803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152 Duty hrs DSN 965-1118/1119, C803-895-1118/1119. Non duty hrs DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------------|----|--------------|--------------------------|
| Cross at 60 MSL to | A | VXV 288/38 | N36°04.00' W84°39.00' |
| 05 AGL B 60 MSL to | B | VXV 332/42 | N36°30.00' W84°20.00' |
| 01 AGL B 60 MSL to | C | VXV 015/34 | N36°28.00' W83°45.00' |
| 01 AGL B 60 MSL to | D | VXV 065/34 | N36°10.00' W83°17.00' |
| 03 AGL B 60 MSL to | E | VXV 082/31 | N36°00.00' W83°16.00' |
| 03 AGL B 90 MSL to | F | VXV 102/33 | N35°49.00' W83°14.00' |
| 03 AGL B 90 MSL to | G | VXV 115/37 | N35°40.00' W83°11.50' |
| 03 AGL B 90 MSL to Exit at 90 MSL | H | VXV 124/41 | N35°33.00' W83°10.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to H.

ROUTE WIDTH - 5 NM either side of centerline for the entire route.

Special Operating Procedures:

- (1) Monitor Atlanta ARTCC on 254.3 at B.
- (2) Contact Atlanta ARTCC on 269.5 passing F. If no contact, try Asheville APP CON on 351.8 124.65 for further IFR clearance.
- (3) CAUTION: Heavy civil IFR traffic crossing on V-16, V-185, V-136 immediately above route altitude block D to H. NOTE: Knoxville Approach Control has very good radar coverage in this area (frequency 360.8/353.6).
- (4) CAUTION: Hang Glider Activity: N36-26.7 W84-02.7, N36-15.0 W83-38.0, N36-22.0 W83-22.0, N35-54.5 W83-17.8.
- (5) CAUTION:
 - (a) Tower cluster 250' AGL (3779' MSL) N35-54.0 W83-18.2.
 - (b) Tower 300' AGL (1500' MSL) N36-08.8 W83-13.3.
- (6) CAUTION: IR-743/VR-1743 same direction E to H (Deconflict with 20 OSS/OSOS).
- (7) Include route entry/exit times in the remarks section of flight plan.
- (8) Make entry times plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
- (9) CAUTION: Tower cluster 200' AGL (2300' MSL) N36-33.8 W84-07.4.
- (10) Caution: 10 towers at:

- (a) 200' AGL N36-16.93 W84-28.28;
- (b) 250' AGL N36-24.11 W83-38.40;
- (c) 250' AGL N36-12.08 W83-22.12;
- (d) 250' AGL N36-26.95 W83-35.98;
- (e) 250' AGL N36-32.06 W83-42.79;
- (f) 250' AGL N35-50.20 W83-09.30;
- (g) 250' AGL N35-46.10 W83-16.70;
- (h) 250' AGL N35-46.90 W83-14.80;
- (i) 250' AGL N35-48.01 W83-14.70;
- (j) 250' AGL N35-59.85 W83-13.17.

FSS's Within 100 NM Radius:

AND, BNA, HUA, LOU

IR-012

ORIGINATING ACTIVITY: 4 OSS/OSR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672.

SCHEDULING ACTIVITY: 4 OSS/OSOSF, Seymour Johnson AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non-duty hours DSN 722-2679, C919-722-2679.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| As assigned to | A | ILM 277/20 | N34°21.00' W78°17.00' |
| 05 AGL B 30 MSL to | B | ILM 335/32 | N34°48.00' W78°13.00' |
| 05 AGL B 30 MSL to | C | ILM 013/37 | N34°58.00' W77°48.00' |
| 05 AGL B 30 MSL to | D | NKT 316/30 | N35°12.00' W77°22.00' |
| 05 AGL B 30 MSL to | E | NKT 020/24 | N35°18.00' W76°47.00' |
| 20 MSL to | F | NKT 031/29 | N35°21.00' W76°39.00' |
| 20 MSL to | G | NKT 039/52 | N35°39.00' W76°21.00' |
| 20 MSL to Alternate Exit from E to R-5306A | H | NKT 041/55 | N35°41.00' W76°16.50' |
| 05 AGL B 30 MSL to | E1 | NKT 020/24 | N35°18.00' W76°47.00' |
| 15 AGL B 30 MSL to | FA | NKT 030/24 | N35°16.50' W76°42.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to E, and from A to FA.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 4 NM either side of centerline from B to E; 3 NM left and 1 NM right of centerline from E to F; 3 NM left of centerline from F to abeam the NKT 035/34 (N35-25.0 W76-35.3), then 3 NM either side of centerline to H.

Special Operating Procedures:

- (1) CAUTION: Numerous large towers along route.
- (2) Monitor Wilmington Approach 284.65 346.35 passing A.

- (3) Contact Seymour Johnson APP CON (273.6) at B.
- (4) Contact Cherry Point Approach (374.9) passing D.
- (5) Alternate Exit E will be filed and utilized unless prior clearance has been coordinated to enter R-5314 or R-5306A.
- (6) IFR clearance must be received before departing R-5314 (Washington 272.75) or R-5306A (Cherry Point 268.7).
- (7) Alternate Entry: B.
- (8) Alternate Exit: E1 and FA.
- (9) Minimum exit altitude for the alternate exit route is 1500' AGL.
- (10) Avoid: Overflight of towns east of D by 1 NM.
- (11) CAUTION: VR-1043 (Deconflict DSN 582-4040/4041) and VR-1069 (Deconflict DSN 583-8231) crosses right to left A and B.
- (12) CAUTION: IR-062 crosses left to right A to B and crosses right to left B to C. (Deconflict DSN 433-1228).
- (13) CAUTION: VR-1074 same direction C to F. (Deconflict DSN 488-6565).
- (14) CAUTION: VR-1046 crosses right to left C to D and crosses left to right D to E. (Deconflict DSN 582-4040/4041).
- (15) Avoid: Lake Mahamuskeet, Pungo Lake, Swan Quarter National Wildlife Refuges by 2000' AGL.
- (16) Caution 5 towers;
 - (a) 310' AGL (390' MSL) at N34-48.9 W78-03.0;
 - (b) 800' AGL (900' MSL) at N34-55.5 W78-04.4;
 - (c) 500' AGL (560' MSL) at N35-08.5 W77-30.5;
 - (d) 649' AGL (655' MSL) at N35-17.4 W76-45.6;
 - (e) 350' AGL (500' MSL) at N34-55.5 W78-05.7;
 - (f) 350' AGL (400' MSL) at N35-16.3 W77-10.2.
- (17) Avoid uncharted 3000' private grass strip at N35-12.3 W77-09.0.
- (18) Avoid: Noise Sensitive Areas;
 - (a) N35-12.8 W77-11.3; by 1000' AGL/2 NM.
 - (b) N35-01.5 W77-38.0; by 1000' AGL/1 NM.
- (19) Unpublished towers found by surveys 200' AGL and above are in this SOP.

FSS's Within 100 NM Radius:
RDU

IR-015

ORIGINATING ACTIVITY: 347 OSS/OSKA, Moody AFB, GA 31699-1899 DSN 460-4131, C229-257-4131.

SCHEDULING ACTIVITY: 23 OSS/OSOS, Moody AFB, GA 31699-1899 Mon-Fri 0730-1630L exc holidays DSN 460-7831/7839 C229-257-7831/7839. Mon-Fri 0830-1700L, except hol.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------------------------|----|--------------|--------------------------|
| Cross at 20 MSL to or as assigned | A | SZW 092/21 | N30°32.00' W83°58.00' |
| 05 AGL B 20 MSL to | B | SZW 141/39 | N30°02.00' W83°55.00' |
| 05 AGL B 50 MSL to 05 AGL - 70 MSL | C | SZW 176/31 | N30°02.00' W84°21.00' |
| as assigned to | D | SZW 235/19 | N30°23.00' W84°41.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 05 AGL B 50 MSL to | E | SZW 265/31 | N30°31.50' W84°58.00' |
| 05 AGL B 50 MSL to | F | PFN 034/28 | N30°36.00' W85°23.00' |
| 05 AGL B 50 MSL to | G | PFN 343/21 | N30°33.00' W85°48.00' |
| 05 AGL B 50 MSL to | H | DWG 058/18 | N30°38.00' W86°14.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to C and D to H within published altitudes. Aircraft equipped with terrain following equipment may descend in IMC conditions.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM left and 2 NM right from B to C; 5 NM either side of centerline from C to D; 3 NM either side of centerline from D to E; 3 NM left and 4 NM right from E to G; 5 NM either side of centerline from G to H.

Special Operating Procedures:

- (1) Tie-in FSS: Macon (MCN).
- (2) Alternate Entry: B and C.
- (3) Alternate Exit E filed and utilized unless scheduled for R-2914A. Alternate Exit F authorized only with scheduled use of Tyndall C MOA.
- (4) Altitudes up to 7000' MSL for maneuvers between C and D are available when approved by Tallahassee APP CON 250' AGL (3779' MSL). Contact Tallahassee APP CON at A and request maneuver area.
- (5) Report over D to Tallahassee APP CON. Report over E to Tyndall APP CON.
- (6) Climb and maintain 2000' MSL at C until passing Hwy 319, noise sensitive area.
- (7) At E climb to cross the Appalachicola River at 1500' MSL. Remain at 1500' MSL until past F, noise sensitive area.
- (8) Route entry/exit times must be met plus/minus five minutes or route must be rescheduled.
- (9) CAUTION: IR-019 crosses this route from NW to SE between B and C.
- (10) CAUTION: This route crosses, overlaps or runs parallel with IR-017 between E and H. Call 187 FW, DSN 358-9255 to deconflict.
- (11) CAUTION: IR-059 runs opposite direction to IR-015 between E and H. IR-057 parallels IR-015 between E and H. Call 16 OSS Hurlburt Field DSN 579-6877/7812 to deconflict.
- (12) B to H is authorized for unmanned aerospace vehicle operations.
- (13) Do not overfly town of Miccosukee, FL N30-35 W84-02. Extreme noise sensitive area.
- (14) CAUTION: Route penetrates western edge of Tallahassee Class C Airspace between Point C and Point D.

FSS's Within 100 NM Radius:
GNV, OZR

IR-016

ORIGINATING ACTIVITY: 347 OSS/OSKA, Moody AFB, GA 31699-1899 DSN 460-4131, C229-257-4131.

IR ROUTES

SCHEDULING ACTIVITY: 23 OSS/OSOS, Moody AFB, GA 31699-1899 DSN 460-7831/7839 C229-257-7831/7839. Mon-Fri 0830-1700L, except hol.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| Cross at 20 MSL to | A | VAD 353/40 | N31°37.50' W83°20.00' |
| 03 AGL B 20 MSL to | B | VAD 023/20 | N31°17.00' W83°03.50' |
| 03 AGL B 20 MSL to | C | TAY 332/33 | N30°59.00' W82°53.00' |
| 03 AGL B 60 MSL to | D | TAY 309/17 | N30°40.50' W82°49.50' |
| 03 AGL B 20 MSL to | E | TAY 243/23 | N30°19.00' W82°56.00' |
| 03 AGL B 60 MSL to | F | GNV 302/39 | N30°00.00' W82°56.00' |
| 03 AGL B 60 MSL to | G | GNV 306/27 | N29°56.00' W82°43.00' |
| 40 MSL B 60 MSL to | H | GNV 334/17 | N29°56.00' W82°26.00' |
| 40 MSL B 50 MSL to | I | GNV 060/10 | N29°47.00' W82°07.00' |
| 40 MSL B 60 MSL to | J | GNV 096/24 | N29°40.50' W81°49.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to G IAW Command directives.

ROUTE WIDTH - 8 NM either side of centerline from A to D; 3 NM right and 4 NM left from D to E; 7 NM right and 12 NM left from E to F; 4 NM either side of centerline from F to J.

Special Operating Procedures:

- (1) Tie-in FSS: Macon (MCN).
- (2) Cross A at 2000' MSL, maintain 2000' MSL until south of Ocilla, GA.
- (3) Alternate Entry: D.
- (4) Alternate Exit: D and F.
- (5) Route segment from F to J is authorized only for aircraft scheduled to enter R-2903, R-2906 or R-2907.
- (6) Contact Valdosta APP CON 259.3 prior to B for clearance into Moody 2 MOA.
- (7) Maneuvering between C and D is permitted when approved by Valdosta APP CON.
- (8) Climb to 1000' MSL approaching I-75 prior to E. Maintain 1000' AGL minimum until required to climb at G.
- (9) Altitudes up to 6000' MSL for maneuvers between E and F are available when approved by Jacksonville Center.
- (10) Contact Jacksonville Center 385.6 for clearance to maneuver between E and F.
- (11) Cross G at 4000' MSL or as assigned.
- (12) CAUTION: IR-023 crosses IR-016 from north to south at H. Call Cherry Point MCAS, DSN 582-4040/4041 to deconflict.
- (13) Route entry/exit times must be met plus/minus 5 minutes or route must be rescheduled.
- (14) USE EXTREME CAUTION: VR-1066 (23 OSS/OSOS DSN 460-7831) and VR-1002/1003 (FACSFAC JAX DSN 942-2004/2005) run opposite direction between Points A and D.

FSS's Within 100 NM Radius:

GNV, MCN, PIE

IR-017

ORIGINATING ACTIVITY: 187 FW, 5187 Selma Highway, Montgomery, AL 36108-4824 DSN 358-9255, C334-394-7255.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------------------------|----|--------------|--------------------------|
| Cross at 30 MSL to | A | MGM 093/38 | N32°09.00' W85°35.00' |
| 05 AGL B 30 MSL to | B | EUF 168/4 | N31°53.00' W85°07.00' |
| 05 AGL B 30 MSL to | C | MAI 053/11 | N30°54.00' W84°57.00' |
| 05 AGL B 30 MSL to | D | MAI 128/15 | N30°38.00' W84°54.00' |
| 05 AGL B 20 MSL to | E | SZW 271/31 | N30°35.00' W84°58.00' |
| 05 AGL B 20 MSL to | F | PFN 034/28 | N30°36.00' W85°23.00' |
| 05 AGL B 20 MSL to | G | PFN 343/21 | N30°33.00' W85°48.00' |
| 05 AGL B 20 MSL to Alternate Exit: | H | DWG 058/18 | N30°38.00' W86°14.00' |
| 30 MSL to | D1 | MAI 128/15 | N30°38.00' W84°54.00' |
| 30 MSL to | AA | MAI 141/26 | N30°26.80' W84°48.50' |
| 30 MSL to | AB | MAI 141/40 | N30°15.80' W84°38.30' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 4 NM west and 5 NM east of centerline from C to D; 5 NM either side of centerline from D to E; 4 NM north and 3 NM south of centerline from E to G; 5 NM either side of centerline from G to H. (Alternate Exit) 4 NM either side of centerline from D1 to AB.

Special Operating Procedures:

- (1) Noise sensitive area A-B; maintain 1000' AGL minimum until 13 NM past A.
- (2) Avoid Schools/Eufaula N31-52.4 W85-08.0/N31-51.0 W85-09.5.
- (3) Hazard B-C; high density helio traffic this leg. Remain east of Chattahoochee River to the maximum extent possible. Noise sensitive area B-C; maintain 1000' AGL minimum from 10 NM north of C to C. Avoid (horse farm) N31-17.0 W85-03.0 by 1500' AGL or 4 NM. No overflight (Farley Nuclear Plant) N31-13.4 W85-06.7.
- (4) Hazard D-E; Avoid (Arpt/Altha FL) N30-53.3 W85-04.2 by 1500' AGL or 3 NM.
- (5) Hazard E-F; Avoid (crop dusting airstrips) N30-36.1 W85-05.5/N30-36.1 W85-08.4.
- (6) Hazard F-G; Tower 499' AGL N30-36.6 W85-27.1.

- (7) Alternate Exit AB shall be filed and utilized unless scheduled into R-2914. File A-AB as IR-017A. Alternate Exit lost communications procedure: Pass AB, climb to 10,000' MSL on MAI 139 left turn on course.
- (8) Contact Atlanta Large TRACON APP CON 278.5 for entry.
- (9) Contact Cairns APP CON 234.4 at B.
- (10) Contact Tallahassee APP CON on 254.3/317.4 at D for exit clearance if utilizing Alternate Exit AB.
- (11) Contact Tyndall APP CON on 373.0 at E.
- (12) Contact Eglin Mission Control on 262.3 prior to G for clearance into R-2914A.
- (13) Concentrated bird activity along the Chattahoochee River. Crop dusting activity is intense during summer and early fall.
- (14) CAUTION: This route crosses, overlaps or runs parallel with IR-015 and VR-1065.
- (15) Special Activity hours of operation: 0700-1730 central time Tue-Fri, occasional weekends. To schedule use on Sat, Sun, Mon or Tue AM, coordinate prior to 1600 central time on previous Fri.

FSS's Within 100 NM Radius:
ANB, GNV, MCN

IR-018

ORIGINATING ACTIVITY: FACSFAC JAX, NAS Jacksonville, FL 32212 DSN 942-2004/2005, C904-542-2004/2005, AUTO BRIEF-DSN 942-2275, C904-542-2275.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2400 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SAV 120/29 | N31°57.00' W80°41.00' |
| 50 MSL B 70 MSL to | B | CHS 013/20 | N33°14.00' W79°59.00' |
| 50 MSL B 70 MSL to | C | CHS 356/30 | N33°23.00' W80°08.00' |
| 50 MSL B 70 MSL to | D | IRQ 148/57 | N32°56.00' W81°30.00' |
| 50 MSL B 70 MSL to | E | AMG 028/16 | N31°46.00' W82°22.00' |
| 50 MSL B 70 MSL to | F | SSI 296/44 | N31°19.00' W82°14.00' |
| 50 MSL B 70 MSL to | G | SSI 003/17 | N31°20.00' W81°27.00' |
| 50 MSL B 70 MSL to | H | SSI 069/19 | N31°11.00' W81°07.00' |
| 50 MSL B 70 MSL to | I | CRG 118/24 | N30°10.00' W81°05.00' |

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: F.
- (2) Alternate Exit: E.
- (3) Altitudes assigned by ATC.
- (4) Radar system navigation (SN).

FSS's Within 100 NM Radius:
AND, GNV, MCN, PIE

IR-019

ORIGINATING ACTIVITY: FACSFAC JAX, NAS Jacksonville, FL 32212 DSN 942-2004/2005, C904-542-2004/2005, AUTO BRIEF-DSN 942-2275, C904-542-2275.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2400 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | TAY 163/18 | N30°13.00' W82°26.00' |
| 40 MSL B 70 MSL to | B | GEF 116/14 | N30°27.00' W83°33.00' |
| 40 MSL B 70 MSL to | C | GEF 024/37 | N31°07.00' W83°29.00' |
| 40 MSL B 70 MSL to | D | PZD 061/23 | N31°51.00' W83°55.00' |
| 40 MSL B 70 MSL to | E | PZD 315/10 | N31°46.00' W84°26.00' |
| 40 MSL B 70 MSL to | F | RRS 041/27 | N31°37.00' W85°04.00' |
| 40 MSL B 70 MSL to | G | RRS VORTAC | N31°17.07' W85°25.87' |
| 40 MSL B 70 MSL to | H | SZW 328/24 | N30°54.00' W84°36.00' |
| 40 MSL B 70 MSL to | I | SZW 158/31 | N30°04.00' W84°10.00' |
| 40 MSL B 70 MSL to | J | CTY 098/6 | N29°35.00' W82°56.00' |
| 40 MSL B 70 MSL to | K | GNV 020/14 | N29°55.00' W82°12.00' |

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Altitudes assigned by ATC.
- (2) Radar vector from K to destination or may continue to R-2903B.
- (3) Radar navigation (SN).

FSS's Within 100 NM Radius:
ANB, GNV, MCN, PIE

IR-020

ORIGINATING ACTIVITY: FACSFAC JAX, NAS Jacksonville, FL 32212 DSN 942-2004/2005, C904-542-2004/2005, AUTO BRIEF-DSN 942-2275, C904-542-2275.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2400 local daily

IR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | PIE 199/10 | N27°45.00' W82°45.00' |
| 60 MSL B 80 MSL to | B | PIE 188/28 | N27°27.00' W82°46.00' |
| 60 MSL B 80 MSL to | C | RSW 308/26 | N26°47.00' W82°10.00' |
| 60 MSL B 80 MSL to | D | PHK 229/3 | N26°45.00' W80°44.00' |
| 60 MSL B 80 MSL to | E | VRB 108/7 | N27°39.00' W80°22.00' |
| 60 MSL B 80 MSL to | F | ORL 110/33 | N28°21.00' W80°45.00' |
| 60 MSL B 80 MSL to | G | OMN 161/29 | N28°50.90' W80°56.10' |
| 60 MSL B 80 MSL to | H | OMN 141/8 | N29°12.00' W81°01.00' |
| 60 MSL B 80 MSL to | I | OMN 327/48 | N29°59.00' W81°37.00' |
| Alternate Exit: | | | |
| 60 MSL B 80 MSL to | H1 | OMN 141/8 | N29°12.00' W81°01.00' |
| 60 MSL B 80 MSL to | AA | OMN 266/15 | N29°17.00' W81°24.00' |
| 60 MSL B 80 MSL to | AB | OMN 252/26 | N29°10.00' W81°35.00' |

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Radar system navigation (SN).

FSS's Within 100 NM Radius:

GNV, MIA, PIE

IR-021

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL

32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri,

occasionally on weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------|----|--------------|--------------------------|
| As assigned to | A | NSE TACAN | N30°43.44' W87°01.08' |
| 90 MSL-100MSL | | | |
| as assigned to | B | CEW 054/21 | N31°01.00' W86°20.00' |
| 50 MSL-110MSL | | | |
| as assigned to | C | RRS 193/20 | N30°58.00' W85°32.00' |
| 50 MSL-110MSL | | | |
| as assigned to | D | MAI 167/22 | N30°26.00' W85°02.00' |
| 50 MSL-110MSL | | | |
| as assigned to | E | SZW 179/35 | N29°58.00' W84°23.00' |
| 50 MSL-110MSL | | | |
| as assigned to | F | MAI 122/14 | N30°40.00' W84°54.00' |
| 70 MSL-100MSL | | | |

| | | | |
|----------------|---|------------|--------------------------|
| as assigned to | G | EUF 198/5 | N31°52.00' W85°10.00' |
| 70 MSL-100MSL | | | |
| as assigned to | H | MXF 053/29 | N32°41.00' W85°55.00' |
| 70 MSL-100MSL | | | |
| as assigned to | I | MXF 008/17 | N32°40.00' W86°20.00' |
| 70 MSL-100MSL | | | |
| as assigned to | J | MGM 316/6 | N32°18.00' W86°24.00' |
| 70 MSL-100MSL | | | |
| as assigned to | K | MGM 172/30 | N31°43.00' W86°16.00' |
| 70 MSL-100MSL | | | |
| as assigned to | L | CEW 013/36 | N31°24.00' W86°29.00' |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
- (2) Request 10,000' MSL from A to B, 7,000' MSL from B to L.
- (3) Advise controller when making turns in excess of 20 degrees.
- (4) Radar system navigation (SN).
- (5) Alternate Entry/Exit: F.
- (6) Conflict: (Deconflict with the appropriate Scheduling Activity)
 - (a) Crosses IR-015 between Points C-D and E-F
 - (b) Crosses IR-019 between Points F-G.

FSS's Within 100 NM Radius:

ANB, GNV, MCN, PIE

IR-022

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL

32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ weekdays,

occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| As assigned to | A | SDZ VORTAC | N35°12.93' W79°35.28' |
| 90 MSL-100 MSL | | | |
| as assigned to | B | SDZ 276/26 | N35°14.00' W80°07.00' |
| 90 MSL B 100 MSL to | C | HMV 132/65 | N35°46.00' W81°05.00' |
| as assigned to | D | HMV 116/48 | N36°08.00' W81°13.00' |
| 90 MSL-100 MSL | | | |
| as assigned to | E | HMV 186/6 | N36°20.00' W82°08.00' |
| 90 MSL-100 MSL | | | |
| as assigned to | F | SOT 037/22 | N36°06.00' W82°48.00' |
| 100 MSL to | G | SPA 291/41 | N35°15.00' W82°43.00' |
| 100 MSL to | H | ELW 346/24 | N34°48.00' W82°54.00' |

100 MSL to I ODF 247/2 N34°41.00'
W83°20.00'

100 MSL to J ELW 201/4 N34°21.00'
W82°49.00'

40 MSL to G GNV 150/1 N29°41.00'
W82°16.00'

40 MSL to H OCF 098/27 N29°07.00'
W81°43.00'

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
- (2) Request 10,000' MSL from A to F.
- (3) Advise ATC when making a turn in excess of 20 degrees within the route width.
- (4) Radar system navigation (SN).
- (5) Alternate Entry Point: C
- (6) Alternate Exit: G and H
- (7) Conflicts: (Deconflict with the appropriate Scheduling Activity)
 - (a) Opposite direction to IR-079 between Points E and F. Parallels opposite direction from Points F to G.
 - (b) Opposite direction to IR-080 between Points E and F. Parallels opposite direction from Points F to G.
 - (c) Crosses IR-081 between Points D and E.
 - (d) Crosses IR-082 between Points F and G.
 - (e) Opposite direction to IR-083 from Points C to D. Crosses between Points F and G and at Point I.
 - (f) Crosses IR-723 between Points D and E.
 - (g) Crosses IR-726 between Points D and E.

FSS's Within 100 NM Radius:

ANB, AND, BNA, MCN, RDU

IR-023

ORIGINATING ACTIVITY: CG MCAS CHERRY POINT, ATTN RAC-DIOPS, Cherry Point, NC 28533 DSN 582-3466, C252-466-3466.

SCHEDULING ACTIVITY: Central Scheduling Division, MCAS Cherry Point, NC 28533 DSN 582-4040/4041, C252-466-4040/4041.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SAV 300/42 | N32°26.00' W81°57.00' |
| 01 AGL B 30 MSL to | B | SAV 271/44 | N32°05.00' W82°03.00' |
| 01 AGL B 30 MSL to | C | AMG 048/28 | N31°51.00' W82°06.00' |
| 01 AGL B 30 MSL to | D | AYS 098/29 | N31°12.00' W82°00.00' |
| 01 AGL B 40 MSL to | E | TAY 187/11 | N30°19.00' W82°34.00' |
| 40 MSL to | F | TAY 197/18 | N30°13.00' W82°38.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to F.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: D.
- (2) Alternate Exit: B, D and G.
- (3) When terrain following avoid Reedsville, GA Arpt N32-04 W82-09 by 5 NM; Jessup, GA Arpt N31-33 W81-53 by 7 NM. Maintain 2000' AGL over Okefenokee National Wildlife Refuge.
- (4) Avoid R-2907B.
- (5) If not scheduled into R-2910, exit at G.
- (6) Minimum alt 100' AGL for terrain following.
- (7) Radar systems navigation (SN).
- (8) Between C-D Antenna 1032' AGL N31-09.4 W81-58.3.
- (9) At B contact ZJX ARTCC 290.4.
- (10) Antenna 1 NM NE of A at 370'AGL (595' MSL) N32-26.7 W81-58.1.

FSS's Within 100 NM Radius:

AND, GNV, MCN, PIE

IR-026

ORIGINATING ACTIVITY: FACSFACJAX, PO Box 40, NAS Jacksonville, FL 32212-0040 DSN 942-2004/2005 C904-542-2004/2005.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| 40 MSL B 100 MSL to | A | STT 346/26 | N18°45.00' W65°12.50' |
| 40 MSL B 100 MSL to | B | STT 224/8 | N18°15.00' W65°06.00' |
| 30 MSL B 100 MSL to | C | STT 194/21 | N18°00.00' W65°03.00' |
| 20 MSL B 40 MSL to | D | STT 219/20 | N18°04.00' W65°11.60' |

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) This route is to be used for flight of an unmanned aerospace vehicle only.

FSS's Within 100 NM Radius:

SJU

IR ROUTES

IR-027

ORIGINATING ACTIVITY: FACSFACJAX, PO Box 40, NAS Jacksonville, FL 32212-0040 DSN 942-2004/2005 C904-542-2004/2005.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 20 MSL B 40 MSL to | A | STT 228/44 | N17°47.00' W65°30.00' |
| 20 MSL B 40 MSL to | B | STT 234/32 | N17°58.50' W65°25.00' |

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) This route to be used for flight of an unmanned aerospace vehicle only.

FSS's Within 100 NM Radius:

SJU

IR-030

ORIGINATING ACTIVITY: Commander Naval Air Warfare Center, Weapons Division, Code 52911GE, NAWS, Point Mugu NAWS, CA 93042-5008 DSN 351-7545, C805-989-7545.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours only, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 40 MSL B 60 MSL to | A | CEW 143/38 | N30°18.30' W86°16.60' |
| 40 MSL B 60 MSL to | A1 | CEW 135/29 | N30°27.70' W86°17.80' |
| 40 MSL B 60 MSL to | A2 | CEW 121/23 | N30°36.90' W86°19.10' |
| 05 AGL B 60 MSL to | B | CEW 107/19 | N30°43.50' W86°20.00' |
| 05 AGL B 40 MSL to | C | CEW 073/15 | N30°53.00' W86°24.20' |
| 05 AGL B 40 MSL to | D | CEW 019/18 | N31°06.00' W86°33.00' |
| 05 AGL B 40 MSL to | E | CEW 009/21 | N31°10.00' W86°35.70' |
| 05 AGL B 40 MSL to | F | MVC 091/32 | N31°25.00' W86°44.00' |
| 05 AGL B 40 MSL to | G | MVC 022/32 | N31°56.00' W87°05.00' |
| 05 AGL B 40 MSL to | H | MVC 296/19 | N31°37.00' W87°40.00' |
| 05 AGL B 40 MSL to | I | MVC 248/27 | N31°19.20' W87°51.50' |

| | | | |
|--------------------|---|------------|--------------------------|
| 05 AGL B 40 MSL to | J | MVC 244/28 | N31°16.80' W87°51.70' |
| 05 AGL B 40 MSL to | K | MVC 212/20 | N31°11.30' W87°34.80' |
| 05 AGL B 40 MSL to | L | MVC 131/21 | N31°13.00' W87°04.00' |
| 05 AGL B 40 MSL to | M | CEW 010/18 | N31°07.00' W86°36.00' |
| 05 AGL B 40 MSL to | N | CEW 020/18 | N31°06.00' W86°33.00' |
| 05 AGL B 40 MSL to | O | CEW 074/15 | N30°53.00' W86°24.20' |
| 05 AGL B 40 MSL to | P | CEW 106/19 | N30°43.50' W86°20.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from E to M.

ROUTE WIDTH - 5 NM either side of centerline A to B and C to O; 2 NM west side and 5 NM east side of centerline B to C and O to P.

Special Operating Procedures:

- (1) For use in VMC only.
- (2) Route continuation from M to E authorized.
- (3) Alternate Entry/Exit: A, B and P.
- (4) Altitude restrictions between D and E 500' AGL-4000' MSL Sat-Sun, or Mon-Fri 1100-1300L, with prior coordination. Otherwise altitude restriction 1500' AGL-4000' MSL.
- (5) Alternate Entry/Exit: D and N.

FSS's Within 100 NM Radius:

ANB, DRI

IR-031

ORIGINATING ACTIVITY: Commander Naval Air Warfare Center, Weapons Division, Code 52911GE, NAWS, Point Mugu NAWS, CA 93042-5008 DSN 351-7545, C805-989-7545.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours only, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 40 MSL B 60 MSL to | A | CEW 143/38 | N30°18.30' W86°16.60' |
| 40 MSL B 60 MSL to | A1 | CEW 135/29 | N30°27.70' W86°17.80' |
| 40 MSL B 60 MSL to | A2 | CEW 121/23 | N30°36.90' W86°19.10' |
| 05 AGL B 60 MSL to | B | CEW 107/19 | N30°43.50' W86°20.00' |
| 05 AGL B 40 MSL to | C | CEW 073/15 | N30°53.00' W86°24.20' |
| 05 AGL B 40 MSL to | D | CEW 019/18 | N31°06.00' W86°33.00' |
| 05 AGL B 40 MSL to | E | CEW 010/18 | N31°07.00' W86°36.00' |

| | | | | | | | |
|--------------------|---|------------|--------------------------|--------------------|---|------------|--------------------------|
| 05 AGL B 40 MSL to | F | MVC 131/21 | N31°13.00' W87°04.00' | 30 MSL B 50 MSL to | B | CTY 300/32 | N29°51.00' W83°36.00' |
| 05 AGL B 40 MSL to | G | MVC 212/20 | N31°11.30' W87°34.80' | 30 MSL B 50 MSL to | C | CTY 318/28 | N29°56.00' W83°25.00' |
| 05 AGL B 40 MSL to | H | MVC 244/28 | N31°16.80' W87°51.70' | 30 MSL B 50 MSL to | D | CTY 357/20 | N29°56.00' W83°05.00' |
| 05 AGL B 40 MSL to | I | MVC 248/27 | N31°19.20' W87°51.50' | 30 MSL B 50 MSL to | E | GNV 049/20 | N29°56.00' W82°00.00' |
| 05 AGL B 40 MSL to | J | MVC 296/19 | N31°37.00' W87°40.00' | 30 MSL B 60 MSL to | F | CRG 154/21 | N30°02.00' W81°19.00' |
| 05 AGL B 40 MSL to | K | MVC 022/32 | N31°56.00' W87°05.00' | 05 AGL B 60 MSL to | G | CRG 123/31 | N30°05.00' W81°00.00' |
| 05 AGL B 40 MSL to | L | MVC 091/32 | N31°25.00' W86°44.00' | | | | |
| 05 AGL B 40 MSL to | M | CEW 009/21 | N31°10.00' W86°35.70' | | | | |
| 05 AGL B 40 MSL to | N | CEW 020/18 | N31°06.00' W86°33.00' | | | | |
| 05 AGL B 40 MSL to | O | CEW 074/15 | N30°53.00' W86°24.20' | | | | |
| 05 AGL B 40 MSL to | P | CEW 106/19 | N30°43.50' W86°20.00' | | | | |

TERRAIN FOLLOWING OPERATIONS: Authorized from E to M.

ROUTE WIDTH - 5 NM either side of centerline A to B and C to O; 2 NM west side and 5 NM east side of centerline B to C and O to P.

Special Operating Procedures:

- (1) For use in VMC only.
- (2) Route continuation from M to E authorized.
- (3) Alternate Entry/Exit: A, B and P.
- (4) Altitude restrictions between M and N 500' AGL-4000' MSL Sat-Sun, or Mon-Fri 1100-1300L, with prior coordination. Otherwise altitude restrictions 1500' AGL-4000' MSL.
- (5) Alternate Entry/Exit: D and N.

FSS's Within 100 NM Radius:

ANB, DRI

IR-032

ORIGINATING ACTIVITY: Commander Naval Air Warfare Center, Weapons Division, Code 52911GE, NAWS, Point Mugu NAWS, CA 93042-5008 DSN 351-7545, C805-989-7545.

SCHEDULING ACTIVITY: Commander Fleet Area Control and Surveillance Facility Jacksonville, Naval Air Station, Jacksonville, FL 32212 DSN 942-2004/2005, C904-542-2004/2005, AUTO BRIEF-DSN 942-2275, C904-542-2275.

HOURS OF OPERATION: Daylight hours

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 05 AGL B 50 MSL to | A | CTY 265/50 | N29°30.00' W84°00.00' |

ROUTE WIDTH - 10 NM either side of centerline A to G.

Special Operating Procedures:

- (1) Route use restricted to unmanned aerospace vehicle operations and their support aircraft.
- (2) Daylight hours 0900-1500 Mon-Thu, 0900-1200 Fri. Daylight savings time 0900-1700 Mon-Thu, 0900-1200 Fri. Flight not authorized from 13 Dec-3 Jan, nor Thanksgiving Day and the following Fri, Sat, and Sun.
- (3) Unmanned aerospace vehicles shall avoid all airports by 1500'/3 NM.
- (4) Route is designated for MARSAs operations established by coordinated scheduling.
- (5) Maximum use of IR-032/033 shall not exceed total of six flights per year for both routes together.
- (6) For use in VMC in accordance with FAAH 7610.4 Section 8.

FSS's Within 100 NM Radius:

GNV, PIE

IR-033

ORIGINATING ACTIVITY: Commander Naval Air Warfare Center, Weapons Division, Code 52911GE, NAWS, Point Mugu NAWS, CA 93042-5008 DSN 351-7545, C805-989-7545.

SCHEDULING ACTIVITY: Commander Fleet Area Control and Surveillance Facility Jacksonville, Naval Air Station, Jacksonville, FL 32212 DSN 942-2004/2005, C904-542-2004/2005, AUTO BRIEF-DSN 942-2275, C904-542-2275.

HOURS OF OPERATION: Daylight hours

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 05 AGL B 60 MSL to | A | CRG 123/31 | N30°05.00' W81°00.00' |
| 30 MSL B 60 MSL to | B | CRG 154/21 | N30°02.00' W81°19.00' |
| 30 MSL B 50 MSL to | C | GNV 049/20 | N29°56.00' W82°00.00' |
| 30 MSL B 50 MSL to | D | CTY 357/20 | N29°56.00' W83°05.00' |
| 30 MSL B 50 MSL to | E | CTY 318/28 | N29°56.00' W83°25.00' |
| 30 MSL B 50 MSL to | F1 | CTY 300/32 | N29°51.00' W83°36.00' |

IR ROUTES

05 AGL B 50 MSL to G CTY 265/50 N29°30.00'
Alternate Exit Track W84°00.00'
from Pt E:
30 MSL B 50 MSL to E CTY 318/28 N29°56.00'
W83°25.00'
30 MSL B 50 MSL to F2 SZW 141/39 N30°02.00'
W83°55.00'

ROUTE WIDTH - 10 NM either side of centerline A to G and A to F2.

Special Operating Procedures:

- (1) Route use restricted to unmanned aerospace vehicle operations and their support aircraft.
- (2) Daylight hours 0900-1500 Mon-Thu, 0900-1200 Fri. Daylight savings time 0900-1700 Mon-Thu, 0900-1200 Fri. Flight not authorized from 13 Dec-3 Jan, nor Thanksgiving Day and the following Fri, Sat and Sun.
- (3) Unmanned aerospace vehicles shall avoid all airports by 1500'/3 NM.
- (4) Route is designated for MARSAs operations established by coordinated scheduling.
- (5) Maximum use of IR-032/033 shall not exceed total of six flights per year for both routes together.
- (6) For use in VMC in accordance with FAAH 7610.4 Section 8.
- (7) Alternate Exit F2 to adjoining IR-015.

FSS's Within 100 NM Radius:

GNV, PIE

IR-034

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0600-2400 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | HST 244/46 | N25°07.00' W81°07.00' |
| 10 AGL B 30 MSL to | B | HST 266/46 | N25°24.00' W81°13.00' |
| 10 AGL B 30 MSL to | C | HST 291/56 | N25°46.00' W81°21.50' |
| 10 AGL B 30 MSL to | D | RSW 151/43 | N25°54.50' W81°21.50' |
| 01 AGL B 30 MSL to | E | RSW 129/28 | N26°15.00' W81°21.50' |
| 01 AGL B 30 MSL to | F | RSW 116/26 | N26°21.00' W81°20.00' |
| 01 AGL B 30 MSL to | G | PHK 232/15 | N26°37.80' W80°54.50' |
| 01 AGL B 30 MSL to | H | PHK 230/8 | N26°42.00' W80°48.00' |
| 01 AGL B 20 MSL to | I | PHK 314/16 | N26°58.00' W80°54.20' |

01 AGL B 20 MSL to J PHK 328/32 N27°14.10'
W81°00.50'
01 AGL B 20 MSL to K PHK 328/36 N27°18.00'
W81°03.00'

TERRAIN FOLLOWING OPERATIONS: Authorized from D to K.

ROUTE WIDTH - 8 NM either side of centerline A to J; 6 NM either side of centerline J to K.

Special Operating Procedures:

- (1) Visual road reconnaissance (RC) or photo reconnaissance (PR) route.
- (2) This route terminates at Avon Park gunnery range (R-2901) and may only be scheduled in conjunction with reserve range time. Route entry times must be made so as not to arrive at range boundary earlier than reserved range times. Route exit time must allow for a minimum of 10 minutes reserved range time remaining for the last aircraft in a flight.
- (3) Avoid Immokalee and Clewiston Airports by 3 NM regardless of altitude.
- (4) Minimum altitude over Everglades National Park and Big Cypress Preserve is 1000' AGL. Big Cypress Preserve is between D and E, east of centerline entire leg.
- (5) Minimum altitude within 3 NM of H is 500' AGL.
- (6) Alternate Entry: D and H.
- (7) No Alternate Exit points.
- (8) All requests for use of this route must be approved by the 347WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
- (9) Route clearance valid only plus 30 min from schedule time.
- (10) Route segment from F to H is designated a maneuver area.
- (11) Avoid overflight of Hendry Correctional Complex N26-19 W81-16 by 1500' AGL or 1 NM.
- (12) CAUTION: Uncharted grass airstrip located at N26-20.0 W81-19.2; N26-20.9 W81-26.5.
- (13) CAUTION: Uncharted tower 210' MSL N26-02.5 W81-20.5; tower 210' MSL N26-02.5 W81-21.5; tower 200' MSL N26-17.3 W81-20.2; Microwave tower 150' MSL N26-18.4 W81-16.8; tower 250' MSL N26-27.5 W81-04.5; Microwave tower 315' MSL N26-37.7 W80-55.2; tower 300' MSL N26-38.6 W80-55.2; water tower 250' MSL N27-04.8 W81-04.2; tower 300' MSL N27-07.0 W81-05.0.
- (14) Avoid fishing resort/trailer park at the intersection of Route 70 and Kissimmee River, 7 NM west of Okeechobee.
- (15) H is a mandatory reporting point.
- (16) When the instrument approach at Pahokee/Palm Beach County Glades Airport is active, aircraft will be directed to maintain 4000' MSL from G to I. In addition, when IR-051 is also active, aircraft will maintain 4000' MSL until J.

FSS's Within 100 NM Radius:

MIA, PIE, WBR

IR-035

ORIGINATING ACTIVITY: 437 AW/C-17 OSS/OSA Charleston AFB, SC 29404 DSN 673-7692, C843-963-7692.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152-5000 Duty hours DSN 965-1118/1119 C803-895-1118, Fax

DSN 965-4804. After hours 20 FW/Command Post DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: 0600-2200 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | CRE 077/22 | N33°55.00' W78°18.00' |
| 03 AGL B 40 MSL to | B | CRE 035/45 | N34°27.00' W78°15.00' |
| 03 AGL B 40 MSL to | C | FLO 072/37 | N34°27.00' W78°58.00' |
| 03 AGL B 30 MSL to | D | FLO 138/24 | N33°57.00' W79°19.00' |
| 03 AGL B 30 MSL to | E | FLO 234/25 | N33°58.00' W80°03.00' |
| 03 AGL B 30 MSL to | F | VAN 332/9 | N33°36.00' W80°33.00' |
| 03 AGL B 30 MSL to | G | CAE 184/15 | N33°36.00' W81°04.00' |

TERRAIN FOLLOWING OPERATIONS: After crossing the coast at 2000' MSL or higher, a descent to 300' AGL (fighter aircraft 500') can be initiated once north of ILM 260 degrees radial. From A to G, 300' AGL modified contour flying will be conducted in VMC. IFR/VFR terrain following (TF) to 300' AGL is authorized IAW command directives within published altitude blocks from A to G. when command directives preclude TF (visual/contour operations), aircrews will maintain the IFR altitude for each route segment. The top of the block altitude provides for a minimum of 900' clearance above the highest obstacle on that leg (within 5 NM of course centerline).

ROUTE WIDTH - 5 NM either side of centerline from A to E; 5 NM left and 3 NM right of centerline from E to F; 5 NM either side of centerline from F to G.

Special Operating Procedures:

- (1) Route width excludes North AF, SC class E airspace, and restricted area R-6002 when active.
- (2) For route entry A cross CRE at or below 10,000' MSL and contact Myrtle Beach APP CON on 350.3 119.2 to facilitate route entry/clearance with Wilmington Approach 284.65 or 118.25.
- (3) Alternate Entry D: (Contact Myrtle Beach APP CON on 350.3 119.2). Alternate Exit: F.
- (4) Lost communications procedures: Maintain 3000' MSL while in the route.
- (5) Contact Florence APP CON 309.7 135.25 at C with E estimate.
- (6) Contact Myrtle Beach APP CON 321.1 119.2 at D.
- (7) Contact Shaw RAPCON 358.3 118.85 prior to E, with F estimate.
- (8) Contact Columbia APP CON 338.2 124.15 passing F.
- (9) CAUTION: VR-1040 and VR-1043 route deconfliction, DSN 582-4040/4041.
- (10) CAUTION: IR-062 opposite direction at C, deconflict DSN 433-1228.
- (11) CAUTION: Crossing/intersecting routes VR-087, VR-088, VR-097, VR-1059, and IR-036 deconflicted by scheduling activity when route is booked. VR-083 deconflicted by 4FW at DSN 722-2129.

- (12) CAUTION: Prior to F - Look for flights of fighter aircraft holding (VFR) over the Rimini Bridge awaiting entry into R-6002 (hours of operation 1200-0300Z++).
- (13) Approaches to North Field contact North Field Advisory Service 235.775 or 118.15. Prior scheduling and approval required through 437 OSS/OSO DSN 673-5554.
- (14) Avoid: Flying along the Lumber River into North Carolina. Plan turn near C, so as to cross the river only once while in North Carolina.
- (15) Avoid: Marion County Airport N34-10.8 W79-20.1 by 1500' AGL/3 NM. Note: 3 NM arc extends 1 NM into the route below 1593' MSL.
- (16) CAUTION: VFR student flying training in the vicinity of Aynor, SC, N34-00 W79-13 3000-4000' MSL.
- (17) Avoid: Santee National Wildlife Refuge (Lake Marion) just prior to F, 2200' AGL.
- (18) Avoid nine Noise Sensitive Areas:
 - (a) Olanta N33-56.2 W79-48.3 by 1000' AGL/1 NM;
 - (b) Residence N34-04.4 W79-42.6 by 1500' AGL/1 NM;
 - (c) Residence N33-50.0 W80-22.0 by 1500' AGL/1 NM;
 - (d) N33-39.1 W80-27.1 by 1000' AGL/1 NM;
 - (e) Town of North, SC N33-36.0 W81-06.5 by 1500' AGL/1 NM;
 - (f) Congressional noise sensitive area (town/residences at Galivants Ferry) N34-03.4 W79-14.3, avoid by 2000' AGL/2 NM;
 - (g) Hog farm N34-04.4 W79-12.2 by 1500' AGL/1 NM;
 - (h) Hog farm N34-07.1 W79-09.6 by 1500' AGL/1 NM;
 - (i) Hog farm N34-03.1 W79-09.0 by 1500' AGL/1 NM.
- (19) Caution:Towers:
 - (a) 250' AGL (600' MSL) N34-12.55 W79-11.41;
 - (b) 250' AGL (750' MSL) N34-19.38 W79-00.24;
 - (c) 300' AGL (750' MSL) N33-58.17 W79-54.98.
- (20) Avoid two eagle nest locations, endangered species:
 - (a) N33-36.9 W80-31.8 by 1500' AGL/1 NM;
 - (b) N34-00.7 W79-23.5 by 1500' AGL/1 NM.
- (21) CAUTION: Vicinity of North Airfield; C-5, C-17, C-141 aircraft conducting tactical training operations into and out of the airfield.
- (22) Contact Charleston AFB, Base Operations via 372.2 (DSN 673-3026) or relay through Command Post 349.4 to report any unusual active bird conditions along the route. These frequencies/numbers can also be used to obtain the latest information about the route's bird hazards.
- (23) Unpublished towers found by route surveys 200' AGL and above are listed in this SOP. Note: A quick reference to the latest Charlotte Sectional Chart (1-500 scale) will show charted towers on this route.
- (24) IR-012 entry south of B (deconflict DSN 722-2129).
- (25) Make entry times plus or minus 5 minutes or reschedule.
- (26) Caution: due to ultralite activity, avoid Lake City N33-52.5 W79-45.5 by 1500' AGL/7 NM.
- (27) CAUTION:
 - (a) Uncharted airport, N34-17.7 W79-03.3, Rwy 8-24 and 15-33;
 - (b) Uncharted grass strip, N33-59.4 W79-37.8, Rwy 12-30, approximately 2500';
 - (c) Uncharted grass strip, N33-45 W80-20, Rwy 10-28;
 - (d) Uncharted airstrip, (Matthew's Airstrip) N33-59.3 W79-45.4;
 - (e) Uncharted airstrip, (Dannie Rodgers) N33-58.6 W79-39.4;
 - (f) Uncharted airstrip, (Tommie and Rick) N33-48.2 W79-31.5;
 - (g) Uncharted airstrip, (Bernie) N33-57.7 W79-56.2;

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- (h) Uncharted airstrip, (Cockfield Aerodrome SC60)
N33-54.1 W79-40.6;
- (i) Uncharted airstrip, (McGee Airstrip) N33-53.4 W79-52.5.

FSS's Within 100 NM Radius:

AND, MCN, RDU

IR-036

ORIGINATING ACTIVITY: 437 AW/C-17 OSS/OSOT
Charleston AFB, SC 29404 DSN 673-5613, C803-566-5613.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC
29152-5000 Duty hours DSN 965-1118/1119 C803-895-1118, Fax
DSN 965-4804. After hours 20 FW/Command Post DSN
965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: 0600-2200 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | CAE 184/15 | N33°36.00' W81°04.00' |
| 03 AGL B 30 MSL to | B | CAE 212/17 | N33°37.00' W81°13.00' |
| 03 AGL B 30 MSL to | C | CAE 194/38 | N33°14.00' W81°13.00' |
| 03 AGL B 40 MSL to | D | VAN 192/26 | N33°03.00' W80°30.00' |
| 03 AGL B 40 MSL to | E | VAN 081/26 | N33°35.00' W79°57.00' |
| 03 AGL B 40 MSL to | F | VAN 036/25 | N33°50.00' W80°12.00' |
| 03 AGL B 30 MSL to | G | VAN 332/9 | N33°36.00' W80°33.00' |
| 03 AGL B 30 MSL to | H | CAE 184/15 | N33°36.00' W81°04.00' |

TERRAIN FOLLOWING OPERATIONS: 300' AGL
modified contour low level operations approved for the entire
route VMC. IFR terrain following (TF) to 300' AGL is authorized
IAW command directives within published altitude blocks from A
to H (round robin). When command directives preclude TF/visual
contour operations, aircrews will maintain the IFR altitude for
each route segment. The top of the block altitude provides for a
minimum of 1000' clearance above the highest obstacle on that
leg (within 5 NM of course centerline).

ROUTE WIDTH - 5 NM either side of centerline from A to F;
3 NM right and 5 NM left of centerline from F to G; 5 NM either
side of centerline from G to H.

Special Operating Procedures:

- (1) Route width excludes North AF, SC class E airspace, and
restricted area R-6002 when active.
- (2) Contact Columbia APP CON on 338.2 or 124.15 for route
entry at A with D estimate.
- (3) Alternate Entry authorized at Pt B (contact Columbia APP
CON).
- (4) Alternate Exit authorized at D.
- (5) Monitor Jacksonville ARTCC on 363.2 /132.5 at B.
- (6) Monitor Charleston APP CON on 319.8/120.7 prior to D.

- (7) Contact Shaw RAPCON on 358.3 or 118.85 at E with G
estimate.
- (8) Contact Columbia APP CON on 338.2 or 124.15 passing F.
- (9) Lost Communications Procedures: Maintain 3000' MSL while
on the route.
- (10) CAUTION: VR-1040 and VR-1043 route deconfliction DSN
582-4040/4041.
- (11) CAUTION: Crossing/intersecting routes VR-087, VR-088,
VR-097, VR-1059, and IR-035 deconflicted by scheduling
activity when route is booked.
- (12) CAUTION: Prior to G - Look for flights of fighter aircraft
holding (VFR) over the Rimini Bridge awaiting entry into
R-6002, (hours of operation 1200-0300Z++).
- (13) Approaches to North Field contact North Field Advisory
Service 235.775 or 118.15. Prior scheduling and approval
required through 437 OSS/OSO DSN 673-5554.
- (14) Avoid three airports:
 - (a) Bamberg CO Airport N33-18.5 W81-06.9 by 1500'
AGL/3 NM;
 - (b) St. George Airport N33-11.7 W80-30.5 by 1500' AGL/3
NM;
 - (c) Orangeburg Airport N33-27.7 W80-51.5 by 1500' AGL/3
NM. NOTE: These airports are outside of the route
structure but their 3 NM avoidance area extends into the
route below 1500' AGL.
- (15) Avoid: Santee National Wildlife Refuge (Lake Marion) just
prior to G, by 2200' AGL.
- (16) Avoid six Noise Sensitive Areas:
 - (a) Residence N33-50.0 W80-22.0 by 1500' AGL/1 NM;
 - (b) N33-39.1 W80-27.1 by 1000' AGL/1 NM;
 - (c) N33-29.7 W81-16.8 by 1000' AGL/1 NM;
 - (d) Givhans, SC N33-00.8 W80-20.2 by 1000' AGL/1.5 NM;
 - (e) N33-15.5 W81-11.5 by 1000' AGL/1 NM;
 - (f) N33-40.8 W80-03.5 by 1000' AGL/1 NM.
- (17) CAUTION: Bird activity: Landfill N33-07.9 W80-21.4.
- (18) Avoid ten Eagle Nest locations, endangered species:
 - (a) N33-10.8 W80-25.3 by 1500' AGL/1 NM;
 - (b) N33-36.9 W80-31.8 by 1500' AGL/1 NM;
 - (c) Santee NWR N33-23.5 W80-02.6 min alt: 2000' AGL;
 - (d) Santee NWR N33-26.0 W79-55.0 min alt: 2000' AGL;
 - (e) Santee NWR N33-18.4 W80-10.6 min alt: 2000' AGL;
 - (f) Santee NWR N33-26.1 W80-07.4 min alt: 2000' AGL;
 - (g) Santee NWR N33-28.8 W80-09.5 min alt: 2000' AGL;
 - (h) Santee NWR N33-24.4 W80-11.6 min alt: 2000' AGL;
 - (i) Santee NWR N33-25.4 W80-16.9 min alt: 2000' AGL;
 - (j) Santee NWR N33-29.6 W80-10.1 min alt: 2000' AGL.
- (19) CAUTION: Vicinity of North Airfield, SC, C-5, C-17, C-141
aircraft conducting tactical training operations into and out
of the airfield.
- (20) Contact Charleston AFB Base Operations 372.2 (DSN
673-3026) or relay through Command Post 349.4 to report
any unusual active bird conditions along the route. These
frequencies/numbers can also be used to obtain the latest
information about the route's bird hazards.
- (21) Unpublished towers found by route surveys 200' AGL and
above are listed in this SOP. NOTE: A quick reference to the
latest Charlotte Sectional Chart (1-500 scale) will show
charted towers on this route.
- (22) Make entry times plus or minus 5 minutes or reschedule.
- (23) CAUTION: Uncharted grass strip N33-45 W80-20 (Rwy
10-28).

FSS's Within 100 NM Radius:

AND, MCN, RDU

IR-037

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Mon-Fri 1200-0400Z++,
occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------------|----|--------------|--------------------------|
| Cross at 60 MSL to or as assigned | A | SJI 099/2 | N30°43.00' W88°19.00' |
| 60 MSL to or as assigned | B | GPT 027/33 | N30°53.00' W88°46.00' |
| 60 MSL to or as assigned | C | LBY 107/43 | N31°09.00' W88°34.00' |
| 60 MSL to or as assigned | D | LBY 025/17 | N31°40.00' W89°10.00' |
| 60 MSL to or as assigned | E | PCU 353/26 | N31°00.00' W89°45.00' |
| 60 MSL to or as assigned | F | PCU 055/9 | N30°38.00' W89°35.00' |
| 60 MSL to or as assigned | G | GPT VORTAC | N30°24.41' W89°04.61' |
| 60 MSL to or as assigned | H | GPT 068/22 | N30°32.00' W88°41.00' |

ROUTE WIDTH - 5 NM either side of centerline from A to C;
4 NM left and 5 NM right of centerline from C to D; 5 NM either
side of centerline from D to H.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++
Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++
on Mon, call prior to 2200Z++ on previous Friday.
- (2) Advise controller when making turns in excess of 20
degrees.
- (3) Radar system navigation (SN).
- (4) Conflicts: (deconflict with the appropriate Scheduling
Activity)
 - (a) Crosses VR-060 at Point C.
 - (b) Crosses VR-179 at Points B and C.
- (5) Alternate Entry authorized at Point B.
- (6) Alternate Exit authorized at Point G.

FSS's Within 100 NM Radius:

DRI, GNV, GWO

IR-038

ORIGINATING ACTIVITY: FACSFAC, NAS Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset, Mon-Fri,
occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------------------|----|--------------|--------------------------|
| As assigned to 80 MSL-100 MSL | A | BFM 214/16 | N30°24.00' W88°15.00' |
| as assigned to 80 MSL-100 MSL | B | GPT VORTAC | N30°24.41' W89°04.61' |
| as assigned to 80 MSL-100 MSL | C | LEV 109/39 | N28°54.00' W89°26.00' |
| as assigned to 80 MSL-100 MSL | D | LEV 253/28 | N29°05.00' W90°38.00' |
| as assigned to 80 MSL-100 MSL | E | LEV 109/39 | N28°54.00' W89°26.00' |
| as assigned to 80 MSL-100 MSL | F | GPT VORTAC | N30°24.41' W89°04.61' |
| as assigned to 80 MSL-100 MSL | G | BFM 214/16 | N30°24.00' W88°15.00' |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++
Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++
on Mon, call prior to 2200Z++ on previous Friday.
- (2) Advise controller when making turns in excess of 20
degrees.
- (3) Radar system navigation (SN).

FSS's Within 100 NM Radius:

DRI, GNV

IR-040

ORIGINATING ACTIVITY: FACSFAC, NAS Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Mon-Fri 1200-0400Z++,
occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------------|----|--------------|--------------------------|
| Cross at 50 MSL to or as assigned | A | SJI 169/22 | N30°22.00' W88°19.00' |
| 50 MSL to or as assigned | B | SJI 099/2 | N30°43.00' W88°19.00' |
| 50 MSL to or as assigned | C | GCV 084/13 | N31°06.00' W88°14.00' |
| 50 MSL to or as assigned | D | LBY 061/39 | N31°41.00' W88°38.00' |
| 50 MSL to or as assigned | E | LBY 025/17 | N31°40.00' W89°10.00' |
| 50 MSL to or as assigned | F | LBY 096/21 | N31°21.00' W88°56.00' |
| 50 MSL to or as assigned | G | LBY 107/43 | N31°09.00' W88°34.00' |
| 50 MSL to or as assigned | H | GPT 027/33 | N30°53.00' W88°46.00' |

ROUTE WIDTH - 5 NM either side of centerline.

IR ROUTES

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
- (2) Advise controller when making turns in excess of 20 degrees.
- (3) Radar system navigation (SN).
- (4) Aircraft are required to transmit in the blind on 297.1 their intentions to transit Desoto MOA prior to F.
- (5) Conflicts: (Deconflict with the appropriate Scheduling Activity)
 - (a) Crosses VR-060 between Points C and D and F and G.
 - (b) Crosses VR-179 between Points C and D, F and G, and at Point H.

FSS's Within 100 NM Radius:

DRI, GNV, GWO

IR-044

ORIGINATING ACTIVITY: COMDRAWING ONE, NAS Meridian, MS 39309-0136 DSN 637-2347, C601-679-2347.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------------|----|--------------|--------------------------|
| Cross at 30 MSL to or as assigned | A | NMM 274/31 | N32°37.00' W89°09.00' |
| 24 MSL B 60 MSL to or as assigned | B | NMM 288/32 | N32°45.00' W89°09.00' |
| 24 MSL B 70 MSL to | C | NMM 288/42 | N32°48.00' W89°20.00' |
| 24 MSL B 70 MSL to | D | JAN 055/21 | N32°41.00' W89°48.00' |
| 22 MSL B 70 MSL to | E | JAN 031/24 | N32°50.00' W89°53.00' |
| 22 MSL B 70 MSL to | F | JAN 014/26 | N32°55.00' W90°00.00' |
| 22 MSL B 70 MSL to | G | SQS 102/26 | N33°21.00' W89°47.00' |
| 22 MSL B 70 MSL to | H | SQS 106/33 | N33°17.00' W89°40.00' |
| 22 MSL B 70 MSL to | I | SQS 122/42 | N33°04.00' W89°36.00' |
| 28 MSL B 70 MSL to | J | IGB 249/35 | N33°19.00' W89°11.00' |
| 28 MSL B 70 MSL to | K | NMM 322/43 | N33°09.00' W89°04.00' |
| 28 MSL B 50 MSL to | L | NMM 339/33 | N33°06.00' W88°46.00' |

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Visual road recon (RC).
- (2) Instructor/Flight Leader must not descend below 3000' MSL to maintain contact with ATC.
- (3) Alternate Exit: K.

- (4) Alternate Entry: G.

FSS's Within 100 NM Radius:

ANB, DRI, GWO, MKL

IR-046

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0700-2400 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------------|----|--------------|--------------------------|
| Cross at 30 MSL to or as assigned | A | PIE 291/39 | N28°09.00' W83°22.30' |
| 30 MSL to or as assigned | B | PIE 281/25 | N27°59.40' W83°08.40' |
| 30 MSL to or as assigned | C | PIE 332/20 | N28°12.00' W82°51.00' |
| 05 AGL B 30 MSL to | D | OCF 214/40 | N28°37.50' W82°38.50' |
| 10 AGL B 30 MSL to | E | OCF 162/26 | N28°45.50' W82°04.50' |
| 05 AGL B 30 MSL to | F | OCF 160/52 | N28°21.50' W81°53.50' |
| 10 AGL B 30 MSL to | G | OCF 160/60 | N28°14.00' W81°50.50' |
| 10 AGL B 30 MSL to | H | ORL 185/32 | N28°01.00' W81°23.20' |
| 10 AGL B 40 MSL to | I | ORL 182/32 | N28°00.00' W81°21.50' |
| 10 AGL B 50 MSL to | J | ORL 181/46 | N27°46.00' W81°21.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to C; 8 NM left and 5 NM right of centerline from C to D; 5 NM either side of centerline from D to I; 6 NM left and 4 NM right of centerline from I to J.

Special Operating Procedures:

- (1) When entering the route from the north enter at A. Refer to A as RILEE in all ATC communications and file to RILEE on the DD Form 175. If entering the route at B, refer to B as HILTI and file to HILTI on the DD Form 175.
- (2) All requests for use of this route must be approved by the 347WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
- (3) Contact 347WG Det 1/RO Originating Activity during normal duty hours for hazard briefing prior to flying route.

- (4) Alternate Entry: B from west of W83-25 or south of N28-00; C limited to entry immediately after departure from MacDill AFB; E no restrictions.
- (5) This route is only used for aircraft scheduled for entry into R-2901 with a specific range period. There are no Alternate Exit points.
- (6) Entry/ exit time windows for deconfliction with IR-051, IR-056, VR-1098 and other IR-046 traffic. For A Entry, flights must enter 23 minutes prior to scheduled range start time (RST) and NLT 28 minutes prior to the range end time (RET). For C Entry, flights must enter NET 20 minutes prior to scheduled RST and NLT 25 minutes prior to RET. For E Entry, enter NET 10 minutes prior to RST and NLT 17 minutes prior to RET. Flights must exit IR-046 NET the RST and NLT 10 minutes prior to RET. Maintain between 360-540 knots ground speed. Entry outside time windows not authorized and requires rescheduling.
- (7) Radar navigation and contour flying authorized from C to J.
- (8) E to F is designated a maneuvering area for visual road reconnaissance.
- (9) Restrictions:
 - (a) Cross F at or above 1000' AGL;
 - (b) Avoid overflight of town Pine Island N28-34 W82-39, Mabel N28-35 W81-59;
 - (c) To avoid 1134' tower on route centerline at N28-07 W81-33, climb to 1500' MSL when passing Highway 27, west of Hanes City.
- (10) Minimum IMC altitude: 3000' MSL A to C, 2500' MSL C to D, 1700' MSL D to G, 2200' MSL G to H, 1700' MSL H to J.
- (11) 15 Oct-15 Mar, Migratory birds. From 1 hour before sunset to 1 hour after sunrise, minimum altitudes are IMC minimums.
- (12) CAUTION: Be alert for light aircraft flying above major highways between D to E, and between E and H. Civil aircraft often fly parallel to Highway 60 just north of R-2901D at 500'. Extensive glider activity near F, surface to 5000'.
- (13) CAUTION: VR-1006 crosses beneath route between D and E and F and G and runs beneath route (opposite direction) between G to H from 500' to 700'. See and Avoid.
- (14) This route deconflicted with IR-051, IR-056 and VR-1098 by 6 OSS/OSOS scheduling. IR-046 is MARSAs with these MTR's.
- (15) Pilots shall file R-2901 as the end point of the route and include any delay times necessary. Miami ARTCC requires enroute delay type flight plans vice a new flight plan departing the range. Flights departing from locations north of 28 degrees must file A.
- (16) ACC bombers that require dry or multiple passes, file IR-046Z as route in DD Form 175. Include delay time for orbits and range at R-2901. Orbit route for re-attack is left turn through Marian MOA to join IR-051 between G and I, maintain at or below 2000' MSL while on IR-051.

FSS's Within 100 NM Radius:

GNV, MIA, PIE

IR-047

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0700-2400 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------------|----|--------------|--------------------------|
| As assigned to 50 MSL - 90 MSL | A | LAL 261/14 | N27°57.20' W82°16.50' |
| as assigned to 50 MSL - 90 MSL | B | LAL VORTAC | N27°59.17' W82°00.83' |
| as assigned to 50 MSL - 90 MSL | C | LAL 082/36 | N28°03.50' W81°21.00' |
| as assigned to 50 MSL - 90 MSL | D | ORL 181/32 | N28°00.00' W81°21.00' |
| as assigned to | E | ORL 181/46 | N27°46.00' W81°21.00' |

ROUTE WIDTH - 3.5 NM either side of centerline from A to D; 6 NM left and 4 NM right of centerline from D to E.

Special Operating Procedures:

- (1) All requests for use of this route must be approved by the 347WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
- (2) Alternate Entry: B.
- (3) This route will only be scheduled for aircraft entering R-2901. There are no Alternate Exit points.
- (4) CAUTION: Heavy commercial and general aviation aircraft traffic in the vicinity of Lakeland.

FSS's Within 100 NM Radius:

GNV, MIA, PIE

IR-048

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0700-2400 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------|----|--------------|--------------------------|
| 40 MSL B 60 MSL to | A | MCF 101/61 | N27°38.50' W81°24.00' |
| 40 MSL B 60 MSL to | B | MCF 104/49 | N27°38.50' W81°38.00' |
| 50 MSL to or as assigned | C | MCF 110/30 | N27°40.80' W81°59.30' |

ROUTE WIDTH - 6 NM either side of centerline from A to B; 5 NM either side of centerline from B to C.

IR ROUTES

Special Operating Procedures:

- (1) All requests for use of this route must be approved by the 347WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
- (2) Alternate Entry/Exit: B.
- (3) This route is only for aircraft returning to MacDill AFB from R-2901 or Lake Placid MOA. It terminates with a hand-off to Tampa Approach Control.
- (4) CAUTION: Numerous light aircraft flying north and south between A and B.

FSS's Within 100 NM Radius:

GNV, MIA, PIE

IR-049

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0700-2400 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | MCF 159/23 | N27°30.00' W82°22.00' |
| 05 AGL B 30 MSL to | B | LBV 314/46 | N27°21.70' W82°00.00' |
| 05 AGL B 30 MSL to | C | LBV 319/37 | N27°18.00' W81°50.00' |
| 05 AGL B 30 MSL to | D | LBV 327/26 | N27°11.50' W81°39.00' |
| 05 AGL B 60 MSL to Cross 81 deg W at or below 50 MSL | E | PHK 325/28 | N27°10.00' W80°59.30' |
| 05 AGL B 50 MSL to Enter R-2901 (Point F) 15 AGL to 40 MSL. If clearance into R-2901 has not been received, enter Avon South MOA at 50 MSL with Miami ARTCC. | F | PHK 329/37 | N27°18.80' W81°03.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 8 NM left and 3 NM right of centerline from A to B; 5 NM either side of centerline for entire route from B to D; 6 NM either side of centerline for entire route from D to E; 3.5 NM left and 7 NM right of centerline from E to F.

Special Operating Procedures:

- (1) All requests for use of this route must be approved by the 347 Rescue Wing, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
- (2) Contact 347 Rescue Wing, Det 1/ROA during normal duty hours for hazard briefing prior to flight planning.
- (3) Alternate Entry: B (A is only authorized on departure from MacDill AFB, FL)
- (4) This route is only used for aircraft scheduled for entry into R-2901 with specified range period. There are no Alternate Exit points.
- (5) Entry/exit time windows for deconfliction with IR-034, IR-050, and other IR-049 traffic. For A Entry, flight must enter NET 15 minutes prior to scheduled range start time (RST) and NLT 20 minutes prior to the range end time (RET). For B Entry, enter NET 10 minutes prior to RST and NLT 18 minutes prior to RET. Flight must exit IR-049 NET the RST and NLT 10 minutes prior to RET. Maintain between 360-540 knots ground speed. Route entry outside the time windows is not authorized and requires rescheduling.
- (6) Radar navigation, contour flying and terrain following radar flying authorized A to F.
- (7) Visual road reconnaissance authorized D to E.
- (8) Restrictions: Avoid overflight of Brownsville at N27-18 W81-49, hospital at N27-12 W81-41 (by 1 NM), Brighton at N27-14 W81-06.
- (9) This route is deconflicted with IR-034, IR-050, IR-051 and IR-055 by 347th Wing, Det 1/ROA.
- (10) CAUTION: IR-049 airspace coincides with: VR-1098 from A to E, VR-1006 at E, VR-1087/1088 from E to F. In VMC, See and Avoid.
- (11) CAUTION: Be alert for light aircraft north of Arcadia and in the vicinity of Lake Placid. Avoid flight within 1500' AGL or 3 NM of private airports enroute.
- (12) Minimum IMC altitude is 1700' MSL for entire route.
- (13) 15 Oct-15 Mar/Migratory birds. From 1 hour before sunset to 1 hour after sunrise, minimum altitude is IMC altitude for entire route.
- (14) Use Caution: Entry Point A is within 2 NM of Class B and C airspace.
- (15) Use Caution: Alternate Entry Point B is within 20 NM of Class B and C airspace.

FSS's Within 100 NM Radius:

MIA, PIE, WBR

IR-050

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0700-2400 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | MCF 159/23 | N27°30.00' W82°22.00' |
| 05 AGL B 30 MSL to | B | LBV 314/46 | N27°21.70' W82°00.00' |
| 05 AGL B 30 MSL to | C | LBV 319/37 | N27°18.00' W81°50.00' |
| 05 AGL B 30 MSL to | D | LBV 016/5 | N26°54.00' W81°22.00' |
| 05 AGL B 30 MSL to | E | PHK 318/19 | N27°01.30' W80°55.70' |
| 05 AGL B 30 MSL to | F | PHK 325/28 | N27°10.00' W80°59.30' |
| 05 AGL B 50 MSL to Enter R-2901 (Point G) 15 AGL to 40 MSL. If clearance into R-2901 has not been received, enter Avon South MOA at 50 MSL with Miami ARTCC. | G | PHK 329/37 | N27°18.80' W81°03.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 8 NM left and 3 NM right of centerline from A to B; 5 NM either side of centerline from B to E; 3.5 NM left and 7 NM right of centerline from E to G.

Special Operating Procedures:

- All requests for use of this route must be approved by the 347 Rescue Wing, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
- Contact 347 Rescue Wing, Det 1/ROA during normal duty hours for hazard briefing prior to flying route.
- Alternate Entry: B (A is only authorized on departure from MacDill AFB, FL)
- This route is only used for aircraft scheduled for entry into R-2901 with a specified range period. There are no Alternate Exit points.
- Entry/exit time windows for deconfliction with IR-034, IR-049 and other IR-050 traffic. For A Entry, flight must enter NET 17 minutes prior to the scheduled range start time (RST) and NLT 22 minutes prior to the range end time (RET). For B Entry, enter NET 15 minutes prior to RST and NLT 20 minutes prior to RET. Flight must exit IR-050 NET the RST and NLT 10 minutes prior to RET. Maintain between 360-540 knots ground speed. Entry outside time windows is not authorized and requires rescheduling.
- Radar navigation and contour flying authorized A to G.
- Restrictions: Avoid overflight of Brownsville N27-18 W81-49; hospital at N27-12 W81-41 by 1 NM; Arcadia at N27-12.5 W81-50.0; Brighton N27-13.8 W81-05.7.
- This route is deconflicted with IR-034, IR-051 and IR-055 by 347 Rescue Wing, Det 1/ROA Scheduling. IR-050 is MARSA with these MTRs.
- CAUTION: IR-050 airspace coincides with: VR-1006 from D to F, VR-1098 from D to G, VR-1087 from E to G, and cross VR-1098 at F. In VMC, See and Avoid.

- CAUTION: Be alert for light aircraft in vicinity of C and D. Avoid flight within 1500' or 3 NM of private airports enroute.
- Minimum IMC altitude 1700' MSL for entire route.
- 15 Oct-15Mar/Mirgatory birds: From 1 hour before sunset to 1 hour after sunrise, minimum altitude is IMC altitude for entire route.
- Use Caution: Entry Point A is within 2 NM of Class B and C airspace.
- Use Caution: Alternate Entry Point B is within 20 NM of Class B and C airspace.

FSS's Within 100 NM Radius:

MIA, PIE, WBR

IR-051

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0700-2400 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| As assigned to | A | MCF 159/23 | N27°30.00' W82°22.00' |
| 05 AGL B 30 MSL to | B | LBV 314/46 | N27°21.70' W82°00.00' |
| 05 AGL B 30 MSL to | C | LBV 319/37 | N27°18.00' W81°50.00' |
| 05 AGL B 30 MSL to | D | LBV 016/5 | N26°54.00' W81°22.00' |
| 30 MSL to | E | PHK 295/26 | N26°58.00' W81°08.00' |
| 30 MSL to | F | PHK 013/24 | N27°10.70' W80°35.50' |
| 05 AGL B 30 MSL to | G | VRB 206/24 | N27°18.50' W80°39.50' |
| 05 AGL B 20 MSL to | H | VRB 237/18 | N27°30.00' W80°45.00' |
| 05 AGL B 20 MSL to | I | VRB 281/20 | N27°43.00' W80°51.40' |
| 05 AGL B 20 MSL to | J | VRB 297/25 | N27°50.50' W80°55.00' |
| 05 AGL B 20 MSL to | K | ORL 169/29 | N28°04.00' W81°14.00' |
| 05 AGL B 50 MSL to | L | ORL 181/32 | N28°00.00' W81°21.00' |
| 05 AGL B 50 MSL to (Excluding R-2901) Enter Avon North MOA if clearance into R-2901 is not received prior to L. | M | ORL 181/46 | N27°46.00' W81°21.00' |

TERRAIN FOLLOWING OPERATIONS: Contour flying and terrain following radar flying authorized from A to D and F to

IR ROUTES

M. Minimum IMC altitude 1700' MSL from A to D and from F to M.
M. Minimum IMC altitude 3000' MSL from D to F.

ROUTE WIDTH - 8 NM left and 3 NM right of centerline from A to B; 5 NM either side of centerline from B to F; 4 NM either side of centerline from F to H; 3 NM either side of centerline from H to L; 6 NM left and 4 NM right of centerline from L to M.

Special Operating Procedures:

- (1) All requests for use of this route must be approved by the 347 Rescue Wing, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
- (2) Contact 347 Rescue Wing, Det1/RO Originating Activity during normal duty hours for hazard briefing prior to flying route.
- (3) Alternate Entry: B and F when flight planned, and between H and I when entering from Marina MOA. (A is only authorized on departure from MacDill AFB, FL)
- (4) This route is used for aircraft scheduled for entry into R-2901 with a specified range period. There are no Alternate Exit points.
- (5) Entry/exit time windows for deconfliction with IR-046, IR-049, IR-050, IR-056, VR-1089, VR-1098 and other IR-051 traffic. For A/B Entry, enter NET 27 minutes prior to scheduled range start time (RST) and NLT 32 minutes prior to range end time (RET). For F Entry, enter NET 14 minutes prior to RST and NLT 19 minutes prior to RET. Flight must exit IR-051 NET the RST and NLT 10 minutes prior to RET. Maintain between 420-540 kts ground speed. Round entry outside time windows not authorized and requires rescheduling.
- (6) Radar navigation authorized A to K.
- (7) This route is deconflicted with IR-034, IR-046, IR-049, IR-050, IR-055, and IR-056. IR-051 is MARSAs with them.
- (8) Restrictions: Avoid overflight of hospital N27-12 W81-41 by 1 NM.
- (9) IR-051 airspace coincides with VR-1006 from F to L. In VMC, See and Avoid.
- (10) CAUTION: Be alert for light aircraft in vicinity of C, D, and along the Florida Turnpike.
- (11) Minimum IMC altitude is 1700' MSL except from D to F where 3000' MSL is mandatory altitude. Numerous MTRs under IR-051 between D to F.
- (12) 15 Oct-15 Mar/Migratory birds: From 1 hour before sunset to 1 hour after sunrise, minimum altitude is IMC altitude for entire route.
- (13) Possible bird hazard area located approximately N27-20.6 W80-41.4. Avoid this area by 3 NM or above 2000' AGL.
- (14) Use Caution: Entry Point A is within 2 NM of Class B and C airspace.
- (15) Use Caution: Alternate Entry Point B is within 20 NM of Class B and C airspace.

FSS's Within 100 NM Radius:

GNV, MIA, PIE

IR-053

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0600-2400 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------------------|----|--------------|--------------------------|
| As assigned to | A | HST 153/18 | N25°14.00' W80°13.00' |
| 05 AGL B 30 MSL to | B | HST 202/40 | N24°51.00' W80°37.00' |
| 05 AGL B 30 MSL to | C | HST 209/50 | N24°44.00' W80°47.00' |
| 05 AGL B 30 MSL to | D | EYW 084/38 | N24°38.00' W81°07.00' |
| 05 AGL B 30 MSL to Descend to | E | EYW 218/27 | N24°14.00' W82°07.00' |
| 25 MSL to | F | EYW 249/23 | N24°27.00' W82°12.00' |

ROUTE WIDTH - 5 NM either side of centerline from A to C; 2 NM either side of centerline from C to E; 5 NM either side of centerline E to F.

Special Operating Procedures:

- (1) All requests for use of this route must be approved by the 347WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
- (2) Alternate Entry: B (A is only authorized on departure from Homestead ARB).
- (3) Contact Navy Key West APP CON not later than 5 minutes prior to exit.
- (4) Clearance to fly this route does not include clearance into W-174E, Marquesas/Patricia target area.
- (5) Obstruction/hazard/noise sensitive briefing shall be obtained at time of scheduling.
- (6) CAUTION: Uncharted airstrips N25-00.0 W80-33.0.
- (7) CAUTION: Uncharted 250' MSL concrete tower N25-07.7 W80-24.8; tower with strobe light 300' MSL N27-07.5 W80-24.3; two microwave towers 250' MSL N25-06.7 W80-25.0; tower 350' MSL N25-01.8 W80-30.5; tower 300' MSL N24-55.3 W80-38.0; twin towers 250' MSL N24-54.6 W80-38.8.

FSS's Within 100 NM Radius:

MIA

IR-055

ORIGINATING ACTIVITY: 347 WG, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 WG, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0600-2400 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 15 AGL B 20 MSL to | A | PHK 329/40 | N27°21.30' W81°04.50' |
| 01 AGL B 40 MSL to | B | PHK 318/34 | N27°12.30' W81°06.70' |
| 01 AGL B 40 MSL to | C | PHK 271/28 | N26°47.20' W81°13.00' |
| 01 AGL B 40 MSL to | D | RSW 116/26 | N26°21.00' W81°20.00' |
| 01 AGL B 40 MSL to | E | RSW 129/28 | N26°15.00' W81°21.50' |
| 01 AGL B 40 MSL to | F | HST 299/59 | N25°54.50' W81°21.50' |
| 10 AGL B 40 MSL to | G | HST 291/56 | N25°46.00' W81°21.50' |
| 10 AGL B 40 MSL to | H | HST 266/46 | N25°24.00' W81°13.00' |
| 10 AGL B 40 MSL to | I | HST 244/46 | N25°07.00' W81°07.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline A to B; 8 NM either side of centerline B to I.

Special Operating Procedures:

- (1) All requests for use of this route must be approved by the 347WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
- (2) Route entry from R-2901 required during scheduled range period only. No Alternate Entry points. To maintain separation with preceding flights, start route NET 10 minutes into scheduled range time.
- (3) National Park Service operates fixed and rotary wing aircraft over Everglades National Park and Big Cypress Preserve. Exercise caution between D and I.
- (4) Minimum altitude over Everglades National Park and Big Cypress Preserve is 1000' AGL. Big Cypress Preserve is between E and F, left of centerline entire leg.
- (5) Avoid Immikalee Airport by 3 NM regardless of altitude.
- (6) Contact Miami ARTCC 133.55/291.6 prior to entering route.
- (7) Alternate Exit: D and H.
- (8) Visual road recon (RC) route.
- (9) This route is deconflicted with IR-034, IR-049, IR-050, IR-051, and IR-056 by scheduling.
- (10) Avoid overflight of Hendry Correctional Complex N26-19 W81-16 by 1 NM or 1500' AGL.
- (11) Avoid overflight of horse ranch at N26-52 W81-14 by 2 NM or 1500' AGL.
- (12) CAUTION: Uncharted grass airstrips N26-20.9 W81-26.5; N26-20.0 W81-19.2.
- (13) CAUTION: Uncharted tower 300' MSL N27-07.0 W81-05.0; water tower 250' MSL N27-04.8 W81-04.2; tower 250' MSL N26-59.0 W81-07.8; tower 200' MSL N26-25.9 W81-26.9; microwave tower 150' MSL N26-18.4 W81-16.8; tower 200' MSL N26-17.3 W81-20.2; tower 210' MSL N26-02.5 W81-20.5; tower 210' MSL N26-02.5 W81-21.5.

- (14) CAUTION: Uncharted water tower 250' MSL N27-04.8 W81-04.2; tower 250' MSL N26-59.0 W81-07.8; microwave tower 150' MSL N26-18.4 W81-16.8; tower 200' MSL N26-17.3 W81-20.2; tower 200' MSL N26-02.5 W81-21.5.
- (15) Possible bird hazard area located approximately N27-20.6 W80-41.4. Avoid this area by 3 NM or above 2000' AGL.

FSS's Within 100 NM Radius:

MIA, PIE

IR-056

ORIGINATING ACTIVITY: 347 WG, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 WG, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: 0600-2400 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | HST 244/46 | N25°07.00' W81°07.00' |
| 10 AGL B 30 MSL to | B | HST 266/46 | N25°24.00' W81°13.00' |
| 10 AGL B 30 MSL to | C | HST 291/56 | N25°46.00' W81°21.50' |
| 10 AGL B 30 MSL to | D | RSW 151/43 | N25°54.50' W81°21.50' |
| 01 AGL B 30 MSL to | E | RSW 129/28 | N26°15.00' W81°21.50' |
| 01 AGL B 30 MSL to | F | RSW 116/26 | N26°21.00' W81°20.00' |
| 01 AGL B 30 MSL to | G | PHK 232/15 | N26°37.80' W80°54.50' |
| 01 AGL B 30 MSL to | H | PHK 230/8 | N26°42.00' W80°48.00' |
| 01 AGL B 30 MSL to | I | PHK 345/15 | N27°01.50' W80°46.00' |
| 01 AGL B 30 MSL to | J | PHK 352/23 | N27°10.00' W80°45.00' |
| 01 AGL B 20 MSL to | K | VRB 228/16 | N27°29.00' W80°42.00' |
| 01 AGL B 20 MSL to | L | VRB 275/18 | N27°41.00' W80°50.00' |
| 01 AGL B 20 MSL to | M | VRB 296/25 | N27°50.00' W80°56.00' |
| 01 AGL B 30 MSL to | N | LAL 085/43 | N28°02.00' W81°12.00' |
| 01 AGL B 30 MSL to | O | LAL 086/39 | N28°01.00' W81°17.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from D to O.

ROUTE WIDTH - 8 NM either side of centerline from A to H; 4 NM either side of centerline from H to K; 3 NM either side of centerline from K to O.

IR ROUTES

Special Operating Procedures:

- (1) Visual road reconnaissance (RC) or photo reconnaissance (PR) route.
- (2) This route terminates at Avon Park Gunnery Range (R-2901) and may only be scheduled in conjunction with reserved range time. Route entry times must be made so as not to arrive at range boundary earlier than reserved range time. Route exit time must allow for a minimum of 10 minutes reserved range time remaining for the last aircraft in a flight.
- (3) Avoid Immokalee and Clewiston Airports by 3 NM regardless of altitude.
- (4) Minimum altitude over Everglades National Park and Big Cypress Preserve is 1000'AGL. Big Cypress Preserve is between D and E, east of centerline entire leg.
- (5) Minimum altitude within 3 NM of H is 500'AGL.
- (6) Alternate Entry: D and H.
- (7) Alternate Exit L is to be used only for entry into R-2901 via Marian MOA.
- (8) Florida's turnpike - minimum crossing altitude or paralleling within 1/2 NM altitude is 500' AGL.
- (9) All requests for use of this route must be approved by the 347WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
- (10) Route clearance valid only plus 30 minutes from scheduling time.
- (11) Route segment from F to H is designated a maneuver area.
- (12) Avoid overflight of Hendry Correctional Complex N26-19.0 W81-16.0 by 1 NM or 1500' AGL.
- (13) CAUTION: Uncharted grass airstrips N26-20.0 W81-19.2; N26-20.9 W81-26.5; N27-41.0 W80-48.5.
- (14) CAUTION: Uncharted tower 210' MSL N26-02.5 W81- 20.5; tower 210' MSL N26-02.5 W81-21.5; tower 200' MSL N26-17.3 W81-20.2; microwave tower 150' MSL N26-18.4 W81-16.8; tower 250' MSL N26-27.5 W81-04.5; microwave tower 315' MSL N26-37.7 W80-55.2; tower 300' MSL N26-38.6 W80-55.2; tower 300' MSL N27-52.0 W80-52.8; grain elevator 200' MSL N27-45.3 W80-47.8; grain elevator 300' MSL N27-48.1 W80-47.8; tower 250' MSL N27-42.6 W80- 54.3.
- (15) Tower 516' MSL N27-14.3 W80-45.2 is N27-14.0 W80-40.5. Drive-in movie theater N27-14.5 W80-40.5 is at N27-14.3 W80-45.2.
- (16) H is a mandatory reporting point. In addition to reporting H, non Homestead AFB based aircraft are required to give ETA in Zulu time for M.
- (17) When the instrument approach to Pahokee/Palm Beach County Glades Airport is active, aircraft will be directed to maintain 4000' MSL from G to I.
- (18) Possible bird hazard area located approximately N27-20.6 W80-41.4. Avoid this area by 3 NM or above 2000' AGL.

FSS's Within 100 NM Radius:

GNV, MIA, PIE

IR-057

ORIGINATING ACTIVITY: 16 OSS/DOAA, Hurlburt Field, FL 32544 DSN 579-7409, C850-884-7409.

SCHEDULING ACTIVITY: 16 OSS/DOO, Hurlburt Field, FL 32544 DSN 579-6877/7812, C850-884-6877/7812.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| Cross at 10 MSL to | A | CEW VORTAC | N30°49.57' W86°40.75' |
| 02 AGL B 10 MSL to | B | CEW 010/11 | N31°00.00' W86°38.00' |
| 02 AGL B 30 MSL to | C | CEW 002/44 | N31°33.40' W86°36.60' |
| 02 AGL B 20 MSL to | D | MGM 202/10 | N32°03.90' W86°24.40' |
| 02 AGL B 13 MSL to | E | MGM 102/33 | N32°04.60' W85°41.20' |
| 02 AGL B 15 MSL to | F | EUF 016/11 | N32°07.90' W85°03.60' |
| 02 AGL B 15 MSL to | G | EUF 092/22 | N31°55.30' W84°42.30' |
| 02 AGL B 30 MSL to | H | PZD 274/20 | N31°39.80' W84°41.20' |
| 02 AGL B 30 MSL to | I | PZD 199/30 | N31°10.20' W84°28.00' |
| 02 AGL B 30 MSL to | J | SZW 332/13 | N30°44.90' W84°29.00' |
| 02 AGL B 30 MSL to | K | MAI 146/15 | N30°34.80' W84°57.70' |
| 02 AGL B 10 MSL to | L | MAI 253/25 | N30°39.80' W85°34.60' |
| 02 AGL B 10 MSL to | M | CEW 087/33 | N30°49.30' W86°01.90' |
| 02 AGL B 10 MSL to | N | CEW 061/15 | N30°56.20' W86°24.80' |
| 02 AGL B 10 MSL to | O | CEW 282/8 | N30°51.70' W86°49.80' |
| 02 AGL B 10 MSL to (Sontay DZ) (Alternate routing from N) | P | CEW 197/12 | N30°37.90' W86°45.70' |
| 02 AGL B 10 MSL to | N | CEW 061/15 | N30°56.20' W86°24.80' |
| 02 AGL B 10 MSL to (Pino DZ) | NA | CEW 116/17 | N30°41.20' W86°23.60' |

TERRAIN FOLLOWING OPERATIONS: Entire route designated for terrain following operations by MC-130 and MH-53 aircraft. Special equipment and procedures enable MC-130's and MH-53's to operate at lower than standard IFR terrain clearance altitudes.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Tie-in FSS: GNV (Gainesville).
- (2) Limited to 16 SOW use only.
- (3) Primary Entry: A.
- (4) Alternate Entry: D, I.
- (5) Primary Exit: P or NA.
- (6) Alternate Exit: D, F, I.
- (7) To file alternate routing from N to NA (Pino DZ), file (entry point). IR-057. CEW061015. IR057A. CEW116017.
- (8) Communication requirements: The aircraft shall:
 - (a) Contact Jacksonville ARTCC 120.2 346.6 at B;

- (b) Contact Atlanta ARTCC 120.55 270.25 at C;
- (c) Contact Montgomery APP CON 124.0 319.9 at D;
- (d) Contact Atlanta Large TRACON APP CON 126.55 278.5 339.8 at E;
- (e) Contact Jacksonville ARTCC on 125.75 226.8 at G;
- (f) Contact Tallahassee APP CON on 128.7 254.3 at I;
- (g) Contact Elgin APP CON on 124.05 393.0 at M. When Eglin Approach is closed contact Pensacola Approach 124.05 393.0.
- (9) Route Floor: MH-53 - 200' AGL; MC-130 - 250' AGL.
- (10) Mission number required for entry into R-2914 or R-2915.
- (11) Contact Eglin Range Control at N for entry into R-2914 or O for entry into R-2915.
- (12) Use caution near Crestview VORTAC due to intensive military and civilian traffic.
- (13) Avoid noise sensitive areas:
 - (a) N31-01.2 W86-37.0 (Near B);
 - (b) N30-56.4 W86-30.0 (Near N) by 1000' AGL or 1 NM;
 - (c) N31-01.8 W86-36.5 (Near B) by 1500' AGL or 2 NM;
 - (d) Cody Hill Aviary at N32-08.2 W85-18.4 by 1000' AGL or 1/4 NM.

FSS's Within 100 NM Radius:

ANB, MCN, OZR

IR-059

ORIGINATING ACTIVITY: 16 OSS/DOAA, Hurlburt Field, FL 32544 DSN 579-7409, C850-884-7409.

SCHEDULING ACTIVITY: 16 OSS/DOO, Hurlburt Field, FL 32544 DSN 579-6877/7812, C850-884-6877/7812.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| Cross at 10 MSL to | A | CEW VORTAC | N30°49.57' W86°40.75' |
| 02 AGL B 10 MSL to | B | CEW 061/15 | N30°56.20' W86°24.80' |
| 02 AGL B 10 MSL to | C | CEW 087/33 | N30°49.30' W86°01.90' |
| 02 AGL B 10 MSL to | D | MAI 253/25 | N30°39.80' W85°34.60' |
| 02 AGL B 10 MSL to | E | MAI 146/15 | N30°34.80' W84°57.70' |
| 02 AGL B 30 MSL to | F | SZW 332/13 | N30°44.90' W84°29.00' |
| 02 AGL B 30 MSL to | G | PZD 199/30 | N31°10.20' W84°28.00' |
| 02 AGL B 30 MSL to | H | PZD 274/20 | N31°39.80' W84°41.20' |
| 02 AGL B 30 MSL to | I | EUJ 092/22 | N31°55.30' W84°42.30' |
| 02 AGL B 15 MSL to | J | EUJ 016/11 | N32°07.90' W85°03.60' |
| 02 AGL B 15 MSL to | K | MGM 102/33 | N32°04.60' W85°41.20' |
| 02 AGL B 13 MSL to | L | MGM 202/10 | N32°03.90' W86°24.40' |

| | | | |
|---|----|------------|--------------------------|
| 02 AGL B 20 MSL to | M | CEW 002/44 | N31°33.40' W86°36.60' |
| 02 AGL B 30 MSL to | N | CEW 010/11 | N31°00.00' W86°38.00' |
| 02 AGL B 10 MSL to | O | CEW 282/8 | N30°51.70' W86°49.80' |
| 02 AGL B 10 MSL to (Sontay DZ) (Alternate routing from N) | P | CEW 197/12 | N30°37.90' W86°45.70' |
| 02 AGL B 30 MSL to | N | CEW 010/11 | N31°00.00' W86°38.00' |
| 02 AGL B 10 MSL to | B1 | CEW 061/15 | N30°56.20' W86°24.80' |
| 02 AGL B 10 MSL to (Pino DZ) | BA | CEW 116/17 | N30°41.20' W86°23.60' |

TERRAIN FOLLOWING OPERATIONS: Entire route designated for terrain following operations by MC-130 and MH-53 aircraft. Special equipment and procedures enable MC-130's and MH-53's to operate at lower than standard IFR terrain clearance altitudes.

ROUTE WIDTH - All segments, 2 NM either side of centerline.

Special Operating Procedures:

- (1) Tie-in FSS: CNV (Gainesville).
- (2) Limited to: 16 SOW use only.
- (3) Primary Entry: A.
- (4) Alternate Entry: G, L.
- (5) Primary Exit: P or BA.
- (6) Alternate Exit: G, J, L.
- (7) To file alternate routing from N to BA (Pino DZ), file (entry point). IR-059. CEW010011. IR059A. CEW116017.
- (8) Communication requirements: The aircraft shall:
 - (a) Contact Tallahassee APP CON on 128.7 254.3 at E;
 - (b) Contact Jacksonville ARTCC on 125.75 226.8 at G;
 - (c) Contact Atlanta Large TRACON APP CON 126.55 278.5 339.8 at H;
 - (d) Contact Montgomery APP CON on 124.0 319.9 at K;
 - (e) Contact Atlanta ARTCC on 120.55 270.25 at L;
 - (f) Contact Jacksonville ARTCC on 120.2 346.6 at M;
 - (g) Contact Elgin APP CON on 124.05 393.0 at N. When Eglin Approach is closed contact Pensacola Approach 124.05 393.0.
- (9) Route Floor: MH-53 - 200' AGL; MC-130 - 250' AGL.
- (10) Mission number required for entry into R-2914 or R-2915.
- (11) Contact Eglin Range Control at N for entry into R-2914 or O for entry into R-2915.
- (12) Use caution near Crestview VORTAC due to intensive military and civilian traffic.
- (13) Avoid noise sensitive areas:
 - (a) N31-01.2 W86-37.0 (Near B);
 - (b) N30-56.4 W86-30.0 (Near N) by 1000' AGL or 1 NM;
 - (c) N31-01.8 W86-36.5 (Near B) by 1500' AGL or 2 NM;
 - (d) Cody Hill Aviary at N32-08.2 W85-18.4 by 1000' AGL or 1/4 NM.

FSS's Within 100 NM Radius:

ANB, MCN, OZR

IR ROUTES

IR-062

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana , NAS Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------|----|--------------|--------------------------|
| 40 MSL-50 MSL | | | |
| As assigned to 40 MSL-50 MSL | A | ISO 093/50 | N35°24.00' W76°33.00' |
| as assigned to 30 MSL-40 MSL | B | CVI 241/15 | N36°13.00' W77°07.00' |
| as assigned to 30 MSL-40 MSL | C | TYI 008/30 | N36°29.00' W77°40.00' |
| as assigned to 30 MSL-40 MSL | D | RDU 019/47 | N36°38.00' W78°32.00' |
| as assigned to 30 MSL-40 MSL | E | SBV 228/23 | N36°24.00' W79°20.00' |
| as assigned to 30 MSL-40 MSL | F | LIB 204/5 | N35°44.00' W79°39.00' |
| as assigned to 30 MSL-40 MSL | G | SDZ 199/21 | N34°53.00' W79°42.00' |
| as assigned to 30 MSL-40 MSL | H | FAY 222/34 | N34°32.00' W79°18.00' |
| as assigned to 30 MSL-40 MSL | I | FAY 174/27 | N34°32.00' W78°47.00' |
| as assigned to 30 MSL-40 MSL | J | ILM 354/23 | N34°44.00' W77°59.00' |
| as assigned to 30 MSL-40 MSL | K | ISO 121/5 | N35°20.00' W77°28.00' |
| as assigned to 30 MSL-40 MSL | L | ISO 074/27 | N35°32.00' W77°03.00' |
| as assigned to | M | CVI 161/33 | N35°53.00' W76°33.00' |

Alternate Exit: L and LA

| | | | |
|------------------------------|----|------------|--------------------------|
| 30 MSL-40 MSL | | | |
| as assigned to 30 MSL-40 MSL | L | ISO 074/27 | N35°32.00' W77°03.00' |
| as assigned to | LA | ISO 105/41 | N35°15.00' W76°44.00' |

ROUTE WIDTH - 4 NM either side of centerline from A to C; 3 NM left and 4 NM right of centerline from C to E; 4 NM either side of centerline from E to M; 4 NM either side of centerline from L to LA on alternate exit track.

Special Operating Procedures:

- (1) Route reservations and brief required.
- (2) Alternate Entry: B.
- (3) Alternate Exit: L and LA.
- (4) To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use a stereo flight plan.

- (5) Where two altitudes are indicated, the lower published altitude is the primary route altitude. The higher altitude will be assigned by ATC when required to provide separation from other IFR operations.
- (6) Mandatory reporting points. Radio reports are required when passing:
 - (a) A to Cherry Point 314.0;
 - (b) B to Washington ARTCC 323.0;
 - (c) D to Washington ARTCC 269.4;
 - (d) E to Greensboro APP CON 247.2;
 - (e) 30 NM North of G to Fayetteville APP CON 340.7;
 - (f) 5 NM East of I to Wilmington APP CON 346.35;
 - (g) J to Seymour Johnson APP CON 273.6;
 - (h) 16 NM Southeast of L to Washington ARTCC 272.75;
 - (i) Exit fix on assigned frequency.
- (7) Return altitude 15,000' MSL. Lost communications altitude 3000' MSL.
- (8) Hazards: At Point M, transit R-5314 below 1000' AGL unless cleared by Range Control 358.8. Numerous MTR's terminate in this area. Military aircraft may be holding VFR over Phelps Lake or at the Alligator River bridge awaiting clearance into the Dare Bombing Range.
- (9) Caution: IR-012 crosses left to right at Point A, crosses twice at Points I-K, and crosses left to right at Point L. (Deconflict with Seymour Johnson AFB DSN 488-6565).
- (10) Caution: IR-035 (Points A-C) runs opposite direction at Points H-J. (Deconflict with Shaw AFB DSN 965-1118).
- (11) Caution: VR-087 coincides same direction at Point H. (Deconflict with Shaw AFB DSN 965-1118).

FSS's Within 100 NM Radius:

EKN, RDU

IR-066

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710 DSN 742-7560/7633, C662-434-7560/7633.

SCHEDULING ACTIVITY: 50 FTS, Columbus AFB, MS 39710 DSN 742-7734/7735, C662-434-7734/7735.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------------|----|--------------|--------------------------|
| 30-50 MSL | | | |
| As assigned to | A | VUZ 001/16 | N33°56.00' W86°53.00' |
| as assigned to 15 AGL B 30-50 MSL | B | HAB 105/16 | N34°07.00' W87°42.00' |
| 01 AGL B 40 MSL to | C | MSL 296/36 | N34°59.00' W88°09.00' |
| 01 AGL B 40 MSL to | D | GHM 183/33 | N35°17.00' W87°31.00' |
| 01 AGL B 40 MSL to | E | DYR 136/55 | N35°19.00' W88°35.00' |
| 01 AGL B 40 MSL to | F | HLI 054/41 | N35°08.00' W88°48.00' |
| 01 AGL B 40 MSL to | G | HLI 068/21 | N34°53.00' W89°06.00' |

01 AGL B 40 MSL to H CBM 355/45 N34°23.00'
W88°31.00'

01 AGL B 40 MSL to I HAB 246/21 N34°04.00'
W88°24.00'

TERRAIN FOLLOWING OPERATIONS: Minimum altitude 1500' AGL A to B. Authorized IAW Command Directives with enroute structure from B to I.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from IFR traffic only. MARSAs apply after aircraft have passed the entry/alternate entry point until ATC establishes standard separation after exiting the route.
- (2) Alternate Entry: B, C and G.
- (3) Alternate Exit: F, G and H.
- (4) Aircrews should watch for glider operations out of M40: Monroe County Airport, MS (N33 52.42' W88 29.38'). Glider operations usually take place north of M40 from SFC to 8000'.
- (5) Compulsory Reporting Points:
 - (a) D, Memphis ARTCC 125.85/379.25;
 - (b) F, Memphis ARTCC 135.9/273.55 (compulsory only when F is filed exit);
 - (c) G, Memphis ARTCC 135.9/273.55;
 - (d) H, Memphis ARTCC 135.9/273.55;
 - (e) I, Columbus RAPCON 120.4/239.25 (when Columbus RAPCON closed, contact Memphis Center 128.5/279.55).
- (6) Army National Guard units conduct tactical helicopter operations from SFC to 3000' AGL from N33-45.0 W88-56.5 to N34-20.0 W88-30.0.
- (7) Tie-in FSS: Anniston (ANB).
- (8) When exiting at Point I, aircraft will climb to 3000' MSL at the exit point and proceed to the destination at this altitude until radio contact is made.
- (9) For route briefing contact Scheduling Activity.
- (10) Numerous power lines/antennae below 200' AGL may be uncharted.
- (11) Aircrews calling to schedule IR-066 will ensure they have checked all applicable Bird Hazard products (examples: <http://www.usahas.com/> and <http://www.usahas.com/bam/>) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.
- (12) Crossing Routes:
 - (a) IR-067 common route from Point A to D, and E to G (48 FTS, DSN 742-7840 C662-434-7840).
 - (b) VR-1014 between Points A and B, between Points B and C, and between Points H and I (37/41 FTS, DSN 742-7666 C662-434-7666).
 - (c) VR-1016 common route from Point B to D, and E to G (48 FTS, DSN 742-7840 C662-434-7840).
 - (d) VR-1050 common route from Point A to F and from Point H to I, crosses between Points G and H (48 FTS, DSN 742-7840 C662-434-7840).
 - (e) VR-1051 common route from Point A to D and from Point E to G (48 FTS, DSN 742-7840 C662-434-7840).
 - (f) SR-075 crosses between Points H and I (48 FTS, DSN 742-7840 C662-434-0588).
- (13) Route Deconfliction:

- (a) IR-067, VR-1050, VR-1051, VR-1016: Deconflicted by scheduler using time (if unable to enter within + or - 4 minutes, re-coordinate a new entry time).
- (b) VR-1014: Aircraft flying IR-066 between Points A to B, until half way between the Points B to C and between Points H and I will fly at or above 1500' AGL unless the crew has verified that VR-1014 is not being utilized.
- (c) Contact the Scheduling Activity for SR-075 to verify if the route is being utilized.

FSS's Within 100 NM Radius:

ANB, BNA, GWO, JBR, MKL

IR-067

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710 DSN 742-7560/7633, C662-434-7560/7633.

SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, MS 39710 DSN 742-7840/7847, C662-434-7840/7847.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|------------|
| As assigned to | A | VUZ 001/16 | N33°56.00' |
| 15 AGL B 30-50 MSL | | | W86°53.00' |
| as assigned to | B | HAB 105/16 | N34°07.00' |
| 15 AGL B 30-50 MSL | | | W87°42.00' |
| 01 AGL B 40 MSL to | C | MSL 296/36 | N34°59.00' |
| | | | W88°09.00' |
| 01 AGL B 40 MSL to | D | GHM 183/33 | N35°17.00' |
| | | | W87°31.00' |
| 01 AGL B 40 MSL to | E | GHM 312/33 | N36°13.00' |
| | | | W87°56.00' |
| 01 AGL B 40 MSL to | F | DYR 082/32 | N36°04.00' |
| | | | W88°40.00' |
| 01 AGL B 40 MSL to | G | DYR 136/55 | N35°19.00' |
| | | | W88°35.00' |
| 01 AGL B 40 MSL to | H | HLI 054/41 | N35°08.00' |
| | | | W88°48.00' |
| 01 AGL B 40 MSL to | I | HLI 068/21 | N34°53.00' |
| | | | W89°06.00' |

TERRAIN FOLLOWING OPERATIONS: Minimum altitude 1500' AGL A to B. Authorized IAW Command Directives with enroute structure from B to I.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from IFR traffic only. MARSAs apply after aircraft have passed the entry/alternate entry point until ATC establishes standard separation after extending the route.
- (2) Alternate Entry: B, C and E.
- (3) Alternate Exit: E.
- (4) Compulsory Reporting Points:
 - (a) D, Memphis ARTCC 125.85/379.25;
 - (b) E, Memphis ARTCC 125.85/379.25 (compulsory only when filed as an alternate exit);

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- (c) F, Memphis ARTCC 134.65/316.15;
- (d) I, Memphis ARTCC 135.9/273.55.
- (5) Tie-in FSS: Anniston (ANB).
- (6) Numerous power lines/antennae below 200' AGL may be uncharted.
- (7) To schedule for weekend use, contact Scheduling Activity prior to 2200Z on Friday.
- (8) For route briefing, contact scheduling agency.
- (9) Aircrews calling to schedule IR-067 will ensure they have checked all applicable Bird Hazard products (examples: <http://www.usahas.com/> & <http://usahas.com/bam/>) and are applying appropriate guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.
- (10) Crossing Routes:
 - (a) IR-066 common route from Point A to D and from Point G to I (50 FTS, DSN 742-7734 C662-434-7734);
 - (b) IR-077/078 crosses between Point D and F, and between Point F and G, and already has altitude separation;
 - (c) VR-1014 between A and B, between B and C (37/41 FTS, DSN 742-7666 C662-434-7666);
 - (d) VR-1016 common route from Point B to D and E to G (48 FTS, DSN 742-7840 C662-434-7840);
 - (e) VR-1050 common route from Point A to D and from Point H to I crosses between Point G and H (48 FTS, DSN 742-7840 C662-434-7840);
 - (f) VR-1051 common route from Point A to D, and from Point E to G (48 FTS, DSN 742-7840 C662-434-7840);
 - (g) SR-221 Common route reciprocal heading near Point E (314 OSS/OSTX, DSN 726-7504 C901-291-7504).
 - (h) SR-075 crosses between Points H and I (48 FTS, DSN 742-7840 C662-434-0588).
- (11) Route Deconfliction:
 - (a) IR-066, VR-066, VR-1050, VR-1016; deconflicted by scheduler using time (if unable to enter within +/- 4 minutes re-coordinate a new entry time).
 - (b) VR-1014: Aircraft flying IR-067 between points A to B and until halfway between points B to C will fly at or above 1500' AGL unless the crew has verified that VR-1014 is not being utilized.
 - (c) SR-075 has the same scheduler and will be able to advise if the route is scheduled to be flown.
 - (d) Contact the scheduling activity for SR-221 to verify if the route is being utilized.

FSS's Within 100 NM Radius:

ANB, BNA, GWO, JBR, MKL

IR-068

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710 DSN 742-7560/7633, C662-434-7560/7633.

SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, MS 39710 DSN 742-7840/7847, C662-434-7840/7847.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| Cross at 30 MSL to | A | SQS 348/12 | N33°40.00' W90°19.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 01 AGL B 30 MSL to | B | SQS 330/54 | N34°16.00' W90°46.00' |
| 01 AGL B 30 MSL to | C | MEM 227/34 | N34°38.00' W90°30.00' |
| 01 AGL B 30 MSL to | D | SQS 025/44 | N34°07.00' W89°52.00' |
| 01 AGL B 40 MSL to | E | SQS 079/36 | N33°33.00' W89°34.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized IAW Command Directives within route structure from A to E.

ROUTE WIDTH - 5 NM either side of centerline from A to D; 8 NM either side of centerline from D to E.

Special Operating Procedures:

- (1) Photo reconnaissance (PR) route.
- (2) Compulsory reporting points:
 - (a) Point C, Memphis ARTCC 135.3 335.8;
 - (b) Point E, Memphis ARTCC 128.5 279.55.
- (3) Numerous power lines and antenna below 200' AGL may be uncharted.
- (4) To schedule for weekend use, contact Scheduling Activity prior to 2200z on Friday.
- (5) For route briefing, contact scheduling agency.
- (6) Aircraft avoid overflight of Camp McCain, MS, Maintain 1500' within 2 NM of N33-42 W89-43. (Contains laser weaponry range, helicopter operations and controlled firing range).
- (7) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSAs apply after aircraft have passed the entry and alternate entry point until ATC establishes standard separation after exiting the route. MARSAs also apply between aircraft flying IR-068 and other aircraft flying IR-091 by using see and avoid and/or route scheduling.
- (8) Aircrews calling to schedule IR-068 will ensure they have checked all applicable Bird Hazard products (examples: <http://www.usahas.com/> & <http://usahas.com/bam/>) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.
- (9) Crossing routes:
 - (a) IR-070 Common route (reciprocal heading) from Point A to B (48 FTS, DSN 742-7840, C662-434-7840);
 - (b) IR-091 between Points C and D, and near Point E (50 FTS, DSN 742-7734, C662-434-7734);
 - (c) VR-1051 between Points D and E (48 FTS, DSN 742-7840, C662-434-7840);
 - (d) SR-073/074 Common route from near Point C to D (48 FTS, DSN 742-7840, C662-434-7840);
 - (e) SR-137/138 at Exit Point E (37/41 FTS, DSN 742-7666, C662-434-7666);
 - (f) SR-238 Entry Point near Point C (314 OSS/OSK, DSN 731-3719, C501-987-3719).
- (10) Route deconfliction:
 - (a) SR-073, SR-074, IR-070 and VR-1051 have the same scheduler and will be able to advise if these routes are scheduled to be flown. Aircraft flying IR-070 will exit at IR-070 Alternate Exit Point H unless the crew has verified that IR-068 is not being utilized. IR-068 and VR-1051 both are nearing their Exit Points when they become a conflict.

- (b) Contact the different Scheduling Activities for SR-137, SR-138, SR-238 and IR-091 to verify if they are being utilized. IR-091 is normally flown on Mondays, Wednesdays and Fridays while IR-068 is flown on Tuesdays and Thursdays.

(11) Route restricted to 14 FTW aircraft, unless otherwise coordinated.

FSS's Within 100 NM Radius:

DRI, GWO, JBR, MKL

IR-070

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710-5000 DSN 742-7560/7633, C662-434-7560/7633.

SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, MS 39710 DSN 742-7840/7847, C662-434-7840/7847.

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | JAN 303/29 | N32°48.00' W90°37.00' |
| 05 AGL B 30 MSL to | B | SQS 245/49 | N33°09.00' W91°11.00' |
| 05 AGL B 30 MSL to | C | ELD 130/30 | N32°53.00' W92°20.00' |
| 05 AGL B 30 MSL to | D | ELD 054/24 | N33°27.00' W92°20.00' |
| 05 AGL B 50 MSL to 05 AGL B 50 MSL to cross F | E | MON 285/33 | N33°44.00' W92°20.00' |
| at or below 30 MSL | F | MON 289/29 | N33°45.20' W92°15.00' |
| 05 AGL B 30 MSL to | G | GLH 349/29 | N34°00.00' W91°03.00' |
| 05 AGL B 50 MSL to | H | SQS 316/45 | N34°02.00' W90°52.00' |
| 05 AGL B 40 MSL to | I | SQS 333/34 | N33°59.00' W90°33.00' |
| 05 AGL B 40 MSL to Cross at 40 MSL or as assigned | J | SQS 348/12 | N33°40.00' W90°19.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized IAW Command Directives within entire route structure.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Photo reconnaissance (PR) route.
- (2) Alternate Entry: Point C, Alternate Exit: Points E and H.
 - (a) When utilizing Point E as an alternate exit point: File to MON, then as required; cross Point E at 5,000' MSL and contact Memphis ARTCC 135.875 269.35 for altitude assignment.
 - (b) When utilizing Point H as an alternate exit point: File to GLH, then as required; cross Point H at 5,000' MSL and contact Memphis ARTCC 135.875 269.35 for altitude assignment.

- (3) Compulsory Reporting Points:
 - (a) Point B, Memphis ARTCC 135.875 269.35;
 - (b) Point C, Monroe APP CON 126.9 307.9;
 - (c) Point E, Memphis ARTCC 135.875 269.35;
 - (d) Point H, Memphis ARTCC 135.875 269.35 (compulsory only when Point H is filed as Exit);
 - (e) Point I, Memphis ARTCC 132.5 259.1;
 - (f) Point J, Memphis ARTCC 132.5 259.1.
- (4) Tie-in FSS - JAN (A-D) and GWO (E-I).
- (5) To schedule for weekend use, contact Scheduling Activity prior to 2200Z on Friday.
- (6) For route briefing, contact scheduling agency.
- (7) Aircrews calling to schedule IR-070 will ensure they have checked all applicable Bird Hazard products (examples: <http://www.usahas.com/> & <http://usahas.com/bam/>) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.
- (8) Crossing Routes:
 - (a) IR-068 Common route (reciprocal heading) from Point H to I (48 FTS, DSN 742-7840, C662-434-7840);
 - (b) VR-1032 starts/ends at Point A, crosses twice between Points B and C, common route between Points C and D (COMTRAWING ONE NAS, Meridian, DSN 637-2487, C601-697-2487).
- (9) If aircraft need to delay entry at Point A, aircraft should hold on the JAN 303 radial between 29 and 37 DME. Altitude will be assigned by ATC (usually 030 MSL or above).
- (10) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSAs applies after aircraft have passed the entry/alternate entry point until ATC establishes standard separation after exiting the route.
- (11) Route Deconfliction:
 - (a) IR-068 has the same scheduler and will be able to advise if this route is scheduled to be flown. Aircraft flying IR-070 will exit at IR-070 Alternate Exit Point H unless the crew has verified that IR-068 is not being utilized. IR-068 is normally only flown on Tuesdays and Thursdays.
 - (b) Contact the VR-1032 Scheduling Activity to verify if the route is being utilized.

FSS's Within 100 NM Radius:

DRI, GWO, JBR, MKL

IR-077

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL 32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri; occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| Cross at 50 MSL to | A | VUZ 073/22 | N33°46.00' W86°28.00' |
| 50 MSL to | B | GAD 341/14 | N34°12.00' W86°10.00' |

IR ROUTES

| | | | | | | | |
|-----------|---|------------|--------------------------|-----------|---|------------|--------------------------|
| 50 MSL to | C | GAD 031/34 | N34°27.00' W85°43.00' | 60 MSL to | G | RQZ 041/41 | N35°18.00' W86°04.00' |
| 50 MSL to | D | GQO 268/28 | N34°57.00' W85°43.00' | 60 MSL to | H | GQO 268/28 | N34°57.00' W85°43.00' |
| 50 MSL to | E | RQZ 041/41 | N35°18.00' W86°04.00' | 60 MSL to | I | GAD 031/34 | N34°27.00' W85°43.00' |
| 50 MSL to | F | BNA 189/41 | N35°27.00' W86°47.00' | 60 MSL to | J | GAD 341/14 | N34°12.00' W86°10.00' |
| 50 MSL to | G | GHM 144/21 | N35°32.00' W87°13.00' | 60 MSL to | K | VUZ 073/22 | N33°46.00' W86°28.00' |
| 50 MSL to | H | GHM 190/3 | N35°47.00' W87°28.00' | | | | |
| 50 MSL to | I | GHM 289/29 | N36°01.00' W88°00.00' | | | | |
| 50 MSL to | J | JKS 081/16 | N35°38.00' W88°02.00' | | | | |
| 50 MSL to | K | JKS 236/17 | N35°27.00' W88°39.00' | | | | |

ROUTE WIDTH - 4 NM either side of centerline A to E; 10 NM either side of centerline E to K.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
- (2) Advise controller when making turns in excess of 20 degrees.
- (3) Radar systems navigation (SN) route.
- (4) Mandatory reporting points: C contact Chattanooga ATC on 321.2. D contact Memphis ARTCC 353.5.
- (5) Caution: VR-092 same direction C and E (de-conflict with Shaw AFB, DSN 965-1118 C803-895-1118).

FSS's Within 100 NM Radius:

ANB, AND, BNA, GWO, JBR, MCN, MKL

IR-078

ORIGINATING ACTIVITY: FACSFA, Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri;
occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| Cross at 60 MSL to | A | JKS 236/17 | N35°27.00' W88°39.00' |
| 60 MSL to | B | JKS 081/16 | N35°38.00' W88°02.00' |
| 60 MSL to | C | GHM 289/29 | N36°01.00' W88°00.00' |
| 60 MSL to | D | GHM 190/3 | N35°47.00' W87°28.00' |
| 60 MSL to | E | GHM 144/21 | N35°32.00' W87°13.00' |
| 60 MSL to | F | BNA 189/41 | N35°27.00' W86°47.00' |

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
- (2) Advise controller when making turns in excess of 20 degrees.
- (3) Radar system navigation (SN) route.
- (4) Mandatory reporting points:
 - (a) H, contact Chattanooga ATC 321.2;
 - (b) I, contact Atlanta ARTCC 353.7;
 - (c) J, contact Birmingham ATC 231.1 338.2.

FSS's Within 100 NM Radius:

ANB, AND, BNA, GWO, JBR, MCN, MKL

IR-079

ORIGINATING ACTIVITY: FACSFA, Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri;
occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------------------|----|--------------|--------------------------|
| Cross at 100 MSL to | A | SOT 149/19 | N35°32.00' W82°50.00' |
| 100 MSL to | B | SOT 035/19 | N36°04.00' W82°51.00' |
| 90 MSL-100 MSL as assigned to | C | HMV 186/6 | N36°20.00' W82°08.00' |
| 90 MSL-100 MSL as assigned to | D | HMV 302/25 | N36°38.00' W82°35.00' |
| 70 MSL-90 MSL as assigned to | E | GZG 336/27 | N37°14.00' W82°20.00' |
| 70 MSL-90 MSL as assigned to | F | ECB 164/27 | N37°44.00' W82°44.00' |
| 70 MSL-90 MSL as assigned to | G | ECB 045/23 | N38°26.00' W82°35.00' |
| 70 MSL-90 MSL as assigned to | H | HNN 312/8 | N38°50.00' W82°09.00' |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.

- (2) Advise controller when making turns in excess of 20 degrees.
- (3) Request 9000' from B to H.
- (4) Radar system navigation (SN) route.
- (5) Alternate Exit: G.
- (6) Conflicts: (De-conflict with appropriate Scheduling Activity)
 - (a) Same direction as IR-080 from Points A to C.
 - (b) Opposite direction to IR-022 from Points A to C.

FSS's Within 100 NM Radius:

AND, BNA, CLE, DAY, EKN, LOU

IR-080

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri;
occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| Cross at 100 MSL to | A | SOT 149/19 | N35°32.00' W82°50.00' |
| 100 MSL to | B | SOT 035/19 | N36°04.00' W82°51.00' |
| 90 MSL-100 MSL | C | HMV 186/6 | N36°20.00' W82°08.00' |
| as assigned to | D | HMV 069/30 | N36°39.00' W81°34.00' |
| 90 MSL-100 MSL | E | PSK 251/20 | N36°57.00' W81°05.00' |
| as assigned to | F | PSK 350/15 | N37°20.00' W80°48.00' |
| 80 MSL-100 MSL | G | BKW 133/14 | N37°38.00' W80°53.00' |
| as assigned to | H | BKW 357/23 | N38°10.00' W81°12.00' |
| 80 MSL-100 MSL | I | HNN 048/14 | N38°55.00' W81°49.00' |
| as assigned to | | | |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
- (2) Advise controller when making turns in excess of 20 degrees.
- (3) Request 9000' from B to I.
- (4) Radar system navigation (SN) route.
- (5) Alternate Exit: H.
- (6) Conflicts: (De-conflict with appropriate Scheduling Activity)
 - (a) Crosses VR-903 between Points D and E.
 - (b) Opposite direction to IR-022 from Points A to C.
 - (c) Same direction as IR-079 from Points A to C.
 - (d) Same direction as IR-081 from Points D to E.
 - (e) Opposite direction to IR-608 from Points D to F.
 - (f) Opposite direction to IR-723 from Points E to I.

FSS's Within 100 NM Radius:

AND, BNA, CLE, DAY, EKN, RDU

IR-081

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri;
occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| Cross at 100 MSL to | A | SUG 048/30 | N35°45.00' W81°50.00' |
| 100 MSL to | B | HMV 118/47 | N36°07.00' W81°15.00' |
| 90 MSL-100 MSL | C | HMV 069/30 | N36°39.00' W81°34.00' |
| as assigned to | D | PSK 251/20 | N36°57.00' W81°05.00' |
| 90 MSL-100 MSL | E | PSK 063/16 | N37°14.00' W80°26.00' |
| as assigned to | F | PSK 125/37 | N36°47.00' W80°02.00' |
| 90 MSL-100 MSL | G | SBV 214/15 | N36°27.00' W79°10.00' |
| as assigned to | | | |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
- (2) Advise controller when making turns in excess of 20 degrees.
- (3) Request 9000' from B to G.
- (4) Radar system navigation (SN) route.
- (5) Conflicts: (De-conflict with appropriate Scheduling Activity)
 - (a) Same direction as IR-080 from Points C to D.
 - (b) Crosses IR-082 at Point A.
 - (c) Same direction as IR-083 from Points A to B.
 - (d) Opposite direction to IR-608 from Points C to D.
 - (e) Opposite direction to IR-723 from Points A to D.

FSS's Within 100 NM Radius:

AND, BNA, EKN, RDU

IR-082

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri;
occasional weekends

IR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------------------|----|--------------|--------------------------|
| As assigned to 90 MSL-100 MSL | A | SDZ 264/30 | N35°08.00' W80°11.00' |
| 90 MSL B 100 MSL to | B | SPA 094/48 | N35°00.00' W80°57.00' |
| 90 MSL B 100 MSL to | C | HMV 173/67 | N35°20.00' W81°52.00' |
| as assigned to 90 MSL-100 MSL | D | SUG 048/30 | N35°45.00' W81°50.00' |
| as assigned to 90 MSL-100 MSL | E | SUG 002/22 | N35°46.00' W82°16.00' |
| as assigned to 90 MSL-100 MSL | F | SOT 149/19 | N35°32.00' W82°50.00' |
| as assigned to 90 MSL-100 MSL | G | SOT 202/26 | N35°23.00' W83°13.00' |
| as assigned to 90 MSL-100 MSL | H | VXV 173/28 | N35°27.00' W83°48.00' |
| as assigned to 90 MSL-100 MSL | I | HRS 050/8 | N35°02.00' W83°47.00' |
| as assigned to | J | ODF 247/2 | N34°41.00' W83°20.00' |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
- (2) Advise controller when making turns in excess of 20 degrees.
- (3) Request 9000' MSL.
- (4) Radar system navigation (SN) route.
- (5) Alternate Entry: Point C.
- (6) Alternate Exit: Point H.
- (7) Conflicts: (De-conflict with appropriate Scheduling Activity)
 - (a) Crosses IR-022 between Points E and F and at J.
 - (b) Crosses RI-081 at Point D.
 - (c) Opposite direction to IR-83 from Points D to J.
 - (d) Crosses IR-723 at Point D.

FSS's Within 100 NM Radius:

ANB, AND, BNA, MCN, RDU

IR-083

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL 32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri; occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------------------|----|--------------|--------------------------|
| 90 MSL-100 MSL | | | |
| As assigned to 90 MSL-100 MSL | A | ODF 247/2 | N34°41.00' W83°20.00' |

| | | | |
|----------------------------------|---|------------|--------------------------|
| as assigned to 90 MSL-100 MSL | B | HRS 050/8 | N35°02.00' W83°47.00' |
| as assigned to 90 MSL-100 MSL | C | VXV 173/28 | N35°27.00' W83°48.00' |
| as assigned to 90 MSL-100 MSL | D | SOT 202/26 | N35°23.00' W83°13.00' |
| as assigned to 90 MSL-100 MSL | E | SOT 149/19 | N35°32.00' W82°50.00' |
| as assigned to 90 MSL-100 MSL | F | SUG 002/22 | N35°46.00' W82°16.00' |
| as assigned to 90 MSL-100 MSL | G | SUG 048/30 | N35°45.00' W81°50.00' |
| as assigned to 90 MSL-100 MSL | H | HMV 116/48 | N36°08.00' W81°13.00' |
| 90 MSL B 100 MSL to | I | HMV 132/65 | N35°46.00' W81°05.00' |
| as assigned to | J | SDZ VORTAC | N35°12.93' W79°35.28' |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
- (2) Advise controller when making turns in excess of 20 degrees.
- (3) Request 9000' MSL.
- (4) Radar system navigation (SN) route.
- (5) Alternate Exit: G.
- (6) Conflicts: (De-conflict with the appropriate Scheduling Activity)
 - (a) Crosses IR-022 at Point A between Points E and F and at J. Opposite direction from Point H to I.
 - (b) Same direction as IR-081 from Points H to I.
 - (c) Opposite direction to IR-082 from Points A to G.
 - (d) Opposite direction to IR-723 from Points G to H.
 - (e) Parallels IR-726 opposite direction from Points F to G.

FSS's Within 100 NM Radius:

ANB, AND, BNA, MCN, RDU

IR-089

ORIGINATING ACTIVITY: 437 OSS/OSOT, Charleston AFB, SC 29404 DSN 673-5554, C843-963-5554.

SCHEDULING ACTIVITY: 437 OSS/OSOT, Charleston AFB, SC 29404 DSN 673-5552, C843-963-5552. Non duty hrs DSN 673-2531, C843-963-2531.

HOURS OF OPERATION: 0600-2400 local, daily, Jan, Mar, May, Jul, Sep and Nov only

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| Cross at 60 MSL to | A | GQO 208/32 | N34°30.00' W85°28.00' |
| 01 AGL B 60 MSL to | B | GQO 196/29 | N34°30.30' W85°19.30' |

| | | | |
|--------------------|---|------------|--------------------------|
| 01 AGL B 40 MSL to | C | GQO 139/35 | N34°31.00' W84°42.00' |
| 01 AGL B 60 MSL to | D | GQO 129/41 | N34°31.00' W84°31.00' |
| 01 AGL B 60 MSL to | E | GQO 115/47 | N34°37.00' W84°18.00' |
| 01 AGL B 70 MSL to | F | AHN 323/55 | N34°41.00' W84°00.00' |
| 01 AGL B 70 MSL to | G | AHN 330/36 | N34°28.30' W83°41.00' |
| 01 AGL B 40 MSL to | H | AHN 338/27 | N34°22.00' W83°32.00' |
| 01 AGL B 30 MSL to | I | AHN 010/17 | N34°14.00' W83°16.00' |
| 01 AGL B 30 MSL to | J | AHN 030/17 | N34°12.00' W83°09.00' |
| 01 AGL B 50 MSL to | K | GRD 263/43 | N34°09.00' W83°00.00' |
| 50 MSL to | L | GRD VORTAC | N34°15.10' W82°09.25' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to K.

ROUTE WIDTH - 5 NM either side of centerline from A to J; 5 NM left and 3 NM right of centerline J to K; 3 NM either side of centerline from K to L.

Special Operating Procedures:

- (1) Monitor Atlanta ARTCC 353.7 passing A then 282.35 C.
- (2) Continue to monitor Atlanta ARTCC by changing from 282.35 to 307.9 passing F then 316.05 passing I.
- (3) Contact Greer APP CON 350.2 passing K.
- (4) Alternate Exit: F, when exiting at F cross F at 7000' MSL and proceed direct to HRS VORTAC located at N34-56.6 W83-54.9. Contact Atlanta ARTCC 370.9 at F.
- (5) CAUTION: Hang glider activity, N34-32 W85-28 to 4000'AGL. Caution: Hot air balloons operating from surface to 12,000' MSL within 10 NM of N34-42.0 W83-44.0.
- (6) CAUTION: VR-1055 opposite direction A to D. VR-1052 starts 10 NM east of B and runs northeast. (Deconflict DSN 922-2735).
- (7) CAUTION: VR-097 same direction Point F to K. (Deconflict DSN 965-1118/1119).
- (8) Five noise sensitive areas:
 - (a) N34-14.5 W83-22.4, avoid by 1500' AGL and 1 NM;
 - (b) LLA GA, N34-11.0 W83-16.5, avoid by 1000' AGL and 1 NM;
 - (c) Maintain at or above 1500' AGL from Point F to Point G due to numerous noise sensitive areas.
 - (d) Avoid congressional noise sensitive area: Carnesville, GA N34-19.5 W83-18.2 by 1500' and 1 NM.
 - (e) Avoid: Chicken Farm N34-20 W83-30 by 1500' AGL and 1.5 NM.
- (9) Avoid: Army Airfield, N34-37.5 W84-06.0 1500' and 3 NM.
- (10) Avoid: Tower N34-31.4 W83-40.8 by 400' AGL (2200' MSL).
- (11) CAUTION: Bird activity: Landfills at N34-20.7 W83-25.4; N34-11.3 W82-30.5; N34-08.5 W82-46.5.
- (12) Include route entry/exit times in the remarks section of flight plan.
- (13) CAUTION: Student pilot training conducted between 500' AGL-5000' MSL within a 10 NM radius of Greenwood Co Airport (GRD) at N34-14.9 W82-09.6.

- (14) Make entry times plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.

FSS's Within 100 NM Radius:

ANB, AND, BNA, HUA, MCN

IR-090

ORIGINATING ACTIVITY: 437 OSS/OSOT, Charleston AFB, SC 29404 DSN 673-5554, C843-963-5554.

SCHEDULING ACTIVITY: 437 OSS/OSOT, Charleston AFB, SC 29404 DSN 673-5552, C843-963-5552. Non duty hrs DSN 673-2531, C843-963-2531.

HOURS OF OPERATION: 0600-2400 local, daily, Feb, Apr, Jun, Aug, Oct and Dec only

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| Cross at 50 MSL to | A | GRD VORTAC | N34°15.10' W82°09.25' |
| 50 MSL to | B | GRD 263/43 | N34°09.00' W83°00.00' |
| 01 AGL B 50 MSL to | C | AHN 030/17 | N34°12.00' W83°09.00' |
| 01 AGL B 30 MSL to | D | AHN 010/17 | N34°14.00' W83°16.00' |
| 01 AGL B 30 MSL to | E | AHN 338/27 | N34°22.00' W83°32.00' |
| 01 AGL B 40 MSL to | F | AHN 330/36 | N34°28.30' W83°41.00' |
| 01 AGL B 70 MSL to | G | AHN 323/55 | N34°41.00' W84°00.00' |
| 01 AGL B 70 MSL to | H | GQO 115/47 | N34°37.00' W84°18.00' |
| 01 AGL B 60 MSL to | I | GQO 129/41 | N34°31.00' W84°31.00' |
| 01 AGL B 60 MSL to | J | GQO 139/35 | N34°31.00' W84°42.00' |
| 01 AGL B 40 MSL to | K | GQO 196/29 | N34°30.30' W85°19.30' |
| 40 MSL B 100 MSL to | L | GQO 208/32 | N34°30.00' W85°28.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from B to J.

ROUTE WIDTH - 3 NM either side of centerline from A to B; 3 NM left and 5 NM right of centerline from B to C; 5 NM either side of centerline from C to L.

Special Operating Procedures:

- (1) Monitor Atlanta ARTCC on 316.05 passing B then 307.9 passing D; 282.35 passing G.
- (2) Monitor, then contact when practical Atlanta ARTCC on 353.7 passing J.
- (3) Include entry/exit times in remarks section of flight plan.
- (4) CAUTION: Tower N34-31.4 W83-40.8 400' AGL (2200' MSL).

IR ROUTES

- (5) Alternate Exit: G. When exiting cross G at 7000' MSL and proceed direct to HRS VORTAC N34-56.6 W83-54.9. Contact Atlanta ARTCC 307.9 at G.
- (6) CAUTION: Hang gliding activity, N34-32 W85-28 to 4000' AGL. Caution: Hot air balloons operating from surface to 12,000' MSL within 10 NM of N34-42.0 W83-44.0.
- (7) Avoid Army Airfield, N34-37.5 W84-06.0 by 1500'/3 NM.
- (8) CAUTION: VR-1055 same direction from I to L. VR-1052 starts 10 NM east of K and runs northeast. (Deconflict DSN 922-2735).
- (9) CAUTION: VR-097 opposite direction Point B to G. (Deconflict DSN 965-1118/1119).
- (10) CAUTION: Bird activity: Landfills at N34-20.7 W83-25.4; N34-11.3 W82-30.5; N34-08.5 W82-46.5.
- (11) Five noise sensitive areas:
 - (a) N34-14.5 W83-22.4. avoid by 1500' AGL and 1 NM;
 - (b) N34-11.0 W83-16.5, IIA GA, avoid by 1000';
 - (c) Maintain at or above 1500' AGL from Point F to G due to numerous noise sensitive areas;
 - (d) Avoid congressional noise sensitive area: Carnesville, GA N34-19.5 W83-18.2;
 - (e) Avoid: Chicken Farm N34-20 W83-30 by 1500' AGL and 1.5 NM.
- (12) CAUTION: Student pilot training conducted between 500' AGL-5000' MSL within a 10 NM radius of Greenwood Co Airport (GRD) at N34-14.9 W82-09.6.
- (13) Make entry times plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.

FSS's Within 100 NM Radius:

ANB, AND, BNA, HUA, MCN

IR-091

ORIGINATING ACTIVITY: 14 OSS/OSOP Columbus AFB, MS 39710 DSN 742-7560/7633 C662-434-7560/7633.

SCHEDULING ACTIVITY: 50 FTS Columbus AFB, MS 39710 DSN 742-7734/7735, C662-434-7734/7735.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|--------------------------|
| As assigned to | A | CBM 269/26 | N33°38.00' W88°57.00' |
| SFC B 40 MSL to | B | CBM 273/76 | N33°42.00' W89°57.00' |
| SFC B 40 MSL to | C | CBM 284/89 | N33°59.00' W90°10.00' |
| SFC B 40 MSL to | D | CBM 296/88 | N34°16.00' W90°02.00' |
| SFC B 30 MSL to | E | CBM 306/90 | N34°31.00' W89°55.00' |
| SFC B 30 MSL to | F | CBM 325/75 | N34°40.00' W89°19.00' |
| SFC B 40 MSL to | G | CBM 297/42 | N33°57.00' W89°11.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized IAW Command Directives within entire route structure.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

- (1) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSAs apply after aircraft have passed the entry/alternate entry point until ATC establishes standard separation after exiting the route. MARSAs also applies between aircraft flying IR-068 and other aircraft flying IR-091 by using see and avoid and/or route scheduling.
- (2) Alternate Entry: C and D.
- (3) Compulsory Reporting Points:
 - (a) Point D, Memphis ARTCC 128.5 279.55;
 - (b) Point G, Columbus RAPCON 120.4 239.25 (when Columbus RAPCON closed, contact Memphis ARTCC 128.5 279.55).
- (4) CAUTION: VFR tactical helicopter operations are conducted from the surface to 3000' AGL along IR-091 from F to G.
- (5) Numerous power lines/antenna below 200' AGL may be uncharted.
- (6) For route briefing contact scheduling agency.
- (7) Aircraft avoid overflight of Camp McCain, MS Maintain 1500' within 2 NM of N33-42 W89-43. (Contains laser weaponry range, helicopter operations, and a controlled firing range).
- (8) Aircrews calling to schedule IR-091 will ensure they have checked all applicable Bird Hazard products (examples: <http://www.usahas.com/> & <http://usahas.com/bam/>) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.
- (9) To schedule for weekend use, contact scheduling activity prior to 2200Z on Friday.
- (10) Crossing routes:
 - (a) IR-068 Between Point A and B, near Point D (48 FTS, DSN 742-7840, C662-434-7840);
 - (b) VR-1051 Between Point A and B, between Point F and G (48 FTS, DSN 742-7840, C662-434-7840);
 - (c) SR-074 crosses near Point D, crosses between Points F and G, opposite direction corridor near Point F (48 FTS, DSN 742-7840, C662-434-7840);
 - (d) SR-073 crosses near Point E, between Points F and G, opposite direction corridor near Point F (48 FTS, DSN 742-7840, C662-434-7840).
- (11) Route Deconfliction: Contact the Scheduling Activity for SR-073, SR-074, VR-1051 and IR-068 (these routes have the same scheduler) to verify if these routes are being utilized: IR-091 is normally only flown on Mondays, Wednesdays and Fridays while IR-068 is flown on Tuesdays and Thursdays.
- (12) Route restricted to 14 FTW aircraft, unless otherwise coordinated.

FSS's Within 100 NM Radius:

DRI, GWO, JBR, MKL

IR-102

ORIGINATING ACTIVITY: 49 OSS/OSTA, 700 Delaware Ave., Holloman AFB, NM 88330-8017 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | HMN 117/37 | N32°29.50' W105°32.00' |
| 05 AGL B 80 MSL to | B | HMN 108/37 | N32°34.30' W105°28.40' |
| 05 AGL B 80 MSL to | C | HMN 102/34 | N32°38.50' W105°29.00' |
| 05 AGL B 80 MSL to | D | CME 206/41 | N32°48.00' W105°07.50' |
| 05 AGL B 80 MSL to | E | CME 188/43 | N32°39.50' W104°54.50' |
| 05 AGL B 80 MSL to | F | CME 188/48 | N32°35.00' W104°56.30' |
| 05 AGL B 80 MSL to | G | SFL 344/22 | N32°06.60' W105°07.00' |
| 05 AGL B 70 MSL to | H | SFL 021/7 | N31°51.00' W105°00.50' |
| 05 AGL B 70 MSL to | I | SFL 086/17 | N31°42.50' W104°45.00' |
| 05 AGL B 70 MSL to | J | SFL 125/64 | N30°57.50' W104°14.50' |
| 05 AGL B 80 MSL to | K | FST 163/26 | N30°31.50' W102°55.50' |
| 05 AGL B 100 MSL to | L | FST 158/35 | N30°22.50' W102°51.00' |
| 05 AGL B 100 MSL to | M | FST 174/69 | N29°48.50' W103°05.00' |
| 05 AGL B 90 MSL to | N | FST 226/95 | N30°04.50' W104°29.50' |
| 05 AGL B 90 MSL to | O | HUP 139/88 | N30°17.00' W104°33.00' |
| 05 AGL B 90 MSL to | P | HUP 132/80 | N30°29.00' W104°28.50' |
| 05 AGL B 90 MSL to | Q | HUP 133/60 | N30°44.50' W104°43.00' |
| 05 AGL B 90 MSL to | R | HUP 153/29 | N31°06.50' W105°14.00' |
| 05 AGL B 70 MSL to | S | HUP 339/25 | N31°59.00' W105°27.00' |
| 05 AGL B 80 MSL to | A1 | HMN 117/37 | N32°29.50' W105°32.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to G; 2 NM left and 5 NM right of centerline G to I; 5 NM either side of centerline from I to S; 5 NM either side of centerline from S to A1.

Special Operating Procedures:

- (1) Airspeeds are subsonic.
- (2) Alternate Entry/Exit: B, F, J and Q.
- (3) This route to be used by ALCM and ALCM carrier aircraft only.

- (4) For ALCM carrier aircraft a corridor limit of 2.5 NM on the west side of track exist from S to A.
- (5) Avoid the following airfields by 1500' or 3 NM: Dell City, Triangle Ranch, Saddleback Ranch, Longfellow Ranch, Chaney, Maravilas Gap, O-2 Ranch, Mayfield Ranch.
- (6) Avoid the town of Valentine N34-35-00 W104-35-00 by a minimum 1000' above the highest obstacle within a horizontal radius of 2000' of the aircraft IAW with FAR 91.79B.
- (7) Anyone wishing to schedule IR-102 must ensure they have also scheduled R-5103B and C.

FSS's Within 100 NM Radius:

SJT

IR-103

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB Fort Worth, TX 76127 DSN 739-6903/6904/6905, C817-782-6903/6904/6905.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-2200 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SPS 138/48 | N33°18.00' W98°05.50' |
| 05 AGL B 50 MSL to | B | SPS 176/26 | N33°33.00' W98°38.80' |
| 01 AGL B 50 MSL to | C | SPS 235/31 | N33°46.00' W99°09.00' |
| 01 AGL B 50 MSL to | D | SPS 278/28 | N34°08.00' W99°08.00' |
| 03 AGL B 24 MSL to | E | SPS 303/37 | N34°24.00' W99°08.00' |
| 03 AGL B 24 MSL to | F | HBR 135/17 | N34°38.00' W98°52.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route in VMC.

ROUTE WIDTH - 10 NM either side of course from A to D; 2 NM either side of course from D to F.

Special Operating Procedures:

- (1) Route is designated MARSAs and MARSAs shall also apply between aircraft flying VR-158, VR-159, VR-162, VR-1141, VR-1142, VR-1143 and VR-1144. Call 90 FTS at Sheppard AFB, TX, DSN 736-2675/4995 to deconflict with these routes prior to flying IR-103.
- (2) Route will be flown between 300 and 600 KIAS.
- (3) Alternate Entry/Exit: C and D.
- (4) Aircraft scheduled into R-5601 must contact Falcon Range on 363.7, 342.3.
- (5) 1000' AGL minimum from F to Falcon Range.
- (6) Avoid by 1 NM or 1000' AGL noise sensitive areas; N33-26.3 W98-22.0; N33-33.4 W98-42.7; N34-22.5 W99-08.0.
- (7) Avoid by 1500' or 3 NM all charted airfields.
- (8) Numerous power lines throughout low level route.

IR ROUTES

- (9) Aircraft will contact and monitor Sheppard APP CON 323.0/269.025 while operating above 3000' MSL.
- (10) IR-103 is an approved LOWAT route authorized between A and D.
- (11) Units requesting IR-103 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process. This altitude will not comply with the minimum safe altitude for that portion.
- (12) Route Conflicts:
 - (a) IR-103 conflicts with the following VR's at points along the route: VR-148, VR-159, VR-162, VR-1138, VR-1141, VR-1142, VR-1143 and VR-1144. Call the schedulers, 90 FTS, at Sheppard AFB, TX DSN 736-2675/4995, C940-676-2675/4995 to deconflict with these routes before flying IR-103;
 - (b) From Point D to F on IR-103, the route ceiling, 2400' MSL, will not comply with the minimum safe altitude (2800' MSL) for that portion of the route. If higher altitude is needed (night or IMC) at Point D, pilot should contact Altus Approach 257.725.
- (13) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

FSS's Within 100 NM Radius:

FTW

IR-105

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Ft. Worth, TX 76127 DSN 739-6903/6904/6905, C817-782-6903/6904/6905.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0600-2200 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SPS 138/48 | N33°18.00' W98°05.00' |
| 05 AGL B 50 MSL to | B | SPS 176/26 | N33°33.00' W98°38.80' |
| 01 AGL B 50 MSL to | C | SPS 235/31 | N33°46.00' W99°09.00' |
| 01 AGL B 50 MSL to | D | SPS 267/51 | N34°05.00' W99°37.00' |
| 01 AGL B 30 MSL to | E | HBR 264/32 | N34°54.00' W99°42.00' |
| 03 AGL B 35 MSL to | F | HBR 349/18 | N35°10.00' W99°04.00' |
| 03 AGL B 35 MSL to | G | HBR 029/15 | N35°04.00' W98°52.00' |
| 03 AGL B 35 MSL to | H | HBR 086/10 | N34°51.00' W98°52.00' |
| 24 AGL B 70 MSL to | I | HBR 135/17 | N34°38.00' W98°52.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to H in VMC.

ROUTE WIDTH - 10 NM either side of centerline from A to D; 3 NM either side of centerline from D to I.

Special Operating Procedures:

- (1) Aircraft will contact Altus APP CON at D 257.725.
- (2) Aircraft will report F to Fort Worth ARTCC 339.8.
- (3) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSAs applies after aircraft have passed entry/alternate entry point until ATC established standard separation after exiting the route.
- (4) Route will be flown between 300 and 600 KIAs.
- (5) Alternate Entry: C and E.
- (6) Alternate Exit: C, E and H.
- (7) Aircraft scheduled into R-5601 must contact Falcon Range for clearance on 363.7, 342.3.
- (8) 1000' AGL minimum from I to Falcon Range.
- (9) Avoid by 1 NM or 1000' AGL noise sensitive areas: N33-26.3 W98-22.0; N33-33.4 W98-42.7; N34-52.5 W98-52.0.
- (10) Avoid by 1500' AGL or 3 NM all charted airfields.
- (11) Numerous power lines throughout low level route.
- (12) Route segment H to I closed except to aircraft scheduled into R-5601. Aircraft not scheduled into R-5601 must exit by Point H and remain clear of R-5601F.
- (13) IR-105 is an approved LOWAT route authorized between Points A and D.
- (14) CAUTION: Frequent heavy aircraft using Sooner Drop Zone (N34-34-2 W99-41-3) for airdrops. See and avoid principle applies. Contact Altus AFB Command Post DSN 866-6313/6314 or C580-481-6313/6314 for times. Aircraft will report point D to Altus Approach Control 257.725. Aircraft will ask if the drop zone is hot. If the drop zone is reported hot, aircraft will climb to 1500' AGL until they have visual/radar contact with the heavy aircraft. Once visual/radar contact is established, aircraft may return to minimum altitudes.
- (15) Units requesting IR-105 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
- (16) Route conflicts:
 - (a) IR-105 conflicts with the following VR's at points along the route: VR-158, VR-159, VR-162, VR-1138, VR-1141, VR-1142, VR-1143 and VR-1144. Call the schedulers, 90 FTS, at Sheppard AFB, TX DSN 736-2675/4995, C940-676-2675/4995 to deconflict with these routes before flying IR-105;
 - (b) IR-105 conflicts with the following IR's, VR's and SR's at points along the route: IR-193, VR-106, VR-144, VR-184, VR-190, VR-191, VR-198, VR-199, SR-217, SR-205, SR-206, SR-208, SR-216 and Tornado Route. Contact schedulers, 97 OSS at Altus AFB, OK DSN 866-7110/6617, C580-481-6617/7110 to deconflict with these routes;
 - (c) Effective 1 Feb 2000, aircraft operating above 3000' MSL shall contact Sheppard Approach 323.0.
- (17) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

FSS's Within 100 NM Radius:

FTW, MLC

IR-107

ORIGINATING ACTIVITY: 27 SOSS/OSTA 110 E. Sextant Ave., Suite 1081, Cannon AFB, NM 88103 DSN 681-2521 C575-784-2521.

SCHEDULING ACTIVITY: 27 SOSS/OSOS 110 E. Sextant Ave., Suite 1080, Cannon AFB, NM 88103 DSN 681-2276, C575-784-2276.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| As assigned to descend to and maintain | A | TCC 041/19 | N35°22.50' W103°17.00' |
| 100 MSL to start descent to be at or below 80 MSL | A1 | TCC 023/25 | N35°31.50' W103°18.50' |
| 01 AGL B 80 MSL to | B | TCC 015/28 | N35°36.00' W103°20.00' |
| 01 AGL B 80 MSL to | C | DHT 237/43 | N35°50.00' W103°21.50' |
| 01 AGL B 80 MSL to | D | DHT 243/56 | N35°51.00' W103°39.00' |
| 01 AGL B 80 MSL to | E | DHT 261/65 | N36°08.00' W103°52.50' |
| 01 AGL B 80 MSL to | F | DHT 274/66 | N36°23.00' W103°51.00' |
| 01 AGL B 80 MSL to | G | DHT 286/58 | N36°32.50' W103°35.50' |
| 01 AGL B 80 MSL to | H | DHT 319/45 | N36°45.00' W103°00.00' |
| 01 AGL B 80 MSL to (Alternate Entry) | I | DHT 323/52 | N36°53.00' W103°00.00' |
| 01 AGL B 80 MSL to (Alternate Exit) | J | TBE 168/20 | N36°55.00' W103°36.00' |
| 01 AGL B 100 MSL to | K | TBE 188/26 | N36°51.50' W103°47.00' |
| 01 AGL B 100 MSL to (Alternate Entry) | L | CIM 101/28 | N36°18.00' W104°21.00' |
| 01 AGL B 90 MSL to | M | CIM 131/43 | N35°55.00' W104°21.00' |
| 01 AGL B 85 MSL to | N | TCC 291/27 | N35°26.00' W104°04.00' |
| 01 AGL B 80 MSL to (Alternate Exit) | O | TCC 278/24 | N35°19.00' W104°03.00' |
| 01 AGL B 70 MSL to | P | TCC 225/24 | N34°58.00' W104°00.00' |
| 01 AGL B 70 MSL to | Q | TCC 196/23 | N34°50.50' W103°49.00' |
| 01 AGL B 70 MSL to To Melrose Range Night/IMC PTN: | M1 | TCC 184/33 | N34°39.00' W103°47.00' |
| 01 AGL B 70 MSL to | M2 | CVS 295/28 | N34°39.00' W103°47.00' |
| 01 AGL B 70 MSL to | M3 | CVS 232/27 | N34°10.00' W103°48.00' |
| 01 AGL B 70 MSL to | M4 | CVS 218/34 | N34°00.00' W103°50.00' |
| 01 AGL B 70 MSL to | M5 | CVS 229/43 | N34°00.00' W104°04.00' |

| | | | |
|--|----|------------|---------------------------|
| 01 AGL B 70 MSL to | M6 | CVS 285/39 | N34°39.00' W104°02.00' |
| 01 AGL B 70 MSL to Alternate Entry: J as assigned to Start descent to be | M7 | CVS 295/28 | N34°39.00' W103°47.00' |
| 80 MSL to | EJ | TBE 086/25 | N37°12.00' W103°04.50' |
| 01 AGL B 80 MSL to Then via IR-107 Alternate Entry: M as assigned to Start descent to be | J1 | TBE 107/19 | N37°06.00' W103°15.00' |
| 01 AGL B 80 MSL to Then via IR-107 Alternate Entry: M as assigned to Start descent to be | J2 | TBE 168/20 | N36°55.00' W103°36.00' |
| 01 AGL B 90 MSL to Thence via IR-107 Alternate Exit: K | EM | CIM 098/32 | N36°18.00' W104°15.00' |
| 100 MSL to Climb so as to be | M8 | CIM 131/43 | N35°55.00' W104°21.00' |
| 110 MSL to Contact Albuquerque ARTCC 299.3 Alternate Exit: P | K1 | TBE 188/26 | N36°51.50' W103°47.00' |
| 70 MSL to | XK | TBE 208/35 | N36°49.00' W104°04.00' |
| 70 MSL to Contact Albuquerque ARTCC 319.2 Alternate Transition Route to IR-409 | P1 | TCC 225/24 | N34°58.00' W104°00.00' |
| 01 AGL B 80 MSL to | XP | TCC 186/14 | N34°58.00' W103°41.00' |
| 01 AGL B 80 MSL to | I1 | DHT 323/52 | N36°53.00' W103°00.00' |
| 01 AGL B 80 MSL to Thence via IR-409. | T1 | TBE 125/24 | N36°58.00' W103°16.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 7.5 NM either side of centerline entire route to include exits, alternate entries and Melrose Night/IMC pattern.

Special Operating Procedures:

- (1) Tie-in FSS: Albuquerque (ABQ).
- (2) Non-27 SOW aircraft entry times are booked no closer than 15 minutes. Users must meet booked entry/exit times plus or minus 5 minutes. If unable to meet planned entry time, enter at Alternate Entry so as to meet booked exit time or do not enter the route. Route times are planned at 480 kts ground speed.
- (3) Alternate Entry: J and M.
- (4) Alternate Exit: K and P.
- (5) Aircraft must call in-the-blind route entry and exit 255.4. Monitor 255.4 on this route unless operational requirements dictate otherwise.
- (6) Albuquerque ARTCC does not provide IFR separation between scheduled MTR users on this route.
- (7) Avoid by 2 NM:
 - (a) Capulin National Monument N36-47-00 W103-58-30. Avoid by 2000' AGL:
 - (b) Ranch near Quay, NM N34-55-30 W103-45-42. Avoid by 1000' AGL:
 - (c) House, NM N34-38-42 W103-54-12;
 - (d) Ranch N35-53-30 W103-48-48.
- (8) Avoid by 1000' and 1 NM:

IR ROUTES

- (a) Ray Ranches N35-55-00 W104-16-48 and N35-54-36 W104-21-00;
 - (b) Ranch N35-48-56 W103-13-56;
 - (c) Ranch N34-54-06 W103-49-30;
 - (d) Ranch N34-55-45 W103-45-42;
 - (e) Ranch N36-36-48 W103-35-42;
 - (f) Black Mesa State Park N36-50-48 W102-52-42.
- (9) Avoid by 2000' AGL and 1 NM:
- (a) Resorts N35-22-06 W104-12-30;
 - (b) Ranch N36-32-30 W103-23-06;
 - (c) Ranch N36-34-42 W103-13-48;
 - (d) Montoya, NM N35-05-48 W104-03-56;
 - (e) Bell Ranch HQ N35-31-42 W104-05-42;
 - (f) Randall N35-02-48 W104-04-42.
- CAUTION: The following obstructions are not found in CHUM and are not printed on current cartographic materials: Towers are less than 200' at the following locations: N34-50.31 W103-42.97; N34-50.52 W103-42.73; N34-59.11 W104-07.98; N34-57.00 W104-11.20; N35-06.50 W103-42.00; N37-14.73 W103-20.19; N37-10.65 W103-19.80; N34-51.15 W104-07.72; N35-03.71 W104-02.52; N35-04.15 W104-01.60; N35-49.19 W104-32.89; N35-59.97 W103-27.36; N35-22.04 W103-24.72; N35-51.30 W103-18.05; N35-28.00 W103-11.00; N35-51.00 W103-26.00; N35-53.77 W104-11.24; N36-31.36 W103-29.30; N36-32.44 W103-27.54; N36-48.88 W103-51.70; N36-00.61 W104-13.76; N35-14.00 W104-10.50; N34-56.00 W104-10.50; N35-58.60 W104-14.00; N36-21.50 W104-00.00; N36-41.50 W103-48.00; N35-16.50 W104-13.60; N35-27.00 W104-22.00.
- (10) Aircraft using R-5104/R-5105 will file a re-entry on flight plans to ensure airspace reservation on Night/IMC pattern. R-5104/R-5105 re-entry pattern conflicts with Pecos LOW MOAs.
- (11) Aircraft not scheduled on to Melrose Range (R-5104/R-5105) must exit prior to Pt P.
- (12) Deconfliction between IR-107, IR-109, IR-111, IR-113, VR-108 and VR-114 by 27 SOW scheduling. See and Avoid applies to non-27 SOW conflicting (VR-1195/1107, VR-1574/1174, IR-409) routes. Consult FLIP AP/1B chart for details.
- (13) CAUTION: Numerous towers and obstructions exist on this route which are hazards to flight at less than 300' AGL. Contact 27 SOSS/OSTA DSN 681-2521 to obtain a current and complete fax copy of unchummed/uncharted obstructions.
- (14) CAUTION: Increased bird activity, Nov-Feb during dusk and night in areas from I to J, EJ to J, L to N, and EM to M. Recommend flight at 1000' AGL or above during these periods to reduce bird strike hazard.
- (15) Avoid by 1 NM and 1000' AGL uncharted active airport at Canyon, Co./Canadian River N36-04-56 W104-25-00.
- (16) CAUTION: Camco Ranch misplotted on TPC's and Sectional. Avoid Camco Ranch Airstrip N35-34-30 W103-18-30 1000' AGL and 1 NM.

FSS's Within 100 NM Radius:

ABQ

IR-109

ORIGINATING ACTIVITY: 27 SOSS/OSTA 110 E. Sextant Ave., Suite 1081, Cannon AFB, NM 88103 DSN 681-2521 C575-784-2521.

SCHEDULING ACTIVITY: 27 SOSS/OSOS 110 E. Sextant Ave., Suite 1080, Cannon AFB, NM 88103 DSN 681-2276, C575-784-2276.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 160 MSL to or as assigned | A | ABQ 332/65 | N36°05.00' W107°10.00' |
| 01 AGL B 120 MSL to | B | ABQ 344/71 | N36°14.00' W106°53.00' |
| 01 AGL B 120 MSL to | C | ABQ 346/76 | N36°19.00' W106°50.00' |
| 01 AGL B 120 MSL to | D | ALS 190/41 | N36°43.00' W106°09.00' |
| 01 AGL B 120 MSL to | E | ALS 150/22 | N37°00.00' W105°41.00' |
| 01 AGL B 120 MSL to | F | ALS 134/21 | N37°03.50' W105°35.00' |
| 01 AGL B 120 MSL to | AO | ALS 119/26 | N37°03.50' W105°24.50' |
| 01 AGL B 150 MSL to | AP | ALS 119/37 | N36°56.00' W105°15.00' |
| 01 AGL B 150 MSL to | G | CIM 295/17 | N36°40.00' W105°09.00' |
| 01 AGL B 150 MSL to | H | CIM 277/13 | N36°34.00' W105°08.00' |
| 01 AGL B 150 MSL to | I | CIM 221/18 | N36°19.00' W105°10.00' |
| 01 AGL B 150 MSL to | J | CIM 204/25 | N36°09.00' W105°11.00' |
| 01 AGL B 150 MSL to | K | FTI 352/27 | N36°06.00' W105°05.00' |
| 01 AGL B 120 MSL to | L | FTI 043/28 | N35°55.00' W104°40.00' |
| 01 AGL B 120 MSL to | M | FTI 055/29 | N35°50.00' W104°35.00' |
| 01 AGL B 90 MSL to | N | FTI 069/26 | N35°43.00' W104°36.00' |
| 01 AGL B 80 MSL to | O | TCC 263/45 | N35°15.00' W104°31.00' |
| 01 AGL B 70 MSL to | P | TCC 245/44 | N35°01.00' W104°28.00' |
| 01 AGL B 70 MSL to Alternate Transition Routing to R-5104 IR-109 South | Q | CVS 283/32 | N34°35.00' W103°55.00' |
| as assigned to | P1 | TCC 245/44 | N35°01.00' W104°28.00' |
| 01 AGL B 70 MSL to | AA | CME 341/53 | N34°13.00' W104°45.00' |
| 01 AGL B 70 MSL to | AB | CME 343/47 | N34°07.00' W104°42.00' |
| 01 AGL B 70 MSL to | AC | CME 008/44 | N34°02.00' W104°19.00' |
| 01 AGL B 70 MSL to | AD | CVS 221/42 | N33°56.00' W103°59.00' |
| 01 AGL B 70 MSL to | AE | CVS 216/34 | N34°00.00' W103°50.00' |

| | | | | | | | |
|--|-----|------------|---------------------------|--|----|------------|---------------------------|
| 01 AGL B 70 MSL to R-5104/R-5105 North Race Track: Exit R-5104/R5105 at or below 70 MSL | AF | CVS 230/27 | N34°10.00' W103°48.00' | 70 MSL to Contact Cannon RAP- CON 358.3 leaving 61 MSL. Alternate Exit: AQ | AM | CVS 193/21 | N34°04.00' W103°30.00' |
| 01 AGL B 70 MSL to | AF1 | CVS 230/27 | N34°10.00' W103°48.00' | at or below 70 MSL | P1 | TCC 245/44 | N35°01.00' W104°28.00' |
| 01 AGL B 70 MSL to | AE1 | CVS 216/34 | N34°00.00' W103°50.00' | 70 MSL to or as assigned | AQ | CME 348/76 | N34°36.00' W104°37.00' |
| 01 AGL B 70 MSL to | AG | CVS 227/44 | N34°00.00' W104°04.00' | (Contact ZAB ARTCC 319.2 for transition to VR-1195 or Pecos MOAS). | | | |
| 01 AGL B 70 MSL to | AH | CVS 285/39 | N34°39.00' W104°02.00' | | | | |
| 01 AGL B 70 MSL to R-5104/R-5105 South Race Track: Exit R-5104/R5105 at or below 70 MSL | AI | TCC 184/33 | N34°39.00' W103°47.00' | | | | |
| 01 AGL B 70 MSL to | AI1 | TCC 184/33 | N34°39.00' W103°47.00' | | | | |
| 01 AGL B 70 MSL to | AH1 | CVS 285/39 | N34°39.00' W104°02.00' | | | | |
| 01 AGL B 70 MSL to | AG1 | CVS 227/44 | N34°00.00' W104°04.00' | | | | |
| 01 AGL B 70 MSL to | AE2 | CVS 216/34 | N34°00.00' W103°50.00' | | | | |
| 01 AGL B 70 MSL to R-5104/R-5105 Alternate Entry: I | AF2 | CVS 230/27 | N34°10.00' W103°48.00' | | | | |
| 160 MSL to or as assigned | AJ | CIM 273/21 | N36°35.00' W105°17.00' | | | | |
| 01 AGL B 150 MSL to Then via IR-109 Alternate Entry: M | I1 | CIM 221/18 | N36°19.00' W105°10.00' | | | | |
| 170 MSL to or as assigned Descent to cross | AN | FTI 035/40 | N36°06.00' W104°32.00' | | | | |
| 01 AGL B 90 MSL to then via IR-109 or IR-109 South Alternate Exit: J | M1 | FTI 055/29 | N35°50.00' W104°35.00' | | | | |
| 150 MSL to Proceed direct to | J1 | CIM 204/25 | N36°09.00' W105°11.00' | | | | |
| 150 MSL to (Contact Albuquerque ARTCC 353.8) Alternate Exit: AO | AK | FTI 341/16 | N35°55.00' W105°10.00' | | | | |
| 01 AGL B 120 MSL to (Contact Denver ARTCC 379.95) Climb to cross | AO1 | ALS 119/26 | N37°03.50' W105°24.50' | | | | |
| 160 MSL to Alternate Exit: P | AR | ALS 083/24 | N37°18.40' W105°19.40' | | | | |
| at or below 70 MSL | P2 | TCC 245/44 | N35°01.00' W104°28.00' | | | | |
| 70 MSL to Flight plan route (Contact Albuquerque ARTCC 319.2) Alternate Exit: AE | AL | TCC 247/29 | N35°05.00' W104°11.00' | | | | |
| 01 AGL B 70 MSL to | AE3 | CVS 218/34 | N34°00.00' W103°50.00' | | | | |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to E; 3 NM left and 1 NM right of centerline from E to AO; 5 NM left and 3 NM right of centerline from AO to AP; 5 NM either side of centerline from AP to end of route; 5 NM either side of centerline for Alternate Entry I and Exits J, P, and AE; 4 NM either side of centerline for Alternate Entry M. Alternate Exit AO; 3 NM left and 1 NM right of centerline from F to AO; 4 NM either side of centerline from AO to AR. Re-Entry; R-5104/5105; 7.5 NM either side of centerline on re-entry pattern AF1 to AI, AI1 and AF2.

Special Operating Procedures:

- (1) Non-27 SOW aircraft entry times are booked no closer than 15 minutes apart. Users must meet booked entry and exit time plus or minus 5 minutes. If unable to meet planned entry time enter at an Alternate Entry so as to meet booked exit time or do not enter the route. Route times are planned at 480 kt ground speed.
- (2) Aircraft must call-in-the-blind route entry and exit 255.4. Monitor 255.4 while on this route unless operational requirements dictate otherwise.
- (3) ZAB ARTCC does not provide IFR separation between scheduled MTR users while on this route.
- (4) Avoid all charted public use airfields by 1500' AGL or 3 NM.
- (5) C through G are noise sensitive.
- (6) Avoid by 2 NM:
 - (a) Guadalupita, NM N36-38.0 W105-14.0;
 - (b) Ocate and Naranjos, NM Area N36-10.0 W105-00.0;
 - (c) House, NM N34-39.0 W103-54.0;
 - (d) Christ of the Monastery, NM N36-22.4 W106-41.3.
- (7) Avoid by 1000' AGL or 1 NM an area bounded by N34-20 W104-46 to N34-21 W104-43 to N34-13 W104-12 to beginning.
- (8) Aircraft transitioning to south routing to R-5104 will file 'TCC 245/44 IR109S' after main routing.
- (9) Aircraft may exit at AQ for transition to VR-1195/1107 or Pecos MOAs. Contact ABQ ARTCC at AQ.
- (10) Aircraft using R-5104/R-5105 will file a re-entry on all flight plans to ensure airspace reservation on downwind pattern. R-5104/R-5105 re-entry pattern conflicts with Pecos low MOAs.
- (11) Aircraft not scheduled into R-5104/R-5105 must exit at or prior to P or AE south transition.
- (12) Deconfliction between this and other crossing 27 SOW routes will be by 27 SOW Scheduling. See and Avoid applies to non-27 SOW conflicting VR and SR routes.
- (13) Route conflicts with Pecos low MOA, IR-107, IR-110, IR-111, IR-113, VR-1195/1107, VR-108, VR-125, VR-1174/1574 and VR-1181. Consult FLIP AP/1B chart for particulars.

IR ROUTES

FSS's Within 100 NM Radius:

ABQ, DEN

IR-111

ORIGINATING ACTIVITY: 27 SOSS/OSTA 110 E. Sextant Ave., Suite 1081, Cannon AFB, NM 88103 DSN 681-2521 C575-784-2521.

SCHEDULING ACTIVITY: 7 SOSS/OSOS 110 E. Sextant Ave., Suite 1080, Cannon AFB, NM 88103 DSN 681-2276, C575-784-2276.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| As assigned to | A | ACH 222/31 | N34°48.50' W105°33.00' |
| 01 AGL B 90 MSL to | B | FTI 226/24 | N35°27.00' W105°33.00' |
| 01 AGL B 120 MSL to | C | FTI 261/20 | N35°41.00' W105°33.00' |
| 01 AGL B 160 MSL to | D | FTI 275/21 | N35°46.00' W105°33.00' |
| 01 AGL B 160 MSL to | E | FTI 314/37 | N36°11.00' W105°33.00' |
| 01 AGL B 160 MSL to | F | FTI 326/38 | N36°15.00' W105°25.00' |
| 01 AGL B 160 MSL to | G | FTI 332/35 | N36°13.00' W105°19.00' |
| 01 AGL B 160 MSL to | H | FTI 352/27 | N36°06.00' W105°05.00' |
| 01 AGL B 120 MSL to | I | FTI 043/28 | N35°55.00' W104°40.00' |
| 01 AGL B 120 MSL to | J | FTI 055/29 | N35°50.00' W104°35.00' |
| 01 AGL B 90 MSL to | K | FTI 094/26 | N35°32.00' W104°38.00' |
| 01 AGL B 90 MSL to | L | FTI 110/24 | N35°26.00' W104°43.00' |
| 01 AGL B 90 MSL to | M | ACH 291/13 | N35°14.00' W105°16.00' |
| 01 AGL B 90 MSL to | N | ACH 264/13 | N35°08.00' W105°18.00' |
| 01 AGL B 90 MSL to | O | ACH 163/22 | N34°45.00' W105°00.00' |
| 01 AGL B 80 MSL to | P | ACH 151/26 | N34°42.00' W104°53.00' |
| 01 AGL B 70 MSL to | Q | TCC 211/24 | N34°53.00' W103°56.00' |
| 01 AGL B 70 MSL to | R | TCC 190/25 | N34°48.00' W103°47.00' |
| 01 AGL B 70 MSL to To R-5105 Re-Entry-Exit R-5104/R-5105 | S | TCC 184/33 | N34°39.00' W103°47.00' |
| 01 AGL B 70 MSL to | S1 | CVS 293/28 | N34°39.00' W103°47.00' |
| 01 AGL B 70 MSL to | T | CVS 230/27 | N34°10.00' W103°48.00' |

| | | | |
|--------------------|----|------------|---------------------------|
| 01 AGL B 70 MSL to | U | CVS 216/34 | N34°00.00' W103°50.00' |
| 01 AGL B 70 MSL to | V | CVS 227/44 | N34°00.00' W104°04.00' |
| 01 AGL B 70 MSL to | W | CVS 283/39 | N34°39.00' W104°02.00' |
| 01 AGL B 70 MSL to | S2 | TCC 184/33 | N34°39.00' W103°47.00' |

Alternate Exit: O
Climb to cross

| | | | |
|-----------|----|------------|---------------------------|
| 90 AGL to | O1 | ACH 163/22 | N34°45.00' W105°00.00' |
|-----------|----|------------|---------------------------|

| | | | |
|--------------------------------------|----|------------|---------------------------|
| Turn right to a heading of 270 to AB | | | |
| 90 MSL to | AB | ACH 175/32 | N34°35.00' W105°07.00' |

or as assigned
(Ctc ZAB ARTCC
269.4 for transition to
VR-1195 or Pecos
MOA)

Alternate Entry: J

| | | | |
|----------------|---|------------|---------------------------|
| as assigned to | Y | FTI 035/40 | N36°06.00' W104°32.00' |
|----------------|---|------------|---------------------------|

| | | | |
|--------------------|----|------------|---------------------------|
| Descend to cross | | | |
| 01 AGL B 90 MSL to | J1 | FTI 055/29 | N35°50.00' W104°35.00' |

Alternate Entry: R

| | | | |
|----------------|---|------------|---------------------------|
| as assigned to | Z | TCC 268/18 | N35°14.00' W103°58.00' |
|----------------|---|------------|---------------------------|

| | | | |
|--------------------|----|------------|---------------------------|
| Descend to | | | |
| 01 AGL B 70 MSL to | R1 | TCC 190/25 | N34°48.00' W103°47.00' |

| | | | |
|--------------------|----|------------|---------------------------|
| Alternate Exit: Q | | | |
| 01 AGL B 70 MSL to | Q1 | TCC 211/24 | N34°53.00' W103°56.00' |

| | | | |
|------------|----|------------|---------------------------|
| Climb to | | | |
| 120 MSL to | AA | TCC 147/14 | N34°58.00' W103°30.00' |

or as assigned
Contact Albuquerque
ARTCC 319.2
Alternate Transition to
Pecos East and West
Low MOA

| | | | |
|--------------------|----|------------|---------------------------|
| 01 AGL B 90 MSL to | O2 | ACH 163/22 | N34°45.00' W105°00.00' |
|--------------------|----|------------|---------------------------|

| | | | |
|--|----|------------|---------------------------|
| 01 AGL B 80 MSL to Pecos East and West Low MOA to AD | AC | ACH 158/34 | N34°33.00' W104°55.00' |
|--|----|------------|---------------------------|

| | | | |
|--|----|------------|---------------------------|
| | AD | TCC 199/43 | N34°34.00' W104°02.50' |
|--|----|------------|---------------------------|

| | | | |
|---|----|------------|---------------------------|
| 01 AGL B 70 MSL to Thence via IR-111 | Q2 | TCC 211/24 | N34°53.00' W103°56.00' |
|---|----|------------|---------------------------|

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to K; 6 NM either side centerline from K to S; Re-Entry-Exit R-5104/R-5105: 7.5 NM either side of centerline on re-entry pattern S1 to S2; 4 NM either side of centerline on all Alternate Entry/Exits; 4 NM right and 22 NM left of centerline O2 to AC and AD to O2.

Special Operating Procedures:

- (1) Non-27 SOW aircraft entry times are booked no closer than 15 minutes. Users must meet booked entry and exit times plus or minus 5 minutes. If unable to meet planned entry

- time enter at an Alternate Entry so as to meet booked exit time or do not enter the route. Route times are planned at 480 kt ground speed.
- (2) Aircraft must call in-the-blind route entry and exit 255.4. Monitor 255.4 on this route unless operational constraints dictate otherwise.
 - (3) ZAB ARTCC does not provide IFR separation between scheduled MTR users while on this route.
 - (4) Avoid by 2 NM:
 - (a) Guadalupita, NM N36-38.0 W105-14.0;
 - (b) Ocate and Naranjos, NM area N36-10.0 W105-00.0;
 - (c) Ranch near Quay, NM N34-55.0 W103-46.0;
 - (d) House, NM N34-39.0 W103-46.0.
 - (5) Avoid by 1000' and 1 NM:
 - (a) Ranch N35-56.5 W104-38.5;
 - (b) Ranch N34-53.0 W104-23.0;
 - (c) Ranch N35-18.0 W105-07.0;
 - (d) Ranch N35-05.0 W105-09.5;
 - (e) Ranch N34-54.0 W103-50.0;
 - (f) Ranch N34-50.5 W103-59.3;
 - (g) Truck stop N34-59.0 W105-13.5.
 - (6) Avoid by 1.5 NM, ranch N35-27.0 W105-35.0; South San Ysirdo N35-27.0 W105-35.0.
 - (7) Avoid Pastura, NM N34-47.0 W104-57.0 by 1.5 NM and 1000'.
 - (8) Remain above 1000' AGL 3 NM either side of I-25 near B.
 - (9) Aircraft using R-5104/R-5105 will file a re-entry on all flight plans to ensure airspace reservation on downwind pattern.
 - (10) Deconfliction between this and other crossing 27 SOW routes will be by 27 SOW Scheduling. See and Avoid applies to conflicting non-27 SOW VR and SR routes.
 - (11) Route conflicts with IR-109, IR 110, IR-113, IR-107, VR-108, VR-1195/1107, VR-1574/1174 and VR-1181. Consult FLIP AP-1B Chart for particulars.
 - (12) Pecos East and West Low MOA may be filed only if scheduled into Pecos East and West Low MOA. Aircraft must receive clearance from ZAB ARTCC into Pecos East and West Low MOA prior to route entry. Flight plans must specify the required delay in Pecos East and West Low MOA. Monitor assigned frequency in MOA airspace. Transition is for 27 SOW use only.

FSS's Within 100 NM Radius:

ABQ

IR-112

ORIGINATING ACTIVITY: 27 SOSS/OSTA 110 E. Sextant Ave., Suite 1081, Cannon AFB, NM 88103 DSN 681-2521 C575-784-2521.

SCHEDULING ACTIVITY: 27 SOSS/OSOS 110 E. Sextant Ave., Suite 1080, Cannon AFB, NM 88103 DSN 681-2276, C575-784-2276.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | ABQ 293/50 | N35°32.00' W107°39.00' |
| Start descent to be | | | |
| SFC B 100 MSL to | B | GUP 071/43 | N35°32.00' W108°00.00' |

| | | | |
|--|-----|-------------|---------------------------|
| SFC B 100 MSL to | C | GUP 069/41 | N35°33.00' W108°03.00' |
| SFC B 100 MSL to | D | GUP 316/26 | N35°51.00' W109°08.00' |
| SFC B 100 MSL to | E | GUP 278/46 | N35°46.00' W109°45.00' |
| SFC B 100 MSL to | F | GUP 279/55 | N35°50.00' W109°54.00' |
| SFC B 90 MSL to | G | TBC 070/58 | N36°12.00' W110°05.00' |
| SFC B 90 MSL to (Alternate Entry) | EH | TBC 065/49 | N36°16.00' W110°16.00' |
| SFC B 90 MSL to (Alternate Exit) | I | TBC 073/20 | N36°08.00' W110°52.00' |
| SFC B 90 MSL to | J | TBC 087/16 | N36°04.00' W110°56.50' |
| SFC B 90 MSL to (Alternate Entry) | EK | INW 288/23 | N35°16.00' W111°12.00' |
| SFC B 90 MSL to (Alternate Exit) | L | INW 215/21 | N34°50.00' W111°07.00' |
| SFC B 80 MSL to | XM | INW 190/19 | N34°46.00' W110°57.00' |
| SFC B 80 MSL to After TN climb to 110 MSL to (Contact Albuquerque ARTCC 307.2 for high- er alt prior to reaching SJJN) Re-Entry: Exit Bomb Run Corri- dor | TN | SJJN 293/47 | N34°52.00' W109°55.00' |
| SFC B 80 MSL to turn right at | AA | SJJN 292/39 | N34°47.00' W109°48.00' |
| SFC B 80 MSL to continue right turn at | AB | SJJN 281/41 | N34°41.00' W109°54.00' |
| SFC B 80 MSL to climb to cross at or below 100 MSL turn right | AC | INW 179/30 | N34°34.00' W110°56.00' |
| at or below 100 MSL descend to cross | AD | INW 194/27 | N34°40.00' W111°03.00' |
| at or below 80 MSL Alternate Entry: EH as assigned to | XM | INW 190/19 | N34°46.00' W110°57.00' |
| | EH1 | TBC 065/49 | N36°16.00' W110°16.00' |
| SFC B 90 MSL to Alternate Entry: EK as assigned to Start descent to be | I1 | TBC 073/20 | N36°08.00' W110°52.00' |
| SFC B 80 MSL to Alternate Exit: I | EK1 | INW 288/23 | N35°16.00' W111°12.00' |
| SFC B 90 MSL to climb to cross | L1 | INW 215/21 | N34°50.00' W111°07.00' |
| | I | TBC 073/20 | N36°08.00' W110°52.00' |
| 110 MSL to or as assigned (Contact Denver ARTCC 343.95 for fur- ther clearance. Alternate Exit: L | XI | TBC 041/14 | N36°15.00' W111°02.10' |

IR ROUTES

SFC B 80 MSL to L2 INW 215/21 N34°50.00'
climb to cross W111°07.00'
110 MSL to XM1 INW 190/19 N34°46.00'
or as assigned W110°57.00'
(Contact Albuquerque
ARTCC 306.2 for high-
er altitude).

TERRAIN FOLLOWING OPERATIONS: Authorized
entire route. IMC Terrain Following (TF) authorized within major
command guidance.

ROUTE WIDTH - 5 NM either side of centerline from A to D;
5 NM left and 4 NM right of centerline from D to E; 5 NM either
side of centerline from E to TN; 5 NM either side of centerline for
Alternate Exit I; Re-entry, Exit Bomb Run Corridor, 5 NM either
side of centerline between TN and XM.

Special Operating Procedures:

- (1) Tie-in FSS: Albuquerque (ABQ).
- (2) Non-27 SOW aircraft entry times are booked no closer than
30 minutes. Users must meet booked exit time or do not
enter the route. Route times are planned at 250 kt ground
speed.
- (3) Aircraft must call in-the-blind route entry and exit 255.4.
Monitor 255.4 on this route unless operational requirements
dictate otherwise.
- (4) Albuquerque ARTCC does not provide IFR separation
between scheduled MTR users while on this route.
- (5) Alternate Entry: EH and EK.
- (6) Alternate Exit: I and L.
- (7) Avoid buildings in Petrified Forest National Park N34-48.9
W109-51.9 by 1000' and 2 NM.
- (8) Avoid Ganado High School N35-45.2 W109-37.7 by 1/4 NM.
- (9) This route conflicts with IR-320. To deconflict, contact 7
OSS/OSOR, Dyess AFB, DSN 461-3666, C915-696-3666.
Aircraft not flown on automatic Terrain Following (TFR) or in
VMC must be at 10,000' MSL between Points D and E, and
at 9000' MSL between Points XM and TN, and Points AB
and AC. Consult FLIP AP/1B chart for details.
- (10) CAUTION: Numerous powerlines cross route.
- (11) CAUTION: Numerous towers and obstructions exist on this
route which are hazards to flights less than 300' AGL.
Contact Scheduling Activity to obtain a current fax or email
of unchummed/uncharted obstructions.
- (12) Contact Scheduling Activity for a fax or email of the most
current Avoid Areas.

FSS's Within 100 NM Radius:

ABQ, CDC, PRC

IR-113

ORIGINATING ACTIVITY: 27 SOSS/OSTA 110 E. Sextant
Ave., Suite 1081, Cannon AFB, NM 88103 DSN 681-2521
C575-784-2521.

SCHEDULING ACTIVITY: 27 SOSS/OSOS 110 E. Sextant
Ave., Suite 1080, Cannon AFB, NM 88103. Req for use shall be
coord with 27 SOW 24 hr in adv btn 1330-2230Z wkd req for
wkend use shall be coord btn 1330-2230Z Mon-Fri. DSN
681-2276 C575-784-2276.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|-------------|
| As assigned to | A | TCC 226/24 | N34°58.00' |
| Start descent to be | | | W104°00.90' |
| 01 AGL B 80 MSL to | B | TCC 217/38 | N34°46.00' |
| | | | W104°11.00' |
| 01 AGL B 80 MSL to | C | CNX 074/57 | N34°25.00' |
| | | | W104°32.00' |
| 01 AGL B 90 MSL to | D | CNX 076/51 | N34°23.00' |
| | | | W104°39.00' |
| 01 AGL B 90 MSL to (Alternate Entry) | E | CNX 059/20 | N34°28.00' |
| | | | W105°18.00' |
| 01 AGL B 90 MSL to (Alternate Exit) | TF | CNX 354/12 | N34°34.00' |
| | | | W105°39.00' |
| 01 AGL B 90 MSL to | G | CNX 307/21 | N34°38.00' |
| | | | W105°57.00' |
| 01 AGL B 100 MSL to | H | CNX 280/23 | N34°31.00' |
| | | | W106°06.00' |
| 01 AGL B 100 MSL to | I | CNX 241/16 | N34°17.50' |
| | | | W105°59.50' |
| 01 AGL B 115 MSL to | J | CNX 176/35 | N33°47.50' |
| | | | W105°47.50' |
| 01 AGL B 115 MSL to (Alternate Entry) | K | CNX 167/38 | N33°43.50' |
| | | | W105°40.50' |
| 01 AGL B 115 AGL to Start descent to be | L | CNX 143/44 | N33°41.50' |
| | | | W105°19.50' |
| 01 AGL B 80 MSL to | M | CME 302/39 | N33°47.50' |
| | | | W105°11.50' |
| 01 AGL B 80 MSL to | N | CME 319/46 | N34°00.50' |
| | | | W105°04.50' |
| 01 AGL B 80 MSL to | TO | CME 329/46 | N34°03.50' |
| | | | W104°55.50' |
| 01 AGL B 80 MSL to (Alternate Exit) | P | CVS 231/50 | N33°58.00' |
| | | | W104°12.00' |
| 01 AGL B 70 MSL to | XQ | CVS 222/42 | N33°56.50' |
| | | | W103°59.50' |
| 01 AGL B 70 MSL to | M3 | CVS 218/34 | N34°00.00' |
| | | | W103°50.00' |
| 01 AGL B 70 MSL to to Melrose Range night/IMC pattern: | M2 | CVS 230/27 | N34°10.00' |
| | | | W103°48.00' |
| 01 AGL B 70 MSL to | M1 | CVS 295/28 | N34°39.00' |
| | | | W103°47.00' |
| 01 AGL B 70 MSL to | M2 | CVS 230/27 | N34°10.00' |
| | | | W103°48.00' |
| 01 AGL B 70 MSL to | M3 | CVS 218/34 | N34°00.00' |
| | | | W103°50.00' |
| 01 AGL B 70 MSL to | M4 | CVS 229/43 | N34°00.00' |
| | | | W104°04.00' |
| 01 AGL B 70 MSL to | M5 | CVS 285/39 | N34°39.00' |
| | | | W104°02.00' |
| 01 AGL B 70 MSL to Alternate Entry: E | M1 | CVS 295/28 | N34°39.00' |
| | | | W103°47.00' |
| as assigned to Start descent to be | EE | CNX 052/40 | N34°39.20' |
| | | | W104°56.70' |
| 01 AGL B 90 MSL to then via IR-113 Alternate Entry: M3 | E | CNX 059/20 | N34°28.00' |
| | | | W105°18.00' |
| as assigned to Start descent to be | M6 | CME 057/41 | N33°34.80' |
| | | | W103°51.40' |

| | | | | |
|---|-----|------------|---------------------------|---|
| 01 AGL B 70 MSL to then via IR-113 Alternate Transition to Pecos Low MOA | M3 | CVS 218/34 | N34°00.00' W103°50.00' | (7) LOWAT authorized in IR-113 corridor within Pecos MOA boundaries. MARSAA See and Avoid applies between aircraft in IR-113 and interceptor aircraft. LOWAT authorized in VMC only. |
| 01 AGL B 80 MSL to | TO | CME 329/46 | N34°03.50' W104°55.50' | (8) Avoid by 3NM: Gran Quivira National Monument N34-15.6 W106-05.5. |
| 01 AGL B 80 MSL to | P | CVS 231/50 | N33°58.00' W104°12.00' | (9) Avoid Fort Sumner Airport N34-29.2 W104-13.1 by 1500'/3 NM to the South, East and West, and to the Pecos East MOA boundary to the North. |
| 70 MSL to or as assigned (Contact Albuquerque ARTCC 319.2 or Cannon APP CON 358.3) Alternate Transition to RED RIO RANGE on IR-133. | XQ1 | CVS 222/42 | N33°56.50' W103°59.50' | (10) Avoid Double V Ranch Airstrip N34-07.0 W104-25.6 by 1500'/2 NM. |
| 01 AGL B 90 MSL to | TF | CNX 354/12 | N34°34.00' W105°39.00' | (11) Avoid Canning Ranch Airstrip N33-42.0 W105-23.4 by 1500'/2 NM. |
| 01 AGL B 90 MSL to | F1 | ONM 080/22 | N34°19.00' W106°23.00' | (12) Avoid Claunch, NM N34-08.6 W105-59.6 by 1500'/1 NM. |
| 01 AGL B 90 MSL to Alternate Transition to OSCURA RANGE on IR-133. | F2 | ONM 125/42 | N33°49.00' W106°16.00' | (13) Avoid by 1000'/1 NM: (a) Ranch N34-36.5 W104-22.0; (b) Ranch N34-21.7 W104-06.9; (c) Ranch N34-14.7 W104-41.4; (d) White Oaks, NM N33-45.0 W105-44.2; (e) Ranch N34-20.8 W104-32.5; (f) Ranch N34-16.9 W105-05.2; (g) Ranch N34-16.2 W104-42.5; (h) Ranch N33-54.0 W104-17.1; (i) Lake Sumner Settlement N34-37.2 W104-23.9; (j) Ranch N33-42.4 W105-38.4. |
| 01 AGL B 90 MSL to | TF | CNX 354/12 | N34°34.00' W105°39.00' | (14) Avoid by 1500'/2 NM ranch N34-20.5 W104-23.2. |
| 01 AGL B 90 MSL to | F3 | CNX 304/23 | N34°39.00' W106°00.00' | (15) CAUTION: Increased bird activity Nov- Feb during dusk and night in areas from B to C, TF to I, and N to P. Recommend flight at 1000' AGL or above during these periods to reduce birdstrike hazard. |
| 01 AGL B 90 MSL to | I | CNX 241/16 | N34°17.50' W105°59.50' | (16) Contact Cherokee Control prior to entering R-5107B may be either a standard high altitude range departure or low level via Alternate Entry K. If unable to contact Cherokee, obtain clearance from Oscura Range Control Officer. |
| 01 AGL B 110 MSL to thence via IR-113 Alternate Entry: K Exit R-5107 at | TI | CNX 189/42 | N33°43.00' W106°00.00' | (17) Aircraft using R-5104/R-5105 will file a re-entry on all flight plans to ensure airspace reservation on night/IMC pattern. R-5104/R-5105 re-entry pattern conflicts with Pecos Low MOAs. |
| 110 MSL to | EK | CNX 194/43 | N33°44.00' W106°04.20' | (18) Pecos Low MOA transition may be filed only if scheduled into Pecos Low MOA prior to route entry. Flight plans must specify the required delay in Pecos Low MOA. Monitor assigned ARTCC frequencies while in MOA airspace. Transition is for 27 SOW use only. |
| 01 AGL B 115 MSL to then via IR-113. | K1 | CNX 167/38 | N33°43.50' W105°40.50' | (19) Aircraft not scheduled into R-5104/R-5105 Melrose Range Complex must exit prior to XQ. |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route. IMC TF authorized for ACC F-111 aircraft or other types specifically authorized by their major command.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 4 NM either side of centerline from C to D; 5 NM either side of centerline from D to M2; 5 NM either side of centerline for all Alternate Entries and Exits. Melrose Range Night/IMC pattern 7.5 NM either side of centerline.

Special Operating Procedures:

- (1) Tie-in FSS: Albuquerque (ABQ).
- (2) Non-27 SOW aircraft entry times are booked no closer than 15 minutes. Users must meet booked Entry and Exit times plus or minus 5 minutes. If unable to meet planned Entry time, enter at an Alternate Entry so as to meet booked Exit time or do not enter the route. Route times are planned at 450 KT ground speed.
- (3) Alternate Entry: E, K, M3.
- (4) Alternate Exit: P, TF.
- (5) Aircraft must call in-the-blind route Entry and Exit on 255.4. Monitor 255.4 on this route unless operational requirements dictate otherwise.
- (6) Albuquerque ARTCC does not provide IFR separation between scheduled MTR users while on this route.
- (7) CAUTION: Numerous towers and obstructions exist on this route which are hazards to flight at less than 300' AGL. Contact 27 SOSS/OSTA DSN 681-2521 to obtain a current and complete fax copy of unchummed/uncharted obstructions.
- (8) See Cannon AFB Supplement 1 to AFI 13-212 (previously AFR 50-46) for procedures to transition to Melrose night/IMC pattern for south entries into Melrose Range, R-5104 and R-5105.
- (9) CAUTION: The following obstructions are not found on CHUM and are not printed on current cartographic materials: Towers less than 200' at the following locations:

IR ROUTES

N33-57.69 W103-53.01; N34-06.9 W103-39.1; N33-55.15 W104-3.49; N33-37.32 W105-14.42; N34-14.65 W105-59.5; N33-41.9 W105-41.9; N34-30.11 W104-49.55; N34-26.19 W104-36.63; N34-559.11 W104-07.98; N34-29.22 W106-06.71; N34-16.7 W105-35.22; N34-51.15 W104-07.72; N35-03.71 W104-02.52; N35-04.15 W104-01.6; N34-08.0 W103-38.2; N34-56.0 W104-10.5; N34-28.0 W105-24.0; N33-40.9 W104-59.2.

FSS's Within 100 NM Radius:

ABQ

IR-115

ORIGINATING ACTIVITY: 49 OSS/OSTA, 700 Delaware Ave., Holloman AFB, NM 88330-8017 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | HMN 179/18 | N32°33.50' W106°10.00' |
| 05 AGL B 120 MSL to | B | HMN 108/37 | N32°34.30' W105°28.40' |
| 05 AGL B 80 MSL to | C | CME 188/48 | N32°35.00' W104°56.30' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Airspeeds are subsonic.
- (2) Alternate Entry/Exit: B.
- (3) This route to be used by ALCM and ALCM carrier aircraft only.
- (4) Avoid Timberon Airfield by 1500'/3 NM.
- (5) Anyone wishing to schedule IR-115 must ensure they have also scheduled R-5107B, R-5107D, and R-5103B and C.

FSS's Within 100 NM Radius:

IR-116

ORIGINATING ACTIVITY: 49 OSS/OSTA, 700 Delaware Ave., Holloman AFB, NM 88330-8017 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | CME 188/48 | N32°35.00' W104°56.30' |
| 05 AGL B 80 MSL to | B | HMN 108/37 | N32°34.30' W105°28.40' |
| 05 AGL B 120 MSL to | C | HMN 179/18 | N32°33.50' W106°10.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Airspeeds are subsonic.
- (2) Alternate Entry/Exit: B.
- (3) This route to be used by ALCM and ALCM carrier aircraft only.
- (4) Avoid Timberon Airfield by 1500'/3 NM.
- (5) Anyone wishing to schedule IR-116 must ensure they have also scheduled R-5107B, R-5107D, R-5103B and C.

FSS's Within 100 NM Radius:

IR-117

ORIGINATING ACTIVITY: 188FW Arkansas ANG, 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502.

SCHEDULING ACTIVITY: Same as Originating Activity. Route scheduled no more than 72 hr in advance. Minimum separation between scheduled entry times is fifteen minutes.

HOURS OF OPERATION: Continuous (except Sunday 1000-1200 local)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | TIK 142/15 | N35°13.00' W97°13.00' |
| 05 AGL B 30 MSL to | B | MLC 270/32 | N34°55.00' W96°25.00' |
| SFC B 40 MSL to | C | MLC 160/32 | N34°20.00' W95°39.00' |
| SFC B 40 MSL to | D | PGO 288/3 | N34°42.00' W94°40.00' |
| SFC B 40 MSL to | E | PGO 022/10 | N34°50.00' W94°31.00' |
| SFC B 40 MSL to | F | FSM 167/19 | N35°04.00' W94°14.00' |
| SFC B 40 MSL to | G | FSM 141/14 | N35°11.00' W94°07.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to D; 2 NM either side of centerline from D to E; 2 NM left and 10 NM

right of centerline from E to F; 2 NM either side of centerline from F to G (until entering R-2402).

Special Operating Procedures:

- (1) Alternate Entry: B, C, D.
- (2) Alternate Exit: D, F.
- (3) Participating aircraft separation on IR-117, 120, 121 and 164 is MARSAs through restrictive scheduling.
- (4) See and Avoid/restrictive scheduling applies between IR-117 and IR-120, IR-121, IR-164, VR-189, 1102, 1103, 1104, 1113, 1130 Hog Low North MOA.
- (5) Caution Points E-G, multiple converging MTRs and military aircraft in Hog MOA.
- (6) Call in-the-blind on 305.4 before entering the Hog MOA. Clearance into R-2402 must be received on 339.05.
- (7) Point D is a compulsory reporting point, contact Ft. Smith APP CON 343.75.
- (8) Avoid flight within 1500' AGL/3 NM all charted airports when practicable.
- (9) Uncharted and not in CHUM route obstructions:
 - (a) Tower 1260' MSL (260' AGL) N34-45.0 W94-39.0.
- (10) Entrance at Point A restricted to aircraft departing Tinker AFB.
- (11) Contact Razorback APP CON on 343.75 if departing IR route at Point F or G when the Hog MOA is scheduled active.
- (12) Make entry time plus or minus five minutes or reschedule.

FSS's Within 100 NM Radius:

FTW, ICT, MLC

IR-120

ORIGINATING ACTIVITY: 188FW Arkansas ANG, 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502.

SCHEDULING ACTIVITY: Same as Originating Activity. Route scheduled no more than 72 hr in advance. Minimum separation between scheduled entry times is fifteen minutes.

HOURS OF OPERATION: Continuous (except Sunday 1000-1200 local)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | FSM 072/63 | N35°35.00' W93°01.00' |
| 01 AGL B 50 MSL to | B | FSM 086/46 | N35°21.00' W93°20.00' |
| 01 AGL B 50 MSL to | C | FSM 102/44 | N35°09.00' W93°25.50' |
| 01 AGL B 50 MSL to | D | PGO 063/35 | N34°54.50' W93°58.00' |
| 10 AGL B 40 MSL to | E | FSM 134/16 | N35°11.00' W94°04.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to N35-28 W93-10; 3 NM left and 5 NM right of centerline to B; 5 NM left and 8 NM right of centerline from B to C; 5 NM either

side of centerline from C to D; 5 NM left and 3 NM right of centerline from D to E.

Special Operating Procedures:

- (1) Route designated for SN, RR, and PR.
- (2) MARSAs (See and Avoid scheduling) applies after aircraft enter route until standard separation is provided after exiting route.
- (3) MARSAs applies between IR-120, IR-117, IR-121, IR-164, VR-1102, VR-1103, VR-1104, VR-1130 and VR-1189 and Hog MOA.
- (4) Units requesting use of IR-120 will furnish scheduler with entry time, time at D, and exit time.
- (5) Route will be flown 240 to 540 knots.
- (6) Caution Points A-C, numerous SR routes frequented by flights of multiple C-130s.
- (7) Caution Points C-E, multiple converging MTRs and military aircraft in Hog MOA.
- (8) Contact Razorback APP CON on 343.75 if departing at Point D or E when Hog MOA is scheduled active.
- (9) See and Avoid/restrictive scheduling applies between IR-120 and IR-117, IR-121, IR-164, VR-189, 1102, 1103, 1104, 1113, 1130 Hog North MOA.
- (10) Call in-the-blind on 305.4 before entering the Hog MOA. Clearance into R-2402 must be received on 339.05.
- (11) Point D is a compulsory reporting point, contact Razorback App Con 343.75.
- (12) Be alert for hang gliders in vicinity of Magazine Mountain between B and C.
- (13) Avoid direct overflight of Nuclear Facility N35-19 W93-14.
- (14) Caution: Soaring bird activity vicinity Mount Magazine.
- (15) Uncharted tower 1217' MSL (150' AGL) N35-28.8 W93-12.4.
- (16) Make entry times plus or minus five minutes or reschedule.

FSS's Within 100 NM Radius:

JBR, MLC

IR-121

ORIGINATING ACTIVITY: 188FW Arkansas ANG, 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502.

SCHEDULING ACTIVITY: Same as Originating Activity. Route scheduled no more than 72 hr in advance. Minimum separation between scheduled entry times is fifteen minutes.

HOURS OF OPERATION: Continuous (except Sunday 1000-1200 local)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | TXK 072/50 | N33°40.00' W93°05.00' |
| 01 AGL B 20 MSL to | B | TXK 037/43 | N34°02.00' W93°28.00' |
| 01 AGL B 30 MSL to | C | TXK 006/49 | N34°19.00' W93°51.00' |
| 01 AGL B 40 MSL to | D | PGO 082/48 | N34°44.00' W93°38.00' |

IR ROUTES

01 AGL B 40 MSL to E PGO 063/34 N34°54.00'
W93°58.40'
01 AGL B 40 MSL to F FSM 131/15 N35°12.10'
W94°04.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 2 NM either side of centerline from A to B; 2 NM widening to 6 NM left and 3 NM right of centerline from B to C; 8 NM either side of centerline from C to E; 5 NM left and 3 NM right of centerline from E to F.

Special Operating Procedures:

- (1) Alternate Entry: C.
- (2) Alternate Exit: E.
- (3) Participating aircraft separation on IR-121, 117, 120, and 164 is MARSAs through restrictive scheduling.
- (4) See and Avoid/restrictive scheduling applies between IR-121 and IR-117, IR-120, IR-164, VR-189, 1102, 1103, 1104, 1113, 1130, Hog Low North MOA.
- (5) Caution Points B-F, multiple MTRs and military traffic in Hog MOA.
- (6) Call in-the-blind on 305.4 before entering the Hog MOA. Clearance to enter R-2402 must be received on 339.05.
- (7) Point D is a compulsory reporting point, contact Ft. Smith APP CON 343.75.
- (8) Contact Razorback APP CON on 343.75 if departing IR route at Point D or E when the Hog MOA is scheduled active.
- (9) Avoid flight within 1500' AGL/3 NM all charted airports when practicable.
- (10) Make entry time plus or minus five minutes or reschedule.

FSS's Within 100 NM Radius:

MLC

IR-122

ORIGINATING ACTIVITY: 49 OSS/OSTA, 700 Delaware Ave., Holloman AFB, NM 88330-8017 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Continuous (except Sunday 1000-1200 local)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | HUP 133/60 | N30°44.50' W104°43.00' |
| 05 AGL B 120 MSL to | B | SFL 125/64 | N30°57.50' W104°14.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 7 NM either side of centerline.

Special Operating Procedures:

- (1) Airspeeds are subsonic.
- (2) This route to be used by ALCM and ALCM carrier acft only.

FSS's Within 100 NM Radius:

SJT

IR-123

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB Fort Worth, TX 76127 DSN 739-6903/6904/6905, C817-782-6903/6904/6905.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------|----|--------------|---------------------------|
| As assigned to | A | LLO 135/22 | N30°30.00' W98°32.00' |
| 05 AGL B 50 MSL to | B | JCT 191/16 | N30°21.00' W99°55.00' |
| 05 AGL B 50 MSL to | C | RSG 290/42 | N30°22.00' W101°00.00' |
| 01 AGL B 50 MSL to | D | DLF 305/71 | N30°09.00' W101°47.00' |
| 01 AGL B 60 MSL to | E | FST 090/72 | N30°43.00' W101°37.00' |
| 01 AGL B 50 MSL to | F | SJT 248/54 | N31°11.00' W101°29.00' |
| 05 AGL B 50 MSL to | G | SJT 209/35 | N30°55.00' W100°53.00' |
| 05 AGL B 60 MSL to | H | JCT 041/22 | N30°50.00' W99°30.00' |
| 05 AGL B 40 MSL to | I | LLO 295/23 | N31°00.00' W99°09.50' |
| 05 AGL B 60 MSL to | J | LLO 307/22 | N31°03.00' W99°05.00' |
| Alternate Exit: H | | | |
| 05 AGL B 60 MSL to | H1 | JCT 041/22 | N30°50.00' W99°30.00' |
| Climb to | | | |
| 110 MSL to | HA | LLO 265/17 | N30°48.60' W99°06.90' |
| (Contact Houston ARTCC) | | | |
| 110 MSL to | HB | LLO VORTAC | N30°47.78' W98°47.24' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 13 NM either side of centerline from C to F; 13 NM tapering to 5 NM either side of centerline from F to G; 5 NM either side of centerline from G to J. Alternate Exit H: 5 NM either side of centerline from H1 to HB.

Special Operating Procedures:

- (1) Minimum speeds: 300 kt.

- (2) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSAs apply after aircraft have passed the Entry/Alternate Entry Point until ATC establishes standard separation after exiting the route.
- (3) Route conflicts:
- (a) IR-123 just past Point B to Point G shares the route centerline with IR-169. You must call the schedulers, 87 FTS at Laughlin AFB, TX DSN 732-5824/5484, C830-298-5824 to deconflict and ensure 10 minutes separation between aircraft;
- (b) SR-281 and SR-282 conflicts with IR-123 from Point A to Point E in numerous places, and SR-283 and SR-284 conflicts with IR-123 between Point C to Point H. Call the schedulers, 85 FTS at Laughlin AFB, TX DSN 732-5121/5337, C830-298-5429 to deconflict with these routes;
- (c) The left corridor of IR-123 between Point A to just past Point B conflicts with the route corridor of VR-140 at Point G. Call the 560 FTS at Randolph AFB, TX DSN 487-3518/3942, C210-652-3518 to deconflict;
- (d) You must schedule Brady MOA if you are delaying in Brady.
- (4) Units requesting IR-123 shall furnish 301 OG/SUA with planned entry/exit points, times, and planned speeds. Accurate times are critical in the deconfliction process.
- (5) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
- (6) All aircraft will monitor FSS (255.4) unless assigned a frequency by ARTCC. The entry and exit and all Alternate Entry/Exit Points are compulsory reporting points. Ft. Worth ARTCC request all aircraft monitor 295.0 from E to G.
- (7) Exit procedures:
- (a) Aircraft exiting at G will climb to 7000' MSL, contact ZHU ARTCC on 346.4. Cross the JCT 302 radial 7000' MSL and maintain 7000' MSL until H. After H proceed direct LLO, cross the LLO 265/017 at 11,000' MSL, then direct to LLO 088/029 BSM 344/017 BSM;
- (b) Aircraft exiting at H will proceed via the LLO 265 radial direct LLO, climb, maintain 11,000' MSL. Contact ZHU ARTCC 343.9. Cross the LLO 265/017 11,000' MSL.
- (8) NORDO procedures:
- (a) In the event of lost communications prior to entry point and two-way communications are not re-established prior to the entry point, the pilot shall maintain the last assigned altitude until the entry point then descend and cross the next fix after the entry point at the highest IR route altitude and fly the IR route at the highest published altitudes and execute the lost communications procedure at the end of the route. Squawk Code 7600;
- (b) In the event of lost communications, and unable to proceed VFR, climb to 7000' at G. Cross the JCT 302 radial at 7000' MSL until Hotel. After Hotel proceed direct LLO and cross the LLO 265/017 at 11,000' MSL then via flight plan route.
- (9) Sensitive Areas: Avoid the following areas by 1300' AGL or 1 NM radius: N30-18-00 W100-38-45; N30-32-36 W100-54-24; N30-40-00 W101-42-00; N31-11-00 W101-32-00; N31-12-00 W101-28-30; N31-09-15 W101-20-04; N30-49-30 W100-42-15; N30-53-00 W99-33-00; N30-19-40 W99-54-20. Avoid the following areas by 1.5 NM radius: N30-24-30 W98-43-00; N30-24-30 W100-37-00. Avoid Pave Paws Radar Site N30-58-41 W100-33-08 by 5000' AGL or 1 NM.
- (10) Alternate Entry: B and C.

(11) Alternate Exit: G and H.

(12) Obstructions:

- (a) Unlit 500' AGL tower at (N30-43-50 W098-57-12).

FSS's Within 100 NM Radius:

FTW, SJT

IR-124

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB Fort Worth, TX 76127 DSN 739-6903/6904/6905, C817-782-6903/6904/6905.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | SJT 106/35 | N31°07.00' W99°50.00' |
| 05 AGL B 40 MSL to | B | SJT 211/23 | N31°05.00' W100°45.00' |
| 01 AGL B 40 MSL to | C | SJT 273/33 | N31°30.00' W101°05.00' |
| 01 AGL B 40 MSL to | D | SJT 318/54 | N32°08.00' W101°01.00' |
| 05 AGL B 50 MSL to | E | SJT 016/32 | N31°51.00' W100°11.00' |
| 05 AGL B 50 MSL to | F | LLO 309/45 | N31°21.00' W99°23.00' |
| 05 AGL B 60 MSL to | G | LLO 312/40 | N31°18.00' W99°17.00' |
| 05 AGL B 60 MSL to | H | LLO 347/17 | N31°05.00' W98°49.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route (See SOP number 5).

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Minimum speed: 300 kt.
- (2) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSAs apply after aircraft have passed the Entry/Alternate Entry point until ATC established standard separation after exiting the route.
- (3) Route Conflicts:
- (a) IR-124 from Points B to C conflicts with SR-283 Point H and SR-284 Point A. Both are on or near the route centerline. Call the 85 FTS at Laughlin AFB DSN 732-5121, C830-298-5121/5529 to ensure altitude and time separation;
- (b) IR-124 conflicts with SR-243 Points C to E with SR-244 Points B to C, and SR-242 at Point F. Call Dyess AFB DSN 461-2792 to deconflict.
- (4) Units requesting IR-124 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.

IR ROUTES

- (5) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route. at or below FL180 descend direct to cross B RSK 090/45 N36°34.00' W107°11.00'
- (6) Monitor FSS 255.4 unless assigned a frequency by ARTCC. The entry and exit and all Alternate Entry/Exit points are compulsory reporting points. Contact San Angelo APP CON 354.1 with position reports at A and C. 100 MSL to direct to C RSK 104/37 N36°27.50' W107°26.00'
- (7) Exit procedures:
 (a) Aircraft exiting E will climb to be at 5000' by E and contact Fort Worth 295.0; 06 AGL B 100 MSL to direct to D RSK 142/31 N36°16.50' W107°50.00'
- (b) Aircraft exiting at H will proceed to LLO via LLO 347 radial, then via flight plan route: climb and maintain 9000' to cross LLO 347/9 at 9000' and contact Houston ARTCC 307.3. (Aircraft requesting Brady MOA will be cleared by Houston Center as soon as possible after radio communication has been established). 06 AGL B 100 MSL to turn right and climb to E RSK 177/34 N36°11.00' W108°14.00'
- (b) Aircraft exiting at H will proceed to LLO via LLO 347 radial, then via flight plan route: climb and maintain 9000' to cross LLO 347/9 at 9000' and contact Houston ARTCC 307.3. (Aircraft requesting Brady MOA will be cleared by Houston Center as soon as possible after radio communication has been established). 06 AGL B 110 MSL to direct to F RSK 184/35 N36°11.50' W108°19.50'
- (8) NORDO procedures:
 (a) In the event of lost communications prior to entry point and two-way communications are not reestablished prior to the entry point, the pilot shall maintain the last assigned altitude until the entry point then descend and cross the next fix after the entry point at the highest IR route altitude and fly the IR route at the highest published altitudes and execute the lost communications procedure at the end of the route. Squawk Code 7600; 06 AGL B 110 MSL to direct to G RSK 212/38 N36°18.50' W108°39.00'
- (b) Point E: In the event of lost communications, and unable to proceed VFR attempt contact with Fort Worth ARTCC 295.0. If no contact, maintain 5000' MSL, continue on the route to H, execute published lost communications procedures; 02 AGL B 110 MSL to direct to GA TBC 047/100 N36°53.00' W109°26.00'
- (c) Point H: In the event of lost communications, and unable to proceed VFR, proceed from H to LLO via LLO 347 radial, then via flight plan route. Climb and maintain 9000'. Cross LLO 347/9 at 9000'. 04 AGL B 110 MSL to direct to GB DVC 209/57 N37°06.50' W109°45.00'
- (9) Alternate Entry: D. 10 AGL B 110 MSL to descend and turn left to H HVE 139/75 N37°17.50' W110°00.00'
- (10) Alternate Exit: E. 02 AGL B 110 MSL to direct to I HVE 142/71 N37°19.50' W110°06.50'
- (11) Sensitive Areas: Avoid the following areas by 1300' AGL or 1 NM radius: N31-07.5 W99-49.5; N31-09.5 W99-53.0; N31-15.5 W100-49.0; N31-11.0 W100-54.5; N32-03.0 W100-40.5; N31-19.0 W99-14.5; N31-13.5 W99-13.5. 02 AGL B 90 MSL to turn right to J HVE 167/65 N37°20.00' W110°45.00'
- 02 AGL B 90 MSL to direct to K HVE 170/64 N37°21.00' W110°49.50'
- 02 AGL B 90 MSL to direct to L BCE 082/45 N37°36.00' W111°22.00'
- 02 AGL B 90 MSL to turn left to M BCE 086/36 N37°34.00' W111°33.00'
- 02 AGL B 90 MSL to (Start Maneuver Area) direct to N BCE 126/29 N37°19.00' W111°55.50'
- 05 AGL B 90 MSL to direct to O BCE 172/45 N36°57.00' W112°25.00'
- 02 AGL B 90 MSL to (End Maneuver Area) direct to P OZN 106/38 N36°45.50' W112°55.50'
- 02 AGL B 90 MSL to descend and turn right to Q OZN 139/34 N36°34.50' W113°17.00'
- 02 AGL B 90 MSL to direct to R OZN 143/34 N36°34.00' W113°20.00'
- 02 AGL B 80 MSL to climb and turn right to S MMM 109/27 N36°30.50' W113°48.50'
- 02 AGL B 90 MSL to direct to T MMM 113/19 N36°34.50' W113°58.50'
- 02 AGL B 90 MSL to descend direct to U MMM 091/11 N36°43.00' W114°03.50'
- 02 AGL B 90 MSL to direct to V MMM 075/9 N36°46.00' W114°05.00'
- 06 AGL B 80 MSL to turn right and climb to W MMM 009/11 N36°56.00' W114°11.00'
- 02 AGL B 90 MSL to direct to X MMM 001/19 N37°04.00' W114°10.00'
- 02 AGL B 90 MSL to turn left to Y OZN 316/23 N37°25.50' W113°49.50'
- 02 AGL B 90 MSL to Re-Entry: (End Maneuver Area) Z OZN 321/34 N37°36.00' W113°53.00'

FSS's Within 100 NM Radius:

FTW, SJT

IR-126

ORIGINATING ACTIVITY: 7 OSS/A3R, 965 Ave. D-4, Ste. 109, Dyess AFB, TX 79606 DSN 461-3666, C325-696-3666, fax DSN 461-3677, C325-696-3677.

SCHEDULING ACTIVITY: 7 OSS/A3R, 966 Ave. D-4, Ste. 109, Dyess AFB, TX 79606 DSN 461-3665, C325-696-3665, fax DSN 461-4158, C325-696-4158.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|------------------------|
| Cross at FL200 to or as assigned descend direct to cross | A | RSK 085/50 | N36°37.00' W107°04.00' |

| | | | |
|--|-----|------------|---------------------------|
| 90 MSL to Turn left and climb to cross | P1 | OZN 106/38 | N36°45.50' W112°55.50' |
| 100 MSL to direct to | AA | OZN 110/52 | N36°35.00' W112°43.00' |
| 100 MSL to (Start Maneuver Area) turn right and descend to cross | AC | BCE 128/14 | N37°30.00' W112°07.50' |
| 90 MSL to Then via published route Alternate Exit: AB | N1 | BCE 126/29 | N37°19.00' W111°55.50' |
| 90 MSL to (End Maneuver Area) (Contact Los Angeles ARTCC 343.6 prior to AA) Climb and turn left to cross | P2 | OZN 106/38 | N36°45.50' W112°55.50' |
| at or below 120 MSL Climb direct to cross | AA1 | OZN 110/52 | N36°35.00' W112°43.00' |
| 140 MSL to or as assigned Alternate Entry: AD | AB | BCE 175/42 | N37°00.00' W112°27.00' |
| 170 MSL to or as assigned 110 MSL B 170 MSL descend direct to cross | AD | TBC 041/52 | N36°36.00' W110°22.00' |
| 110 MSL to descend direct to cross | AE | DVC 225/93 | N37°00.00' W110°36.00' |
| 02 AGL B 90 MSL to turn left and descend to | AF | DVC 237/93 | N37°15.50' W110°45.50' |
| 02 AGL B 90 MSL to Thence via published route. | K1 | HVE 170/64 | N37°21.00' W110°49.50' |

PMSV CONTACTS: Primary home station. Alternate Dyess (DYS 344.6).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC terrain following (TF), Terrain Avoidance (TA), visual contour (VC) operations are authorized IAW command directives C to Z and AE to K. When command directives preclude TA/TF/VC operations, aircrews will maintain the IFR altitude for each TA/TF route segment. Minimum altitudes, other than surface, provide at least 100' vertical clearance of known man-made obstructions. Obstructions under 200' AGL were not considered in route design. Command directives may require additional obstruction clearance for TA/TF/VC operations. The entire route is mountainous. Regulations governing aircraft operations below 500' AGL must be complied with. Auto TF descent is authorized at C and 11 NM prior to AE on the Alternate Entry for B-1B aircraft.

ROUTE WIDTH - 5 NM either side of centerline from A to H; 4 NM either side of centerline from H to M; 3 NM either side of centerline from M to N; 4 NM left and 2 NM right of centerline from N to O; 3 NM left and 2.5 NM right of centerline from O to Q; 3 NM left and 2.5 NM right of centerline from Q to S; 4 NM either side of centerline from S to X; Boundaries of Desert MOA left and 4 NM right from X to Z; Alternate Exit: 4 NM either side

of centerline from P to AB; Alternate Entry: 4 NM either side of centerline from AD to K; Re-Entry: 4 NM either side of centerline from P to AC; Re-Entry: 2.5 left and 4 NM right of centerline from AC to N.

Special Operating Procedures:

- (1) Participating Aircraft Separation: Route designated for MARSA operations established by coordinated scheduling. All aircraft must enter route at prescribed scheduled time plus or minus 2 1/2 minutes. Otherwise new entry time must be scheduled with 7BW.
- (2) Lost communications altitude after exit at AB is 14,000' MSL. Lost communications altitude after exit at Z is as required for aircraft participating in operations in the Desert MOA and Nellis Ranges.
- (3) Routing from P-Z will only be used by aircraft scheduled into Desert MOA by Red Flag Air Tasking Order or 554th Range Group Schedule DSN 348-4710. For same day scheduling call Blackjack at DSN 682-3707.
- (4) Aircrews are authorized to turn left and enter the Desert MOA anywhere between X and Z based on their preplanned mission scenario. Must file Z exit (OZN321034).
- (5) Method of MARSA between IR-126 and IR-266 will be coordinated scheduling. Fly centerline between O and P to avoid Pipe Springs National Monument N36-51.7 W112-44.2.
- (6) Aircrews should be especially vigilant between O-S for possible traffic on IR-400 and IR-266.
- (7) Centerline between the following points are depicted as a 7.5 NM arc: E to F; H to I; J to K; L to M; Q to R; S to T; W to X; Y to Z; and P to AA. Centerline between AC to N is 7.0 NM radius arc.
- (8) Contact Nellis Control 343.0/392.1 prior to entering Desert MOA at Z. If Nellis Control cannot be reached, contact Blackjack 377.8.
- (9) Aircraft using Alternate Exit will contact Los Angeles ARTCC 343.6 prior to AA. If unable, Squawk Mode 3 Code 7600. If no contact is made by AB, follow two-way communications failure.
- (10) Aircrews entering IR-126 on Alternate Entry AD must file IR-126A.
- (11) IR-126 ends at Z, routing within Nellis Ranges is not part of IR-126. Therefore, Z must be filed as IR-126 exit, followed by western most point in Nellis Ranges and Exit Point for Nellis Ranges.
- (12) When aircraft are operating in IMC or marginal VMC conditions, report passing Point R (OZN 143/34) to Los Angeles ARTCC 343.6.
- (13) Aircrews should be especially vigilant for VFR helicopter traffic from SFC to 500' AGL between O and S.
- (14) Route hazard procedures: Aircrews encountering hazards/hazardous weather along this route will notify 15th AF Command Post via inflight procedures who in turn will determine route status.
- (15) Air rescue operations within this route notify 15th AF Command Post DSN 947-2035.
- (16) Aircrews are restricted to IFR altitude between X and Y due to blasting in the area of N37-22 W113-52 between the following time frames: 1730-1830Z and 2130Z-2330Z during daylight savings time. 1830-1930Z and 2230-0030Z during daylight standard time. Use extreme caution for the Mesquite Airport N36-50.2 W114-03.5, between U and W. Airport located on E side of corridor with Runway of 1/19.
- (17) Noise Sensitive Areas:
 - (a) Residence N37-11.5 W109-52.0;

IR ROUTES

- (b) Residence N37-16.1 W109-55.6 avoid by 1/2 NM, (NO OVERFLIGHT);
- (c) Pipe Springs National Monument N36-51.7 W112-44.2 avoid by 1/2 NM, (NO OVERFLIGHT).

- (18) Alternate Entry: AD.
- (19) Alternate Exit: AB.
- (20) Aircrews be aware of LATN activity from Point P to Point Z.

FSS's Within 100 NM Radius:

ABQ, CDC, PRC

IR-127

ORIGINATING ACTIVITY: 12 OSS/OSOA, 501 I Street East, Randolph AFB, TX 78150 DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 99th FTS, 1450 5th Street East, Randolph AFB, TX 78150 DSN 487-6746, C210-652-6746.

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| As assigned to | A | LOA 075/23 | N31°10.00' W95°32.00' |
| 09 AGL B 40 MSL to | B | DAS 357/22 | N30°33.00' W94°38.00' |
| 07 AGL B 40 MSL to | C | LFK 063/25 | N31°19.00' W94°16.00' |
| 07 AGL B 40 MSL to | D | GGG 125/40 | N31°58.00' W94°10.00' |
| 07 AGL B 40 MSL to | E | GGG 198/30 | N31°58.00' W95°00.00' |
| 07 AGL B 40 MSL to | F | GGG 197/38 | N31°50.50' W95°03.20' |
| 07 AGL B 40 MSL to | G | LOA 054/44 | N31°28.00' W95°12.30' |
| 06 AGL B 40 MSL to Alternate Entry: D | H | LOA 041/25 | N31°24.00' W95°36.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSAs applies after aircraft have passed the Entry/Alternate Entry Point until ATC established standard separation after exiting the route.
- (2) Route Conflicts: IR-127 and VR-187 share common segments and traffic flow along the entire route. IR-129 conflicts from Point D to Point H. VR-106 conflicts at Point C. Route Deconfliction is assured through coordinated scheduling. (VICTOR) airways and VFR flyways cross all route segments.
- (3) All aircraft will monitor FSS 255.4 unless assigned a frequency by ARTCC. All Entry/Alternate Entry points and Exit/Alternate Exit points are compulsory reporting points.

- (4) Exit Procedures: Aircraft exit from over G via the LOA 041 radial to LOA, then flight plan route. Climb and maintain 8000', cross LOA 041/11 at 8000'. Contact Houston 269.6.
- (5) NORDO Procedures:
 - (a) In the event of lost communications prior to the entry point and two-way communications are not re-established prior to the entry point, the pilot shall maintain the last assigned altitude until the entry point, then descend and cross the next fix after the entry point at the highest IR route altitude and fly the IR route at the highest published altitude and execute the lost communications procedure at the end of the route. Squawk Code 7600;
 - (b) In the event of lost communications, and unable to proceed VFR, proceed from H via LOA041 radial to LOA, then flight plan route. Climb and maintain 8000', cross LOA041011 at 8000'.
- (6) Sensitive Areas: Avoid Livingston Airfield by 1500/3; Avoid the following areas by 1300' AGL or 1 NM radius: N30-50-00 W95-07-00; N31-09-00 W95-33-00; N30-46-30 W94-27-40; N31-10-00 W94-28-30; N30-49-00 W94-25-45; N31-31-00 W94-09-00; N31-56-30 W94-41-20. Avoid area by 1300' AGL or 2 NM radius: N30-42-30 W94-56-00. Avoid by 1500' AGL or 1 NM radius: N31-56-45 W94-14-35; N31-39-00 W95-04-30; N31-51-00 W94-51-30. Avoid area by 2000' AGL or 1 NM radius: N31-02-00 W94-26-00. Avoid areas by 1500' AGL or 1.5 NM radius: N31-47-30 W94-11-00; N31-54-30 W94-23-45; N31-48-10 W95-09-00. Avoid Lake Murvaul area by 1000' AGL or 1 NM of the shoreline.
- (7) Obstructions: Tower 420' AGL N30-56-20 W94-41-05; tower 670' AGL N30-41-30 W94-56-10; tower 429' AGL N30-44-00 W94-55-30; tower 460' AGL N30-43-45 W94-55-00; tower 406' AGL N30-43-30 W94-54-30; tower 403' AGL N30-43-10 W94-54-30; tower 300' AGL N30-58-00 W95-19-00.
- (8) Alternate Entry: D.
- (9) Alternate Exit C. (Only for aircraft transferring to route VR-106).
- (10) Noise sensitive areas: Avoid all noise sensitive areas by 1000' or 1/4 NM unless otherwise noted:
 - (a) Residence: N30-54.07 W94-28.4 Avoid by 1/2 NM.
- (11) The following Public Use Airports, as depicted on Houston Sectional Chart are within 5 NM of IR-127 route corridor:
 - (a) Point A-B: Livingston Arpt, Houston Co. Arpt, and Trinity Co. Arpt;
 - (b) Point B-C: Tyler Co. Arpt;
 - (c) Point C-D: San Augustine Co. Arpt, and Center Arpt;
 - (d) Point D-E: Panola Co. Arpt;
 - (e) Point E-F: Cherokee Co. Arpt;
 - (f) Point G-H: Houston Co. Arpt.

FSS's Within 100 NM Radius:

CXO, DRI, FTW, SJT

IR-128

ORIGINATING ACTIVITY: 7 OSS/A3R, 965 Ave. D-4, Ste. 109, Dyess AFB, TX 79606 DSN 461-3666, C325-696-3666, fax DSN 461-3677, C325-696-3677.

SCHEDULING ACTIVITY: 7 OSS/A3R, 966 Ave. D-4, Ste. 109, Dyess AFB, TX 79606 DSN 461-3665, C325-696-3665, fax DSN 461-4158, C325-696-4158.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long | | | | |
|---|----|--------------|---------------------------|---|----|------------|---------------------------|
| Cross at 100 MSL to or as assigned (TFR Initiation Point) descend direct to cross | A | BGS 033/12 | N32°31.50' W101°19.50' | 02 AGL B 70 MSL to turn left and descend to | Z | MAF 240/37 | N31°48.50' W102°52.00' |
| 06 AGL B 100 MSL to (TA Initiation Point) turn left to | B | LBB 142/48 | N32°59.50' W101°29.00' | 02 AGL B 70 MSL to (Contact Midland APP CON 290.4) direct to | AA | MAF 232/34 | N31°45.00' W102°47.50' |
| 02 AGL B 70 MSL to direct to | C | LBB 153/40 | N33°04.00' W101°41.50' | 08 AGL B 60 MSL to turn left to | AB | MAF 180/28 | N31°33.00' W102°17.50' |
| 06 AGL B 70 MSL to turn right to | D | LBB 167/44 | N32°58.50' W101°53.00' | 02 AGL B 60 MSL to direct to | AC | MAF 174/28 | N31°32.50' W102°14.00' |
| 02 AGL B 70 MSL to direct to | DE | LBB 171/45 | N32°57.50' W101°56.50' | 06 AGL B 60 MSL to (Contact Midland APP CON on 290.4) direct to | AD | MAF 160/28 | N31°32.50' W102°06.00' |
| 05 AGL B 70 MSL to turn right to | E | LBB 187/49 | N32°56.00' W102°13.00' | 02 AGL B 60 MSL to (TA/TFR Termination Point) (Contact FT. Worth ARTCC 322.55 or 364.8) | AE | MAF 126/39 | N31°31.50' W101°40.00' |
| 02 AGL B 70 MSL to direct to | F | LBB 195/50 | N32°57.50' W102°21.00' | 60 MSL B 130 MSL climb direct to cross | | | |
| 06 AGL B 70 MSL to direct to | G | LBB 224/50 | N33°13.50' W102°44.00' | 130 MSL to or as assigned | AF | MAF 109/60 | N31°30.50' W101°11.00' |
| 02 AGL B 70 MSL to turn right to | H | LBB 231/52 | N33°18.00' W102°49.50' | Re-Entry: BA direct to | | | |
| 02 AGL B 70 MSL to direct to | I | LBB 240/56 | N33°23.50' W102°57.50' | 04 AGL B 70 MSL to turn left to | O1 | HOB 328/40 | N33°16.00' W103°33.00' |
| 02 AGL B 70 MSL to (Alternate Exit) turn left to | J | LBB 250/55 | N33°33.50' W103°00.00' | 04 AGL B 70 MSL to direct to | BA | HOB 347/29 | N33°07.50' W103°17.50' |
| 02 AGL B 70 MSL to continue left turn to | K | LBB 256/49 | N33°39.50' W102°53.50' | 02 AGL B 70 MSL to Thence via published route. | J1 | LBB 250/55 | N33°33.50' W103°00.00' |
| 05 AGL B 70 MSL to direct to | L | LBB 268/51 | N33°50.00' W102°55.00' | Alternate Exit: RG direct to | | | |
| 02 AGL B 70 MSL to direct to | M | LBB 264/62 | N33°47.50' W103°09.00' | 04 AGL B 60 MSL to direct to | RA | TXO 193/65 | N33°30.50' W103°22.00' |
| 05 AGL B 70 MSL to direct to | N | LBB 258/65 | N33°40.50' W103°13.00' | 02 AGL B 60 MSL to direct to | RB | TXO 203/64 | N33°36.50' W103°33.00' |
| 02 AGL B 70 MSL to turn left to | O | HOB 328/40 | N33°16.00' W103°33.00' | 02 AGL B 60 MSL to turn right to | RC | TXO 213/65 | N33°43.00' W103°45.00' |
| 02 AGL B 70 MSL to direct to | P | HOB 319/36 | N33°10.00' W103°37.50' | 02 AGL B 60 MSL to continue turn and climb to | RD | TXO 218/64 | N33°47.00' W103°48.50' |
| 12 AGL B 70 MSL to direct to | Q | HOB 314/34 | N33°06.00' W103°39.00' | 02 AGL B 70 MSL to continue climb to | RE | TXO 220/63 | N33°49.50' W103°49.00' |
| 02 AGL B 70 MSL to (Contact Fort Worth ARTCC 298.95) direct to | R | HOB 291/24 | N32°51.00' W103°40.50' | 02 AGL B 70 MSL to direct to | RF | TXO 223/60 | N33°54.50' W103°49.00' |
| 02 AGL B 70 MSL to direct to | S | HOB 264/21 | N32°40.00' W103°41.00' | 05 AGL B 70 MSL to Re-Entry: RG then R-5104/R-5105. | RG | TXO 237/52 | N34°10.00' W103°48.00' |
| 02 AGL B 70 MSL to direct to | T | HOB 250/21 | N32°35.00' W103°41.00' | Re-Entry: R-5104/R-5105 Exit R-5104/R-5105 | | | |
| 02 AGL B 70 MSL to turn left to | U | HOB 230/25 | N32°26.00' W103°42.00' | at or below 70 MSL | RH | TCC 184/33 | N34°39.00' W103°47.00' |
| 09 AGL B 70 MSL to direct to | V | HOB 218/30 | N32°18.50' W103°42.50' | 02 AGL B 70 MSL On Re-Entry RG: turn left to | | | |
| 07 AGL B 70 MSL to turn right to | W | HOB 193/30 | N32°11.00' W103°30.50' | 02 AGL B 70 MSL to direct to | RI | CVS 285/39 | N34°39.00' W104°02.00' |
| 04 AGL B 70 MSL to direct to | X | HOB 164/23 | N32°15.50' W103°14.00' | 06 AGL B 70 MSL to turn left to | RJ | CVS 229/44 | N34°00.00' W104°04.00' |
| | Y | HOB 146/28 | N32°12.00' W103°03.00' | | | | |

IR ROUTES

05 AGL B 70 MSL to RK CVS 218/34 N34°00.00'
 direct to W103°50.00'
 02 AGL B 70 MSL to RG1 CVS 232/27 N34°10.00'
 to R-5104/5105 W103°48.00'
 (Contact Albuquerque
 ARTCC 319.2 for exit
 instructions)

PMSV CONTACTS: Primary Home Station. Alternate Dyess
 (DYS 344.6).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC
 terrain following (TF) visual contour (VC) operations are
 authorized IAW command directive within the published altitude
 blocks from A to AE and O1 to J1 on re-entry BA, and RA to RG1
 on re-entry R-5104/5105. VMC terrain avoidance (TA/VC)
 operations are authorized within the published altitude blocks
 from B to AE and O1 to J1 on re-entry BA, and RA to RG1 on
 re-entry R-5104/5105. When command directives preclude
 TF/TA/VMC operations aircrews will maintain the IFR altitude for
 each route segment. Minimum altitudes, other than surface, are
 established to provide 100' vertical clearance of known
 man-made obstructions within the route width. Command
 directives may require additional obstruction clearance for
 TF/TA/VMC operations. The entire route is designated
 non-mountainous. Regulations governing operations below 500'
 AGL must be complied with. The route corridor provides airspace
 for 500' lateral separation from man-made obstacles.
 Obstructions under 200' AGL were not considered in route
 design. Aircrews must be aware of charted airports within or near
 route corridor limits.

ROUTE WIDTH - 4 NM either side of centerline from A to C;
 3 NM left and 2.5 NM right of centerline from C to DE; 3 NM
 either side of centerline from DE to E; 4 NM either side of
 centerline from E to K; 5 NM left and 4 NM right of centerline
 from K to M; 4 NM either side of centerline from M to Q; 4 NM
 left and 3 NM right of centerline from Q to R; 3 NM left and 4
 NM right of centerline from R to U; 4 NM either side of centerline
 from U to W; 4 NM left and 3 NM right of centerline from W to Y;
 3 NM either side of centerline from Y to Z; 4 NM either side of
 centerline from Z to AF. Re-Entry; 4 NM either side of centerline
 from O1 to J1. Alternate Exit RG: 4 NM left and 5 NM right of
 centerline from RA to RC; 5 NM either side of centerline from RC
 to RE; 5 NM left and 3 NM right of centerline from RE to RG.
 Re-Entry R-5104/R-5105 boundaries from RG to RH; 4 NM either
 side of centerline from RH to RG1.

Special Operating Procedures:

- (1) Lost communications (LC) procedures: Route LC altitude will
 be published IFR altitude for the route. On exit aircrews will
 climb at AE to cross exit AF at 110 MSL and use 110 MSL as
 LC altitude from this point. NOTE: Aircraft going to Dyess
 AFB, TX will proceed at 110 MSL, to the ABI 161/30 DME,
 IAF (Jessa) and execute the HI-ILS or LOC/DME RWY 34
 (circle as required).
- (2) Participating aircraft separation: Route is designated for
 MARSAs operations established by coordinated scheduling.
- (3) Centerline between turn points is depicted as a 7.5 NM arc
 except between RH and RI and RJ and RK, which are 6 NM
 radius arcs.
- (4) Aircraft at TF/TA/VMC altitude may be required to fly at a
 higher minimum tracking altitude as listed in 99 ECRGR
 50-3, for scored activity. In no case will aircraft fly below
 command directed TF/TA/VMC altitudes.

- (5) Aircrews must be aware of airports within or near route
 corridor limits. Particular vigilance must be given to the
 following airports: N33-02.0 W101-55.7; N34-00.8
 W102-59.6; N32-08.5 W103-09.5; N33-16.1 W103-11.4.
- (6) TF capable aircraft can make an Auto-TF descent beginning
 at A from 170 MSL.
- (7) Additional tactical descent procedures. TF capable aircraft,
 when specifically cleared by ARTCC, will cross A at FL 220
 or as assigned and begin descent to cross B at or below 50
 MSL, then via published route.
- (8) The method of MARSAs between IR-180 and IR-128 will be
 scheduling.
- (9) Unit schedulers using Alternate Exit RG must deconflict
 IR-113 and R-5104/5105 and must comply with range
 orders.
- (10) Aircrews aborting on Alternate Exit RG will if conditions
 permit, abort to the southwest to avoid turning into Cannon
 Approach Airspace.
- (11) Minimum separation between scheduled entry times is 10
 minutes. ARTCC provides users with separation from known
 IFR traffic only. MARSAs applies after aircraft have passed
 the Entry/Alternate Entry Point until ATC established
 standard separation after exiting the route.
- (12) Aircrews should be aware of the 5549' tower at N33-33.2
 W103-39.1 which is 451' below the IFR altitude on Alternate
 Exit RG, but outside the corridor.
- (13) Aircrews should be alerted to the increase of migratory
 waterfowl throughout the entire route (especially between J
 and N) during the spring and fall migration season.
- (14) Aircrews are advised of a new 923' tower N32-54.40
 W103-41.13.
- (15) Aircrews should monitor 255.4 approaching G. T-37 and T-1
 aircraft flying SR-275/277 cross at G at 1000' AGL.
- (16) Noise Sensitive Areas: Avoid all Noise Sensitive Areas by
 1000' or 1/4 mile:
 - (a) Residence at N32-14.4 W103-03.9;
 - (b) Residence at N32-10.0 W103-33.9;
 - (c) School at N32-47.9 W101-26.8.

FSS's Within 100 NM Radius:

ABQ, SJT

IR-129

ORIGINATING ACTIVITY: 12 OSS/OSOA, 501 I Street
 East, Randolph AFB, TX 78150 DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 99th FTS, 1450 5th Street East,
 Randolph AFB, TX 78150 DSN 487-6746, C210-652-6746.

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | BYP 042/18 | N33°44.50' W95°58.00' |
| 08 AGL B 60 MSL to | B | SLR 344/37 | N33°49.00' W95°39.00' |
| 08 AGL B 40 MSL to | C | SLR 008/46 | N33°56.00' W95°17.50' |
| 06 AGL B 30 MSL to | D | TXK 274/27 | N33°36.00' W94°36.00' |

| | | | |
|--|---|------------|--------------------------|
| 06 AGL B 30 MSL to (Alternate Entry) | E | GGG 024/23 | N32°45.00' W94°31.00' |
| 05 AGL B 20 MSL to | F | GGG 060/29 | N32°36.50' W94°13.50' |
| 07 AGL B 20 MSL to | G | GGG 089/34 | N32°21.50' W94°05.00' |
| 07 AGL B 20 MSL to | H | GGG 125/40 | N31°58.00' W94°10.00' |
| 07 AGL B 40 MSL to | I | GGG 198/30 | N31°58.00' W95°00.00' |
| 07 AGL B 40 MSL to | J | LOA 054/44 | N31°28.00' W95°12.30' |
| 06 AGL B 40 MSL to Alternate Entry: E | K | LOA 041/25 | N31°24.00' W95°36.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to E; 2.5 NM either side of centerline from E to G; 5 NM either side of centerline from G to K.

Special Operating Procedures:

- (1) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSAs apply after aircraft have passed the Entry/Alternate Entry point until ATC establishes standard separation after exiting the route.
- (2) IR-129 and VR-188 share common route segments, opposite direction, from Point A to Point E. IR-129, IR-127 and VR-187 share common route segments from Point E to Point K. Route Deconfliction is assured through coordinated scheduling. (VICTOR) airways and VFR flyways cross all route segments.
- (3) All aircraft will monitor FSS 255.4 unless assigned a frequency by ARTCC.
- (4) All Entry/Alternate Entry points and Exit/Alternate Exit Ppoints are compulsory reporting points.
- (5) Aircraft exiting at K will proceed to LOA via the LOA 041 radial, then via flight plan route. Cross the LOA 041/11 at 8000'. Maintain 8000' until cleared higher. Contact Houston Center on 269.6.
- (6) NORDO procedures: In the event of lost communications, and unable to proceed VFR, proceed from over K via the LOA 041 radial to LOA, then via flight plan route. Climb and maintain 8000'. Cross the LOA 041/11 at 8000'.
- (7) Sensitive Area: Avoid by 1300' AGL or 1 NM radius: N33-49-30 W95-55-30; N33-47-30 W95-31-30; N33-00-00 W94-36-00; N31-56-30 W94-41-20. Avoid areas by 1500' AGL or 1 NM radius: N31-54-30 W94-23-30; N31-57-00 W94-14-30; N31-48-00 W95-09-00; N31-39-00 W95-04-00. Avoid the bounded area by 1300' AGL: N32-54-30 W94-45-00 to N32-55-00 W94-37-30 to N32-45-00 W94-24-00 to N32-45-00 W94-36-30.
- (8) Obstructions: Tower 440' AGL N32-29-50 W94-06-38; tower 500' AGL N34-00-57 W95-19-15; tower 464' AGL N33-54-56 W95-28-08; tower 420' AGL N31-45-08 W95-06-13; tower 450' AGL N32-30-40 W94-07-20; tower 420' AGL N32-21-30 W94-06-30.
- (9) Alternate Entry: E.
- (10) The following Class C and Public Use Airports, as depicted on Houston, Memphis and Dallas-Ft Worth Sectional Charts are within 5 NM of IR-129 route corridors:
 - (a) Point B-C: Stamper Arprt;
 - (b) Point C-D: McCurtain Co. Arprt;

- (c) Point D-E: Lonestar Arprt;
- (d) Point F-G: Harrison Co Arprt and Shreveport Class C Airspace;
- (e) Point G-H: Panola Co. Arprt;
- (f) Point H: Center Arprt;
- (g) Point I-J: Cherokee Co Arprt.

FSS's Within 100 NM Radius:
CXO, DRI, FTW, MLC, SJT

IR-130

ORIGINATING ACTIVITY: 49 OSS/OSTA, 700 Delaware Ave., Holloman AFB, NM 88330-8017 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | SFL 125/64 | N30°57.50' W104°14.50' |
| 05 AGL B 120 MSL to | B | HUP 133/60 | N30°44.50' W104°43.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 7 NM either side of centerline.

Special Operating Procedures:

- (1) Airspeeds are subsonic.
- (2) This route to be used by ALCM and ALCM carrier aircraft only.

FSS's Within 100 NM Radius:
SJT

IR-131

ORIGINATING ACTIVITY: 49 OSS/OSTA, 700 Delaware Ave., Holloman AFB, NM 88330-8017 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | HMN 117/37 | N32°29.50' W105°32.00' |
| 05 AGL B 120 MSL to | B | HMN 177/23 | N32°29.00' W106°10.00' |

IR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Airspeeds are subsonic.
- (2) This route to be used by ALCM and ALCM carrier aircraft only.
- (3) Anyone wishing to schedule IR-131 must ensure they have also scheduled R-5107B, R-5107D, R-5103B and R-5103C.

FSS's Within 100 NM Radius:

IR-132

ORIGINATING ACTIVITY: 49 OSS/OSTA, 700 Delaware Ave., Holloman AFB, NM 88330-8017 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | HMN 177/23 | N32°29.00' W106°10.00' |
| 05 AGL B 120 MSL to | B | HMN 117/37 | N32°29.50' W105°32.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Airspeeds are subsonic.
- (2) This route to be used by ALCM and ALCM carrier aircraft only.
- (3) Anyone wishing to schedule IR-132 must ensure they have also scheduled R-5107B, R-5107D, R-5103B and R-5103C.

FSS's Within 100 NM Radius:

IR-133

ORIGINATING ACTIVITY: 49 OSS/OSOA, 700 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: 0700-2300 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at 120 MSL to or as assigned | A | CME 256/39 | N33°18.50' W105°24.00' |
| 01 AGL B 120 MSL to | B | CME 282/31 | N33°33.00' W105°11.00' |
| 01 AGL B 80 MSL to | C | CME 300/38 | N33°46.00' W105°11.00' |
| 01 AGL B 80 MSL to | D | CNX 111/27 | N34°07.00' W105°14.00' |
| 01 AGL B 90 MSL to | E | CNX 059/20 | N34°28.00' W105°18.00' |
| 01 AGL B 90 MSL to | F | CNX 353/12 | N34°34.00' W105°39.00' |
| 01 AGL B 90 MSL to | G | CNX 304/23 | N34°39.00' W106°00.00' |
| 01 AGL B 90 MSL to | H | CNX 234/17 | N34°15.50' W105°59.50' |
| 01 AGL B 120 MSL to Alternate Exit: Red Rio | I | CNX 189/42 | N33°43.00' W106°00.00' |
| 01 AGL B 90 MSL to | F | CNX 353/12 | N34°34.00' W105°39.00' |
| 01 AGL B 90 MSL to | F1 | ONM 080/22 | N34°19.00' W106°23.00' |
| 01 AGL B 90 MSL to Alternate Entry: From Pecos MOA | F2 | ONM 125/42 | N33°49.00' W106°16.00' |
| 01 AGL B 90 MSL to | E1 | CNX 064/30 | N34°28.50' W105°05.00' |
| 01 AGL B 90 MSL to Alternate Exit: To Pecos Low MOA | E | CNX 059/20 | N34°28.00' W105°18.00' |
| 01 AGL B 80 MSL to | D | CNX 111/27 | N34°07.00' W105°14.00' |
| 01 AGL B 90 MSL to Alternate Entry: ELK | D1 | CNX 090/30 | N34°15.00' W105°05.00' |
| 120 MSL to | A2 | PIO 345/24 | N32°56.00' W105°20.10' |
| 120 MSL to | A1 | CME 230/43 | N33°00.20' W105°22.10' |
| 120 MSL to | A | CME 256/39 | N33°18.50' W105°24.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route. Do not descend below minimum specified altitude for each leg.

ROUTE WIDTH - Starting at N33-17.2 W105-21.3 to N33-32 W105-08 to N34-06 W104-58 to N34-13 W105-05 to N34-31 W105-05 to N34-32 W104-58 to N34-42 W105-13 to N34-42 W106-14 to N34-16 W106-30 to N33-50 W106-30 via the southern boundary of R-5107C to N33-45 W106-04 to N33-39 W105-49 to N34-27 W105-49 to N34-22 W105-30 to N33-35 W105-14 to N33-20 W105-26.2 to beginning. Alternate Entry ELK: 2 NM either side of centerline from A2 to A.

Special Operating Procedures:

- (1) Request for use shall be coordinated with 49 OSS/OSOS 24 hours in advance. Request for weekend use shall be coordinated between 0730-1630 local Mon-Fri.
- (2) Route segments C through I designated as maneuver area.

- (3) Contact Cherokee Control 294.6 for clearance into White Sands Missile Range (WSMR). If unable to enter WSMR, contact Holloman APP CON or Albuquerque ARTCC, as appropriate, for further clearance.
- (4) IMC authorized only in accordance with appropriate USAF guidelines.
- (5) MARSAs applies at entries, along the route and exits. MARSAs accomplished by scheduling and See and Avoid.
- (6) Use of segment F-F2 not authorized if R-5107H active unless alternate exit Red Rio scheduled through 49 OSS/OSOS and in radio contact with and clearance received from Cherokee Control.
- (7) Do not penetrate R-5107H or R-5107J on Segment H-I unless scheduled into this airspace through 49 OSS/OSOS and in radio contact with and clearance received from Cherokee Control.
- (8) SAR responsibilities rest with the appropriate military command post.
- (9) Alternate Entry Points: A2-A, C, E-E1 (from Pecos Low MOA only), F-F2, (for entrance to Red Rio only).
- (10) Alternate Exit Points: D-D1 (to Pecos Low MOA only), F-F2 (to Red Rio Range only), G and H.
- (11) No fly and noise sensitive areas:
 - (a) Avoid the following national monument sites by 3 NM or 1,500' AGL: N34-15.5 W106-06; N34-36.0 W106-23; N34-26.8 W106-23.5;
 - (b) Avoid the following airfields by 3 NM or 1,500' AGL: N34-32.5 W106-13.4; N34-05.6 W106-07.1;
 - (c) Avoid the following towns by 2 NM or 1,500' AGL: N34-36 W106-02; N34-36 W105-12.5; N34-31.5 W106-14.5; N34-39 W105-27.5;
 - (d) Avoid the following noise sensitive areas by 1 NM or 1,500' AGL: N33-34.5 W105-12; N34-32.5 W105-21.5; N33-25.3 W105-18.8; N34-06.0 W106-28.0; N34-02.0 W106-28.5; N34-08.1 W105-59.5; N33-54.0 W105-50.0; N34-16.9 W105-05.0; N33-59.0 W105-18.0; N34-28.5 W106-17.9; N34-40.0 W105-32.1; N34-08 W105-23; N34-39.5 W105-41.3; N34-28 W105-54.
- (12) Uncharted obstacles below 100' AGL are not listed. The following uncharted obstacles taller than 100' exist within the route structure:
 - (a) Tower 190' AGL N33-25.5 W105-14.0;
 - (b) Tower 125' AGL N33-55.1 W105-19.5;
 - (c) Tower 225' AGL N34-15.1 W105-59.2;
 - (d) Tower 125' AGL N34-12.5 W106-01.5;
 - (e) Tower 175' AGL N34-39.6 W105-19.8;
 - (f) Tower 240' AGL N34-30.5 W106-11.8;
 - (g) Tower 125' AGL N34-20.4 W106-17.8;
 - (h) Tower 100' AGL N34-29.5 W105-21.5;
 - (i) Tower 150' AGL N34-08.5 W105-05.2;
 - (j) Tower 300' AGL N34-41.5 W105-41.9.
- (13) Stay above 1,000' AGL in the following areas:
 - (a) 1 NM either side of U.S. Hwy 380 between Point A and Point B;
 - (b) 1 NM either side of U.S. Hwy 70 between Point A and Point B;
 - (c) 2 NM circle centered at N33-33.5 W105-10.5;
 - (d) 2 NM circle centered at N33-35.2 W105-10.1.

FSS's Within 100 NM Radius:

ABQ

IR-134

ORIGINATING ACTIVITY: 49 OSS/OSOA, 700 Delaware Ave., Holloman AFB, NM 88440-8014 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Sunrise-0600Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|---------------------------|
| Cross at 120 MSL to or as assigned | A | PIO 317/11 | N32°41.00' W105°25.00' |
| 10 AGL B 120 MSL to | B | PIO 329/6 | N32°37.00' W105°20.50' |
| 10 AGL B 80 MSL to | C | PIO 261/4 | N32°32.00' W105°23.30' |
| 01 AGL B 80 MSL to | D | PIO 202/24 | N32°11.50' W105°34.50' |
| 01 AGL B 80 MSL to | E | PIO 183/23 | N32°09.30' W105°25.60' |
| 01 AGL B 98 MSL to | F | PIO 126/36 | N32°05.00' W104°50.00' |
| 01 AGL B 98 MSL to | G | PIO 122/29 | N32°11.10' W104°53.50' |
| 01 AGL B 90 MSL to | H | PIO 061/10 | N32°34.50' W105°07.50' |
| 01 AGL B 80 MSL to | I | PIO 004/14 | N32°45.10' W105°13.90' |
| 10 AGL B 110 MSL to | J | PIO 344/24 | N32°56.00' W105°20.10' |
| 10 AGL B 110 MSL to | K | PIO 274/14 | N32°35.50' W105°34.20' |
| 01 AGL B 125 MSL to | L | PIO 246/19 | N32°27.90' W105°39.80' |
| 01 AGL B 125 MSL to | M | PIO 256/32 | N32°30.40' W105°56.00' |
| Alternate Entry: Talon Low | | | |
| 03 AGL B 90 MSL to | H1 | PIO 061/10 | N32°34.50' W105°07.50' |
| Alternate Entry: El Paso Gap | | | |
| 01 AGL B 70 MSL to | F1 | SFL 048/27 | N31°58.50' W104°38.00' |
| 10 AGL B 98 MSL to | F | PIO 126/36 | N32°05.00' W104°50.00' |
| Alternate Exit: Zipper | | | |
| 01 AGL B 80 MSL to | I | PIO 004/14 | N32°45.10' W105°13.90' |
| 10 AGL B 80 MSL to | I1 | PIO 342/15 | N32°46.50' W105°20.00' |
| 10 AGL B 130 MSL to | I2 | PIO 315/15 | N32°44.10' W105°28.00' |
| Alternate Exit: El Paso Gap | | | |

IR ROUTES

01 AGL B 98 MSL to F PIO 126/36 N32°05.00'
W104°50.00'

10 AGL B 98 MSL to F1 SFL 048/27 N31°58.50'
W104°38.00'

01 AGL B 70 MSL to F2 SFL 058/32 N31°55.80'
W104°30.00'

Alternate Exit:
Talon Low

01 AGL B 98 MSL to G PIO 122/29 N32°11.10'
W104°53.50'

TERRAIN FOLLOWING OPERATIONS: Authorized from Point C to Point I and from Point K to Point M; Not authorized on any alternate entry or from Point A to Point C and from Point I to Point K.

ROUTE WIDTH - Starting at N32-35 W105-10 to N32-13 W105-15 to N32-10.5 W105-00 to N32-35 W105-10 to N32-44 W105-23 to N32-34 W105-30 to N32-26 W105-30 to N32-15 W105-42 to N32-06 W105-41 to N32-02 W104-41 to N32-12 W104-41 to N33-00 W105-09 to N33-00 W105-21.5 to N32-36 W105-38.5 to N32-44 W105-59 to N32-27.8 W106-00 to N32-23 W105-42.5 to N32-15 W105-42 to N32-26 W105-30 to N32-34 W105-30 to N32-44 W105-23 to point of beginning.

Special Operating Procedures:

- (1) Coordinate use requests with 49 OSS/OSOS 24 hours in advance, and weekend use requests between 1430-2230Z Mon-Fri.
- (2) From Point C to Point H and Point K to Point M route is designated maneuvering airspace and cleared for LOWAT.
- (3) Uncharted obstacles below 100' AGL are not listed.
- (4) If not scheduled on Centennial Range or for entry into R-5103B and R-5103B is active, use alternate exit ZIPER. If R-5103B is not active, route can be flown to Point M.
- (5) To schedule Centennial Range, or R-5103B, contact 49 OSS/OSOS. Comply with all range procedures listed in the current HAFB range supplement.
- (6) To scheduled Centennial Range, contact 49 OSS/OSOS. Comply with all procedures listed in current HAFB range supplement.
- (7) Exiting at Point M and not scheduled into Centennial Range or R-5103B or exiting at ZIPER, contact Holloman Approach Control 325.3. All other exits contact Albuquerque ARTCC 292.15.
- (8) To transition from IR-134 to/from Talon MOA, both the MOA and the IR must be scheduled and procedural briefing received from 49 OSS/OSOS. Request 20 minute block time in MOA starting 15 minutes after IR entry time. Contact Albuquerque ARTCC 292.15 for clearance into MOA, prior to exceeding top of the altitude block on segment G-H, and do not exceed 12,500' MSL until cleared by Albuquerque ARTCC to do so.
- (9) Alternate Entries: Point F (from El Paso Gap, IR-194 only); Point H (from Talon Low MOA only).
- (10) Alternate Exits: Point F (to El Paso Gap, IR-194 only); Point G (to Talon Low MOA only); Point I (to ZIPER only); Point J.
- (11) MARSAs applies at entry, exit and along the route. MARSAs is accomplished by scheduling and See and Avoid. Control is based on pilot's scheduled exit time.
- (12) Route conflicts with IR-192, IR-194 and IR-195.
- (13) Avoid the following sites by the altitude/distance stipulated:
 - (a) Ranch - 1,500' AGL or 1 NM: N32-10.9 W105-35.7
 - (b) Ranch - 1,000' AGL or 1 NM: N32-17.9 W105-26.1

- (c) Town (Queen) - 1,500' AGL or 1.5 NM: N32-11.8 W104-43.9
- (d) Cantonment area - 1,000' slant range
- (e) Town (Dunken) - 500' slant range
- (14) Avoid the following noise sensitive areas by 1,000' slant range:
 - (a) N32-01.56 W104-46.5
 - (b) N32-01.6 W105-35.0
 - (c) N32-02.8 W104-45.7
 - (d) N32-40.8 W105-35.4
- (15) Avoid overflight of the following populated areas below 1000' AGL:
 - (a) N33-04.60 W105-10.30 to N33-00.08 W105-09-98 to N32-55.95 W105-06.57 to N32-40.35 W105-16.73 to N32-35.05 W105-10.95 to N32-32.15 W105-10.62 to N32-32.08 W105-30.00 to N32-33.05 W105-30.00 to N32-37.18 W105-37.55 to N32-36.22 W105-38.03 to N32-34.83 W105-40.18 to N32-37.50 W105-44.95 to N32-40.55 W105-42.72 to N32-40.58 W105-38.43 to N32-57.15 W105-27.50 to N33-01.95 W105-26.78 to N33-05.03 W105-20.06 to point of beginning.
 - (b) N32-42.80 W105-48.20 to N32-40.80 W105-49.70 to N32-39.70 W105-47.70 to N32-41.80 W105-46.20 to point of beginning.
- (16) Obstacles on route less than 100' AGL are not listed. The following objects 100' AGL or taller are within the route boundaries and not depicted on current maps:
 - (a) Two towers 125' AGL N32-09.80 W104-49.50
 - (b) Four towers 100' AGL N32-05.30 W104-43.00
 - (c) Tower 125' AGL N32-06.80 W105-05.30
 - (d) Tower 100' AGL N32-05.20 W105-32.50
 - (e) Tower 125' AGL N32-37.50 W104-59.50
 - (f) Tower 100' AGL N32-21.70 W105-46.50
 - (g) Tower 125' AGL N32-36.40 W105-38.03.
- (17) The only aircraft authorized to operate below 500' AGL are Tornados (100' AGL minimum).

IR-135

ORIGINATING ACTIVITY: COMDRAWING TWO, NAS Kingsville, TX 78363 DSN 876-6518/6283, C361-516-6518/6283/6108. Hrs 0800-1600 Mon-Fri ONLY (excluding holidays).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 30 MSL B 90 MSL to | A | NQI 242/19 | N27°22.00' W98°08.00' |
| 30 MSL B 90 MSL to | B | NQI 202/40 | N26°54.00' W98°08.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 30 MSL B 90 MSL to | C | NQI 216/61 | N26°43.00' W98°32.00' |
| 30 MSL B 90 MSL to | D | NQI 253/46 | N27°19.00' W98°39.00' |
| 30 MSL B 90 MSL to | E | NQI 262/55 | N27°26.00' W98°50.00' |
| 30 MSL B 90 MSL to | F | NQI 283/57 | N27°47.00' W98°50.00' |
| 30 MSL B 90 MSL to | G | NQI 298/51 | N27°57.00' W98°37.00' |

ROUTE WIDTH - 8 NM either side of centerline from A to D; 5 NM either side of centerline from D to F; 8 NM either side of centerline from F to G.

Special Operating Procedures:

- (1) A to C altitude may be assigned by ATC.
- (2) Route will be flown at 240-420 kt.
- (3) Maneuvering from A to G for road reconnaissance and simulated attacks.
- (4) Contact Houston ARTCC 307.2 at D coordination of crossing of airway corridor. If no contact with Houston ARTCC 307.2 cross corridor which is located between E and F between 3000' to 5000' MSL.
- (5) Aircraft shall be scheduled with a minimum of 10 minutes longitudinal separation.
- (6) The primary method of invoking MARSAs shall be by scheduling.
- (7) All proposed users of IR-135 or any other approved IR route that is common with IR-135 or any part thereof, shall coordinate that route with COMTRAWING TWO, Kingsville NAS, TX.
- (8) MARSAs apply after aircraft have passed the entry point and until standard ATC separation is established after exiting the route.
- (9) Lost communications route and altitude for TRAWING TWO aircraft shall be: G direct NQI 270/026, maintain 15,000', then a HI-TACAN RWY 13 penetration to the 15 NM arc, then via either a north or south arc, complete remainder of HI-TACAN RWY 13L or 35R approach.
- (10) Lost communications route and altitude for all other users shall be as above except maintain 7000'.
- (11) All entry and exit points shall be compulsory reporting points.
- (12) Aircraft other than Kingsville NAS based shall fly IR-135 from A to B a 5000' to 7000', and from B to G at 3000' to 7000' MSL.
- (13) Houston ARTCC frequency from A to B is 291.6 or as assigned; from B to G, 307.2 or as assigned; and after G, 307.2 or SAT FSS.
- (14) Scheduling of, or amendments to shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.

FSS's Within 100 NM Radius:

SJT

IR-136

ORIGINATING ACTIVITY: COMTRAWING TWO, NAS Kingsville, TX 78363 DSN 876-6518/6283, C361-516-6518/6283/6108. Hrs 0800-1600 Mon-Fri ONLY (excluding holidays).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | NGP 043/20 | N27°54.00' W97°01.00' |
| 10 AGL B 20 AGL to | B | NGP 004/23 | N28°04.00' W97°13.00' |
| SFC B 20 AGL to | C | THX 140/20 | N28°13.00' W97°57.00' |
| SFC B 20 AGL to | D | THX 255/33 | N28°26.00' W98°46.00' |
| SFC B 20 AGL to | E | NQI 290/84 | N28°04.00' W99°15.00' |
| SFC B 20 AGL to | F | NQI 303/60 | N28°06.00' W98°43.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to D; 4 NM either side of centerline from D to E; 5 NM either side of centerline from E to F.

Special Operating Procedures:

- (1) Route altitude may be assigned by ATC.
- (2) Route will be flown from 300-420 kt.
- (3) Minimum IMC altitude is 2000' MSL.
- (4) Radar advisories are available from Corpus Christi APP CON from A to B.
- (5) Aircraft shall be scheduled with a minimum of 10 minutes longitudinal separation.
- (6) The primary method of invoking MARSAs shall be by scheduling.
- (7) All proposed users of IR-136, or any other IR route that is common with IR-136, or any part thereof, shall coordinate that route with COMTRAWING TWO, Kingsville NAS, TX.
- (8) MARSAs apply after aircraft have passed the entry point and until standard ATC separation is established after exiting the route.
- (9) The lost communications route and altitude for TRAWING TWO aircraft shall be: F direct NQI 270/026 maintain 15,000', then a HI-TACAN RWY 13 penetration to the 15 NM arc, then via either a north or south arc and complete remainder of HI-TACAN RWY 13R OR 35R approach.
- (10) NOTE: If radio failure occurs prior to receiving clearance into IR-6312, exit the route after passing the LRD 025 radial between E and F.
- (11) The lost communications route and altitude for all other users shall be as above, except maintain 7000'.
- (12) All Entry and Exit points shall be compulsory reporting points.
- (13) Alternate Entry: C.
- (14) ATC frequencies are: A to C, CPR approach 354.8 or as assigned; C to F, TAC frequency or as assigned; after F, Houston ARTCC 307.2 or SAT FSS.
- (15) Scheduling of, or amendments to shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.

IR ROUTES

FSS's Within 100 NM Radius:

SJT

IR-137

ORIGINATING ACTIVITY: 58 OSS/DOO, Kirtland AFB, NM 87117-5861 DSN 263-5979/5888, C505-853-5979/5888/5701.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | ABQ 347/36 | N35°39.00' W106°49.00' |
| 02 AGL B 100 MSL to | B | ABQ 349/53 | N35°56.00' W106°47.00' |
| 02 AGL B 130 MSL to | C | ABQ 005/62 | N36°02.00' W106°25.00' |
| 02 AGL B 120 MSL to | D | TAS 228/26 | N36°24.00' W106°22.00' |
| 02 AGL B 130 MSL to | E | TAS 269/28 | N36°42.00' W106°28.00' |
| 02 AGL B 130 MSL to | F | ALS 202/28 | N36°58.00' W106°09.00' |
| SFC B 110 MSL to | G | ALS 112/26 | N37°06.00' W105°22.00' |
| 02 AGL B 130 MSL to | H | ALS 069/22 | N37°24.00' W105°22.00' |
| 02 AGL B 130 MSL to | I | ALS 072/46 | N37°25.00' W104°52.00' |
| 02 AGL B 100 MSL to | J | PUB 173/18 | N38°00.00' W104°28.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route. IMC Terrain Following (TF) authorized within major command guidance.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) This route restricted to turboprop, tiltrotor, and rotary wing aircraft only.
- (2) This route conflicts with IR-109, IR-409, IR-415-424 and VR-1175. To deconflict with IR-409 or IR-415-424, contact 140th OG, Buckley ANGB, DSN 847-9470/71/72. To deconflict with IR-109, contact 27 OSS, Cannon AFB, DSN 681-1750/2279.
- (3) Alternate Exit: Points F, G and I.
- (4) Avoid Abiquiu Dam at N36-15.0 W106-26.0 by 1 NM or 1000' AGL.
- (5) Avoid Canon de San Diego, N35-46.0 W106-41.0 by 3 NM.
- (6) Avoid the following airfields by 2 NM or 2000' AGL:
 - (a) Ghost Airfield at N36-18.0 W106-29.0;
 - (b) Cuchara Valley at N37-31.0 W105-01.0;
 - (c) Johnson at N37-42.0 W104-47.0.
- (7) CAUTION: Tower, 275' AGL at N37-23.82 W105-24.35.

- (8) CAUTION: Numerous towers and obstructions exist on this route which are hazards to flight at flight altitudes less than 300' AGL. Contact 58 OSS/OSO DSN 263-5701/5979 to obtain a current and complete fax list of unchummed/uncharted obstructions.
- (9) Contact 58 OSS, DSN 263-5979/5888, C505-853-5979/5888/5701 for a fax or email of the most current Avoid Areas.

FSS's Within 100 NM Radius:

ABQ, DEN

IR-139

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB Fort Worth, TX 76127 DSN 739-6903/6904/6905, C817-782-6903/6904/6905.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-2200 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | MQP 260/22 | N32°43.00' W98°26.30' |
| 05 AGL B 30 MSL to | B | MQP 221/2 | N32°42.00' W98°02.00' |
| 05 AGL B 30 MSL to | C | MQP 175/11 | N32°32.50' W98°00.80' |
| 01 AGL B 30 MSL to | D | LZZ 004/49 | N31°58.80' W97°56.50' |
| 01 AGL B 60 MSL to | E | LZZ 014/24 | N31°33.80' W97°58.00' |
| 10 AGL B 60 MSL to | F | LZZ 047/21 | N31°23.00' W97°48.90' |

TERRAIN FOLLOWING OPERATIONS: Authorized A to E.

ROUTE WIDTH - 5 NM either side of centerline A to D; 10 NM either side of centerline D to E; 5 NM either side of centerline E to F.

Special Operating Procedures:

- (1) Route is designed MARSAs and MARSAs shall also apply between aircraft flying VR-158 by utilizing (See and Avoid) and/or route scheduling.
- (2) Route will be flown between 300 and 600 KIAS.
- (3) Alternate Entry Points: C, D, and E.
- (4) Alternate Exit Points: D and E.
- (5) Aircraft will report Point D to Fort Worth ARTCC 381.65.
- (6) Aircraft will report Point E to Gray RAPCON 244.0. Clearance must be received prior to entering the Hood MOA airspace.
- (7) Aircraft will not enter R-6302 without clearance from Hood Radio, Shoal Creek Range Officer, or FAC.
- (8) Aircraft will remain at or above 1000' AGL from Point E until entering scheduled/assigned R-6302 airspace.
- (9) Route is approved LOWAT authorized between Points D and E.

- (10) Units requesting IR-139 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
- (11) Route Conflicts:
 - (a) IR-139 from Points A to B and C to D conflict with VR-158 between Points B, C, D, and E. You must call the schedulers at 90 FTS, Sheppard AFB, DSN 736-2675/4995 to deconflict;
 - (b) IR-139 conflicts with SR-261 from Points F to G. Call Dyess AFB, DSN 461-2792 to deconflict.
- (12) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

FSS's Within 100 NM Radius:

CXO, FTW, SJT

IR-141

ORIGINATING ACTIVITY: 49 OSS/OSTA, 700 Delaware Ave., Holloman AFB, NM 88330-8017 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | HMN 117/37 | N32°29.50' W104°56.30' |
| 05 AGL B 80 MSL to | B | HUP 339/25 | N31°59.00' W105°27.00' |
| 05 AGL B 70 MSL to | C | HUP 153/29 | N31°06.50' W105°14.00' |
| 05 AGL B 90 MSL to | D | HUP 133/60 | N30°44.50' W104°43.00' |
| 05 AGL B 90 MSL to | E | HUP 132/80 | N30°29.00' W104°28.50' |
| 05 AGL B 90 MSL to | F | HUP 139/88 | N30°17.00' W104°33.00' |
| 05 AGL B 90 MSL to | G | FST 226/95 | N30°04.50' W104°29.50' |
| 05 AGL B 90 MSL to | H | FST 174/69 | N29°48.50' W103°05.00' |
| 05 AGL B 100 MSL to | I | FST 158/35 | N30°22.50' W102°51.00' |
| 05 AGL B 100 MSL to | J | FST 163/26 | N30°31.50' W102°55.50' |
| 05 AGL B 80 MSL to | K | SFL 125/64 | N30°57.50' W104°14.50' |
| 05 AGL B 70 MSL to | L | SFL 086/17 | N31°42.50' W104°45.00' |
| 05 AGL B 70 MSL to | M | SFL 021/7 | N31°51.00' W105°00.50' |
| 05 AGL B 70 MSL to | N | SFL 344/22 | N32°06.60' W105°07.00' |
| 05 AGL B 80 MSL to | O | CME 188/48 | N32°35.00' W104°56.30' |

| | | | |
|--------------------|----|------------|---------------------------|
| 05 AGL B 80 MSL to | P | CME 188/43 | N32°39.50' W104°54.50' |
| 05 AGL B 80 MSL to | Q | CME 206/41 | N32°48.00' W105°07.50' |
| 05 AGL B 80 MSL to | R | HMN 102/34 | N32°38.50' W105°29.00' |
| 05 AGL B 80 MSL to | S | HMN 108/37 | N32°34.30' W105°28.40' |
| 05 AGL B 80 MSL to | A1 | HMN 117/37 | N32°29.50' W105°32.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline form A to L; 5 NM left and 2 NM right of centerline L to N; 5 NM either side of centerline from N to S; 5 NM either side of centerline from S to A1.

Special Operating Procedures:

- (1) Airspeeds are sub-sonic.
- (2) Alternate Entry/Exit: D, K, O and S.
- (3) This route to be used by ALCM and ALCM carrier aircraft only.
- (4) For ALCM carrier aircraft a corridor limit of 2.5 NM on the west side of track exists from A to B.
- (5) Avoid the following airfields by 1500' or 3 NM: Mayfield Ranch, O-2 Ranch, Maravilas Gap, Chaney, Longfellow Ranch, Saddleback Ranch, Triangle Ranch, Dell City.
- (6) Avoid the town of Valentine N34-35-00 W104-35-00 by a minimum of 1000' above the highest obstracle within a horizontal radius of 2000' of the aircraft, in accordance with FAR 91.79B.
- (7) Anyone wishing to schedule IR-141 must ensure they have also scheduled R-5103B and R-5103C.

FSS's Within 100 NM Radius:

SJT

IR-142

ORIGINATING ACTIVITY: 49 OSS/OSOA, 700 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Sunrise-0600Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|---------------------------|
| Cross at 120 MSL to or as assigned | A | CNX 189/42 | N33°43.00' W106°00.00' |
| 01 AGL B 120 MSL to | B | CNX 235/17 | N34°15.50' W106°00.00' |
| 01 AGL B 90 MSL to | C | CNX 304/23 | N34°39.00' W106°00.00' |
| 01 AGL B 90 MSL to | D | CNX 354/12 | N34°34.00' W105°39.00' |

IR ROUTES

| | | | |
|---|----|------------|---------------------------|
| 01 AGL B 90 MSL to | E | CNX 059/20 | N34°28.00' W105°18.00' |
| 01 AGL B 90 MSL to | F | CNX 111/27 | N34°07.00' W105°14.00' |
| 01 AGL B 80 MSL to | G | CME 301/38 | N33°46.00' W105°11.00' |
| 01 AGL B 80 MSL to | H | CME 282/31 | N33°33.00' W105°11.00' |
| 10 AGL B 120 MSL to Alternate Exit: ELK (to IR-192) | I | CME 256/39 | N33°18.50' W105°24.00' |
| 10 AGL B 120 MSL to | I | CME 256/39 | N33°18.50' W105°24.00' |
| 120 MSL to | 11 | CME 230/43 | N33°00.20' W105°22.10' |
| 120 MSL to | 12 | CME 224/43 | N32°56.00' W105°20.10' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point A to Point H.

ROUTE WIDTH - Starting at N33-17.2 W105-21.3 to N33-32 W105-08 to N34-06 W104-58 to N34-13 W105-05 to N34-31 W105-05 to N34-32 W104-58 to N34-42 W105-13 to N34-42 W106-14 to N34-16 W106-30 to N33-50 W106-30 via the southern boundary of R-5107C to N33-45 W106-04 to N33-39 W105-49 to N34-27 W105-49 to N34-22 W105-30 to N33-35 W105-14 to N33-20 W105-26.2 to point of beginning. Alternate Exit: ELK, 2 NM either side of centerline from I to I2.

Special Operating Procedures:

- (1) Request for use shall be coordinated with scheduling agency 24 hours in advance. Request for weekend use shall be coordinated between 0730-1630 local (Mountain Time), Mon-Fri.
- (2) Route Segments A through H designated as Maneuvering area and cleared for LOWAT.
- (3) Route width excludes the airspace within R-5107C, R-5107H, and R-5107J when those areas are active.
- (4) Tornado aircraft are authorized to operate down to 100' AGL on/in route segments/areas not otherwise restricted. All other aircraft may not operate below 500' AGL or the minimum specified in the route description, or above SOPs for each route segment.
- (5) Buddy-buddy refueling authorized between Tornado fighters between Point A and H. Minimum altitude for buddy-buddy refueling is 500'.
- (6) IMC authorized only in accordance with appropriate USAF guidelines.
- (7) MARSAs apply at entry, along the route and at exit. MARSAs are accomplished by scheduling and see and avoid. IR-113, IR-133 and IR-142 will not be used concurrently. Control shall be based on pilots assigned entry/exit time.
- (8) SAR responsibilities rest with the appropriate military command post.
- (9) Route conflicts with IR-113, IR-133, VR-100, VR-125, VR-176, VR-1107, VR-1195, VR-1233 and SR-213.
- (10) Alternate entry points: None.
- (11) Alternate exit points: I - I2 (to IR-192 only).
- (12) No fly and noise sensitive areas:
 - (a) Avoid the following national monument sites by 3 NM or 1,500' AGL: N34-15.6 W106-05.6; N34-26.8 W106-23.5
 - (b) Avoid the following airports by 3 NM or 1,500' AGL: Carrizozo

- (c) Avoid the following towns by distances shown: Carrizozo: 1500' AGL or 2 NM, N33-38.6 W105-52.2; Claunch: 1000' AGL or 2000' radius, N34-08.6 W105-59.7; Duran: 1000' AGL or 2000' radius, N34-28.25 W105-23.65; Mountainair: 1500' AGL or 3 NM radius, N34-31.5 W106-14.5; Negra: 1000' AGL or 2000' radius, N34-40.0 W105-32.35; Encino: 1000' AGL or 1 NM radius, N34-39.15 W105-27; Vaughn: 1500' AGL or 2.75 NM radius, N34-36.3 W105-12.45; Willard: 1000' AGL 2000' radius, N34-36.0 W 106-02.0
 - (d) Avoid the following noise sensitive areas by altitude/distance specified: Ranch home N34-06.15 W106-07.1, 1000' AGL or 1 NM radius; Ranch home N33-33.9 W105-50.15, 1000' AGL or 2 NM radius; Ranch home N34-05.76 W106-23.73, 1000 slant range; Site N33-34.5 W105-12.0 1500' AGL or 1 NM radius; Site N33-25.3 W105-18.8 1500' AGL or 1 NM radius.
- (13) Uncharted obstacles below 100' AGL are not listed. The following uncharted obstacles taller than 100' exist within the route structure:
- (a) Tower 125' AGL N34-38.95 W105-20.46;
 - (b) Tower 150' AGL N33-55.2 W105-19.6;
 - (c) Tower 150' AGL N34-08.6 W105-05.3;
 - (d) Tower 150' AGL N34-11.45 W106-01.85;
 - (e) Tower 150' AGL N34-20.46 W106-17.9;
 - (f) Tower 175' AGL N33-22.9 W105-17.36;
 - (g) Tower 175' AGL N34-39.48 W105-29.45;
 - (h) Tower 100' AGL N34-14.6 W105-59.55;
 - (i) Tower 215' AGL N33-53.45 W106-22.0;
 - (j) Tower 225' AGL N34-24.55 W106-27.0;
 - (k) Tower 235' AGL N34-30.45 W106-11.8;
 - (l) Tower 275' AGL N34-30.4 W105-06.6;
 - (m) Tower 300' AGL N34-40.83 W105-41.20;
 - (n) Tower (2) 150' AGL N33-25.99 W105-13.8;
 - (o) Tower (multiple) 150' AGL N34-14.8 W105-47.25.
- (14) Stay above 500' AGL in the areas bounded by the following coordinates: Arabella: N33-37.0 W105-16.9 to N33-37.0 W105-14.56 to N33-29.73 W105-07.99 to N33-25.9 W105-10.56 to N33-31.75 W105-19.1 to N33-35.23 W105-20.43 to POB. Tinnie: N33-30.65 W105-20.45 to N33-23.15 W105-13.05 to N33-021.28 W105-14.43 to N33-25.25 W105-24.9 to POB.
- (15) Stay above 1000' AGL in the area bounded by the following coordinates: Mountainair: N34-42.05 W106-00.0 to N34-35.06 W106-00.0 to N34-24.48 W106-24.8 to N34-42.05 W106-15.99 to POB.

FSS's Within 100 NM Radius:

ABQ

IR-145

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.

SCHEDULING ACTIVITY: 25 FTS/DISP, Vance AFB, OK 73705-5202 DSN 448-6038, C580-213-6038.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|--------------------------|
| As assigned to | A | END 218/18 | N36°08.00' W98°10.00' |
| SFC B 50 MSL to | B | END 223/26 | N36°03.50' W98°19.00' |
| SFC B 30 MSL to | C | END 228/50 | N35°51.00' W98°44.00' |
| SFC B 37 MSL to | D | GAG 158/37 | N35°44.00' W99°43.00' |
| SFC B 40 MSL to | E | GAG 171/17 | N36°04.00' W99°53.00' |
| SFC B 40 MSL to | F | GAG 114/44 | N35°56.00' W99°08.00' |
| SFC B 36 MSL to | G | GAG 063/48 | N36°34.00' W98°56.00' |
| SFC B 60 MSL to | H | END 290/51 | N36°42.00' W98°53.00' |

ROUTE WIDTH - 3 NM either side of centerline from A to D; 3 NM east and 6 NM west of centerline D to E; 3 NM south and 6 NM north of centerline from E to F; 5 NM east and 3 NM west of centerline from F to G; 3 NM either side of centerline from G to H.

Special Operating Procedures:

- (1) Aircrews may use 265.25 for interplane frequency.
- (2) Report Point E to Kansas City Center 379.2.
- (3) Cross 3 NM northeast of G at or above 40 MSL.
- (4) Cross Point H at 60 MSL. Contact Vance Approach 378.8 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
- (5) On route departure, all 71 FTW aircraft proceed direct to Vance, or as directed.
- (6) Aircrews will avoid the ranch 1 mile East of Eagle City located at N35-57.3 W98-33.7 by 2 NM or 1000' AGL.

FSS's Within 100 NM Radius:

ICT

IR-146

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.

SCHEDULING ACTIVITY: 25 FTS/DISP, Vance AFB, OK 73705-5202 DSN 448-6038, C580-213-6038.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|--------------------------|
| As assigned to | A | END 218/18 | N36°08.00' W98°10.00' |
| SFC B 50 MSL to | B | END 224/26 | N36°04.00' W98°19.00' |
| SFC B 33 MSL to | C | END 232/45 | N35°56.00' W98°41.00' |
| SFC B 32 MSL to | D | END 270/48 | N36°25.00' W98°54.00' |

| | | | |
|-----------------|---|------------|--------------------------|
| SFC B 30 MSL to | E | GAG 033/41 | N36°51.00' W99°18.00' |
| SFC B 37 MSL to | F | GAG 015/46 | N37°02.00' W99°29.00' |
| SFC B 36 MSL to | G | END 292/48 | N36°42.00' W98°48.00' |
| SFC B 36 MSL to | H | END 252/35 | N36°13.00' W98°37.00' |
| SFC B 60 MSL to | I | END 238/26 | N36°09.00' W98°24.00' |

ROUTE WIDTH - 3 NM either side of centerline from A to C; 3 NM east and 5 NM west of centerline from C to 12 NM beyond C; 3 NM either side of centerline from 12 NM beyond C to F; 2 NM south and 6 NM north of centerline from F to 12 NM beyond F; 2 NM either side of centerline from 12 NM beyond F to I.

Special Operating Procedures:

- (1) Aircrews may use 265.25 for interplane frequency.
- (2) Cross 2 NM southeast of Point H at or above 40 MSL.
- (3) Cross Point I at 60 MSL. Contact Vance Approach 378.8 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
- (4) On route departure, all 71 FTW aircraft proceed direct to Vance, or as directed.
- (5) Aircrews will avoid the ranch 1 mile East of Eagle City located at N35-57.3 W98-33.7 by 2 NM or 1000' AGL.

FSS's Within 100 NM Radius:

ICT, MLC

IR-147

ORIGINATING ACTIVITY: COMTRAWING TWO, NAS Kingsville, TX 78363 DSN 876-6518/6283, C361-516-6518/6283/6108. Hrs 0800-1600 Mon-Fri ONLY (excluding holidays).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise to 30 minutes after Sunset, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | THX 182/15 | N28°15.50' W98°12.00' |
| 30 MSL B 90 MSL to | B | THX 193/25 | N28°06.50' W98°19.50' |
| 30 MSL B 90 MSL to | C | COT 132/44 | N27°53.00' W98°36.00' |
| 30 MSL B 90 MSL to | D | LRD 095/41 | N27°18.50' W98°41.00' |
| 30 MSL B 90 MSL to | E | LRD 081/24 | N27°28.50' W98°58.50' |
| 30 MSL B 90 MSL to | F | LRD 049/28 | N27°43.50' W98°58.00' |
| 30 MSL B 90 MSL to | G | LRD 047/51 | N27°57.00' W98°37.00' |

Entire route designated a maneuver area.

IR ROUTES

ROUTE WIDTH - 3 NM either side of centerline from A to C;
4 NM either side of centerline from C to G.

Special Operating Procedures:

- (1) MARSAs applies after aircraft have passed the Entry point and until standard ATC separation is provided after exiting the route.
- (2) MARSAs is provided by scheduling and See and Avoid. All users of IR-147, or any part thereof, shall coordinate route usage with the scheduling activity. A minimum of 10 minutes longitudinal separation between flights is required.
- (3) The lost communications route and altitude for TRAWING TWO aircraft shall be from G direct to Waade or Rvera (as appropriate), climbing to FL 190. All other users shall file a DD Form 175 and indicate in the remarks the desired lost communications altitude.
- (4) All Entry/Exit points are compulsory reporting points.
- (5) Scheduling of, or amendments to shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.
- (6) The route is designed for simulated road reconnaissance training missions and is primarily utilized by multi-plane jet formation.
- (7) No practice attacks on simulated targets shall descend below 3000' MSL. Uncontrolled airports and inhabited areas shall be avoided by 3000' vertically and 1 NM horizontally.
- (8) All aircraft shall report C to Houston ARTCC 307.2 for restriction to cross the corridor between NQ1 MOA and the NIR 3 MOA. If aircraft are unable to contact Houston ARTCC at C, the corridor shall be crossed at an altitude block of 3000' through 5000' between C-D and Pts. E-F.

FSS's Within 100 NM Radius:

SJT

IR-148

ORIGINATING ACTIVITY: COMTRAWING TWO, NAS Kingsville, TX 78363 DSN 876-6518/6283, C361-516-6518/6283/6108. Hrs 0800-1600 Mon-Fri ONLY (excluding holidays).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daily 0600-2230 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | THX 324/19 | N28°47.00' W98°19.00' |
| 05 AGL B 20 MSL to | B | THX 009/37 | N29°06.00' W97°57.00' |
| 05 AGL B 20 MSL to | C | THX 015/54 | N29°20.00' W97°45.00' |
| 05 AGL B 20 MSL to | D | SAT 080/56 | N29°40.00' W97°23.00' |
| 05 AGL B 20 MSL to | E | CWK 136/40 | N29°51.00' W97°03.00' |
| 05 AGL B 20 MSL to | F | CWK 141/59 | N29°33.00' W96°55.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 05 AGL B 20 MSL to | G | SAT 091/61 | N29°29.00' W97°19.00' |
| 05 AGL B 20 MSL to | H | THX 053/42 | N28°51.00' W97°27.00' |

ROUTE WIDTH - 3 NM either side of centerline from A to H.

Special Operating Procedures:

- (1) Maximum airspeed is 480 KIAS.
- (2) MARSAs applies after aircraft have passed the Entry point and until standard ATC separation is provided after exiting the route.
- (3) MARSAs is provided by scheduling and 'See and avoid'. All users of IR-148 or any part thereof, shall coordinate route usage with the scheduling activity. A minimum of 10 minutes longitudinal separation between flights is required.
- (4) Maintain 1000' AGL until 5 NM beyond A.
- (5) Exit at H, climb and maintain 5000' MSL and contact Houston ARTCC 350.3 for further enroute clearance.
- (6) If lost communications are experienced on the IR-148 route, exit at H, climb and maintain 5000' MSL and proceed direct to the Randolph 106/40 TACAN fix. Arc in the appropriate direction and complete the HI-ILS/DME RWY 32R, HI-ILS/DME 1 RWY 14L or the HI-TACAN A or B approach as appropriate for landing at Randolph AFB.
- (7) TRAWING TWO aircraft only. If lost communications are experienced on IR-148 route, exit at H, climb and maintain 5000' and proceed direct Three Rivers VORTAC direct to Kingsville 310/12 TACAN fix. Complete remainder of HI-TACAN RWY 13R approach or arc south on the 12 mile arc to intercept the Kingsville 182/12 TACAN fix and complete remainder of HI-TACAN RWY 35R approach.
- (8) All Entry/Exit points are compulsory reporting points.
- (9) Scheduling of, or amendments to shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letters of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.

FSS's Within 100 NM Radius:

CXO, SJT

IR-149

ORIGINATING ACTIVITY: COMTRAWING TWO, NAS Kingsville, TX 78363 DSN 876-6518/6283, C361-516-6518/6283/6108. Hrs 0800-1600 Mon-Fri ONLY (excluding holidays).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daily 0600-2230 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | SAT 263/43 | N29°39.50' W99°16.50' |
| 05 AGL B 30 MSL to | B | RSG 084/37 | N29°58.00' W99°35.00' |
| 05 AGL B 30 MSL to | C | RSG 074/31 | N30°04.00' W99°42.00' |
| 05 AGL B 50 MSL to | D | RSG 141/16 | N29°47.00' W100°09.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 05 AGL B 30 MSL to | E | DLF 082/30 | N29°22.00' W100°12.00' |
| 05 AGL B 30 MSL to | F | DLF 132/39 | N28°52.00' W100°17.00' |
| 05 AGL B 50 MSL to | G | COT 269/54 | N28°35.00' W100°08.00' |
| 05 AGL B 50 MSL to | H | COT 213/34 | N28°02.00' W99°33.00' |
| 05 AGL B 30 MSL to | I | LRD 040/28 | N27°47.00' W99°01.00' |

ROUTE WIDTH - 5 NM either side of centerline from A to B; 3 NM either side of centerline from B to D; 4 NM either side of centerline from D to F; 5 NM either side of centerline from F to H; 4 NM either side of centerline from H to I.

Special Operating Procedures:

- (1) Alternate Entry: D.
- (2) Alternate Exit: G and H.
- (3) MARSA applies after aircraft have passed the Entry point and until standard ATC separation is established after exiting the route.
- (4) Maximum airspeed is 520 KIAS. All entry and exit points are compulsory reporting points.
- (5) Contact Houston ARTCC 307.2 at H for flight following to I.
- (6) The lost communications route and altitude for TRAWING TWO aircraft shall be: I direct to WAADE or RVERA (as appropriate) climbing to FL 190 and execute the TACAN approach for landing at Kingsville NAS.
- (7) When exiting the route at I, avoid R-6312 (SFC B 12,000 AGL) 20 NM northeast.
- (8) B-52 aircraft periodically operate VFR from surface to 1000' AGL from C to F. Call sign will be SOPHY 21/22/23, monitor 361.4/259.1.
- (9) Scheduling of, or amendments to shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.
- (10) IR-149 conflicts with RE-170 between Points D and F. Aircrews will deconflict with IR-170 by scheduling a block time with 87FTS/DOS Laughlin AFB at DSN 732-5484, C830-298-5484.
- (11) Make the following call on 255.4 approaching IR-149 Point D: Attention all IR-170 aircraft: (Callsign, number, type) approaching IR-170 Point C at (altitude, speed). Example: Attention all IR-170 aircraft: Tiger 01, 2 T-1s approaching IR-170 Point C, 500' AGL, 300 knots.

FSS's Within 100 NM Radius:

SJT

IR-150

ORIGINATING ACTIVITY: 7 OSS/OSOR, 966 Ave. D-4, Ste. 117, Dyess AFB, TX 79607 DSN 461-3666, C325-696-3666.

SCHEDULING ACTIVITY: 7 OSS/OSOR, 966 Ave. D-4, Ste. 117, Dyess AFB, TX 79607 DSN 461-3665, C325-696-3665.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|-----------|---------------------|---------------------------|
| Cross at 130 MSL to or as assigned (TFR Initiation Point) SFC B 130 MSL direct to cross | A | TCC 311/17 | N35°24.50' W103°48.50' |
| at or below 90 MSL direct to | B | TCC 010/17 | N35°26.50' W103°28.00' |
| 02 AGL B 90 MSL to direct to | C | TCC 040/29 | N35°29.00' W103°08.00' |
| 02 AGL B 80 MSL to (TA Initiation Point) turn left to | D | TCC 047/39 | N35°31.00' W102°55.00' |
| 02 AGL B 70 MSL to direct to | DD | DHT 194/28 | N35°40.50' W102°47.50' |
| 02 AGL B 60 MSL to turn right to | E | DHT 224/20 | N35°54.00' W102°53.50' |
| 02 AGL B 60 MSL to direct to | EE | DHT 232/19 | N35°57.00' W102°54.00' |
| 06.5 AGL B 60 MSL to direct to | F | DHT 308/22 | N36°22.00' W102°50.00' |
| 02 AGL B 67 MSL to turn left to | G | TBE 091/42 | N37°06.00' W102°44.50' |
| 02 AGL B 67 MSL to direct to | H | TBE 080/34 | N37°14.00' W102°53.50' |
| 02 AGL B 67 MSL to direct to | I | TBE 081/29 | N37°14.00' W103°00.00' |
| 02 AGL B 67 MSL to turn right to | J | TBE 082/20 | N37°14.00' W103°11.50' |
| 02 AGL B 67 MSL to (Start Maneuver Area) direct to | K | TBE 054/12 | N37°20.50' W103°22.00' |
| 02 AGL B 67 MSL to turn right to | L | TBE 005/36 | N37°50.00' W103°22.50' |
| 02 AGL B 67 MSL to direct to | M | TBE 016/47 | N37°56.50' W103°08.00' |
| 02 AGL B 67 MSL to (End Maneuver area) (TA/TFR Termination Point) turn right to | N | TBE 042/52 | N37°46.00' W102°43.50' |
| 67 MSL to direct to | O | TBE 054/48 | N37°35.00' W102°40.50' |
| 67 MSL B 100 MSL to turn left to | P | TBE 062/41 | N37°27.00' W102°46.00' |
| 80 MSL B 110 MSL to direct to | Q | TBE 073/41 | N37°19.00' W102°45.00' |
| 90 MSL B 110 MSL to (Contact Albuquerque ARTCC 351.7 passing 100 MSL) | R | TBE 078/43 | N37°15.30' W102°42.00' |
| 90 MSL B 110 MSL direct to | | | |
| 110 MSL to or as assigned Re-Entry ALPHA: | SA | TBE 093/58 | N37°00.00' W102°26.00' |
| 67 MSL to turn right to | N1 | TBE 042/52 | N37°46.00' W102°43.50' |
| 67 MSL to direct to | O1 | TBE 054/48 | N37°35.00' W102°40.50' |

IR ROUTES

| | | | |
|---|----|------------|---------------------------|
| 67 MSL to (TA/TFR Initiation Point) turn right to | S | TBE 074/36 | N37°18.00' W102°51.50' |
| 02 AGL B 67 MSL to direct to | I1 | TBE 081/29 | N37°14.00' W103°00.00' |
| 02 AGL B 67 MSL to turn right to | J1 | TBE 082/20 | N37°14.00' W103°11.50' |
| 02 AGL B 67 MSL to (Start Maneuver Area) Thence via published route. | K1 | TBE 054/12 | N37°20.50' W103°22.00' |

PMSV CONTACTS: Primary home station. Alternate Dyess (DYS 344.6).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

terrain following (TF)/Visual Contour (VC) Operations are authorized IAW Command Directives within the published altitude blocks from A to N, S to N, on the Re-entry. Terrain avoidance (TA) may begin at D and again at S on the (Re-entry). When command directives preclude TF/TA/VMC operations, aircrews will maintain the IFR altitude for each route segment. Minimum altitudes are established to provide 200' vertical clearance of known man-made obstructions within the route width. Command directives may require additional obstructions clearance for TF/TA/VMC operations. The route is designated non-mountainous. Regulations governing operations below 500' AGL must be complied with. The route corridor provides airspace for 500' lateral separation from man-made obstacles. Obstructions under 200' AGL were not considered in route design. Aircrews must be aware of charted airports within or near route corridor limits.

ROUTE WIDTH - 4 NM left and 3 NM right of centerline from A to E; 3 NM either side of centerline from E to G; 4 NM either side of centerline from G to J; 3 NM left and 4 NM right of centerline from J to K; 4 NM left and 8 NM right of centerline from K to L; 4 NM either side of centerline from L to SA; Re-Entry; 4 NM either side of centerline from N1 to J1; 3 NM left and 4 NM right of centerline from J1 to K1.

Special Operating Procedures:

- (1) Aircraft exiting the route or using the ALPHA Re-entry will cross the end maneuver area point at the specified minimum IFR altitude.
- (2) Participating aircraft separation: Route is designated for MARSAs operations established by coordinated scheduling.
- (3) Lost communication (LC) procedures: Route LC altitude is 11,000' MSL.
- (4) Route is separated from conflicting routes by coordinated scheduling.
- (5) Aircrews should be especially vigilant when flying between N36-34.0 W102-49.0 and N36-42.0 W102-48.0 due to possible VFR traffic to include B-1's and B-52's on VR-1175 and VR-1176.
- (6) Centerline between turn points will be depicted as a 7.5 NM arc unless otherwise specified.
- (7) Route will be open 0001Z 24 Apr through 2359Z 8 October. This route will be closed at all other times.
- (8) Noise Sensitive Areas: Avoid by 1000' or 1/4 NM unless otherwise noted.
 - (a) Residence at N37-49.2 W103-14.4;
 - (b) Residence at N37-05.2 W102-44.6;
 - (c) Residence at N37-20.4 W103-22.9;

- (d) Residence at N37-14.2 W103-14.9.
- (9) This route effects Two Buttes MOA operations which is controlled by Buckley ANG/120FS down to 300' AGL. Advise 120FS; DSN 847-9470 or FAX 847-9612, C720-847-9470, FAX C720-847-9612 on estimated entry and exit times of the Two Buttes MOA.
- (10) All aircraft will make an (in-the-blind) call on 381.4 prior to entering the lateral limits of Two Buttes MOA. This call is to alert aircraft operating in the MOA of your presence. This is not intended to be used as a separation tool, only a (heads up call).
- (11) Uncharted obstructions and bird attractants:
 - (a) Uncharted antenna approx. 200' AGL, N37°20.33' W103°22.65'; abeam Pt K.
 - (b) Cattle yard at N36°09.54' W102°52.32' (bird attractant).

FSS's Within 100 NM Radius:

ABQ, DEN

IR-154

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N. Sixth Street, Bldg 164, Rm 4, Altus AFB, OK 73522 DSN 866-6098.

SCHEDULING ACTIVITY: 97 OSS/OSK, 516 S. Sixth Street, Ste A, Altus AFB, OK 73523 DSN 866-7110/6617.

HOURS OF OPERATION: 0830-0230 local Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| As assigned to | A | LBB 106/39 | N33°24.50' W101°13.70' |
| SFC B 90 MSL to | B | LBB 109/54 | N33°15.00' W100°58.70' |
| SFC B 50 MSL to | C | GTH 179/51 | N32°56.00' W100°29.30' |
| SFC B 50 MSL to | D | GTH 175/51 | N32°56.00' W100°25.50' |
| SFC B 50 MSL to | E | GTH 174/48 | N32°59.00' W100°24.50' |
| SFC B 50 MSL to | F | GTH 228/18 | N33°37.00' W100°38.50' |
| SFC B 50 MSL to | G | GTH 233/17 | N33°39.00' W100°38.30' |
| SFC B 50 MSL to | H | GTH 318/16 | N34°00.30' W100°30.50' |
| SFC B 50 MSL to | I | GTH 320/17 | N34°01.70' W100°30.70' |
| SFC B 50 MSL to | J | PNH 123/51 | N34°40.70' W100°55.30' |
| SFC B 50 MSL to | K | PNH 123/48 | N34°42.50' W100°58.00' |
| SFC B 50 MSL to | L | PNH 127/48 | N34°40.30' W101°01.00' |
| SFC B 50 MSL to | M | PNH 137/55 | N34°29.00' W101°03.30' |
| SFC B 50 MSL to | N | LBB 039/51 | N34°14.50' W101°07.70' |
| SFC B 70 MSL to | O | LBB 042/48 | N34°11.00' W101°09.00' |

70 MSL to P LBB 042/38 N34°05.00'
W101°18.00'

70 MSL to Q LBB 043/27 N33°58.00'
W101°29.00'

SFC B 50 MSL to G PNH 094/26 N35°08.50'
Mandatory reporting W101°11.30'
Point G contact Ama-
rillo APP CON 319.15.

SFC B 50 MSL to H PNH 098/23 N35°07.60'
W101°14.50'

SFC B 50 MSL to I PNH 105/24 N35°04.50'
W101°15.00'

SFC B 50 MSL to J PNH 137/55 N34°29.00'
W101°03.30'

SFC B 50 MSL to K LBB 040/51 N34°14.50'
Begin climb W101°07.00'

SFC B 70 MSL to L LBB 042/48 N34°11.00'
W101°09.00'

70 MSL to M LBB 042/38 N34°05.00'
W101°18.00'

70 MSL to N LBB 043/27 N33°58.00'
W101°29.00'

TERRAIN FOLLOWING OPERATIONS: VFR Terrain
Following authorized for the entire route. When IMC, maintain at least MAJCOM directed minimum IFR altitudes for each segment to assure terrain/obstacle clearance.

ROUTE WIDTH - 2 NM either side of centerline A to Q.

Special Operating Procedures:

- (1) Route will be flown at or below 400 KIAS.
- (2) Route designated MARSAs. MARSAs between IR-154 and IR-155 is accomplished through restrictive scheduling.
- (3) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.
- (4) Alternate Exit: J. Pilots utilizing J to exit shall contact ZAB ARTCC 351.7/127.85 prior to the exit point. If unable to contact ZAB 351.7/127.85 prior to the exit point, maintain 5000' MSL and contact Amarillo APP CON 307.0/119.5 at PNH118029 (DOGIN).
- (5) Deconflict with: VR-1141, VR-1142 (Sheppard AFB); SR-233, SR-234, SR-250, SR-273 (Dyess AFB); and SR-274, SR-275 (Vance AFB) with appropriate route schedulers.
- (6) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.

FSS's Within 100 NM Radius:

FTW, SJT

IR-155

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N. Sixth Street, Bldg 164, Rm 4, Altus AFB, OK 73522 DSN 866-6098.

SCHEDULING ACTIVITY: 97 OSS/OSK, 516 S. Sixth Street, Ste A, Altus AFB, OK 73523 DSN 866-7110/6617.

HOURS OF OPERATION: 0830-0230 local Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| As assigned to | A | LBB 098/38 | N33°29.70' W101°12.20' |
| SFC B 90 MSL to | B | LBB 080/43 | N33°41.30' W101°03.80' |
| SFC B 50 MSL to | C | GTH 318/16 | N34°00.30' W100°30.50' |
| SFC B 50 MSL to | D | GTH 324/18 | N34°02.50' W100°29.50' |
| SFC B 50 MSL to | E | PNH 099/48 | N34°59.50' W100°46.00' |
| SFC B 50 MSL to | F | PNH 097/46 | N35°01.50' W100°47.50' |

TERRAIN FOLLOWING OPERATIONS: VFR terrain following authorized for the entire route. When IMC, maintain at least MAJCOM directed minimum IFR altitudes for each segment to assure terrain/obstacle clearance.

ROUTE WIDTH - 1.5 NM either side of centerline from A to B; 5 NM either side of centerline from B to K; 2 NM either side of centerline K to N.

Special Operating Procedures:

- (1) Route will be flown at or below 400 KIAS.
- (2) Route designated MARSAs. MARSAs between IR-154 and IR-155 is accomplished through restrictive scheduling.
- (3) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.
- (4) Alternate Exit: E. Pilots utilizing E to exit shall contact ZAB ARTCC on 351.7127.85 prior to the exit point. If unable to contact ZAB ARTCC 351.7/127.85 prior to the exit point, maintain 5000' MSL and contact Amarillo APP CON 307.0/119.5 at PNH078029 (GOONI).
- (5) Deconflict with: VR-1141, VR-1142 (Sheppard AFB); and SR-274, SR-275 (Vance AFB) with appropriate route schedulers.
- (6) Noise Sensitive Area: Avoid overflight of the town of Goodnight near I below 1000' AGL.
- (7) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.

FSS's Within 100 NM Radius:

FTW, SJT

IR-164

ORIGINATING ACTIVITY: 188FW Arkansas ANG, 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502.

SCHEDULING ACTIVITY: Same as Originating Activity. Route scheduled no more than 72 hr in advance. Minimum separation between scheduled entry times is fifteen minutes.

IR ROUTES

HOURS OF OPERATION: Continuous (except Sunday 1000-1200 local)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | PGO 188/29 | N34°12.00' W94°44.00' |
| 01 AGL B 40 MSL to | B | PGO 116/43 | N34°19.00' W93°51.00' |
| 01 AGL B 40 MSL to | C | PGO 082/48 | N34°44.00' W93°38.00' |
| 01 AGL B 40 MSL to | D | PGO 063/34 | N34°54.00' W93°58.40' |
| 01 AGL B 40 MSL to | E | FSM 131/15 | N35°12.10' W94°04.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 8 NM either side of centerline from B to D; 5 NM left and 3 NM right of centerline D to E.

Special Operating Procedures:

- (1) Alternate Entry: B.
- (2) Alternate Exit: D.
- (3) Participating aircraft separation on IR-164, 117, 120, and 121 is MARSAs through restrictive scheduling.
- (4) See and Avoid/restrictive scheduling applies between IR-164 and IR-117, 120, 121, VR-189, 1102, 1103, 1104, 1113, 1130, Hog Low North MOA.
- (5) Caution Point B, crossing MTRs.
- (6) Caution Points B-E, multiple converging MTRs and military aircraft in Hog MOA.
- (7) Call in-the-blind on 305.4 entering the Hog MOA. Clearance to enter R-2402 must be received 339.05.
- (8) Point D is a compulsory reporting point, contact Ft. Smith APP CON 343.75.
- (9) Contact Razorback APP CON on 343.75 if departing IR route at Point D or E when the Hog MOA is scheduled active.
- (10) Avoid flight within 1500' AGL/3 NM all charted airports when practicable.
- (11) Uncharted and not in CHUM route obstruction:
 - (a) Tower 700' MSL (200' AGL) N34-12.5 W94-14.0.
- (12) Make entry time plus or minus five minutes or reschedule.

FSS's Within 100 NM Radius:

DRI, MLC

IR-166

ORIGINATING ACTIVITY: COMTRAWING TWO, NAS Kingsville, TX 78363 DSN 876-6518/6283, C361-516-6518/6283/6108. Hrs 0800-1600 Mon-Fri ONLY (excluding holidays).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-2400 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 15 MSL B 30 MSL to | A | NQI 121/24 | N27°16.00' W97°26.00' |
| 15 MSL B 30 MSL to | B | NQI 139/31 | N27°05.00' W97°27.00' |
| 15 MSL B 30 MSL to | C | BRO 339/56 | N26°50.00' W97°35.00' |
| SFC B 30 MSL to | D | NQI 202/41 | N26°53.00' W98°08.00' |
| SFC B 30 MSL to | E | NQI 259/41 | N27°25.00' W98°34.00' |
| SFC B 30 MSL to | F | LRD 079/34 | N27°30.00' W98°47.00' |
| SFC B 30 MSL to | G | LRD 050/36 | N27°47.00' W98°50.00' |
| SFC B 30 MSL to | H | LRD 047/51 | N27°57.00' W98°37.00' |
| SFC B 30 MSL to | I | NQI 279/32 | N27°37.00' W98°23.00' |
| SFC B 30 MSL to | J | NQI 249/16 | N27°25.00' W98°06.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized the entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to I; 3 NM either side of centerline from I to J.

Special Operating Procedures:

- (1) Route will be flown 250-420 kt, low level navigation.
- (2) Alternate Exit: H.
- (3) Aircraft shall be scheduled with a minimum of 10 minutes longitudinal separation.
- (4) The primary method invoking MARSAs shall be by scheduling. All proposed users of IR-166 or any other approved IR route that is common with IR-166 or any part thereof, shall coordinate that route with TRAWING TWO, Kingsville NAS, TX.
- (5) MARSAs applies after aircraft have passed the entry point and until standard ATC separation is established after exiting the route.
- (6) The lost communication route and altitude for all aircraft filed to NAS Kingsville shall be J, direct NQI 270/015, maintain 7000'. Proceed via 15 NM DME arc either north or south as appropriate and complete the final portion of the TACAN 13R or 35R approach to NQI.
- (7) If Kingsville NAS is not the filed destination, all other proposed users shall exit at H, turn left, climb and maintain 7000' MSL and proceed as per the filed flight plan, while climbing, attempt to contact Houston ARTCC 307.2 for further routing. If unable to contact the center, proceed to filed destination via route filed in flight plan or coded recovery route. CAUTION: Do not enter R-6312 without Yankee Target Control approval.
- (8) All Entry and Exit points shall be compulsory reporting points.
- (9) ATC frequencies: A to H, 291.6 or as assigned; H to J NQI ATCF or as assigned.
- (10) Maintain 1500' AGL within 3 NM of Wyatt Ranch Airport located at N27-25.2 W98-36.5 2 NM W of E.

- (11) Scheduling of, or amendments to, shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.
- (12) Use caution between A-C and H-I for extensive windmill farm activity and construction with obstructions up to 716' AGL.

FSS's Within 100 NM Radius:

SJT

IR-167

ORIGINATING ACTIVITY: COMTRAWING TWO, NAS Kingsville, TX 78363 DSN 876-6518/6283, C361-516-6518/6283/6108. Hrs 0800-1600 Mon-Fri ONLY (excluding holidays).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-2400 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|--------------------------|
| As assigned to | A | BRO 359/39 | N26°33.70' W97°16.50' |
| SFC B 20 MSL to | B | BRO 332/53 | N26°46.00' W97°42.00' |
| SFC B 20 MSL to | C | NQI 197/41 | N26°53.00' W98°08.00' |
| SFC B 20 MSL to | D | LRD 103/47 | N27°11.00' W98°36.00' |
| SFC B 20 MSL to | E | LRD 156/34 | N26°56.00' W99°15.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to E.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Route will be flown a 240-420 kt, low level navigation.
- (2) Aircraft shall be scheduled with a minimum of 10 minutes longitudinal separation.
- (3) The primary method of invoking MARSAs shall be by scheduling. All proposed users of IR-167 on any other approved IR route that is common with IR-167 or any part thereof, shall coordinate that route with TRAWING TWO, Kingsville NAS, TX.
- (4) MARSAs apply after aircraft have passed the entry point and until standard ATC separation is established after exiting the route.
- (5) Remain outside of 3 NM of the Johnson Airport located N26-34-00 W97-26-00 between A and B.
- (6) The lost communication route and altitude for TRAWING TWO aircraft shall be from over E via the LRD 156/016 NQI 270/026 maintain 15,000', then HI-TACAN RWY 13R penetration to the 15 NM DME fix arc either north or south (as appropriate) and complete remainder of HI-TACAN Rwy 13L or 35R approach, cross the LRD 156/016 at and maintain 15,000'.
- (7) All other proposed users shall file a DD-175 and indicate in remarks the lost communication altitude.

- (8) All entry and exit points shall be compulsory reporting points.
- (9) ATC frequencies: A to D is 291.6 or as assigned; D to E 307.2.
- (10) Scheduling of, or amendments to shall be coordinated with the scheduling activity 2 hours prior to use in accordance with Letter of Agreement between COMTRAWING TWO, Houston ARTCC and Kingsville NAS ATCF.

FSS's Within 100 NM Radius:

SJT

IR-169

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd Street, Ste. 6, Laughlin AFB, TX 78843-5222 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 87 FTS/DOS, 570 2nd Street, Laughlin AFB, TX 78843 DSN 732-5484, C830-298-5484. Scheduling hours 0730-1630 local Mon-Fri (excluding holidays)

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| As assigned to | A | DLF 332/28 | N29°48.00' W100°58.00' |
| 45 MSL to | B | DLF 339/47 | N30°07.00' W100°59.00' |
| SFC B 45 MSL to | C | RSG 290/42 | N30°22.00' W101°00.00' |
| SFC B 60 MSL to | D | DLF 305/71 | N30°09.00' W101°47.00' |
| SFC B 50 MSL to | E | FST 090/72 | N30°43.00' W101°37.00' |
| SFC B 50 MSL to | F | SJT 248/54 | N31°11.00' W101°29.00' |
| SFC B 50 MSL to | G | SJT 236/44 | N31°04.50' W101°14.50' |
| SFC B 70 MSL to | H | SJT 209/35 | N30°55.00' W100°53.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route in VMC only. Aircraft will enter the route as assigned at 4500' MSL. Maintain 4500' MSL from Point ALPHA to Point BRAVO.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 13 NM either side of centerline from C to F; 13 NM either side of centerline tapering to 10 NM either side of centerline from F to G; 10 NM either side of centerline tapering to 5 NM either side of centerline from G to H.

Special Operating Procedures:

- (1) Route:
 - (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
 - (b) This route is covered by the following maps and charts: San Antonio Sectional, Low IFR Enroute L-15, TPC H-23B.
- (2) Scheduling:

IR ROUTES

- (a) Request for use shall be with the Scheduling Activity. Request for weekend use shall be coordinated between 0730-1630 local Mon - Fri.
- (b) Aircraft shall be scheduled with a minimum of 10 minutes separation, 35 minutes if a T-38 follows a T-1 on the route.
- (3) Restrictions:
- (a) For environmental reasons, this route may only be flown by T-1 and T-38 aircraft
- (b) Aircraft unable to meet their assigned entry time within the window three minutes early to three minutes late must not enter the route.
- (c) For deconfliction purposes, aircrew should fly this low-level at 500' AGL, unless complying with specific procedures outlined in this section.
- (d) The primary means of invoking MARSAs shall be by scheduling.
- (e) MARSAs apply after aircraft have passed the entry point and until standard ATC separation is established after exiting the route.
- (f) The See and Avoid concept applies at route crossing points. Route use is VMC only. Prior to encountering IMC, aircraft will cancel IFR, discontinue the route, maintain VMC and recover VFR, or obtain a separate IFR clearance.
- (g) Aircrews planning for a left turn after exit from IR-169 will file the following routing on DD-175; from the exit point to the JCT 281/39; direct SGT 165/29, direct SGT, and thence desired routing to destination. Plan the turn off the JCT 281 radial so as to intercept the SGT 165 radial. If not planning to turn north after route exit any desired routing may be filed.
- (4) Conflicts:
- (a) Crosses IR-170 between Points A and B. All aircraft will maintain 4500' MSL from Point A to N30°07.0', W100°59.0'.
- (b) Crosses SR-281 / 282 between Points B and C.
- (c) Crosses SR-283 / 284 between Points C and D.
- (d) Overlaps and parallels VR-143 from Point C through H.
- (e) Is identical to IR-123 from Point C through H.
- (f) Overlaps SR-283 / 284 in vicinity of Point D (right side of route).
- (g) Crosses SR-283 / 284 between Points G and H. Call 87 FTS / DOS Laughlin AFB to deconflict IR-170 at DSN 732-5484, C830-298-5484. Call 85 FTS / DOS Laughlin AFB to deconflict SR-281/282/283/284 at DSN 732-5121, C830-298-5121. Call 301 OG/SUA, NAS JRB Fort Worth, to deconflict VR-143 and IR-123 at DSN 739-6903/04/05, C817-782-6903/04/05.
- (5) Communications:
- (a) Del Rio Approach Control shall issue clearance for IR-169 route and altitude. Prior to route entry, pilots shall provide an ETA (Zulu) for the planned exit point.
- (b) Entry and Exit points are compulsory reporting points. Report the exit time to the first ATC facility contacted upon route exit.
- (c) Aircraft without an exit clearance shall contact Houston ARTCC prior to exit (UHF) 346.4 or 327.0 (VHF) 125.75.
- (d) Monitor (UHF) 255.4 while on the route.
- (e) At Point B, make the following radio call on 270.1 (Ch 9), 'Ranch (call sign)(number)(type) Point Bravo on IR-169.' Approaching Point C, make the following radio call on 255.4, 'Attention all aircraft: (call sign)(number)(type) approaching Point Charlie on IR-169'.
- (f) Lost Communications:

1. In the event of lost communication by any aircraft filed to Laughlin after exiting IR-169, recover via direct to DLF 346/54 at 7000' MSL (or last assigned altitude); then via the DLF 346 radial to DLF. Use local procedures once established on DLF radials.

2. Aircraft filed to destinations other than Laughlin shall comply with FLIP AP/1B communications failure procedures. The filing of a lost communication altitude in the remarks section of the flight plan shall not constitute ATC clearance to climb to that altitude. It is the altitude ATC will expect the pilot to climb to at the exit point if the pilot exercises emergency authority after a radio failure has been confirmed.

- (6) Uncharted Obstructions:
 215' AGL (2133' MSL) N30-42.71 W101-49.89
 495' AGL (3095' MSL) N30-41.70 W101-30.39
 150' AGL (2796' MSL) N30-44.46 W101-42.53
 345' AGL (3015' MSL) N30-43.85 W101-32.86
- (7) Uncharted Airfields (3176' MSL) N30-27.97 W101-48.58 paved and old
- (8) Laughlin Specific Instructions:
- (a) For departures from Laughlin, expect to be cleared the appropriate departure procedure, TAE LR TRANSITION at 7000' MSL. Request clearance off the TAE LR TRANSITION prior to 25 DME. RAPCON will ensure no less than ten minutes separation exists between aircraft at Point A, 35 minutes if a T-38 follows a T-1.
- (b) When flying the route twice, schedule two entry times and inform the Duty Officer/SUP. Upon exiting the route, proceed with the Devils-XXX Arrival (maintain 7000' MSL or assigned altitude direct to DLF 346/54, then proceed inbound on the DLF 346 radial). When handed off to Del Rio Approach, coordinate for vectors to Point A for the second entry.
- (c) Laughlin aircraft exiting IR-169 on TALON 169 stereo are automatically cleared from the exit point to the TAE LR fix at 7000'. Clearance for IR-169 is also clearance for this exit routing and altitude.

FSS's Within 100 NM Radius:

SJT

IR-170

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd Street, Ste. 6, Laughlin AFB, TX 78843-5222 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 87 FTS/DOS, 570 2nd Street, Laughlin AFB, TX 78843 DSN 732-5484, C830-298-5484. Scheduling hours 0730-1630 local Mon-Fri (excluding holidays)

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| As assigned to | A | DLF 302/39 | N29°46.00' W101°21.00' |
| SFC B 50 MSL to | B | DLF 324/44 | N30°00.00' W101°10.50' |
| SFC B 35 MSL to | C | DLF 353/33 | N29°54.90' W100°46.00' |
| SFC B 50 MSL to | D | RSG 141/16 | N29°47.00' W100°09.00' |

| | | | |
|-----------------|---|------------|---------------------------|
| SFC B 30 MSL to | E | RSG 153/24 | N29°38.00' W100°10.00' |
| SFC B 30 MSL to | F | DLF 082/30 | N29°22.00' W100°12.00' |
| SFC B 50 MSL to | G | DLF 132/39 | N28°52.00' W100°17.00' |
| SFC B 50 MSL to | H | DLF 137/57 | N28°35.00' W100°08.00' |
| SFC B 50 MSL to | I | LRD 339/34 | N28°02.00' W99°33.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route in VMC only.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM tapering to 3 NM either side of centerline from B to D; 3 NM tapering to 4 NM either side of centerline from D to G; 4 NM expanding to 5 NM either side of centerline from G to I.

Special Operating Procedures:

- (1) Route:
 - (a) Consult Laughlin NOTAMs (KDLE) for most current notices for this route.
 - (b) This route is covered by the following maps and charts: San Antonio Sectional, Low IFR Enroute L-19, L-20, TPC H-23B.
 - (c) Alternate Entry: D.
 - (d) Alternate Exit: H.
- (2) Scheduling:
 - (a) Request for use shall be with the Scheduling Activity. Request for weekend use shall be coordinated between 0730-1630 local Mon - Fri.
 - (b) Aircraft shall be scheduled with a minimum of 10 minutes separation, 35 minutes if a T-38 follows a T-1 on the route.
- (3) Restrictions:
 - (a) For environmental reasons, this route may only be flown by T-38 and T-1A aircraft.
 - (b) Aircraft unable to meet their assigned entry time within the window three minutes early to three minutes late must not enter the route.
 - (c) The primary means of invoking MARSAs shall be by scheduling.
 - (d) MARSAs apply after aircraft have passed the entry point and until standard ATC separation is established after exiting the route.
 - (e) The See and Avoid concept applies at route crossing points. Route use is VMC only. Prior to encountering IMC, aircrews will cancel IFR, discontinue the route, maintain VMC and recover VFR, or obtain a separate IFR clearance.
 - (f) IR-170 will be flown no higher than 3,000 MSL from Point F to H without 24 hour prior coordination with 47 OSS/OSA DSN 732-5052, C830-298-5052.
 - (g) Remain at or below 3500' MSL between Points B and C.
- (4) Conflicts:
 - (a) For low-level deconfliction purposes, aircrew should fly this low-level at 500' AGL, unless complying with specific deconfliction procedures outlined in this section.
 - (b) To deconflict IR-149, aircrews will schedule entry times for IR-149 Point D for 10 minutes prior to 10 minutes after planned time to IR-170 Point D.
 - (c) Crosses SR-283 / 284 between Points A and B.
 - (d) Crosses SR-281 / 282 at Point B.
 - (e) Overlaps VR-143 in the vicinity of Point B.
 - (f) Crosses IR-169 between Points B and C.
 - (g) Crosses SR-281 / 282 twice between Points B and D.
 - (h) Overlaps IR-149 from Points D to H.
 - (i) Closely parallels SR-281 / 282 between Points E and G.
 - (j) Overlaps VR-168 between Points D and F.
 - (k) Crosses and closely parallels SR-281 / 282 from Point G through I. Call 85 FTS / DOS Laughlin AFB to deconflict SR-281 / 282 / 283 / 284 at DSN 732-5121, C830-298-5121. Call 301 OG/SUA, NAS JRB Fort Worth, to deconflict VR-143 at DSN 739-6903 / 04 / 05, C817-782-6903 / 04 / 05. Call 87 FTS / DOS Laughlin AFB to deconflict IR-169 at DSN 732-5484, C830-298-5484. Call 301 COMTRAWING TWO, NAS Kingsville to deconflict IR-149 and/or VR-168 at DSN 876-6518/6108, C361-516-6518/6108.
- (5) Communications:
 - (a) Del Rio Approach Control shall issue clearance for IR-170 route and altitude. Prior to route entry, pilots shall provide an ETA (Zulu) for the planned exit point.
 - (b) All Entry/Alternate Entry Points are compulsory reporting points.
 - (c) Approaching Point D make the following radio call of 255.4: 'Attention all aircraft: (callsign)(number)(type) approaching IR-170 Point D at (altitude)(speed).' Ex. 'Attention all aircraft: Cool 01, 2 T-38's approaching IR-170 Point D, 500 AGL, 300 knots'.
 - (d) Monitor (UHF) 255.4 while on the route.
 - (e) Contact Houston Center (UHF) 307.2, (VHF) 127.8 prior to (I) for exit clearance unless previously coordinated.
 - (f) When local flying is in progress at Laughlin, this airspace is under control of Del Rio APP CON; at all other times this is Houston Center airspace. Contact Del Rio Approach 326.2 for exit clearance prior to Point H when Del Rio APP CON controls this airspace.
 - (g) Lost Communications:
 1. In the event of lost communications by aircraft filed to Laughlin, use Laughlin local procedures after established on filed DLF radials.
 2. Aircraft filed to destinations other than Laughlin shall comply with FLIP AP/1B communications failure procedures. The filing of lost communication altitude in the remarks section of the flight plan does not constitute ATC clearance to climb to that altitude. It is the altitude ATC will expect the pilot to climb to at the exit point if the pilot exercises emergency authority after a radio failure has been confirmed.
 3. In the event of lost communication by any aircraft filed to Laughlin after exiting IR-170, maintain 5000' or last assigned altitude. Use Laughlin local procedures after established on DLF radials.
 4. If filed for the TALON 170H / 170I stereo route, fly the route as applicable and land at Laughlin.
- (6) Uncharted Obstructions:

Uncharted 200' tower Loma Alta Area N 29-54W 100-46
Charted 200' tower west of road (depicted on east) N 29-53.5 W 100-32.5
Uncharted 200' tower west of pumping station N 28-49.5 W 100-20
- (7) Laughlin Specific Instructions:
 - (a) When filed on a TALON 170H / 170I request to be cleared off the LAEKE TRANSITION prior to 25 DME.
 - (b) Laughlin aircraft on TALON 170H or TALON 170I stereo flight plans will recover from the Exit Point / Alternate Exit Point as filed at 5000' or as assigned. This exit clearance is automatically coordinated when cleared for IR-170 on a TALON 170H / 170I.

IR ROUTES

FSS's Within 100 NM Radius:

SJT

IR-171

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.

SCHEDULING ACTIVITY: 25 FTS/DISP, Vance AFB, OK 73705-5202 DSN 448-6038, C580-213-6038.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | END 237/23 | N36°10.00' W98°20.00' |
| 05 AGL B 50 MSL to | B | END 230/38 | N35°59.00' W98°33.00' |
| 05 AGL B 40 MSL to | C | IFI 266/36 | N35°51.00' W98°44.00' |
| 05 AGL B 40 MSL to | D | IFI 260/58 | N35°47.00' W99°12.00' |
| 05 AGL B 40 MSL to | E | SYO 357/22 | N35°43.00' W99°35.00' |
| 05 AGL B 40 MSL to | F | SYO 325/37 | N35°54.00' W99°57.00' |
| 05 AGL B 40 MSL to | G | GAG 164/21 | N36°00.00' W99°50.00' |
| 05 AGL B 40 MSL to | H | GAG 124/25 | N36°03.00' W99°30.00' |
| 05 AGL B 40 MSL to | I | GAG 094/27 | N36°14.00' W99°20.00' |
| 05 AGL B 40 MSL to | J | END 269/38 | N36°23.00' W98°42.00' |
| 05 AGL B 60 MSL to | K | END 286/27 | N36°30.00' W98°26.00' |

ROUTE WIDTH - 3 NM either side of centerline from A to C; 4 NM either side of centerline from C to J; 2 NM either side of centerline from J to K.

Special Operating Procedures:

- (1) Aircrews may use 265.25 for interplane frequency.
- (2) Report Point F to Kansas City Center 379.2.
- (3) Cross Point K at 60 MSL. Contact Vance Approach 378.8 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
- (4) On route departure all 71 FTW aircraft fly heading 090°, or as directed.
- (5) Aircrews will avoid the ranch 1 mile East of Eagle City located at N35-57.3 W98-33.7 by 2 NM or 1000' AGL.

FSS's Within 100 NM Radius:

ICT

IR-172

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| Cross at 60 MSL to | A | PNH 069/27 | N35°20.00' W101°10.00' |
| 60 MSL to | B | PNH 073/51 | N35°22.00' W100°40.00' |
| 60 MSL to | C | PNH 069/68 | N35°29.00' W100°21.00' |
| 60 MSL to | D | PNH 061/79 | N35°42.00' W100°12.00' |
| 40 MSL B 60 MSL to | E | PNH 056/87 | N35°51.50' W100°05.00' |
| 05 AGL B 40 MSL to | F | SYO 325/37 | N35°54.00' W99°57.00' |
| 05 AGL B 40 MSL to | G | SYO 357/22 | N35°43.00' W99°35.00' |
| 05 AGL B 40 MSL to | H | IFI 260/58 | N35°47.00' W99°12.00' |
| 05 AGL B 40 MSL to | I | IFI 266/36 | N35°51.00' W98°44.00' |
| 05 AGL B 40 MSL to | J | END 230/38 | N35°59.00' W98°33.00' |
| 05 AGL B 60 MSL to | K | END 237/23 | N36°10.00' W98°20.00' |

ROUTE WIDTH - 4 NM either side of centerline A to E; 3 NM either side of centerline E to F; 4 NM either side of centerline F to I; 3 NM either side of centerline I to K.

Special Operating Procedures:

- (1) Aircrews may use 265.25 for interplane frequency.
- (2) Do not descent out of 60 MSL until 4 NM past Point D.
- (3) Report Point F to Kansas City Center 379.2.
- (4) Cross Point K at 60 MSL. Contact Vance Approach 378.8 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
- (5) On route departure, all 71 FTW aircraft proceed direct to Vance, or as directed.
- (6) Aircrews will avoid the ranch 1 mile East of Eagle City located at N35-57.3 W98-33.7 by 2 NM or 1000' AGL.

FSS's Within 100 NM Radius:

ICT

IR-173

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| Cross at 60 MSL to | A | PNH 069/27 | N35°20.00' W101°10.00' |
| 60 MSL to | B | PNH 073/51 | N35°22.00' W100°40.00' |
| 60 MSL to | C | PNH 069/68 | N35°29.00' W100°21.00' |
| 60 MSL to | D | PNH 061/79 | N35°42.00' W100°12.00' |
| 40 MSL B 60 MSL to | E | GAG 189/31 | N35°51.50' W100°05.00' |
| 05 AGL B 40 MSL to | F | SYO 325/37 | N35°54.00' W99°57.00' |
| 05 AGL B 40 MSL to | G | GAG 164/21 | N36°00.00' W99°50.00' |
| 05 AGL B 40 MSL to | H | GAG 124/26 | N36°03.00' W99°30.00' |
| 05 AGL B 40 MSL to | I | GAG 094/27 | N36°14.00' W99°20.00' |
| 05 AGL B 40 MSL to | J | END 269/38 | N36°23.00' W98°42.00' |
| 05 AGL B 60 MSL to | K | END 286/27 | N36°30.00' W98°26.00' |

ROUTE WIDTH - 4 NM either side of centerline A to E; 3 NM either side of centerline E to F; 4 NM either side of centerline F to J; 2 NM either side of centerline J to K.

Special Operating Procedures:

- (1) Aircrews may use 265.25 for interplane frequency.
- (2) Do not descend out of 60 MSL until 4 NM past Point D.
- (3) Report Point F to Kansas City Center 379.2.
- (4) Cross Point K at 60 MSL. Contact Vance Approach 378.8 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
- (5) On route departure, all 71 FTW aircraft fly heading 090°, or as directed.
- (6) IR-172 and IR-173 have same geographical Points A-F.

FSS's Within 100 NM Radius:

ICT

IR-174

ORIGINATING ACTIVITY: 509 OSS/OSKA, 905 Spirit Blvd., Whiteman AFB, MO 65305 DSN 975-1713/1754, C660-687-1713/1754. After hours contact Command Post C660-687-3778.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------------------|----|--------------|--------------------------|
| Cross at FL230 to descend direct to | A | ARG 060/100 | N36°49.50' W89°05.00' |

| | | | |
|---|----|------------|--------------------------|
| 60 MSL B FL230 to 30 MSL B 60 MSL descend direct to cross | B | ARG 061/71 | N36°36.50' W89°37.00' |
| 30 MSL to direct to | BA | ARG 061/55 | N36°30.00' W89°55.00' |
| 30 MSL to Contact Memphis ARTCC 289.4 passing C | C | ARG 061/40 | N36°23.50' W90°12.50' |
| turn right to | | | |
| 30 MSL to (TA/TFR Initiation Point) direct to | D | ARG 054/35 | N36°25.00' W90°21.00' |
| 05 AGL B 30 MSL to turn left to | E | ARG 008/35 | N36°41.00' W90°48.50' |
| 05 AGL B 30 MSL to direct to | F | ARG 358/36 | N36°42.50' W90°55.50' |
| 06 AGL B 30 MSL to direct to | G | ARG 316/41 | N36°38.00' W91°30.00' |
| 06 AGL B 30 MSL to right to | H | ARG 297/55 | N36°34.50' W91°56.00' |
| 06 AGL B 30 MSL to direct to | I | ARG 295/63 | N36°37.00' W92°05.00' |
| 06 AGL B 30 MSL to turn left to | J | ARG 297/70 | N36°43.00' W92°12.00' |
| 06 AGL B 30 MSL to direct to | K | ARG 297/78 | N36°46.00' W92°20.00' |
| 06 AGL B 30 MSL to turn left to | L | ARG 290/90 | N36°42.50' W92°39.50' |
| 06 AGL B 30 MSL to (Start Maneuver Area) continue to | M | RZC 068/68 | N36°35.50' W92°47.50' |
| 05.5 AGL B 30 MSL to (Report passing N to ZME ARTCC on 263.15) then | N | RZC 091/62 | N36°09.00' W92°50.50' |
| 05 AGL B 40 MSL to (End Maneuver Area) turn left to | O | LIT 325/69 | N35°40.50' W92°53.50' |
| 05 AGL B 40 MSL to direct to | P | LIT 335/59 | N35°36.50' W92°35.50' |
| 06 AGL B 40 MSL to turn right and descend to | Q | RZC 093/92 | N36°02.50' W92°15.00' |
| 07 AGL B 30 MSL to direct to | R | RZC 090/99 | N36°06.00' W92°05.00' |
| 06 AGL B 25 MSL to turn left and descend to | S | ARG 257/31 | N36°01.50' W91°35.50' |
| 06 AGL B 25 MSL to direct to | T | ARG 261/23 | N36°04.50' W91°25.50' |
| 06 AGL B 20 MSL to (End TA/TFR Point) turn right and climb to | U | ARG 324/19 | N36°22.50' W91°09.50' |
| 20 MSL B 30 MSL to (Contact ZME ARTCC on 289.4) 30 MSL B 40 MSL climb direct to cross | V | ARG 344/19 | N36°25.50' W91°02.00' |

IR ROUTES

| | | | |
|--|----|------------|--------------------------|
| 40 MSL to direct to | W | ARG 019/20 | N36°25.50' W90°47.50' |
| 40 MSL to Re-Entry: Cross | X | ARG 029/23 | N36°25.50' W90°42.00' |
| 06 AGL B 20 MSL to Contact ZME ARTCC on 289.4 | U1 | ARG 324/19 | N36°22.50' W91°09.50' |
| turn left and climb to | | | |
| 06 AGL B 30 MSL to direct to | Y | ARG 330/30 | N36°34.00' W91°13.50' |
| 06 AGL B 30 MSL to direct to | Z | ARG 319/39 | N36°37.50' W91°26.50' |
| 06 AGL B 30 MSL to Thence via published route. | G1 | ARG 316/41 | N36°38.00' W91°30.00' |
| Alternate Exit: Q | | | |
| 05 AGL B 40 MSL to terminate TFR climb to | O1 | LIT 325/69 | N35°40.50' W92°53.50' |
| 05 AGL B 40 MSL to climb to cross | P1 | LIT 335/59 | N35°36.50' W92°35.50' |
| 50 MSL to | Q1 | RZC 093/92 | N36°02.50' W92°15.00' |

PMSV CONTACTS: Primary Home Station. Alternates Whitman (SZL 344.6), Barksdale (BAD 373.1).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR terrain following (TF) visual contour (VC) is authorized IAW command directives within published altitude block from D to U and U to Z. When command directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each TF route segment. The route is designated mountainous from M to R. The remainder of the route is designated nonmountainous. Regulations governing aircraft below 500' AGL must be complied with. Minimum altitudes other than surface are established to provide 100' vertical clearance of man-made obstructions within the route width. Command directives may require additional obstruction clearance for TF/VC operations.

ROUTE WIDTH - 4 NM either side of centerline from A to D; 3 NM either side of centerline from D to F; 3 NM right and 4 NM left of centerline from F to G; 2 NM right and 4 NM left of centerline from G to K; 3 NM either side of centerline from K to L; 4 NM right and 3 NM left of centerline from L to N; 4 NM either side of centerline from N to P; 4 NM right and 3 NM left of centerline from P to R; 4 NM either side of centerline from R to X; Re-Entry; 4 NM either side of centerline from U1 to Y; 3 NM either side of centerline from Y to G1.

Special Operating Procedures:

- (1) Participating Aircraft Separation: Route is designated for MARSA operations established by coordinated scheduling.
- (2) Route designated for SN missions.
- (3) Centerline between turn points is depicted as a 7.5 NM radius arc.
- (4) Lost communications (LC) procedures: Route LC altitude is 4000' MSL. Desired deviations from this procedure must be filed IAW FLIP AP/1B, Chapter 1 and verified with Memphis ARTCC prior to route entry.
- (5) Aircrews should be on the alert for C-130's flying SR-218, 219, 220, 221, 222, 225, 227, 229, 230, 231, 232 and 238. SR-221 and 225 cross IR-174.

- (6) Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N36-25.5 W89-54.0; N36-29.0 W90-00.5; N36-22.2 W90-09.5; N36-34.5 W90-37.0; N36-39.0 W92-13.5; N35-44.0 W92-29.0.
- (7) Noise Sensitive Areas: (Avoid by 1/4 NM):
 - (a) School at N36-10.9 W92-51.0.
 - (b) Residence at N36-38.5 W92-06.3.
 - (c) Dairy/Emu farm at N36-38.9 W92-02.7.
 - (d) Residence at N36-36.8 W92-46.2.
 - (e) Residence at N36-45.1 W92-25.3.
 - (f) Farm house at N36-45.0 W92-25.0.
 - (g) Residence at N36-36.9 W92-45.4.
 - (h) Residence at N36-26.8 W92-47.6.

FSS's Within 100 NM Radius:

BNA, COU, JBR, MKL, MLC, STL

IR-175

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.

SCHEDULING ACTIVITY: 25 FTS/DISP, Vance AFB, OK 73705-5202 DSN 448-6038, C580-213-6038.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | END 291/32 | N36°35.00' W98°31.00' |
| 05 AGL B 40 MSL to | AA | END 280/42 | N36°31.50' W98°45.00' |
| 05 AGL B 40 MSL to | B | END 273/52 | N36°28.00' W98°59.00' |
| 05 AGL B 40 MSL to | C | END 297/63 | N36°54.00' W99°02.02' |
| 05 AGL B 40 MSL to | D | GAG 349/13 | N36°34.00' W99°53.00' |
| 05 AGL B 40 MSL to | E | GAG 323/25 | N36°43.00' W100°07.00' |
| 05 AGL B 40 MSL to | F | GAG 006/43 | N37°02.00' W99°38.00' |
| 05 AGL B 40 MSL to | G | ANY 263/51 | N37°09.00' W99°14.00' |
| 05 AGL B 40 MSL to | G1 | ANY 246/31 | N37°00.50' W98°46.67' |
| 05 AGL B 40 MSL to | H | ANY 219/21 | N36°55.00' W98°29.00' |
| 05 AGL B 60 MSL to | I | ANY 205/21 | N36°52.00' W98°24.00' |

ROUTE WIDTH - 4 NM left and 2 NM right from A to B; 4 NM left and 3 NM right from B to C; 4 NM either side from C to D; 3 NM either side from D to F; 4 NM left and 3 NM right from F to G1; 2 NM left and 3 NM right from G1 to I.

Special Operating Procedures:

- (1) Aircrews may use 265.25 for interplane frequency.
- (2) Use caution for ACC aircraft operating at low level in the airspace immediately Northwest of Points E to F.
- (3) Report Point E to Kansas City Center 379.2.
- (4) Cross Point I at 60 MSL. Contact Vance Approach 378.8 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
- (5) On route departure, all 71 FTW aircraft proceed direct to Vance, or as directed.

FSS's Within 100 NM Radius:

ICT, MLC

IR-177

ORIGINATING ACTIVITY: 7 OSS/OSOR, 966 Ave. D-4, Ste. 117, Dyess AFB, TX 79607 DSN 461-3666, C325-696-3666.

SCHEDULING ACTIVITY: 7 OSS/OSOR, 966 Ave. D-4, Ste. 117, Dyess AFB, TX 79607 DSN 461-3665, C325-696-3665.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at FL230 to or as assigned 170 MSL B FL230 descend direct to cross | A | CIM 071/57 | N36°35.50' W103°42.50' |
| at or above 170 MSL 150 MSL B FL230 descend to cross | B | DHT 285/52 | N36°29.00' W103°30.00' |
| at or above 150 MSL 70 MSL B FL230 continue descent direct to cross | C | DHT 284/43 | N36°24.00' W103°20.00' |
| 70 MSL to 59MSL B 70 MSL turn left and descend to cross | D | DHT 281/27 | N36°16.00' W103°04.00' |
| 59 MSL to (TA/TFR Initiation Point) direct to | E | DHT 308/22 | N36°22.00' W102°50.00' |
| 02 AGL B 59 MSL to turn right to | F | TBE 100/40 | N37°00.00' W102°49.50' |
| 02 AGL B 59 MSL to direct to | G | TBE 090/43 | N37°06.50' W102°43.50' |
| 02 AGL B 57 MSL to turn left to | H | LBL 274/57 | N37°17.50' W102°07.50' |
| 02 AGL B 57 MSL to direct to | I | LBL 286/55 | N37°27.00' W102°00.00' |
| 02 AGL B 57 MSL to climb direct to | J | LAA 100/23 | N38°03.00' W102°14.00' |
| 05 AGL B 70 MSL to turn left and continue climb to | K | LAA 345/34 | N38°46.00' W102°43.50' |
| 04 AGL B 70 MSL to direct to | L | LAA 321/35 | N38°44.00' W103°01.50' |

| | | | |
|--|----|------------|---------------------------|
| 02 AGL B 70 MSL to descend direct to | M | LAA 313/30 | N38°36.50' W103°03.00' |
| 04.5 AGL B 70 MSL to turn right to | N | LAA 296/21 | N38°24.50' W103°02.00' |
| 04.5 AGL B 60 MSL to (Start Maneuver Area) direct to | O | LAA 284/19 | N38°20.00' W103°03.00' |
| 02 AGL B 60 MSL to turn left to | P | LAA 243/33 | N38°03.00' W103°21.00' |
| 02 AGL B 60 MSL to direct to | Q | LAA 227/37 | N37°53.00' W103°21.00' |
| 02 AGL B 60 MSL to (End Maneuver Area) (TA/TFR Termination Point) direct to | R | LAA 188/42 | N37°32.00' W102°59.00' |
| 60 MSL to 60 MSL B 110 MSL climb direct to cross | S | TBE 071/40 | N37°20.00' W102°46.00' |
| at or above 70 MSL 70 MSL B 110 MSL continue climb to cross | SS | TBE 078/43 | N37°15.30' W102°42.00' |
| 110 MSL to or as assigned (Contact Albuquerque ARTCC 351.7 passing 100 MSL) Re-Entry: Alpha | T | TBE 093/58 | N37°00.00' W102°26.00' |
| 60 MSL to (End Maneuver Area) (TA/TFR Termination Point) turn left to | R1 | LAA 188/42 | N37°32.00' W102°59.00' |
| 60 MSL to direct to | U | LAA 170/31 | N37°40.50' W102°42.50' |
| 60 MSL to 60 MSL B 70 MSL climb direct to cross | V | LAA 178/26 | N37°46.50' W102°47.00' |
| 70 MSL to direct to | W | LAA 189/21 | N37°52.00' W102°51.00' |
| 70 MSL to 60 MSL B 70 MSL descend to cross | X | LAA 291/37 | N38°32.00' W103°21.00' |
| 60 MSL to (TA/TFR Initiation Point) continue right turn to | Y | LAA 306/41 | N38°42.50' W103°16.00' |
| 02 AGL B 60 MSL to Thence via published route. Alternate Entry: Z | M1 | LAA 313/30 | N38°36.50' W103°03.00' |
| FL190 to or as assigned 57 MSL B FL190 descend direct to cross | Z | LBL 264/43 | N37°06.00' W101°52.00' |
| 57 MSL to direct to | ZA | LAA 128/46 | N37°37.00' W102°04.00' |
| 57 MSL to Thence via published route. | J1 | LAA 100/23 | N38°03.00' W102°14.00' |

IR ROUTES

PMSV CONTACTS: Primary Home Station. Alternates Whiteman (SZL 344.6), Barksdale (Bad 373.1).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR

terrain following (TF)/visual contour (VC) operations are authorized IAW command directives within published altitude blocks from E to R, and ZA to J1 (Alternate Entry Z). When command directives preclude TF/VC operations aircrews will maintain the IFR altitude for each TF route segment. Minimum altitudes are established to provide 200' vertical clearance of known man-made obstructions within the route corridor. Command directives may require additional obstruction clearance for TF/VC operations. Aircrews flying command directed TF/VC altitudes may be required to fly at a higher minimum tracking altitude (MTA), as listed in 99 ECRG 50-3, for STR scored activity. In no case will aircraft fly below command directed TF/VC altitudes. The entire route is designated non-mountainous. Regulations governing aircraft operations below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to E; 3 NM either side of centerline from E to F; 4 NM either side of centerline from F to N; 3 NM left and 4 NM right of centerline N to O; 3 NM either side of centerline from O to P; 6 NM left and 3 NM right of centerline from P to Q; 6 NM left and 5 NM right of centerline from Q to R; 4 NM either side of centerline from R to T. Re-Entry; 4 NM left and 3 NM right of centerline from R1 to U; 4 NM either side of centerline from U to W; 4 NM left and 2 NM right of centerline from W to X; 4 NM either side of centerline from X to M1. ALTERNATE ENTRY Z: 4 NM either side of centerline from Z to J1.

Special Operating Procedures:

- (1) Aircraft exiting the route or using the Alpha Re-Entry will cross the End Maneuver Area point at the specified minimum IFR altitude.
- (2) Participating aircraft separation: Route is designated for MARSAs operations established by coordinated scheduling.
- (3) Lost communications (LC) procedures: Route LC altitude is 11,000' MSL. Desired deviation from this procedure must be filed IAW FLIP AP/1B, Chapter 1 and verified with Albuquerque ARTCC prior to route entry.
- (4) This route effects Cheyenne MOA and Two Buttes MOA operations which is controlled by Buckley ANG/120FS down to 300' AGL. Advise 120FS; DSN 847-9470 or FAX 847-9612, C720-847-9470, FAX C720-847-9612, on estimated entry and exit times of the MOA's. In addition, provide estimated times to 120FS at Points J and M.
- (5) All aircraft will make an (in-the-blind) call on 381.4 prior to entering the lateral limits of Two Buttes and Cheyenne MOA's. This call is to alert aircraft operating in the MOA of your presence. This is not intended to be used as a separation tool, only a (heads up call).
- (6) Route is separated from conflicting routes by coordinated scheduling.
- (7) Aircrews entering IR-177 on Alternate Entry Z must file IR-177A.
- (8) Aircrews entering IR-177 using Alternate Entry Z should use the Garden City altimeter for descent into the route.
- (9) Aircrews should be especially vigilant when flying between N36-34-00 W102-50-00 and N36-42-00 W102-49-00 due to possible VFR traffic to include B-1's and B-52's on VR-1175 and VR-1176.
- (10) Ducks and geese will pose a significant hazard 1 Oct-15 Jan between points E and F and N and R during the evening and dark/dusk (plus/minus one hour). Sandhill cranes, pelicans

and gulls will pose a significant hazard 15 Sep-15 Nov and a hazard from 1 Mar-30 Apr between points N and R. They will fly from several refuges found around the entire maneuver area to local feeding areas.

- (11) Centerline between turn points will be depicted as a 7.5 NM arc unless otherwise specified.
- (12) Route is open all year long.
- (13) Aircraft aborting the route shall contact the appropriate ARTCC as follows: Points A-G, Albuquerque ARTCC 351.7, Points H-I, Kansas city ARTCC 290.8, Points J-O, Denver ARTCC 387.15, Points P-S, Denver ARTCC 379.95.
- (14) Noise Sensitive Areas: Avoid by 1000' or 1/4 NM unless otherwise noted.
 - (a) Residence at N38-03.8 W103-19.1;
 - (b) Residence at N37-49.2 W103-14.4;
 - (c) Residence at N37-05.2 W102-44.6;
 - (d) Residence at N37-06.4 W102-51.1;
 - (e) Residence at N37-12.5 W102-37.0;
 - (f) Residence at N37-49.3 W102-07.3;
 - (g) Residence at N38-49.6 W103-00.7;
 - (h) Residence at N38-03.3 W103-20.8;
 - (i) Residence at N38-04.3 W103-21.8;
 - (j) Farm at N37-57.0 W103-21.6;
 - (k) Residence at N38-49.8 W102-49.5.
- (15) Uncharted obstructions and bird attractants:
 - (a) Silos at N37°22.14' W102°51.43';
 - (b) Uncharted antenna approx. 250' AGL, N38°11.0' W103°09.0';
 - (c) Cattle yards: N36°33.98' W102°46.82'; N36°36.19' W102°46.85'; N37°25.05' W101°58.06'; N36°17.65' W102°58.19'.

FSS's Within 100 NM Radius:

DEN

IR-178

ORIGINATING ACTIVITY: 7 OSS/A3R, 965 Ave. D-4, Ste. 109, Dyess AFB, TX 79606 DSN 461-3666, C325-696-3666, fax DSN 461-3677, C325-696-3677.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 150 MSL to or as assigned (TA/TFR Initiation Point) | A | HUP 194/20 | N31°16.00' W105°33.00' |
| descend direct to 04 AGL B 150 MSL to | B | HUP 149/39 | N30°57.50' W105°08.00' |
| descend direct to 04 AGL B 150 MSL to | C | HUP 138/59 | N30°43.00' W104°49.00' |
| turn right to 04 AGL B 90 MSL to | D | HUP 138/63 | N30°39.00' W104°46.00' |
| direct to | | | |

IR ROUTES

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|-----------------------|---|------------|---------------------------|---------------------------|----|------------|---------------------------|
| 04 AGL B 90 MSL to | E | HUP 140/97 | N30°08.00' W104°30.00' | 05 AGL B 90 MSL to | X | INK 273/32 | N32°00.00' W103°51.00' |
| turn left to | | | | 05 AGL B 70 MSL | | | |
| 04 AGL B 90 MSL to | F | MRF 235/30 | N30°05.50' W104°28.50' | if not exiting at Point Z | | | |
| direct to | | | | turn right and climb to | | | |
| 03 AGL B 90 MSL to | G | MRF 210/26 | N29°58.00' W104°17.00' | 90 MSL B 110 MSL to | Y | INK 292/25 | N32°06.00' W103°39.00' |
| descend direct to | | | | 05 AGL B 70 MSL | | | |
| 03 AGL B 90 MSL to | H | MRF 174/26 | N29°51.50' W104°00.00' | if not exiting at Point Z | | | |
| direct to | | | | descend direct to | | | |
| 03 AGL B 80 MSL to | I | MRF 137/45 | N29°40.00' W103°30.00' | 110 MSL to | Z | INK 348/17 | N32°10.00' W103°15.00' |
| turn left and descend | | | | 05 AGL B 70 MSL | | | |
| to | | | | if not exiting at Point Z | | | |
| 03 AGL B 80 MSL to | J | MRF 126/48 | N29°42.50' W103°19.50' | direct to | | | |
| descend direct to | | | | 05 AGL B 70 MSL to | AA | INK 001/19 | N32°10.80' W103°10.00' |
| 03 AGL B 76 MSL to | K | FST 167/37 | N30°20.00' W102°57.00' | direct to | | | |
| direct to | | | | 12 AGL B 70 MSL to | AB | INK 030/18 | N32°06.30' W103°00.30' |
| 03 AGL B 72 MSL to | L | FST 131/29 | N30°34.50' W102°38.00' | direct to | | | |
| descend direct to | | | | 12 AGL B 70 MSL to | AC | MAF 240/37 | N31°48.50' W102°52.00' |
| 06 AGL B 72 MSL to | M | FST 110/30 | N30°42.00' W102°29.00' | direct to | | | |
| turn left to | | | | 08 AGL B 70 MSL to | AD | MAF 232/34 | N31°45.00' W102°47.50' |
| 06 AGL B 60 MSL to | N | FST 101/30 | N30°46.00' W102°26.50' | descend direct to | | | |
| direct to | | | | 08 AGL B 60 MSL to | AE | MAF 180/28 | N31°33.00' W102°17.50' |
| 04 AGL B 60 MSL to | O | FST 067/28 | N31°03.00' W102°26.50' | turn left to | | | |
| turn left and descend | | | | 08 AGL B 60 MSL to | AF | MAF 174/28 | N31°32.50' W102°14.00' |
| to | | | | direct to | | | |
| 06 AGL B 50 MSL to | P | FST 047/25 | N31°10.00' W102°34.00' | 08 AGL B 60 MSL to | AG | MAF 160/28 | N31°32.50' W102°06.00' |
| direct to | | | | direct to | | | |
| 06 AGL B 50 MSL to | Q | FST 347/22 | N31°19.00' W102°59.50' | start climb to cross AH | | | |
| turn left to | | | | at or above 20 AGL | | | |
| 07 AGL B 50 MSL to | R | PEQ 100/25 | N31°19.00' W103°07.50' | 08 AGL B 60 MSL to | AH | MAF 126/39 | N31°31.50' W101°40.00' |
| direct to | | | | End TF | | | |
| 07 AGL B 50 MSL to | S | PEQ 178/24 | N31°04.00' W103°39.00' | (Contact Fort Worth | | | |
| turn right direct to | | | | ARTCC 298.95 for | | | |
| 04 AGL B 70 MSL to | T | PEQ 203/25 | N31°07.00' W103°51.00' | clearance into Lancer | | | |
| direct to | | | | MOA) | | | |
| 05 AGL B 70 MSL to | U | PEQ 281/34 | N31°41.00' W104°11.50' | climb direct to cross | | | |
| turn right to | | | | AI at or above 70 MSL | | | |
| 09 AGL B 70 MSL to | V | PEQ 297/37 | N31°51.00' W104°09.00' | 20 AGL B 90 MSL to | AI | MAF 113/47 | N31°34.00' W101°25.50' |
| direct to | | | | turn left to | | | |
| 09 AGL B 70 MSL to | W | PEQ 306/36 | N31°54.00' W104°03.20' | 70 MSL B 90 MSL to | AJ | BGS 154/44 | N31°40.50' W101°16.00' |
| climb direct to | | | | turn left to | | | |
| | | | | 70 MSL B 90 MSL to | AK | BGS 148/39 | N31°46.50' W101°12.50' |
| | | | | direct to | | | |
| | | | | 70 MSL B 90 MSL to | AL | BGS 039/19 | N32°35.00' W101°12.00' |
| | | | | RE-ENTRY V1: | | | |
| | | | | turn right, | | | |
| | | | | cross V1 at | | | |
| | | | | 60 MSL to | V1 | PEQ 297/37 | N31°51.00' W104°09.00' |
| | | | | turn right to | | | |

IR ROUTES

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| 60 MSL to | VA | PEQ 308/32 | N31°52.00' W103°59.00' |
| direct to | | | |
| 60 MSL to | VB | PEQ 071/24 | N31°31.50' W103°07.00' |
| turn right to | | | |
| 60 MSL to | R1 | PEQ 100/25 | N31°19.00' W103°07.50' |
| thence via published route. | | | |
| Alternate Route O1: direct to | | | |
| 06 AGL B 60 MSL to | O1 | FST 067/28 | N31°03.00' W102°26.50' |
| direct to | | | |
| 06 AGL B 60 MSL to | OA | MAF 194/42 | N31°22.50' W102°32.00' |
| turn right to | | | |
| 06 AGL B 60 MSL to | AE1 | MAF 180/28 | N31°33.00' W102°17.50' |
| thence via published route. | | | |
| Alternate Exit M: direct to | | | |
| 03 AGL B 76 MSL to | K1 | FST 167/37 | N30°20.00' W102°57.00' |
| climb direct to | | | |
| 03 AGL B 170 MSL to | L1 | FST 131/29 | N30°34.50' W102°38.00' |
| (Contact Albuquerque ARTCC 292.15 for exit instructions) | | | |
| 06 AGL B 170 MSL direct to cross | | | |
| 170 MSL to | M1 | FST 110/30 | N30°42.00' W102°29.00' |
| Alternate Exit Z: climb direct to cross | | | |
| 05 AGL B 90 MSL to | X1 | INK 273/32 | N32°00.00' W103°51.00' |
| (Contact Fort Worth ARTCC 298.95 for instructions) | | | |
| continue climb to cross | | | |
| 90 MSL B 110 MSL to | Y1 | INK 292/25 | N32°06.00' W103°39.00' |
| direct to | | | |
| 110 MSL to | Z1 | INK 348/17 | N32°10.00' W103°15.00' |
| or as assigned | | | |
| Alternate Entry F: 150 MSL to | F1 | MRF 235/30 | N30°05.50' W104°28.50' |
| or as assigned by ARTCC | | | |
| descend direct to | | | |
| 04 AGL B 90 MSL to | G1 | MRF 210/26 | N29°58.00' W104°17.00' |
| thence via published route. | | | |

PMSV CONTACTS: Primary Home Station. Alternates Whiteman (SZL 344.6), Barksdale (BAD 373.1).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC Terrain Following (TF)/Terrain Avoidance (TA)/Visual Contour (VC) operations are authorized IAW command directives within

published altitude blocks from Point A to AH and Point O1 to AF1 on alternate route O1. When command directives preclude TF/TA/VC operations, aircrews will maintain the IFR altitude for each route segment. Minimum altitudes other than surface are established to provide 200' vertical clearance from known manmade obstructions within route corridor. Command directives may require additional obstruction clearance for TF/TA/VC operations. The route is designated mountainous from Point A to M and Point R to X. The remainder of route is non-mountainous. Regulations governing operations below 500' AGL must be complied with. ACC Aircrews should reference their appropriate AFI series Vol.3 for low altitude minimum altitude, and 7 BW Clearance Plane Letter for current clearance plane setting information.

ROUTE WIDTH - 6 NM either side of centerline from A to F; 5 NM left and 9 NM right of centerline from F to I; 8 NM left and 6 NM right of centerline from I to P; 10 NM left and 4 NM right of centerline from P to S; 4 NM left and 10 NM right of centerline from S to V; 4 NM either side of centerline from V to Z; 4 NM left and 2 NM right of centerline from Z to AB; 3 NM left and 4 NM right of centerline from AB to AC; 4 NM either side of centerline from AC to AL; Re-entry V1: 4 NM either side of centerline from V1 to VA; 4 NM left and 2 NM right of centerline from VA to VB; 4 NM either side of centerline from VB to R1; Alternate Route O1: 4 NM left and 6 NM right of centerline from O1 to OA; 4 NM either side of centerline from OA to AF.

Special Operating Procedures:

- (1) Lost communications (LC) procedures: LC altitude will be published IFR altitude on the route. NOTE: aircraft going to Dyess AFB, proceed to the ABI 161/20 FIX/DME, IAF (PAGGY) and execute the HI-ILS or LOC/DME RWY 34 (circle as required).
- (2) NORDO procedures in the event of lost communications between the entry and exit point and unable to proceed VFR, maintain to the exit/alternate exit point the higher of the following:
 - (a) The minimum IFR altitude for each of the remaining route segments;
 - (b) The highest altitude assigned in the last ATC clearance. Depart the Exit/Alternate Exit Point at the altitude determined above, then climb/descend to the altitude filed in the flight plan for the remainder of the flight.
- (3) Participating aircraft separation: Route is designated for MARSAs operations established by coordinated scheduling.
- (4) Centerline between turn points is depicted as a 7.5 NM arc.
- (5) Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N32-08.5 W103-09.5, N29-36.2 W103-40.0, and N29-42.1 W103-08.5.
- (6) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSAs applies after aircraft have passed the Entry/Alternate Entry Point until ATC standard separation is established after exiting the route.
- (7) Aircrews should be alerted to the increase of migratory waterfowl throughout the entire route during the spring and fall migration season.
- (8) PMSV contact for IR-178 is DYS (344.6).
- (9) Aircrews will indicate the altitude required after exiting IR-178 in the remarks section immediately after the route exit time.

- (10) Aircrews are responsible for verifying both the exit time and the exit fix prior to entry.
- (11) Noise Sensitive Areas: Avoid all noise sensitive areas by 1000' or 1/4 NM unless otherwise stated:
 - (a) Residence at N32-14.4 W103-03.9;
 - (b) Residence at N30-07.3 W103-07.1: Avoid by 1/2 mile or 1000'; Clair Holland;
 - (c) Residence at N29-34.0 W103-27.6; Karen Reimers;
 - (d) Residence at N29-59.1 W103-07.8;
 - (e) Residence at N31-05.9 W103-35.6; Charlotte Evans;
 - (f) Residence at N29-52.1 W104-07.2; Jack Brown;
 - (g) Residence at N29-59.7 W103-15.7: Avoid by 1/4 mile and NO OVERFLIGHT; Tim Leary.
- (12) Clearance to fly this route does not include clearance to enter Lancer MOA. Entry into Lancer MOA requires prior coordination with the Dyess AFB Scheduling Office. Aircraft not scheduled into Lancer MOA must exit route at Alternate Exit M or Alternate Exit Z.
- (13) 15 NM prior to Point C transmit in the blind on 255.4 (CALL SIGN, EAGLE PEAK). At Point E transmit in the blind on 255.4 (CALL SIGN, CHINATI). At Point I transmit in the blind on 255.4 (CALL SIGN, NINEPOINT).
- (14) All VHF equipped aircraft use the following procedures: Transmit in the blind on 122.8 at Imperial Reservoir (8 NAP Point Q), (CALLSIGN, PASSING IMPERIAL RESERVOIR ON IR-178). At Red Bluff Reservoir (18 NAP Point V), CALLSIGN, PASSING RED BLUFF RESERVOIR ON IR-178). Monitor VHF 122.8 from Point P to Point W. Single engine Cessna aircraft operating between Point S to Point W within corridor 1000' AGL and below, callsign N6486T. Color of aircraft is Silver and Blue.
- (15) Alternate Exits:
 - (a) Point Z (must follow Alternate Exit Z procedures);
 - (b) Point M;
- (16) To file IR-178, please use the following formats exactly:
 - (a) IR-178 exiting at Point M (FST110030). Computer format: HUP194020.IR178.FST110030..(Flight Plan Route). Note: No re-entries are permitted.
 - (b) IR-178 (Z procedure) exiting at Point Z (INK348017). Computer format: HUP194020.IR178..(Flight Plan Route).
 - (c) IR-178 (Racetrack filing procedures) HUP194020.IR178+R1.INK348017..(Flight Plan Route). The (+R1) value represents the number of racetrack circuits requested. Enter a numerical value after (R) for racetrack's requested.
- (17) Alternate Entry: Point F1; filing procedures: MRF235030.IR178.(follow filing procedures for Alternate Exits M, Z, AL).
 - (a) IR-178 (Alternate Entry Procedures at F1) MRF235030.IR178.INK348017..(Flight Plan Route).
- (18) Alternate Exit: Point AL filing procedures: HUP194020.IR178.BGS039019..(Flight Plan Route). The (BGS039019) is the (AL) exit point entering LANCER MOA. Filing the alternate exit (AL) exit point does not authorize use of LANCER MOA/ATCAA. LANCER must be scheduled separately with Dyess Scheduling Office.
- (19) Alternate Route: O1; filing procedures: HUP194020.IR178O1.BGS039019..(Flight Plan Route).
- (20) CAUTION: IR-178Z. This route has a ROUTE CORRIDOR conflict with VR-196 and VR-197 from Point T to U. These VR routes are not on MAMS and you are not deconflicted with them. VR routes are See and Avoid. Conflict potential is during daytime only. Be especially vigilant for same direction traffic from VR-196 and opposite direction traffic

- from VR-197 in this area. IR-178Z users should contact 86 FTS (DSN 732-5584) with your times from Point T to U and make a broadcast in the blind on 255.4 approaching Point T.
- (21) Restricted use of IR-178 Zulu exit (only) due to explosive testing between points R-S at Old Goodyear Test Track. Prior coordination required prior to use from 70SS Scheduling or Airspace Management Office.

FSS's Within 100 NM Radius:

ABQ, SJT

IR-180

ORIGINATING ACTIVITY: 7 OSS/A3R, 965 Ave. D-4, Ste. 109, Dyess AFB, TX 79606 DSN 461-3666, C325-696-3666, fax DSN 461-3677, C325-696-3677.

SCHEDULING ACTIVITY: 7 OSS/A3R, 966 Ave. D-4, Ste. 109, Dyess AFB, TX 79606 DSN 461-3665, C325-696-3665, fax DSN 461-4158, C325-696-4158.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at 170 MSL to or as assigned (TFR Initiation Point) 02 AGL B 170 MSL descend direct to cross | A | MAF 109/60 | N31°30.50' W101°11.00' |
| 02 AGL B 60 MSL to (TA Initiation Point) (Contact Midland APP CON 372.1) direct to | B | MAF 126/39 | N31°31.50' W101°40.00' |
| 02 AGL B 60 MSL to direct to | C | MAF 160/28 | N31°32.50' W102°06.00' |
| 06 AGL B 60 MSL to turn right to | D | MAF 174/28 | N31°32.50' W102°14.00' |
| 02 AGL B 60 MSL to direct to | E | MAF 180/28 | N31°33.00' W102°17.50' |
| 08 AGL B 60 MSL to (Contact Ft. Worth ARTCC 298.95 and report Point F, IR-180) turn right and climb to | F | MAF 232/34 | N31°45.00' W102°47.50' |
| 02 AGL B 70 MSL to direct to | G | MAF 240/37 | N31°48.50' W102°52.00' |
| 02 AGL B 70 MSL to (Alternate Entry Point) turn left to | H | HOB 146/28 | N32°12.00' W103°03.00' |
| 04 AGL B 70 MSL to direct to | I | HOB 164/23 | N32°15.50' W103°14.00' |
| 07 AGL B 70 MSL to turn right to | J | HOB 193/30 | N32°11.00' W103°30.50' |
| 09 AGL B 70 MSL to direct to | K | HOB 218/30 | N32°18.50' W103°42.50' |
| 02 AGL B 70 MSL to direct to | L | HOB 230/25 | N32°26.00' W103°42.00' |
| 02 AGL B 70 MSL to direct to | M | HOB 250/21 | N32°35.00' W103°41.00' |

IR ROUTES

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|--|----|------------|---------------------------|---|-----|------------|---------------------------|
| 02 AGL B 70 MSL to direct to | N | HOB 264/21 | N32°40.00' W103°41.00' | 02 AGL B 60 MSL to continue turn and climb to | RD | TXO 218/64 | N33°47.00' W103°48.50' |
| 02 AGL B 70 MSL to direct to | O | HOB 291/24 | N32°51.00' W103°40.50' | 02 AGL B 70 MSL to climb direct to | RE | TXO 220/63 | N33°49.50' W103°49.00' |
| 12 AGL B 70 MSL to turn right to | P | HOB 314/34 | N33°06.00' W103°39.00' | 02 AGL B 70 MSL to direct to | RF | TXO 223/60 | N33°54.50' W103°49.00' |
| 02 AGL B 70 MSL to direct to | Q | HOB 319/36 | N33°10.00' W103°37.50' | 05 AGL B 70 MSL to Re-Entry: RG then R-5104/R-5105 | RG | TXO 237/52 | N34°10.00' W103°48.00' |
| 02 AGL B 70 MSL to direct to | R | HOB 328/40 | N33°16.00' W103°33.00' | Re-Entry: R-5104/R-5105 Exit R-5104/R-5105 | | | |
| 05 AGL B 70 MSL to direct to | S | LBB 258/65 | N33°40.50' W103°13.00' | at or below 70 MSL On Re-Entry RG: turn left to | RH | TCC 184/33 | N34°39.00' W103°47.00' |
| 02 AGL B 70 MSL to turn right to | T | LBB 264/62 | N33°47.50' W103°09.00' | 02 AGL B 70 MSL to direct to | RI | CVS 285/39 | N34°39.00' W104°02.00' |
| 05 AGL B 70 MSL to continue right turn to | U | LBB 268/51 | N33°50.00' W102°55.00' | 06 AGL B 70 MSL to turn left to | RJ | CVS 229/44 | N34°00.00' W104°04.00' |
| 02 AGL B 70 MSL to direct to | V | LBB 256/49 | N33°39.50' W102°53.00' | 05 AGL B 70 MSL to direct to | RK | CVS 218/34 | N34°00.00' W103°50.00' |
| 02 AGL B 70 MSL to turn left to | W | LBB 250/55 | N33°33.50' W103°00.00' | 02 AGL B 70 MSL to To R-5104/R-5105 (Contact Albuquerque ARTCC 319.2 for exit instructions) | RG1 | CVS 232/27 | N34°10.00' W103°48.00' |
| 02 AGL B 70 MSL to direct to | X | LBB 240/56 | N33°23.50' W102°57.50' | | | | |
| 02 AGL B 70 MSL to direct to | Y | LBB 231/52 | N33°18.00' W102°49.50' | | | | |
| 06 AGL B 70 MSL to direct to | Z | LBB 224/50 | N33°13.50' W102°44.00' | | | | |
| 02 AGL B 70 MSL to turn left to | AA | LBB 195/50 | N32°57.50' W102°21.00' | | | | |
| 02 AGL B 70 MSL to direct to | AB | LBB 187/49 | N32°56.00' W102°13.00' | | | | |
| 05 AGL B 70 MSL to turn left to | AC | LBB 171/45 | N32°57.50' W101°56.50' | | | | |
| 02 AGL B 70 MSL to direct to | AD | LBB 167/44 | N32°58.50' W101°53.00' | | | | |
| 06 AGL B 70 MSL to turn right to | AE | LBB 153/40 | N33°04.00' W101°41.50' | | | | |
| 02 AGL B 70 MSL to (TA/TFR Termination Point) (Contact Ft. Worth ARTCC 350.2/backup 298.95) 70 MSL B 110 MSL climb direct to cross 110 MSL to or as assigned Re-Entry: BA direct to | AF | LBB 142/48 | N32°59.50' W101°29.00' | | | | |
| 02 AGL B 70 MSL to direct to | AG | BGS 033/12 | N32°31.50' W101°19.50' | | | | |
| 02 AGL B 70 MSL to direct to | W1 | LBB 250/55 | N33°33.50' W103°00.00' | | | | |
| 02 AGL B 70 MSL to turn right to | BA | HOB 347/29 | N33°07.50' W103°17.50' | | | | |
| 02 AGL B 70 MSL to Thence via published route. Alternate Exit: RG direct to | R1 | HOB 328/40 | N33°16.00' W103°33.00' | | | | |
| 04 AGL B 60 MSL to direct to | RA | TXO 193/65 | N33°30.50' W103°22.00' | | | | |
| 02 AGL B 60 MSL to direct to | RB | TXO 203/64 | N33°36.50' W103°33.00' | | | | |
| 02 AGL B 60 MSL to turn right to | RC | TXO 213/65 | N33°43.00' W103°45.00' | | | | |

PMSV CONTACTS: Primary Home Station. Alternates Whiteman (SZL 344.6), Barksdale (BAD 373.1).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC terrain following (TF) visual contour (VC) operations are authorized IAW command directives within the published altitude blocks from A to AF and W1 to R1 on re-entry BA and RA to RG1 on re-entry R-5104/R-5105. VMC terrain avoidance (TA) Visual Contour (VC) authorized within the published altitude blocks from B to AF, W1 to R1 on re-entry BA, RA to RG1 on re-entry R-5104/R-5105. When command directives preclude TF/TA/VMC operations aircrews will maintain the IFR altitude for each route segment. Minimum altitudes, other than surface, are established to provide 100' vertical clearance of unknown man-made obstructions within the route width. Command directives may require additional obstruction clearance for TF/TA/VMC operations. The entire route is designated nonmountainous. Regulations governing operations below 500' AGL must be complied with. The route corridor provides airspace for 500' lateral separation from man-made obstacles. Obstructions under 200' AGL were not considered in route design. Aircrews must be aware of charted airports within or near route corridor limits.

ROUTE WIDTH - 4 NM either side of centerline from A to G; 3 NM either side of centerline from G to H; 3 NM left and 4 NM right of centerline from H to J; 4 NM either side of centerline from J to L; 4 NM left and 3 NM right of centerline from L to O; 3 NM left and 4 NM right of centerline from O to P; 4 NM either side of centerline from P to T; 4 NM left and 5 NM right of centerline from T to V; 4 NM either side of centerline from V to AB; 3 NM either side of centerline from AB to AC; 2.5 NM left and 3 NM right of centerline from AC to AE; 4 NM either side of centerline from AE to AG. Re-Entry: 4 NM either side of centerline from W1 to R1. Alternate Exit RG: 4 NM left and 5 NM right of centerline from RA to RC; 5 NM either side of centerline from RC to RE; 5 NM left and 3 NM right of centerline from RE to RG. R-5104/R-5105 boundaries from RG to RH; 4 NM either side of centerline from RH to RG1.

Special Operating Procedures:

- (1) Lost communications (LC) procedures: LC altitude will be the published IFR altitude on the route. On exit aircrews will climb at AF to cross exit AG at 110 MSL and use 110 MSL as LC altitude from this point. Note: Aircraft going to Dyess AFB, TX will proceed at 110 MSL to the ABI 161/30 DME, IAF (Jessa) and execute the HI-ILS or LOC/DME RWY 34 (circle as required).
- (2) Participating aircraft separation: Route is designated for MARSAs operations established by coordinated scheduling.
- (3) Centerline between turn points is depicted as a 7.5 NM arc except between RH, RI, RJ, and RK which are 6 NM arc.
- (4) Aircraft at TF/TA/VMC altitude may be required to fly at a higher minimum tracking altitude as listed in 99 ECRGR 50-3 for scored activity. In no case will aircraft fly below command directed TF/TA/VMC altitudes.
- (5) Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N33-02.0 W101-55.7; N34-00.8 W102-59.6; N32-08.5 W103-09.5; N33-16.1 W103-11.4; N32-56.0 W102-18.0; N32-55.0 W102-21.0.
- (6) TF capable aircraft can make an AUTO-TF descent beginning at point A from 170 MSL.
- (7) Additional tactical descent procedures: TF capable aircraft, when specifically cleared by ARTCC, will cross point A at FL 220 or as assigned and begin descent to cross point B at or below 50 MSL, then via published route.
- (8) The method of MARSAs between IR-180 and IR-128 will be scheduling.
- (9) Unit schedulers using Alternate Exit RG must deconflict IR-113 and R-5104/R-5105 and must comply with range orders.
- (10) Aircrews aborting an Alternate Exit RG will if conditions permit, abort to the southwest to avoid turning into Cannon Approach Airspace.
- (11) Minimum separation between scheduled entry times is 10 minutes. ARTCC provides users with separation from known IFR traffic only. MARSAs applies after aircraft have passed the Entry/Alternate Entry point until ATC establishes standard separation after exiting the route.
- (12) Aircrews should be aware of the 5549' tower at N33-33.2 W103-39.1 which is 451' below the IFR altitude on Alternate Exit RG, but outside the corridor.
- (13) Aircrews should be alerted to the increase of migratory waterfowl throughout the entire route, (especially between points S and W) during the spring and fall migration season.
- (14) Aircrews are advised of a new 923' tower at N32-54-40 W103-41-13.
- (15) Aircrews should monitor 255.4 approaching point Z. T-37 and T-1 aircraft flying SR 275/277 cross at point Z at 1000' AGL.
- (16) Noise Sensitive Areas: Avoid all Noise Sensitive areas by 1000' or 1/4 mile:
 - (a) Residence at N32-14.4 W103-03.9;
 - (b) Residence at N32-10.0 W103-33.9;
 - (c) School at N32-47.9 W101-26.8.

FSS's Within 100 NM Radius:

ABQ, SJT

IR-181**ORIGINATING ACTIVITY:** 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.**SCHEDULING ACTIVITY:** 25 FTS/DISP, Vance AFB, OK 73705-5202 DSN 448-6038, C580-213-6038.**HOURS OF OPERATION:** 30 min after Sunrise-30 min before Sunset and active days per local directives**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | END 286/27 | N36°30.00' W98°26.00' |
| 05 AGL B 50 MSL to | B | END 269/38 | N36°23.00' W98°42.00' |
| 05 AGL B 40 MSL to | C | GAG 094/27 | N36°14.00' W99°20.00' |
| 05 AGL B 40 MSL to | D | GAG 124/26 | N36°03.00' W99°30.00' |
| 05 AGL B 40 MSL to | E | GAG 164/21 | N36°00.00' W99°50.00' |
| 05 AGL B 40 MSL to | F | SYO 325/37 | N35°54.00' W99°57.00' |
| 05 AGL B 40 MSL to | G | SYO 357/22 | N35°43.00' W99°35.00' |
| 05 AGL B 40 MSL to | H | IFI 260/58 | N35°47.00' W99°12.00' |
| 05 AGL B 40 MSL to | I | IFI 266/36 | N35°51.00' W98°44.00' |
| 05 AGL B 40 MSL to | J | END 230/38 | N35°59.00' W98°33.00' |
| 05 AGL B 60 MSL to | K | END 237/23 | N36°10.00' W98°20.00' |

ROUTE WIDTH - 2 NM either side of centerline from A to B; 4 NM either side of centerline from B to I; 3 NM either side of centerline from I to K.**Special Operating Procedures:**

- (1) Aircrews may use 265.25 for interplane frequency.
- (2) Report Point F to Kansas City Center 379.2.
- (3) Cross Point K at 60 MSL. Contact Vance Approach 378.8 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
- (4) On route departure, all 71 FTW aircraft proceed direct to Vance, or as directed.
- (5) Aircrews will avoid the ranch 1 mile East of Eagle City located at N35-57.3 W98-33.7 by 2 NM or 1000' AGL.
- (6) IR-181 and IR-183 have same geographical Points A-F.

FSS's Within 100 NM Radius:

ICT

IR-182**ORIGINATING ACTIVITY:** 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.**SCHEDULING ACTIVITY:** Same as Originating Activity.

IR ROUTES

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | END 237/23 | N36°10.00' W98°20.00' |
| 05 AGL B 50 MSL to | B | END 230/38 | N35°59.00' W98°33.00' |
| 05 AGL B 40 MSL to | C | IFI 266/36 | N35°51.00' W98°44.00' |
| 05 AGL B 40 MSL to | D | IFI 260/58 | N35°47.00' W99°12.00' |
| 05 AGL B 40 MSL to | E | SYO 357/22 | N35°43.00' W99°35.00' |
| 05 AGL B 40 MSL to | F | SYO 325/37 | N35°54.00' W99°57.00' |
| 05 AGL B 40 MSL to | G | PNH 056/87 | N35°51.50' W100°05.00' |
| 40 MSL B 60 MSL to | H | PNH 061/79 | N35°42.00' W100°12.00' |
| 60 MSL to | I | PNH 069/68 | N35°29.00' W100°21.00' |
| 60 MSL to | J | PNH 073/51 | N35°22.00' W100°40.00' |
| 60 MSL to | K | PNH 069/27 | N35°20.00' W101°10.00' |

ROUTE WIDTH - 3 NM either side of centerline from A to C; 4 NM either side of centerline from C to F; 3 NM either side of centerline from F to G; 4 NM either side of centerline from G to K.

Special Operating Procedures:

- (1) Aircrews may use 265.25 for interplane frequency.
- (2) Climb to be at 60 MSL 4 NM prior to Point H.
- (3) Report Point F to Kansas City Center 379.2.
- (4) On route departure, maintain 60 MSL (or as directed) and contact Amarillo Approach 319.15.
- (5) IR-171 and IR-182 have same geographical Points A-F.
- (6) Aircrews will avoid the ranch 1 mile East of Eagle City located at N35-57.3 W98-33.7 by 2 NM or 1000' AGL.

FSS's Within 100 NM Radius:

ICT

IR-183

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------|----|--------------|--------------------------|
| As assigned to | A | END 286/27 | N36°30.00' W98°26.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 05 AGL B 50 MSL to | B | END 269/38 | N36°23.00' W98°42.00' |
| 05 AGL B 40 MSL to | C | GAG 094/27 | N36°14.00' W99°20.00' |
| 05 AGL B 40 MSL to | D | GAG 124/25 | N36°03.00' W99°30.00' |
| 05 AGL B 40 MSL to | E | GAG 164/21 | N36°00.00' W99°50.00' |
| 05 AGL B 40 MSL to | F | SYO 325/37 | N35°54.00' W99°57.00' |
| 05 AGL B 40 MSL to | G | GAG 189/31 | N35°51.50' W100°05.00' |
| 40 MSL B 60 MSL to | H | PNH 061/79 | N35°42.00' W100°12.00' |
| 60 MSL to | I | PNH 069/68 | N35°29.00' W100°21.00' |
| 60 MSL to | J | PNH 073/51 | N35°22.00' W100°40.00' |
| 60 MSL to | K | PNH 069/27 | N35°20.00' W101°10.00' |

ROUTE WIDTH - 2 NM either side of centerline from A to B; 4 NM either side of centerline from B to F; 3 NM either side of centerline from F to G; 4 NM either side of centerline from G to K.

Special Operating Procedures:

- (1) Aircrews may use 265.25 for interplane frequency.
- (2) Climb to be at 60 MSL 4 NM prior to Point H.
- (3) Report Point F to Kansas City Center 379.2.
- (4) On route departure, maintain 60 MSL (or as directed) and contact Amarillo Approach 319.15.
- (5) IR-181 and IR-183 have same geographical Points A-F.

FSS's Within 100 NM Radius:

ICT

IR-185

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.

SCHEDULING ACTIVITY: 25 FTS/DISP, Vance AFB, OK 73705-5202 DSN 448-6038, C580-213-6038.

HOURS OF OPERATION: 30 min after Sunrise-30 min before Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | ANY 205/21 | N36°52.00' W98°24.00' |
| 05 AGL B 50 MSL to | B | ANY 219/21 | N36°55.00' W98°29.00' |
| 05 AGL B 40 MSL to | B1 | ANY 246/31 | N37°00.50' W98°46.67' |
| 05 AGL B 40 MSL to | C | ANY 263/51 | N37°09.00' W99°14.00' |
| 05 AGL B 40 MSL to | D | GAG 006/43 | N37°02.00' W99°38.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 05 AGL B 40 MSL to | E | GAG 323/25 | N36°43.00' W100°07.00' |
| 05 AGL B 40 MSL to | F | GAG 349/13 | N36°34.00' W99°53.00' |
| 05 AGL B 40 MSL to | G | END 297/63 | N36°54.00' W99°02.00' |
| 05 AGL B 40 MSL to | H | END 273/52 | N36°28.00' W98°59.00' |
| 05 AGL B 40 MSL to | I | END 280/42 | N36°31.50' W98°45.00' |
| 05 AGL B 60 MSL to | J | END 291/32 | N36°35.00' W98°31.00' |

| | | | |
|---------------------|---|------------|---------------------------|
| 01 AGL B 70 MSL to | H | CNM 021/24 | N32°36.00' W103°58.00' |
| 01 AGL B 70 MSL to | I | CNM 074/19 | N32°16.80' W103°51.83' |
| 01 AGL B 70 MSL to | J | CNM 126/15 | N32°04.50' W104°02.10' |
| 01 AGL B 70 MSL to | K | SFL 058/41 | N31°58.50' W104°20.00' |
| 01 AGL B 70 MSL to | L | SFL 058/32 | N31°55.80' W104°30.00' |
| 01 AGL B 70 MSL to | M | SFL 065/28 | N31°51.00' W104°33.30' |
| 01 AGL B 70 MSL to | N | SFL 111/43 | N31°21.50' W104°23.50' |
| 01 AGL B 70 MSL to | O | SFL 128/26 | N31°25.00' W104°45.60' |
| 01 AGL B 70 MSL to | P | SFL 123/17 | N31°32.70' W104°51.00' |
| 01 AGL B 70 MSL to | Q | SFL 199/9 | N31°37.20' W105°10.50' |
| 01 AGL B 65 MSL to | R | SFL 223/27 | N31°29.30' W105°31.20' |
| 01 AGL B 65 MSL to | S | SFL 278/35 | N31°56.80' W105°43.50' |
| 01 AGL B 80 MSL to | T | PIO 202/24 | N32°11.50' W105°34.50' |
| 01 AGL B 80 MSL to | U | PIO 225/17 | N32°22.50' W105°35.00' |
| 01 AGL B 125 MSL to | V | PIO 246/19 | N32°27.90' W105°39.80' |
| 01 AGL B 125 MSL to | W | PIO 256/32 | N32°30.40' W105°56.00' |

ROUTE WIDTH - 3 NM left and 2 NM right of centerline from A to B1; 3 NM left and 4 NM right of centerline from B1 to D; 3 NM either side of centerline from D to F; 4 NM either side of centerline from F to G; 3 NM left and 4 NM right of centerline from G to H; 2 NM left and 4 NM right of centerline from H to J.

Special Operating Procedures:

- (1) Aircrews may use 265.25 for interplane frequency.
- (2) Use caution for ACC aircraft operating at low level in the airspace immediately Northwest of Points C to E.
- (3) Report Point E to Kansas City Center 379.2.
- (4) Cross Point J at 60 MSL. Contact Vance Approach 378.8 no later than crossing the Exit Point. Replying with (negative ATIS) is acceptable.
- (5) On route departure, all 71 FTW aircraft fly heading 090°, or as directed.

FSS's Within 100 NM Radius:

ICT, MLC

IR-192

ORIGINATING ACTIVITY: 49 OSS/OSOA, 700 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Sunrise-0600Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|---------------------------|
| Cross at 120 MSL to or as assigned | A | PIO 344/24 | N32°56.00' W105°20.10' |
| 10 AGL B 120 MSL to | B | PIO 357/16 | N32°47.80' W105°15.40' |
| 10 AGL B 110 MSL to | C | PIO 007/16 | N32°46.60' W105°12.20' |
| 01 AGL B 80 MSL to | D | PIO 041/18 | N32°42.50' W105°01.30' |
| 01 AGL B 90 MSL to | E | CNM 294/42 | N32°40.00' W104°54.50' |
| 01 AGL B 90 MSL to | F | CNM 307/33 | N32°40.10' W104°39.00' |
| 01 AGL B 48 MSL to | G | CNM 341/26 | N32°40.80' W104°17.00' |

Alternate Entry:
TALON LOW

| | | | |
|---------------------------------|----|------------|---------------------------|
| 03 AGL B 90 MSL to | F1 | PIO 064/34 | N32°40.10' W104°39.00' |
| Alternate Entry: ELK 120 MSL to | A2 | CME 256/39 | N33°18.50' W105°24.00' |
| 120 MSL to | A1 | CME 230/43 | N33°00.20' W105°22.10' |
| 120 MSL to | A | PIO 344/24 | N32°56.00' W105°20.10' |

Alternate Entry:
EL PASO GAP

| | | | |
|--|----|------------|---------------------------|
| 01 AGL B 98 MSL to | L2 | CNM 240/33 | N32°05.00' W104°50.00' |
| 10 AGL B 98 MSL to | L1 | CNM 219/27 | N31°58.50' W104°38.00' |
| 01 AGL B 70 MSL to Thence via flight plan route. | M1 | SFL 065/28 | N31°51.00' W104°33.30' |
| Alternate Exit: TALON LOW | D | PIO 041/18 | N32°42.50' W105°01.30' |
| Alternate Exit: EL PASO GAP | L | SFL 058/32 | N31°55.80' W104°30.00' |
| 01 AGL B 70 MSL to | L1 | SFL 047/27 | N31°58.50' W104°38.00' |

IR ROUTES

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|-----------------------|----|------------|---------------------------|
| 10 AGL B 98 MSL to | L2 | SFL 021/24 | N32°05.00' W104°50.00' |
| Alternate Exit: ZIPER | | | |
| 01 AGL B 80 MSL to | T | PIO 202/24 | N32°11.50' W105°34.50' |
| 10 AGL B 80 MSL to | T1 | PIO 329/6 | N32°37.00' W105°20.50' |
| 10 AGL B 130 MSL to | T2 | PIO 315/15 | N32°44.10' W105°28.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point D to V.

ROUTE WIDTH - 10 NM left and 7 NM right of centerline from A to B; 8 NM left and 7 NM right of centerline from B to E; 2 NM left and 8 NM right of centerline from E to G; 4 NM left and 7 NM right of centerline from G to H; 3 NM left and 7 NM right of centerline from H to I; 3 NM left and 4 NM right of centerline from I to J; 3 NM either side of centerline from J to K; 3 NM left and 4 NM right of centerline from K to L; 8 NM left and 10 NM right of centerline from L to N; 5 NM left and 10 NM right of centerline from N to Q; 4 NM left and 13 NM right of centerline from Q to R; 5 NM left and 8 NM right of centerline from R to S; 7 NM left and 6 NM right of centerline from S to T; 7 NM left and 13 NM right of centerline from T to U; 10 NM either side of centerline from U to V; 10 NM left and 9 NM right of centerline from V to W. Alternate Entry ELK: 2 NM either side of centerline from A2 to A.

Special Operating Procedures:

- (1) Request for use must be coordinated with 49 OSS/OSOS 24 hours in advance. Request for weekend use shall be coordinated between 1430-2330Z Monday-Friday.
- (2) From Point D to F and from Point G to W route is designated maneuvering airspace and cleared for LOWAT.
- (3) Uncharted obstacles below 100' AGL are not listed.
- (4) If not scheduled for Centennial Range or entry into R-5103B, and R-5103B is active, use alternate exit ZIPER. If R-5103B is not active, route can be flown to Point W.
- (5) To schedule Centennial Range or R-5103B, contact 49 OSS/OSOS. Comply with all range procedures listed in current HAFB Range Supplement.
- (6) If scheduled into Centennial Range or R-5103B, do not enter restricted airspace until clearance is received from Centennial Range Control.
- (7) Exiting at Point W, and not scheduled into Centennial Range or R-5103B or at ZIPER, contact Holloman Approach 325.3. At other exits, contact ABQ ARTCC on 292.15.
- (8) To transition from IR-192 to/from Talon Low MOA, both the MOA and the IR must be scheduled and procedural briefing received from 49 OSS/OSOS. Request 20 minute block time in MOA, starting 5 minutes after IR entry. Prior to exceeding top of altitude block on route segment D-F, contact Albuquerque ARTCC 292.15 for clearance into MOA, and do not exceed 12,500' MSL until cleared to do so by Albuquerque ARTCC.
- (9) For re-entry into IR-192 from Talon Low MOA, contact Albuquerque ARTCC and request clearance to depart MOA and re-enter IR-192 at Point F.
- (10) Alternate entries are: A1-A (Elk from IR-142 only) F (from Talon Low MOA only); L2-M1 (from IR-195 via El Paso Gap only).
- (11) Alternate exits are: D (to Talon Low MOA only); L-L2 (to IR-134, El Paso Gap only); T-T2 (to ZIPER only).

- (12) MARSA applies at entry, along the route and at exit. MARSA is accomplished by scheduling and See and Avoid. Control is based on pilot's scheduled route exit time.
- (13) Route conflicts with IR-134, IR-195, IR-194 and VR-196.
- (14) Avoid the following noise sensitive areas by distance/altitude specified:
 - (a) ranch house N43-10.9 W105-35.48, 1 NM or 1500' AGL
 - (b) ranch house N32-17.92 W105-26.45, 1000' slant range
 - (c) town N32-11.8 W104-43.9, 1.5 NM radius or 1000' AGL
 - (d) town N31-46.83 W105-28.31, 1000' slant range
 - (e) landfill (bird hazard area) N32-29.82 W104-03.55, 1000' slant range
 - (f) settlement N32-12.13 W104-41.38, 1000' slant range
 - (g) settlement N32-48.7 W105-12.13, 500' slant range.
- (15) The following objects taller than 100' AGL are within the route boundaries:
 - (a) 100' tower N32-15.22 W103-59.45;
 - (b) 100' tower N32-18.7 W105-51.23;
 - (c) 100' tower N32-20.88 W105-46.05;
 - (d) 100' tower N32-20.90 W105-50.77;
 - (e) 100' tower N32-21.72 W105-46.53;
 - (f) 100' tower N31-31.53 W105-00.53;
 - (g) 110' tower N31-20.35 W104-23.02;
 - (h) 125' tower N31-50.95 W104-33.58;
 - (i) 125' tower N32-06.38 W105-05.18;
 - (j) 125' tower N32-29.99 W103-56.32;
 - (k) 125' tower N32-36.40 W105-04.40;
 - (l) 150' tower N31-27.58 W104-50.97;
 - (m) 150' tower N31-38.77 W104-38.43;
 - (n) 150' tower N31-42.22 W105-27.53;
 - (o) 150' towers (4) N32-04-93 W104-44.42;
 - (p) 150' tower N32-21.33 W103-52.95;
 - (q) 150' tower N32-31.43 W103-52.97;
 - (r) 150' tower N32-31.63 W103-52.73;
 - (s) 150' tower N32-32.70 W104-01.62;
 - (t) 150' tower N32-34.18 W103-55.22;
 - (u) 175' tower N31-42.85 W105-22.42;
 - (v) 175 towers (2) N32-09.82 W104-49.57;
 - (w) 175' tower N32-42.85 W104-26.63;
 - (x) 200' tower N31-55.55 W104-24.55;
 - (y) 225' tower N31-39.13 W105-22.33;
 - (z) 230' tower N31-48.52 W105-28.93;
 - (aa) 250' tower N32-30.30 W103-57.82;
 - (ab) 250' tower N32-45.03 W104-17.73.
- (16) Stay above 800' AGL in the following described area to avoid conflict with 300' tall wind generators starting at: N31-46.02 W104-45.05 to N31-45.85 W104-44.25 to N31-45.13 W104-43.82 to N31-44.38 W104-44.08 to N31-43.83 W104-44.63 to N31-42.82 W104-44.63 to N31-42.13 W104-44.45 to N31-41.45 W104-44.30 to N31-41.83 W104-44.18 to N31-40.32 W104-44.10 to N31-38.78 W104-44.45 to N31-38.22 W104-44.77 to N31-38.63 W104-45.57 to N31-40.62 W104-46.58 to N31-45.58 W104-46.40 to POB.
- (17) Avoid the following mines with tall towers/buildings by 500' above the listed objects or 500' horizontally:
 - (a) mine/tower 150' AGL N32-30.05 W103-55.72
 - (b) mine/tower 175' AGL N32-24.80 W103-56.08
 - (c) mine/tower 175' AGL N32-29.35 W103-56.32
 - (d) mine/tower 2100' AGL N32-32.12 W103-56.13
 - (e) mine/tower 200' AGL N32-35.95 W103-58.48
- (18) Avoid the following described areas below 1000' AGL:

- (a) starting at N32-14.55 W103-56.93 to N32-14.55 W103-56.90 to N32-01.55 W104-00.50 to N32-00.63 W104-04.12 to N32-08.87 W104-04.12 to N32-14.58 W103-59.30 to POB
 - (b) starting at N33-06.40 W105-10.03 to N33-00.08 W105-09.98 to N32-55.95 W105-06.57 to N32-40.35 W105-16.73 to N32-35.05 W105-10.95 to N32-32.15 W105-10.62 to N32-32.08 W105-30.00 to N32-33.05 W105-30.00 to N32-37.18 W105-37.55 to N32-36.22 W105-38.03 to N32-34.83 W105-40.18 to N32-37.50 W105-44.95 to N32-40.55 W105-42.72 to N32-40.58 W105-38.43 to N32-57.15 W105-27.50 to N33-01.95 W105-26.78 to N33-05.03 W105-20.07 to POB
 - (c) starting at N32-42.80 W105-48.20 to N32-40.80 W105-49.70 to N32-39.70 W105-47.70 to N32-41.80 W105-46.20 to POB
 - (d) starting at N32-42.83 W104-17.08 to N32-32.78 W104-17.08 to N32-32.58 W104-25.02 to N32-32.60 W104-25.02 to POB
- (19) No aircraft except Tornados may operate below 500' AGL or the minimum specified for each individual route segment or higher as directed in these SOPs. Tornado aircraft are authorized to operate down to 100' AGL on/in route segments/areas not otherwise restricted by these SOPs.

FSS's Within 100 NM Radius:

ABQ

IR-193

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N Sixth St., Altus AFB, OK 73521 DSN 866-6098 C580-481-6098.

SCHEDULING ACTIVITY: 97 OSS/DOA, 400 N Sixth St., Ste 12, Altus AFB, OK 73521 DSN 866-7110.

HOURS OF OPERATION: 0830-0230 local Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 03 AGL B 40 MSL to | A | LTS 247/22 | N34°34.20' W99°42.00' |
| 03 AGL B 40 MSL to | B | CDS 022/17 | N34°36.70' W100°06.50' |
| 03 AGL B 50 MSL to | C | CDS 334/22 | N34°43.70' W100°25.00' |
| 03 AGL B 50 MSL to | D | SYO 245/50 | N35°07.50' W100°36.60' |
| 03 AGL B 50 MSL to | E | SYO 251/30 | N35°16.10' W100°14.80' |
| 03 AGL B 50 MSL to | F | SYO 180/17 | N35°03.70' W99°41.70' |
| 03 AGL B 50 MSL to | G | LTS 247/22 | N34°34.20' W99°42.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to B; 5 NM either side of centerline from B to D; 5 NM right widening to 7 NM right and 5 NM left of centerline from D to E; 7 NM right narrowing to 5 NM right and 5 NM left of centerline from E to F; 10 NM either side of centerline from F to G.

Special Operating Procedures:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313, C580-481-6313.
- (2) Primary Entry: A; Alternate Entry: B; Primary Exit: G; Alternate Exit: F.
- (3) Aircraft accomplishing airdrops at Sooner DZ, report commencement of airdrop run-in not later than 5 minutes prior to Altus Approach Control 257.725, using the phrase (call sign, inbound Sooner DZ, intentions to follow).
- (4) At C, when practicable, avoid Memphis Municipal Airport by 1500' AGL or 3 NM.
- (5) From C to D avoid flight over town of Quail, TX, by 2 NM.
- (6) From D to E avoid flight over town of Shamrock, OK, and when practicable avoid McLean Gray Airport and Shamrock Municipal Airport by 1500' AGL or 3 NM.
- (7) From E to F, when practicable, avoid Haddock Airport by 1500' AGL or 3 NM.
- (8) Contact Altus Approach Control 125.1/257.725 (CH 6) upon exiting F or G. Monitor 255.4 entire route of flight.
- (9) Route designated MARSA, MARSA between Tornado, Cyclone and Twister SKE routes; VR-144, VR-184, VR-190, VR-191, VR-198, VR-199, SR-205, SR-206, SR-208, SR-216, SR-217 and VR-106 is accomplished through restrictive scheduling. IR-193 is the exact routing as VR-106.
- (10) Deconflict with IR-105 (NAS Ft. Worth), VR-159, VR-162, VR-1141, VR-1142, VR-1143, VR-1144 (Sheppard AFB) with appropriate route schedulers. For day low levels on legs C, D, E, and F, all aircraft will remain east of the McLean-Hedley line (near Point D) and south of I-40 (south of the town of Shamrock, near Point E) in order to avoid the eastern and southern halves of the VR-1141/1142 corridor. The coordinates for this line are approximately N34-43.08 W100-35.68 straight north to N35-14.42 and straight east to W99-52.10.
- (11) PMSV: Altus AFB 239.8.
- (12) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter route. Aircraft must also exit route within the window of two minutes early to two minutes late.
- (13) Use caution for uncharted airfield just beyond Point F, N34-58.5 W99-29.0.

FSS's Within 100 NM Radius:

FTW, SJT

IR-194

ORIGINATING ACTIVITY: 49 OSS/OSOA, 700 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Sunrise-0600Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|---------------------------|
| Cross at 120 MSL to or as assigned | A | PIO 317/11 | N32°41.00' W105°25.00' |

IR ROUTES

| | | | | | | | |
|--|----|------------|---------------------------|---|----|------------|---------------------------|
| 10 AGL B 120 MSL to | B | PIO 329/6 | N32°37.00' W105°20.50' | 03 AGL B 90 MSL to | T1 | PIO 041/18 | N32°42.50' W105°01.30' |
| 10 AGL B 80 MSL to | C | PIO 261/4 | N32°32.00' W105°23.30' | Alternate Exit: EL PASO GAP | | | |
| 01 AGL B 80 MSL to | D | PIO 202/24 | N32°11.50' W105°34.50' | 01 AGL B 70 MSL to | K | SFL 065/28 | N31°51.00' W104°33.30' |
| 01 AGL B 80 MSL to | E | SFL 278/35 | N31°56.80' W105°43.50' | 01 AGL B 70 MSL to | K1 | SFL 048/27 | N31°58.50' W104°38.00' |
| 01 AGL B 65 MSL to | F | SFL 223/27 | N31°29.30' W105°31.20' | 10 AGL B 98 MSL to | K2 | PIO 126/36 | N32°05.00' W104°50.00' |
| 01 AGL B 65 MSL to | G | SFL 199/9 | N31°37.20' W105°10.50' | Alternate Exit: ZIPER | | | |
| 01 AGL B 70 MSL to | H | SFL 123/17 | N31°32.70' W104°51.00' | 10 AGL B 110 MSL to | V | PIO 357/16 | N32°47.80' W105°15.40' |
| 01 AGL B 70 MSL to | I | SFL 128/26 | N31°25.00' W104°45.60' | 10 AGL B 130 MSL to | V1 | PIO 315/15 | N32°44.10' W105°28.00' |
| 01 AGL B 70 MSL to | J | SFL 111/43 | N31°21.50' W104°23.50' | Alternate Exit: TALON LOW | | | |
| 01 AGL B 70 MSL to | K | SFL 065/28 | N31°51.00' W104°33.30' | 01 AGL B 48 MSL to | R | PIO 064/34 | N32°40.10' W104°39.00' |
| 01 AGL B 70 MSL to | L | SFL 058/32 | N31°55.80' W104°30.00' | Alternate Exit: ELK | | | |
| 01 AGL B 70 MSL to | M | SFL 058/41 | N31°58.50' W104°20.00' | 10 AGL B 120 MSL to | W | PIO 344/24 | N32°56.00' W105°20.10' |
| 01 AGL B 70 MSL to | N | CNM 126/15 | N32°04.50' W104°02.10' | 120 MSL to | W1 | CME 230/43 | N33°00.20' W105°22.10' |
| 01 AGL B 70 MSL to | O | CNM 074/19 | N32°16.80' W103°51.50' | 120 MSL to | W2 | CME 256/39 | N33°18.50' W105°24.00' |
| 01 AGL B 70 MSL to | P | CNM 021/24 | N32°36.00' W103°58.00' | TERRAIN FOLLOWING OPERATIONS: Authorized from Point C to Q. | | | |
| 01 AGL B 70 MSL to | Q | CNM 341/26 | N32°40.80' W104°17.00' | ROUTE WIDTH - 3 NM left and 2 NM right of centerline from A to B; 9 NM left and 6 NM right of centerline from B to D (excludes airspace within R-5103B); 6 NM left and 7 NM right of centerline from D to E; 8 NM left and 5 NM right of centerline from E to F; 13 NM left and 4 NM right of centerline from F to G; 10 NM left and 5 NM right of centerline from G to J; 10 NM left and 8 NM right of centerline from J to L; 4 NM left and 3 NM right of centerline from L to M; 3 NM either side of centerline from M to N; 4 NM left and 3 NM right of centerline from N to O; 7 NM left and 3 NM right of centerline from O to P; 7 NM left and 4 NM right of centerline from P to Q; 8 NM left and 2 NM right of centerline from Q to S; 7 NM left and 8 NM right of centerline from S to V; 7 NM left and 10 NM right of centerline from V to W; 3 NM left and 4 NM right of centerline from W to Y; 10 NM left and 9 NM right of centerline from Y to Z; Alternate Exit ELK: 2 NM either side of centerline from W to W2. | | | |
| 01 AGL B 48 MSL to | R | PIO 064/34 | N32°40.10' W104°39.00' | | | | |
| 01 AGL B 90 MSL to | S | CNM 294/42 | N32°40.00' W104°54.50' | | | | |
| 01 AGL B 90 MSL to | T | PIO 041/18 | N32°42.50' W105°01.30' | | | | |
| 01 AGL B 80 MSL to | U | PIO 007/16 | N32°46.60' W105°12.20' | | | | |
| 10 AGL B 110 MSL to | V | PIO 357/16 | N32°47.80' W105°15.40' | | | | |
| 10 AGL B 110 MSL to | W | PIO 344/24 | N32°56.00' W105°20.10' | | | | |
| 10 AGL B 110 MSL to | X | PIO 274/14 | N32°35.50' W105°34.20' | | | | |
| 01 AGL B 125 MSL to | Y | PIO 246/19 | N32°27.90' W105°39.80' | | | | |
| 01 AGL B 125 MSL to | Z | PIO 256/32 | N32°30.40' W105°56.00' | | | | |
| Alternate Entry: EL PASO GAP | | | | | | | |
| 01 AGL B 98 MSL to | K2 | PIO 126/36 | N32°05.00' W104°50.00' | | | | |
| 10 AGL B 98 MSL to | K1 | SFL 048/27 | N31°58.50' W104°38.00' | | | | |
| 01 AGL B 70 MSL to Thence via flight plan route. | L1 | SFL 058/32 | N31°55.80' W104°30.00' | | | | |
| Alternate Entry: TALON LOW | | | | | | | |

Special Operating Procedures:

- (1) Request for use must be coordinated with 49 OSS/OSOS 24 hours in advance. Request for weekend use shall be coordinated between 1430-2330Z Monday-Friday.
- (2) From Point C to Q; from Point R to T and from Point X to Z, route is designated maneuvering airspace and cleared for LOWAT.
- (3) Uncharted obstacles below 100' AGL are not listed.
- (4) If not scheduled for Centennial Range or entry into R-5103B, and R-5103B is active, use alternate exit ZIPER. If R-5103B is active, use alternate exit ZIPER. If R-5103B is not active, route can be flown to Point Z.
- (5) To schedule Centennial Range or R-5103B, contact 49 OSS/OSOS. Comply with all range procedures listed in current HAFB Range Supplement.

- (6) If scheduled into Centennial Range or R-5103B, do not enter restricted airspace until clearance is received from Centennial Range Control.
- (7) Exiting at Point Z, and not scheduled into Centennial Range or R-5103B or ZIPER, contact Holloman Approach on 325.3. At other alternate exits contact ABQ ARTCC on 292.15.
- (8) To transition from IR-194 to/from Talon Low MOA, both the MOA and the IR must be scheduled and procedural briefing received from 49 OSS/OSOS. Request 20 minute block time in MOA, starting 20 minutes after IR entry. Prior to exceeding top of altitude block on route segment R-S, contact Albuquerque ARTCC 292.15 for clearance into MOA, and then do not exceed 12,500' MSL until cleared to do so by Albuquerque ARTCC.
- (9) For re-entry to IR-194 from Talon Low MOA, contact Albuquerque ARTCC and request clearance to depart MOA and re-enter IR-194 at Point T.
- (10) Alternate entries are: El Paso Gap (K2-L1) from IR-134 only; T from Talon Low MOA only.
- (11) Alternate exits are: El Paso Gap (K2-L1) to IR-195 only; R to Talon Low MOA only; Elk (W-W2) to IR-133 only; Ziper (V-V1) to Ziper only.
- (12) MARSAs applies at entry, along the route and at exit. MARSAs is accomplished by scheduling and See and Avoid. Control is based on pilot's scheduled route exit time.
- (13) Route conflicts with IR-134, IR-192, IR-195 and VR-196.
- (14) Avoid the following noise sensitive areas by distance/altitude specified:
- Ranch/house N33-10.9 W105-35.48, 1 NM or 1500 AGL;
 - Ranch/house N32-17.92 W105-26.45, 1000 slant range;
 - Town N32-11.8 W104-43.9, 1.5 NM or 1000' AGL;
 - Town N31-46.83 W105-28.31, 1000' slant range;
 - Landfill (Bird hazard area) N32-29.82 W104-03.55, 1000' slant range;
 - Settlement N32-12.13 W104-41.38, 1000' slant range;
 - Settlement N32-48.7 W104-12.13, 500' slant range.
- (15) The following objects taller than 100' AGL are within the route boundaries:
- 100' tower N32-15.22 W103-59.45;
 - 100' tower N32-18.7 W105-51.23;
 - 100' tower N32-20.88 W105-46.05;
 - 100' tower N32-20.90 W105-50.77;
 - 100' tower N32-21.72 W105-46.53;
 - 100' tower N31-31.53 W105-00.53;
 - 110' tower N31-20.35 W104-23.02;
 - 125' tower N31-50.95 W104-33.58;
 - 125' tower N32-06.38 W105-05.18;
 - 125' tower N32-29.99 W103-56.32;
 - 125' tower N32-36.40 W105-04.40;
 - 150' tower N31-27.58 W104-50.97;
 - 150' tower N31-38.77 W104-38.43;
 - 150' tower N31-42.22 W105-27.53;
 - 150' towers (4) N32-04-93 W104-44.42;
 - 150' tower N32-21.33 W103-52.95;
 - 150' tower N32-31.43 W103-52.97;
 - 150' tower N32-31.63 W103-52.73;
 - 150' tower N32-32.70 W104-01.62;
 - 150' tower N32-34.18 W103-55.22;
 - 175' tower N31-42.85 W105-22.42;
 - 175 towers (2) N32-09.82 W104-49.57;
 - 175' tower N32-42.85 W104-26.63;
 - 200' tower N31-55.55 W104-24.55;
 - 225' tower N31-39.13 W105-22.33;
 - 230' tower N31-48.52 W105-28.93;
 - (aa) 250' tower N32-30.30 W103-57.82;
 - (ab) 250' tower N32-45.03 W104-17.73.
- (16) Stay above 800' AGL in the following described area to avoid conflict with 300' tall wind generators starting at: N31-46.02 W104-45.05 to N31-45.85 W104-44.25 to N31-45.13 W104-43.82 to N31-44.38 W104-44.08 to N31-43.83 W104-44.63 to N31-42.82 W104-44.63 to N31-42.13 W104-44.45 to N31-41.45 W104-44.30 to N31-41.83 W104-44.18 to N31-40.32 W104-44.10 to N31-38.78 W104-44.45 to N31-38.22 W104-44.77 to N31-38.63 W104-45.57 to N31-40.62 W104-46.58 to N31-45.58 W104-46.40 to POB.
- (17) Avoid the following mines with tall towers/buildings by 500' above the listed objects or 500' horizontally:
- mine/tower 150' AGL N32-30.05 W103-55.72
 - mine/tower 175' AGL N32-24.80 W103-56.08
 - mine/tower 175' AGL N32-29.35 W103-56.32
 - mine/tower 2100' AGL N32-32.12 W103-56.13
 - mine/tower 200' AGL N32-35.95 W103-58.48
- (18) Avoid the following described areas below 1000' AGL:
- starting at N32-14.55 W103-56.93 to N32-14.55 W103-56.90 to N32-01.55 W104-00.50 to N32-00.63 W104-04.12 to N32-08.87 W104-04.12 to N32-14.58 W103-59.30 to POB
 - starting at N33-06.40 W105-10.03 to N33-00.08 W105-09.98 to N32-55.95 W105-06.57 to N32-40.35 W105-16.73 to N32-35.05 W105-10.95 to N32-32.15 W105-10.62 to N32-32.08 W105-30.00 to N32-33.05 W105-30.00 to N32-37.18 W105-37.55 to N32-36.22 W105-38.03 to N32-34.83 W105-40.18 to N32-37.50 W105-44.95 to N32-40.55 W105-42.72 to N32-40.58 W105-38.43 to N32-57.15 W105-27.50 to N33-01.95 W105-26.78 to N33-05.03 W105-20.07 to POB
 - starting at N32-42.80 W105-48.20 to N32-40.80 W105-49.70 to N32-39.70 W105-47.70 to N32-41.80 W105-46.20 to POB
 - starting at N32-42.83 W104-17.08 to N32-32.78 W104-17.08 to N32-32.58 W104-25.02 to N32-32.60 W104-25.02 to POB
- (19) No aircraft except Tornados may operate below 500' AGL or the minimum specified for each individual route segment or higher as directed in these SOPs. Tornado aircraft are authorized to operate down to 100' AGL on/in route segments/areas not otherwise restricted by the SOPs.

FSS's Within 100 NM Radius:

ABQ

IR-195

ORIGINATING ACTIVITY: 49 OSS/OSOA, 700 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

HOURS OF OPERATION: Sunrise-0600Z++

IR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|---------------------------|
| Cross at 120 MSL to or as assigned | A | PIO 344/24 | N32°56.00' W105°20.10' |
| 10 AGL B 120 MSL to | B | PIO 004/14 | N32°45.10' W105°13.90' |
| 01 AGL B 80 MSL to | C | PIO 061/10 | N32°34.50' W105°07.50' |
| 01 AGL B 90 MSL to | D | PIO 122/29 | N32°11.10' W104°53.50' |
| 01 AGL B 98 MSL to | E | PIO 126/36 | N32°05.00' W104°50.00' |
| 01 AGL B 98 MSL to | F | PIO 183/23 | N32°09.30' W105°25.60' |
| 01 AGL B 80 MSL to | G | PIO 202/24 | N32°11.50' W105°34.50' |
| 01 AGL B 80 MSL to | H | PIO 225/17 | N32°22.50' W105°35.00' |
| 01 AGL B 125 MSL to | I | PIO 246/19 | N32°27.90' W105°39.80' |
| 01 AGL B 125 MSL to | J | PIO 256/32 | N32°30.40' W105°56.00' |
| Alternate Entry: El Paso Gap | | | |
| 10 AGL B 70 MSL to | E1 | SFL 048/27 | N31°58.50' W104°38.00' |
| 10 AGL B 98 MSL to | E | PIO 126/36 | N32°05.00' W104°50.00' |
| Alternate Entry: Talon Low | | | |
| 10 AGL B 80 MSL to | D1 | PIO 122/29 | N32°11.10' W104°53.50' |
| Alternate Exit: El Paso Gap | | | |
| 01 AGL B 98 MSL to | E | PIO 126/36 | N32°05.00' W104°50.00' |
| 10 AGL B 98 MSL to | E1 | SFL 048/27 | N31°58.50' W104°38.00' |
| 01 AGL B 70 MSL to | E2 | SFL 065/28 | N31°51.00' W104°33.30' |
| Alternate Exit: Talon Low | | | |
| 01 AGL B 98 MSL to | C | PIO 061/10 | N32°34.50' W105°07.50' |
| Alternate Exit: Zipper | | | |
| 01 AGL B 80 MSL to | G | PIO 202/24 | N32°11.50' W105°34.50' |
| 10 AGL B 80 MSL to | G1 | PIO 329/6 | N32°37.00' W105°20.50' |
| 10 AGL B 130 MSL to | G2 | PIO 315/15 | N32°44.10' W105°28.00' |

TERRAIN FOLLOWING OPERATIONS: Terrain following is authorized from Point B to Point J.

ROUTE WIDTH - Starting at N32-35 W105-10 to N32-13 W105-15 to N32-10.5 W105-00 to N32-35 W105-10 to N32-44 W105-23 to N32-34 W105-30 to N32-36 W105-38.5 to N32-44 W105-59 to N32-28 W106-00 to N32-23 W105-42.5 to N32-06 W105-41 to N32-02 W104-41 to N32-12 W104-41 to N32-52.2

W105-04.5 to N32-49 W105-12 to N32-57.6 W105-17.3 to N32-54.8 W105-22.7 to N32-44 W105-23 to point of beginning.

Special Operating Procedures:

- (1) Coordinate use requests with 49 OSS/OSOS 24 hours in advance, and weekend use requests between 1430-2230Z Mon-Fri.
- (2) From Point C to Point J route is designated maneuvering airspace and cleared for LOWAT.
- (3) Uncharted obstacles below 100' AGL are not listed.
- (4) If not scheduled on Centennial Range or for entry into R-5103B and R-5103B is active, use alternate exit ZIPER. If R-5103B is not active, route can be flown to Point J.
- (5) To schedule Centennial Range, or R-5103B, contact 49 OSS/OSOS. Comply with all range procedures listed in the current HAFB range supplement.
- (6) If scheduled into Centennial Range or R-5103B, do not enter restricted airspace until clearance is received from Centennial Range Control.
- (7) Exiting at Point J and not scheduled into Centennial Range or R-5103B or exiting at ZIPER, contact Holloman Approach on 325.3. All other exits, contact Albuquerque ARTCC on 292.15.
- (8) To transition from IR-195 to/from Talon Low MOA, both the MOA and the IR must be scheduled and procedural briefing received from 49 OSS/OSOS. Request 20 minute block time in MOA starting 5 minutes after IR entry time. Contact Albuquerque ARTCC 292.15 for clearance into Talon High MOA, prior to exceeding top of the altitude block on segment C-D, and do not exceed 12,500' MSL until cleared by Albuquerque ARTCC to do so.
- (9) Alternate Entries: Point D (from Talon Low MOA only); Point E (from IR-192, El Paso Gap only).
- (10) Alternate Exits: Point C (to Talon Low MOA only); Point E (to IR-192, El Paso Gap only); Point G (to alternate exit ZIPER only).
- (11) MARSAs applies at entry, exit and along the route. MARSAs is accomplished by scheduling and See and Avoid. Control is based on pilot's scheduled exit time.
- (12) Route conflicts with IR-134, IR-192 and IR-194.
- (13) Avoid the following sites by the altitude/distance stipulated:
 - (a) Ranch - 1,500' AGL or 1 NM: N32-10.9 W105-35.7
 - (b) Ranch - 1,000' AGL or 1 NM: N32-17.9 W105-26.045
 - (c) Town (Queen) - 1,500' AGL or 1.5 NM: N32-11.8 W104-43.9
 - (d) Cantonment area - 1,000' slant range
 - (e) Town (Dunken) - 500' slant range
- (14) Avoid the following ranch/houses by 1,000' slant range:
 - (a) N32-01.56 W104-46.5
 - (b) N32-01.6 W105-35.0
 - (c) N32-02.8 W104-45.7
 - (d) N32-40.8 W105-35.4
- (15) Avoid overflight of the following two areas below 1,000 AGL:
 - (a) N33-04.60 W105-10.30 to N33-00.08 W105-09-98 to N32-55.95 W105-06.57 to N32-40.35 W105-16.73 to N32-35.05 W105-10.95 to N32-32.15 W105-10.62 to N32-32.08 W105-30.00 to N32-33.05 W105-30.00 to N32-37.18 W105-37.55 to N32-36.22 W105-38.03 to N32-34.83 W105-40.18 to N32-37.50 W105-44.95 to N32-40.55 W105-42.72 to N32-40.58 W105-38.43 to N32-57.15 W105-27.50 to N33-01.95 W105-26.78 to N33-05.03 W105-20.06 to point of beginning.
 - (b) N32-24.8 W105-48.2 to N32-40.8 W105-49.7 to N32-39.7 W105-47.7 to N34-41.8 W105-46.2

- (16) Obstacles on route less than 100' AGL are not listed. The following objects 100' AGL or taller are within the route boundaries and not depicted on current maps:
 (a) 4 towers 150' AGL N32-04.93 W104-44-41
 (b) Tower 100' AGL N32-05.2 W105-32.5
 (c) Tower 125' AGL N32-06.39 W105-05.19
 (d) 2 towers 175' AGL N32-09.81 W104-49.56
 (e) Tower 100' AGL N32-18.7 W105-51.23
 (f) Tower 100' AGL N32-20.89 W105-46.05
 (g) Tower 100' AGL N32-21.71 W105-46.53
 (h) Tower 125' AGL N32-36.4 W105-38.03
- (17) The only aircraft authorized to operate below 500' AGL are Tornados (100' AGL minimum).

| | | |
|---------------------|----|------------|
| 05 AGL B 95 MSL to | N | NID 022/30 |
| 05 AGL B 75 MSL to | O | NID 010/38 |
| 05 AGL B 110 MSL to | P | NID 011/45 |
| 05 AGL B 110 MSL to | PA | NID 009/47 |
| 30 AGL B 120 MSL to | Q | BTY 269/39 |
| 05 AGL B 105 MSL to | R | BTY 279/38 |
| 05 AGL B 100 MSL to | S | BTY 286/44 |
| 05 AGL B 115 MSL to | T | BTY 291/65 |
| 05 AGL B 115 MSL to | U | TPH 216/40 |
| 05 AGL B 110 MSL to | V | TPH 215/22 |
| 05 AGL B 110 MSL to | W | TPH 152/8 |
| 05 AGL B 110 MSL to | X | TPH 111/13 |
| 05 AGL B 110 MSL to | Y | TPH 060/30 |
| 05 AGL B 110 MSL to | Z | TPH 068/46 |

| |
|-------------|
| N36°05.20' |
| W117°18.50' |
| N36°15.00' |
| W117°21.00' |
| N36°21.10' |
| W117°15.90' |
| N36°24.00' |
| W117°16.50' |
| N36°58.10' |
| W117°31.80' |
| N37°04.00' |
| W117°28.50' |
| N37°11.10' |
| W117°31.20' |
| N37°26.80' |
| W117°50.50' |
| N37°37.70' |
| W117°41.70' |
| N37°48.00' |
| W117°24.00' |
| N37°54.00' |
| W117°00.00' |
| N37°54.00' |
| W116°49.50' |
| N38°08.50' |
| W116°25.50' |
| N38°06.00' |
| W116°04.00' |
| N37°52.00' |
| W115°54.50' |
| N37°45.00' |
| W115°36.00' |
| N37°48.00' |
| W115°15.00' |
| N37°41.20' |
| W115°12.00' |
| N37°27.70' |
| W114°34.20' |
| N37°38.20' |
| W114°12.80' |
| N38°08.20' |
| W113°58.70' |
| N38°19.00' |
| W114°02.00' |
| N38°24.20' |
| W113°55.90' |
| N38°38.00' |
| W113°55.90' |
| N38°57.50' |
| W113°38.00' |
| N39°14.40' |
| W113°38.00' |
| N39°24.00' |
| W113°27.00' |

IR-200

ORIGINATING ACTIVITY: Commander Naval Air Warfare Center, Weapons Division, Code P529800E, (Naval Bases, Ventura County) Pt. Mugu, CA 93042-5001 DSN 351-7358, C805-989-7358.

SCHEDULING ACTIVITY: Commander Naval Air Warfare Center, Weapons Division, Code P529800E, (Naval Bases, Ventura County) Pt. Mugu, CA 93042-5001 DSN 351-7545, C805-989-7545.

HOURS OF OPERATION: Sunrise-Sunset by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | GVO 189/19 | N34°15.00' W120°15.00' |
| 30 AGL B 70 MSL to | B | GVO 269/13 | N34°35.30' W120°20.60' |
| 30 AGL B 60 MSL to | C | GVO 338/14 | N34°46.30' W120°07.20' |
| 30 AGL B 100 MSL to | D | GVO 020/10 | N34°40.20' W119°58.10' |
| 14 AGL B 100 MSL to | DA | GVO 047/19 | N34°40.50' W119°45.00' |
| 11 AGL B 100 MSL to | DB | GVO 063/46 | N34°40.20' W119°10.00' |
| 11 AGL B 100 MSL to | E | GMN 117/12 | N34°40.10' W118°41.00' |
| 20 AGL B 90 MSL to | F | LHS 091/3 | N34°40.10' W118°30.90' |
| 15 AGL B 90 MSL to | G | LHS 011/9 | N34°48.70' W118°30.00' |
| 05 AGL B 100 MSL to | H | LHS 008/23 | N35°02.50' W118°23.50' |
| 05 AGL B 110 MSL to | I | LHS 016/29 | N35°05.70' W118°16.50' |
| 05 AGL B 85 MSL to | J | LHS 028/47 | N35°15.00' W117°55.50' |
| 05 AGL B 85 MSL to | K | NID 166/17 | N35°24.00' W117°42.00' |
| 05 AGL B 85 MSL to | L | NID 101/9 | N35°37.00' W117°31.00' |
| 05 AGL B 85 MSL to | M | NID 010/12 | N35°52.00' W117°35.00' |

| | | |
|---------------------|----|------------|
| 05 AGL B 110 MSL to | AA | TPH 083/54 |
| 05 AGL B 115 MSL to | AB | TPH 086/70 |
| 05 AGL B 115 MSL to | AC | ILC 221/49 |
| 05 AGL B 115 MSL to | AD | ILC 213/51 |
| 05 AGL B 120 MSL to | AE | ILC 174/48 |
| 05 AGL B 115 MSL to | AF | ILC 151/38 |
| 05 AGL B 120 MSL to | AG | ILC 093/21 |
| 05 AGL B 120 MSL to | AH | ILC 061/17 |
| 05 AGL B 120 MSL to | AI | ILC 051/24 |
| 05 AGL B 120 MSL to | AJ | ILC 027/32 |
| 05 AGL B 120 MSL to | AK | ILC 024/55 |
| 05 AGL B 120 MSL to | AL | DTA 250/53 |
| 05 AGL B 105 MSL to | AM | DTA 262/44 |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to R; 7 NM left and 4 NM right of centerline R to S; 7 NM either side of centerline from S to T; 4 NM either side of centerline from T to AF; 7 NM left and 4 NM right of centerline AF to AG; 7 NM left

IR ROUTES

and 10 NM right of centerline AG to AI; 4 NM either side of centerline from AI to AM.

Special Operating Procedures:

- (1) This route to be used only in direct support of test programs authorized by PMTC or AFFTC.
- (2) Alternate Entry/Exits: G, H, O, R, S, V, W, X, Z, AA, AB, AD, AE, AF, AI and AK.
- (3) Remain clear of Sisquoc Condor Sanctuary between D and E by 1 mile laterally or 3000' AGL.
- (4) Aircraft shall adhere to the following radio procedures:
 - (a) Contact Edward's Approach Control on 348.7.
 - (b) Monitor Oakland ARTCC on 319.8 after S.
 - (c) Contact Nellis Control (when operational) on 392.1 at Z, other times monitor Los Angeles ARTCC on 343.6.
 - (d) Monitor Salt Lake City ARTCC on 360.8 after AG.
- (5) Unmanned aerospace vehicles will avoid charted airports by 1500' vertically or 3 NM laterally.
- (6) Route is designated for MARSAs operations established by coordinated scheduling.

FSS's Within 100 NM Radius:

CDC, HHR, RAL, RNO, SAN

IR-203

ORIGINATING ACTIVITY: Commander Strike Fighter Wing, US. Pacific Fleet, 001 (K) Street, Room 121, NAS Lemoore, CA 93246-5022 DSN 949-1034, C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|----|--------------|---------------------------|
| As assigned to | A | AVE 056/1 | N35°39.00' W119°58.00' |
| 80 MSL B 100 MSL to | B | MQO 303/10 | N35°23.00' W120°54.00' |
| 80 MSL B 100 MSL to | C | BSR 069/25 | N36°13.00' W121°08.00' |
| 80 MSL B 100 MSL to | D | SNS 287/18 | N36°50.00' W121°55.00' |
| 110 MSL B 120 MSL to | E | PXN 305/26 | N37°03.00' W121°07.00' |
| 110 MSL B 120 MSL to | F | LIN 009/13 | N38°16.00' W120°53.00' |
| 110 MSL B 120 MSL to | G | CZQ 021/8 | N37°00.00' W119°42.00' |
| 110 MSL B 120 MSL to | H | NLC 068/47 | N36°25.00' W119°00.00' |

ROUTE WIDTH - 6 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Exit: Point F and G.
- (2) Tie-in FSS: Rancho Murieta (RIU).
- (3) Altitude data is a block from which Oakland Center will assign an altitude.
- (4) Radar training route. Simulated dive attacks not authorized.

- (5) Users of this route shall ensure that Hunter and Foothill MOA's are scheduled for transit with COMSTRKFIGHTWINGPAC.
- (6) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (7) Remain clear of R-2513 between B and C.
- (8) Contact Oakland Center on 353.8 prior to H for further IFR clearance.
- (9) Be alert for C-5/C-141 aircraft flying 250 KCAS at 1000' AGL on a crossing route

FSS's Within 100 NM Radius:

HHR, OAK, RNO, RAL, RIU

IR-206

ORIGINATING ACTIVITY: Commander Naval Air Warfare Center, Weapons Division, Code P3524, NAWS, Pt. Mugu, CA 93042-5008 DSN 351-7527, C805-989-7527.

SCHEDULING ACTIVITY: Commander Naval Air Warfare Center, Weapons Division, Code P3506, NAWS, Pt. Mugu, CA 93042-5008 DSN 351-7545, C805-989-7545.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| 05 AGL B 110 MSL to (exit IR-200 at Pt V) | A | TPH 215/22 | N37°48.00' W117°24.00' |
| 05 AGL B 110 MSL to | B | TPH 300/29 | N38°23.00' W117°27.00' |
| 05 AGL B 140 MSL to | C | MVA 093/11 | N38°30.00' W117°48.50' |
| 05 AGL B 140 MSL to | D | MVA 012/8 | N38°41.00' W117°57.00' |
| 05 AGL B 85 MSL to | E | MVA 329/25 | N38°58.00' W118°09.70' |
| 05 AGL B 85 MSL to | F | MVA 320/38 | N39°09.00' W118°21.50' |
| 05 AGL B 85 MSL to | G | MVA 298/49 | N39°09.00' W118°46.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline A to B; 3 NM either side of centerline B to G.

Special Operating Procedures:

- (1) Airspeeds are subsonic.
- (2) This route to be used only in support of Test missions authorized by PMTC or AAFTC in conjunction with IR-200.
- (3) Unmanned aerospace vehicles will avoid charted airports by 1500' vertically or 3 NM laterally.
- (4) Alternate Exits: D and F.
- (5) Aircraft shall adhere to the following radio procedures:
 - (a) Contact Oakland ARTCC on 319.8 MHZ at Point S on IR-200.
 - (b) Contact Fallon desert control on 322.35 MHZ at Point D on IR-206.

- (6) Prior coordination with NAS Fallon Range Scheduling required by user. (DSN 890-2416/2418, C775-426-2416/2418).
- (7) Route is designated for MARSA operations established by coordinated scheduling.

FSS's Within 100 NM Radius:

RIU, RNO

IR-207

ORIGINATING ACTIVITY: Commander Strike Fighter Wing, US. Pacific Fleet, 001 (K) Street, Room 121, NAS Lemoore, CA 93246-5022 DSN 949-1034, C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|---------------------------|
| Cross at 150 MSL to or as assigned | A | SNS 227/18 | N36°32.00' W121°56.00' |
| 80 MSL B 150 MSL to | B | SNS 270/35 | N36°50.00' W122°18.00' |
| 30 MSL B 80 MSL to | C | OSI 187/26 | N37°00.00' W122°30.00' |
| 30 MSL to | D | OSI 235/28 | N37°15.00' W122°50.00' |
| 30 MSL to | E | OSI 282/38 | N37°42.00' W122°59.00' |
| 30 MSL to | F | PYE 176/14 | N37°51.00' W122°56.00' |
| 30 MSL B 50 MSL to | G | PYE 238/15 | N38°01.00' W123°10.00' |
| 50 MSL to | H | PYE 315/25 | N38°27.00' W123°07.00' |
| 50 MSL B 90 MSL to | I | PYE 331/33 | N38°37.00' W123°01.00' |
| 90 MSL to | J | ENI 077/24 | N39°02.00' W122°45.00' |
| 90 MSL to | K | ENI 064/36 | N39°09.00' W122°31.00' |
| 60 MSL B 90 MSL to | L | ENI 060/44 | N39°14.00' W122°21.00' |
| 60 MSL to | M | RBL 110/42 | N39°40.00' W121°31.00' |
| 05 AGL B 100 MSL to | N | RBL 063/51 | N40°14.00' W121°08.00' |
| 05 AGL B 100 MSL to | O | RBL 049/72 | N40°33.00' W120°47.00' |
| 05 AGL B 130 MSL to | P | LLC 261/45 | N40°12.50' W119°32.50' |
| 02 AGL B 120 MSL to | PA | LLC 251/31 | N40°06.00' W119°15.00' |
| 02 AGL B 100 MSL to | Q | LLC 178/15 | N39°53.00' W118°39.50' |
| 02 AGL B 120 MSL to | R | LLC 096/11 | N40°03.50' W118°22.00' |

| | | | |
|---------------------|---|------------|---------------------------|
| 02 AGL B 120 MSL to | S | LLC 092/21 | N40°01.00' W118°09.00' |
| 02 AGL B 120 MSL to | T | LLC 110/19 | N39°56.00' W118°14.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized from M to P. Radar navigation activity from A to M and from P to T.

ROUTE WIDTH - 2.5 NM either side of centerline from A to H; 5 NM either side of centerline from H to P; 2 NM either side of centerline from P to T.

Special Operating Procedures:

- (1) Alternate Entry: G and M.
- (2) Alternate Exit: Q, R and S.
- (3) Monitor assigned Oakland Center frequency for entire route. After O, expect to monitor Oakland Center 269.3/134.45.
- (4) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (5) Tie-in FSS: Rancho Murieta (RIU).
- (6) Radar training route. Simulated dive attacks not authorized.
- (7) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset to sunrise.
- (8) Reserving this route does not authorize access to the Carson MOA or R-4813 between PA and T. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for airspace entry authorization.
- (9) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 322.35/126.6 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (10) Minimum altitude does not guarantee terrain clearance on all route segments. Pilots flying IMC are responsible for maintaining adequate terrain clearance.
- (11) Scheduling this route does not authorize entry into the China MOA between M and N. See the AP/1A for MOA scheduling point of contact.
- (12) Remain left of route centerline between N and O to avoid the town of Westwood.
- (13) Remain left of route centerline between O and P to avoid the town and airport of Susanville and R-2530.
- (14) Remain below 100 MSL between PA and Q to deconflict with V6.
- (15) Be alert for C-5/C-141 aircraft flying 250 KCAS at 1000' AGL on a crossing route.

FSS's Within 100 NM Radius:

HHR, OAK, RNO, RIU

IR-211

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462. Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

IR ROUTES

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | LAX 262/54 | N34°02.00' W119°31.00' |
| 02 AGL B 30 MSL to | B | RZS 104/23 | N34°20.00' W119°22.00' |
| 10 AGL B 50 MSL to | C | RZS 049/23 | N34°41.00' W119°21.00' |
| 02 AGL B 80 MSL to | D | GMN 121/4 | N34°45.00' W118°48.00' |
| 02 AGL B 80 MSL to | E | GMN 079/13 | N34°47.00' W118°36.00' |
| 02 AGL B 80 MSL to | F | GMN 040/32 | N35°06.00' W118°19.00' |
| 02 AGL B 80 MSL to | G | GMN 039/52 | N35°18.00' W118°00.00' |
| 02 AGL B 80 MSL to | H | GMN 040/58 | N35°20.00' W117°53.00' |
| 02 AGL B 80 MSL to | I | DAG 294/54 | N35°32.00' W117°26.00' |

TERRAIN FOLLOWING OPERATIONS: Terrain following operations are not authorized on the route segment from B to C.

ROUTE WIDTH - 2 NM either side of centerline from A to F;
4 NM either side centerline from F to I.

Special Operating Procedures:

- (1) Alternate Entry Point C.
- (2) Alternate Exit Point F.
- (3) Aircraft will remain VMC at all times on this route.
- (4) CAUTION: Tower extending to 1545' MSL located 3 NM West of Point A.
- (5) Maintain 3000' AGL within 3 NM of Conover Airport on Point C to D segment and White Oaks Lodge Airport Point E to F segment.
- (6) Forest Service Heliport located NW corner of Lake Casitas under route segment B to C.
- (7) Aircraft shall contact High Desert TRACON for traffic advisories at Point E on 348.7.
- (8) Comply with R-2508 restrictions. Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1 California, Flight Hazards, R-2508.
- (9) Aircraft will be VFR. See and Avoid with other R-2508 complex users within the lateral confines of R-2508.
- (10) Contact High Desert TRACON on 348.7 for return clearance to El Toro.
- (11) Special coordination instructions -Route conflicts with VR-1265 between Points C and E. VR-1257 at Point E, VR-1262 between Points E and G. VR-232 at Point E, IR-200 at Point C and between Points E and F/H and I, IR-425 at Point C and between Point E and F/H and I, VR-236 between E and H, VR-1293 between Points E and F, IR-256 between Points E and G, IR-297 between Points E and G, VR-1206 at Point E, VR-294 at Point H, IR-298 between Point F and G, and VR-1216 at Point G.
- (12) Separation Criteria - Scheduling coordinated by user for IR conflicts and See and Avoid for VR conflicts.
- (13) Maintain at or above 3000' AGL when within 5 NM of Mojave Airport (between Points F and G).

FSS's Within 100 NM Radius:

HHR, RAL, SAN

IR-212

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462.
Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | DAG 156/42 | N34°16.00' W116°27.00' |
| 02 AGL B 70 MSL to | B | DAG 158/12 | N34°46.00' W116°33.00' |
| 02 AGL B 70 MSL to | C | DAG 083/20 | N34°55.00' W116°11.00' |
| 02 AGL B 70 MSL to | D | DAG 047/38 | N35°16.00' W115°54.00' |
| 02 AGL B 80 MSL to | E | DAG 005/43 | N35°38.00' W116°17.00' |
| 30 AGL B 80 MSL to | F | DAG 339/46 | N35°44.00' W116°41.00' |
| 02 AGL B 80 MSL to | G | DAG 325/48 | N35°43.00' W116°55.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to D and F.

ROUTE WIDTH - 5 NM either side of centerline from A to C;
3 NM either side of centerline from C to G.

Special Operating Procedures:

- (1) Aircraft will remain VMC at all times on this route.
- (2) Comply with R-2501 and R-2502 restrictions.
- (3) Cross a point 15 miles south of Pt. B at or below 7000' MSL.
- (4) Upon entering R-2508 complex, aircraft will transmit in the blind on 315.9 and continue to monitor while in the complex. Aircrews transiting R-2508 complex are required to see FLIP, Area Planning, AP/1, California, Flight Hazards, R-2508.
- (5) Contact Edwards RAPCON on 291.6 for return clearance after exit at F or G.
- (6) Special Coordination Instructions - Route conflicts with VR-1217 between Points A and C, IR-213 between Points A and C, IR-217 between Points A and C, VR-1218 between Points A and B/C and D, VR-1265 between Points B and C, VR-1214 between Points D and E, and VR-1215 between Points E and G.
- (7) Separation Criteria-Scheduling coordination by user for IR conflicts and See and Avoid for VR conflicts.

FSS's Within 100 NM Radius:

HHR, RAL, RNO, SAN

IR-213

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462.
Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | DAG 156/42 | N34°16.00' W116°27.00' |
| 02 AGL B 70 MSL to | B | DAG 158/12 | N34°46.00' W116°33.00' |
| 02 AGL B 70 MSL to | C | DAG 083/20 | N34°55.00' W116°11.00' |
| 02 AGL B 70 MSL to | D | GFS 307/26 | N35°28.00' W115°30.00' |
| 15 AGL B 70 MSL to | E | GFS 007/14 | N35°21.00' W115°04.00' |
| 02 AGL B 70 MSL to | F | GFS 091/18 | N35°03.00' W114°50.00' |
| 02 AGL B 70 MSL to | G | EED 346/17 | N35°03.00' W114°28.00' |
| 02 AGL B 80 MSL to | H | EED 012/19 | N35°03.00' W114°18.00' |
| 02 AGL B 80 MSL to | I | EED 075/31 | N34°46.00' W113°51.00' |
| 02 AGL B 80 MSL to | J | EED 098/43 | N34°28.90' W113°40.00' |
| 02 AGL B 60 MSL to | K | PKE 084/1 | N34°06.00' W114°40.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to C and from E to K.

ROUTE WIDTH - 5 NM either side of centerline from A to F; 2 NM left and 5 NM right of centerline from F to G; 3 NM either side of centerline from G to I; 1 NM left and 3 NM right of centerline from I to J; 2 NM left and 3 NM right of centerline from J to K.

Special Operating Procedures:

- (1) Aircraft will remain VMC at all times on this route.
- (2) Avoid airports along route by 2000' or 3 NM.
- (3) Comply with R-2501 restrictions.
- (4) Cross a point 15 miles south of B at or below 7000' MSL.
- (5) Attempt contact with Los Angeles Center at D on 360.65 .
- (6) Do not fly between 1000' AGL within 4 NM of Parker Dam.
- (7) Contact Los Angeles Center on 285.6 at K for return clearance.
- (8) Special Coordination Instructions - Route conflicts with IR-212 between Point A and C, IR-217 between Point A and F, VR-1217 between Points A and C, VR-1218 between Points A and B/C and D, VR-1265 between Points B and D/F and H, VR-1225 between Points C and D, VR-299 between Points F and G/I and J, VR-247 between Points G and H, VR-283 between Points G and H/I and J, VR-1220 at Point H and between Points I and J, VR-1203 between Points H and

- I, IR-254 at Point I, VR-1268 at Point H and between I and J, IR-255 between Points I and J, IR-252 between Points I and J, VR-296 at Point J, and IR-214 between Points H and J.
- (9) Separation Criteria-scheduling coordinated by user for IR conflicts and See and Avoid for VR conflicts.
- (10) Avoid overflight of Gene Wash Airfield (between Points J and K) by 3NM when below 3000' AGL.
- (11) Critical bald eagle breeding and nesting areas below the Baghdad 1 MOA and to the north toward Mohan Peak (between Points I and J, left of centerline), mid Dec through mid Jun.
- (12) CAUTION: 100' tower located at N35-29-27 W115-33-27W between Points C and D 3.5 NM NW of Point D.
- (13) CAUTION: Antenna Farm located at N35-01-58 W114-21-57 between Points G and H approximately 4.5 NM past Point G; 1 NM right of centerline tallest 164'.

FSS's Within 100 NM Radius:

HHR, PRC, RAL, RNO, SAN

IR-214

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462.
Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Even numbered days only

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | PKE 235/35 | N33°54.00' W115°20.00' |
| 02 AGL B 70 MSL to | B | PKE 107/12 | N34°00.00' W114°29.00' |
| 02 AGL B 60 MSL to | C | PKE 076/46 | N34°05.00' W113°46.00' |
| 02 AGL B 60 MSL to | D | DRK 221/40 | N34°19.00' W113°08.00' |
| 02 AGL B 60 MSL to | E | DRK 251/25 | N34°40.00' W112°59.00' |
| 02 AGL B 80 MSL to | F | DRK 281/34 | N34°56.50' W113°06.50' |
| 02 AGL B 80 MSL to | G | EED 075/31 | N34°46.00' W113°51.00' |
| 02 AGL B 60 MSL to | H | EED 098/43 | N34°28.90' W113°40.00' |
| 02 AGL B 60 MSL to | I | PKE 084/1 | N34°06.00' W114°40.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 4 NM either side of centerline A to C; 1 NM left and 4 NM right of centerline C to F; 1 NM either side of centerline F to G; 1 NM left and 3 NM right of centerline G to H; 2 NM left and 4 NM right of centerline H to I.

Special Operating Procedures:

- (1) Aircraft shall remain VMC at all times when on this route.

IR ROUTES

- (2) Do not fly below 2000' AGL within 3NM of Vital Junction and Parker Airports.
- (3) Do not fly below 1000' AGL within 4 NM of Parker Dam.
- (4) Cross a Point 9 NM South of G at or below 6000' MSL
- (5) Report at F to Albuquerque on 298.9. if unable, contact Prescott FSS.
- (6) Contact Los Angeles Center 285.6 at Parker for return clearance to El Toro.
- (7) Special Coordination Instructions-Route conflicts with VR-1265 near A, IR-217 between Points A and B, IR-255 between Points A and B, IR-250 between Points A and B, IR-252 between Points A and B, VR-296 between Points B and C, VR-299 between Points B and C/H and I. VR-1267 at Point C, VR-1268 between C and G/H and I, IR-283 at Point C and between Points H and I, VR-1220 at Point C and between Points D and F/H and I, IR-272 between Points C and D, VR-245 between Points C and D, VR-1203 between Points C and D/G and H, VR-242 between Points C and D, VR-225 between Points D and F, IR-254 between Points D and F and at Point H, and IR-213 between Points G and H.
- (8) Avoid Gene Wash Airfield (between Points H and I) by 3 NM when below 3000' AGL.
- (9) Critical bald eagle breeding and nesting areas in the vicinity of the Alamo Lake (N34 16.0 W113 34.0) below the Baghdad 1 MOA and to the north toward Mohan Peak (Point F) mid-Dec thru mid-Jun. recommend 1500' AGL when crossing Aquarius Mountains (between Points F and G).

FSS's Within 100 NM Radius:

HHR, PRC, RAL, RNO, SAN

IR-216

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462.
Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Even numbered days- daylight only

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | TNP 042/4 | N34°09.00' W115°42.00' |
| 02 AGL B 70 MSL to | B | TNP 063/15 | N34°10.00' W115°28.00' |
| 02 AGL B 70 MSL to | C | TNP 121/20 | N33°52.00' W115°29.00' |
| 02 AGL B 70 MSL to | D | TRM 070/30 | N33°41.00' W115°34.00' |
| 02 AGL B 70 MSL to | E | TRM 088/35 | N33°31.00' W115°28.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

- (1) R-2507 restrictions to be complied with after Point E.

- (2) Aircraft shall remain VMC at all times.
- (3) Contact Yuma Control on 274.0 for return clearance to El Toro after completing operations in R2507.
- (4) Mandatory reporting Point at E. Contact Los Angeles Center on 285.6.
- (5) Special Coordination Instructions - Route conflicts with VR-1265 between Points A and B, IR-250 at Point A, VR-289 between Points A and D, IR-248 between Points C and D, VR-296 at Point D, IR-218 between Points D and E, VR-1266 between Points D and E, and IR-217 between Points D and F.
- (6) Separation Criteria - Scheduling coordinated by user for IR conflicts and See and Avoid for VR conflicts.
- (7) Cross Point B at or above 7000' MSL.

FSS's Within 100 NM Radius:

HHR, RAL, RNO, SAN

IR-217

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462.
Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | DAG 156/42 | N34°16.00' W116°27.00' |
| 02 AGL B 70 MSL to | B | DAG 158/12 | N34°46.00' W116°33.00' |
| 02 AGL B 70 MSL to | C | DAG 083/20 | N34°55.00' W116°11.00' |
| 02 AGL B 70 MSL to | D | GFS 307/26 | N35°28.00' W115°30.00' |
| 15 AGL B 70 MSL to | E | GFS 007/14 | N35°21.00' W115°04.00' |
| 02 AGL B 70 MSL to | F | GFS 091/18 | N35°03.00' W114°50.00' |
| 02 AGL B 60 MSL to | G | PKE 279/22 | N34°15.00' W115°05.00' |
| 02 AGL B 70 MSL to | H | TNP 113/30 | N33°48.00' W115°18.00' |
| 02 AGL B 70 MSL to | I | TRM 099/23 | N33°29.00' W115°44.00' |
| 02 AGL B 70 MSL to | J | TRM 152/15 | N33°23.00' W116°05.00' |
| 02 AGL B 70 MSL to | K | TRM 154/31 | N33°07.00' W116°01.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to D and from E to K.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Exit: I.
- (2) Alternate Entry: F and G
- (3) Aircraft will remain VMC at all times on this route.

- (4) Avoid airports along route by 2000' or 3 NM.
- (5) Comply with R-2501 restrictions.
- (6) Cross a point 15 miles south of B at or below 7000' MSL.
- (7) Attempt contact with Los Angeles ARTCC at D on 360.65.
- (8) Contact Los Angeles Center on 285.6 for exit at I or 291.7 for exit at K for return clearance.
- (9) Special Coordination Instructions - Route conflicts with IR-212 between Points A and C, IR-217 between A and F, VR-1217 between Points A and C, VR-1218 between Points A and B/C and D. VR-1265 between Points B and D/F and H, VR-1225 between Points C and D/F and G, IR-248 between Points G and I, IR-255 between Points G and H, IR-214 between G and H, VR-296 between Points H and I, IR-218 between Points H and I, IR-216 between Points H and I, VR-1266 between Points H and I, VR-289 between Points I and K, IR-252 between Points F and G, and IR-288 between Points I and K.
- (10) Light aircraft and glider activity at Desert Sky Ranch N33-28-52 W115-52-24.
- (11) Separation Criteria - Scheduling coordinated by user for IR conflicts and See and Avoid for VR conflicts.
- (12) When alternate entry Point G is used, cross a point 15 NM north of H at or below 7000' MSL.
- (13) CAUTION: 112' Radio Tower located N33-39-20 W115-27-10 (Chuckwalla Peak, 3766' MSL, approximately 9 NM past Point H, 2 NM left of centerline).
- (14) Contact Yuma Range Control on 274.0 for clearance into R-2507 if exiting at Point I.
- (15) CAUTION: 199' Radio Tower located at N33-43-00 W115-24-32 between Points H and I approximately 7 NM past Pt. H 1.5 NM left of centerline.
- (16) CAUTION: Radio Tower located at N34-08-44 W115-07-15 between Point G and H approximately 8 NM past Pt. G 1 NM left of centerline.
- (17) CAUTION: 100' Radio Tower located at N35-29-27 W115-33-27 3.5 NM NW of Point D.

FSS's Within 100 NM Radius:

HHR, PRC, RAL, RNO, SAN

IR-218

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462.
Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | TNP 165/33 | N33°34.00' W115°46.00' |
| 05 AGL B 60 MSL to | B | BLH 339/17 | N33°53.00' W114°48.00' |
| 05 AGL B 60 MSL to | C | BLH 069/27 | N33°39.00' W114°13.00' |
| 45 MSL B 50 MSL to | D | BXK 269/13 | N33°30.00' W113°04.00' |
| 35 MSL B 40 MSL to | E | GBN 245/27 | N32°52.00' W113°12.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 35 MSL B 40 MSL to | F | BZA 073/42 | N32°48.00' W113°46.00' |
| 05 AGL B 40 MSL to | G | BZA 089/26 | N32°40.00' W114°06.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to C and from F to G.

ROUTE WIDTH - 5 NM either side of centerline except, 2 NM either side of centerline between Pts. E and F.

Special Operating Procedures:

- (1) Aircraft will remain VMC at all times on this route.
- (2) Maintain at or above 2000' AGL within 3 NM of all airports.
- (3) Route user must comply with altitudes listed to avoid conflict with users of IR-266 and 500' vertical separation provided at route intersections.
- (4) Report D to Prescott FSS, if two-way communications cannot be maintained with Albuquerque ARTCC on 307.3.
- (5) Comply with R-2301 restrictions.
- (6) Contact Yuma Approach on 314.0 or 374.8 for clearance to El Toro if not operating in R-2301.
- (7) Contact Yuma Range Control on 274.0 inside the R-2301 for return clearance to El Toro. Contact prior to exiting R-2301.
- (8) Special Coordination Instructions - Route conflicts with IR-248 between Points A and B, VR-289 between A and B, VR-296 between Points A and B, IR-216 between Points A and B, IR-217 between Points A and B, VR-1265 between Points A and B, VR-1267 between Points A and B/C and D/E and F, VR-1268 between Point A and B/C and D/E and F, IR-250 at Point B, VR-231 between C and D/E and F, VR-283 between C and D/E and F, VR-1220 between Points C and D, E and F, IR-272 between Points C and E, VR-242 between Points C and E, VR-225 between Points C and F, VR-1207 between Points D and F, and VR-245 between Points C and D/E and F.
- (9) Separation Criteria-Scheduling coordinated by user for IR conflicts and See and Avoid for VR conflicts.
- (10) Cross a point 15 NM southeast of B at or below 6000' MSL.
- (11) CAUTION: 112' Radio Tower located N33-39-20 W115-27-10 (Chuckwalla Peak, 3766' MSL approximately 16 NM past Point A 1.2 NM right of centerline).
- (12) CAUTION: 199' Radio Tower located N33-43-00 W115-23-22 between Points A and B approximately 20 NM past Point A 2 NM left of centerline.

FSS's Within 100 NM Radius:

HHR, PRC, RAL, RNO, SAN

IR-234

ORIGINATING ACTIVITY: Commander AFFTC, 412 OSS/OSAA, 235 S Flightline Rd, Edwards AFB, CA 93523-6460 DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: Commander AFFTC, 412 OSS/OSR, 300 E Yeager Blvd, Edwards AFB, CA 93524 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: Daylight hours by NOTAM

IR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------|----|--------------|---------------------------|
| As assigned to | A | TPH 068/46 | N38°06.00' W116°04.00' |
| SFC B 105 MSL to | B | TPH 052/43 | N38°17.00' W116°11.00' |
| SFC B 115 MSL to | C | TPH 044/48 | N38°25.00' W116°08.00' |
| SFC B 115 MSL to | D | TPH 025/78 | N39°00.00' W115°55.00' |
| SFC B 115 MSL to | E | BQU 137/51 | N40°00.00' W115°17.00' |
| SFC B 115 MSL to | F | BVL 199/50 | N40°03.00' W114°24.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 7 NM either side of centerline from A to B; 10 NM either side of centerline from B to D; 8 NM either side of centerline from D to E; 4 NM either side of centerline from E to F.

Special Operating Procedures:

- (1) This route authorized in direct support of AFFTC's test program.
- (2) Aircrew entering at A shall schedule the Reveille MOA with the Range Management Office at Nellis AFB, NV (DSN 348-4710). If within 2 days of scheduled operation, contact Blackjack (DSN 682-3537).
- (3) Approaching the Reveille MOA, aircrew shall contact Nellis Control 343.0 for clearance into the MOA.
- (4) Aircrew exiting at F shall schedule the Gandy MOA with the 388th Ranges Range Control Office at Hill AFB, UT (DSN 777-9385 for future use or 777-9386 for same day operations).
- (5) Aircrew shall contact Clover 339.0, 301.7, 118.45, or 134.1 prior to entering the Gandy MOA.
- (6) Alternate Entry/Exit: C.
- (7) Route is designated for MARSAs operations established by coordinated scheduling.
- (8) Special Coordination Instructions: Route conflicts with IRs 200-235-237-238-286-425, VRs 1253-1259-1260-1406 between A and B, IRs 235-237-238 between B and C, IRs 235-237-238 between C and D, IRs 235-293, VRs 209-1253-1260 between D and E. Scheduling coordination required by user for MOA entry and IR conflicts and See and Avoid for VR conflicts.
- (9) Aircrew will obtain a copy of the Cruise Missile Routes and Procedures Letter of Agreement from Edwards AFB Center Scheduling and follow these procedures.

FSS's Within 100 NM Radius:

CDC, RNO

IR-235

ORIGINATING ACTIVITY: Commander AFFTC, 412 OSS/OSAA, 235 S Flightline Rd, Edwards AFB, CA 93523-6460 DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: Commander AFFTC, 412 OSS/OSR, 300 E Yeager Blvd, Edwards AFB, CA 93524 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------|----|--------------|---------------------------|
| As assigned to | A | BVL 199/50 | N40°03.00' W114°24.00' |
| SFC B 115 MSL to | B | BQU 137/51 | N40°00.00' W115°17.00' |
| SFC B 115 MSL to | C | TPH 025/78 | N39°00.00' W115°55.00' |
| SFC B 115 MSL to | D | TPH 044/48 | N38°25.00' W116°08.00' |
| SFC B 115 MSL to | E | TPH 052/43 | N38°17.00' W116°11.00' |
| SFC B 105 MSL to | F | TPH 068/46 | N38°06.00' W116°04.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 8 NM either side of centerline from B to C; 10 NM either side of centerline from C to E; 7 NM either side of centerline from E to F.

Special Operating Procedures:

- (1) This route authorized in direct support of AFFTC test program.
- (2) Aircrew entering at A shall schedule the Gandy MOA with the 388th Ranges Range Control Office at Hill AFB, UT (DSN 777-9385 for future use or 777-9386 for same day operations).
- (3) Approaching the Gandy MOA, aircrew shall contact Clover on 339.0, 301.7, 118.45, or 134.1 prior to entry for clearance into the MOA.
- (4) Aircrew exiting at F shall schedule the Reveille MOA with the Range Management Office at Nellis AFB, NV (DSN 348-4710). If within 2 days of scheduled operation, contact Blackjack (DSN 682-3537).
- (5) Aircrew shall contact Nellis Control on 343.0 for clearance into the Reveille MOA.
- (6) Alternate Entry/Exit: Point D.
- (7) Route is designated for MARSAs operations established by coordinated scheduling.
- (8) Special Coordination Instructions: Route conflicts with IR-234 from A to F, IR-293, VRs 1253-1260 between B and C, IRs 237-238 between C and D, IRs 237-238 between D and E, IRs 200-237-238-286-425, VRs 1253-1260-1406 between E and F. Scheduling coordination by user for MOA entry, IR conflicts and See and Avoid for VR conflicts.
- (9) Aircrew will obtain a copy of the Cruise Missile Routes and Procedures Letter of Agreement from Edwards AFB Center Scheduling and follow these procedures.

FSS's Within 100 NM Radius:

CDC, RNO

IR-236

ORIGINATING ACTIVITY: Commander AFFTC, 412 OSS/OSAA, 235 S Flightline Rd, Edwards AFB, CA 93523-6460 DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: Commander AFFTC, 412
OSS/OSR, 300 E Yeager Blvd, Edwards AFB, CA 93524 DSN
527-4110, C661-277-4110.

HOURS OF OPERATION: 0600-2200 local, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | EDW 021/11 | N35°07.50' W117°36.30' |
| 02 AGL B 50 MSL to | B | EDW 264/14 | N35°01.30' W118°01.30' |
| 02 AGL B 55 MSL to | C | EDW 285/23 | N35°10.50' W118°08.50' |
| 02 AGL B 105 MSL to | D | EHF 072/34 | N35°31.30' W118°23.80' |
| 02 AGL B 100 MSL to | E | EHF 058/32 | N35°38.80' W118°28.80' |
| 02 AGL B 100 MSL to | F | EHF 045/35 | N35°47.40' W118°28.80' |
| 02 AGL B 105 MSL to | G | TTE 049/30 | N36°07.60' W118°27.30' |
| 02 AGL B 145 MSL to | H | BIH 139/61 | N36°28.00' W117°49.30' |
| 02 AGL B 135 MSL to | I | BIH 142/29 | N36°56.20' W118°08.00' |
| 02 AGL B 130 MSL to | J | BIH 144/21 | N37°03.00' W118°12.50' |
| 02 AGL B 130 MSL to | K | BIH 116/26 | N37°05.60' W117°57.30' |
| 02 AGL B 90 MSL to | L | BIH 101/34 | N37°07.30' W117°43.40' |
| 02 AGL B 100 MSL to | M | BTY 247/52 | N36°41.80' W117°48.70' |
| 02 AGL B 100 MSL to | N | BTY 217/40 | N36°24.10' W117°24.50' |
| 02 AGL B 75 MSL to | O | NID 029/29 | N36°02.00' W117°16.10' |
| 02 AGL B 80 MSL to | P | NID 079/30 | N35°38.50' W117°04.50' |
| 02 AGL B 75 MSL to | Q | EDW 035/26 | N35°15.80' W117°19.80' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 2 NM either side of centerline from A to D; 3 NM left and 1 NM right of centerline from D to F; 2 NM either side of centerline from F to I; 1 NM left and 4 NM right of centerline from I to K; 2 NM either side of centerline from K to Q.

Special Operating Procedures:

- (1) Route available only when IMC exists along portions of the route.
- (2) Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1, California, Flight Hazards, R-2508. Users must schedule into complex MOAs/restricted areas when these areas are active.
 - (a) R-2508 MOAs-Contact CCF at DSN 527-2508.
 - (b) R-2515 MOAs-Contact AFFTC scheduling DSN 527-4110.

- (c) R-2524 MOAs-Contact NAWC Echo Range scheduling DSN 437-9131.
- (3) Points B to C: Avoid Mojave Airport Class D airspace. Avoid California City Airport by 3 miles lateral.
- (4) In R-2515, prior to Point A, contact Sport (343.7) for route entry.
- (5) Point C, Alternate Entry. Contact Joshua Approach 348.7 for IFR clearance if using this as initial entry point.
- (6) Point C to D, avoid Kelso Valley Airport by 3 miles lateral or 1500' vertical.
- (7) Point D to F, fly 2 NM left of centerline to avoid the Isabella Dam, surrounding communities and Kernville.
- (8) Point N, Alternate Exit. If R-2524 not available, start climb on course to arrive at NID 030/29 at 13,000' MSL. Hold NE inbound on the 030 radial between 40 and 30 DME. Contact Joshua Approach 291.6 for further instructions.
- (9) Point O, Alternate Exit only when in VFR conditions.
- (10) Point Q: Exit route, contact Sport 343.7 and proceed to Morri (EDW043/15) at 10,000' MSL. Hold NE of the EDW043/15 as published.
- (11) Route designated for MARSAs operations established by coordinated scheduling.
- (12) Points G and M are mandatory reporting points. Contact Joshua Approach on assigned mission frequency. Mission frequencies will be assigned by the scheduling activity.
- (13) Conflicts: A to B: R-2515; B to C: IR-200-211-425, VR-1262, Isabella MOA; C to D: IR-200-211-425, VR-1262, Isabella MOA; G to I: VR-1262-1255, Owens MOA; K to N: IR-200-425, VR-1205-1255-1262 and Saline/Panamint MOAs; N to O: IR-200-425, VR-1205, Panamint MOA; O to Q: VR-1205 and Panamint MOA, R-2524, R-2515.

FSS's Within 100 NM Radius:

HHR, RAL, SAN

IR-237

ORIGINATING ACTIVITY: Commander AFFTC, 412
OSS/OSAA, 235 S Flightline Rd, Edwards AFB, CA 93523-6460
DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: Commander AFFTC, 412
OSS/OSR, 300 E Yeager Blvd, Edwards AFB, CA 93524 DSN
527-4110, C661-277-4110.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | TPH 111/13 | N37°54.00' W116°49.50' |
| 05 AGL B 115 MSL to | B | TPH 016/19 | N38°17.40' W116°49.20' |
| 05 AGL B 140 MSL to | C | TPH 008/53 | N38°50.10' W116°32.30' |
| 05 AGL B 120 MSL to | D | TPH 015/69 | N39°00.00' W116°15.00' |
| 05 AGL B 120 MSL to | E | TPH 068/46 | N38°06.00' W116°04.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

IR ROUTES

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) This route authorized in direct support of AFFTC's test program.
- (2) Aircrew shall schedule the Reveille MOA with the Range Management Office at Nellis AFB, NV (DSN 348-4710). If within 2 days of scheduled operation, contact Blackjack (DSN 682-3537). If required, schedule R-4809.
- (3) Route is designated for MARSAs operations established by coordinated scheduling.
- (4) Special Coordination Instructions: Route conflicts with IRs 200-238-279-280-282-286-425 between A and B, IRs 238-264-275-279-280-282-286 and VR-1253 between B and C, IRs 238-264-275 between C and D, IRs 200-234-235-238-264-275-279-286-425 and VRs 209-1253-1259-1260 between D and E. Scheduling coordination by user for MOA entry and IR conflicts and See and Avoid for VR conflicts.
- (5) Approaching the Reveille MOA, aircrew shall contact Nellis Control 343.0 for clearance into the MOA.
- (6) Aircrew will obtain a copy of the Cruise Missile Routes and Procedures Letter of Agreement from Edwards AFB Center Scheduling and follow these procedures.

FSS's Within 100 NM Radius:

CDC, RNO

IR-238

ORIGINATING ACTIVITY: Commander AFFTC, 412 OSS/OSAA, 235 S Flightline Rd, Edwards AFB, CA 93523-6460 DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: Commander AFFTC, 412 OSS/OSCS, 306 E. Popson, Edwards AFB, CA 93524-6680 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | TPH 068/46 | N38°06.00' W116°04.00' |
| 05 AGL B 120 MSL to | B | TPH 015/69 | N39°00.00' W116°15.00' |
| 05 AGL B 120 MSL to | C | TPH 008/53 | N38°50.10' W116°32.60' |
| 05 AGL B 140 MSL to | D | TPH 016/19 | N38°17.40' W116°49.20' |
| 05 AGL B 115 MSL to | E | TPH 111/13 | N37°54.00' W116°49.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) This route authorized in direct support of AFFTC's test program.

- (2) Aircrew shall schedule the Reveille MOA with the Range Management Office at Nellis AFB, NV (DSN 348-4710). If within 2 days of scheduled operation, contact Blackjack (DSN 682-3537).
- (3) Approaching the Reveille MOA, aircrew shall contact Nellis Control 343.0 for clearance into the MOA.
- (4) Route is designated for MARSAs operations established by coordinated scheduling.
- (5) Special Coordination Instructions: Route conflicts with IRs 200-234-235-237-264-275-279-286-425 and VRs 209-1253-1259-1260 between A and B, IRs 237-264-275 between B and C, IRs 237-264-275-279-280-282-286 and VR-1253 between C and D, IRs 200-237-279-280-282-286-425 between D and E. Scheduling coordination by user for IR conflicts and See and Avoid for VR conflicts.
- (6) Aircrew will obtain a copy of the Cruise Missile Routes and Procedures Letter of Agreement from Edwards AFB Center Scheduling and follow these procedures.

FSS's Within 100 NM Radius:

CDC, RNO

IR-250

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462. Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours on even even numbered days

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| As assigned to | A | PGS 104/38 | N35°19.00' W112°52.00' |
| SFC B 80 MSL to | B | DRK 291/22 | N34°55.00' W112°51.00' |
| SFC B 80 MSL to | C | DRK 272/21 | N34°48.00' W112°53.00' |
| SFC B 80 MSL to | D | DRK 199/34 | N34°14.00' W112°51.00' |
| SFC B 70 MSL to | E | BLH 066/52 | N33°45.00' W113°44.00' |
| SFC B 70 MSL to | F | PKE 189/14 | N33°53.00' W114°48.00' |
| SFC B 70 MSL to | G | PKE 248/9 | N34°05.00' W114°52.00' |
| SFC B 70 MSL to | H | TNP 011/28 | N34°32.00' W115°31.00' |
| SFC B 70 MSL to | I | TNP 042/4 | N34°09.00' W115°42.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Remain below Gladden MOA between C and E.
- (2) Remain above 2500' AGL at D to avoid Williams AFB IR-272.
- (3) Report to Riverside FSS at F if radio communications cannot be maintained with Los Angeles.

- (4) Alternate Entry F: Ensure adherence to route boundaries between C and D to avoid towns of Kirkland Junction and Peoples Valley.
- (5) CAUTION: Uncharted tower between A and B at N35-21.1 W112-56.9 128' 6295' MSL.
- (6) Avoid overflight of uncharted airport between E and F, (Indian Hills) at N33-46.0 W113-36.0.

FSS's Within 100 NM Radius:

CDC, HHR, PRC, RAL, RNO, SAN

IR-252

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462.

Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours on odd numbered days

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| As assigned to | A | TNP 355/26 | N34°32.00' W115°41.00' |
| SFC B 80 MSL to | B | GFS 284/23 | N35°19.00' W115°35.00' |
| SFC B 80 MSL to | C | GFS 256/5 | N35°08.00' W115°17.00' |
| SFC B 80 MSL to | D | GFS 166/19 | N34°49.00' W115°11.00' |
| SFC B 70 MSL to | E | GFS 181/31 | N34°38.00' W115°21.00' |
| SFC B 70 MSL to | F | PKE 069/8 | N34°07.00' W114°31.00' |
| SFC B 70 MSL to | G | PKE 107/12 | N34°00.00' W114°29.00' |

ROUTE WIDTH - 5 NM either side of centerline, excluding restricted area R-2501E.

Special Operating Procedures:

- (1) Remain clear of R-2501E. Airspeed 400-460 KIAS.

FSS's Within 100 NM Radius:

HHR, PRC, RAL, RNO, SAN

IR-254

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462.

Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | DRK 194/37 | N34°09.00' W112°50.00' |
| 25 AGL B 90 MSL to | B | DRK 218/28 | N34°25.00' W112°55.00' |
| SFC B 90 MSL to | C | DRK 223/24 | N34°29.00' W112°53.00' |
| SFC B 90 MSL to | D | DRK 237/34 | N34°31.00' W113°08.00' |
| SFC B 90 MSL to | E | EED 097/48 | N34°28.00' W113°35.00' |
| SFC B 90 MSL to | F | DRK 289/26 | N34°56.00' W112°55.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) If Gladden 1 or Gladden 1A MOAs are penetrated, See and Avoid applies.
- (2) Coordination must be conducted with Luke AFB prior to scheduling due to conflicting routes IR's 224, 225 and 240.
- (3) Coordination required with El Toro MCAS to resolve conflict with IR-214.
- (4) Remain VMC at all times on this route.

FSS's Within 100 NM Radius:

PRC, RNO

IR-255

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462.

Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| As assigned to | A | BLH 286/21 | N33°46.00' W115°07.00' |
| SFC B 70 MSL to | B | BLH 286/28 | N33°50.00' W115°15.00' |
| SFC B 70 MSL to | C | PKE 248/27 | N34°03.00' W115°13.00' |
| SFC B 70 MSL to | D | PKE 063/19 | N34°10.00' W114°18.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Prior coordination with 3d MAW, El Toro MCAS is required for scheduling.
- (2) Fifteen minute delay over Point D.
- (3) Luke AFB IR-230 A-B crosses Point D climbing to 9000' MSL, See and Avoid applies.

IR ROUTES

(4) Cross Point B at or below 7000' MSL.

FSS's Within 100 NM Radius:

PRC, RAL, RNO, SAN

IR-264

ORIGINATING ACTIVITY: 60 OSS/OSO, 611 E St., Travis AFB, CA 94535 DSN 837-1073, C707-424-1073.

SCHEDULING ACTIVITY: 60 OSS/OSO, 611 E St., Travis AFB, CA 94535 DSN 837-5582, C707-424-5582.

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 170 MSL to or as assigned 170 MSL B 130 MSL descend direct to cross | A | MVA 233/8 | N38°31.00' W118°12.00' |
| 130 MSL to (TFR Initiation Point) direct to | B | MVA 094/16 | N38°28.00' W117°42.50' |
| SFC B 130 MSL to turn left and descend to | C | TPH 021/25 | N38°21.50' W116°42.50' |
| SFC B 130 MSL to (TA Initiation Point) direct to | D | TPH 027/35 | N38°27.00' W116°31.50' |
| SFC B 120 MSL to direct to | E | TPH 009/76 | N39°10.00' W116°20.00' |
| SFC B 120 MSL to turn left and descend to | F | BAM 117/52 | N39°57.00' W116°08.00' |
| SFC B 120 MSL to direct to | G | BAM 121/39 | N40°04.50' W116°21.50' |
| SFC B 110 MSL to direct to | GA | BAM 131/38 | N40°02.00' W116°30.00' |
| SFC B 110 MSL to (End TA) turn left to | H | NFL 054/47 | N39°41.00' W117°44.50' |
| SFC B 110 MSL to (Start Maneuver Area) direct to | I | NFL 055/43 | N39°38.50' W117°50.00' |
| SFC B 110 MSL to (End Maneuver Area) (Start TA) start climb and turn left to | J | NFL 103/23 | N39°14.00' W118°16.50' |
| SFC B 120 MSL to continue climb to | K | NFL 120/29 | N39°04.50' W118°16.50' |
| SFC B 120 MSL to direct to cross | KA | MVA 012/8 | N38°41.00' W117°57.00' |
| 120 MSL to or as assigned (TA/TFR Termination Point) Re-Entry: | L | MVA 084/10 | N38°32.00' W117°49.50' |

120 MSL to L1 MVA 084/10 N38°32.00'
or as assigned W117°49.50'
At 120 MSL B 130 MSL
turn left and climb to cross
130 MSL to B1 MVA 094/16 N38°28.00'
(TFR Initiation Point) W117°42.50'
Thence via published route.

PMSV CONTACTS: Primary Home Station. Alternates Mountain Home (MUO 342.5).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF), Terrain Following Radar (TFR), Visual Contour (VC), and Terrain Avoidance (TA) authorized IAW Command Directives within published altitudes from B to L (Re-entry through L1). Night VC operations are not authorized. Minimum altitudes, other than SFC, are established to provide at least 100' vertical separation of known man-made obstructions. Route IFR altitudes provide a minimum of 1000' AGL clearance above the highest terrain obstruction within the route boundaries and 5 NM either side of the route corridor. Obstructions under 200' were not considered in the route design. When Command Directives preclude TF/VC/TA operations, aircrews will maintain the IFR altitude for each route. Aircrews will comply with regulations governing low level operations. Aircrews must consider all airports within or near route corridor limits when mission planning route of flight. The entire route is designated mountainous.

ROUTE WIDTH - 4 NM either side of centerline from A to G; 5 NM either side of centerline from G to H; 3 NM left and 4 NM right of centerline from H to J; 4 NM either side of centerline from J to K; 2 NM right and 4 NM left of centerline from K to L. Re-entry: 4 NM either side of centerline from L1 to B1.

Special Operating Procedures:

- (1) Prior coordination required with NAS Fallon Range Scheduling (DSN 890-2416/2418, C775-426-2416/2418) for restricted area and MOA scheduling.
- (2) Cross US highway 50, segment I through J below 2000' AGL or above 4000' AGL.
- (3) All turn radii are 7.5 NM.
- (4) Participating aircraft separation: Route is designed for MARSA operations established by coordinated scheduling. Fallon NAS special use airspace controller (Desert Control 322.35) must be contacted prior to operating within the confines of Fallon Training Range Complex. If contact is not made with Desert Control, crews are authorized to enter the training range complex and will continue to attempt contact with Desert Control.
- (5) Participants must be familiar with NAS Fallon Range Users Manual NASFINST 3752.1 and applicable command guidance.
- (6) Contact Fallon Clearance Delivery (271.5) 15 to 45 minutes prior to entering special use airspace (Austin/GABBS MOA).
- (7) Contact Echo Whiskey prior to R-4816 range entry.
- (8) Contact Desert Control before area exit for area exit clearance, and ZOA ARTCC frequency and handoff.
- (9) Aircraft planning to execute the published re-entry will file each re-entry as a separate low level. The standard racetrack identifier does not apply to IR-264. The usual filing identifiers will be MVA 233008 IR-264 MVA084010 MVA 094016 IR-264 MVA 084010 followed by the remainder of the flight planned route.

- (10) Aircrews experiencing loss of communication prior to route entry will proceed from Point A direct to Point B direct to first filed point. After low level exit then via flight planned route. Remaining clear of MOAs. Lost communication (LC) procedures after low level entry will be in accordance with FLIP AP/1B. LC altitude is 170 MSL.
- (11) Aircrews should be aware of numerous crossing visual routes. VR-1252/1264 cross just prior to Point B. VR-208 crosses the route between Point B and C, and VR-1253 crosses at Point D. Each of these routes are used approximately two times per day.

FSS's Within 100 NM Radius:

RIU, RNO

IR-266

ORIGINATING ACTIVITY: 7 OSS/OSOR, 966 Ave. D-4, Ste. 118, Dyess AFB, TX 79607 DSN 461-3666, C325-696-3666, fax C325-696-3677.

SCHEDULING ACTIVITY: 7 OSS/OSOR, 966 Ave. D-4, Ste. 117, Dyess AFB, TX 79607 DSN 461-3663, C325-696-3665, fax C325-696-3677.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------------|----|--------------|---------------------------|
| Cross at 90 MSL to or as assigned | A | OZN 321/34 | N37°36.00' W113°53.00' |
| 04 AGL B 90 MSL to | B | OZN 316/23 | N37°25.50' W113°49.50' |
| 04 AGL B 90 MSL to | C | MMM 001/19 | N37°04.00' W114°10.00' |
| 04 AGL B 90 MSL to | D | MMM 009/11 | N36°56.00' W114°11.00' |
| 06 AGL B 80 MSL to | E | MMM 075/9 | N36°46.00' W114°05.00' |
| 06 AGL B 90 MSL to | F | MMM 091/11 | N36°43.00' W114°03.50' |
| 04 AGL B 90 MSL to | G | MMM 113/19 | N36°34.50' W113°58.50' |
| 04 AGL B 90 MSL to | H | MMM 109/27 | N36°30.50' W113°48.50' |
| 04 AGL B 80 MSL to | I | OZN 143/34 | N36°34.00' W113°20.00' |
| 04 AGL B 90 MSL to | J | OZN 139/34 | N36°34.50' W113°17.00' |
| 04 AGL B 90 MSL to | K | OZN 106/38 | N36°45.50' W112°55.50' |
| 04 AGL B 90 MSL to | L | BCE 172/45 | N36°56.90' W112°25.00' |
| 04 AGL B 90 MSL to | M | BCE 126/29 | N37°19.00' W111°55.50' |
| 04 AGL B 90 MSL to | N | BCE 086/36 | N37°34.00' W111°33.50' |
| 04 AGL B 90 MSL to | O | BCE 082/45 | N37°36.00' W111°22.00' |
| 05 AGL B 90 MSL to | P | HVE 170/64 | N37°21.00' W110°49.50' |

| | | | |
|--|----|-------------|---------------------------|
| 04 AGL B 90 MSL to | Q | HVE 167/65 | N37°20.00' W110°45.00' |
| 04 AGL B 90 MSL to | R | HVE 142/71 | N37°19.50' W110°06.50' |
| 04 AGL B 110 MSL to | S | HVE 139/75 | N37°17.50' W110°00.00' |
| 10 AGL B 110 MSL to | SA | DVC 209/57 | N37°06.50' W109°45.00' |
| 04 AGL B 110 MSL to | SB | TBC 047/100 | N36°53.00' W109°26.00' |
| 04 AGL B 110 MSL to | T | RSK 212/38 | N36°18.50' W108°39.00' |
| 05 AGL B 110 MSL to | U | RSK 184/35 | N36°11.50' W108°19.50' |
| 06 AGL B 110 MSL to | V | RSK 177/34 | N36°11.00' W108°14.00' |
| 06 AGL B 100 MSL to | W | RSK 142/31 | N36°16.50' W107°50.00' |
| 06 AGL B 100 MSL to (Contact Denver ARTCC 348.7) | X | RSK 104/37 | N36°27.50' W107°26.00' |
| 100 MSL B 170 MSL to cross | | | |
| 170 MSL to or as assigned | Y | RSK 085/50 | N36°37.00' W107°04.00' |
| Alternate Entry: B1 cross | | | |
| 90 MSL to Thence via published route. | B1 | OZN 316/23 | N37°25.50' W113°49.50' |

PMSV CONTACTS: Primary Home Station. Alternates Mountain Home (MUO 342.5).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF) Visual Contour (VC) operations are authorized IAW Command Directives A to X. Command Directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each TF route segment. Minimum altitudes other than surface provide at least 100' vertical clearance of known man-made obstructions. Obstructions under 200' AGL were not considered in route design. Command Directives may require additional obstruction clearance for TF/VC operations. The entire route is mountainous. Regulations governing aircraft operation below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to H; 2.5 NM left and 3 NM right of centerline from H to J; 4 NM either side of centerline from J to L; 2 NM left and 4 NM right of centerline from L to M; 3 NM either side of centerline from M to N; 4 NM either side of centerline from N to S; 5 NM either side of centerline from S to Y. Alternate Entry: B1 4 NM either side of centerline.

Special Operating Procedures:

- (1) Participating aircraft separation: Route designated for MARSAs operations established by coordinating scheduling.
- (2) Route lost communications (LC) altitude is 170' MSL for Alternate Exit. LC altitude for primary route (Z) is as required for participating in operation Red Flag activity.
- (3) Centerline between the following Points is depicted as a 7.5 NM arc: C to D, G to H, I to J, N to O, P to Q, R to S, U to V, and AC to K.

IR ROUTES

- (4) Aircrews should be especially vigilant for VFR helicopter traffic from SFC to 500' AGL between Points H and L.
- (5) Route Hazard Procedures: Aircrews encountering hazard/hazardous weather along this route will notify 15th AF Command Post via inflight procedures who in turn will determine route status.
- (6) Air rescue operations within this route will notify 15th AF Command Post (DSN 447-2035).
- (7) Primary Entry Point A will only be used by aircraft that are scheduled into the Desert MOA by Red Flag Air Tasking Order or 554th Range Group Scheduling.
- (8) Alternate Entry Point B1: Aircrews using this entry need not own Desert MOA times.
- (9) Aircrews are restricted to IFR altitudes between Points B and C due to blasting in the area of N37-22 W113-52 between the following time frames, 1830Z-1930Z++ and 2230Z-0030Z++.
- (10) Noise Sensitive Areas:
Residence at N37-16.1 W109-55.6;
- (11) Fly centerline or south of centerline between K and L to avoid Pipe Springs National Monument, located at N36°51.7' W112°44.2'. Avoid by 1/2 NM and no overflight.
- (12) Aircrews be aware of LATN activity from Point A to Point K.

FSS's Within 100 NM Radius:

ABQ, CDC, PRC, RNO

IR-275

ORIGINATING ACTIVITY: 60 OSS/OSO, 611 E St., Travis AFB, CA 94535 DSN 837-1073, C707-424-1073.

SCHEDULING ACTIVITY: 60 OSS/OSO, 611 E St., Travis AFB, CA 94535 DSN 837-5582, C707-424-5582.

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| 110 MSL B FL200 to or as assigned descend direct to | B | BAM 288/28 | N40°50.50' W117°25.00' |
| 110 MSL B FL200 to turn right and descend to | C | BAM 358/34 | N41°07.00' W116°43.00' |
| 90 MSL B 110 MSL to (TA/TFR Initiation Point) direct to | D | BAM 018/34 | N41°02.00' W116°28.50' |
| SFC B 90 MSL to direct to | E | BAM 080/29 | N40°30.00' W116°17.50' |
| SFC B 110 MSL to right to | F | BAM 096/35 | N40°20.00' W116°14.00' |
| SFC B 110 MSL to direct to | G | BAM 121/56 | N39°52.00' W116°08.00' |
| SFC B 110 MSL to direct to | H | BAM 124/59 | N39°48.00' W116°08.00' |
| SFC B 120 MSL to direct to | I | TPH 009/76 | N39°10.00' W116°20.00' |
| SFC B 120 MSL to right to | J | TPH 018/48 | N38°41.00' W116°27.50' |
| SFC B 130 MSL to direct to | K | TPH 015/38 | N38°34.50' W116°36.00' |

| | | | |
|--|----------|--------------------------|--|
| SFC B 130 MSL to (Start Maneuver Area) direct to | L | TPH 329/32 | N38°33.00' W117°12.00' |
| 130 MSL to direct to | M | MVA 233/8 | N38°31.00' W118°12.00' |
| 130 MSL to (End Maneuver Area) left to | N | MVA 247/36 | N38°30.00' W118°48.00' |
| 130 MSL B 150 MSL to (Aircrews exiting IR-275 will contact Oakland ARTCC 319.8 after passing O) direct to | O | MVA 236/44 | N38°21.00' W118°56.00' |
| 150 MSL to direct to | P | OAL 266/51 | N38°11.00' W118°49.00' |
| 150 MSL to direct to | Q | OAL 263/44 | N38°08.00' W118°41.00' |
| 150 MSL B 170 MSL to right to | R | OAL 276/23 | N38°09.00' W118°13.00' |
| 170 MSL to direct to | S | OAL 278/20 | N38°08.50' W118°09.00' |
| 170 MSL to Re-Entry: | T | OAL VORTAC | N38°00.20' W117°46.23' |
| 130 MSL to (End Maneuver Area) left to | N1 | MVA 247/36 | N38°30.00' W118°48.00' |
| 130 MSL B 150 MSL to left to | O1 | MVA 236/44 | N38°21.00' W118°56.00' |
| 150 MSL to left to | P1 | OAL 266/51 | N38°11.00' W118°49.00' |
| 150 MSL to direct to | Q1 | OAL 263/44 | N38°08.00' W118°41.00' |
| 140 MSL B 150 MSL to direct to | U | OAL 267/36 | N38°08.50' W118°30.00' |
| 140 MSL to direct to | R1 | OAL 276/23 | N38°09.00' W118°13.00' |
| 140 MSL to left to | V | TPH 324/19 | N38°19.50' W117°09.50' |
| 130 MSL B 140 MSL to Thence via published route. Alternate Entry: I Cross FL230 to or as assigned direct to | L1 | TPH 329/32 | N38°33.00' W117°12.00' |
| 130 MSL B FL230 to right to | I1 | TPH 009/76 | N39°10.00' W116°20.00' |
| 130 MSL B FL230 to right to L Thence via published route. Alternate Exit: J SFC B 120 MSL to Thence via IR-279 routing. Alternate Entry: K SFC B 130 MSL to Thence via published route. | J1 K1 | TPH 018/48 TPH 015/38 | N38°41.00' W116°27.50' N38°41.00' W116°27.50' |
| | J | TPH 018/48 | N38°41.00' W116°27.50' |
| | K | TPH 015/38 | N38°34.50' W116°36.00' |

PMSV CONTACTS: Primary Home Station. Alternates Mountain Home (MUO 342.5).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF)/Visual Contour operations are authorized IAW Command Directives within published altitude blocks from D to L. The route is designed mountainous. When Command Directives preclude terrain following/visual contour operations, aircrews will maintain the IFR altitude for each terrain following route segment. Regulations governing operations below 500' AGL will be complied with. Aircrews will avoid towns and villages by 1000' vertically or 2000' laterally when operating at terrain following altitudes. (REF: FAR 91.79(B)).

ROUTE WIDTH - 4 NM either side of centerline from B to M; 9 NM either side of centerline from M to N; 4 NM either side of centerline from N to T; 4 NM either side of centerline from N to L (Re-Entry); 4 NM either side of centerline from I to K (Alternate Entry).

Special Operating Procedures:

- (1) Aircraft will cross the end maneuver area at the specified minimum IFR altitude.
- (2) Participating aircraft separation: Route designated for MARSAs operations established by coordinated scheduling.
- (3) Lost communications (LC) procedures: Route LC altitude is 17,000' MSL.
- (4) IR-275 is designated for SN missions.
- (5) Aircrews will contact Oakland ARTCC on 125.75 or 319.8 MHZ passing Point L N38-33-00 W117-12-00 and report (tactical call sign) passing Point L (Number of Re-Entries). No report is required passing L during re-entry.
- (6) Aircraft with dual communications capability may stay on Oakland ARTCC frequency to receive flight advisory service.
- (7) Centerline between the following Points will be depicted as a 7.5 NM radius arc: C to D, G to H, J to K, N to O, P to Q, R to S, V to L on the re-entry.
- (8) Use Alternate Exit J only in conjunction with IR-279 entry to restricted areas R-4809/R-4807.

FSS's Within 100 NM Radius:

BOI, RNO, RIU

IR-279

ORIGINATING ACTIVITY: 57 OSS/OSM, Nellis AFB, NV 89191 DSN 682-7891, C702-652-7891.

SCHEDULING ACTIVITY: 57 OSS/OSOS, 4450 Tyndall Ave., Nellis AFB, NV 89191 DSN 682-2040, C702-652-2040.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| SFC B 120 MSL to SFC B 120 MSL descend direct to cross | A | TPH 018/48 | N38°41.00' W116°27.50' |
| SFC B 110 MSL to direct to | B | TPH 031/33 | N38°24.00' W116°30.50' |
| SFC B 110 MSL to (Enter R-4809 and/or R-4807) Re-Entry: | C | TPH 097/22 | N37°53.00' W116°37.00' |

| | | | |
|---|----|------------|---------------------------|
| SFC B 110 MSL to turn right to | C1 | TPH 097/22 | N37°53.00' W116°37.00' |
| SFC B 110 MSL to turn left to | D | TPH 112/19 | N37°50.00' W116°43.60' |
| SFC B 110 MSL to direct to | E | TPH 132/24 | N37°41.00' W116°46.00' |
| SFC B 110 MSL to SFC B 120 MSL turn left and climb to cross | F | TPH 130/33 | N37°34.00' W116°39.00' |
| 120 MSL to direct to | G | TPH 112/40 | N37°36.50' W116°23.00' |
| 120 MSL to (Exit R-4807) direct to | H | TPH 088/34 | N37°53.00' W116°20.00' |
| 120 MSL to turn left to | I | TPH 030/56 | N38°39.50' W116°10.00' |
| 120 MSL to Thence via published route. | A1 | TPH 018/48 | N38°41.00' W116°27.50' |

PMSV CONTACTS: Primary Home Station. Alternates Mountain Home (MUO 342.5).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR

Terrain Following (TF)/Visual Contour operations are authorized IAW command directives within published altitude blocks from A to C and C to G (Re-Entry). When Command Directives preclude TF/Visual Contour operations, aircrews will maintain the IFR altitude for each TF segment. The route is designated mountainous. ACC aircrews should reference ACCR 51-18, figure 11-1 for low altitude minimum altitudes. Regulations governing operations below 500' AGL (FAR 91-79B, AFR 60-16, ACCR 51-18) must be complied with. Aircraft executing a re-entry will cross G at the IFR altitude (12000' MSL).

ROUTE WIDTH - 4 NM either side of centerline from A to B; 6 NM left and 4 NM right of centerline from B to C; 4 NM either side of centerline from C to A (Re-Entry).

Special Operating Procedures:

- (1) Participating aircraft separation: Route designated for MARSAs operations established by coordinated scheduling.
- (2) Lost Communications (LC) procedures: Route LC altitude is 17,000' MSL.
- (3) Route is designated for SN missions.
- (4) Centerline between the following Points will be depicted as a 7.0 NM radius: C to D, D to E, F to G, and I to A (Re-Entry).
- (5) Aircrews desiring entry into IR-279 must file for IR-275 routing from Points A (PECP) through J (Alt Exit) to insure scheduled separation from aircraft flying IR-275. Aircrews must confirm clearance to enter IR-279 with Salt Lake ARTCC prior to IR-275 route entry.
- (6) All planned re-entries for IR-279 must be scheduled through 49 Test Squadron Barksdale AFB, LA 71110, DSN 781-8821.
- (7) Aircraft using IR-279 must own corresponding R-4807/4809 entry times.
- (8) The method of MARSAs between IR-279 Re-Entry and IRs -234, 235, 237, and 238 will be coordinated scheduling. IR-279 Re-Entries will not be scheduled for use concurrently with IRs-234, 235, 237 and 238.

IR ROUTES

- (9) Prior to entering R-4809 aircrews will contact Silverbow Approach on 272.5 or 260.95. Prior to exiting R-4809 aircrews will again contact Silverbow or, if unable, contact Salt Lake ARTCC on 322.5.
- (10) Between segments A and B, 75' Tower N38-11.5 W116-28.5.

FSS's Within 100 NM Radius:

RNO

IR-280

ORIGINATING ACTIVITY: 60 OSS/OSO, 611 E St., Travis AFB, CA 94535 DSN 837-1073, C707-424-1073.

SCHEDULING ACTIVITY: 60 OSS/OSO, 611 E St., Travis AFB, CA 94535 DSN 837-5582, C707-424-5582.

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 170 MSL to or as assigned | A | BAM 065/44 | N40°39.00' W115°58.00' |
| 140 MSL B 170 MSL to | B | BQU 164/27 | N40°19.00' W115°46.00' |
| 01 AGL B 140 MSL to | C | BQU 161/49 | N39°57.00' W115°43.00' |
| 01 AGL B 140 MSL to | D | BQU 190/78 | N39°35.50' W116°30.70' |
| 01 AGL B 140 MSL to | E | TPH 357/34 | N38°35.00' W116°51.70' |
| 01 AGL B 140 MSL to | F | TPH 337/24 | N38°25.70' W117°05.00' |
| 01 AGL B 140 MSL to | G | TPH 300/29 | N38°23.00' W117°27.00' |
| 01 AGL B 140 MSL to | H | MVA 093/11 | N38°30.00' W117°48.50' |
| 01 AGL B 140 MSL to | I | MVA 012/8 | N38°41.00' W117°57.00' |
| 01 AGL B 85 MSL to | J | MVA 329/25 | N38°58.00' W118°09.70' |
| 01 AGL B 85 MSL to | K | MVA 320/38 | N39°09.00' W118°21.50' |
| 01 AGL B 85 MSL to Alternate Exit: H | L | MVA 298/49 | N39°09.00' W118°46.50' |
| 01 AGL B 140 MSL to | G1 | TPH 300/29 | N38°23.00' W117°27.00' |
| 140 MSL to Contact Oakland ARTCC 319.8 or 285.5 (Right turn only crossing H) | H1 | TPH 291/46 | N38°30.00' W117°48.50' |

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following Radar (TFR), visual contour (VC), and terrain avoidance (TA) operations are authorized with the published altitude blocks from Point B to L. When command directives preclude TF/TFR/VC/TA operations, aircrews, will maintain the IFR altitude for each route segment. Minimum altitudes on TF/TFR/VC/TA legs do not provide vertical clearance from manmade obstructions. Minimum IFR altitude on other legs

provide 1000' AGL clearance above the highest obstructions within the route boundaries and 5 NM either side of the route corridor. Regulations governing low level operations must be complied with. Aircrews must be aware of charted airports with or near route corridor limits. The route is designated mountainous.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 5 NM either side of centerline from B to E; 4 NM left and 5 NM right of centerline from E to H; 3 NM either side of centerline from H to L.

Special Operating Procedures:

- (1) MARSA applies and is accomplished by timing at route entry based on 480 knots ground speed while on the route. See and Avoid applies during VMC. Other airspeeds may be flown as coordinated with the scheduling agency. Aircraft flying at similar airspeeds may be scheduled with ten minutes separation at the entry point. Aircrews unable to make scheduled entry time within plus or minus 2 minutes must coordinate a new entry time with Raymond 27 on 381.3 or 15091/5703.
- (2) Except for IMC terrain in the following radar operations, aircrews encountering IMC will climb to the minimum IFR altitude prior to IR route crossing.
- (3) WARNING: Chart update manual (CHUM) data used to construct navigational charts does not address vertical obstruction data below 200' AGL. Locally obtained vertical obstruction data, from aerial estimation, below 200' AGL may be obtained from the scheduling agency. Aircrews flying this route will report their observations of new developments or cultural changes to the originating agency. This route has been surveyed IAW ACC Sup 1 to AFI 13-201 down to 100' AGL.
- (4) Reporting units will furnish the scheduling agency with Call Sign, number and type of aircraft, planned entry time, entry point, proposed speed, exit point and exit time.
- (5) Clearance to fly this route does not include clearance to enter the GABBS MOA or NAS Fallon restricted areas. Prior coordination required with NAS Fallon Range Scheduling (DSN 890-2416/2418, C775-426-2416/2418) for entry to Fallon Training Range Complex (FTRC). Aircrews not scheduled for FTRC will exit this route at alternate exit Point E or H. Aircrews scheduled for FTRC will contact Desert Control-322.35 prior to range entry.
- (6) Alternate Entry: E (contact Salt Lake City ARTCC on 397.85).
- (7) Alternate Exit: E; Climb in order contact Salt Lake City ARTCC on 397.85 no later than Point E.
- (8) Uncharted airports: N39-56-00 W115-38-00, N39-09-00 W116-42-00 and N38-56-00 W116-40-00. Overfly at or above 1500' AGL or avoid by 3 NM.
- (9) Uncharted power line: N39-39-00 W116-07-18 to N39-44-24 W116-25-30. Uncharted tower 100 ft: N38-35-00 W116-52-00 and 80 ft: N38-28-30 W117-37-30.

FSS's Within 100 NM Radius:

RNO, RIU

IR-281

ORIGINATING ACTIVITY: 60 OSS/OSO, 611 E St., Travis AFB, CA 94535 DSN 837-1073, C707-424-1073.

SCHEDULING ACTIVITY: 60 OSS/OSO, 611 E St., Travis AFB, CA 94535 DSN 837-5582, C707-424-5582.

HOURS OF OPERATION: By NOTAM**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 170 MSL to or as assigned descend to | A | BQU 074/29 | N40°45.00' W115°08.00' |
| 140 MSL to turn right and descend to | B | BQU 108/35 | N40°25.00' W115°08.00' |
| 120 MSL to | C | BQU 128/33 | N40°19.00' W115°21.00' |
| 01 AGL B 120 MSL to | D | BAM 095/29 | N40°22.50' W116°20.00' |
| 01 AGL B 110 MSL to | E | BAM 111/23 | N40°19.50' W116°32.00' |
| 01 AGL B 110 MSL to | F | BAM 149/18 | N40°17.00' W116°50.00' |
| 01 AGL B 110 MSL to | G | BAM 215/38 | N40°11.00' W117°35.00' |
| 01 AGL B 110 MSL to | H | NFL 035/62 | N40°04.00' W117°40.00' |
| 01 AGL B 110 MSL to | I | NFL 053/45 | N39°41.00' W117°48.00' |
| 01 AGL B 110 MSL to Alternate Exit: T | J | NFL 103/23 | N39°14.00' W118°16.50' |
| 01 AGL B 110 MSL to | G1 | BAM 215/38 | N40°11.00' W117°35.00' |
| 01 AGL B 85 MSL to | R | LLC 071/23 | N40°08.00' W118°04.00' |
| 01 AGL B 75 MSL to | S | HZN 353/16 | N39°47.00' W118°56.00' |
| 01 AGL B 70 MSL to | T | HZN 132/12 | N39°21.00' W118°52.00' |

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF), Terrain Following Radar (TFR), Visual Contour (VC), and Terrain Avoidance (TA) operations are authorized with the published altitude blocks from Point C to J and from Point C to T. Begin auto TF letdown after crossing point C. When command directives preclude TA/TF/TFR/VC operations, aircrews will maintain the IFR altitude for each route segment. Minimum altitudes on TF/TFR/VC/TA legs do not provide vertical clearance from man-made obstruction. Minimum IFR altitude on other legs provide 1000' AGL clearance above the highest obstruction within the route boundaries and 5 NM either side of the route corridor. Regulations governing low level operations must be complied with. Aircrews must be aware of charted airports within or near route corridor limits. The route is mountainous.

ROUTE WIDTH - 4 NM either side of centerline from A to C; 5 NM left and 4 NM right of centerline from C to D; 2 NM either side of centerline from D to F; 5 NM either side of centerline from F to G; 3 NM left and 4 NM right of centerline from G to J. Alternate Exit: 2 NM left and 3 NM right of centerline from G1 to T.

Special Operating Procedures:

- (1) MARSAs applies and is accomplished by timing at route entry based on 480 knots ground speed while on the route. See and Avoid applies during VMC. Other airspeeds may be flown as coordinated with the scheduling agency. Aircraft flying at similar airspeeds may be scheduled with ten

minutes separation at the Entry Point. Aircrews unable to make scheduled entry time within plus or minus 2 minutes must coordinate a new entry time with Raymond 27 on 381.3 (UHF) or 15091/5703.

- (2) Except for IMC terrain following radar operations, aircrews encountering IMC will climb to the minimum IFR altitude prior to IR route crossing
- (3) **WARNING:** Chart update manual (CHUM) data used to construct navigational charts does not address vertical obstruction data below 200' AGL. Locally obtained vertical obstruction data, from aerial estimations, below 200' AGL may be obtained from the scheduling agency. Aircrews flying this route will report their observations of new developments or cultural changes to the originating agency. This route has been surveyed IAW ACC Sup 1 to AFI 13-201 down to 100' AGL.
- (4) Requesting units will furnish the scheduling agency with Call Sign, number and type of aircraft, planned entry time, entry point, proposed speed, exit point, and exit time.
- (5) Clearance to fly this route does not include clearance to enter the GABBS MOA or NAS Fallon restricted areas. Prior coordination with NAS Fallon Range Scheduling (DSN 890-2416/2418, C775-426-2416/2418) for entry to Fallon Training Range Complex (FTRC). Aircrews not scheduled for FTRC will exit this at Alternate Exit Point G. Aircrews scheduled for FTRC will contact Desert Control on 322.35 prior to range entry.
- (6) Cross US Highway 50, segments I-J and S-T.
- (7) Alternate Entry: G. Contact Salt Lake City ARTCC on 363.15.
- (8) Alternate Exit: G. Climb in order to contact Salt Lake City ARTCC 363.15 no later than Pt G. T; R-4803 must be scheduled with NAS Fallon. Be especially alert for possible traffic on VR-1259, VR-1260 and VR1352.
- (9) Uncharted airport: N40-10-00 W115-54-00. Overfly at or above 1500' AGL or avoid by 3 NM.
- (10) Noise Sensitive Area: Dean Ranch at N40-18-30 W116-35-00. Overfly at or above 1500' AGL or avoid by 1 NM.

FSS's Within 100 NM Radius:

RNO, RIU

IR-282

ORIGINATING ACTIVITY: 60 OSS/OSO, 611 E St., Travis AFB, CA 94535 DSN 837-1073, C707-424-1073.

SCHEDULING ACTIVITY: 60 OSS/OSO, 611 E St., Travis AFB, CA 94535 DSN 837-5582, C707-424-5582.

HOURS OF OPERATION: By NOTAM**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------------------------|----|--------------|---------------------------|
| Cross at 170 MSL to or as assigned | A | BAM 065/44 | N40°39.00' W115°58.00' |
| 140 MSL B 170 MSL to | B | BQU 164/27 | N40°19.00' W115°46.00' |
| 01 AGL B 140 MSL to | C | BQU 161/49 | N39°57.00' W115°43.00' |
| 01 AGL B 140 MSL to | D | BQU 190/78 | N39°35.50' W116°30.70' |

IR ROUTES

| | | | |
|---------------------|---|------------|---------------------------|
| 01 AGL B 140 MSL to | E | TPH 357/34 | N38°35.00' W116°51.70' |
| 01 AGL B 114 MSL to | F | TPH 000/24 | N38°25.00' W116°53.00' |
| 01 AGL B 104 MSL to | G | TPH 025/7 | N38°07.00' W116°56.00' |
| 01 AGL B 104 MSL to | H | TPH 143/9 | N37°53.00' W116°57.80' |

TERRAIN FOLLOWING OPERATIONS: IMC/VMC Terrain Follow Radar (TFR), Visual Contour (VC), and Terrain Avoidance (TA) operations are authorized with the published altitude blocks from Point B to I. When Command Directives preclude TA/TF/TFR/VC operations, aircrews will maintain the IFR altitude for each route segment. Minimum altitudes on TF/TFR/VC/TA legs do not provide vertical clearance from man-made obstructions. Minimum IFR altitude on other legs provide 1000' AGL clearance above the highest obstruction within the route boundaries and 5 NM either side of the route corridor. Regulations governing low level operations must be complied with. Aircrews must be aware of charted airports within or near corridor limits. The route is designated mountainous.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 5 NM either side of centerline from B to H.

Special Operating Procedures:

- (1) MARSAs apply and is accomplished by timing at route entry based on 480 knots ground speed while on the route. See and Avoid applies during VMC. Other airspeeds may be flown as coordinated with the scheduling agency. Aircraft flying at similar airspeeds may be scheduled with 10 minutes separation at the entry point. Aircrews unable to make scheduled entry time within plus or minus 2 minutes must coordinate a new entry time with Raymond 27 on 381.3 (UHF) or 15091/5703 (HF).
- (2) Except for IMC terrain following radar operations, aircrews encountering IMC will climb to the minimum IFR altitude prior to IR route crossing.
- (3) WARNING: Chart update manual (CHUM) data used to construct navigational charts does not address vertical obstruction data below 200' AGL. Locally obtained vertical obstruction data, from aerial estimations, below 200' AGL may be obtained from the scheduling agency. Aircrews flying this route will report their observations of new developments or cultural changes to the originating agency. This route has been surveyed IAW ACC Sup 1 to AFI 13-201 down to 100' AGL.
- (4) Requesting units will furnish the scheduling agency with Call Sign, number and type of aircraft, planned entry time, entry point, proposed speed, exit point, and exit time.
- (5) Aircraft operating in R-4807 will be cleared to operate at the altitudes specified in the FLIP AP/1A. Special Use Airspace, and maneuver within the restricted area boundaries. Contact Nellis Control on 338.7 prior to G.
- (6) Nellis control will coordinate handoffs with appropriate ARTCC when exiting R-4807.
- (7) Alternate Entry: E Contact Salt Lake City ARTCC on 397.85.
- (8) Alternate Exit: E; Climb in order to contact Salt Lake City ARTCC on 397.85 no later than Point E. At Point F exit by a left turn, under Salt Lake's control, to the next filed Point.
- (9) Uncharted airports: N39-55-00 W115-38-00, N39-09-00 W116-42-00 and N38-56-00 W116-40-00. Overfly at or above 1500' AGL or avoid by 3 NM.
- (10) Uncharted power line N39-39-00 W116-07-18 to N39-44-24 W116-25-30. Uncharted tower 100' N38-35-00 W116-52-00.

FSS's Within 100 NM Radius:

RNO

IR-286

ORIGINATING ACTIVITY: 57 OSS/OSM, Nellis AFB, NV 89191 DSN 682-7891, C702-652-7891.

SCHEDULING ACTIVITY: 57 OSS/OSOS, 4450 Tyndall Ave., Nellis AFB, NV 89191 DSN 682-2040, C702-652-2040.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 140 MSL to or as assigned | A | LSV 277/42 | N36°30.00' W115°50.00' |
| 100 MSL B 140 MSL to | B | BTY 111/30 | N36°30.00' W116°15.00' |
| 05 AGL B 100 MSL to | C | BTY 135/11 | N36°38.00' W116°38.00' |
| 05 AGL B 90 MSL to | D | BTY 104/3 | N36°46.50' W116°41.50' |
| 01 AGL B 90 MSL to | E | OAL 129/23 | N37°41.00' W117°30.00' |
| SFC B 98 MSL to | F | OAL 103/17 | N37°52.00' W117°28.00' |
| SFC B 98 MSL to | G | OAL 074/14 | N38°00.00' W117°28.00' |
| SFC B 90 MSL to | H | TPH 346/16 | N38°18.00' W117°01.00' |
| SFC B 94 MSL to | I | TPH 055/31 | N38°11.00' W116°25.00' |
| SFC B 95 MSL to | J | TPH 084/73 | N37°47.00' W115°32.00' |
| SFC B 94 MSL to | K | TPH 090/82 | N37°37.00' W115°23.00' |
| SFC B 94 MSL to | L | TPH 097/87 | N37°26.00' W115°22.00' |
| SFC B 94 MSL to Alternate Entry: I | M | TPH 115/99 | N36°55.00' W115°30.00' |
| 170 MSL to or as assigned descend to | AA | TPH 017/49 | N38°42.00' W116°27.00' |
| 140 MSL to descend to | BB | TPH 025/35 | N38°28.00' W116°32.00' |
| 105 MSL to descend to | CC | TPH 035/28 | N38°19.00' W116°34.00' |
| 94 MSL to Alternate Entry/Exit: G | I1 | TPH 055/31 | N38°11.00' W116°25.00' |
| SFC B 98 MSL to | G1 | OAL 074/14 | N38°00.00' W117°28.00' |
| SFC B 90 MSL to Thence to Nellis Target Area 71 Alternate Exit: I | GX | OAL 091/33 | N37°50.00' W117°06.00' |
| SFC B 94 MSL to | I2 | TPH 055/31 | N38°11.00' W116°25.00' |

SFC B 90 MSL to IX TPH 090/30 N37°53.00'
Thence to Nellis Tar- W116°26.00'
get areas 72, 73, 74, or
R-4809.
Alternate Exit: J
SFC B 95 MSL to J1 TPH 084/73 N37°47.00'
W115°32.00'
SFC B 90 MSL to JX TPH 092/58 N37°43.00'
Thence to Nellis Tar- W115°54.00'
get areas 72, 73, 74, or
R-4809.

TERRAIN FOLLOWING OPERATIONS: Terrain
Following authorized - VFR beginning at Point C.

ROUTE WIDTH - 5 NM either side of centerline from A to D;
8 NM either side of centerline (excluding R-4807) from D to E; 5
NM either side of centerline from E to M.

Special Operating Procedures:

- (1) For VMC use, MARSAs applies and is accomplished by See and Avoid.
- (2) Operations within R4807/09, or Desert MOA will be conducted IAW AFR 13-212, Nellis AFB Sup 1.
- (3) CAUTION: Avoid Beatty Airport N36-52-00 W116-47-00, and the community and airport of Goldfield N37-33-00 W117-14-00 by 3 NM or 1500' AGL.
- (4) CAUTION: Cross B at 10,000' MSL or as assigned by ATC from VFR overflight traffic at 11,000' MSL and traffic exiting VR-222 at 9,500' MSL and below.
- (5) Fly north of centerline between Points B and C.
- (6) CAUTION: Route parallels VR-222 from B to D and VR-1214 from B to E. Additional numerous other MTRs cross this route from D to L.
- (7) During VMC operations monitor 255.4 UHF until entering the MOAs.
- (8) Uncharted Obstacles:
 - (a) Between segments B and C, tower with white strobe N36-32 W116-26;
 - (b) Between segments B and C, 150' tower N36-34 W116-27;
 - (c) Between segments B and C, 150' radio tower N36-34.2 W116-27.1;
 - (d) Between segments B and C, powerlines N36-38 W116-38;
 - (e) Between segments D and E, multiple towers 100' west side of peak N36-56 W116-49;
 - (f) Between segments D and E, three 100' towers N36-56 W116-51.1;
 - (g) Between segments D and E, 50' microwave tower N36-46.5 W116-41.5;
 - (h) Between segments D and E, 250' tower N37-06.6 W116-48.4;
 - (i) Between segments D and E, 249' tower N37-18 W117-03.8;
 - (j) Between segments D and E, 1300' microwave tower N37-41 W117-24;
 - (k) Between segments H and I, 300' tower below peak in canyon N38-10.7 W116-24.5
 - (l) Between segments I and J, 300' tower N37 55.6 W115-53.
- (9) Aircraft exiting at B will advise Oakland ARTCC on 319.8 upon exit.

FSS's Within 100 NM Radius:
CDC, RNO

IR-293

ORIGINATING ACTIVITY: 388 RANS/RST, 6606 Cedar Ln.
bldg 1274, Hill AFB, UT 84056-5812 DSN 777-4401
C801-777-4401.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at 140 MSL to or as assigned 140 MSL B 120 MSL descend to cross | AA | BQU 051/58 | N41°07.00' W114°34.50' |
| 120 MSL to start descent to cross | AB | BQU 064/47 | N40°53.00' W114°44.00' |
| 115 MSL to (TA/TFR Initiation Point) direct to | A | BQU 083/41 | N40°38.00' W114°53.00' |
| 01 AGL B 115 MSL to direct to | B | BQU 122/43 | N40°13.00' W115°09.00' |
| 01 AGL B 115 MSL to turn left to | C | ELY 256/41 | N39°19.50' W115°43.00' |
| 01 AGL B 115 MSL to direct to | D | ELY 242/37 | N39°10.50' W115°37.50' |
| 01 AGL B 115 MSL to descend direct to | E | ELY 162/26 | N38°51.50' W114°50.00' |
| 01 AGL B 115 MSL to direct to | F | ELY 157/27 | N38°51.00' W114°47.00' |
| 01 AGL B 110 MSL to turn right to | G | ELY 144/30 | N38°49.50' W114°38.50' |
| 01 AGL B 110 MSL to direct to | H | ELY 139/33 | N38°47.50' W114°33.50' |
| 01 AGL B 110 MSL to (TA/TFR Termination Point) turn left and climb to | I | ILC 344/25 | N38°40.50' W114°23.50' |
| 110 MSL B 130 MSL to 110 MSL B 130 MSL continue climb direct to cross | J | ILC 353/24 | N38°39.00' W114°18.50' |
| 130 MSL to (Contact Clover Con- trol 363.5) direct to | K | ILC 006/25 | N38°38.00' W114°12.00' |
| 130 MSL to (Alternate Entry) (Enter Sevier B MOA) turn left to | L | MLF 275/35 | N38°34.00' W113°42.50' |
| 130 MSL to (TA/TFR Initiation Point) descend direct to | M | MLF 279/31 | N38°34.50' W113°36.50' |
| 01 AGL B 130 MSL to turn left to | N | MLF 309/24 | N38°41.50' W113°18.50' |

IR ROUTES

| | | | |
|--|----|------------|---------------------------|
| 01 AGL B 110 MSL to direct to | O | MLF 318/24 | N38°43.50' W113°14.50' |
| 01 AGL B 110 MSL to turn left to | P | MLF 334/29 | N38°50.00' W113°07.00' |
| 01 AGL B 110 MSL to direct to | Q | MLF 338/32 | N38°53.00' W113°05.00' |
| 01 AGL B 110 MSL to turn left and climb to | R | MLF 346/46 | N39°07.50' W112°59.00' |
| 01 AGL B 120 MSL to direct to | S | MLF 340/55 | N39°17.00' W113°06.00' |
| 01 AGL B 120 MSL to (Alternate Exit) direct to | SS | MLF 338/56 | N39°17.50' W113°08.00' |
| 01 AGL B 120 MSL to | T | MLF 322/66 | N39°23.00' W113°32.00' |

PMSV CONTACTS: Primary Home Station. Alternate Mountain Home (MUO 342.5).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC terrain following (TF) visual contour (VC) operations are authorized IAW command directives within published altitude blocks from A to I and M to T. When command directives preclude TF/VC operations, aircrews will maintain the IFR altitudes for each TF route segment. Minimum altitudes are established to provide at least 100' vertical clearance of known man-made obstructions within the route width. Obstruction under 200' AGL were not considered in route design. Command Directives may require additional obstruction clearance for TF/VC operations. The entire route is mountainous. Aircrews should reference their aircraft tech data and the latest clearance plane settings letter for low altitude minimum altitudes. FAA, DOD, Individual service and Major Command directives and instructions governing aircraft operations below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from AA to D; 4 NM left and 3 NM right of centerline from D to E; 3 NM either side of centerline from E to G; 4 NM left and 3 NM right of centerline from G to H; 4 NM either side of centerline from H to T. Centerline between turn points is depicted as a 7.5 NM arc unless otherwise specified.

Special Operating Procedures:

- (1) Participating aircraft separation: Route designated for MARSAs operations established by coordinated scheduling.
- (2) Lost communications (LC) is as required by mission tasking order.
- (3) Route designated for SN missions.
- (4) Centerline between turn points is depicted as a 7.5 NM arc unless otherwise specified.
- (5) Aircrews should be especially vigilant when flying IR-293 between N39-53-00 W115-21-18 and N39-45-18 W115-26-18 due to traffic on VR-1253, VR-1260; between N39-19-30 W115-43-00 and N38-55-30 W115-00-00 due to traffic on VR-1258, VR-1260, VR-1253; between Points G and T due to possible traffic on VR-1259, VR-1406, IR-285, IR-310, IR-200, IR-425, and VR-1258.
- (6) IR-293 will only be used by aircraft scheduled into Utah Test and Terrain Range (UTTR).
- (7) Scheduling agency for the Sevier A & B MOA's and UTTR is the 388 RNG SQU, DSN 777-4401.
- (8) Contact Clover Control on 363.5 prior to entering Sevier B MOA.

- (9) Between Point L and T aircraft will not deviate outside the route corridor.
- (10) IR-293 ends at T. Routing within the UTTR is not part of IR-293, therefore T must be filed as IR-293 exit, followed by a delay in the UTTR, then file FFU222023 to exit the UTTR. Additionally, show the fix POISN when filing the UTTR with your delay i.e.:
IR293.MLF322066..POISN/D1+00..FFU222023..AS FILED.
- (11) Aircrews should be aware of rapidly rising terrain on either side of centerline between Points S and T.
- (12) Alternate Entry: L.
- (13) Crews coming from East of the ranges and using the alternate entry into IR-293 must fly to Milford VORTAC (MLF) first.
- (14) Alternate Exit Point: SS.
- (15) UTTR is not part of IR-293, therefore when using alternate exit file SS as IR-293 exit, followed by a delay in the UTTR then file FFU222023 to exit UTTR.
- (16) When Alternate Exit is filed aircrews will remain within route corridor from L to SS. Sevier A MOA authorized only.
- (17) Uncharted obstruction: Tower 300' AGL (N41-05-30 W114-34-00).
- (18) Information on migratory bird activity along this route may be obtained from the bird avoidance web page on the Air Force Safety Center site:
<http://safety.kirtland.af.mil/AFSC/Bash/avoid.html>

FSS's Within 100 NM Radius:

CDC, RNO

IR-300

ORIGINATING ACTIVITY: 366 OSS/OSOS, Mountain Home AFB, ID 83648 DSN 728-2172/4607 C208-828-2172. Airspace Management information DSN 728-4722.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling requests 0730-1630 local Mon-Fri. After hours and weekends call Mountain Home AFB Command Post DSN 728-5800 C208-828-5800. Must be scheduled minimum of 2 hours prior to entry into airspace.

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at 150 MSL to or as assigned descend direct to | A | LKV VORTAC | N42°29.57' W120°30.43' |
| 100 MSL B 150 MSL to 150 MSL B 100 MSL continue descent to cross | AA | LKV 120/13 | N42°20.00' W120°19.00' |
| 100 MSL to (TA/TFR Initiation Point) direct to | B | LKV 120/17 | N42°17.00' W120°15.50' |
| 01 AGL B 100 MSL to direct to | C | LKV 121/31 | N42°06.00' W120°03.50' |
| 01 AGL B 100 MSL to turn left and climb to | D | SDO 224/58 | N40°57.00' W119°09.00' |
| 01 AGL B 110 MSL to direct to | E | SDO 217/53 | N40°54.00' W118°59.00' |

| | | | |
|---|----|------------|---------------------------|
| 01 AGL B 110 MSL to direct to | EE | SDO 210/29 | N41°05.20' W118°30.00' |
| 01 AGL B 110 MSL to turn left to | F | SDO 092/10 | N41°21.00' W117°49.00' |
| 01 AGL B 110 MSL to direct to | G | SDO 062/14 | N41°27.00' W117°44.00' |
| 01 AGL B 110 MSL to descend direct to | GA | REO 148/43 | N41°53.50' W117°39.00' |
| 01 AGL B 110 MSL to direct to | GB | REO 145/37 | N41°59.50' W117°38.00' |
| 01 AGL B 90 MSL to turn right to | H | REO 141/32 | N42°05.00' W117°37.00' |
| 01 AGL B 90 MSL to direct to | I | REO 136/30 | N42°08.50' W117°35.00' |
| 01 AGL B 90 MSL to turn left to | J | REO 065/29 | N42°38.50' W117°12.50' |
| 01 AGL B 90 MSL to descend direct to | K | REO 057/32 | N42°43.00' W117°10.00' |
| 01 AGL B 90 MSL to (Start Maneuver Area) direct to | L | REO 040/36 | N42°54.00' W117°09.50' |
| 01 AGL B 80 MSL to direct to | M | BOI 272/44 | N43°47.50' W117°09.50' |
| 01 AGL B 80 MSL to (End Maneuver Area) turn left to | N | BOI 276/46 | N43°51.00' W117°09.50' |
| 01 AGL B 80 MSL to (TA/TFR Termination Point) (Contact Salt Lake City ARTCC 387.15 prior to P) turn left to | O | BOI 280/48 | N43°55.00' W117°11.00' |
| 80 MSL to direct to | P | BOI 278/58 | N43°57.00' W117°25.00' |
| 80 MSL to | Q | BOI 270/70 | N43°53.00' W117°43.50' |
| 80 MSL B 150 MSL climb direct to cross | | | |
| 150 MSL to or as assigned. | R | BOI 260/93 | N43°44.00' W118°19.00' |

PMSV CONTACTS: Primary Home Station. Alternates Mountain Home (MUO 342.5).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC terrain following (TF) terrain avoidance (TA) and visual contour (VC) operations are authorized IAW command directives within published altitudes from B to O. When command directives preclude TA/TF/VMC operations aircrews will maintain the IFR altitude for each route segment. Minimum altitudes other than surface are established to provide at least 100' vertical separation of known man-made obstructions within the route width. Command Directives may require additional obstructions clearance for TA/TF/VMC operations. The entire route is mountainous. Aircrews must comply with regulations governing operations below 500' AGL. The route corridor provides airspace for 500' lateral separation from obstacles. Obstructions under 200' AGL were not considered in the route design.

ROUTE WIDTH - 4 NM either side of centerline from A to E; 4 NM left and 3 NM right of centerline from E to F; 4 NM either side of centerline from F to G; 3 NM left and 4 NM right of centerline from G to H; 4 NM either side of centerline from H to L; 9 NM left and 4 NM right of centerline from L to M; 9 NM left

and 3 NM right of centerline from M to N; 4 NM left and 3 NM right of centerline from N to O; 4 NM either side of centerline from O to R.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designed for MARSAs operations established by coordinated scheduling.
- (2) Route is designated for SN missions.
- (3) Aircrews should be especially vigilant when flying IR-300 between N41-16.5 W117-58.5 and Point G due to possible crossing traffic on IR-303 and between N42-10.0 W117-36.0 and N42-17.0 W117-30.0 due to crossing traffic on IR-304. If VMC exists at the crossing point, See and Avoid is the method of MARSAs. In IMC the method of MARSAs will be procedural.
- (4) Centerline is depicted as a 7.5 NM radius arc between turn points.
- (5) Aircrews should be especially vigilant when flying IR-300 between L and P due to a high volume of general aviation traffic crossing the route.
- (6) Aircrews will indicate the altitude required after exiting IR-300 in the remarks section immediately after the route exit time.
- (7) Aircrew may expect a descent restriction until Point AA by Seattle ARTCC if required for traffic separation. If descent is restricted, aircrews may not be able to make 100 MSL by Point B. Crews are authorized to continue descent into the route altitude structure.
- (8) Alternate Entry EE and K: Alternate Entry K may be used only after exiting out of the Owhee and Paradise MOA's.
- (9) Aircrews should be aware of hang gliding activity from Pt. A thru C.
- (10) Noise Sensitive Areas:
 - (a) Residence at N41-25.5 W117-47.5;
 - (b) Residence at N43-17.5 W117-06.0;
 - (c) Residence at N43-21.2 W117-06.9;
 - (d) Residence at N42-00.0 W117-38.5.

FSS's Within 100 NM Radius:

BOI, CLE, MMV, RNO

IR-301

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aeronca St., Boise Air Terminal, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise Air Terminal, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| Cross at 120 MSL to | A | BOI 010/51 | N44°18.00' W115°39.00' |
| 01 AGL B 120 MSL to | B | BOI 027/73 | N44°25.00' W115°00.00' |
| 01 AGL B 120 MSL to | C | BOI 041/99 | N44°25.00' W114°15.00' |
| 01 AGL B 130 MSL to | D | DLN 183/53 | N44°25.00' W112°59.00' |

IR ROUTES

| | | | |
|---------------------|---|------------|---------------------------|
| 01 AGL B 120 MSL to | E | DLN 229/26 | N45°05.00' W113°06.00' |
| 01 AGL B 120 MSL to | F | DLN 290/34 | N45°36.00' W113°11.50' |
| 01 AGL B 110 MSL to | G | CPN 221/51 | N45°34.00' W113°45.00' |
| 01 AGL B 110 MSL to | H | CPN 231/74 | N45°32.00' W114°21.80' |
| 01 AGL B 110 MSL to | I | DNJ 358/80 | N46°02.00' W115°39.00' |
| 01 AGL B 110 MSL to | J | DNJ 329/41 | N45°26.50' W116°25.00' |
| 01 AGL B 110 MSL to | K | DNJ 271/20 | N44°53.00' W116°39.00' |
| 110 MSL to | L | BOI 320/63 | N44°33.00' W116°47.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 8 NM either side of centerline from A to H; 5 NM either side of centerline from H to I; 4 NM either side of centerline from I to L.

Special Operating Procedures:

- (1) MARSA applies between successive participants and at all route crossings. Technique for applying MARSA is by scheduling and/or See and Avoid.
- (2) IR-301 will not be scheduled/flown when IR-307 is in use.
- (3) Avoid all airports by 1500' vertically or 3 NM laterally.
- (4) Cape Horn sensitive area (N44-16.5 W115-00.0 to N44-26.0 W115-08.5). Overfly at or above 1000' AGL or avoid by 3 NM.
- (5) Cypress mine blast area (N44-19.0 W114-32.5). Overfly at or above 1500' AGL or avoid by 3 NM.
- (6) Bannack noise sensitive area (N45-09-30 W112-59-45). Overfly at or above 1000' AGL or avoid by 3 NM.
- (7) Peterson noise sensitive area (N45-32-00 W113-29-00). Overfly at or above 1000' AGL or avoid by 1 NM.
- (8) Uncharted heliport (N45-24-00 W114-10-00). Overfly at or above 1500' AGL or avoid by 3 NM.
- (9) Uncharted airport (N45-39-30 W114-18-00). Overfly at or above 1500' AGL or avoid by 3 NM.
- (10) Shook noise sensitive area (N45-35-45 W114-19-00). Overfly at or above 1000' AGL or avoid by 1 NM.
- (11) Salmon river sensitive area. Overfly at or above 1000' AGL or avoid river by 2 NM from Slate Creek (N45-38-00 W116-18-00) to 5 NM south of Pollock (N45-13-00 W116-27-00).
- (12) Wiggins noise sensitive area (N44-41-00 W116-41-45). Overfly at or above 1000' AGL or avoid by 1 NM.
- (13) Contact Seattle ARTCC on 282.3 to report Pt D.
- (14) Contact Salt Lake ARTCC on 387.15 at L for further clearance.
- (15) Alternate Entry: D, F, H and I.
- (16) Alternate Exit: D, F, H, and I.
- (17) Lost Communications (LC) procedures: Route LC altitude is 12,000' MSL.

FSS's Within 100 NM Radius:

BOI, GTF

IR-302

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aeronca St., Boise Air Terminal, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise Air Terminal, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------------------|----|--------------|---------------------------|
| Cross at 130 MSL to | A | BOI 070/46 | N43°35.50' W115°08.30' |
| 01 AGL B 130 MSL to | B | BOI 057/98 | N43°59.20' W114°00.50' |
| 01 AGL B 130 MSL to | C | PIH 300/65 | N43°39.00' W113°40.50' |
| 01 AGL B 130 MSL to | D | PIH 298/51 | N43°27.50' W113°28.50' |
| 01 AGL B 110 MSL to | E | PIH 295/40 | N43°18.50' W113°19.50' |
| 01 AGL B 70 MSL to | F | PIH 257/26 | N42°54.00' W113°14.50' |
| 01 AGL B 65 MSL to | FA | PIH 250/26 | N42°51.00' W113°14.00' |
| 01 AGL B 60 MSL to | FB | PIH 245/26 | N42°48.50' W113°13.50' |
| 01 AGL B 60 MSL to | G | PIH 224/28 | N42°38.50' W113°12.00' |
| 01 AGL B 80 MSL to | H | PIH 203/42 | N42°19.80' W113°15.70' |
| 01 AGL B 100 MSL to | I | BYI 120/37 | N42°07.00' W113°18.50' |
| 01 AGL B 110 MSL to | J | BYI 153/32 | N42°03.00' W113°45.00' |
| 01 AGL B 100 MSL to | JJ | BYI 200/67 | N41°42.20' W114°47.00' |
| 01 AGL B 100 MSL to | K | BOI 150/130 | N41°26.00' W115°33.50' |
| 01 AGL B 120 MSL to | L | BOI 163/117 | N41°36.83' W116°12.00' |
| 01 AGL B 120 MSL to | M | BOI 185/109 | N41°52.00' W117°06.00' |
| 01 AGL B 120 MSL to | N | BOI 196/75 | N42°30.00' W117°06.00' |
| 130 MSL to Alternate Exit: Y | O | BOI 206/59 | N42°50.00' W117°06.00' |
| 01 AGL B 100 MSL to | K1 | BOI 150/130 | N41°26.00' W115°33.50' |
| 01 AGL B 120 MSL to | X | BOI 149/119 | N41°37.00' W115°33.50' |
| 01 AGL B 120 MSL to | Y | BOI 146/97 | N42°00.00' W115°33.50' |

PMSV CONTACTS: Primary Home Station. Alternates Mountain Home (MUO 342.5).

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 8 NM left and 4 NM right of centerline from A to B; 8 NM either side of centerline from B to F; 4 NM either side of centerline from F to I; 5 NM right and 8 NM left of centerline from I to J; 8 NM either side of centerline from J to M; 5 NM either side of centerline from M to O; 4 NM either side of centerline from X to Y. Alternate Exit Y: 8 NM either side of centerline from K1 to X; 4 NM either side of centerline from X to Y.

Special Operating Procedures:

- (1) MARSAs applies between successive participants by scheduling block time at Point A. See and Avoid primary method of MARSAs in VMC.
- (2) Route crossing L to N, IR-300 and IR-304. If IMC is anticipated, transition to VMC conditions to the leg segment minimum IFR altitude. Remain at minimum IFR altitude until past conflict point, or standard ATC separation is established after leaving the route.
- (3) Noise Sensitive Areas:
 - (a) 10,000' MSL minimum altitude from 5 NM prior to 5 NM past Galena Highway (located between A and B).
- (4) Avoid the following Noise Sensitive Areas by 1500' AGL or 3 NM:
 - (a) City of Rocks (N42-05-00 W113-43-00);
 - (b) Mountain City (N41-50-30 W115-57-30);
 - (c) Ranch (N41-43-50 W115-58-50);
 - (d) Ward Ranch/uncharted airport (N42-03-00 W113-29-07);
 - (e) Craters of the Moon National Monument (N43-27-45 W113-33-00);
 - (f) Henry area (N41-42-10 W114-49-00).
- (5) Due to bird strike potential, minimum altitude from 5 NM prior to 5 NM past point G is 1000' AGL.
- (6) Helicopter ski operations in the Boulder and Pioneer Mountains (east of 114-30W) are conducted in daylight hours from 1 Dec to 30 Apr. Maintain 13,000' MSL between A and B during this time frame.
- (7) Contact Salt Lake ARTCC on 387.15 at Point N for further clearance.
- (8) Avoid all airports by overflight of 1500' AGL vertically or 3 NM laterally: Uncharted airports (N41-55-30 W114-07-00, N41-26-00 W115-47-00, N41-39-00 W114-49-50).
- (9) Uncharted tower 100' AGL: N42-35-24 W113-11-50.
- (10) Alternate Entry Points: B, E, F, I, J, JJ, K and M.
- (11) Alternate Exit Points: F, I, J, JJ, K, M and Y.
- (12) Lost communications procedures: Fly 12,000' MSL or top of the block.
- (13) For non-fighter type aircraft: Due to the severity of terrain near Alternate Exit Point Y, terrain following will only be flown in VMC conditions from Point X to N41-50-00. During IMC or at night, fly the published IFR altitudes to avoid the 9912' MSL peak.

FSS's Within 100 NM Radius:

BOI, MMV, RNO

IR-303

ORIGINATING ACTIVITY: 366 OSS/OSOS, Mountain Home AFB, ID 83648 DSN 728-2172/4607 C208-828-2172. Airspace Management information DSN 728-4722.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling requests 0730-1630 local Mon-Fri. After hours and weekends call Mountain Home AFB Command Post DSN

728-5800 C208-828-5800. Must be scheduled minimum of 2 hours prior to entry into airspace.

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at FL190 to or as assigned. descend to | A | REO 237/27 | N42°29.00' W118°27.00' |
| at or above 120 MSL | B | REO 208/42 | N42°07.00' W118°33.00' |
| 120 MSL to | C | REO 202/50 | N41°57.00' W118°36.00' |
| 01 AGL B 120 MSL to | D | REO 198/54 | N41°52.00' W118°35.00' |
| 01 AGL B 100 MSL to | E | REO 180/63 | N41°36.00' W118°20.00' |
| 01 AGL B 100 MSL to | F | BAM 311/38 | N41°06.50' W117°21.50' |
| 01 AGL B 100 MSL to | G | BAM 348/41 | N41°15.00' W116°50.00' |
| 01 AGL B 100 MSL to | H | BQU 309/50 | N41°27.00' W116°23.00' |
| 01 AGL B 140 MSL to | I | BQU 323/50 | N41°33.00' W116°08.50' |
| 01 AGL B 140 MSL to | J | BQU 343/57 | N41°42.50' W115°45.00' |
| 01 AGL B 140 MSL to | K | MUO 150/64 | N42°00.00' W115°34.00' |
| Alternate Entry: M FL180 to | M | BQU 344/34 | N41°20.00' W115°45.00' |
| or as assigned. descend to | | | |
| 140 MSL to | J1 | BQU 343/57 | N41°42.50' W115°45.00' |
| Thence via published route. | | | |
| Alternate Exit: I | | | |
| 01 AGL B 100 MSL to | H1 | BQU 309/50 | N41°27.00' W116°23.00' |
| climb to cross | | | |
| 140 MSL to | I1 | BQU 323/50 | N41°33.00' W116°08.50' |
| Contact Salt Lake City ARTCC 363.15 | | | |

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF), Terrain Following Radar (TFR), Visual Contour (VC), and Terrain Avoidance (TA) authorized IAW command directive within published altitudes from Point D to K. Night VC operations are not authorized. Minimum altitudes on TF/TFR/VC/TA legs do not provide vertical clearance from man-made obstructions. Route IFR altitudes provide a minimum of 1000' AGL clearance above the highest terrain obstruction within the route boundaries and 5 NM either side of the route corridor. Obstructions under 200 feet were not considered in the route design. When command directives preclude TF/TFR/VC/TA operations, aircrews will maintain the IFR altitude for each route. Aircrews will comply with regulations governing low level operations. Aircrews must consider all airports within or near route corridor limits when mission planning route of flight. The entire route is designated mountainous.

ROUTE WIDTH - On centerline from Point A to D; 5 NM either side of centerline from D to F; 8 NM either side of centerline from F to H; 4 NM either side of centerline from H to J; 5 NM left and 15 NM right of centerline from J to K.

IR ROUTES

Special Operating Procedures:

- (1) MARSAs applies and is accomplished by timing at route entry based on 480 knots ground speed while on the route. See and Avoid applies during VMC. Other airspeeds may be flown as coordinated with the scheduling agency. Aircraft flying at similar airspeeds may be scheduled with ten minutes separation at entry point. Aircrews unable to make scheduled entry time within plus or minus 2 minutes must coordinate a new entry time with Raymond 27 on 381.3 or 15091/5703 (HF).
- (2) Except for IMC terrain following radar operations, aircrews encountering IMC will climb to the minimum IFR altitude prior to IR route crossing.
- (3) WARNING: Chart update manual (CHUM) data used to construct navigational charts does not address vertical obstruction data below 200 feet AGL. Locally obtained vertical obstruction data, from aerial estimation, below 200' AGL may be obtained from the scheduling agency. Aircrews flying this route will report their observations of new developments or cultural changes to the originating agency. This route has been surveyed IAW ACC Sup to AFI 13-201 down to 100' AGL.
- (4) Requesting units will furnish the scheduling agency with the Call sign, number and type of aircraft, planned entry time, entry point, proposed speed, exit point and exit time.
- (5) Clearance to fly this route does not include clearance to enter Mountain Home Range Complex (MHRC). MHRC includes Paradise East/West, Owyhee, Jarbidge MOA's, Saylor Creek Range (R-3202), Juniper Butte Range (R-3204). Prior coordination required with 366 OSS/OSOS (DSN 728-2172) for scheduling. Aircraft not scheduled for MHRC will exit this route at alternate exit Point I.
- (6) Units will not schedule or enter any portion of the MHRC unless they have reviewed governing range and airspace regulations. Regulations are available on the ACC web page at: <https://do.acc.af.mil/dor/DORA/Units-MHAFB.html>
- (7) Information on migratory bird routes along this route may be obtained from the bird avoidance web page on the Air Force Safety Center site: <http://safety.kirtland.af.mil/AFSC/Bash/avoid.html>
- (8) Due to mine blasting operation, avoid by 1000' AGL, an area formed by N41-06 W117-21, N41-13 W117-18, N41-13 W117-15, N41-05 W117-17 to point of beginning.
- (9) Alternate Entry: D, Contact Salt Lake City ARTCC on 363.15, cross Point D at 10,000' MSL or as assigned then descend into the block 100' AGL to 10,000' MSL by Point E. F; Contact Salt Lake City ARTCC on 363.15, cross Point F at 10,000' MSL or as assigned when descend into block 100' AGL to 10,000' MSL by Point G.
- (10) Uncharted airports; N41-57-21 W118-37-30 and N41-39-00 W118-30-00. Overfly at or above 1500' AGL or avoid by 3 NM.
- (11) Uncharted towers: 65', N41-28-29 W118-03-21 and N41-24-30 W118-01-30 located next to SDO TACAN. 75', N41-09-28 W117-28-16. 50', N41-09-20 W117-28-32.
- (12) Noise Sensitive Areas:
 - (a) Town of Midas: N41-14-30 W116-47-30, overfly at or above 1500' AGL or avoid by 1 NM;
 - (b) Hansen Ranch: N41-43-30 W115-58-30, overfly at or above 1500' AGL or avoid by 3 NM;
 - (c) Stowell Ranch: N41-58-00 W115-40-30, overfly at or above 1500' AGL or avoid by 1 NM.

FSS's Within 100 NM Radius:

BOI, MMV, RNO

IR-304

ORIGINATING ACTIVITY: 366 OSS/OSOS, Mountain Home AFB, ID 83648 DSN 728-2172/4607 C208-828-2172. Airspace Management information DSN 728-4722.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling requests 0730-1630 local Mon-Fri. After hours and weekends call Mountain Home AFB Command Post DSN 728-5800 C208-828-5800. Must be scheduled minimum of 2 hours prior to entry into airspace.

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------------------|----|--------------|---------------------------|
| Cross at 170 MSL to or as assigned. | A | BOI 285/71 | N44°10.00' W117°35.00' |
| descend to | | | |
| 140 MSL to | B | BKE 200/13 | N44°40.50' W118°00.00' |
| turn left to | | | |
| 140 MSL to | C | BKE 219/21 | N44°39.70' W118°13.70' |
| descend to | | | |
| 01 AGL B 100 MSL to | D | BKE 203/34 | N44°25.00' W118°21.00' |
| | | | |
| 01 AGL B 100 MSL to | DD | BKE 188/49 | N44°07.00' W118°21.00' |
| | | | |
| 01 AGL B 90 MSL to | E | BKE 185/56 | N44°00.00' W118°21.00' |
| | | | |
| 01 AGL B 90 MSL to | EE | BKE 180/69 | N43°46.00' W118°21.00' |
| | | | |
| 01 AGL B 80 MSL to | F | REO 323/68 | N43°40.00' W118°21.00' |
| | | | |
| 01 AGL B 80 MSL to | FF | REO 318/53 | N43°24.00' W118°21.00' |
| | | | |
| 01 AGL B 90 MSL to | G | REO 299/33 | N43°00.00' W118°22.00' |
| descend to | | | |
| 01 AGL B 90 MSL to | H | REO 246/15 | N42°34.00' W118°12.00' |
| descend to | | | |
| 01 AGL B 85 MSL to | I | REO 229/12 | N42°31.00' W118°07.00' |
| | | | |
| 01 AGL B 85 MSL to | J | REO 144/16 | N42°20.00' W117°45.50' |
| | | | |
| 01 AGL B 85 MSL to | K | REO 125/30 | N42°11.00' W117°28.00' |
| | | | |
| 01 AGL B 85 MSL to | L | REO 113/44 | N42°06.00' W117°08.50' |
| climb to | | | |
| 01 AGL B 95 MSL to | M | REO 108/49 | N42°06.00' W117°00.00' |
| Alternate Entry: N | | | |
| 170 MSL to | N | REO 275/48 | N42°55.00' W118°52.00' |
| or as assigned | | | |
| descend to | | | |
| 01 AGL B 110 MSL to | H1 | REO 246/15 | N42°34.00' W118°12.00' |
| | | | |
| 01 AGL B 85 MSL to | I1 | REO 229/12 | N42°31.00' W118°07.00' |
| Thence via published route. | | | |
| Alternate Exit: J | | | |

01 AGL B 85 MSL to J1 REO 144/16 N42°20.00'
 climb to W117°45.50'
 140 MSL to O REO 131/35 N42°05.00'
 (Contact Salt Lake City W117°28.00'
 ARTCC 387.15)

TERRAIN FOLLOWING OPERATIONS: IMC/VMC terrain following (TF), Terrain Following Radar (TFR), Visual Contour (VC) and Terrain Avoidance (TA) authorized IAW command directives within published altitude from Point C to M. Night VC operations are not authorized. Minimum altitudes on TF/TFR/VC/TA legs do not provide vertical clearance from man-made obstructions. Route IFR altitudes provide a minimum of 1000' AGL clearance above the highest terrain obstruction within the route boundaries and 5 NM either side of the route corridor. Obstructions under 200' were not considered in the route design. When command directives preclude TF/TFR/VC/TA operations, aircrews will maintain the IFR altitude for each route. Aircrews will comply with regulations governing low level operations. Aircrews must consider all airports within or near route corridor limits when mission planning route of flight. The route is designated mountainous.

ROUTE WIDTH - On centerline from A to D; 8 NM either side of centerline from D to DD; 8 NM right and 6 NM left of centerline from DD to E; 8 NM either side of centerline from E to G; 8 NM left and 5 NM right of centerline from G to H; 8 NM either side of centerline from H to M. Alternate Entry N: On centerline from N to H1; 8 NM either side of centerline from H1 to I1. Alternate Entry J: On centerline J1 to O.

Special Operating Procedures:

- (1) MARSAs applies and is accomplished by timing at route entry based on 480 knot ground speed while on the route. See and Avoid applies during VMC. Other airspeeds may be flown as coordinated with the scheduling agency. Aircraft flying at similar airspeeds may be scheduled with ten minutes of separation at the entry point. Aircrews unable to make scheduled entry time within plus or minus 2 minutes must coordinate a new entry time with Raymond 27 on 381.3 (UHF) or 15091/5703 (HF).
- (2) Except for IMC terrain following Radar operations, aircrews encountering IMC will climb to the minimum IFR altitude prior to IR route crossing.
- (3) WARNING: Chart update manual (CHUM) data used to construct navigational charts does not address vertical obstruction data below 200' AGL. Locally obtained vertical obstruction data, from aerial estimations, below 200' AGL may be obtained from the scheduling agency. Aircrews flying this route will report their observations of new developments or cultural changes to the originating agency. This route has been surveyed IAW ACC Sup 1 to AFI 13-201 down to 100' AGL.
- (4) Requesting units will furnish the scheduling agency with Call Sign, number and type of aircraft, planned entry time, entry point, proposed speed, exit point and exit time.
- (5) Clearance to fly this route does not include clearance to enter Mountain Home Range Complex (MHRC). MHRC includes Paradise East/West, Owyhee, Jarbidge MOA's, Saylor Creek Range (R-3202), Juniper Butte Range (R-3204). Prior coordination required with 366 OSS/OSOS (DSN 728-2172) for scheduling. Aircraft not scheduled for MHRC will exit this route at alternate exit Point J.

- (6) Units will not schedule or enter any portion of the MHRC unless they have reviewed governing range and airspace regulations. Regulations are available on the ACC web page at: <https://do.acc.af.mil/dor/DORA/Units-MHAFB.html>
- (7) Alternate Entry: D. Contact Salt Lake City ARTCC on 387.15, cross Point D southbound at 10,000' MSL or as assigned then descend into the block 100' AGL to 10,000' MSL by Point DD. H. Contact Salt Lake City ARTCC on 387.15, cross Point H at 8500' MSL or as assigned then descend into the block 100' AGL to 8500' MSL by Point I.
- (8) Uncharted airports: N43-57-30 W118-08-00, N43-45-00 W118-28-00, N43-34-30 W118-33-00, N42-13-00 W117-55-00. Overfly at or above 1500' AGL or avoid by 3 NM.
- (9) Uncharted towers: 65', N41-28-29 W118-03-21 and N41-24-30 W118-01-30 located next to SDO TACAN. 75', N41-09-28 W117-28-16. 50', N41-09-20 W117-28-32.
- (10) CAUTION: Five uncharted towers exist from Point F to FF. These temporary wind energy meteorological towers are within a 5 NM radius of N43-53-00 W118-43-00. Three of the towers are on or very near the centerline of the route. These structures can extend into the floor of the MTR stucture, and up to but not including 200' AGL.
- (11) Information on migratory bird routes along this route may be obtained from the bird avoidance web page on the Air Force Safety Center site: <http://safety.kirtland.af.mil/AFSC/Bash/avoid.html>

FSS's Within 100 NM Radius:
 BOI, MMV, RNO

IR-305

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aeronca St., Boise Air Terminal, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise Air Terminal, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| Cross at 120 MSL to | A | BOI 206/59 | N42°50.00' W117°06.00' |
| 01 AGL B 120 MSL to | B | BOI 196/75 | N42°30.00' W117°06.00' |
| 01 AGL B 120 MSL to | C | BOI 185/109 | N41°52.00' W117°06.00' |
| 01 AGL B 120 MSL to | D | BOI 163/117 | N41°36.83' W116°12.00' |
| 01 AGL B 120 MSL to | E | BOI 150/130 | N41°26.00' W115°33.50' |
| 01 AGL B 100 MSL to | F | BYI 200/67 | N41°42.20' W114°47.00' |
| 01 AGL B 100 MSL to | G | BYI 153/32 | N42°03.00' W113°45.00' |
| 01 AGL B 110 MSL to | H | BYI 120/37 | N42°07.00' W113°18.50' |
| 01 AGL B 80 MSL to | I | PIH 203/42 | N42°19.80' W113°15.70' |

IR ROUTES

| | | | |
|--|----|-------------|---------------------------|
| 01 AGL B 60 MSL to | J | PIH 224/28 | N42°38.50' W113°12.00' |
| 01 AGL B 60 MSL to | JA | PIH 245/26 | N42°48.50' W113°13.50' |
| 01 AGL B 65 MSL to | JB | PIH 250/26 | N42°51.00' W113°14.00' |
| 01 AGL B 70 MSL to | K | PIH 257/26 | N42°54.00' W113°14.50' |
| 01 AGL B 110 MSL to | L | PIH 295/40 | N43°18.50' W113°19.50' |
| 01 AGL B 130 MSL to | M | PIH 298/50 | N43°27.50' W113°28.50' |
| 01 AGL B 130 MSL to | N | PIH 300/65 | N43°39.00' W113°40.50' |
| 01 AGL B 130 MSL to | O | PIH 302/89 | N43°59.20' W114°00.50' |
| 01 AGL B 140 MSL to Alternate Exit: Y | P | BOI 060/75 | N43°49.00' W114°30.00' |
| 01 AGL B 100 MSL to | E1 | BOI 150/130 | N41°26.00' W115°33.50' |
| 01 AGL B 120 MSL to | X | BOI 149/119 | N41°37.00' W115°33.50' |
| 01 AGL B 120 MSL to | Y | BOI 146/97 | N42°00.00' W115°33.50' |

- (6) Helicopter ski operations in the Boulder and Pioneer Mountains (east of W114-30-00) are conducted in daylight from 1 Dec to 30 Apr. Maintain 13,000' MSL between O and P during this time frame.
- (7) Contact Salt Lake ARTCC on 363.0 at Point O for further clearance.
- (8) Avoid all airports by overflight of 1500' AGL vertically or 3 NM laterally: Uncharted airports (N41-55-30 W114-07-00, N41-26-00 W115-47-00, N41-39-00 W114-49-50).
- (9) Uncharted obstructions:
 - (a) Tower 190' AGL (N43-17-30 W113-11-50);
 - (b) Tower 100' AGL (N42-35-24 W113-11-50);
 - (c) Tower 75' AGL (N42-30-00 W113-10-00) on top of hill.
- (10) Alternate Entry Points: C, E, F, G, H, K, L and O.
- (11) Alternate Exit Points: C, E, F, G, H, K, L, O and Y.
- (12) Lost communications procedures: Fly 12,000' MSL or top of the block.
- (13) For non-fighter type aircraft: Due to the severity of terrain near Alternate Exit Point Y, terrain following will only be flown in VMC conditions from Point X to N41-50-00. During IMC conditions or at night, fly the published IFR altitudes to avoid the 9912' MSL peak.

FSS's Within 100 NM Radius:

BOI

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 8 NM either side of centerline from C to G; 5 NM left and 8 NM right of centerline from G to H; 4 NM either side of centerline from H to K; 8 NM either side of centerline from K to O; 8 NM right and 4 NM left of centerline from O to P; 4 NM either side of centerline from X to Y.

Special Operating Procedures:

- (1) MARSAs applies between successive participants by scheduling block of time at Point A. See and Avoid primary method of MARSAs in VMC.
- (2) Route crossing A to D, IR-300 and IR-304. If IMC is anticipated, transition to VMC conditions to the leg segment minimum IFR altitude. Remain at minimum IFR altitude until past conflict point, or standard ATC separation is established after leaving the route.
- (3) Noise Sensitive Areas:
 - (a) 10,000' MSL minimum altitude from 5 NM prior to 5 NM past Galena Highway (located between O and P).
- (4) Avoid the following Noise Sensitive Areas by 1500' AGL or 3 NM:
 - (a) City of Rocks (N42-05-00 W113-43-00);
 - (b) Marys River area (N41-39-00 W115-06-00, N41-33-00 W115-20-00, N41-23-00 W115-14-00, N41-28-00 W114-59-00);
 - (c) Mountain City (N41-50-30 W115-57-30);
 - (d) Ranch (N41-43-50 W115-58-50);
 - (e) Ward Ranch/uncharted airport (N42-03-00 W113-29-07);
 - (f) Craters of the Moon Park National Monument (N43-27-45 W113-33-00);
 - (g) Henry area (N41-42-10 W114-49-00).
- (5) Due to bird strike potential, minimum altitude from 5 NM prior to 5 NM past Point J is 1000' AGL.

IR-307

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aeronca St., Boise Air Terminal, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise Air Terminal, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| Cross at 110 MSL to | A | BOI 320/65 | N44°33.00' W116°47.00' |
| 01 AGL B 110 MSL to | B | DNJ 271/20 | N44°53.00' W116°39.00' |
| 01 AGL B 110 MSL to | C | DNJ 329/41 | N45°26.50' W116°25.00' |
| 01 AGL B 110 MSL to | D | DNJ 358/80 | N46°02.00' W115°39.00' |
| 01 AGL B 110 MSL to | E | CPN 231/74 | N45°32.00' W114°21.80' |
| 01 AGL B 110 MSL to | F | CPN 221/51 | N45°34.00' W113°45.00' |
| 01 AGL B 120 MSL to | G | DLN 290/34 | N45°36.00' W113°11.50' |
| 01 AGL B 120 MSL to | H | DLN 229/26 | N45°05.00' W113°06.00' |
| 01 AGL B 120 MSL to | I | DLN 183/53 | N44°25.00' W112°59.00' |
| 01 AGL B 130 MSL to | J | BOI 041/99 | N44°25.00' W114°15.00' |

01 AGL B 120 MSL to K BOI 027/73 N44°25.00'
W115°00.00'
120 MSL to L BOI 010/51 N44°18.00'
W115°39.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to D; 5 NM either side of centerline from D to E; 8 NM either side of centerline from E to L.

Special Operating Procedures:

- (1) MARSAs applies between successive participants and at all route crossings. Techniques for applying MARSAs is by scheduling and/or 'See and Avoid'.
- (2) IR-307 will not be scheduled/flown when IR-301 is in use.
- (3) Avoid all airports by 1500' vertically or 3 NM laterally.
- (4) Wiggins noise sensitive area (N44-41-00 W116-41-45) avoid at or above 1000' AGL or avoid by 1 NM.
- (5) Salmon River sensitive area. Overfly at or above 1000' AGL or avoid river by 2 NM from Slate Creek (N45-38.0 W116-18.0) to 5 NM South of Pollock (N45-13.0 W116-27.0).
- (6) Uncharted airfields:
 - (a) N45-39.5 W114-18.0, overfly at or above 1500' AGL or avoid by 3 NM,
 - (b) N44-26.0 W113-44.0.
- (7) Uncharted heliport (N45-24.0 W114-10.0). Overfly at or above 1500' AGL or avoid by 3 NM.
- (8) Cypress mine blast area (N44-19.0 W114-32.5), Overfly at or above 1500' AGL or avoid by 3 NM.
- (9) Peterson noise sensitive area (N45-32-00 W113-29-00). Overfly at or above 1000' AGL or avoid by 1 NM.
- (10) Bannack noise sensitive area (N45-09-30 W112-59-45). Overfly at or above 1000' AGL or avoid by 3 NM.
- (11) Cypress mine blast area (N44-19-00 W114-32-30). Overfly at or above 1500' AGL or avoid by 3 NM.
- (12) Cape Horn sensitive area (N44-16-30 W115-00-00 to N44-26-00 W115-08-30). Overfly at or above 1000' AGL or avoid by 3 NM.
- (13) Contact Seattle ARTCC on 282.3 to report Pt I.
- (14) Contact Salt Lake ARTCC on 387.15 at L for further clearance.
- (15) Alternate Entry: D, E, G, and I.
- (16) Alternate Exit: D, E, G, and I.
- (17) Lost Communications (LC) procedures. Route LC altitude is 12,000' MSL.

FSS's Within 100 NM Radius:

BOI, GTF

IR-308

ORIGINATING ACTIVITY: 58 OSS/DOO, Kirtland AFB, NM 87117-5861 DSN 263-5979/5888, C505-853-5979/5888/5701.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | PUB 173/18 | N38°00.00' W104°28.00' |
| 02 AGL B 100 MSL to | B | ALS 072/46 | N37°25.00' W104°52.00' |
| 02 AGL B 130 MSL to | C | ALS 069/22 | N37°24.00' W105°22.00' |
| 02 AGL B 110 MSL to | D | ALS 112/26 | N37°06.00' W105°22.00' |
| SFC B 130 MSL to | E | ALS 202/28 | N36°58.00' W106°09.00' |
| 02 AGL B 130 MSL to | F | ALS 224/36 | N37°01.00' W106°27.00' |
| 02 AGL B 110 MSL to | G | ALS 227/54 | N36°54.00' W106°47.00' |
| 02 AGL B 110 MSL to | H | ALS 214/71 | N36°32.00' W106°53.00' |
| 02 AGL B 110 MSL to | I | ABQ 341/46 | N35°48.00' W106°55.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route. IMC Terrain Following (TF) authorized within major command guidance.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) This route restricted to turboprop, tiltrotor, and rotary wing aircraft only.
- (2) This route conflicts with IR-109, IR-409, IR-415/424, and VR-1175. To deconflict with IR-409 or IR-415/424, contact 140th OG, Buckley ANGB, DSN 847-9470/71/72. To deconflict with IR-109, contact 27 OSS, Cannon AFB, DSN 681-1750/2279.
- (3) Alternate Entry: Points B, D and E.
- (4) Avoid the following airfields by 2 NM or 2000' AGL:
 - (a) N36-50.0 W106-53.0;
 - (b) Cuchara Valley at N37-31.0 W105-01.0;
 - (c) Johnson at N37-42.0 W104-47.0.
- (5) CAUTION: Tower, 275' AGL at N37-23.82 W105-24.35.
- (6) CAUTION: Numerous towers and obstructions exist on this route which are hazards to flight at flight altitudes less than 300' AGL. Contact 58 OSS/OSO DSN 263-5979/5888, C505-853-5979 to obtain a current and complete fax list of unchummed/uncharted obstructions.
- (7) Contact 58 OSS/DOO for a fax or email of the most current avoid areas.

FSS's Within 100 NM Radius:

ABQ, DEN

IR-320

ORIGINATING ACTIVITY: 7 OSS/OSOR, 966 Ave. D-4, Ste. 118, Dyess AFB, TX 79607 DSN 461-3666, C325-696-3666, fax C325-696-3677.

SCHEDULING ACTIVITY: 7 OSS/OSOR, 1001 Ave. D-4, Ste. 107, Dyess AFB, TX 79607 DSN 461-3665, C325-696-3665, fax C325-696-4158.

IR ROUTES

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at FL230 to or as assigned (Start TFR Point) descend direct to | A | JNC 183/42 | N38°24.00' W109°04.00' |
| 01 AGL B FL230 to (Start TA Point) direct to | B | DVC 251/12 | N37°47.50' W109°10.50' |
| 06 AGL B 95 MSL to turn right to | C | DVC 190/43 | N37°09.00' W109°18.00' |
| 01 AGL B 95 MSL to direct to | D | DVC 192/51 | N37°03.00' W109°24.00' |
| 01 AGL B 95 MSL to turn left to | E | DVC 202/62 | N36°58.00' W109°41.00' |
| 01 AGL B 95 MSL to turn right to | F | TBC 043/84 | N36°51.00' W109°47.50' |
| 01 AGL B 95 MSL to direct to | G | TBC 058/75 | N36°28.50' W109°47.50' |
| 01 AGL B 95 MSL to descend direct to | H | TBC 063/74 | N36°21.50' W109°47.00' |
| 04 AGL B 95 MSL to direct to | I | TBC 080/75 | N36°00.00' W109°43.50' |
| 01 AGL B 90 MSL to direct to | J | TBC 089/79 | N35°48.00' W109°42.00' |
| 01 AGL B 90 MSL to direct to | K | SJN 322/50 | N35°10.00' W109°35.50' |
| 01 AGL B 90 MSL to turn right to | L | SJN 284/20 | N34°34.00' W109°30.00' |
| 01 AGL B 90 MSL to climb direct to cross | M | SJN 269/20 | N34°29.00' W109°32.00' |
| 100 MSL to direct to | N | SJN 260/22 | N34°26.00' W109°35.00' |
| 100 MSL to turn right to | O | SJN 229/45 | N34°03.50' W109°55.50' |
| 01 AGL B 100 MSL to direct to | P | SJN 230/51 | N34°01.00' W110°03.00' |
| 01 AGL B 100 MSL to turn right to | Q | SJN 237/63 | N34°02.50' W110°20.00' |
| 01 AGL B 100 MSL to direct to | R | SJN 246/67 | N34°11.50' W110°27.50' |
| 06.5 AGL B 90 MSL to turn left to | S | INW 051/35 | N35°18.50' W110°08.50' |
| 90 MSL to direct to | T | INW 045/37 | N35°22.50' W110°09.00' |
| 90 MSL to (Contact Denver ARTCC on 256.87) climb to cross | U | INW 030/43 | N35°34.50' W110°11.50' |
| 160 MSL to | V | TBC 088/50 | N35°56.00' W110°16.00' |
| 160 MSL to | W | TBC 082/43 | N36°02.00' W110°23.00' |
| 160 MSL to | X | TBC 078/22 | N36°06.00' W110°49.00' |
| Alternate Entry: F1 | | | |
| 120 MSL to or as assigned then descend direct to cross | F1 | TBC 053/77 | N36°36.00' W109°47.50' |

| | | | |
|--|----|------------|---------------------------|
| 01 AGL B 100 MSL to turn right to | G1 | TBC 058/75 | N36°28.50' W109°47.50' |
| 01 AGL B 100 MSL to Thence via published route. | H1 | TBC 063/74 | N36°21.50' W109°47.00' |
| Alternate Entry: AD | | | |
| FL230 to or as assigned then direct to cross | AD | ZUN 124/24 | N34°40.00' W108°50.00' |
| at or below 170 MSL then turn left and continue descent to | AE | ZUN 175/15 | N34°43.00' W109°12.00' |
| 100 MSL B 170 MSL to then continue descent direct to cross | AF | ZUN 191/19 | N34°41.00' W109°19.00' |
| 100 MSL to direct to | AG | SJN 300/17 | N34°37.00' W109°24.00' |
| 100 MSL to Thence via published route. | M1 | SJN 269/20 | N34°29.00' W109°32.00' |
| Alternate Exit: S | | | |
| 01 AGL B 100 MSL to turn right to | Q1 | SJN 237/63 | N34°02.50' W110°20.00' |
| 01 AGL B 100 MSL to direct to | R1 | SJN 246/67 | N34°11.50' W110°27.50' |
| 06.5 AGL B 90 MSL to Contact ABQ ARTCC 306.2 | S1 | INW 051/35 | N35°18.50' W110°08.50' |

PMSV CONTACTS: Primary Home Station. Alternate Ellsworth (RCA 375.775), Barksdale (BAD 373.1).

TERRAIN FOLLOWING OPERATIONS: Terrain Following (TF) Visual Contour (VC) operations are authorized IAW command directives within published altitudes from A to G and H to L. This route is mountainous. Minimum altitudes other than surface are established to provide at least 200' vertical separation of known man-made obstructions. Obstructions under 200' AGL were not considered in the route design. When command directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each TF route segment.

ROUTE WIDTH - 3 NM left and 5 NM right of centerline from A to B; 4 NM either side of centerline from B to X. ALTERNATE ENTRY, F1: 4 NM either side of centerline from F1 to H1. ALTERNATE ENTRY, AD: 4 NM either side of centerline from AD to M1. ALTERNATE EXIT, S: 4 NM either side of centerline from Q1 to S1.

Special Operating Procedures:

- (1) Deconfliction will be by coordinated scheduling. Aircraft utilizing this MTR shall meet their scheduled entry, and exit points by plus or minus 2.5 minutes to ensure the mandatory separation time of 10 minutes. If unable, contact the scheduling authority to cancel and or reschedule mission.
- (2) Lost Communications (LC) procedures: Route LC altitude is 16,000' MSL. Desired deviation from this procedure must be filed IAW command directive and verified with Denver ARTCC prior to route entry.
- (3) Aircrews are advised of 550' smokestack located at N34-56-26 W110-17-59.
- (4) Aircraft will contact the following ARTCC's with their call sign, location and route identifier:
 - (a) Albuquerque ARTCC at Point L on 239.05;

- (b) Denver ARTCC at Point U on 256.87.
- (5) IR-320 and IR-112 conflict in the area of Point J and between Points R and S. For de-confliction with IR-112, contact Kirtland AFB (DSN 263-5979 or 5888). The method of MARSAs in these areas will be coordinated scheduling.
- (6) Centerline between designated turn points is depicted as a 7.5 NM radius arc.
- (7) Aircrews should be especially vigilant during summer months for increased VFR traffic between Points N and S.
- (8) Aircrews are advised of a 300' smokestack located at the Pulp Mill located at N34-30.3 W110-20.2. Avoid by 1/4 NM.
- (9) Noise Sensitive Areas:
 - (a) Residence at N34-52.0 W110-18.5;
 - (b) Residence at N34-22.4 W110-25.9;
 - (c) Residence at N34-23.1 W110-23.0;
 - (d) Residence at N37-52.4 W109-11.3;
 - (e) High School at N35-45.3 W109-37.8;
 - (f) Residence at N34-53.3 W110-16.3;
 - (g) Residence at N34-54.5 W110-14.9;
 - (h) Residence at N34-54.8 W110-13.2.
- (10) Aircrew requesting to use the Alternate Entry Track AD request to schedule IR-320AD with the scheduling agency.
- (11) Alternate Exit: Point S; climb to cross Point S at 9000 MSL, contact Albuquerque ARTCC 306.2, exit at Point S under Albuquerque's control direct to next filed point.

FSS's Within 100 NM Radius:

ABQ, CDC, PRC

IR-324

ORIGINATING ACTIVITY: 62 OSS/OSK, 1172 Levitow Blvd., McCord AFB, WA 98438 DSN 382-3615, C253-982-3615.

SCHEDULING ACTIVITY: 62 OSS/OSO, 100 Main St., McChord AFB, WA 98438 DSN 382-9925, C253-982-9925. Duty hours 0800-1700 local. Non-duty hours McChord Command Post DSN 382-2635, C253-982-2635.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | EPH 105/21 | N47°10.00' W119°00.00' |
| 03 AGL B 50 MSL to | B | GEG 205/30 | N47°13.00' W118°09.00' |
| 03 AGL B 50 MSL to | C | GEG 258/26 | N47°38.00' W118°15.70' |
| 03 AGL B 60 MSL to | D | GEG 278/32 | N47°49.00' W118°19.00' |
| 03 AGL B 60 MSL to | E | GEG 270/42 | N47°49.00' W118°36.00' |
| 03 AGL B 60 MSL to | F | EPH 359/28 | N47°49.00' W119°11.00' |
| 03 AGL B 60 MSL to | G | EPH 334/23 | N47°46.00' W119°28.50' |
| 03 AGL B 60 MSL to | H | EPH 297/26 | N47°42.00' W119°51.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 03 AGL B 50 MSL to | I | EPH 218/15 | N47°15.00' W119°44.00' |
| 03 AGL B 50 MSL to | J | EPH 187/22 | N47°03.40' W119°40.50' |

TERRAIN FOLLOWING OPERATIONS: After crossing Point A descent to 300' AGL can be initiated. From Point A to J, 300' AGL modified contour will be conducted in VMC. If IMC, route leg altitudes will be 2000' above highest obstacle within 5 NM of route centerline unless on FAA exemption 4371 between Points H and J. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) All turns must remain within route width.
- (2) Authorized aircraft C-17 and C-130.
- (3) Primary Entry: Point A. Alternate Entry: Point B.
- (4) Primary Exit: Point J. Alternate Exit: Points G and H.
- (5) Route Communications:
 - (a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A for clearance;
 - (b) Between Points B and C monitor Spokane Approach Control 123.75 or 282.25;
 - (c) Between Points C and H monitor Seattle Center 126.1 or 291.6. Give progress report at Point E. If exiting at Point G, relay intentions after exit prior to Point F;
 - (d) Between Points H and J monitor Grant County Approach 126.4 or 385.5. Before Point I, advise of intentions after exit;
 - (e) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and B. Monitor Spokane Approach Control 123.75 or 282.25 between Points B and C. Then monitor Seattle Center 126.1 or 291.6 between Points C and J. Prior to Point I advise Center of intentions after exit. (Tie in FSS: SEA).
- (6) Speed:
 - (a) Maintain 250 KCAS or below until route entry;
 - (b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSAs established via coordinated scheduling;
 - (c) Maximum speed on route: 360 KCAS.
- (7) Caution:
 - (a) Deconflict traffic on VR-1350, VR-1351, IR-325, IR-326, IR-327, IR-328, IR-330 and IR-341 with scheduling activity. Exit at Point G will deconflict with VR-1350;
 - (b) Be alert for crop duster activity while over any agricultural area below 1000' AGL;
 - (c) Prior to Point A, crews should be alert for light aircraft conducting basic flight training that may not be talking to air traffic control;
 - (d) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township from Points H to J. Crews should be alert for aircraft and glider aircraft under tow without transponders and not talking to air traffic control. Crews should use extreme caution when exiting;
 - (e) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;
 - (f) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be

IR ROUTES

alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.

- (8) When practicable avoid by 1500' AGL or 3 NM:
- (a) Tree Heart AFD (Pvt) N47-08-30 W118-48-04;
 - (b) Pru AFD N47-07-30 W118-23-34;
 - (c) Kramer AFD N47-22-54 W118-17-48;
 - (d) Hanes AFD (Pvt) N47-29-30 W118-15-04;
 - (e) Davenport AFD N47-39-15 W118-10-04;
 - (f) 7 Bays AFD (Pvt) N47-51-04 W118-19-49;
 - (g) Gollehon AFD (Pvt) N47-49-13 W118-41-13;
 - (h) Wilbur AFD N47-45-12 W118-44-38;
 - (i) Sheffels Ranch AFD (Pvt) N47-49-02 W118-48-05;
 - (j) Mansfield AFD N47-48-35 W119-38-14;
 - (k) Quincy AFD N47-12-42 W119-50-23;
 - (l) Grigg AFD (Pvt) N47-10-24 W119-44-48.
- (9) Sensitive Areas:
- (a) Avoid Sprague Lake NE of Point B;
 - (b) Maintain 2000' AGL or above over FDR Lake between Points D and E;
 - (c) Avoid by 1 NM wildlife areas between Points D and E: N47-49-30 W118-20-48, N47-53-00 W118-27-48.
 - (d) Avoid sport parachute activity by 3NM at N47-09-38 W118-17-33.
- (10) Crews should forward any observed hazard to aviation or concerns to the 62nd AW Airspace Manager at DSN 382-4057, C253-982-4057.

FSS's Within 100 NM Radius:

SEA

IR-325

ORIGINATING ACTIVITY: 62 OSS/OSK, 1172 Levitow Blvd., McCord AFB, WA 98438 DSN 382-3615, C253-982-3615.

SCHEDULING ACTIVITY: 62 OSS/OSO, 100 Main St., McCord AFB, WA 98438 DSN 382-9925, C253-982-9925. Duty hours 0800-1700 local. Non-duty hours McCord Command Post DSN 382-2635, C253-982-2635.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | EPH 218/15 | N47°15.00' W119°44.00' |
| 03 AGL B 60 MSL to | B | EPH 297/26 | N47°42.00' W119°51.00' |
| 03 AGL B 60 MSL to | C | EPH 334/23 | N47°46.00' W119°28.50' |
| 03 AGL B 60 MSL to | D | EPH 359/28 | N47°49.00' W119°11.00' |
| 03 AGL B 60 MSL to | E | GEG 278/32 | N47°49.00' W118°19.00' |
| 03 AGL B 60 MSL to | F | GEG 258/26 | N47°38.00' W118°15.70' |
| 03 AGL B 50 MSL to | G | GEG 205/30 | N47°13.00' W118°09.00' |
| 03 AGL B 50 MSL to | H | EPH 105/21 | N47°10.00' W119°00.00' |

TERRAIN FOLLOWING OPERATIONS: After crossing Point A descent to 300' AGL can be initiated. From Point A to H, 300' AGL modified contour will be conducted in VMC. If IMC, route leg altitudes will be 2,000' above highest obstacle within 5 NM of route centerline. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) All turns must remain within route width.
- (2) Authorized aircraft C-17 and C-130.
- (3) Primary Entry: Point A. Alternate Entry: Points B and C.
- (4) Primary Exit: Point H. There are no alternate exit points.
- (5) Route Communications:
 - (a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A for clearance;
 - (b) Between Points B and F monitor Seattle Center 126.1 or 291.6;
 - (c) Between Points F and G monitor Spokane Approach Control 123.75 or 282.25;
 - (d) Before Point H, advise Grant County Approach of intentions after exit on 126.4 or 385.5;
 - (e) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and F. Monitor Spokane Approach Control from Point F to G. Then monitor Seattle Center 126.1 or 291.6 from Point G to H. At Point G advise of intentions after exit.
- (6) Speed:
 - (a) Maintain 250 KCAS or below until route entry;
 - (b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSAs established via coordinated scheduling;
 - (c) Maximum speed on route: 360 KCAS.
- (7) Caution:
 - (a) Deconflict traffic on VR-1350, VR-1351, IR-324, IR-326, IR-327, IR-328, IR-330 and IR-341 with scheduling activity. Entry at Point C will deconflict with VR-1350;
 - (b) Be alert for crop duster activity while over any agricultural area below 1000' AGL;
 - (c) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township from Points A to B. Enroute to Point A. Crews should be alert for glider aircraft and glider aircraft under tow without transponders and not talking to air traffic control;
 - (d) When climbing out of the low level near Point H, be alert for small aircraft conducting basic flight training;
 - (e) During summer months (May-Oct) crews must check Seattle Center NOTAMS for any Temporary Flight Restrictions that may be in effect in support of fire suppression;
 - (f) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.
- (8) When practicable avoid by 1500' AGL or 3 NM:
 - (a) Grigg AFD (Pvt) N47-10-24 W119-44-48;
 - (b) Quincy AFD N47-12-42 W119-50-23;
 - (c) Mansfield AFD N47-48-35 W119-38-14;
 - (d) Sheffels Ranch AFD (Pvt) N47-49-02 W118-48-05;
 - (e) Wilbur AFD N47-45-12 W118-44-38;
 - (f) Gollehon AFD (Pvt) N47-49-13 W118-41-13;
 - (g) 7 Bays AFD (Pvt) N47-51-04 W118-19-49;

- (h) Davenport AFDL N47-39-15 W118-10-04;
 - (i) Hanes AFDL (Pvt) N47-29-30 W118-15-04;
 - (j) Kramer AFDL N47-22-54 W118-17-48;
 - (k) Pru AFDL N47-07-30 W118-23-34;
 - (l) Tree Heart Afdl N47-08-30 W118-48-04.
- (9) Sensitive Areas:
- (a) Avoid Sprague Lake NE of Point G;
 - (b) Maintain 2000' AGL or above over FDR Lake between Points D and E;
 - (c) Avoid by 1 NM wildlife areas between Points D and E: N47-53-00 W118-27-48, N47-49-30 W118-20-48.
 - (d) Avoid sport parachute activity by 3NM at N47-09-38 W118-17-33.
- (10) Crews should forward any observed hazard to aviation or concerns to the 62nd AW Airspace Manager at DSN 382-4057, C253-982-4057.

FSS's Within 100 NM Radius:

SEA

IR-326

ORIGINATING ACTIVITY: 62 OSS/OSK, 1172 Levitow Blvd., McCord AFB, WA 98438 DSN 382-3615, C253-982-3615.

SCHEDULING ACTIVITY: 62 OSS/OSO, 100 Main St., McChord AFB, WA 98438 DSN 382-9925, C253-982-9925. Duty hours 0800-1700 local. Non-duty hours McChord Command Post DSN 382-2635, C253-982-2635.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | EPH 114/40 | N46°54.00' W118°44.10' |
| 03 AGL B 50 MSL to | B | EPH 091/32 | N47°10.40' W118°41.40' |
| 03 AGL B 50 MSL to | C | GEG 204/29 | N47°13.20' W118°08.40' |
| 03 AGL B 50 MSL to | D | PUW 280/16 | N46°48.30' W117°33.00' |
| 03 AGL B 50 MSL to | E | ALW 347/19 | N46°23.40' W118°14.30' |
| 03 AGL B 50 MSL to | F | EPH 139/50 | N46°35.70' W119°00.00' |
| 03 AGL B 50 MSL to | G | EPH 187/22 | N47°03.40' W119°40.50' |

TERRAIN FOLLOWING OPERATIONS: After crossing Point A descent to 300' AGL can be initiated. From Point A to G, 300' AGL modified contour will be conducted in VMC, unless overflying Columbia National Wildlife Refuge, where minimum altitude will be 2000 feet AGL. If IMC, route leg altitude will be 2000' above the highest obstacle within 5 NM of route centerline unless on FAA exemption 4371C between Points F and G. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) All turns must remain within route width.
- (2) Authorized aircraft C-17 and C-130.
- (3) Primary Entry: Point A. Alternate Entry: Points B, C and D.
- (4) Primary Exit: Point G. There are no alternate exit points.
- (5) Route Communications:
 - (a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A for clearance;
 - (b) For entry at Point D contact Seattle Center on 123.95 or 282.3 for clearance;
 - (c) Between Point C and E monitor Seattle Center on 123.95 or 282.3. Provide progress report to Seattle at Point D;
 - (d) Monitor Chinook Approach 128.75 or 377.2 between Points E and F;
 - (e) At Point F, advise Grant County Approach of intentions after exit on 126.4 or 385.5;
 - (f) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and C. Monitor Seattle on 123.95 or 282.3 from Point C to E, relay progress report at Point D. Then monitor Seattle on 126.1 or 291.6 between Points E and G. At Point F advise of intentions after exit.
- (6) Speed:
 - (a) Maintain 250 KCAS or below until route entry;
 - (b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSA established via coordinated scheduling;
 - (c) Maximum speed on route: 360 KCAS.
- (7) Caution:
 - (a) Deconflict traffic on VR-1350, VR-1351, IR-324, IR-325, IR-329, IR-330 and IR-341 with scheduling activity;
 - (b) Be alert for small aircraft conducting spin training 6000' MSL and below midway between Point F and G;
 - (c) Be alert for crop duster activity while over any agricultural area below 1000' AGL;
 - (d) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township. When exiting the route, crews should be alert for glider aircraft and glider aircraft under tow without transponders and not talking to air traffic control;
 - (e) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;
 - (f) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.
- (8) When practicable avoid by 1500' AGL or 3 NM:
 - (a) Lind AFDL N46-58-40 W118-35-09;
 - (b) Tree Heart Afdl (Pvt) N47-08-30 W118-48-04;
 - (c) Pru AFDL N47-07-30 W118-23-34;
 - (d) Little Goose AFDL N46-35-00 W118-00-04;
 - (e) Slinkard AFDL (Pvt) N46-36-12 W119-03-46;
 - (f) Christensen AFDL (Pvt) N46-55-14 W119-35-24;
 - (g) Hanes AFDL (Pvt) N47-29-30 W118-15-04;
 - (h) Kramer AFDL (Pvt) N47-22-54 W118-17-48.
- (9) Sensitive Areas:
 - (a) Avoid Sprague Lake NE of Point C;
 - (b) Maintain 2000' AGL or above over Columbia National Wildlife Refuge between Points F and G.
 - (c) Avoid sport parachute activity by 3NM at N47-09-38 W118-17-33.

IR ROUTES

(10) Crews should forward any observed hazard to aviation or concerns to the 62nd AW Airspace Manager at DSN 382-4057, C253-982-4057.

FSS's Within 100 NM Radius:

SEA

IR-327

ORIGINATING ACTIVITY: 62 OSS/OSK, 1172 Levitow Blvd., McCord AFB, WA 98438 DSN 382-3615, C253-982-3615.

SCHEDULING ACTIVITY: 62 OSS/OSO, 100 Main St., McCord AFB, WA 98438 DSN 382-9925, C253-982-9925. Duty hours 0800-1700 local. Non-duty hours McCord Command Post DSN 382-2635, C253-982-2635.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | EPH 063/18 | N47°24.50' W118°59.20' |
| 50 MSL to | B | GEG 250/32 | N47°34.20' W118°25.10' |
| 03 AGL B 50 MSL to | C | GEG 275/37 | N47°49.80' W118°26.40' |
| 03 AGL B 70 MSL to | D | GEG 291/45 | N48°04.20' W118°27.80' |
| 03 AGL B 70 MSL to | E | EPH 001/57 | N48°15.80' W118°54.00' |
| 03 AGL B 70 MSL to | F | EPH 324/37 | N47°58.00' W119°39.20' |
| 03 AGL B 60 MSL to | G | EPH 287/21 | N47°35.40' W119°49.40' |
| 03 AGL B 60 MSL to | H | EPH 218/15 | N47°15.00' W119°44.00' |
| 03 AGL B 50 MSL to | I | EPH 187/22 | N47°03.40' W119°40.50' |

TERRAIN FOLLOWING OPERATIONS: After crossing Point B descent to 300' AGL can be initiated. From Point B and I 300' AGL modified contour will be conducted in VMC. If IMC, route leg altitudes will be 2,000' above highest obstacle within 5 NM of route centerline unless on FAA exemption 4371 between Points H and I. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) All turns must remain within route width.
- (2) Authorized aircraft C-17 and C-130.
- (3) Primary Entry: Point A. Alternate Entry: Points B and D.
- (4) Primary Exit: Point I. Alternate Exit: Points F and G.
- (5) Coordination is required with Whidbey Island NAS, DSN 820-2877, for transition through Roosevelt and Okanogan MOAs.
- (6) Route Communications:
 - (a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A or B for clearance;

- (b) For entry at Point D contact Seattle Center on 126.1 or 291.6 for clearance;
- (c) Monitor Seattle Center 126.1 or 291.6 between Point B and G. Relay progress report at Point F;
- (d) Monitor Monitor Grant County Approach Control 126.4 or 385.5 between Point G and I. At Point G report on Freq and advise of intentions after exit;
- (e) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and I. Prior to Point H advise of intentions after exit.

- (7) Speed:
 - (a) Maintain 250 KCAS or below until route entry;
 - (b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSA established via coordinated scheduling;
 - (c) Maximum speed on route: 360 KCAS.
- (8) Caution:
 - (a) Deconflict traffic on VR-1350, VR-1351, IR-324, IR-325, IR-328 and IR-330 with scheduling activity. Exit at Point F will avoid VR-1350;
 - (b) Be alert for crop duster activity while over any agricultural area below 1000' AGL;
 - (c) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township from Points G to I. Crews should be alert for glider aircraft under tow without transponders and not talking to air traffic control. Crew should use extreme caution when exiting;
 - (d) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;
 - (e) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.
- (9) When practicable avoid by 1500' AGL or 3 NM:
 - (a) 7 Bays AFDL (Pvt) N47-51-04 W118-19-49;
 - (b) Mansfield AFDL N47-48-35 W119-38-14;
 - (c) Quincy AFDL N47-12-42 W119-50-23;
 - (d) Grigg AFDL (Pvt) N47-10-24 W119-44-48.
- (10) Sensitive Areas:
 - (a) Minimize overflight of Lake Creek, right of course centerline between Point A and B during summer months (May-Sep);
 - (b) Maintain 2000' AGL or above over FDR Lake between Points B and D.
 - (c) Avoid by 1 NM wildlife area East and Northwest of Point C. N47-53-00 W118-27-48, N47-49-30 W118-20-48.
- (11) Crews should forward any observed hazard to aviation or concerns to the 62nd AW Airspace Manager at DSN 382-4057, C253-982-4057.

FSS's Within 100 NM Radius:

SEA

IR-328

ORIGINATING ACTIVITY: 62 OSS/OSK, 1172 Levitow Blvd., McCord AFB, WA 98438 DSN 382-3615, C253-982-3615.

SCHEDULING ACTIVITY: 62 OSS/OSO, 100 Main St., McCord AFB, WA 98438 DSN 382-9925, C253-982-9925. Duty

hours 0800-1700 local. Non-duty hours McChord Command Post DSN 382-2635, C253-982-2635.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | EPH 218/15 | N47°15.00' W119°44.00' |
| 03 AGL B 60 MSL to | B | EPH 287/21 | N47°35.40' W119°49.40' |
| 03 AGL B 60 MSL to | C | EPH 324/37 | N47°58.00' W119°39.20' |
| 03 AGL B 70 MSL to | D | EPH 001/57 | N48°15.80' W118°54.00' |
| 03 AGL B 70 MSL to | E | GEG 291/45 | N48°04.20' W118°27.80' |
| 03 AGL B 70 MSL to | F | GEG 275/37 | N47°49.80' W118°26.40' |
| 03 AGL B 50 MSL to | G | GEG 250/32 | N47°34.20' W118°25.10' |
| 03 AGL B 50 MSL to | H | EPH 063/18 | N47°24.50' W118°59.20' |

TERRAIN FOLLOWING OPERATIONS: After crossing Point A descent to 300' AGL can be initiated. From Point A and H, 300' AGL modified contour will be conducted in VMC. If IMC, route leg altitudes will be 2000' above highest obstacle within 5 NM of route centerline. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) All turns must remain within route width.
- (2) Authorized aircraft C-17 and C-130.
- (3) Primary Entry: Point A. Alternate Entry: Points B and C.
- (4) Primary Exit: Point H. There are no alternate exit points.
- (5) Coordination is required with Whidbey Island NAS, DSN 820-2877, for transition through Roosevelt and Okanogan MOAs.
- (6) Route Communications:
 - (a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A;
 - (b) For entry at Point B or C, contact Seattle Center on 126.1 or 291.6 for clearance;
 - (c) Monitor Seattle Center 126.1 or 291.6 between Point B and G. Relay progress report at Point F;
 - (d) Contact Grant County Approach Control 126.4 or 385.5 at Point G and advise of intentions after exit;
 - (e) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and H. Prior to Point G advise of intentions after exit.
- (7) Speed:
 - (a) Maintain 250 KCAS or below until route entry;
 - (b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSAs established via coordinated scheduling;
 - (c) Maximum speed on route: 360 KCAS.
- (8) Caution:

- (a) Deconflict traffic on VR-1350, VR-1351, IR-324, IR-325, IR-328 and IR-330 with scheduling activity. Exit at Point F will avoid VR-1350;
 - (b) Be alert for crop duster activity while over any agricultural area below 1000' AGL;
 - (c) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township from Points A to B. Enroute to Point A, crews should be alert for glider aircraft and glider aircraft under tow without transponders and not talking to air traffic control;
 - (d) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;
 - (e) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.
- (9) Sensitive Areas:
- (a) Maintain 2000' AGL or above over FDR Lake between Pts E and F;
 - (b) Avoid by 1 NM wildlife area east and northwest of Pt F (N47-53-00 W118-27-48, N47-49-30 W118-20-48);
 - (c) Minimize overflight of Lake Creek, left of course centerline between Pts G and H during summer months (May-Sep).
- (10) Crews should forward any observed hazard to aviation or concerns to the 62ND AW Airspace Manager at DSN 382-4027 C253-982-4057.

FSS's Within 100 NM Radius:

SEA

IR-329

ORIGINATING ACTIVITY: 62 OSS/OSK, 1172 Levitow Blvd., McCord AFB, WA 98438 DSN 382-3615, C253-982-3615.

SCHEDULING ACTIVITY: 62 OSS/OSO, 100 Main St., McChord AFB, WA 98438 DSN 382-9925, C253-982-9925. Duty hours 0800-1700 local. Non-duty hours McChord Command Post DSN 382-2635, C253-982-2635.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | EPH 136/25 | N46°59.40' W119°11.00' |
| 03 AGL B 50 MSL to | B | PSC 348/32 | N46°47.70' W119°00.88' |
| 03 AGL B 50 MSL to | C | PSC 050/19 | N46°22.00' W118°41.80' |
| 03 AGL B 50 MSL to | D | PSC 109/18 | N46°04.40' W118°46.90' |
| 03 AGL B 50 MSL to | E | PSC 220/23 | N46°04.00' W119°36.10' |
| 03 AGL B 50 MSL to | F | PSC 246/23 | N46°14.20' W119°40.00' |
| 03 AGL B 60 MSL to | G | YKM 061/28 | N46°38.00' W119°46.60' |

IR ROUTES

03 AGL B 50 MSL to H YKM 038/30 N46°49.80'
W119°48.90'

03 AGL B 50 MSL to I EPH 187/22 N47°03.40'
W119°40.50'

TERRAIN FOLLOWING OPERATIONS: After crossing Point A descent to 300' AGL can be initiated. From Point A to I, 300' AGL modified contour will be conducted in VMC. If IMC, route leg altitudes will be 2,000' above the highest obstacle within 5 NM of route centerline. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) All turns must remain within route width.
- (2) Authorized aircraft C-17 and C-130.
- (3) Primary Entry: Point A. Alternate Entry: Point B.
- (4) Primary Exit: Point I. There are no alternate exit points.
- (5) Route Communications:
 - (a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A or B for clearance;
 - (b) Monitor Chinook Approach Control 128.75 or 377.2 between Points B and G. If operating between 1000' and 1500' AGL provide estimates for Points C and D;
 - (c) Contact Grant County Approach Control 126.4 or 385.5 prior to Point H with ETA for Point I and intentions after exit;
 - (d) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and C. Then monitor Seattle Center 132.6 or 269.35 between Points C and H. Then on 126.1 or 291.6 between Points H and I. Prior to Point H advise Center of intentions after exit.
- (6) Speed:
 - (a) Maintain 250 KCAS or below until route entry;
 - (b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSA established via coordinated scheduling.
 - (c) Maximum speed on route: 360 KCAS.
- (7) Caution:
 - (a) Deconflict traffic on VR-1350, VR-1351, VR-1354 and IR-326 with scheduling activity;
 - (b) Be alert for crop duster activity while over any agricultural area below 1000' AGL;
 - (c) Numerous windmills between Point D and E and in the vicinity of Point D. Some mills are 416' AGL;
 - (d) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township. When exiting the route, crews should be alert for glider aircraft and glider aircraft under tow without transponders and not talking to air traffic control;
 - (e) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;
 - (f) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.
- (8) When practicable avoid by 1500' AGL or 3 NM:
 - (a) New Warden AFDL N46-58-00 W119-04-04;
 - (b) Taggares AFDL (Pvt) N46-51-47 W119-08-19;
 - (c) Othello AFDL N46-47-42 W119-04-49;

- (d) Connell City AFDL (Pvt) N46-39-45 W118-50-00;
- (e) Slinkard AFDL (Pvt) N46-36-12 W119-03-46;
- (f) Compressor Sta AFDL (Pvt) N46-03-04 W118-50-39;
- (g) McWhorter AFDL (Pvt) N46-19-14 W119-37-04;
- (h) Christensen Bro AFDL (Pvt) N46-42-29 W119-48-04;
- (i) Mattawa AFDL (Pvt) N46-43-57 W119-42-08;
- (j) B and G Farms AFDL (Pvt) N46-56-25 W119-44-15;
- (k) Christensen AFDL (Pvt) N46-55-14 W119-35-24.

- (9) Sensitive Areas:
- (a) Maintain 2000' AGL or above over Columbia National Wildlife Refuge between Points A and B;
 - (b) Maintain 2000' AGL or above over Juniper Dunes Wilderness Area between Points B and C;
 - (c) Maintain 3000' AGL or above over Kennewick Tank Farm at N46-09 W119-00 Northwest of Point D;
 - (d) Maintain 1800' MSL or above over Hanford Nuclear Reservation between Points F and H;
 - (e) Maintain 2000' AGL or above over Saddle Mountain National Wilderness Refuge between Point G and H.
- (10) Crews should forward any observed hazard to aviation or concerns to the 62nd AW Airspace Manager at DSN 382-4057, C253-982-4057.

FSS's Within 100 NM Radius:

SEA

IR-330

ORIGINATING ACTIVITY: 62 OSS/OSK, 1172 Levitow Blvd., McCord AFB, WA 98438 DSN 382-3615, C253-982-3615.

SCHEDULING ACTIVITY: 62 OSS/OSO, 100 Main St., McChord AFB, WA 98438 DSN 382-9925, C253-982-9925. Duty hours 0800-1700 local. Non-duty hours McChord Command Post DSN 382-2635, C253-982-2635.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | EPH 114/40 | N46°54.50' W118°44.10' |
| 03 AGL B 50 MSL to | B | EPH 091/32 | N47°10.40' W118°41.40' |
| 03 AGL B 50 MSL to | C | EPH 056/37 | N47°30.40' W118°32.20' |
| 03 AGL B 50 MSL to | D | EPH 357/17 | N47°39.20' W119°17.30' |
| 03 AGL B 50 MSL to | E | EPH 331/11 | N47°33.58' W119°27.95' |
| 03 AGL B 50 MSL to | F | EPH 267/11 | N47°26.40' W119°41.40' |
| 03 AGL B 50 MSL to | G | EPH 235/11 | N47°20.18' W119°41.15' |
| 03 AGL B 50 MSL to | H | EPH 187/22 | N47°03.40' W119°40.50' |

TERRAIN FOLLOWING OPERATIONS: After crossing Point A descent to 300' AGL can be initiated. From Point A and H, 300' AGL modified contour will be conducted in VMC. If IMC, route leg altitudes will be 2000' above the highest obstacle within 5 NM of route centerline unless on FAA exemption 4371

between Points G and H. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 5 NM either side of centerline from A to E; 5 NM left and 2 NM right of centerline from E to G; 5 NM either side of centerline from G to H.

Special Operating Procedures:

- (1) All turns must remain within route width.
- (2) Authorized aircraft C-17 and C-130.
- (3) Primary Entry: Point A. Alternate Entry: Point B.
- (4) Primary Exit: Point H. Alternate Exit: Point G.
- (5) Route Communications:
 - (a) Contact Grant County Approach Control 126.4 or 385.5 prior to Point A or B for clearance. Then monitor from Point A to H. Prior to Point F advise of intentions after exit. If desire is to exit at Point G, advise controller prior to route entry and give intentions upon exit. Plan to cross Point G at 5000' MSL;
 - (b) Between 2200 (L) and 0600 (L) contact Seattle Center on 126.1 or 291.6 for clearance, then monitor between Points A and H. Prior to Point F advise Center of intentions after exit.
- (6) Speed:
 - (a) Maintain 250 KCAS or below until route entry;
 - (b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSAs established via coordinated scheduling;
 - (c) Maximum speed on route: 360 KCAS.
- (7) Caution:
 - (a) Deconflict traffic on VR-1351, IR-324, IR-325, IR-326, IR-327, IR-328 and IR-341 with scheduling activity. VR-1351 can be avoided by remaining West of centerline or above 2000' AGL from N47-22 W118-36 until West of Point C;
 - (b) Be alert for crop duster activity while over any agricultural area below 1000' AGL;
 - (c) Extensive glider activity (Apr to Oct) West of Ephrata Airport and Township from Points E to H. Crews should be alert for glider aircraft and glider aircraft under tow without transponders and not talking to air traffic control. Crews should use extreme caution when exiting;
 - (d) See NOTAMs/Directory for Class E (sfc) effective hours for Ephrata between Points F and H;
 - (e) During summer months (May-Oct) crews must check Seattle Center NOTAMs for any Temporary Flight Restrictions that may be in effect in support of fire suppression;
 - (f) Crews should remain vigilant for fire suppression aircraft operating in and out of Grant County. Crews should be alert for these aircraft when operating near any source of water. Avoid areas of smoke by ten miles.
- (8) When practicable avoid by 1500' AGL or 3 NM:
 - (a) Tree Heart AFD (Pvt) N47-08-30 W118-48-04;
 - (b) Odessa AFD (Pvt) N47-21-30 W118-40-24;
 - (c) Coulee City AFD (Pvt) N47-37-00 W119-14-34;
 - (d) Quincy AFD N47-12-42 W119-50-23;
 - (e) Grigg AFD (Pvt) N47-10-24 W119-44-48.
- (9) Sensitive Areas:
 - (a) Minimize overflight of Lake Creek, West Southwest of Point C during summer months (May-Sep).
- (10) Crews should forward any observed hazard to aviation or concerns to the 62nd AW Airspace Manager at DSN 382-4057, C253-982-4057.

FSS's Within 100 NM Radius:

SEA

IR-341

ORIGINATING ACTIVITY: Commanding Officer (N38), NAS Whidbey Island, 3730 N. Charles Porter Ave., Oak Harbor, WA 98278-5300 DSN 820-2877, C360-257-2877.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling can be accomplished between 0700-1130 for entry after 1400 local only.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Report | | | |
| Cross at FL230 to or as assigned descend on the Yaki-108 deg radial to cross the YKM 108/28 at 110 MSL then | A | YKM VORTAC | N46°34.22' W120°26.68' |
| 70 MSL to | B | PDT 293/21 | N45°56.00' W119°18.00' |
| 60 MSL to | C | PDT 344/22 | N46°03.70' W118°54.00' |
| 60 MSL to | D | PDT 006/41 | N46°18.50' W118°30.00' |
| 05 AGL B 50 MSL to | E | GEG 136/35 | N47°02.00' W117°18.00' |
| 05 AGL B 40 MSL to | F | GEG 209/40 | N47°08.10' W118°22.40' |
| 05 AGL B 40 MSL to | G | EPH 030/38 | N47°46.00' W118°42.00' |
| 15 AGL B 50 MSL to | H | EPH 002/15 | N47°36.30' W119°17.00' |
| 15 AGL B 50 MSL to | I | EPH 323/23 | N47°45.00' W119°35.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point D to I in VFR conditions within published altitude blocks.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Route speed schedules in 60 knot increments. Average route speed may not exceed 420 knots. Indicate desired speed when scheduling. Advise scheduling agency if MARSAs. Route entry times must be within 5 minutes of scheduled time.
- (2) Monitor Seattle ARTCC frequencies: 269.35 Point A to B, 377.2 Point B to D (Chinook Approach), 282.3 Point D to F, 291.6 Point F to I.
- (3) If radio communications cannot be established on ARTCC monitored frequencies, contact the nearest FSS.
- (4) CAUTION: Crop dusting activity (seasonal) below 500' AGL between Points D and G.

IR ROUTES

- (5) Avoid airports from Points D to I by 2000' or 3 NM. Remain within route structure while avoiding airports.
- (6) Route conflicts WIOTH ir-326 BETWEEN pOINTS d AND g; ir-327 AND ir-328 BETWEEN pOINTS f AND g; ir-324, ir-325 and IR-330 between Points F and I.
- (7) Alternate Exit: Point E.
- (8) Route crosses VR-1351 between Points D and E; VR-1354 between Points D and F; VR-1350 and VR-1351 between Points H and I.
- (9) Avoid TPC uncharted Sheffels Airport located right of centerline at N47-49 W118-47 by 1500' AGL or 3 NM between Points G and H.
- (10) CAUTION: Heavy hangliding activity Apr-Oct off Chelan Butte in the vicinity of Point I.

FSS's Within 100 NM Radius:

MMV, SEA

IR-342

ORIGINATING ACTIVITY: Commanding Officer (N38), NAS Whidbey Island, 3730 N. Charles Porter Ave., Oak Harbor, WA 98278-5300 DSN 820-2877, C360-257-2877.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling can be accomplished between 0700-1130 for entry after 1400 local only.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at FL230 to or as assigned descend on Kimberly VORTAC 160 deg radial to cross | A | IMB VORTAC | N44°38.90' W119°42.70' |
| at or above 130 MSL descend to cross | B | IMB 161/20 | N44°19.00' W119°43.00' |
| at or below 85 MSL descend to cross | C | IMB 160/43 | N43°56.00' W119°43.00' |
| at or below 85 MSL | D | LKV 017/60 | N43°18.30' W119°42.00' |
| 05 AGL B 85 MSL to | E | LKV 316/27 | N42°54.20' W120°45.80' |
| 05 AGL B 85 MSL to | F | LKV 331/59 | N43°28.10' W120°45.00' |
| 05 AGL B 85 MSL to | G | IMB 189/33 | N44°09.90' W120°05.00' |
| 05 AGL B 85 MSL to | H | LTJ 118/39 | N45°13.00' W120°30.00' |
| 05 AGL B 53 MSL to | I | LTJ 103/40 | N45°20.00' W120°18.50' |
| 05 AGL B 40 MSL to | J | PDT 253/31 | N45°43.50' W119°41.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point B to J in VFR conditions from 500' AGL day and 800' AGL night. Aircraft equipped with terrain following equipment may operate on these segments within the published altitude blocks regardless of weather both day and night.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Route speed schedules in 60 knot increments. Average route speed may not exceed 420 knots. Indicate desired speed when scheduling. Advise scheduling agency if MARSA. Route entry times must be within 5 minutes of scheduled time.
- (2) Monitor Seattle ARTCC frequencies: 257.75 from Point A to D, 351.7 from Point D to F, 257.75 from Point F to I, 269.35 from Point I to J.
- (3) If radio communications cannot be established on ARTCC monitored frequencies, contact the nearest FSS.
- (4) Avoid airports along the entire route by 2000' or 3 NM. Remain within route structure while avoiding airports.
- (5) Aircraft operating in the vicinity of N44-00 W119-43 shall make an alert call in the blind on 272.15 MHZ to inform aircraft operating in Juniper MOA of their presence. The alert call will consist of call sign, route, speed and estimated time to Juniper MOA.
- (6) Route crosses VR-1301, VR-316 and VR-319 between Points C and E.
- (7) Extreme Radar Hazard Zone within 5.5 NM of N43-17.3 W120-21.6 (LKV 350/048) between Points D and E. Remain on or south of centerline while within Juniper North MOA.
- (8) Avoid town of Summer Lake, or located vicinity (N42-58.0 W120-46.5) 5 NM N of Point E by 1500' or 2 NM.
- (9) Alternate Exit: Point E.
- (10) Route conflicts with VR-1353 between Points E and J.
- (11) CAUTION: Forest fire suppression air activity left of centerline approximately 8 NM south of Point F at FT. Rock Helibase (N43-26.1 W120-50.6) and Ft. Rock Airstrip (N43-20.4 W120-50.6) during fire season, normally May-Oct.
- (12) Alternate Exit: Point H. Commence climb to 16,000' MSL (minimum 3000' per minute rate of climb) passing N45-00. Upon reaching Point H, proceed direct to Klickitat VORTAC, maintain 16,000' MSL. Contact Seattle ARTCC on 257.6 for clearance.
- (13) CAUTION: Crop dusting activity (seasonal) below 500' AGL between Points I and J.
- (14) IFR exit procedures: Shuttle climb to 10,000' MSL west of the Pendleton VORTAC 254/31, 5 mile legs, left turns within R-5701 contacting Seattle ARTCC or Walla Walla FSS for IFR clearance.
- (15) Route conflicts with IR-343, IR-344 and IR-346 between Points H and J.

FSS's Within 100 NM Radius:

MMV

IR-343

ORIGINATING ACTIVITY: Commanding Officer (N38), NAS Whidbey Island, 3730 N. Charles Porter Ave., Oak Harbor, WA 98278-5100 DSN 820-2877, C360-257-2877, C360-257-2133.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling can be accomplished between 0700-1130 for entry after 1400 local only.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Report | | | |
| Cross at FL230 to or as assigned descend on the Yakima VORTAC 108 deg radial to cross YKM 108/28 at 110 MSL then | A | YKM VORTAC | N46°34.22' W120°26.68' |
| 70 MSL to | B | PDT 293/21 | N45°56.00' W119°18.00' |
| 60 MSL to | C | PDT 344/22 | N46°03.70' W118°54.00' |
| 60 MSL to | D | PDT 041/27 | N45°54.90' W118°23.00' |
| 80 MSL to | E | PDT 080/43 | N45°34.00' W117°55.50' |
| 90 MSL to | F | PDT 105/33 | N45°23.20' W118°18.50' |
| 05 AGL B 90 MSL to | G | IMB 008/7 | N44°45.10' W119°38.00' |
| 05 AGL B 90 MSL to | H | IMB 315/43 | N45°17.90' W120°08.20' |
| 63 MSL to | I | LTJ 105/34 | N45°23.00' W120°27.00' |
| 50 MSL to | J | LTJ 183/9 | N45°35.00' W121°11.00' |
| 60 MSL to | K | LTJ 342/17 | N45°59.30' W121°04.90' |
| 110 MSL to | L | YKM 204/30 | N46°13.00' W120°57.00' |
| 110 MSL to | M | YKM 331/25 | N46°59.00' W120°32.00' |
| 110 MSL to | N | EPH 230/27 | N47°13.50' W120°03.20' |
| 70 MSL to | O | EPH 002/15 | N47°36.30' W119°17.00' |
| 70 MSL to | P | EPH 323/23 | N47°45.00' W119°35.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point F to H in VFR conditions within published altitude blocks.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Route speeds schedules in 60 knot increments. Average route speed may not exceed 420 knots. Indicate desired speed when scheduling. Advise scheduling agency if MARSA. Route entry times must be within 5 minutes of scheduled time.
- (2) Monitor Seattle ARTCC frequencies: 269.35 from Point A to B, 377.2 from Point B to D (Chinook Approach), 380.2 from Point D to F, 257.75 from Point F to I, 257.6 from Point I to K, 269.35 from Point K to M, 291.6 from Point M to P.
- (3) If radio communications cannot be established on ARTCC monitored frequencies, contact the nearest FSS.
- (4) Avoid airports from Point F to H by 2000' or 3 NM. Remain within route structure while avoiding airports.

- (5) CAUTION: Forest fire suppression helicopter activity left of centerline approximately 18.5 NM past Point F at Frazier Helibase (N45-09.25 W118-38.0) during fire season, normally May-Oct.
- (6) Route crosses VR-1352 at Point G.
- (7) Cross the Pendleton VORTAC 050 radial at 7000' MSL or above. Report crossing the Baker VORTAC 297 radial to Seattle ARTCC on 288.1 or to McMinville Radio on 255.4 for relay to ARTCC. Report passing Point J to McMinville radio on 255.4 for relay to ARTCC. Report reaching 11,000' MSL prior to Point L to Seattle ARTCC 343.9. Request clearance to descend after passing Point N maintain 11,000' MSL from Point L to Point P unless clearance to descend has been received from Seattle ARTCC.
- (8) CAUTION: Forest fire suppression helicopter activity right of centerline approximately 10 NM past Point L at Ft. Simcoe Helibase (N46-20.45 W120-51.07) during fire season, normally May-Oct.
- (9) Route conflicts with IR-341 between Points A and C.
- (10) Route conflicts with IR-342, IR-344 and IT-346 between Points H and I.

FSS's Within 100 NM Radius:

BOI, MMV, SEA

IR-344

ORIGINATING ACTIVITY: Commanding Officer (N38), NAS Whidbey Island, 3730 N. Charles Porter Ave., Oak Harbor, WA 98278-5100 DSN 820-2877, C360-257-2877, C360-257-2133.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling can be accomplished between 0700-1130 for entry after 1400 local only.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 170 MSL to or as assigned descend on the HQM 237 deg radial to cross | A | HQM VORTAC | N46°56.82' W124°08.96' |
| at or above 120 MSL descend to cross | B | HQM 240/16 | N46°53.80' W124°32.00' |
| at or below 50 MSL descend to cross | C | HQM 240/36 | N46°50.00' W125°00.00' |
| at or below 20 MSL | X | HQM 216/28 | N46°41.00' W124°42.00' |
| 02 AGL B 20 MSL to | D | HQM 138/28 | N46°31.20' W123°53.00' |
| 05 AGL B 40 MSL to | E | OLM 195/29 | N46°34.00' W123°18.00' |
| 05 AGL B 40 MSL to | F | OLM 136/31 | N46°30.20' W122°35.40' |
| 05 AGL B 70 MSL to | F1 | OLM 126/35 | N46°29.50' W122°24.50' |
| 05 AGL B 60 MSL to | G | OLM 116/42 | N46°28.50' W122°11.50' |
| 05 AGL B 70 MSL to | Q | LTJ 300/50 | N46°21.50' W121°51.00' |

IR ROUTES

| | | | | |
|--------------------|----|------------|---------------------------|---|
| 05 AGL B 70 MSL to | Q1 | LTJ 277/25 | N45°54.50' W121°38.00' | (17) CAUTION: Heavy crop dusting activity (seasonal) below 500' AGL between Points H and M. |
| 05 AGL B 60 MSL to | H | LTJ 267/22 | N45°49.50' W121°35.50' | (18) Report crossing Point J to Seattle Center. Avoid city of Maupin, Oregon in vicinity of Point J by 1500' or 2 NM. |
| 05 AGL B 50 MSL to | I | LTJ 250/16 | N45°43.00' W121°29.50' | (19) CAUTION: Forest fire suppression helicopter activity vicinity Point J at Maupin helibase (N45-10 W121-04) during fire season, normally May-Oct. |
| 05 AGL B 50 MSL to | J | LTJ 158/32 | N45°10.40' W121°05.00' | (20) Route crosses VR-1353 between Points K and M. Route conflicts with IR-342 and IR-343 between Points K and M. Route conflicts with IR-346 between Points J and M. |
| 05 AGL B 60 MSL to | K | LTJ 118/39 | N45°13.00' W120°30.00' | (21) Alternate Exit: Point K. Upon reaching K turn right climbing to 16,000' MSL (min 3000' per minute rate of climb) direct to Klickitat VORTAC; maintain 16,000' MSL. Contact Seattle ARTCC on 257.6 for further clearance. |
| 05 AGL B 53 MSL to | L | LTJ 103/40 | N45°20.00' W120°18.50' | |
| 05 AGL B 40 MSL to | M | PDT 253/31 | N45°43.50' W119°41.00' | |

TERRAIN FOLLOWING OPERATIONS: Authorized in VFR conditions from 200' AGL from B to D, and 500' AGL from D to M. Aircraft equipped with terrain following equipment may operate on these segments between 500' AGL and the published route ceilings regardless of weather both day and night.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Route speeds schedules in 60 knot increments. Average route speed may not exceed 420 knots. Indicate desired speed when scheduling. Advise scheduling agency if MARSA. Route entry times must be within 5 minutes of scheduled time.
- (2) Monitor Seattle ARTCC frequencies: 269.0 from Point A to D; 317.6 from Point D to G; 257.6 from Point G to K; 269.35 from Point K to M.
- (3) If radio communications cannot be established on ARTCC-monitored frequencies, contact the nearest FSS.
- (4) Alternate Entry: Point D. Aircraft using alternate entry must cross Point D at 5000' MSL.
- (5) Avoid town of Oysterville, WA located vicinity of N46-33 W124-02 (7 NM West-Northwest of Point D) by 1500' AGL or 2 NM. Noise Sensitive Area.
- (6) Avoid the town of Peell, WA at Point E by 1500' AGL or 2 NM. Noise Sensitive Area.
- (7) Communication antenna (360' AGL) vicinity of Point E N46-32 W123-01. Avoid area by 500' AGL or 1 NM.
- (8) Intensive North-South VFR traffic vicinity of Interstate 5 between Points E and F.
- (9) Alternate Entry: Point F1 for MC-130 aircraft only.
- (10) Avoid airports from F to G by 2000' or 3 NM. Remain within route structure while avoiding airports.
- (11) Remain on or south of centerline from N46-31-54 W122-52 to Point F to avoid Mink Farm at N46-33-00 W122-41-48.
- (12) CAUTION: Forest fire suppression activity left of centerline approximately 5 NM prior to Point Q1 at Wooddruff airstrip (N46-00.2 W121-32.05) during fire season normally May-Oct.
- (13) Avoid town of Trout Lake, WA Northeast of Point H.
- (14) Extensive East-West VFR traffic in the vicinity of the Columbia River Gorge at Points H-I. Exercise extreme caution.
- (15) CAUTION: Intermittent glider activity in the vicinity of and along the ridgelines south of Hood River, Oregon, between Points I and J.
- (16) Avoid town of Hood River, Oregon by 1500' AGL or 1 NM. Noise Sensitive Area at Point I.

FSS's Within 100 NM Radius:

MMV, SEA

IR-346

ORIGINATING ACTIVITY: Commanding Officer (N38), NAS Whidbey Island, 3730 N. Charles Porter Ave., Oak Harbor, WA 98278-5100 DSN 820-2877, C360-257-2877, C360-257-2133.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling can be accomplished between 0700-1130 for entry after 1400 local only.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at FL290 to or as assigned descend on the Newport VORTAC 166 deg radial to cross | A | ONP VORTAC | N44°34.52' W124°03.64' |
| at or above 150 MSL descend to cross | B | ONP 165/34 | N44°00.70' W124°08.10' |
| at or below 50 MSL | C | OTH 314/24 | N43°46.50' W124°26.00' |
| 02 AGL B 40 MSL to | D | OTH 337/17 | N43°41.50' W124°12.00' |
| 02 AGL B 40 MSL to | Q1 | EUG 189/28 | N43°42.50' W123°32.50' |
| 02 AGL B 40 MSL to | E | EUG 143/25 | N43°43.50' W123°03.00' |
| 02 AGL B 70 MSL to | F | EUG 105/42 | N43°43.20' W122°25.50' |
| 02 AGL B 70 MSL to | G | EUG 069/42 | N44°07.70' W122°14.30' |
| 02 AGL B 70 MSL to | H | EUG 031/58 | N44°43.00' W122°10.10' |
| 02 AGL B 70 MSL to | I | LTJ 199/47 | N45°06.80' W121°48.50' |
| 02 AGL B 60 MSL to | Q | LTJ 175/35 | N45°09.20' W121°20.00' |
| 05 AGL B 60 MSL to | J | LTJ 118/39 | N45°13.00' W120°30.00' |

02 AGL B 53 MSL to K LTJ 103/40 N45°20.00'
W120°18.50'

02 AGL B 40 MSL to L PDT 253/31 N45°43.50'
W119°41.00'

TERRAIN FOLLOWING OPERATIONS: Authorized from B to L in VFR conditions from 200' AGL day and 800' AGL night. Aircraft equipped with terrain following equipment may operate on these segments between 500' AGL and published route ceilings regardless of weather both day and night. Special attention is directed to numerous mountain peaks between Points E and J.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Route speeds schedules in 60 knot increments. Average route speed may not exceed 420 knots. Indicate desired speed when scheduling. Advise scheduling agency if MARSA. Route entry times must be within 5 minutes of scheduled time.
- (2) Monitor Seattle ARTCC frequencies: as assigned: Point A to Q1, 257.75 Point F to Q, 257.6 Point Q to K, 269.35 Point K to L.
- (3) If radio communications cannot be established on ARTCC-monitored frequencies, contact the nearest FSS.
- (4) Avoid airports along the entire route by 2000' or 3 NM. Remain within route structure while avoiding airports.
- (5) Alternate Entry: Point D.
- (6) Avoid city of Reedsport, Oregon in vicinity of Point D by 1500' or 2 NM.
- (7) At Point Q1 aircraft shall contact Eugene Approach Control on 298.9. Upon exiting Eugene Approach Control airspace (vicinity N43-43 W122-45) switch to Point F frequency 288.1.
- (8) CAUTION: 675' power lines in vicinity of Point H.
- (9) CAUTION: Forest fire suppression helicopter activity left of centerline approximately 8 NM prior to Point I at Ripplebrook Heliport (N45-04.9 W122-03.0) during fire season, normally May-Oct.
- (10) CAUTION: Heavy crop dusting activity (seasonal) below 500' AGL between Points I and L.
- (11) CAUTION: Forest fire suppression helo activity approximately 11 NM past Point Q at Maupin Helibase (N45-10.0 W121-04.0) during fire season, normally May-Oct.
- (12) Route crosses VR-1353 between Points K and L. Route conflicts with IR-344 between Points J and L. Route conflicts with IR-342 and IR-343 between Points K and L.
- (13) Avoid city of Maupin, Oregon in vicinity of Point J by 1500' or 2 NM.
- (14) Alternate Exit: Point J. Upon reaching J turn right climbing to 16,000' MSL (minimum 3000' per minute rate of climb) direct to Klickitat VORTAC; maintain 16,000' MSL. Contact Seattle ARTCC on 257.6 for further clearance.
- (15) IFR Exit procedures: Shuttle climb to 10,000' MSL West of Pendleton VORTAC 254/31; 5 mile legs; left turns within R-5701. Contact Seattle ARTCC or Walla Walla FSS for IFR clearance.

FSS's Within 100 NM Radius:

MMV, SEA

IR-348

ORIGINATING ACTIVITY: Commanding Officer (N38), NAS Whidbey Island, 3730 N. Charles Porter Ave., Oak Harbor, WA 98278-5100 DSN 820-2877, C360-257-2877, C360-257-2133.

SCHEDULING ACTIVITY: Same as Originating Activity. Scheduling hours 0700-1600 local, Mon-Fri only. Same day scheduling can be accomplished between 0700-1130 for entry after 1400 local only.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | NUW 061/24 | N48°25.78' W122°04.98' |
| 05 AGL B 130 MSL to | B | NUW 074/65 | N48°18.08' W121°01.87' |
| 110 MSL to | C | SEA 043/64 | N47°55.50' W120°53.60' |
| 05 AGL B 100 MSL to | D | EPH 319/84 | N48°42.00' W120°08.00' |
| 05 AGL B 90 MSL to | E | EPH 334/90 | N48°52.60' W119°37.10' |
| 15 AGL B 70 MSL to | F | EPH 342/81 | N48°43.70' W119°17.90' |
| 05 AGL B 70 MSL to | G | EPH 360/69 | N48°27.30' W118°48.00' |
| 05 AGL B 81 MSL to | H | GEG 323/69 | N48°40.00' W118°06.80' |
| 05 AGL B 70 MSL to | I | GEG 346/74 | N48°47.00' W117°24.90' |
| 05 AGL B 80 MSL to | J | GEG 004/49 | N48°17.90' W117°06.80' |
| 05 AGL B 63 MSL to | K | GEG 343/34 | N48°07.80' W117°34.20' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to B and C to I in VFR conditions from 500' AGL. Aircraft equipped with terrain following equipment may operate on these segments between 500' AGL and published route ceilings regardless of weather both day and night.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Route speeds schedules in 60 knot increments. Average route speed may not exceed 420 knots. Indicate desired speed when scheduling. Advise scheduling agency if MARSA. Route entry times must be within 5 minutes of scheduled time.
- (2) Monitor Seattle ARTCC frequencies: 270.3 from Point A to C, 291.6 from Point C to K, 282.3 from Point H to K.
- (3) If radio communications cannot be established on ARTCC-monitored frequencies, contact the nearest FSS.
- (4) Avoid airports along the entire route by 2000' or 3 NM. Remain within route structure while avoiding airports.
- (5) Route crosses VR-1350, VR-1351 and VR-1355 between Points A and D.
- (6) Avoid Winthrop Resort area by 3000' or 5 NM between Points C and D.
- (7) Alternate Exit: Points B, C, E, and H.

IR ROUTES

- (8) Alternate Entry: Point D.
- (9) Heavy VFR traffic between Point D and E.
- (10) CAUTION: Forest fire suppression air active/PBY air tanker water (Scoop) point at Lake Roosevelt between Points G and K during fire season, normally May-Oct.
- (11) CAUTION: Crop dusting activity (seasonal) below 500' AGL between Points E and F.
- (12) Remain north of the town of Marcus, WA in vicinity of Point H.
- (13) Route conflicts with IR-340 between Points I and K.
- (14) Avoid fishing resort Western side of Deer Lake in vicinity of Point K.
- (15) IFR exit procedures: Shuttle climb East of GEG 343/34 to 10,000' MSL, 5 NM legs, left turns. Contact Seattle ARTCC on 291.6 for further IFR clearance.
- (16) Avoid Holden mines by 1500' or 3 NM between Points C and D.

FSS's Within 100 NM Radius:

SEA

IR-409

ORIGINATING ACTIVITY: 140th OG/CC Buckley ANGB Aurora, CO 80011-9546 DSN 847-9466, C720-847-9466.

SCHEDULING ACTIVITY: 140th OG/CC Buckley AFB Aurora, CO 80011-9546. Duty Hrs 0700-1700 DSN 847-9472, C720-847-9472.

HOURS OF OPERATION: 0800-1600 local, Tue-Sat

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|---------------------------|
| Cross at 100 MSL to or as assigned | A | LAA VORTAC | N38°11.83' W102°41.26' |
| 100 MSL to or as assigned | B | LAA 157/13 | N37°59.00' W102°38.00' |
| 03 AGL B 77 MSL to | C | LAA 161/28 | N37°43.50' W102°37.00' |
| 03 AGL B 77 MSL to | D | TBE 092/23 | N37°10.00' W103°08.00' |
| 03 AGL B 70 MSL to | E | TBE 125/24 | N36°58.00' W103°16.00' |
| 03 AGL B 80 MSL to | F | TBE 302/30 | N37°36.00' W104°03.00' |
| 10 AGL B 80 MSL to | G | PUB 189/23 | N37°56.00' W104°37.00' |
| 10 AGL B 80 MSL to | H | PUB 245/27 | N38°12.00' W104°59.00' |

TERRAIN FOLLOWING OPERATIONS: Request to fly 1000' AGL for noise abatement on IR-409 Points G to H.

ROUTE WIDTH - 3 NM either side of centerline from A to C; 5 NM either side of centerline from C to E; 4 NM either side of centerline from E to F; 5 NM either side of centerline from F to G; 3 NM either side of centerline from G to H;

Special Operating Procedures:

- (1) The 140th Wing shall ensure MARSAs through coordinated scheduling. Successive aircraft shall be scheduled to arrive at a common primary or alternate entry fix with no less than a 10 minute interval between aircraft.
- (2) Monitor 296.7 enroute. Monitor 255.4 from Point E to F for possible U.S. Army helicopter traffic in the Pinon Canyon MOA up to 500' AGL.
- (3) This route crosses IR-150, IR-500 and IR-501 between Points C and D; IR-110 between Points C and G; IR-107 at Point E; IR-415 and IR-424 at Point G; IR-177 between Points C and D. Deconfliction scheduling applies. (See and be Seen) is method of MARSAs.
- (4) Deconfliction with IR-107 and IR-110 is accomplished through the 27th FW, Cannon AFB, NM DSN 681-2276/2253.
- (5) All aircraft flying IR-409 will contact Pueblo Approach Control prior to Point F for IFF code assignment on 290.5. Approval to fly IR-409 does not constitute clearance into R-2601. Aircraft not entering R-2601 must exit at Point G. Aircraft entering R-2601 can expect frequency change prior to Point H. Aircraft may be required to hold at Point H for range entry.
- (6) Aircraft exiting at Point G will contact Pueblo Approach Control on 290.5 and climb to 10,000' MSL or as assigned by ATC and proceed to Point H until clearance is received.
- (7) Alternate Entry: Points C, G and H.
- (8) Alternate Exit: Point G.
- (9) Avoid the following environmentally sensitive locations by 1500' AGL from 1 May through 31 July:
 - (a) N37-39.46 W104-15.22;
 - (b) N37-58.35 W104-45.09.

FSS's Within 100 NM Radius:

DEN

IR-414

ORIGINATING ACTIVITY: 140th Wing/Airspace Office Buckley AFB Aurora, CO 80011-9546 DSN 847-9470/9471, C720-847-9470/9471/9955.

SCHEDULING ACTIVITY: 140th Wing/Airspace Office Buckley AFB Aurora, CO 80011-9546. Duty Hrs 0700-1700 DSN 847-9470/9472, C720-847-9470/9472. Route is clsd to non-140th WG acft.

HOURS OF OPERATION: 0800-1600 local, Tue-Sat; OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------------|----|--------------|---------------------------|
| Cross at 80 MSL to or as assigned | A | PUB 080/32 | N38°16.00' W103°45.00' |
| 03 AGL B 80 MSL to | B | LAA 354/36 | N38°48.00' W102°36.00' |
| 03 AGL B 110 MSL to | C | GLD 176/18 | N39°05.00' W101°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to C.

Special Operating Procedures:

- (1) The 140th Wing shall ensure MARSAs through coordinated scheduling. Successive aircraft shall be scheduled to arrive at a common primary or alternate entry fix with no less than a 10 minute intervals between aircraft. In all instances where separation is less than 10 minutes, the 140th Wing scheduling unit shall ensure MARSAs through coordinated scheduling.
- (2) Be vigilant for B-52 and B-1 aircraft between A and B. This route crosses IR-177, IR-500 and IR-501 between A and B. If VMC exists at the crossing point, See and Avoid is method of MARSAs. If IMC is anticipated, climb in VMC to the top of the block for that particular leg.
- (3) Monitor 381.4 entire route.
- (4) Clearance to fly IR-414 does not include clearance into Cheyenne MOA. Contact Denver ARTCC at Point A on 387.15 if Cheyenne MOA is to be used.
- (5) Avoid Sand Arroya Landing Strip by 3 NM/1500' AGL (N38-27.0 W103-32.0).

FSS's Within 100 NM Radius:

DEN

IR-415

ORIGINATING ACTIVITY: 140th OG/CC Buckley ANGB Aurora, CO 80011-9546 DSN 847-9466, C720-847-9466.

SCHEDULING ACTIVITY: 140th OG/CC Buckley AFB Aurora, CO 80011-9546. Duty Hrs 0700-1700 DSN 847-9472, C720-847-9472. Route is clsd to non-140th WG acft.

HOURS OF OPERATION: 0800-1600 local, Tue-Sat; OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| Cross at 70 MSL to | A | BKF 091/27 | N39°36.50' W104°11.00' |
| 03 AGL B 70 MSL to | B | TXC 168/8 | N39°34.00' W103°13.00' |
| 03 AGL B 70 MSL to | C | HGO 057/17 | N38°55.00' W103°17.00' |
| 03 AGL B 80 MSL to | D | PUB 080/32 | N38°16.00' W103°45.00' |
| 03 AGL B 80 MSL to | E | PUB 189/23 | N37°56.00' W104°37.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

- (1) The 140th Wing shall ensure MARSAs through coordinated scheduling. Successive aircraft shall be scheduled to arrive at a common primary or alternate entry fix with no less than a 10 minute intervals between aircraft. In all instances where separation is less than 10 minutes, the 140th Wing scheduling unit shall ensure MARSAs through coordinated scheduling.
- (2) Maintain 500' AGL minimum from A to B. Route crosses IR-416 between A and B.

- (3) Monitor 381.4 to D, then 290.5 to E. Aircraft exiting prior to E contact Pueblo Approach on 290.5 prior for clearance. Maintain 10,000' MSL or as assigned.
- (4) Avoid Sand Arroya Landing Strip by 3 NM/1500' AGL (N38-27.0 W103-32.0). Maintain 1000' AGL minimum within a 4 NM radius of Fowler (N38-13.0 W104-02.0).
- (5) Flights transitioning to IR-414 at Point D remain north of Ordway Lake or maintain 1500' AGL during turn. Remain north of Ordway-Sugar City highway during turn.
- (6) Alternate Entry: Point D.
- (7) IR-415 is authorized only for aircraft departing Buckley ANGB.
- (8) Avoid environmentally sensitive location at N37-59.3 W104-29.5 by 1500' AGL from 1 May through 31 July.

FSS's Within 100 NM Radius:

DEN

IR-416

ORIGINATING ACTIVITY: 140th Wing/Airspace Office Buckley AFB Aurora, CO 80011-9546 DSN 847-9470/9471, C720-847-9470/9471/9955.

SCHEDULING ACTIVITY: 140th Wing/Airspace Office Buckley AFB Aurora, CO 80011-9546. Duty Hrs 0700-1700 DSN 847-9470/9472, C720-847-9470/9472. Route is clsd to non-140th WG acft.

HOURS OF OPERATION: 0800-1600 local, Tue-Sat; OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 120 MSL to or as assigned | A | LAR 138/38 | N40°47.00' W105°20.00' |
| 03 AGL B 120 MSL to | B | LAR 238/20 | N41°14.00' W106°08.00' |
| 03 AGL B 120 MSL to | C | LAR 292/27 | N41°36.00' W106°12.00' |
| 03 AGL B 100 MSL to | D | MBW 165/11 | N41°39.50' W106°00.00' |
| 03 AGL B 90 MSL to | E | CYS 332/49 | N42°00.00' W105°03.00' |
| 03 AGL B 75 MSL to | F | CYS 033/45 | N41°44.00' W104°03.00' |
| 03 AGL B 73 MSL to | G | CYS 098/41 | N40°58.00' W103°56.00' |
| 03 AGL B 100 MSL to | H | AKO 295/29 | N40°27.00' W103°41.00' |
| 03 AGL B 70 MSL to | I | AKO 304/20 | N40°24.00' W103°29.00' |
| 03 AGL B 70 MSL to | J | AKO 218/15 | N40°00.00' W103°26.00' |
| 03 AGL B 100 MSL to | K | TXC 283/17 | N39°49.00' W103°33.00' |
| 100 MSL to (Contact Denver ARTCC 387.15 prior to L) | L | BKF 095/55 | N39°26.00' W103°37.00' |

IR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to H; 3 NM either side of centerline from H to L.

Special Operating Procedures:

- (1) The 140th Wing shall ensure MARSAs through coordinated scheduling. Successive aircraft shall be scheduled to arrive at a common primary or alternate entry fix with no less than a 10 minute intervals between aircraft. In all instances where separation is less than 10 minutes, the 140th Wing scheduling unit shall ensure MARSAs through coordinated scheduling.
- (2) Monitor 255.4 entire route.
- (3) Contact Denver ARTCC on 387.15 prior to exit Point L for further clearance. Aircraft exiting at Point C contact Denver ARTCC on 284.7 for further clearance.
- (4) 400' tower within 3 NM of Point C. 300' tower at N41-09.0 W104-03.0 (12 NM prior to Point G) and N41-00.0 W104-02.0 (3 NM prior to Point G). Another tower between Point F and G near N40-03.0 W104-02.0, 200' high, approximately 2 NM west of centerline.
- (5) Avoid Centennial WY (4 NM north of B) and avoid N41-50.0 W105-20.0 (14 NM prior to Point E).
- (6) Alternate Entry: Point F.
- (7) Alternate Exit: Point C.

FSS's Within 100 NM Radius:

CPR, DEN

IR-418

ORIGINATING ACTIVITY: 388 RANS/RST, 6066 Cedar Lane, Hill AFB, UT 84056-5812 DSN 777-9384, C801-777-9384.

SCHEDULING ACTIVITY: 388 RANS/RST, 6066 Cedar Lane, Hill AFB, UT 84056-5812 DSN 777-4401, C801-777-4401.

HOURS OF OPERATION: 0700-2400 local Mon-Thu, 0700-1800 local Fri, 0800-1700 local Sat

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------------|----|--------------|---------------------------|
| Cross at 80 MSL to or as assigned | A | TCH 290/24 | N41°05.00' W112°24.00' |
| 70 MSL B 80 MSL to | B | TCH 300/38 | N41°18.00' W112°34.00' |
| 01 AGL B 80 MSL to | C | TCH 303/46 | N41°26.00' W112°39.00' |
| 01 AGL B 80 MSL to | D | TCH 292/64 | N41°30.00' W113°06.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point B to D.

ROUTE WIDTH - 2 NM either side of centerline from A to C; 5 NM either side of centerline from C to D.

Special Operating Procedures:

- (1) IR-418 will not be flown unless scheduled in conjunction with the appropriate Lucian MOA by aircraft departing Hill AFB on the IL-418 departure only.

FSS's Within 100 NM Radius:

CDC

IR-420

ORIGINATING ACTIVITY: 388 RANS/RST, 6066 Cedar Lane, Hill AFB, UT 84056-5812 DSN 777-9384, C801-777-9384.

SCHEDULING ACTIVITY: 388 RANS/RST, 6066 Cedar Lane, Hill AFB, UT 84056-5812 DSN 777-4401, C801-777-4401.

HOURS OF OPERATION: 0700-2400 local Mon-Thu, 0700-1800 local Fri, 0800-1700 local Sat

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------------|----|--------------|---------------------------|
| Cross at 80 MSL to or as assigned | A | TCH 290/24 | N41°05.00' W112°24.00' |
| 70 MSL B 80 MSL to | B | TCH 271/32 | N41°00.00' W112°39.00' |
| 70 MSL B 80 MSL to | C | TCH 241/36 | N40°43.00' W112°45.00' |
| 10 AGL B 80 MSL to | D | TCH 229/41 | N40°33.00' W112°48.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point C to D.

ROUTE WIDTH - 2 NM either side of centerline from A to C; 5 NM either side of centerline from C to D.

Special Operating Procedures:

- (1) IR-420 will not be flown unless scheduled in conjunction with the appropriate Sevier MOA by aircraft departing Hill AFB on the IL-420 departure only.

FSS's Within 100 NM Radius:

CDC

IR-424

ORIGINATING ACTIVITY: 140th Wing/Airspace Office Buckley AFB Aurora, CO 80011-9546 DSN 847-9470/9471, C720-847-9470/9471/9955.

SCHEDULING ACTIVITY: 140th Wing/Airspace Office Buckley AFB Aurora, CO 80011-9546. Duty Hrs 0700-1700 DSN 847-9470/9472, C720-847-9470/9472.

HOURS OF OPERATION: 0800-1600 local, Tue-Sat; OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|---------------------------|
| Cross at 110 MSL to or as assigned | A | GLD 176/18 | N39°05.50' W101°45.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 03 AGL B 80 MSL to | B | LAA 354/36 | N38°48.00' W102°36.00' |
| 03 AGL B 80 MSL to | C | LAA 334/31 | N38°42.00' W102°51.00' |
| 03 AGL B 80 MSL to | D | PUB 080/32 | N38°16.00' W103°45.00' |
| 03 AGL B 80 MSL to | E | PUB 189/23 | N37°56.00' W104°37.00' |

| | | | |
|---------------------|----|------------|---------------------------|
| 05 AGL B 120 MSL to | D | ILC 027/32 | N38°38.00' W113°55.90' |
| 05 AGL B 120 MSL to | E | ILC 051/24 | N38°24.20' W113°55.90' |
| 05 AGL B 120 MSL to | F | ILC 061/17 | N38°19.00' W114°02.00' |
| 05 AGL B 120 MSL to | G | ILC 093/21 | N38°08.20' W113°58.70' |
| 05 AGL B 120 MSL to | H | ILC 151/38 | N37°38.20' W114°12.90' |
| 05 AGL B 115 MSL to | I | ILC 174/48 | N37°27.70' W114°34.20' |
| 05 AGL B 120 MSL to | J | ILC 213/51 | N37°41.20' W115°12.00' |
| 05 AGL B 115 MSL to | K | ILC 221/49 | N37°48.00' W115°15.00' |
| 05 AGL B 115 MSL to | L | TPH 086/70 | N37°45.00' W115°36.00' |
| 05 AGL B 115 MSL to | M | TPH 083/54 | N37°52.00' W115°54.50' |
| 05 AGL B 110 MSL to | N | TPH 068/46 | N38°06.00' W116°04.00' |
| 05 AGL B 110 MSL to | O | TPH 060/30 | N38°08.50' W116°25.50' |
| 05 AGL B 110 MSL to | P | TPH 111/13 | N37°54.00' W116°49.50' |
| 05 AGL B 110 MSL to | Q | TPH 152/8 | N37°54.00' W117°00.00' |
| 05 AGL B 110 MSL to | R | TPH 215/22 | N37°48.00' W117°24.00' |
| 05 AGL B 110 MSL to | S | TPH 216/40 | N37°37.70' W117°41.70' |
| 05 AGL B 115 MSL to | T | BTY 291/65 | N37°26.80' W117°50.50' |
| 05 AGL B 115 MSL to | U | BTY 286/44 | N37°11.10' W117°31.20' |
| 05 AGL B 100 MSL to | V | BTY 279/38 | N37°04.00' W117°28.50' |
| 05 AGL B 105 MSL to | W | BTY 269/39 | N36°58.10' W117°31.90' |
| 30 AGL B 120 MSL to | X | NID 011/45 | N36°21.10' W117°15.90' |
| 05 AGL B 110 MSL to | Y | NID 010/38 | N36°15.00' W117°21.00' |
| 05 AGL B 75 MSL to | Z | NID 022/30 | N36°05.20' W117°18.50' |
| 05 AGL B 95 MSL to | AA | NID 010/12 | N35°52.00' W117°35.00' |
| 05 AGL B 85 MSL to | AB | NID 101/9 | N35°37.00' W117°31.00' |
| 05 AGL B 85 MSL to | AC | NID 166/17 | N35°24.00' W117°42.00' |
| 05 AGL B 85 MSL to | AD | LHS 028/47 | N35°15.00' W117°55.50' |
| 05 AGL B 85 MSL to | AE | LHS 016/29 | N35°05.70' W118°16.50' |
| 05 AGL B 110 MSL to | AF | LHS 008/23 | N35°02.50' W118°23.50' |
| 05 AGL B 100 MSL to | AG | LHS 011/9 | N34°48.70' W118°30.00' |
| 05 AGL B 90 MSL to | AH | LHS 091/3 | N34°40.10' W118°30.90' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to E.

Special Operating Procedures:

- (1) The 140th Wing shall ensure MARSAs through coordinated scheduling. Successive aircraft shall be scheduled to arrive at a common primary or alternate entry fix with no less than a 10 minute intervals between aircraft. In all instances where separation is less than 10 minutes, the 140th Wing scheduling unit shall ensure MARSAs through coordinated scheduling.
- (2) Be vigilant for B-52 and B-1 aircraft between Points B and D.
- (3) This route crosses IR-177, IR-501 and IR-500 between B and D. If VMC exists at the crossing point, See and Avoid is method of MARSAs. If IMC is anticipated, climb in VMC to the top of the block for that particular leg.
- (4) This route coincides with IR-415 from D to E.
- (5) Monitor 381.4 from A to D. Monitor 290.5 from D to E.
- (6) Contact Pueblo Approach Control at Point E on 290.5 for further clearance.
- (7) Alternate Entry: Point D.
- (8) Avoid Sand Arroya Landing Strip by 3 NM/1500' AGL (N38-27.0 W103-32.0). Maintain 1000' AGL minimum within 4 NM radius of Fowler (N38-05.0 W104-02.0).
- (9) Avoid environmentally sensitive location at N37-59.17 W104-29.27 by 1500' AGL from 1 May through 31 July.

FSS's Within 100 NM Radius:

DEN

IR-425

ORIGINATING ACTIVITY: Commander AFFTC, 412 OSS/OSAA, 235 S. Flightline Rd. Edwards AFB, CA 93523-6460 DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: Commander AFFTC, 412 OSS/OSR, 300 E Yeager Blvd, Edwards AFB, CA 93524 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: Sunrise-Sunset by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | DTA 262/44 | N39°24.00' W113°27.00' |
| 05 AGL B 105 MSL to | B | DTA 250/53 | N39°14.40' W113°38.00' |
| 05 AGL B 120 MSL to | C | ILC 024/55 | N38°57.50' W113°38.00' |

IR ROUTES

| | | | |
|---------------------|----|------------|---------------------------|
| 30 AGL B 90 MSL to | AI | GMN 117/12 | N34°40.10' W118°41.00' |
| 30 AGL B 100 MSL to | AJ | GVO 020/10 | N34°40.20' W119°58.10' |
| 30 AGL B 100 MSL to | AK | GVO 338/14 | N34°46.30' W120°07.20' |
| 30 AGL B 60 MSL to | AL | GVO 269/13 | N34°35.30' W120°20.60' |
| 30 AGL B 70 MSL to | AM | GVO 189/19 | N34°15.00' W120°15.00' |

Saline-Panamint MOA's; W to X: IR-236, VR-1205, Saline-Panamint MOA's; X to Y: IR-236, VR-1205, Saline-Panamint MOA's; Y to Z: IR-236, VR-1205, R-2505, Panamint-Isabella MOA's; Z to AA: IR-236, VR-1205, R-2505, Panamint-Isabella MOA's; AA to AB: IR-211, R-2505, Isabella MOA; AB to AC: IR-211, Isabella MOA; AC to AD: IR-211, SR-390, Isabella MOA; AD to AE: IR-211-236, VR-1262, SR-390, Isabella MOA; AE to AF: IR-211, VR-1262-1293, SR-390, Isabella MOA; AF to AG: IR-211, VR-1206-1262-1293, SR-390, Isabella MOA; AG to AH: VR-1206-1257-1265-1266-1293; AI to AJ: IR-211, VR-1265 AL to AM: If required W-537, W-289N.

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to E; 10 NM left and 7 NM right of centerline from E to G; 4 NM left and 7 NM right of centerline from G to H; 4 NM either side of centerline from H to T; 7 NM either side of centerline from T to U; 4 NM left and 7 NM right of centerline from U to V; 4 NM either side of centerline from V to AM.

Special Operating Procedures:

- (1) Airspeeds are subsonic.
- (2) This route to be used only in support of test missions authorized by PMTC or AFFTC.
- (3) Alternate Entry/Exit Points: C, E, H, I, J, L, M, N, P, Q, U, V, Y, AB, AF and AG.
- (4) California Condors (Endangered Species) nesting in the Sespe Sanctuary in flight between the Sisquac and Sespe Sanctuaries and soaring throughout adjacent mountain areas. Pilots are requested to maintain 1 NM south of centerline or 3000' terrain clearance between AI to AJ.
- (5) Aircrew will obtain a copy of the Cruise Missile Routes and Procedures Letter of Agreement from Edwards AFB Center Scheduling and follow these procedures.
- (6) Segregation of air carrier operations in the Isabella MOA (below 12,000' MSL) may result in denial of MOA airspace between AB and AF.
- (7) Aircrew shall adhere to the following radio procedures:
 - (a) Contact Nellis Control 343.0 prior to entering the Desert MOA (after G);
 - (b) Prior to entering the Reveille MOA (after M) and when advised by Nellis Control contact Salt Lake ARTCC 133.45/397.85;
 - (c) When advised by Salt Lake ARTCC approximately 5 NM west of Q, Contact Oakland ARTCC 125.75/319.8;
 - (d) Contact High Desert TRACON (JOSHUA Approach) 256.8/291.6/123.95 departing U;
 - (e) Contact Los Angeles ARTCC 307.1 at AF;
 - (f) Monitor Los Angeles ARTCC 269.6 after AI.
- (8) Maintain at or above 5300' MSL when within 5 statute miles of Mojave Airport Class D airspace between AD to AF.
- (9) Deconflict the route as follows: Entire route with IR-200; A to C: R-6405, Sevier A MOA; C to D: VR-209, Sevier C/D MOA; D to E: IR-293, VR-1406; E to F: IR-290/290A; G to H: Desert MOA; I to J: VR-1253, Desert MOA; J to K: VR-1253, Desert MOA; K to L: IR-286, VR-1259, Desert MOA; L to M: VR-1253-1259, Desert MOA; M to N: IR-234-235-237-238-286, VR-1253-1259-1260-1406, Desert and Reveille MOA's; N to O: IR-234-235-237-238-286, VR-1253-1406, Reveille MOA; O to P: If required R-4809; P to Q: If required R-4809-4807A, IR-282; Q to R: IR-206-286, VR-208, if required R-4807A; R to S: IR-206, VR-1252; S to T: VR-1205-1255-1264; T to U: VR-208-1205-1264, Saline MOA; U to V: IR-236, VR-1262, Saline MOA; V to W: VR-1262,

- (10) Route is designated for MARSAs operations established by coordinated scheduling.
- (11) Aircrews transiting R-2508 Complex airspace are required to see FLIP, Area Planning, AP/1, California, Flight Hazards, R-2508. Upon enter R-2508, complex aircraft shall maintain VFR (see and avoid) and comply with all R-2508 complex procedures. Aircraft departing the R-2508 complex provide ATC with an estimate to the first fix outside the complex airspace.
- (12) Contact the R-2508 Central Coordinating Facility (DSN 527-2508, C661-277-2508) to schedule airspace and obtain a complex briefing.

FSS's Within 100 NM Radius:

CDC, HHR, RAL, RNO, SAN

IR-473

ORIGINATING ACTIVITY: 28 OSS/OSXA, 1956 Scott Dr., Ste. 201, Ellsworth AFB, SD 57706-4710 DSN 675-1230, C605-385-1230.

SCHEDULING ACTIVITY: 28 OSS/OSXS, 1956 Scott Dr., Ste. 201, Ellsworth AFB, SD 57706-4710 DSN 675-4246, C605-385-4246. After hours RAYMOND 33 DSN 675-3800, C605-385-3800 (ask for on-call Wing Airspace Scheduler).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at FL200 to or as assigned descend direct to | F | CDR 291/55 | N43°03.50' W104°21.00' |
| 150 MSL B FL200 to (TFR/TA Initiation Point) descend direct to | JA | DDY 075/71 | N43°09.00' W104°40.00' |
| 01 AGL B 150 MSL to direct to | JB | DDY 039/32 | N43°25.50' W105°43.00' |
| 01 AGL B 70 MSL to direct to | JC | DDY 030/31 | N43°28.50' W105°48.00' |
| 01 AGL B 70 MSL to turn left to | JD | DDY 008/38 | N43°41.00' W105°59.00' |
| 01 AGL B 70 MSL to climb direct to | JE | CZI 132/20 | N43°44.00' W106°10.50' |
| 01 AGL B 80 MSL to turn right and contin- ue climb to | JF | CZI 196/24 | N43°39.00' W106°42.00' |
| 01 AGL B 130 MSL to direct to | J | CZI 211/26 | N43°41.00' W106°51.50' |

| | | | | | |
|--|----|------------|---------------------------|--|---------------------------|
| 01 AGL B 130 MSL to turn left to | K | SHR 181/41 | N44°11.00' W107°17.50' | 01 AGL B 60 MSL to IL RAP 313/71 | N44°57.50' W103°56.50' |
| 01 AGL B 130 MSL to direct to | L | SHR 189/39 | N44°14.00' W107°24.00' | 01 AGL B 60 MSL climb direct to cross | |
| 01 AGL B 130 MSL to direct to | M | BOY 358/52 | N44°18.50' W108°00.00' | 60 MSL to AK RAP 321/67 | N44°58.50' W103°42.50' |
| 01 AGL B 130 MSL to turn right to | N | BOY 349/52 | N44°20.00' W108°11.00' | (TFR/TA Termination Point) 60 MSL B 100 MSL turn right and climb to cross | |
| 01 AGL B 130 MSL to descend direct to | O | COD 101/32 | N44°23.50' W108°18.00' | 100 MSL to EX RAP 324/56 | N44°50.00' W103°31.50' |
| 01 AGL B 80 MSL to direct to | O1 | BOY 336/80 | N44°47.00' W108°34.20' | continue right turn to 100 MSL to EL RAP 318/52 | N44°44.00' W103°36.00' |
| 01 AGL B 80 MSL to turn left to | P | BIL 176/43 | N45°06.50' W108°48.00' | (Contact Denver ARTCC 338.2) direct to | |
| 01 AGL B 80 MSL to direct to | Q | BIL 180/41 | N45°09.00' W108°51.50' | 100 MSL to EM RAP 298/56 | N44°34.50' W104°00.00' |
| 01 AGL B 80 MSL to turn right to | R | BIL 226/42 | N45°27.00' W109°29.00' | 100 MSL B 160 MSL continue climb to cross | |
| 01 AGL B 80 MSL to descend to | S | BIL 238/41 | N45°36.00' W109°32.50' | 160 MSL to EN RAP 282/64 | N44°25.50' W104°22.00' |
| 01 AGL B 70 MSL to descend direct to | T | BIL 244/38 | N45°40.00' W109°31.00' | or as assigned. | |
| 01 AGL B 60 MSL to turn right to | U | BIL 311/36 | N46°18.00' W109°07.50' | | |
| 01 AGL B 60 MSL to direct to | V | BIL 325/37 | N46°23.00' W108°57.00' | | |
| 05 AGL B 60 MSL to (End TA/TFR) turn left to | W | BIL 355/36 | N46°23.50' W108°29.00' | | |
| 60 MSL to direct to | X | BIL 001/37 | N46°24.50' W108°23.50' | | |
| 60 MSL to (Begin TA/TFR) direct to | XX | BIL 011/46 | N46°30.00' W108°10.00' | | |
| 01 AGL B 60 MSL to direct to | Y | BIL 015/53 | N46°34.50' W108°00.00' | | |
| 01 AGL B 60 MSL to turn right and descend to | Z | BIL 019/61 | N46°39.50' W107°49.50' | | |
| 01 AGL B 50 MSL to direct to | AA | MLS 267/68 | N46°37.00' W107°34.00' | | |
| 01 AGL B 50 MSL to turn left and climb to | AB | MLS 212/33 | N46°00.50' W106°32.00' | | |
| 01 AGL B 60 MSL to direct to | B1 | BIL 069/91 | N45°58.50' W106°28.00' | | |
| 01 AGL B 60 MSL to turn left to | B2 | MLS 146/39 | N45°46.50' W105°39.00' | | |
| 01 AGL B 60 MSL to direct to | B3 | MLS 140/40 | N45°46.50' W105°33.50' | | |
| 01 AGL B 60 MSL to turn right to | B4 | MLS 113/48 | N45°53.00' W105°03.00' | | |
| 01 AGL B 60 MSL to direct to | B5 | MLS 114/59 | N45°45.50' W104°51.00' | | |
| 01 AGL B 60 MSL to direct to | B6 | MLS 136/82 | N45°11.00' W105°00.00' | | |
| 01 AGL B 60 MSL to turn left to | B7 | GCC 015/46 | N45°02.00' W105°03.00' | | |
| 01 AGL B 60 MSL to direct to | AH | GCC 031/45 | N44°53.50' W104°50.00' | | |
| 01 AGL B 60 MSL to direct to | AI | RAP 296/90 | N44°54.00' W104°40.00' | | |

PMSV CONTACTS: Primary Home Station. Alternate Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC Terrain Following (TF) Visual Contour (VC) and VMC Terrain Avoidance (TA/VC) operations are authorized IAW Command Directives within published altitude blocks from JA to W and XX to AK. When Command Directives preclude TA/TF/VMC operations aircrews will maintain the IFR altitude for each segment. Minimum altitudes are established by 28 OSS Clearance Plane Setting Letter and provide 200' vertical clearance of all known man-made obstructions within the route width. Command Directives may require additional obstruction clearance for TA/TF/VMC operations. The route is designated mountainous from F to U. The remaining route segments are designated non-mountainous. Aircrews must comply with regulations governing operations below 500' AGL. The route corridor provides airspace for 500' lateral separation from man-made obstructions. Obstructions under 200' AGL were not considered in route design.

ROUTE WIDTH - 5 NM left and 7 NM right of right of centerline from F to JB; 7 NM left and 4 NM right of centerline from JB to JF; 4 NM either side of centerline from JF to O; 8 NM left and 4 NM right of centerline from O to O1; 4 NM either side of centerline from O1 to T; 3 NM left and 4 NM right of centerline from T to U; 4 NM either side of centerline from U to AA; 4 NM left and 8 NM right of centerline from AA to AB; 4 NM either side of centerline from AB to B2; confines of POWDER RIVER MOA from B2 to B6; 6 NM left and 4 NM right of centerline from B6 to AI; 4 NM either side of centerline from AI to EN.

Special Operating Procedures:

- (1) USAF bomber route.
- (2) MARSAs operations approved. Established by coordinated scheduling.
- (3) Lost Communications (LC) altitude: 16,000 MSL.
- (4) Centerline depicted with a 7.5 NM radius arc, except EX to EL at 6.0 NM.
- (5) Timing tolerance at each turnpoint is +/- 2 1/2 minutes, excluding B3, B4, and B5.
- (6) See Powder River Training Complex Letter of Agreement for nearby ATCAAs.

IR ROUTES

- (7) Route has the same profile as IR-499 from entry to Point N.
- (8) Monitor Denver ARTCC 385.6 (F-J).
- (9) Do not overfly Manderson, Basin, Otto, Emblem, WY; Roundup, MT.
- (10) Belle Fourche ESS: 381.1.
- (11) A delay in the Powder River MOAs is not authorized. Other military activity may be operating above 10,000 MSL within the MOAs from B2 to IL.
- (12) Route merges with the IR-492 corridor at B6 and continues to end.
- (13) Required products available from Airspace Management web page:
<https://afkm.wpafb.af.mil/asps/cop/opencop.asp?filter=OO-OP-AC-81> or via AF Portal at
<https://wwwd.my.af.mil/afknprod/asps/cop/opencop.asp?filter=OO-OP-AC-81>
- (a) Briefing Guide;
- (b) 28 OSS Clearance Plane Setting Letter;
- (c) 28 OSS Noise Sensitive Area Letter.
- (14) Hazards:
- (a) Entry (Class A): AR-678, Black Hills ATCAA, J17, J158;
- (b) Enroute: MTR; IR-499, IR-492, IR-485; SUA; Powder River A/B MOAs. Airfields; Iberlin, Dilts, Hardy, uncharted (N43-27 W105-45), Taylor, Gosney, Bakers, Worland (Class E), South Big Horn Co (Class E), Powell (Class E), North Big Horn (Class E), Bridger, uncharted (N45-17 W109-08), Bangart, uncharted (N45-31 W109-32), Ryegate, Laving, Roundup, Hysham, Forsyth (Class E), Colstrip (Class E), Belle Creek, Ridge (N45-03 W105-01), Morris, dirt strip (N44-48 W104-37), Alzada, Morgan, Newell, Belle Fourche (Class E), Black Hills (Class E). VFR Airways: V26, V254, V235, V298, V247, V611, V324, V319, V187, V85, V465, V2-86, V247, V187, V611, V2-465, V254;
- (c) Exit: J32, J107, J151, J82, V86, AR-678, Black Hills and Gateway ATCAAs;
- (d) Birds. BAM Severe periods: none. Soaring raptors late morning.
- (e) Uncharted towers (less than 200'): N43-11 W104-56, N43-14 W105-16, N45-16 W109-09, N44-12 W107-31, N45-35 W109-38, N45-30 W109-28, N46-05 W109-16, N46-31 W108-05, N46-36 W107-52.

FSS's Within 100 NM Radius:

CPR, GTF

IR-479

ORIGINATING ACTIVITY: 120 FW/OSAD (ANG) 2800

Airport Ave. B, Great Falls, MT 59404 DSN 791-0186, C406-791-0186.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 160 MSL to or as assigned (TFR Initiation Point) descend direct to | A | LWT 077/98 | N46°58.00' W107°14.00' |

| | | | |
|--|----|-------------|---------------------------|
| SFC B 160 MSL to (TA Initiation Point) direct to | B | LWT 066/68 | N47°12.50' W107°58.00' |
| SFC B 80 MSL to direct to | C | LWT 036/42 | N47°30.00' W108°48.00' |
| SFC B 80 MSL to turn left and descend to | D | GTF 042/67 | N48°01.50' W110°00.00' |
| SFC B 80 MSL to direct to | E | GTF 034/62 | N48°06.50' W110°14.50' |
| 04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) turn left to | F | GTF 014/57 | N48°16.50' W110°42.00' |
| SFC B 60 MSL to climb direct to | G | GTF 007/53 | N48°15.50' W110°53.50' |
| SFC B 70 MSL to (Start Maneuver Area) direct to | H | GTF 359/46 | N48°11.50' W111°07.50' |
| SFC B 70 MSL to direct to | I | GTF 326/37 | N48°02.50' W111°42.00' |
| SFC B 70 MSL to (End Maneuver Area) turn right and climb to | J | GTF 292/44 | N47°54.00' W112°16.00' |
| SFC B 90 MSL to direct to | K | CTB 173/36 | N47°58.00' W112°30.00' |
| SFC B 90 MSL to turn right to | L | CTB 211/21 | N48°20.00' W112°44.00' |
| SFC B 90 MSL to descend direct to | M | CTB 218/20 | N48°22.50' W112°45.00' |
| SFC B 90 MSL to turn right and continue descent to | N | CTB 260/18 | N48°36.00' W112°47.00' |
| SFC B 90 MSL to direct to | O | CTB 279/18 | N48°41.50' W112°44.50' |
| SFC B 60 MSL to turn right to | P | CTB 313/19 | N48°50.50' W112°35.00' |
| SFC B 60 MSL to direct to | Q | CTB 339/20 | N48°53.50' W112°22.50' |
| 04 AGL B 60 MSL to climb direct to | R | CTB 048/28 | N48°45.50' W111°42.50' |
| SFC B 80 MSL to turn left to | S | CTB 059/36 | N48°42.50' W111°27.50' |
| SFC B 80 MSL to direct to | T | GTF 347/76 | N48°43.00' W111°19.00' |
| SFC B 80 MSL to turn right to | U | GTF 357/85 | N48°49.50' W110°56.00' |
| SFC B 80 MSL to (Start Maneuver Area) direct to | V | GTF 359/86 | N48°50.00' W110°52.00' |
| SFC B 80 MSL to direct to | W | GTF 020/107 | N48°53.00' W109°49.50' |
| SFC B 80 MSL to (End Maneuver Area) descend direct to | X | GTF 024/113 | N48°53.00' W109°34.50' |
| SFC B 80 MSL to continue descent and turn right to | Y | GTF 025/116 | N48°53.50' W109°29.50' |
| SFC B 80 MSL to direct to | Z | GTF 027/119 | N48°52.50' W109°21.00' |
| SFC B 45 MSL to direct to | AA | GTF 028/119 | N48°52.00' W109°19.50' |

| | | | |
|--|----|-------------|---------------------------|
| SFC B 45 MSL to turn left to | AB | LWT 001/103 | N48°42.50' W108°54.50' |
| SFC B 45 MSL to direct to | AC | LWT 003/104 | N48°42.00' W108°47.00' |
| SFC B 45 MSL to turn right to | AD | LWT 011/115 | N48°46.00' W108°21.00' |
| SFC B 45 MSL to direct to | AE | LWT 012/116 | N48°46.00' W108°15.50' |
| SFC B 45 MSL to turn left to | AF | LWT 026/129 | N48°40.00' W107°30.00' |
| SFC B 45 MSL to SFC B 45 MSL direct to cross | AG | LWT 027/131 | N48°40.00' W107°25.00' |
| 45 MSL to (TA/TFR Termination Point) direct to | AH | GTF 049/181 | N48°40.50' W107°17.50' |
| 45 MSL to (Contact Salt Lake City ARTCC 272.75) 45 MSL B 170 MSL climb direct to cross | AI | ISN 270/140 | N48°41.00' W107°12.00' |
| 120 MSL B 170 MSL to continue climb and turn right to | AJ | ISN 275/109 | N48°44.50' W106°23.50' |
| 120 MSL B 170 MSL to continue climb direct to cross | AK | ISN 272/98 | N48°37.50' W106°08.50' |
| 170 MSL to or as assigned. | AL | GGW 052/22 | N48°22.00' W106°07.00' |

TERRAIN FOLLOWING OPERATIONS: IMC/VMC Terrain Following operations (TF)/Visual Contour(VC) operations are authorized IAW command directives within the published altitude blocks from A to AH. VMC Terrain Avoidance (TA/VC) operations are authorized within the published altitude blocks from A to AH. The route is designated mountainous from B to E, and from K to V. The remainder of the route is designated non-mountainous. Minimum altitudes other than surface, are established to provide 100' vertical separation of known man-made obstructions. Obstructions under 200' AGL were not considered in the route design. The route corridor provides airspace for 500' lateral separation from man-made obstacles. When Command Directives preclude TA/TF/VC operations, aircrews will maintain the IFR altitude for each leg segment.

ROUTE WIDTH - 4 NM either side of centerline from A to C; Boundaries of Hays MOA from C to D; 4 NM either side of centerline from D to H; 6 NM left and 7 NM right of centerline from H to I; 4 NM either side of centerline from I to J; 3 NM left and 4 NM right of centerline from J to K; 4 NM either side of centerline from K to V; 7 NM either side of centerline from V to W; 4 NM either side of centerline from W to AC; 4 NM left and 3 NM right of centerline from AC to AD; 4 NM either side of centerline from AD to AL.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designated for MARSA operations with aircraft in the Hays MOA through coordinated scheduling by the 120th FW.
- (2) IR-479 and IR-480 will not be scheduled simultaneously due to their being a reverse route of each other.
- (3) Alternate entry points are K and Q. Alternate exit points are W and AC.

- (4) Aircrews should be alert for VFR helicopter traffic and aerial crop sprayers from SFC-1500' AGL.
- (5) Report (Callsign, IR-479, Point D) when exiting the Hays MOA westbound to Salt Lake ARTCC on 285.4.
- (6) Aircrews are required to receive 120th FW noise abatement procedures briefing prior to scheduling this route.

FSS's Within 100 NM Radius:

GTF

IR-480

ORIGINATING ACTIVITY: 120 FW/OSAD (ANG) 2800 Airport Ave. B, Great Falls, MT 59404 DSN 791-0186, C406-791-0186.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at 80 MSL to (Start Maneuver Area) direct to | A | GTF 024/113 | N48°53.00' W109°34.50' |
| SFC B 80 MSL to direct to | B | GTF 020/107 | N48°53.00' W109°49.50' |
| SFC B 80 MSL to (End Maneuver Area) direct to | C | GTF 359/86 | N48°50.00' W110°52.00' |
| SFC B 80 MSL to direct to | D | GTF 357/85 | N48°49.50' W110°56.00' |
| SFC B 80 MSL to direct to | E | GTF 347/76 | N48°43.50' W111°19.00' |
| SFC B 80 MSL to direct to | F | CTB 059/36 | N48°42.50' W111°27.50' |
| SFC B 80 MSL to direct to | G | CTB 048/28 | N48°45.50' W111°42.50' |
| 04 AGL B 60 MSL to direct to | H | CTB 339/20 | N48°53.50' W112°22.50' |
| SFC B 60 MSL to direct to | I | CTB 313/19 | N48°50.50' W112°35.00' |
| SFC B 60 MSL to direct to | J | CTB 279/18 | N48°41.50' W112°44.50' |
| SFC B 90 MSL to direct to | K | CTB 260/18 | N48°36.00' W112°47.00' |
| SFC B 90 MSL to direct to | L | CTB 218/20 | N48°22.50' W112°45.00' |
| SFC B 90 MSL to direct to | M | CTB 211/21 | N48°20.00' W112°44.00' |
| SFC B 90 MSL to direct to | N | CTB 173/36 | N47°58.00' W112°30.00' |
| SFC B 90 MSL to (Start Maneuver Area) direct to | O | GTF 292/44 | N47°54.00' W112°16.00' |
| SFC B 70 MSL to direct to | P | GTF 326/37 | N48°02.50' W111°42.00' |
| SFC B 70 MSL to (End Maneuver Area) direct to | Q | GTF 359/46 | N48°11.50' W111°07.50' |
| SFC B 70 MSL to direct to | R | GTF 007/53 | N48°15.50' W110°53.50' |

IR ROUTES

| | | | |
|------------------------------|---|------------|---------------------------|
| SFC B 60 MSL to direct to | S | GTF 014/57 | N48°16.50' W110°42.00' |
| 04 AGL B 60 MSL to direct to | T | GTF 034/62 | N48°06.50' W110°14.50' |
| SFC B 80 MSL to direct to | U | GTF 042/67 | N48°01.50' W110°00.00' |
| SFC B 80 MSL to direct to | V | LWT 036/42 | N47°30.00' W108°48.00' |
| SFC B 80 MSL to direct to | W | LWT 066/68 | N47°12.50' W107°58.00' |
| SFC B 160 MSL to | X | LWT 077/98 | N46°58.00' W107°14.00' |

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following operations (TF)/Visual Contour (VC) operations are authorized IAW command directives within the published altitude blocks from A to X. VMC Terrain Avoidance (TA/VC) operations are authorized within the published altitude blocks from A to X. The route is designated mountainous from C to N, and from T to W. The remainder of the route is designated non-mountainous. Minimum altitudes other than surface, are established to provide 100' vertical separation of known man-made obstructions. Obstructions under 200' AGL were not considered in the route design. The route corridor provides airspace for 500' lateral separation from man-made obstacles. When Command Directives preclude TA/TF/VC operations, aircrews will maintain the IFR altitude for each leg segment.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 7 NM either side of centerline from B to C; 4 NM left and 3 NM right of centerline from C to O; 4 NM either side of centerline from O to P; 7 NM left and 6 NM right of centerline from P to Q; 4 NM either side of centerline from Q to U; Boundries of the Hays MOA from U to V; 4 NM either side of centerline from V to X.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designated for MARSAs operations with aircraft in the Hays MOA through coordinated scheduling by the 120th FW.
- (2) IR-479 and IR-480 will not be scheduled simultaneously due to their being a reverse route of each other.
- (3) Alternate entry points are J and N. Alternate exit point is U.
- (4) Aircrews should be alert for VFR helicopter traffic and aerial crop sprayers from SFC-1500' AGL.
- (5) Aircrews are required to receive 120th FW noise abatement procedures briefing prior to scheduling this route.

FSS's Within 100 NM Radius:

GTF

IR-485

ORIGINATING ACTIVITY: 28 OSS/OSXA, 1956 Scott Dr., Ste. 201, Ellsworth AFB, SD 57706-4710 DSN 675-1230, C605-385-1230.

SCHEDULING ACTIVITY: 28 OSS/OSXS, 1956 Scott Dr., Ste. 201, Ellsworth AFB, SD 57706-4710 DSN 675-4246, C605-385-4246. After hours RAYMOND 33 DSN 675-3800, C605-385-4246, ask for (On-call Wing Airspace Scheduler).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 120 MSL to or as assigned (TFR Initiation Point) descend direct to | LM | MLS 344/57 | N47°19.50' W105°59.00' |
| 01 AGL B 120 MSL to descend direct to | LN | MLS 351/45 | N47°08.00' W105°50.00' |
| 01 AGL B 80 MSL to descend direct to | KN | MLS 007/33 | N46°53.20' W105°39.00' |
| 01 AGL B 50 MSL to turn left to | LO | MLS 049/25 | N46°34.00' W105°24.50' |
| 01 AGL B 50 MSL to direct to | PQ | MLS 060/27 | N46°30.00' W105°19.00' |
| 01 AGL B 50 MSL to turn right and climb to | LB | MLS 082/74 | N46°13.00' W104°11.00' |
| 01 AGL B 60 MSL to direct to | LC | MLS 089/79 | N46°03.00' W104°06.50' |
| 01 AGL B 60 MSL to turn right to | LD | MLS 105/79 | N45°43.00' W104°19.00' |
| 01 AGL B 60 MSL to direct to | LE | MLS 107/80 | N45°40.50' W104°20.50' |
| 01 AGL B 60 MSL to direct to | LF | MLS 134/85 | N45°10.50' W104°55.00' |
| 01 AGL B 60 MSL to turn left to | LG | GCC 015/50 | N45°05.50' W105°00.00' |
| 01 AGL B 60 MSL to direct to | AH | GCC 031/45 | N44°53.50' W104°50.00' |
| 01 AGL B 60 MSL to direct to | AI | RAP 296/90 | N44°54.00' W104°40.00' |
| 01 AGL B 60 MSL to | IL | RAP 313/71 | N44°57.50' W103°56.50' |
| 01 AGL B 60 MSL climb direct to cross 60 MSL to (TA/TFR Termination Point) | AK | RAP 321/67 | N44°58.50' W103°42.50' |
| 60 MSL B 100 MSL turn right and climb to cross | | | |
| 100 MSL to continue right turn to | EX | RAP 324/56 | N44°50.00' W103°31.50' |
| 100 MSL to (Contact Denver ARTCC 338.2) direct to | EL | RAP 318/52 | N44°44.00' W103°36.00' |
| 100 MSL to 100 MSL B 160 MSL continue climb to cross | EM | RAP 298/56 | N44°34.50' W104°00.00' |
| 160 MSL to or as assigned. | EN | RAP 282/64 | N44°25.50' W104°22.00' |

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF) Visual Contour (VC) and VMC Terrain Avoidance (TA/VC) operations are authorized IAW Command Directives within published altitude blocks from LM to AK. When Command Directives preclude TA/TF/VC operations, aircrews will maintain the IFR altitude for each route segment. Minimum altitudes are established by 28 OSS Clearance Plane Setting Letter and provide 200' vertical clearance of all known man-made

obstructions within the route width. Command Directives may require additional obstruction clearance for TA/TF/VC operations. The entire route is designated non-mountainous. Aircrews must comply with regulations governing operations below 500' AGL. The route corridor provides airspace for 500' lateral separation from man-made obstacles. Obstructions under 200' AGL were not considered in route design.

ROUTE WIDTH - 4 NM either side of centerline from LM to LD; confines of POWDER RIVER A MOA from LD to LF; 6 NM left and 4 NM right of centerline from LF to AI; 4 NM either side of centerline from AI to EN.

Special Operating Procedures:

- (1) USAF bomber route.
- (2) MARSA operations approved. Established by coordinated scheduling.
- (3) Lost Communications (LC) altitude: 16,000 MSL.
- (4) Centerline between turnpoint is depicted as a 7.5 NM radius arc, except EX to EL at 6.0 NM.
- (5) Timing tolerance at each turnpoint is +/- 2 1/2 minutes.
- (6) Belle Fourche ESS - 381.1.
- (7) A delay in the Powder River MOAs is not authorized. Other military activity may be operating above 10,000 MSL within the MOAs from LD to IL.
- (8) IR-485 is the short version of IR-492.
- (9) Route merges with the IR-492 corridor at LO and the IR-473 corridor at LF and continues to end.
- (10) Required products available from Airspace Management web page:
<https://afkm.wpafb.af.mil/asps/cop/opencop.asp?filter=OO-OP-AC-81> or via AF Portal at
<https://www.dmy.af.mil/afknprod/asps/cop/opencop.asp?filter=OO-OP-AC-81>
 - (a) Briefing Guide;
 - (b) 28 OSS Clearance Plane Setting Letter;
 - (c) 28 OSS Noise Sensitive Area Letter.
- (11) Hazards:
 - (a) Entry (Class G): V254, V465, V545;
 - (b) Enroute: MTR; IR-473, IR-492. SUA; Powder River A/B MOAs. Airfields; Baker (Class E), Gardner, Lanning, Belle Creek, Ridge (N45-03 W105-01), Morris, dirt strip (N44-48 W104-37), Alzada, Morgan, Newell, Belle Fourche (Class E), Black Hills (Class E), VFR Airways; V465, V545, V2, V120;
 - (c) Exit: J32, J107, J151, J82, V86, AR-678, Black Hills and Gateway ATCAAs;
 - (d) Birds. BAM Severe periods: none. Soaring raptors late morning;
 - (e) Uncharted towers (less than 200') N47-03 W105-44, N46-40 W105-30, N46-26 W105-06, N46-14 W104-20, N45-06 W105-01, N44-53 W104-10.

FSS's Within 100 NM Radius:

CPR

IR-492

ORIGINATING ACTIVITY: 28 OSS/OSXA, 1956 Scott Dr., Ste. 201, Ellsworth AFB, SD 57706-4710 DSN 675-1230, C605-385-1230.

SCHEDULING ACTIVITY: 28 OSS/OSXS, 1956 Scott Dr., Ste. 201, Ellsworth AFB, SD 57706-4710 DSN 675-4246,

C605-385-4246. After hours RAYMOND 33 DSN 675-3800, C605-385-4246, ask for (On-call Wing Airspace Scheduler).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at FL220 to or as assigned descend direct to | NH | ABR 280/35 | N45°35.00' W99°10.00' |
| FL200 B FL220 to FL220 B FL200 turn left and continue descent to cross | NI | ABR 280/46 | N45°38.50' W99°25.00' |
| FL200 to FL200 B 50 MSL descend direct to cross | NJ | ABR 278/51 | N45°38.00' W99°32.50' |
| 50 MSL to direct to | NK | DPR 062/69 | N45°25.00' W100°09.50' |
| 50 MSL to (TA/TFR Initiation Point) descend direct to | NL | DPR 063/53 | N45°18.00' W100°30.00' |
| 01 AGL B 50 MSL to turn right and descend to | NM | DPR 067/41 | N45°14.00' W100°46.50' |
| 01 AGL B 40 MSL to direct to | NN | DPR 050/35 | N45°22.00' W101°00.50' |
| 01 AGL B 40 MSL to direct to | NO | DPR 031/48 | N45°41.00' W100°58.00' |
| 01 AGL B 40 MSL to turn left to | NP | DPR 024/57 | N45°52.00' W100°57.50' |
| 01 AGL B 40 MSL to direct to | NQ | DPR 014/61 | N46°00.00' W101°08.00' |
| 01 AGL B 40 MSL to turn right and climb to | NR | DPR 351/56 | N46°01.00' W101°41.00' |
| 01 AGL B 50 MSL to direct to | NS | DPR 348/57 | N46°02.00' W101°46.00' |
| 01 AGL B 50 MSL to direct to | NT | DPR 341/63 | N46°06.50' W101°57.50' |
| 01 AGL B 50 MSL to direct to | NU | DIK 132/51 | N46°09.50' W102°05.00' |
| 05 AGL B 50 MSL to direct to | AU | DIK 199/23 | N46°32.00' W103°05.00' |
| 01 AGL B 50 MSL to turn right to | AV | DIK 214/25 | N46°35.00' W103°13.00' |
| 01 AGL B 50 MSL to direct to | AW | MLS 067/112 | N46°36.50' W103°16.50' |
| 01 AGL B 50 MSL to turn left to | AX | MLS 050/96 | N46°58.00' W103°48.00' |
| 01 AGL B 50 MSL to direct to | AY | MLS 050/89 | N47°00.00' W104°00.00' |
| 01 AGL B 50 MSL to direct to | AZ | MLS 049/82 | N46°58.00' W104°09.00' |
| 01 AGL B 50 MSL to turn left to | LA | MLS 037/35 | N46°44.50' W105°17.50' |
| 01 AGL B 50 MSL to direct to | PQ | MLS 060/27 | N46°30.00' W105°19.00' |
| 01 AGL B 50 MSL to turn right and climb to | LB | MLS 082/74 | N46°13.00' W104°11.00' |

IR ROUTES

| | | | |
|---|----|------------|---------------------------|
| 01 AGL B 60 MSL to direct to | LC | MLS 089/79 | N46°03.00' W104°06.50' |
| 01 AGL B 60 MSL to turn right to | LD | MLS 105/79 | N45°43.00' W104°19.00' |
| 01 AGL B 60 MSL to direct to | LE | MLS 107/80 | N45°40.50' W104°20.50' |
| 01 AGL B 60 MSL to direct to | LF | MLS 134/85 | N45°10.50' W104°55.00' |
| 01 AGL B 60 MSL to turn left to | LG | GCC 015/50 | N45°05.50' W105°00.00' |
| 01 AGL B 60 MSL to direct to | AH | GCC 031/45 | N44°53.50' W104°50.00' |
| 01 AGL B 60 MSL to direct to | AI | RAP 296/90 | N44°54.00' W104°40.00' |
| 01 AGL B 60 MSL to 01 AGL B 60 MSL climb direct to cross 60 MSL to (TFR/TA Termination Point) | IL | RAP 313/71 | N44°57.50' W103°56.50' |
| 60 MSL B 100 MSL turn right and climb to cross | AK | RAP 321/67 | N44°58.50' W103°42.50' |
| 100 MSL to continue right turn to | EX | RAP 324/56 | N44°50.00' W103°31.50' |
| 100 MSL to (Contact Denver ARTCC 338.2) direct to | EL | RAP 318/52 | N44°44.00' W103°36.00' |
| 100 MSL to 100 MSL B 160 MSL continue climb to cross | EM | RAP 298/56 | N44°34.50' W104°00.00' |
| 160 MSL to or as assigned. | EN | RAP 282/64 | N44°25.50' W104°22.00' |

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF) Visual Contour (VC) and VMC Terrain Avoidance (TA/VC) operations are authorized IAW Command Directives within published altitude blocks from NL to AK. When Command Directives preclude TA/TF/VC operations, aircrews will maintain the IFR altitude for each route segment. Minimum altitudes are established by 28 OSS Clearance Plane Setting Letter and provide 200' vertical clearance of all known man-made obstructions within the route width. Command Directives may require additional obstruction clearance for TA/TF/VC operations. The entire route is designated non-mountainous. Aircrews must comply with regulations governing operations below 500' AGL. The route corridor provides airspace for 500' lateral separation from man-made obstacles. Obstructions under 200' AGL were not considered in route design.

ROUTE WIDTH - 4 NM either side of centerline from NH to NN; 3 NM left and 4 NM right of centerline from NN to NO; 4 NM either side of centerline from NO to NQ; 4 NM left and 8 NM right of centerline from NQ to NT; 8 NM left and 4 NM right of centerline from NT to AU; 4 NM either side of centerline from AU to AW; 4 NM left and 3 NM right of centerline from AW to AX; 3 NM left and 4 NM right of centerline from AX to AZ; 8 NM left and 4 NM right of centerline from AZ to LA; 4 NM left and 3 NM right of centerline from LA to PQ; 4 NM either side of centerline from PQ to LD; confines of Powder River A MOA from LD to LF; 6

NM left and 4 NM right of centerline from LF to AI; 4 NM either side of centerline from AI to EN.

Special Operating Procedures:

- (1) USAF bomber route.
- (2) MARSAs operations approved. Established by coordinated scheduling.
- (3) Lost Communications (LC) altitude: 16,000 MSL.
- (4) Centerline between turnpoint is depicted as a 7.5 NM radius arc, except EX to EL at 6.0 NM.
- (5) Timing tolerance at each turnpoint is +/- 2 1/2 minutes.
- (6) Belle Fourche ESS - 381.1.
- (7) A delay in the Powder River MOAs is not authorized. Other military activity may be operating above 10,000 MSL within the MOAs from LD to IL.
- (8) Route Merges with the IR-473 corridor at LF and continues to end.
- (9) IR-492 is closed Oct 0230-1330Z and Nov 0100-1300Z for high bird activity along route.
- (10) Required products available from Airspace Management web page:
<https://afkm.wpafb.af.mil/asps/cop/opencop.asp?filter=OO-OP-AC-81> or via AF Portal at <https://www.d.mil.af.mil/afknprod/asps/cop/opencop.asp?filter=OO-OP-AC-81>
 - (a) Briefing Guide;
 - (b) 28 OSS Clearance Plane Setting Letter;
 - (c) 28 OSS Avoidance Area Letter.
- (11) Hazards:
 - (a) Entry (Class A): AR106L (ABR to MLS), J90, V561;
 - (b) Enroute: MTR; IR-473, IR-485. SUA; Powder River A/B MOAs. Airfields; Fielder, Beaman, Booth Ranch, Lenling, Timber Lake, Cottonwood, McIntosh, Dietz, uncharted (N46-15 W102-18), Lemmon (Class E), Mott, Erickson, Fordahl, Regnet, Kirschman, Dovre, Swenson, Logging Camp (2), Bergquist, Beach, Hollstein, uncharted (N46-51 W104-48), Terry, Baker (Class E), Gardner, Lanning, Belle Creek, ridge (N45-03 W105-01), Morris, dirt strip (N44-48 W104-37), Alzada, Morgan, Newell, Belle Fourche (Class E), Black Hills (Class E). VFR airways; V71, V344, V169, V491, V2, V545, V2, V120;
 - (c) Exit: J32, J107, J151, J82, V86, AR-678, Black Hills and Gateway ATCAAs;
 - (d) Birds. BAM Severe periods: Oct and Nov. Soaring raptors late morning;
 - (e) Uncharted towers (less than 200'): N46-11 W102-13, N46-23 W102-45, N46-48 W105-04, N46-44 W105-22, N46-45 W105-21, N46-40 W105-30, N46-26 W105-06, N46-14 W104-20, N45-06 W105-01, N44-53 W104-10.

FSS's Within 100 NM Radius:

CPR, HON

IR-499

ORIGINATING ACTIVITY: 28 OSS/OSXA, 1956 Scott Dr., Ste. 201, Ellsworth AFB, SD 57706-4710 DSN 675-1230, C605-385-1230.

SCHEDULING ACTIVITY: 28 OSS/OSXS, 1956 Scott Dr., Ste. 201, Ellsworth AFB, SD 57706-4710 DSN 675-4246, C605-385-4246. After hours RAYMOND 33 DSN 675-3800, C605-385-3800, ask for (On-call Wing Airspace Scheduler).

HOURS OF OPERATION: Continuous

130 MSL to climb to
(Contact Salt Lake City ARTCC 381.6)
130 MSL B 150 MSL climb direct to
150 MSL to or as assigned

SN JAC 147/34 N43°04.50' W110°30.00'

SO JAC 186/35 N43°04.00' W111°01.00'

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|------------------------|
| Cross at FL200 to or as assigned descend direct to | F | CDR 291/55 | N43°03.50' W104°21.00' |
| 150 MSL B FL200 to (TFR/TA Initiation Point) descend direct to | JA | DDY 075/71 | N43°09.00' W104°40.00' |
| 01 AGL B 150 MSL to descend direct to | JB | DDY 039/32 | N43°25.50' W105°43.00' |
| 01 AGL B 70 MSL to direct to | JC | DDY 030/31 | N43°28.50' W105°48.00' |
| 01 AGL B 70 MSL to turn left to | JD | DDY 008/38 | N43°41.00' W105°59.00' |
| 01 AGL B 70 MSL to climb direct to | JE | CZI 132/20 | N43°44.00' W106°10.50' |
| 01 AGL B 80 MSL to turn right and continue climb to | JF | CZI 196/24 | N43°39.00' W106°42.00' |
| 01 AGL B 130 MSL to direct to | J | CZI 211/26 | N43°41.00' W106°51.50' |
| 01 AGL B 130 MSL to left to | K | SHR 181/41 | N44°11.00' W107°17.50' |
| 01 AGL B 130 MSL to direct to | L | SHR 189/39 | N44°14.00' W107°24.00' |
| 01 AGL B 130 MSL to turn left and descend direct to | M1 | BOY 354/52 | N44°19.25' W108°05.50' |
| 01 AGL B 80 MSL to direct to | SA | BOY 344/44 | N44°11.80' W108°17.60' |
| 01 AGL B 80 MSL to turn right to | SB | BOY 344/40 | N44°07.50' W108°18.00' |
| 01 AGL B 80 MSL to climb to | SC | BOY 340/35 | N44°03.00' W108°21.00' |
| 01 AGL B 90 MSL to direct to | SD | BOY 333/32 | N43°59.00' W108°26.00' |
| 01 AGL B 90 MSL to climb to | SE | BOY 309/27 | N43°49.50' W108°39.00' |
| 01 AGL B 110 MSL to climb to | SF | BOY 293/26 | N43°44.00' W108°46.00' |
| 01 AGL B 120 MSL to direct to | SG | BOY 266/30 | N43°34.00' W108°59.00' |
| 01 AGL B 120 MSL to turn right to | SH | BOY 260/35 | N43°31.50' W109°06.00' |
| 01 AGL B 120 MSL to climb to | SI | BOY 256/56 | N43°29.50' W109°34.50' |
| 01 AGL B 130 MSL to direct to | SJ | BOY 255/63 | N43°28.50' W109°45.00' |
| 01 AGL B 130 MSL to turn left to | SK | BOY 253/69 | N43°25.50' W109°52.50' |
| 01 AGL B 130 MSL to turn right to | SL | BOY 241/84 | N43°08.00' W110°09.50' |
| 130 MSL to (TFR/TA Termination Point) direct to | SM | JAC 134/37 | N43°04.50' W110°18.00' |

PMSV CONTACTS: Primary Home Station. Alternate Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC Terrain Following (TF) Visual Contour (VC) and VMC Terrain Avoidance (TA/VC) operations are authorized IAW Command Directives within published altitude blocks from JA to SM. When Command Directives preclude TA/TF/VMC operations aircrews will maintain the IFR altitude for each segment. Minimum altitudes are established by 28 OSS Clearance Plane Setting Letter and provide 200' vertical clearance of all known man-made obstructions within the route width. Command Directives may require additional obstruction clearance for TA/TF/VMC operations. The route is designated mountainous. Aircrews must comply with regulations governing operations below 500' AGL. The route corridor provides airspace for 500' lateral separation from man-made obstructions. Obstructions under 200' AGL were not considered in route design.

ROUTE WIDTH - 5 NM left and 7 NM right of right of centerline from F to JB; 7 NM left and 4 NM right of centerline from JB to JF; 4 NM either side of centerline from JF to SH; 2 NM left and 3 NM right of centerline from SH to SJ; 1 NM left and 3 NM right of centerline from SJ to SL; 3 NM either side of centerline from SL to SO.

Special Operating Procedures:

- (1) USAF bomber route.
- (2) MARSAs operations approved. Established by coordinated scheduling.
- (3) Lost Communications (LC) altitude: 15,000 MSL.
- (4) Centerline between turnpoint is depicted as a 7.5 NM radius arc.
- (5) Timing tolerance at each turnpoint is +/- 2 1/2 minutes.
- (6) Route has the same profile as IR-473 from entry to Point M1.
- (7) Monitor Denver ARTCC 385.6 (F-J).
- (8) Fly right of centerline from Point L to Point M1 for noise abatement.
- (9) Recommend CPS 2000' over the South Big Horn River prior to Point M1 for noise abatement.
- (10) Do not overfly Manderson and Basin, WY.
- (11) Maintain centerline from Point SI to SJ, otherwise CPS 2000' AGL.
- (12) Do not plan a right turn after route exit (SO) in order to minimize traffic conflicts with Jackson Hole arrivals.
- (13) Required products available from Airspace Management web page at:
<https://afkm.wpafb.af.mil/asps/cop/opencop.asp?filter=OO-OP-AC-81> or via AF Portal at
<https://wwwd.my.af.mil/afknprod/asps/cop/opencop.asp?filter=OO-OP-AC-81>
 - (a) Briefing Guide;
 - (b) 28 OSS Clearance Plane Setting Letter;
 - (c) 28 OSS Sensitive Area Letter.
- (14) Hazards:

IR ROUTES

- (a) Entry (Class A): AR-678, Black Hills ATCAA;
 (b) Enroute: Conflicting airspace; IR-473. Airports; Bogner (2), Kaan, Iberlin, Dilts, Hardy, uncharted (N43-27 W105-45), Taylor, Gosney, Bakers, Worland (Class E), South Big Horn Co (Class E), Dubois. VFR airways: V169, V89, V254, V26, V235, V298, V247, V19, V324, V319, V187, V85, V298, V330;
 (c) Exit: Alpine Airport, V465, V328;
 (d) Birds. BAM Severe periods: none. Soaring raptors late morning (especially Point M to SJ).

FSS's Within 100 NM Radius:

CPR

IR-500

ORIGINATING ACTIVITY: 7 OSS/OSOR, 966 Ave. D-4, Ste. 117, Dyess AFB, TX 79607 DSN 461-3666, C325-696-3666.

SCHEDULING ACTIVITY: 7 OSS/OSOR, 966 Ave. D-4, Ste. 117, Dyess AFB, TX 79607 DSN 461-3665, C325-696-3665.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at FL230 to or as assigned | AA | BFF 067/99 | N42°10.00' W101°18.50' |
| FL230 B 60 MSL descend direct to cross | | | |
| at or above 60 MSL continue descent to cross | AB | LBF 307/36 | N41°30.00' W101°17.00' |
| 50 MSL to (TA/TFR Initiation Point) direct to | AC | LBF 298/31 | N41°22.00' W101°16.50' |
| 02 AGL B 50 MSL to direct to | AD | HCT 310/24 | N40°45.50' W101°15.00' |
| 02 AGL B 50 MSL to turn right and climb to | AE | HCT 233/19 | N40°19.00' W101°17.50' |
| 02 AGL B 60 MSL to (TA/TFR Termination Point) direct to | AF | HCT 225/27 | N40°12.00' W101°25.00' |
| 60 MSL to (TA/TFR Initiation Point) direct to | BF | HCT 232/38 | N40°10.00' W101°39.00' |
| 02 AGL B 60 MSL to (TA/TFR Termination Point) turn left to | AG | HCT 236/50 | N40°07.50' W101°55.00' |
| 55 MSL B 60 MSL to (Resume TA/TFR Point) direct to | AH | HCT 231/58 | N40°00.00' W102°02.00' |
| 02 AGL B 60 MSL to turn right and climb to | AI | GLD 303/22 | N39°39.00' W102°02.00' |
| 02 AGL B 70 MSL to direct to | AJ | GLD 278/25 | N39°31.50' W102°11.50' |
| 02 AGL B 70 MSL to turn left to | AK | HGO 030/57 | N39°31.00' W102°47.50' |

| | | | |
|---|----|------------|---------------------------|
| 02 AGL B 70 MSL to direct to | AL | HGO 030/46 | N39°23.50' W102°57.50' |
| 02 AGL B 70 MSL to descend and turn left to | AM | HGO 049/33 | N39°05.00' W103°00.00' |
| 02 AGL B 70 MSL to direct to | AN | HGO 060/32 | N38°59.00' W102°58.00' |
| 03 AGL B 57 MSL to direct to | AO | HGO 082/43 | N38°46.00' W102°43.00' |
| 04.5 AGL B 57 MSL to direct to | AP | LAA 089/19 | N38°08.00' W102°17.50' |
| 02 AGL B 57 MSL to | AQ | LAA 099/23 | N38°03.50' W102°14.00' |
| 02 AGL B 57 MSL to turn right to | F | LAA 132/55 | N37°27.00' W102°00.00' |
| 02 AGL B 57 MSL to climb direct to | G | LAA 141/61 | N37°17.50' W102°07.00' |
| 02 AGL B 67 MSL to direct to | H | LAA 178/59 | N37°14.00' W102°53.50' |
| 02 AGL B 67 MSL to direct to | I | LAA 183/60 | N37°14.00' W103°00.00' |
| 02 AGL B 67 MSL to turn right to | J | LAA 191/63 | N37°14.00' W103°11.50' |
| 02 AGL B 67 MSL to (Start Maneuver Area) direct to | K | LAA 200/61 | N37°20.50' W103°22.00' |
| 02 AGL B 67 MSL to turn right to | L | LAA 224/39 | N37°50.00' W103°22.50' |
| 02 AGL B 67 MSL to direct to | M | LAA 222/26 | N37°56.50' W103°08.00' |
| 02 AGL B 67 MSL to (End Maneuver Area) (TA/TFR Termination Point) turn right to | N | TBE 042/52 | N37°46.00' W102°43.50' |
| 67 MSL to | O | TBE 054/48 | N37°35.00' W102°40.50' |
| 67 MSL B 100 MSL to turn left to | P | TBE 062/41 | N37°27.00' W102°46.00' |
| 80 MSL B 110 MSL to direct to | Q | TBE 073/41 | N37°19.00' W102°45.00' |
| 90 MSL B 110 MSL to (Contact Albuquerque ARTCC 351.7 passing 100 MSL) direct to | R | TBE 078/43 | N37°15.30' W102°42.00' |
| 110 MSL to or as assigned | SA | TBE 093/58 | N37°00.00' W102°26.00' |
| Re-Entry ALPHA: Cross | | | |
| 67 MSL to turn right to | N1 | TBE 042/52 | N37°46.00' W102°43.50' |
| 67 MSL to direct to | O1 | TBE 054/48 | N37°35.00' W102°40.50' |
| 67 MSL to (TA/TFR Initiation Point) turn right to | S | TBE 074/36 | N37°18.00' W102°51.50' |
| 02 AGL B 67 MSL to direct to | I1 | LAA 183/60 | N37°14.00' W103°00.00' |

02 AGL B 67 MSL to J1 LAA 191/63 N37°14.00'
 turn right to W103°11.50'
 02 AGL B 67 MSL to K1 LAA 200/61 N37°20.50'
 (Start Maneuver Area) W103°22.00'

877-9612, on estimated entry and exit times of the MOA's. In addition, provide estimated times to 120FS at Points AM and AP.
 (12) All aircraft will make an (in-the-blind) call on 381.4 prior to entering the lateral limits of Two Buttes and Cheyenne MOA's. This call is to alert aircraft operating in the MOA of your presence. This is not intended to be used as a separation tool, only a (heads up call).

PMSV CONTACTS: Primary Home Station. Alternates Dyress (DYS 344.6), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC Terrain Following (TF)/Terrain Avoidance (TA)/Visual Contour (VC) operations are authorized IAW Command Directives within the published altitude blocks from AC to N and S to N on the re-entry. When command directives preclude TF/TA/VMC operations, aircrews will maintain the IFR altitude for each route segment. Minimum altitudes are established to provide 200' vertical clearance of known man-made obstructions within the route width. Command directives may require additional obstruction clearance for TF/TA/VMC operations. The route is designated non-mountainous. Regulations governing operations below 500' AGL must be complied with. The route corridor provides airspace for 500' lateral separation from man-made obstacles. Obstructions under 200' AGL were not considered in route design. Aircrews must be aware of charted airports within or near route corridor limits.

ROUTE WIDTH - 4 NM either side of centerline from AA to AC; 3 NM either side of centerline from AC to AD; 4 NM either side of centerline from AD to AG; 4 NM left and 2 NM right of centerline from AG to AI; 4 NM either side of centerline from AI to J; 3 NM left and 4 NM right of centerline from J to K; 4 NM left and 8 NM right of centerline from K to L; 4 NM either side of centerline from L to SA; 4 NM either side of centerline from N1 to K1 (Re-Entry).

Special Operating Procedures:

- (1) Aircraft exiting the route or using the ALPHA re-entry will cross the end maneuver area point at the specified minimum IFR altitude.
- (2) Participating aircraft separation: Route is designated for MARSAs operations established by coordinated scheduling.
- (3) Lost communication (LC) Procedures: Route LC altitude is 11,000 MSL.
- (4) Route is separated from conflicting routes by coordinated scheduling.
- (5) Centerline between turn points will be depicted as a 7.5 NM arc unless otherwise specified.
- (6) Aircrews should be aware of and avoid the following airfields:
 - (a) N41-09.5 W101-17.5;
 - (b) N40-55.5 W101-17.5;
 - (c) N40-23.8 W101-11.8.
- (7) Crews will fly at IFR altitude between Points AC and AD during the period Oct through May.
- (8) Route is open all year long.
- (9) Crews will fly at IFR altitude between Pt AC and Pt AD during the period October through May.
- (10) Noise Sensitive Areas: (avoid by 1/4 NM or 1000')
 - (a) N37-49.2 W103-14.4 Residence;
 - (b) N37-20.4 W103-22.9 Residence;
 - (c) N37-14.2 W103-14.9 Residence.
- (11) This route effects Cheyenne MOA and Two Buttes MOA operations which is controlled by Buckley ANG/120FS down to 300' AGL. Advise 120FS; DSN 877-9470 or FAX

FSS's Within 100 NM Radius:
 DEN, HON

IR-501

ORIGINATING ACTIVITY: 7 OSS/OSOR, 966 Ave. D-4, Ste. 117, Dyess AFB, TX 79607 DSN 461-3666, C325-696-3666.

SCHEDULING ACTIVITY: 7 OSS/OSOR, 966 Ave. D-4, Ste. 117, Dyess AFB, TX 79607 DSN 461-3665, C325-696-3665.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at FL230 to or as assigned FL230 B 60 MSL descend direct to cross | A | BFF 067/99 | N42°10.00' W101°18.50' |
| at or above 60 MSL continue descent to cross | BA | LBF 307/36 | N41°30.00' W101°17.00' |
| 50 MSL to (TA/TFR Initiation Point) direct to | B | LBF 295/33 | N41°22.00' W101°16.50' |
| 02 AGL B 50 MSL to direct to | AZ | HCT 310/24 | N40°45.50' W101°15.00' |
| 02 AGL B 50 MSL to turn right and climb to | C | HCT 233/19 | N40°19.00' W101°17.50' |
| 02 AGL B 60 MSL to (TA/TFR Termination Point) direct to | D | HCT 225/27 | N40°12.00' W101°25.00' |
| 60 MSL to (TA/TFR Initiation Point) direct to | DD | HCT 232/38 | N40°10.00' W101°39.00' |
| 02 AGL B 60 MSL to (TA/TFR Termination Point) turn left to | E | HCT 236/50 | N40°07.50' W101°55.00' |
| 55 MSL B 60 MSL to (Resume TA/TFR Point) direct to | F | HCT 231/58 | N40°00.00' W102°02.00' |
| 02 AGL B 60 MSL to turn right and climb to | G | GLD 303/22 | N39°39.00' W102°02.00' |
| 02 AGL B 70 MSL to direct to | H | GLD 278/25 | N39°31.50' W102°11.50' |
| 02 AGL B 70 MSL to turn left to | I | HGO 030/57 | N39°31.00' W102°47.50' |

IR ROUTES

| | | | | | | | |
|---|----|------------|---------------------------|---|----|------------|---------------------------|
| 02 AGL B 70 MSL to direct to | J | HGO 030/46 | N39°23.50' W102°57.50' | 70 MSL B FL190 to or as assigned | AJ | GLD 354/35 | N39°58.00' W101°37.00' |
| 02 AGL B 70 MSL to direct to | K | LAA 325/42 | N38°51.00' W103°02.00' | turn left and descend to | | | |
| 04 AGL B 70 MSL to direct to | L | LAA 319/36 | N38°43.50' W103°03.50' | 60 MSL B 70 MSL to 60 MSL B 70 MSL continue descent to cross | AK | GLD 351/35 | N39°58.00' W101°39.00' |
| 02 AGL B 70 MSL to descend direct to | M | LAA 313/30 | N38°36.50' W103°03.00' | 60 MSL to | AL | HCT 224/53 | N39°56.50' W101°52.00' |
| 04.5 AGL B 70 MSL to turn right to | N | LAA 296/21 | N38°24.50' W103°02.00' | turn left to | | | |
| 04.5 AGL B 60 MSL to (Start Maneuver Area) direct to | O | LAA 284/19 | N38°20.00' W103°03.00' | 60 MSL to Thence via published route. | AM | GLD 317/31 | N39°49.50' W102°02.00' |
| 02 AGL B 60 MSL to turn left to | P | LAA 243/33 | N38°03.00' W103°21.00' | Alternate Entry: M2 (Transition from IR-415) Cross | | | |
| 02 AGL B 60 MSL to direct to | Q | LAA 227/37 | N37°53.00' W103°21.00' | 02 AGL B 70 MSL to Thence via published route. | M2 | LAA 313/30 | N38°36.50' W103°03.00' |
| 02 AGL B 60 MSL to (End Maneuver Area) (TA/TFR Termination Point) direct to | R | LAA 188/42 | N37°32.00' W102°59.00' | Alternate Exit: P1 (Transition to IR-409) Cross | | | |
| 60 MSL to 60 MSL B 110 MSL climb direct to cross | S | TBE 071/40 | N37°20.00' W102°46.00' | 02 AGL B 80 MSL to Thence via published transition to IR-409. | P1 | LAA 243/33 | N38°03.00' W103°21.00' |
| at or above 70 MSL 70 MSL B 110 MSL continue climb to cross | SS | TBE 078/43 | N37°15.50' W102°42.00' | | | | |
| 110 MSL to or as assigned (Contact Albuquerque ARTCC 351.7 passing 100 MSL) Re-Entry ALPHA: Cross | T | TBE 093/58 | N37°00.00' W102°26.00' | | | | |
| 60 MSL to (End Maneuver Area) (TA/TFR Termination Point) turn left to | R1 | LAA 188/42 | N37°32.00' W102°59.00' | | | | |
| 60 MSL to direct to | U | LAA 170/31 | N37°40.50' W102°42.50' | | | | |
| 60 MSL to 60 MSL B 70 MSL climb direct to cross | V | LAA 178/26 | N37°46.50' W102°47.00' | | | | |
| 70 MSL to direct to | W | LAA 189/21 | N37°52.00' W102°51.00' | | | | |
| 70 MSL to 60 MSL B 70 MSL turn right and descend to cross | X | LAA 291/37 | N38°32.00' W103°21.00' | | | | |
| 60 MSL to (TA/TFR Initiation Point) continue right turn to | Y | LAA 306/41 | N38°42.50' W103°16.00' | | | | |
| 02 AGL B 60 MSL to Thence via published route. Alternate Entry: AI Cross | M1 | LAA 313/30 | N38°36.50' W103°03.00' | | | | |
| FL190 to or as assigned descend to | AI | HCT 175/32 | N39°55.00' W101°00.00' | | | | |

PMSV CONTACTS: Primary Home Station. Alternates Dyress (DYS 344.6), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC Terrain Following (TF) contour operations are authorized IAW Command Directives within published altitude blocks from B to E; and F to R. When command directives preclude TF/visual contour operations, aircrews will maintain the minimum IFR altitude for each TF route segment. Minimum altitudes are established to provide 200' vertical clearance of known man-made obstructions within the route width. Command directives may require additional obstruction clearance for TF/visual contour operations. The entire route is designated non-mountainous. Regulations governing aircraft operations below 500' AGL must be complied with. Aircraft exiting the route or using the Alpha Re-Entry will cross the End Maneuver area, Point O, at the specified minimum IFR altitude.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 3 NM either side of centerline from B to AZ; 4 NM either side of centerline from AZ to E; 4 NM left and 2 NM right of centerline from E to G; 4 NM either side of centerline from G to N; 3 NM left and 4 NM right of centerline from N to O; 3 NM either side of centerline from O to P; 6 NM left and 3 NM right of centerline from P to Q; 6 NM left and 5 NM right of centerline from Q to R; 4 NM either side of centerline from R to T; Re-entry: 4 NM left and 3 NM right of centerline from R1 to U; 4 NM either side of centerline from U to W; 4 NM left and 2 NM right of centerline from W to X; 4 NM either side of centerline from X to M1; 4 NM either side of centerline from AI to AL; 4 NM left and 2 NM right of centerline from AL to AM.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designated for MARSAs operations established by coordinated scheduling.
- (2) Lost communications (LC) procedures: Route LC altitude is 11,000' MSL. Desired deviation from this procedure must be filed IAW FLIP AP/1B CH 1, and verified by Albuquerque ARTCC prior to route entry.

- (3) Route is separated from conflicting routes by coordinated scheduling.
- (4) Aircraft flying command directed contour/terrain following altitudes may be required to fly at a higher minimum tracking altitude, as listed in applicable regulations, for STR, scored activity. In no case will aircraft fly below command directed contour/terrain following altitudes.
- (5) Aircrews should be aware of and avoid the following airfields:
 - (a) N41-09.5 W101-17.5;
 - (b) N41-04.4 W101-22.0;
 - (c) N40-59.5 W101-26.5;
 - (d) N40-55.5 W101-17.5;
 - (e) N40-23.8 W101-11.8;
 - (f) N40-05.4 W101-34.0;
 - (g) N40-03.9 W101-32.5;
 - (h) N38-51.1 W103-06.7;
 - (i) N38-34.1 W103-25.3;
 - (j) N38-27.0 W103-31.9;
 - (k) N39-36.5 W102-32.7.
- (6) Aircrews using IR-501 Alternate Entry A1 must file IR-501A.
- (7) Centerline between turn points will be depicted as a 7.5 NM arc unless otherwise specified.
- (8) Crews will fly at IFR altitude between Point B and AZ during the period Oct through May.
- (9) Route is open all year long.
- (10) Noise Sensitive Areas: (avoid by 1/4 NM or 1000')
 - (a) N38-03.8 W103-19.1 Residence;
 - (b) N37-49.2 W103-14.4 Residence;
 - (c) N40-01.2 W102-00.3 Ranch;
 - (d) N39-45.0 W102-02.5 Ranch;
 - (e) N38-06.1 W103-14.1 Residence;
 - (f) N40-09.7 W101-33.2 Residence;
 - (g) N40-13.1 W101-23.7 Residence;
 - (h) N40-08.5 W101-33.0 Feedlot;
 - (i) N38-49.6 W103-00.7 Residence;
 - (j) N38-03.3 W103-20.8 Residence;
 - (k) N38-04.3 W103-21.8 Residence;
 - (l) N37-57.0 W103-21.6 Farm;
 - (m) N38-15.6 W103-07.8 Farm;
 - (n) N38-22.2 W102-02.7 Residence.
- (11) This route effects Cheyenne MOA and Two Buttes MOA operations which is controlled by Buckley ANG/120FS down to 300' AGL. Advise 120FS; DSN 877-9470 or FAX 877-9612, on estimated entry and exit times of the MOA's. In addition, provide estimated times to 120FS at Points J and M.
- (12) All aircraft will make an (in-the-blind) call on 381.4 prior to entering the lateral limits of Two Buttes and Cheyenne MOA's. This call is to alert aircraft operating in the MOA of your presence. This in not intended to be used as a separation tool, only a (heads up call).

FSS's Within 100 NM Radius:

DEN, HON

IR-504

ORIGINATING ACTIVITY: 509 OSS/OSKA, 905 Spirit Blvd., Whiteman AFB, MO 65305 DSN 975-1713/1754, C660-687-1713/1754. After hours contact Command Post C660-687-3778.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| Cross at 170 MSL to 170 MSL B 30 MSL descend direct to cross | A | BUM 169/16 | N38°00.00' W94°28.00' |
| 30 MSL to turn right to | B | BUM 228/32 | N37°58.00' W95°02.50' |
| 30 MSL to (TA/TFR Initiation Point) direct to | C | BUM 240/37 | N38°02.00' W95°12.00' |
| 06 AGL B 30 MSL to turn left to | D | BUM 277/48 | N38°28.00' W95°28.50' |
| 06 AGL B 30 MSL to direct to | E | BUM 280/55 | N38°32.50' W95°36.00' |
| 06 AGL B 30 MSL to turn right to | F | TOP 217/44 | N38°35.50' W96°10.00' |
| 07 AGL B 30 MSL to direct to | G | TOP 231/43 | N38°44.00' W96°18.00' |
| 05.5 AGL B 30 MSL to (Report passing H to Kansas City ARTCC 290.2, back-up 343.7, if unable report I to Kansas City ARTCC 388.8) direct to | H | TOP 256/32 | N39°03.00' W96°13.00' |
| 07.5 AGL B 30 MSL to turn left to | I | TOP 282/31 | N39°17.00' W96°11.00' |
| 07.5 AGL B 30 MSL to continue left turn to | J | TOP 287/32 | N39°20.00' W96°11.00' |
| 07 AGL B 30 MSL to direct to | K | TOP 291/40 | N39°25.50' W96°19.00' |
| 07 AGL B 30 MSL to | L | SLN 029/49 | N39°34.70' W97°00.00' |
| 05 AGL B 30 MSL to | M | SLN 020/42 | N39°32.50' W97°12.50' |
| 05 AGL B 30 MSL to | N | SLN 008/31 | N39°25.00' W97°27.00' |
| 05 AGL B 30 MSL to (End TA/TFR) | O | SLN 319/20 | N39°12.00' W97°51.50' |
| 04 AGL B 30 MSL to (Report passing P to ZKC on 363.2) | P | SLN 301/18 | N39°06.50' W97°55.50' |
| 30 MSL to | Q | SLN 262/22 | N38°55.00' W98°05.50' |
| 03 MSL B 32 MSL to | R | SLN 254/23 | N38°51.92' W98°06.90' |
| 32 MSL to (Enter Smoky Hill Racetrack Maneuvering Airspace) | AA | SLN 247/25 | N38°48.30' W98°08.30' |
| 32 MSL to (Begin TA/TFR) (Start Maneuver Area) descend within | AB | SLN 237/29 | N38°42.50' W98°11.00' |

IR ROUTES

01 AGL B 32 MSL to AC SLN 221/36 N38°31.00'
W98°11.50'

05 AGL B 30 MSL to AD SLN 200/28 N38°30.00'
W97°53.50'

01 AGL B 30 MSL to AE SLN 209/17 N38°42.00'
(Alternate Exit) W97°50.00'

01 AGL B 30 MSL to AF SLN 215/14 N38°45.00'
turn left to end Ma- W97°49.50'
neuver Area
(Terminate TFR)

01 AGL B 30 MSL to AG SLN 228/12 N38°48.50'
W97°50.00'

30 MSL B 32 MSL to AH SLN 251/22 N38°51.00'
W98°04.50'

32 MSL to AA1 SLN 247/25 N38°48.30'
climb within W98°08.30'

32 MSL B 100 MSL to AB1 SLN 237/29 N38°42.50'
W98°11.00'

(Contact KC Center
363.2)

50 MSL B 120 MSL to AC1 SLN 221/36 N38°31.00'
W98°11.50'

100 MSL B 120 MSL to AI SLN 213/39 N38°25.50'
W98°09.50'

120 MSL or as as-
signed to

(IR-504A Alternate
Transition) AJ SLN 199/41 N38°18.00'
W98°00.00'

05 AGL B 30 MSL to P1 SLN 301/18 N39°06.50'
(Report passing P to W97°55.50'
ZKC on 363.2)
(Start TA/TFR)

05 AGL B 30 MSL to AG1 SLN 228/12 N38°48.50'
(Enter Smoky Hill W97°50.00'
Racetrack Maneuver-
ing Airspace)
(Start Maneuver Area)

05 AGL B 30 MSL to AF1 SLN 215/14 N38°45.00'
W97°49.50'

01 AGL B 30 MSL to AE1 SLN 209/17 N38°42.00'
W97°50.00'

(Alternate Exit)

05 AGL B 30 MSL to S SLN 205/20 N38°38.50'
W97°50.90'

turn right to

05 AGL B 30 MSL to T SLN 213/33 N38°30.00'
W98°04.00'

turn left to

05 AGL B 30 MSL to AD1 SLN 200/28 N38°30.00'
thence via published W97°53.50'
IR-504 routing
Re-entry: AA (Smoky
Hill Racetrack)

32 MSL to AA2 SLN 247/25 N38°48.30'
W98°08.30'

32 MSL to AB2 SLN 237/29 N38°42.50'
(Start TA/TFR) W98°11.00'

descend within

10 AGL B 32 MSL to AC2 SLN 221/36 N38°31.00'
W98°11.50'

05 AGL B 30 MSL to AD2 SLN 200/28 N38°30.00'
W97°53.50'

01 AGL B 30 MSL to AE2 SLN 209/17 N38°42.00'
(Alternate Exit) W97°50.00'

01 AGL B 30 MSL to AF2 SLN 215/14 N38°45.00'
(End Maneuver Area) W97°49.50'

(Terminate TA/TFR)
climb within

01 AGL B 30 MSL to AG2 SLN 228/12 N38°48.50'
W97°50.00'

30 MSL B 32 MSL to AH2 SLN 251/22 N38°51.00'
AA2 W98°04.50'

thence via published
route

PMSV CONTACTS: Primary Home Station. Alternate Minot (MIB 342.5).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF)/Visual Contours (VC) operations are authorized IAW Command Directives within published altitude blocks from Point C to O, from AB to AF (for IR-504A) from P1 to AF and within the racetrack maneuvering airspace from AB2 to AF2. When command directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each TF route segment. The route is non-mountainous. Minimum altitudes (other than surface) are prescribed by environmental constraints and provide at least 200' vertical clearance of known man-made obstructions within the route corridor. Aircrews are advised that minimum altitudes provide no buffer outside the route limits obstruction higher than the published minimum altitudes could be present immediately adjacent to the route perimeter. Aircrews are advised that, due to cartographic limitations, vertical obstructions below 200' AGL are not depicted on standard National Geospatial Intelligence Agency (NGA) Tactical Pilotage Charts (TPC) and are not published in Chart Updating Manual (CHUM) documents. Aircrews will assume responsibility for avoiding potential obstructions/environmental hazards when operating within published altitudes below 400' AGL. Regulations governing aircraft operations below 500' AGL must be complied with.

ROUTE WIDTH - 3 NM left and 4 NM right of centerline from A to C; 3 NM left and 3 NM right of centerline from C to I; 4 NM left and 3 NM right of centerline from I to J; 4 NM left and 4 NM right of centerline from J to L; 3 NM left and 3 NM right of centerline from L to N; 2 NM left and 4 right of centerline from N to P; 3 NM left and 3 NM right of centerline from P to AA; IR-504A: 3 NM left and 4 NM right of centerline from P1 to AG1; within the boundaries of Bison MOA/Smoky MOA and R3601A/B from AG1 to AD1. Smoky Hill re-entry racetrack: maneuvering airspace bounded by 2 NM right of centerline from AA2 to AD2, within the confines of Smoky MOA and R3601A/B from AD2 to AF2, 3 NM right of centerline from AF2 to AA2.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designated for MARSAs operations established by coordinated scheduling between 509 BW and Det 1, 184 BW. MARSAs in the Bison and Smoky MOA's and in R-3601 is accomplished through coordinated scheduling and See and Avoid.
- (2) Route is to be flown only when the user has a scheduled range period at Bison MOA, Smoky MOA and R3601A/B. Contact R3601/Smoky MOA/Bison MOA Scheduling DSN 743-7500/7501 ext 148 for a confirmed range time prior to scheduling IR-504.

- (3) IR-504A alternate transition includes a course reversal between points S, T and AD1 to rejoin the standard AR-504 counter clockwise exit routing to Pt AJ. Formations utilizing this option must carefully review and brief their MARSA in-trail spacing plans to preclude any wingman traffic conflicts. Additional maneuvering within the racetrack, Smoky MOA and R3601A/B airspace is authorized if needed to ensure adequate separation.
- (4) Lost communications procedures: Lost communications altitude after Point AJ is 12000' MSL. Squawk 7600.
- (5) Crews utilizing the 504A alternate transition into the range must file IR-504A.
- (6) To utilize the re-entry racetrack file the route entry fix, route designator (IR-504 or IR-504A), followed immediately by a plus sign, the letter R and a digit indicating the number of re-entries, then the route exit fix, (e.g. BUM169016 IR504+R2 SLN198041).
- (7) For crews exiting the route at Alternate Exit AE file the route entry, route designator (IR-504 or IR-504A), Point AE Radial/DME and then include the amount of delay planned in Smoky Hill MOA/R3601 as a remark. If planning to depart the range IFR, file a separate IFR flight plan from R3601 to your destination. Contact Kansas City Center on 363.2 and remain within the Smoky Hill MOA/AR3601 until further IFR clearance is received or proceed VFR.
- (8) ZKC computer limitations require that combinations of re-entries and delays be flown so that all re-entries precede the intended on-range delay, (e.g. BUM169016 IR504A+R2 SLN209017/DO+30 IR504A SLN198041).
- (9) Re-entry racetrack flight procedures: once established in the re-entry racetrack there is no inside corridor or mandatory traffic flow. Coordinate your pattern with range control and maneuver as required. All maneuvers within the racetrack airspace north of R3601 and Smoky Hill MOA (segments AF, AG, AH, AA) must be flown at the appropriate IFR altitude for the segment involved (3000 or 3200 MSL). A proper number of racetrack re-entries must be scheduled to encompass your entire scheduled range delay. Bison MOA, Smoky MOA and R3601A/B must also be scheduled for the entire duration of the delay. Regardless of the maneuvers conducted, crews must ensure that their scheduled/filed IR-504 exit timing is met to ensure separation from subsequent route users.
- (10) Aircrews should include the route number, entry time and exit time in the remarks section of the flight plan IQW FLIP AP/1B Chapter 1. This is particularly important for aircraft delaying in the Smoky Hill Racetrack (e.g. IR-504 E1617X1815 or IR504A E1617x1815).
- (11) Separation between successive missions requires aircrews to maintain scheduled timing plus or minus 2.5 minutes at each route point.
- (12) Aircrews must be especially aware of the 1249' AGL tower located at N39-00.5/W96-03.0; the 649' AGL tower left of corridor between Pts K and L at N39-26.7/W96-48.1; multiple 499' AGL towers right of corridor between Pts N and O at N39-25.9/W97-40.0 and multiple 496' towers south of the racetrack protected airspace between Pts AC and AD at N38-20.8/W98-10.5. Special emphasis must be placed on remaining within the defined route corridor at these locations.
- (13) Centerline between turn points will be depicted as a 7.5 NM arc unless otherwise specified.
- (14) In no case will crews fly below command directed contour/terrain following altitudes.
- (15) ATC center low altitude frequencies are 270.25 A to G, 290.2 or 343.7 G to K, 388.8 K to M, 363.2 M to exit.
- (16) Aircrews should be especially vigilant for traffic on VR511/512. These routes parallel track IR-504 corridor from G to J, and cross IR-504 track between L and M. These VRs are used exclusively by the 132 FW OG/CC (ANG), 3100 McKinley Ave, Des Moines, IA 50321-2799 DSN 946-8250. Additionally there are numerous VRs in the vicinity of R3601.
- (17) Be alert for parachute jumping and ultra-light activity in the vicinity of Osage City Airport N38-37.9/W96-47.8, Wamego Airport N39-12.0/W96-15.5, Ellsworth Airport N38-45.0/W98-14.0.
- (18) Crews should be aware of moderate civilian/military traffic in the vicinity of the Salina Municipal Airport and Class D airspace located northeast of R3601A at N38-47.5/W97-37.0.
- (19) Bird caution 1 Oct thru 1 Dec. Exercise extreme caution due to migrating waterfowl at night and dawn/dusk plus or minus 1 hour, especially near wildlife refuges.
- (20) Aircrews will contact Smoky Hill on 316.9 Primary or 304.9 Secondary prior to entering the R3601A/B, (if unable to establish contact, crews will circumnavigate R3601A/B to the west, remaining within the Smoky MOA and contact Kansas City Center on 363.2 for further clearance.
- (21) The following are identified route noise sensitive areas. Refer to the 509 OSS/OSKA Noise Sensitive Area Letter for applicable avoidance criteria:
- Ranch at N37-57.5 W95-03.8;
 - Residence at N38-07.5 W95-17.4;
 - Elk Farm at N38-12.0 W95-14.8;
 - Farm at N39-14.4 W96-10.8;
 - Residence at N38-34.8 W95-43.8;
 - Brookville (town) at N38-46.4/W97-51.9;
 - Ellsworth (town) at N38-43.9/W98-13.5;
 - Falun (town) at N38-40.1/W97-45.5;
 - Genesco (town) at N38-31.0/W98-09.4;
 - Kanapolis (town) at N38-42.6/W98-09.2;
 - Marquette (town) at N38-33.3/W97-49.9;
 - Kanapolis Dam North at N38-37.6/W97-58.2;
 - Kanapolis Dam South at N38-36.4/W97-57.9;
 - Farm house at N38-41.0/W97-53.4;
 - Farm house at N38-48.0/W97-47.5;
 - Feed lot at N38-37.7/W97-48.5.

FSS's Within 100 NM Radius:

COU, ICT, OLU

IR-505

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/46, C605-988-5745/5746

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, Mon-Sat, OT By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------------------------|----|--------------|--------------------------|
| Cross at 100 MSL to or as assigned | A | LNK 195/51 | N40°09.00' W97°12.00' |
| 40 MSL B 100 MSL to | B | TKO 051/39 | N40°07.00' W97°31.00' |

IR ROUTES

| | | | |
|---|----|------------|--------------------------|
| 01 AGL B 60 MSL to | C | TKO 052/36 | N40°05.00' W97°34.00' |
| 01 AGL B 40 MSL to | D | TKO 062/22 | N39°55.00' W97°49.00' |
| 01 AGL B 40 MSL to | E | TKO 176/18 | N39°30.00' W98°18.00' |
| 01 AGL B 40 MSL to | F | TKO 176/31 | N39°18.00' W98°20.00' |
| 01 AGL B 40 MSL to | G | SLN 280/36 | N39°06.00' W98°22.00' |
| 01 AGL B 40 MSL to | H | SLN 270/36 | N39°00.00' W98°23.00' |
| 01 AGL B 40 MSL to | I | SLN 252/38 | N38°48.00' W98°25.00' |
| 01 AGL B 40 MSL to | J | SLN 235/33 | N38°40.00' W98°14.00' |
| 01 AGL B 40 MSL to | K | SLN 208/19 | N38°40.00' W97°51.00' |
| Alternate Entry: C | | | |
| 80 MSL to | C1 | TKO 052/36 | N40°05.00' W97°34.00' |
| or as assigned | | | |
| 01 AGL B 40 MSL to | D1 | TKO 062/22 | N39°55.00' W97°49.00' |
| Remain within the lateral confines of R-3601 and climb to 170 MSL or as assigned. | | | |
| Alternate Entry Track: | | | |
| E | | | |
| 100 MSL to | YA | TKO VORTAC | N39°48.38' W98°15.60' |
| or as assigned | | | |
| 100 MSL to | YB | TKO 176/6 | N39°42.00' W98°16.50' |
| 40 MSL B 100 MSL to | E1 | TKO 176/18 | N39°30.00' W98°18.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point B to K.

ROUTE WIDTH - 3 NM either side of centerline from A to C; 8 NM either side of centerline from C to G; 8 NM east and 4 NM west of centerline from G to H; 8 NM either side of centerline from H to J; 7 NM either side of centerline from J to K. Alternate Entry: E - On centerline YA to E1.

Special Operating Procedures:

- (1) All route reservations and briefings including night and weekend flights must be made during workday (normally Tue-Fri 0700-1730 local).
- (2) Route is to be flown only when the user has either a scheduled range period at R-3601, or when R-3601 is inactive. Contact R-3601/Smokey MOA scheduling prior to scheduling IR-505 at DSN 743-7600, C785-827-9611/9612.
- (3) MARSAs is applicable between IR-505 beyond Pt I and Bison/Smokey MOAs through coordinated scheduling and See and Avoid.
- (4) Lost communications procedures; At Pt K climb to 170 MSL while staying within the lateral confines of R-3601. Then via flight plan route.
- (5) Kansas City ARTCC low altitude frequencies are: north end 322.4, south end 363.2.
- (6) Route is surveyed to 200' AGL but obstacle clearance is not guaranteed.

- (7) VR-531 parallels and crosses route from Pt F to K. Numerous VR routes are in the vicinity of R-3601. Route coincides with VR-545 and VR-544.
- (8) Avoid all airports by at least 3 NM or 1500' AGL. Be especially concerned around: Beloit Airport N39-29 W98-08, and Rose Airport at N39-38 W98-22. Note that the route boundaries go around the Lucas Airport at N39-04 W98-32.
- (9) Avoid the following areas by 1500' AGL or 1 NM: N39-18.1 W98-27.3, N39-59.0 W97-39.0, N39-47.4 W97-48.5, N39-00.0 W98-27.0. Pay special attention to and avoid by 1500' AGL and 3 NM: N38-59.3 W98-26.5.
- (10) Uncharted towers located at; N39-53 W98-02, N39-47 W97-49; N38-51 W98-20; N38-51 W98-24; N38-40 W98-30, N38-52 W98-30, N38-51 W98-24, N39-31 W98-20, N38-51 W98-20, N39-37 W98-26.
- (11) Avoid the following Noise Sensitive Areas: N38-44 W97-58, Marquette N38-33 W97-50, Brockville N38-47 W97-52, Kanapolis Dam area N38-37 W97-58.
- (12) Migratory bird flyway in the spring and fall.
- (13) Low altitude air-to-air training (LOWAT), is approved on these segments of IR-505 which underlies the Bison and Smokey MOAs. The subject airspace lies between Pt I and K along the MTR from the surface to 4000' MSL.
- (14) Aircrews filing for Alternate Entry at Pt 3 must file as follows: TKO.IR505A.SLN208019....flight plan route.

FSS's Within 100 NM Radius:

ICT, OLU

IR-508

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7745, C605-988-5745.

SCHEDULING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/7746, C605-988-5754/5746.

HOURS OF OPERATION: Daylight hours, Mon-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at 100 MSL to or as assigned | A | LNK 332/108 | N42°37.00' W97°32.00' |
| descend to cross | | | |
| at or below 50 MSL | B | ONL 070/40 | N42°35.00' W97°48.00' |
| 01 AGL B 45 MSL to | C | ONL 069/32 | N42°34.00' W97°59.00' |
| 01 AGL B 45 MSL to | D | ONL 352/32 | N43°00.00' W98°40.00' |
| 01 AGL B 50 MSL to | E | ONL 283/38 | N42°43.00' W99°29.00' |
| 01 AGL B 55 MSL to | F | ONL 242/63 | N42°08.00' W100°01.00' |
| 01 AGL B 45 MSL to | G | ONL 217/29 | N42°08.00' W99°10.00' |
| 01 AGL B 45 MSL to | H | OBH 318/45 | N41°59.00' W98°56.00' |
| 01 AGL B 45 MSL to then climb to cross | I | OBH 310/24 | N41°40.00' W98°43.00' |

100 MSL to J OBH VORTAC N41°22.54' W98°21.22'

Alternate Entry: D

50 MSL to D1 ONL 352/32 N43°00.00' W98°40.00'
Thence via published route.

TERRAIN FOLLOWING OPERATIONS: Authorized from Point C to H.

ROUTE WIDTH - 4 NM either side of centerline from A to C; 8 NM either side of centerline from C to I; 4 NM either side of centerline from I to J.

Special Operating Procedures:

- (1) Route is surveyed to 100' AGL. This altitude will not guarantee obstacle clearance throughout the route.
- (2) Normal operating speed is 480 Kts.
- (3) Route is common with IR-509 from A to E and VR-1521 from C to I.
- (4) When entering at Alternate Entry Point D, aircraft shall be established in the route structure (45 MSL) within 8 NM of Point D.
- (5) When using ONL MOA in conjunction with IR-508, MOA clearance will be attempted prior to entering at Point A.
- (6) Oneill MOA overlaps the route between H and I. If IR-508 is not used in conjunction with Oneill MOA, the user must deconflict Oneill MOA with the 114 FW when scheduling the route.
- (7) Exiting the route cross Point I at 10,000' MSL.
- (8) Migratory birds along rivers and lakes in spring and fall.
- (9) Lost communications altitude is 17,000' MSL.
- (10) Alternate Exit Point is H.
- (11) IR-508 is opposite direction of IR-518 and VR-1520 from C to I. The 114 FW will not schedule opposite and conflicting traffic at the same time.
- (12) Maintain a minimum of 1500' AGL from Point A to C. Remain at least 1.5 NM away from either side of a line from N41-58.0 W98-53.0 to N41-46.0 W98-40.0.
- (13) Avoid the following noise sensitive areas by a minimum of 1500' AGL or 1 NM: ranch N42-19.5 W99-46.5, dairy N42-12.0 W99-42.0, farm N41-48.0 W98-45.0, farm N42-43.5 W99-35.2.
- (14) Avoid Bald Eagle Nesting Area at Karl Mundt National Wildlife Refuge N43-00.9 W98-31.6 by 1 NM or 1500' AGL.
- (15) Avoid Bird Nesting Areas by 1500' or 1 NM March through October: N42-47.0 W99-22.6, N42-43.3 W99-35.7.
- (16) Avoid flight within 1500'AGL or 3 NM of the Rock County Airport.
- (17) Uncharted towers located at N42-06.0 W98-00.0, N42-06.0 W98-05.0, N42-52.0 W98-41.0, N42-32.1 W99-40.1 and N41-48.3 W98-58.0.

FSS's Within 100 NM Radius:

FOD, HON, OLU

IR-509

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7745, C605-988-5745.

SCHEDULING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/7746, C605-988-5754/5746.

HOURS OF OPERATION: Daylight hours, Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|------------------------|
| Cross at 100 MSL to or as assigned descend to cross | A | ONL 070/52 | N42°37.00' W97°32.00' |
| 50 MSL to | B | ONL 070/40 | N42°35.00' W97°48.00' |
| 01 AGL B 50 MSL to | C | ONL 069/32 | N42°34.00' W97°59.00' |
| 01 AGL B 50 MSL to | D | ONL 352/32 | N43°00.00' W98°40.00' |
| 01 AGL B 50 MSL to | E | ONL 283/38 | N42°43.00' W99°29.00' |
| 01 AGL B 50 MSL to | F | ONL 286/47 | N42°49.00' W99°39.00' |
| 01 AGL B 50 MSL to | G | PIR 181/66 | N43°19.00' W100°29.00' |
| 01 AGL B 50 MSL to | H | PIR 146/32 | N43°54.00' W99°52.00' |
| 01 AGL B 55 MSL to | I | PIR 119/42 | N43°56.00' W99°25.00' |
| 01 AGL B 55 MSL to | J | ONL 330/90 | N43°53.00' W99°24.00' |
| 01 AGL B 55 MSL to 01 AGL B 90 MSL to cross | K | ONL 330/73 | N43°37.00' W99°16.00' |
| 01 AGL B 90 MSL to | L | ONL 344/41 | N43°09.00' W98°47.00' |
| 90 MSL to | M | ONL 360/36 | N43°04.00' W98°33.00' |
| 90 MSL to climb to cross | N | ONL 026/35 | N42°57.00' W98°13.00' |
| 100 MSL to | O | ONL 030/37 | N42°56.00' W98°09.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point C to L.

ROUTE WIDTH - 4 NM either side of centerline from A to C; 8 NM either side of centerline from C to L; 4 NM either side of centerline from L to O.

Special Operating Procedures:

- (1) Route is common with IR-508 between A to E, VR-510 from I to O, VR-1521 from C to E.
- (2) Route is opposite direction of IR-518 from A to E, and VR-1520 from C to E.
- (3) Route conflicts with VR-510 at Point D, and IR-508, IR-518, VR-1520 and VR-1521 between L to M.
- (4) Route is surveyed to 500' AGL with sections to 100' AGL. These altitudes will not guarantee obstacle clearance throughout the route.
- (5) Migratory birds along the rivers and lakes during spring and fall.
- (6) Lake Andes MOA overlaps the route between K and N from 6.0 MSL and above. If IR-509 is not used in conjunction with Lake Andes MOA, the user must deconflict with the 114 FW when scheduling the route.

IR ROUTES

- (7) Alternate Entry Points are D, F, H and I. Aircraft shall commence descend from 10.0 MSL or as assigned to be established into the route structure within 8 NM of the designated Alternate Entry Point.
- (8) Alternate Exit Points are D, G, H, I and L.
- (9) Points D and L underlie the Lake Andes MOA. Prior ATC clearance must be received in order to operate in the MOA when exiting at D and L.
- (10) Aircrews should be aware of 1326' AGL tower, 3385' MSL at N43-58.0 W99-35.0.
- (11) Lost communications altitude is 17,000' MSL.
- (12) A minimum of 1500' AGL entire route width from Point A to C.
- (13) A minimum of 1500' AGL over a rectangle beginning and ending at N43-49 W99-10; to N43-49 W99-25; to N43-42 W99-25; to N43-44 W99-06.5.
- (14) Avoid the following noise sensitive areas by a minimum of 1500' AGL or 1 NM: farm N43-01 W98-47; ranch N43-57.3 W99-28.5; ranch N43-23 W99-05; ranch N43-06 W98-56; farm N43-00.5 W99-50.5; ranch N43-18.3 W100-15.4; ranch N43-33.7 W99-14.0.

| | | | |
|---|-----|------------|--------------------------|
| 05 AGL B 40 MSL to Alternate Exit: J | J | HYS 131/21 | N38°34.80' W99°00.00' |
| 10 AGL B 40 MSL to DESCEND WITHIN CONFINES OF BISON | K | HYS 104/38 | N38°34.80' W98°32.00' |
| 10 AGL B 40 MSL to DESCEND WITHIN REMAIN WITHIN CONFINES OF BISON | L | SLN 223/38 | N38°31.00' W98°14.50' |
| 10 AGL B 40 MSL to ENTER SMOKY HILL RACETRACK | Y | SLN 200/28 | N38°30.00' W97°53.50' |
| 05 AGL B 30 MSL to (ALTERNATE EXIT) | Z | SLN 209/17 | N38°42.00' W97°50.00' |
| SFC B 10 MSL to (End maneuver area) | AA | SLN 215/14 | N38°45.00' W97°49.50' |
| 10 AGL B 30 MSL to (TERMINATE TFR) | AB | SLN 228/12 | N38°48.50' W97°50.00' |
| 10 AGL B 30 MSL to | AC | SLN 251/22 | N38°51.00' W98°04.50' |
| 30 MSL B 32 MSL to climb within | AD | SLN 247/25 | N38°48.30' W98°08.30' |
| 32 MSL to Contact KC Center 363.2 climb within | AE | SLN 237/29 | N38°42.50' W98°11.00' |
| 32 MSL B 100 MSL to climb within | AF | SLN 213/39 | N38°25.50' W98°09.50' |
| 50 MSL B 120 MSL to climb within | AG | SLN 213/39 | N38°25.50' W98°09.50' |
| 120 MSL to or as assigned Alternate Entry: G | AH | SLN 199/41 | N38°18.00' W98°00.00' |
| 120 MSL to or as assigned | G1 | GCK 037/61 | N38°36.25' W99°45.50' |
| 150 MSL to descend direct | H1 | GCK 047/75 | N38°34.25' W99°22.50' |
| 05 AGL B 150 MSL to (Contact KC Center 322.4) Thence via published route. Re-Entry: AA1 | I1 | HYS 148/19 | N38°33.50' W99°07.60' |
| 05 AGL B 40 MSL to | AD1 | SLN 247/25 | N38°48.30' W98°08.30' |
| 32 MSL to (Start TA/TFR) | AE1 | SLN 237/29 | N38°42.50' W98°11.00' |
| 10 AGL B 32 MSL to descend within | AF1 | SLN 221/36 | N38°31.00' W98°11.50' |
| 10 AGL B 32 MSL to | Y1 | SLN 200/28 | N38°30.00' W97°53.50' |
| 05 AGL B 30 MSL to Alternate Exit | Z1 | SLN 209/17 | N38°42.00' W97°50.00' |
| SFC B 30 MSL to End maneuver area (Terminate TA/TFR) climb within | AA1 | SLN 215/14 | N38°45.00' W97°49.50' |
| 10 AGL B 30 MSL to | AB1 | SLN 228/12 | N38°48.50' W97°50.00' |
| 30 MSL B 32 MSL to | AC1 | SLN 251/22 | N38°51.00' W98°04.50' |

FSS's Within 100 NM Radius:

FOD, HON, OLU

IR-513

ORIGINATING ACTIVITY: 184BW, DET 1, (SHANGR), 8429 W. Farrelly Rd., Smoky Hill ANG Range, Salina, KS 67401-9407 DSN 743-7500 ext 144 C785-827-9611 ext 144

SCHEDULING ACTIVITY: 184BW (KANG), McConnell AFB, KS 67221-9010 DSN 743-7710 C316-687-7710

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|-----------|---------------------|---------------------------|
| Cross at 170 MSL to or as assigned | A | LBL 056/40 | N37°18.00' W100°12.00' |
| 170 MSL to (START TA/TFR) | B | LBL 049/42 | N37°23.50' W100°13.00' |
| 170 MSL to | CC | DDC 216/17 | N37°38.50' W100°15.50' |
| 10 AGL B 170 MSL to | C | DDC 248/13 | N37°48.00' W100°16.00' |
| 10 AGL B 170 MSL to | D | GCK 038/23 | N38°10.00' W100°21.50' |
| 10 AGL B 40 MSL to | E | GCK 032/30 | N38°17.00' W100°18.00' |
| 05 AGL B 40 MSL to | F | GCK 033/54 | N38°34.00' W99°55.50' |
| 05 AGL B 40 MSL to Alternate Entry: G | G | GCK 037/61 | N38°36.00' W99°45.50' |
| 05 AGL B 40 MSL to | H | GCK 047/75 | N38°34.25' W99°22.50' |
| 05 AGL B 40 MSL to CONTACT KC Center 322.4 REMAIN WITHIN CONFINES OF BISON MOA | I | HYS 148/19 | N38°33.50' W99°07.60' |

TERRAIN FOLLOWING OPERATIONS: Authorized within published altitude blocks from Pt B to Pt AA. Within Smoky MOA (A and B) and within the Smoky Hill Racetrack from POINTS AA1 to AE1. When command directives preclude TF/TA operation aircrews will maintain the IFR altitude for each route segment. Minimum altitudes are established to provide a minimum of 100' vertical clearance of known man made obstacles. Aircrews are advised that route altitudes provide no buffer outside the route limits. Obstructions below 200' AGL were not considered in route design. Command directives may require additional clearance for TF/TA/VMC operations. The entire route is designated non-mountainous. Regulations governing operations below 500' AGL must be complied with. Aircrews must be aware of charted airports within or near the route corridor limits. Avoid flight within 1500' vertical or 3NM horizontal of these airports when practical.

ROUTE WIDTH - 4NM left/4NM right of centerline from Pt A to Pt C; 3NM left/4NM right of centerline Pt C to Pt D; 4NM right/4NM left of centerline Pt D to Pt F; 6NM left/4NM right of centerline from Pt F to Pt I. Points I-Y corridor widths must remain within the confines of the Bison, Smoky Hill Racetrack; circular track encompassing all airspace inside an area bounded by 2NM right of centerline from AA to AD, within the confines of Smoky MOA and R-3601 A/B from AD to AF, 3NM right of centerline from AF to AA. Smoky Hill Re-Entry Racetrack: circular track encompassing all airspace inside an area bounded by 2NM right of centerline from AA to AD, within the confines of Smoky MOA and R-3601 A/B from AD to AF, 3NM right of centerline from AF to AA.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designated for MARSAs operations established by coordinated scheduling.
- (2) Centerline between turn points as depicted as a 7.5NM Arc.
- (3) B-1/B-2 aircraft can make an auto TF descent beginning at Point B.
- (4) Aircrews should file the route number, entry time and exit time in the remarks section of the flight plan IQW FLIP AP/1B Chapter 1. This is particularly important for aircraft delaying in the Smoky Hill Racetrack (E.G. IR513E1617X1815).
- (5) ARTCC low altitude frequencies are: 269.4 Pt A to Pt E, 322.4 Pt E to Pt K; 363.2 Pt K to Pt AH. Smoky Hill Range is 319.9 or 309.9 while in the Smoky Hill.
- (6) Aircrews are cautioned about the following towers located adjacent to the route corridor: 2884 MSL(436'AGL) tower at N38-43.617 W099-53.00 between Pt F and G; 2416 MSL(496'AGL) tower at N38-30.10 W099-10.55 adjacent to Pt I; 2978 MSL(803'AGL) tower at N38-37.067 W098-56.55 left of corridor 3.2NM NE of Pt J; 2234 MSL(496'AGL) towers at N38-21.7 W098-09.33 right of corridor 3.8NM SE of Pt AH. Maintaining aircraft position within the established route widths must be particularly emphasized when flying below IFR altitudes in these areas.
- (7) Route is to be flown when the user has a scheduled range period at Bison MOA, Smoky MOA and R-3601 A/B. Contact R-3601/Smoky MOA/Bison MOA scheduling DSN 743-7500/7501 ext 148 for a confirmed range time prior to scheduling IR-513.
- (8) Alternate Exit at Point J requires receipt of clearance for operation in Bison MOA prior to MTR entry. Aircrews should plan to exit at or above 1000' AGL to ensure they are within the confines of the MOA and to ensure vertical clearance from towers located left and right of route corridor including multiple towers 2798 MSL(803'AGL) located 3NM NE of Pt J at N38-25.9 W098-46.317.

- (9) Aircrews utilizing alternate Entry G shall schedule and file IR-513G.
- (10) Lost communications altitude after Point AJ is 120 MSL. SQUAWK 7600.
- (11) Aircrews will contact Smoky Hill on 316.9 primary or 309.9 secondary prior to entering the R-3601 A/B. (If unable to establish contact, crews will circumnavigate R-3601 A/B to the West, remaining within the Smoky MOA and contact Kansas City Center on 363.2 for further clearance).
- (12) Crews should be aware of moderate civilian/military traffic in the vicinity of the Salina Municipal Airport and Class D airspace located Northeast of R-3601 at N38-47-30 W97-37-00.
- (13) Re-Entry Racetrack filing procedures: To utilize the Racetrack file the route entry fix, route designator (IR-513) followed immediately by a plus sign, the letter 'R' and a digit indicating the number of re-entries, then the route exit fix; (E.G., IR513+R2SLN199041).
- (14) Re-Entry Racetrack Flight Procedures: Once established in the IR-513 Re-Entry Racetrack there is no inside corridor or mandatory traffic flow. Coordinate your pattern with range control and maneuver as required. All maneuvers within the Racetrack Airspace north of R-3601 and Smoky Hill MOA (segments AF, AG, AH, AA) must be flown at the appropriate IFR altitude for the segment involved (3000 or 3200 MSL). A proper number of Racetrack Re-entries must be scheduled to encompass your entire scheduled range delay. Bison A MOA, Smoky MOA and R-3601 A/B must also be scheduled for the entire duration of the delay. Regardless of the maneuvers conducted, crews must ensure that their scheduled/entered IR-513 exit timing is met to ensure separation from subsequent route users.
- (15) Separation between successive missions requires aircrews to maintain scheduled timing plus or minus 2.5 minutes at each route point.
- (16) For crews exiting the route at alternate exit 'AE' file the route entry, route designator (IR-513), Point 'AE' Radial/DME and then include the amount of delay planned in Smoky Hill MOA/R-3601 as a remark. If planning to depart the range IFR, file a separate IFR Flight Plan from R-3601 to your destination. Contact Kansas City Center on 363.2 and remain within the Smoky Hill MOA/R-3601 until further IFR clearance is received or proceed VFR.
- (17) The following are identified route noise sensitive areas. Refer to the Smoky Hill Range Guide for avoidance criteria.
 - (a) Ellsworth (town) N38-43.9 W98-13.5;
 - (b) Falun (town) N38-40.1 W97-45.5;
 - (c) Geneseo (town) N38-31.0 W98-09.4;
 - (d) Kanapolis (town) N38-42.6 W98-09.2;
 - (e) Marquette (town) N38-33.3 W97-49.9;
 - (f) Kanapolis Dam North N38-37.6 W97-58.2;
 - (g) Kanapolis Dam South N38-36.4 W97-57.9;
 - (h) Farm House N38-41.0 W97-53.4;
 - (i) Farm House N38-48.0 W97-47.5;
 - (j) Feed lot N38-37.7 W97-48.5.

FSS's Within 100 NM Radius: ICT

IR-514

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/46, C605-988-5745/5746.

SCHEDULING ACTIVITY: Same as Originating Activity

IR ROUTES

HOURS OF OPERATION: Daylight hours, Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at 100 MSL to or as assigned descend direct to cross | A | LBF 016/25 | N41°25.00' W100°30.00' |
| at or below 50 MSL direct to | B | LBF 335/25 | N41°27.00' W100°53.00' |
| 01 AGL B 70 MSL to direct to | C | LBF 309/45 | N41°37.00' W101°23.00' |
| 01 AGL B 70 MSL to direct to | D | LBF 328/78 | N42°15.00' W101°23.00' |
| 01 AGL B 70 MSL to direct to | E | PHP 158/72 | N42°53.00' W101°23.00' |
| 01 AGL B 70 MSL to direct to | F | PHP 154/52 | N43°13.00' W101°23.00' |
| 01 AGL B 70 MSL to Climb direct to cross | G | PHP 154/41 | N43°24.00' W101°26.50' |
| 70 MSL to (Contact Minneapolis ARTCC 269.1) Continue climb direct to | H | PHP 154/17 | N43°47.00' W101°34.00' |
| 130 MSL to Continue climb direct to cross | I | PIR 221/47 | N43°55.00' W101°01.00' |
| FL230 to | J | PIR 191/48 | N43°39.00' W100°35.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from B to H.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 15 NM right and 4 NM left of centerline from B to C; 13 NM right and 16 NM left of centerline from C to D; 25 NM right and 16 NM left of centerline from D to E; 25 NM right and 10 NM left of centerline from E to G; 6 NM right and 12 NM left of centerline from G to H; 8 NM either side of centerline from H to I; 4 NM either side of centerline from I to J.

Special Operating Procedures:

- (1) Route designed for tactical low level formation, road, reconnaissance, radar low level navigation, ground attack tactics, and aerial defense tactics.
- (2) IR-514 is opposite direction traffic of IR-613. 114 FW will not schedule opposite direction and conflicting traffic at the same time.
- (3) Route is opposite direction of IR-500 from B to D.
- (4) Route is surveyed to 500' AGL with sections to 100' AGL. These altitudes will not guarantee obstacle clearance throughout the route. Give special attention to 1029' AGL tower at N42-40.75 W101-42.75.
- (5) All airports and Lacreek National Wildlife Refuge shall be avoided by 1500' AGL or 3 miles.
- (6) Contact Minneapolis ARTCC on 269.1 after passing H on route climb out.
- (7) Lost communications: After exit at J, if IMC, maintain FL 230 and comply with FAR 91.185 DOD/IFR Supplement.
- (8) Avoid the following Noise Sensitive Areas by a minimum of 1500' AGL or 1 NM: Ranch N42-26 W101-44; St. Francis N43-08 W100-55; Racetrack N43-15 W100-51.

FSS's Within 100 NM Radius:

HON, OLU

IR-518

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7745, C605-988-5745.

SCHEDULING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/7746, C605-988-5754/5746.

HOURS OF OPERATION: Daylight hours, Mon-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------------------|----|--------------|---------------------------|
| Cross at 100 MSL to | A | OBH VORTAC | N41°22.54' W98°21.22' |
| 100 MSL to | B | OBH 310/24 | N41°40.00' W98°43.00' |
| 01 AGL B 45 MSL to | C | OBH 318/45 | N41°59.00' W98°56.00' |
| 01 AGL B 45 MSL to | D | ONL 217/29 | N42°08.00' W99°10.00' |
| 01 AGL B 45 MSL to (Alternate Exit) | E | ONL 242/63 | N42°08.00' W100°01.00' |
| 01 AGL B 55 MSL to (Alternate Exit) | F | ONL 283/38 | N42°43.00' W99°29.00' |
| 01 AGL B 50 MSL to | G | ONL 352/32 | N43°00.00' W98°40.00' |
| 01 AGL B 45 MSL to Climb to cross | H | ONL 069/32 | N42°34.00' W97°59.00' |
| at or below 50 MSL Climb to cross | I | ONL 070/40 | N42°35.00' W97°48.00' |
| 100 MSL to | J | ONL 070/52 | N42°37.00' W97°32.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point B to H.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 8 NM either side of centerline from B to H; 4 NM either side of centerline from H to J.

Special Operating Procedures:

- (1) IR-518 is opposite direction of IR-508 and VR-1521 and common with VR-1520 from B to H, and IR-509 from F to J. The 114 FW will not schedule opposite and conflicting traffic at the same time.
- (2) Route is surveyed to 500' AGL with sections to 100' AGL. These altitudes will not guarantee obstacle clearance though out the route.
- (3) Migratory birds along rivers and lakes during spring and fall.
- (4) Oneill MOA overlaps the route between B and C. If IR-518 is not used in conjunction with Oneill MOA, the user must deconflict Oneill MOA with the 114 FW when scheduling the route.
- (5) Aircraft exiting at Point G to operate in the Lake Andes MOA should get clearance from ATC prior to entering the route.
- (6) Alternate Exit Points are F and G.

- (7) Alternate Entry Point is C (may be used in conjunction with ONL MOA). 06 AGL B 40 MSL to L SLN 205/97 N37°33.00'
(Report passing L to W98°42.50'
Wichita APP on 306.2)
- (8) Lost communications altitudes is 100 MSL.
- (9) Maintain a minimum of 1500' AGL from Point H to J. Remain at least 1.5 NM from either side of a line from N41-58.0 W98-53.0 to N41-46.0 W98-40.0. 05 AGL B 40 MSL to M SLN 203/93 N37°35.00'
W98°36.00'
- (10) Avoid the following noise sensitive areas by a minimum of 1500' AGL or 1 NM: ranch N42-19.5 W99-46.5, dairy N42-12.0 W99-42.0, farm N41-48.0 W98-45.0, farm N42-43.5 W99-35.2. 05 AGL B 40 MSL to N SLN 200/81 N37°43.30'
W98°24.50'
- (11) Avoid flight within 1500' AGL or 3 NM of the Rock County Airport. 05 AGL B 40 MSL to O SLN 204/72 N37°53.50'
W98°23.50'
- (12) Uncharted towers at N42-06.0 W98-00.0, N42-06.0 W98-05.0, N42-52.0 W98-41.0, N42-32.1 W99-40.1 and N41-48.3 W98-58.0. 05 AGL B 40 MSL to P SLN 205/71 N37°55.50'
W98°25.00'
Terminate TFR.
(Report passing P to Wichita APP on 306.2)
- (13) Avoid Bald Eagle Nesting Area at Karl Mundt National Wildlife Refuge N43-00.9 W98-31.6 by 1 NM or 1500' AGL. 05 AGL B 40 MSL to Q HUT 266/23 N38°02.00'
W98°25.60'
- (14) Avoid Bird Nesting Areas by 1500' or 1 NM March through October: N42-47.0 W99-22.6, N42-43.3 W99-35.7. 05 AGL B 40 MSL to R HUT 283/23 N38°08.50'
W98°23.00'

FSS's Within 100 NM Radius:

FOD, HON, OLU

IR-526

ORIGINATING ACTIVITY: 184BW, DET 1, (SHANGR), 8429 W. Farrelly Rd., Smoky Hill ANG Range, Salina, KS 67401-9407 DSN 743-7500 ext 144 C785-827-9611 ext 144

SCHEDULING ACTIVITY: 184BW (KANG), McConnell AFB, KS 67221-9010 DSN 743-7710 C316-687-7710

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long | | | |
|---|----|--------------|---------------------------|---|-------|------------|
| Cross at 150 MSL to or as assigned descend within | A | GCK 226/27 | N37°40.50' W101°11.50' | 06 AGL B 40 MSL to | L | SLN 205/97 |
| 05 AGL B 150 MSL to descend within | B | LBL 346/29 | N37°32.00' W101°00.50' | (Report passing L to Wichita APP on 306.2) | | |
| 05 AGL B 70 MSL to continue descent within | C | LBL 353/25 | N37°28.00' W100°56.00' | 05 AGL B 40 MSL to | M | SLN 203/93 |
| 05 AGL B 50 MSL to (T/A TFR Initiation Point) | D | LBL 022/18 | N37°18.00' W100°46.00' | 05 AGL B 40 MSL to | N | SLN 200/81 |
| 05 AGL B 50 MSL to | E | LBL 051/18 | N37°11.00' W100°39.00' | 05 AGL B 40 MSL to | O | SLN 204/72 |
| 05 AGL B 50 MSL to (Report passing F to Kansas City on 290.8) | F | LBL 072/20 | N37°05.00' W100°33.00' | 05 AGL B 40 MSL to | P | SLN 205/71 |
| 05 AGL B 40 MSL to Alternate Entry: G | G | LBL 078/31 | N37°03.00' W100°20.00' | 05 AGL B 40 MSL to | Q | HUT 266/23 |
| 05 AGL B 40 MSL to | H | LBL 062/59 | N37°19.50' W99°48.00' | 05 AGL B 40 MSL to | R | HUT 283/23 |
| 05 AGL B 40 MSL to | I | DDC 122/33 | N37°29.50' W99°28.00' | 05 AGL B 40 MSL to | S | HUT 300/28 |
| 05 AGL B 40 MSL to | J | DDC 117/35 | N37°31.00' W99°24.00' | 05 AGL B 40 MSL to | T | HUT 306/31 |
| 07 AGL B 40 MSL to | K | DDC 106/45 | N37°33.00' W99°09.00' | 10 AGL B 40 MSL to | U | SLN 213/37 |
| | | | | 10 AGL B 40 MSL to | Y | SLN 200/28 |
| | | | | Enter Smoky Hill Race-track Maneuver Area | Z | SLN 209/17 |
| | | | | 05 AGL B 30 MSL to (Alternate Racetrack Exit) | AA | SLN 215/14 |
| | | | | SFC B 30 MSL to (End Maneuver Area) | AB | SLN 228/12 |
| | | | | 10 AGL B 30 MSL to (TERMINATE TFR) | AC | SLN 251/22 |
| | | | | 10 AGL B 30 MSL to climb to | AD | SLN 247/25 |
| | | | | 30 MSL B 32 MSL to | AE | SLN 237/29 |
| | | | | 32 MSL to climb within (Contact Kansas City Center 363.2) | AF | SLN 221/36 |
| | | | | 32 MSL B 100 MSL to climb within | AG | SLN 213/39 |
| | | | | 50 MSL B 120 MSL to climb within | AH | SLN 199/41 |
| | | | | 100 MSL B 120 MSL to or as assigned | AI | DDC 117/35 |
| | | | | Alternate Entry: G | AJ | DDC 117/35 |
| | | | | 120 MSL to or as assigned | AK | DDC 117/35 |
| | | | | Alternate Entry: G | AL | DDC 117/35 |
| | | | | or as assigned | AM | DDC 117/35 |
| | | | | 150 MSL to descend within | AN | DDC 117/35 |
| | | | | 05 AGL B 150 MSL to Thence via published route. | AO | DDC 117/35 |
| | | | | Re-Entry: AD | AP | DDC 117/35 |
| | | | | 05 AGL B 40 MSL to | AA1 | SLN 247/25 |
| | | | | Re-Entry: AD1 (Smoky Hill Racetrack) | AA2 | SLN 247/25 |
| | | | | 32 MSL to (Start TA/TFR) | AA3 | SLN 247/25 |
| | | | | | AA4 | SLN 247/25 |
| | | | | | AA5 | SLN 247/25 |
| | | | | | AA6 | SLN 247/25 |
| | | | | | AA7 | SLN 247/25 |
| | | | | | AA8 | SLN 247/25 |
| | | | | | AA9 | SLN 247/25 |
| | | | | | AA10 | SLN 247/25 |
| | | | | | AA11 | SLN 247/25 |
| | | | | | AA12 | SLN 247/25 |
| | | | | | AA13 | SLN 247/25 |
| | | | | | AA14 | SLN 247/25 |
| | | | | | AA15 | SLN 247/25 |
| | | | | | AA16 | SLN 247/25 |
| | | | | | AA17 | SLN 247/25 |
| | | | | | AA18 | SLN 247/25 |
| | | | | | AA19 | SLN 247/25 |
| | | | | | AA20 | SLN 247/25 |
| | | | | | AA21 | SLN 247/25 |
| | | | | | AA22 | SLN 247/25 |
| | | | | | AA23 | SLN 247/25 |
| | | | | | AA24 | SLN 247/25 |
| | | | | | AA25 | SLN 247/25 |
| | | | | | AA26 | SLN 247/25 |
| | | | | | AA27 | SLN 247/25 |
| | | | | | AA28 | SLN 247/25 |
| | | | | | AA29 | SLN 247/25 |
| | | | | | AA30 | SLN 247/25 |
| | | | | | AA31 | SLN 247/25 |
| | | | | | AA32 | SLN 247/25 |
| | | | | | AA33 | SLN 247/25 |
| | | | | | AA34 | SLN 247/25 |
| | | | | | AA35 | SLN 247/25 |
| | | | | | AA36 | SLN 247/25 |
| | | | | | AA37 | SLN 247/25 |
| | | | | | AA38 | SLN 247/25 |
| | | | | | AA39 | SLN 247/25 |
| | | | | | AA40 | SLN 247/25 |
| | | | | | AA41 | SLN 247/25 |
| | | | | | AA42 | SLN 247/25 |
| | | | | | AA43 | SLN 247/25 |
| | | | | | AA44 | SLN 247/25 |
| | | | | | AA45 | SLN 247/25 |
| | | | | | AA46 | SLN 247/25 |
| | | | | | AA47 | SLN 247/25 |
| | | | | | AA48 | SLN 247/25 |
| | | | | | AA49 | SLN 247/25 |
| | | | | | AA50 | SLN 247/25 |
| | | | | | AA51 | SLN 247/25 |
| | | | | | AA52 | SLN 247/25 |
| | | | | | AA53 | SLN 247/25 |
| | | | | | AA54 | SLN 247/25 |
| | | | | | AA55 | SLN 247/25 |
| | | | | | AA56 | SLN 247/25 |
| | | | | | AA57 | SLN 247/25 |
| | | | | | AA58 | SLN 247/25 |
| | | | | | AA59 | SLN 247/25 |
| | | | | | AA60 | SLN 247/25 |
| | | | | | AA61 | SLN 247/25 |
| | | | | | AA62 | SLN 247/25 |
| | | | | | AA63 | SLN 247/25 |
| | | | | | AA64 | SLN 247/25 |
| | | | | | AA65 | SLN 247/25 |
| | | | | | AA66 | SLN 247/25 |
| | | | | | AA67 | SLN 247/25 |
| | | | | | AA68 | SLN 247/25 |
| | | | | | AA69 | SLN 247/25 |
| | | | | | AA70 | SLN 247/25 |
| | | | | | AA71 | SLN 247/25 |
| | | | | | AA72 | SLN 247/25 |
| | | | | | AA73 | SLN 247/25 |
| | | | | | AA74 | SLN 247/25 |
| | | | | | AA75 | SLN 247/25 |
| | | | | | AA76 | SLN 247/25 |
| | | | | | AA77 | SLN 247/25 |
| | | | | | AA78 | SLN 247/25 |
| | | | | | AA79 | SLN 247/25 |
| | | | | | AA80 | SLN 247/25 |
| | | | | | AA81 | SLN 247/25 |
| | | | | | AA82 | SLN 247/25 |
| | | | | | AA83 | SLN 247/25 |
| | | | | | AA84 | SLN 247/25 |
| | | | | | AA85 | SLN 247/25 |
| | | | | | AA86 | SLN 247/25 |
| | | | | | AA87 | SLN 247/25 |
| | | | | | AA88 | SLN 247/25 |
| | | | | | AA89 | SLN 247/25 |
| | | | | | AA90 | SLN 247/25 |
| | | | | | AA91 | SLN 247/25 |
| | | | | | AA92 | SLN 247/25 |
| | | | | | AA93 | SLN 247/25 |
| | | | | | AA94 | SLN 247/25 |
| | | | | | AA95 | SLN 247/25 |
| | | | | | AA96 | SLN 247/25 |
| | | | | | AA97 | SLN 247/25 |
| | | | | | AA98 | SLN 247/25 |
| | | | | | AA99 | SLN 247/25 |
| | | | | | AA100 | SLN 247/25 |

IR ROUTES

| | | | |
|---|-----|------------|--------------------------|
| 10 AGL B 32 MSL to descend within | AF1 | SLN 221/36 | N38°31.00' W98°11.50' |
| 10 AGL B 32 MSL to | Y1 | SLN 200/28 | N38°30.00' W97°53.50' |
| 05 AGL B 30 MSL to (ALTERNATE EXIT) | Z1 | SLN 209/17 | N38°42.00' W97°50.00' |
| SFC B 30 MSL to End Maneuver Area (Terminate TA/TFR) climb within | AA1 | SLN 215/14 | N38°45.00' W97°49.50' |
| 10 AGL B 30 MSL to | AB1 | SLN 228/12 | N38°48.50' W97°50.00' |
| 30 MSL B 32 MSL to | AC1 | SLN 251/22 | N38°51.00' W98°04.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized within published altitude blocks from Point C to Point O, from Point S to U, within Smoky Hill Racetrack from Points AB to AF. When command directives preclude TF/TA operation aircrews will maintain the IFR altitude for each route segment. Minimum altitudes are established to provide a minimum of 100' vertical clearance of known man made obstacles. Aircrews are advised that route altitudes provide no buffer outside the route limits. Obstructions below 200' AGL were not considered in route design. Command directives may require additional clearance for TF/TA/VMC operations. The entire route is designated non-mountainous. Regulations governing operations below 500' AGL must be complied with. Aircrews must be aware of charted airports within or near the route corridor limits. Avoid flight within 1500' vertical or 3NM horizontal of these airports when practical. Smoky Hill Re-Entry Racetrack: Circular track encompassing all airspace inside an area bounded by 2NM right of centerline from AA to AD, within the confines of Smoky MOA and R-3601A/B to AF, 3NM right of centerline from AF to AA.

ROUTE WIDTH - 4NM left/3NM right of centerline from Pt A to Pt B; 4NM left/2NM right of centerline Pt B to Pt E; 4NM left/4NM right of centerline PT E to PT J; 3NM left/6NM right of centerline from Pt J to Pt N; 2NM left/2NM right of centerline from PT N to PT R, Points S-T corridor widths must remain within the confines of the Bison MOA, Smoky Hill Racetrack: Circular track encompassing all airspace inside an area bounded by 2NM right of centerline from AA to AD, within the confines of Smoky MOA and R-3601A/B from AD to AF, 3NM right of centerline from AF to AA.

Special Operating Procedures:

- (1) Participating aircraft separation: route designated for MARSAs operations established by coordinated scheduling.
- (2) Centerline between turn points is depicted as a 7.5NM arc.
- (3) B-1/B-2 aircraft can make an auto TF descent beginning at Point B.
- (4) do not fly below 800' AGL from 1 Mar through 30 Sep between Points A through F due to heavy crop dusting activity.
- (5) Aircrews should file the route number, entry time and exit time in the remarks section of the flight plan IAW FLIP AP/1B Chapter 1. This is particularly important for aircraft delaying in the smoky Hill Racetrack (E.G. E1617X1815).
- (6) ARTCC low altitude frequencies are: 269.4 Pt A to Pt H, 344.8 Pt H to K. Smoky Hill Range is 319.9 or 309.9 while in the Smoky MOA.
- (7) Aircrews are cautioned about the following towers located adjacent to the route corridor. 3381 MSI (496 AGL) tower at N37-19.75 W100-54.333 right of corridor between Pt C and

- Pt D; 2744 MSL (999 AGL) tower at N37-55.833 W098-23.400 within corridor maintaining aircraft position within the established route widths/altitudes must be particularly emphasized when flying below IFR altitudes in these areas.
- (8) Route is to be flown only when the user has a scheduled range period at Bison MOA, Smoky MOA and R-3601 A/B. Contact R3601/Smoky MOA/Bison MOA scheduling DSN 743-7600/7501 ext 148 for confirmed range time prior to scheduling IR-526.
 - (9) Alternate Exit at Pt S required receipt of clearance for operation in Bison MOA prior to MTR entry. Aircrews should plan to exit at or above 1000' AGL to ensure they are within the confines of the MOA.
 - (10) Aircrews utilizing Alternate Entry G shall schedule and file G.
 - (11) Lost communications altitude after Point AJ is 120 MSL. Squawk 7600.
 - (12) Aircrews will contact Smoky Hill on 316.9 Primary or 309.9 secondary prior to entering the R-3601 A/B. (If unable to establish contact, crews will circumnavigate R-3601 A/B to the west, remaining within the Smoky MOA and contact Kansas City Center on 363.2 for further clearance).
 - (13) Aircrews should be aware of moderate civilian/military traffic in the vicinity of the Salina Municipal Airport and Class D airspace located Northeast of R-3601 A and N38-47-30 W97-37-00.
 - (14) Re-Entry Racetrack flying procedures: To utilize the Racetrack file the route Entry fix, route designator (IR-526) followed immediately by a plus sign, the letter 'R' and a digit indicating the number of re-entries, then the route Exit fix; E.G. +R2 SLN199041.
 - (15) Aircrews will contact Wichita Approach on 306.2 when passing Pt L and again when passing Pt P.
 - (16) Re-entry Racetrack flight procedures: Once established in the re-entry Racetrack there is no inside corridor or mandatory traffic flow. Coordinate your pattern with Range Control and maneuver as required. All maneuvers within the Racetrack Airspace North of R-3601 and Smoky Hill MOA (Segments AF, AG, AH, AA) must be flown at the appropriate IFR altitude for the segment involved (3000 or 3200 MSL). A proper number of Racetrack Re-entries must be scheduled to encompass your entire scheduled Range delay. Bison MOA, Smoky MOA and R-3601 A/B must also be scheduled for the entire duration of the delay. Regardless of the maneuvers conducted, crews must ensure that their scheduled/entered IR-526 exit timing is met to ensure separation from subsequent route users.
 - (17) Separation between successive missions requires aircrews to maintain scheduled timing plus or minus 2.5 minutes at each route point.
 - (18) For crews exiting the route at Alternate Exit AE file the route entry, route designator (IR-526), Point AE radial/DME and then include the amount of delay planned in Smoky Hill MOA/R-3601 as a remark. If planning to depart the range IFR, file a separate IFR flight plan from R-3601 to your destination. Contact Kansas City Center on 363.2 and remain within the Smoky Hill MOA/R-3601 until further IFR clearance is received or proceed VFR.
 - (19) The following are identified route noise sensitive areas. Refer to the Smoky Hill Range Guide for avoidance criteria.
 - (a) Eilsworth (town) N38-43.6 W98-13.5;
 - (b) Falun (town) N38-40.1 W97-45.5;
 - (c) Geneseo (town) N38-31.0 W98-09.4;
 - (d) Kanapolis (town) N38-42.6 W98-09.2;
 - (e) Marquette (town) N38-33.3 W

- (f) Kanapolis Dam North N38-37.6 W97-58.2;
- (g) Kanapolis Dam South N38-36.4 W97-57.9;
- (h) Farm House N38-41.0 W97-53.4;
- (i) Farm House N38-48.0 W97-47.5;
- (j) Feed Lot N38-37.7 W97-48.5

FSS's Within 100 NM Radius:

ICT

IR-527

ORIGINATING ACTIVITY: 183 FW/OSF, Capital Airport, Springfield, IL 62707 DSN 892-8202.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | MCM 289/11 | N39°44.00' W92°42.00' |
| 03 AGL B 23 MSL to | B | MCM 275/14 | N39°42.00' W92°47.00' |
| 03 AGL B 23 MSL to | C | MCM 238/31 | N39°25.50' W93°05.00' |
| 05 AGL B 23 MSL to | D | HLV 265/32 | N39°07.50' W92°49.00' |
| 05 AGL B 30 MSL to | E | HLV 297/20 | N39°17.50' W92°29.00' |
| 05 AGL B 30 MSL to | F | UIN 160/17 | N39°34.00' W91°11.00' |
| 05 AGL B 30 MSL to | G | UIN 087/20 | N39°50.00' W90°51.00' |
| 05 AGL B 90 MSL to | H | UIN 060/38 | N40°07.00' W90°32.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM right and 3 NM left of centerline from A to D; 5 NM either side of centerline from D to E; 7 NM right and 5 NM left of centerline from E to H.

Special Operating Procedures:

- (1) Route is to be flown in VMC only 3000' ceiling and 5 NM required for entry. Report passing Point F to Kansas City ARTCC on 319.9. Contact 183 FW/OSF for scheduling and for LOA and route briefings. Points D and G are Alternate Entry Points. Tie-in FSS is St. Louis (STL). Aircrews will avoid Glasgow, Missouri Arprt (N39-13 W92-52) by 1500' vertically or 3 NM laterally.

FSS's Within 100 NM Radius:

COU, IKK, STL

IR-592

ORIGINATING ACTIVITY: 509 OSS/OSKA, 905 Spirit Blvd., Whiteman AFB, MO 65305 DSN 975-1713/1754, C660-687-1713/1754/ (after hrs 3778).

SCHEDULING ACTIVITY: 509 OSS/OSOS, 905 Spirit Blvd., Whiteman AFB, MO 65305 DSN 975-1713/1754, C660-687-1713/1754, Non duty hrs call Command Post DSN 975-3778, C660-687-3778.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| Cross at 100 MSL to or as assigned (TA/TFR Initiation Point) descend within | A | FAM 230/16 | N37°30.00' W90°30.00' |
| 06 AGL B 100 MSL to | BA | FAM 206/35 | N37°09.50' W90°33.50' |
| 06 AGL B 30 MSL to | B | FAM 205/38 | N37°06.50' W90°35.00' |
| 06 AGL B 25 MSL to | C | FAM 210/62 | N36°47.00' W90°53.50' |
| 06 AGL B 25 MSL to | D | FAM 210/64 | N36°45.00' W90°55.00' |
| 06 AGL B 20 MSL to | E | ARG 316/17 | N36°19.50' W91°10.50' |
| 06 AGL B 20 MSL to | F | ARG 308/16 | N36°17.50' W91°12.00' |
| 06 AGL B 20 MSL to climb within | G | ARG 261/23 | N36°04.50' W91°25.50' |
| 06 AGL B 25 MSL to | H | ARG 257/31 | N36°01.50' W91°35.50' |
| 06 AGL B 25 MSL to climb within | I | RZC 090/99 | N36°06.00' W92°05.00' |
| 07 AGL B 30 MSL to climb within | J | RZC 093/92 | N36°02.50' W92°15.00' |
| 06 AGL B 40 MSL to | K | LIT 335/59 | N35°36.50' W92°35.50' |
| 05 AGL B 40 MSL to | L | LIT 325/69 | N35°40.50' W92°53.50' |
| 05 AGL B 40 MSL to descend within | M | RZC 099/63 | N36°00.00' W92°51.50' |
| 05 AGL B 40 MSL to (Report passing N to Memphis on 263.15) | N | RZC 091/62 | N36°09.00' W92°50.50' |
| 05 AGL B 30 MSL to | O | RZC 068/68 | N36°35.50' W92°47.50' |
| 06 AGL B 30 MSL to | P | ARG 290/90 | N36°42.50' W92°39.50' |
| 06 AGL B 30 MSL to | Q | ARG 297/78 | N36°46.00' W92°20.00' |
| 06 AGL B 30 MSL to | R | ARG 297/70 | N36°43.00' W92°12.00' |
| 06 AGL B 30 MSL to | S | ARG 295/63 | N36°37.00' W92°05.00' |
| 06 AGL B 30 MSL to | T | ARG 297/55 | N36°34.50' W91°56.00' |
| 06 AGL B 30 MSL to | U | ARG 323/38 | N36°39.00' W91°23.00' |
| 06 AGL B 30 MSL to | V | ARG 333/42 | N36°45.00' W91°17.00' |
| 06 AGL B 30 MSL to | W | ARG 340/52 | N36°57.00' W91°15.00' |

IR ROUTES

| | | | |
|---|----|------------|--------------------------|
| 06 AGL B 40 MSL to (Terminate TFR) climb within | X | MAP 137/40 | N37°03.50' W91°17.50' |
| 06 AGL B 40 MSL to | Y | MAP 140/34 | N37°07.50' W91°23.50' |
| 30 MSL B 40 MSL to (Contact Kansas City Center on 317.5) | Z | MAP 154/17 | N37°19.00' W91°40.00' |
| 40 MSL to | AA | MAP 194/11 | N37°25.00' W91°52.00' |
| 40 MSL to or as assigned | AB | MAP 222/16 | N37°25.00' W92°02.00' |
| 40 MSL to or as assigned Alternate Entry: H | AC | DGD 053/37 | N37°20.00' W92°13.00' |
| 90 MSL to or as assigned (TFR Initiation Point) descend within | H1 | ARG 257/31 | N36°01.50' W91°35.50' |
| 07 AGL B 90 MSL to | I1 | RZC 090/99 | N36°06.00' W92°05.00' |
| 07 AGL B 30 MSL to Thence via published route. Re-Entry: T | J1 | RZC 093/92 | N36°02.50' W92°15.00' |
| 06 AGL B 30 MSL to | T1 | ARG 297/55 | N36°34.50' W91°56.00' |
| 06 AGL B 30 MSL to descend within | TA | ARG 319/39 | N36°37.50' W91°26.50' |
| 06 AGL B 30 MSL to | TB | ARG 330/30 | N36°34.00' W91°13.50' |
| 06 AGL B 20 MSL to Thence via published route. Alternate Exit: Q | E1 | ARG 316/17 | N36°19.50' W91°10.50' |
| 05 AGL B 40 MSL to (Report passing N1 to Memphis Center on 263.15) | N1 | RZC 091/62 | N36°09.00' W92°50.50' |
| 05 AGL B 30 MSL to (Termination TFR) climb within | NA | RZC 072/64 | N36°30.00' W92°50.00' |
| 06 AGL B 50 MSL to continue climb within | OA | RZC 067/67 | N36°36.00' W92°49.00' |
| 30 MSL B 50 MSL to | P1 | ARG 290/90 | N36°42.50' W92°39.50' |
| 50 MSL to or as assigned. | Q1 | RZC 066/92 | N36°46.00' W92°20.00' |

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

terrain following (TF)/visual contour (VC) is authorized IAW command directives from A to X and from T1 to E1. When command directives preclude TF/VC operations, aircrews will maintain IFR altitude for each TF segment. The route is designated mountainous from I to N. The remainder of the route is designated non-mountainous. Regulations governing aircraft below 500' AGL must be complied with. Minimum altitudes other than surface are established to provide 100' vertical clearance of man-made obstructions within the route corridor. Command Directives may require additional obstruction clearance for TF/VC.

ROUTE WIDTH - 3 NM left and 1 NM right of centerline from A to B; 3 NM either side of centerline from B to D; 4 NM

either side of centerline from D to N; 4 NM left and 3 NM right of centerline from N to Q; 3 NM either side of centerline from Q to T; 3 NM left and 4 NM right of centerline from T to U; 4 NM either side of centerline from U to W; 4 NM left and 2 NM right of centerline from W to Y; 4 NM either side of centerline from Y to AA; 4 NM left and 3 NM right of centerline from AA to AC; RE-ENTRY T - 3 NM left and 4 NM of centerline from T1 to TA; 3 NM either side of centerline from TB to EI; ALTERNATE EXIT Q - remain within established N to Q route corridor as DEFINED above.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.
- (2) Centerline between turn points is depicted as a 7.5 NM radius arc.
- (3) Route Lost communication altitude at Point AC is 4000' MSL.
- (4) Aircrews should be on the alert for C-130's flying SR-218, 219, 220, 221, 222, 225, 227, 229, 230, 231, 232, 238. SR-221 and 225 cross.
- (5) Report Point N to Memphis ARTCC on 263.15.
- (6) Point H is designated as an alternate entry.
- (7) Aircrews need to be aware of a lookout tower located at N36-05.0 W92-09.6 between Point I and J when flying TF/VC altitudes.
- (8) Aircrews utilizing Alternate Exit Q must file a fix after route exit which ensures a turn to avoid Lindbergh C and E MOA'S.
- (9) Aircrews should be aware of student pilot training in the following areas:
 - (a) 4 Miles East of Des Arc, MO. (between Pt A-BA) and in the vicinity of Patterson, Mo;
 - (b) Between Piedmont, Mo. airport and Williamsville, Mo. (Pt BA-B).
- (10) Noise Sensitive Areas. Avoid overflight by 1/4 mile. Review 509 OSS/OSKA Noise Sensitive Area letter for additional IR-592 noise reduction procedures:
 - (a) Residence at N37°10.40' W090°33.00';
 - (b) Residence at N36°55.72' W090°44.82';
 - (c) Two Residences at N36°17.00' W091°08.75';
 - (d) Residence at N36°05.80' W092°01.00';
 - (e) Residence at N36°10.40' W092°55.05';
 - (f) School at N36°10.90' W092°51.01';
 - (g) Residence at N36°26.75' W092°47.80';
 - (h) Goat Farm at N36°34.01' W092°49.80';
 - (i) Residence at N36°36.82' W092°46.23';
 - (j) Residence at N36°36.92' W092°45.39';
 - (k) Residence at N36°45.10' W092°25.30';
 - (l) Farm House at N36°44.79' W092°20.59';
 - (m) Farm House at N36°44.06' W092°19.12';
 - (n) Residence at N36°38.47' W092°06.29';
 - (o) Dairy/Emu Farm at N36°39.33' W092°03.22';
 - (p) Ranch at N36°35.14' W091°53.57';
 - (q) Dairy Farm at N36°34.52' W091°52.85';
 - (r) Farm at N36°36.80' W091°48.50'.

FSS's Within 100 NM Radius:

COU, JBR, MKL, MLC, STL

IR-605

ORIGINATING ACTIVITY: 148th FIG (ANG), Duluth Intl., MN 55811 DSN 825-7265.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daily 1400-0500Z++, available OT

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------------|----|--------------|--------------------------|
| Cross at 40 MSL to | A | BJI 069/32 | N47°44.00' W94°16.00' |
| 02 AGL B 40 MSL to | B | BJI 072/36 | N47°43.30' W94°10.00' |
| 02 AGL B 40 MSL to | C | BJI 080/55 | N47°40.00' W93°41.00' |
| 02 AGL B 40 MSL to Climb to cross | D | HIB 018/26 | N47°43.00' W92°29.00' |
| 60 MSL to | E | HIB 047/32 | N47°39.00' W92°06.00' |
| 60 MSL to | F | HIB 064/42 | N47°35.00' W91°45.00' |
| 60 MSL to | G | DLH 014/19 | N47°06.00' W92°03.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to D.

ROUTE WIDTH - 5 NM either side of centerline from A to D;
4 NM either side of centerline from D to G.

Special Operating Procedures:

- (1) Contact 148 FIG Mon through Sun for scheduling and deconflict with IR-606.
- (2) Route designed for tactical low level formation, visual/radar low level NAV/RECON, ground attack tactics, and low altitude air-to-air training.
- (3) Segment B to D designated a maneuver area. Low altitude air-to-air training will only be accomplished within the maneuver area.
- (4) Participating aircraft shall operate MARSAs throughout entire route.
- (5) All aircraft contact Duluth APP CON at Pt E on 285.6.
- (6) Alternate Exit: Pt F.

FSS's Within 100 NM Radius:

GFK, PNM

IR-606

ORIGINATING ACTIVITY: 148th FIG (ANG), Duluth Intl., MN 55811 DSN 825-7265.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daily 1400-0500Z++, Usage between 0500-1400Z++ is allowable

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------------|----|--------------|--------------------------|
| Cross at 60 MSL to | A | DLH 014/19 | N47°06.00' W92°03.00' |
| 60 MSL to | B | HIB 064/42 | N47°35.00' W91°45.00' |
| 60 MSL to | C | HIB 047/32 | N47°39.00' W92°06.00' |
| 05 AGL B 60 MSL to | D | HIB 018/26 | N47°43.00' W92°29.00' |
| 02 AGL B 40 MSL to | E | BJI 080/55 | N47°40.00' W93°41.00' |
| 02 AGL B 40 MSL to Climb to cross | F | BJI 072/36 | N47°43.30' W94°10.00' |
| 40 MSL to | G | BJI 069/32 | N47°44.00' W94°16.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from C to F.

ROUTE WIDTH - 4 NM either side of centerline from A to D;
5 NM either side of centerline from D to G.

Special Operating Procedures:

- (1) Contact 148 FIG Mon through Sun for scheduling and deconflict with IR-605.
- (2) Route designed for tactical low level formation, visual/radar low level NAV/RECON, ground attack tactics, and low altitude air-to-air training.
- (3) Segment D to F designated a maneuver area. Low altitude air-to-air training will only be accomplished within the maneuver area.
- (4) Participating aircraft shall operate MARSAs throughout entire route.
- (5) All aircraft contact Minneapolis ARTCC at Pt F on 251.1.
- (6) Alternate Exit: Pt C.

FSS's Within 100 NM Radius:

GFK, PNM

IR-608

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL 32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri, weekends by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------------|----|--------------|--------------------------|
| Cross at 90 MSL to or as assigned | A | JPU 262/34 | N39°20.00' W82°06.00' |
| 90 MSL B 100 MSL to | B | JPU 235/17 | N39°16.00' W81°40.00' |
| 90 MSL B 100 MSL to | C | EKN 248/32 | N38°39.00' W80°42.00' |
| 90 MSL B 100 MSL to | D | PSK 050/61 | N37°49.00' W79°49.00' |

IR ROUTES

| | | | | | | | |
|---------------------|---|------------|--------------------------|--|---|------------|--------------------------|
| 90 MSL B 100 MSL to | E | PSK 055/38 | N37°30.00' W80°07.00' | 38 MSL to (TA/TFR Initiation Point) direct to | G | IMT 239/35 | N45°30.00' W88°48.50' |
| 90 MSL B 100 MSL to | F | PSK 350/15 | N37°20.00' W80°48.00' | | | | |
| 90 MSL B 100 MSL to | G | PSK 251/20 | N36°57.00' W81°05.00' | 04 AGL B 38 MSL to turn left to | H | IMT 292/27 | N45°58.00' W88°43.00' |
| 90 MSL B 100 MSL to | H | HMV 069/30 | N36°39.00' W81°34.00' | 04 AGL B 38 MSL to direct to | I | IMT 296/27 | N46°00.00' W88°42.50' |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous
- (2) Aircrews shall advise ATC control personnel when beginning and ending radar navigation training and whenever a turn in excess of 20 degrees is required within the route width.
- (3) Scheduling activity shall schedule the use of the IR-MTR to preclude ATC conflicts at common points and/or common route segments other IR-MTR's of the origination activity.
- (4) Conflicts: (De-conflict with the appropriate Scheduling Activity)
 - (a) Opposite direction to IR-080 from Points G to H.
 - (b) Opposite direction to IR-081 from Points G to H.
 - (c) Same direction as IR-723 from Points F to G.

FSS's Within 100 NM Radius:

AND, AOO, BNA, CLE, DAY, DCA, EKN, RDU

IR-609

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr., Minot AFB, ND 58705 DSN 453-2002/3527, C701-723-2002.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| Cross at 170 MSL to or assigned descend direct to cross | A | GRB 031/44 | N45°10.80' W87°38.00' |
| 140 MSL to direct to | B | GRB 010/37 | N45°10.00' W88°02.00' |
| 140 MSL to turn right and descend to | C | GRB 351/36 | N45°09.00' W88°19.00' |
| 90 MSL B 140 MSL to continue descent to cross | D | IMT 202/40 | N45°11.00' W88°26.00' |
| 90 MSL to continue descent to | E | IMT 210/38 | N45°15.00' W88°32.00' |
| 38 MSL B 90 MSL to turn right and contin- ue descent to cross | F | IMT 230/37 | N45°24.00' W88°46.00' |

| | | | |
|---|----|------------|--------------------------|
| 04 AGL B 38 MSL to turn left to | H | IMT 292/27 | N45°58.00' W88°43.00' |
| 04 AGL B 38 MSL to direct to | I | IMT 296/27 | N46°00.00' W88°42.50' |
| 04.5 AGL B 38 MSL to (Point JULIETT) direct to | J | IMT 307/32 | N46°07.00' W88°44.00' |
| 04.5 AGL B 38 MSL to turn right to | K | CMX 194/55 | N46°16.50' W88°46.00' |
| 05 AGL B 38 MSL to direct to | KK | CMX 194/49 | N46°22.50' W88°43.50' |
| 05 AGL B 38 MSL to direct to | II | CMX 180/33 | N46°37.00' W88°27.50' |
| 07 AGL B 38 MSL to turn right to | L | CMX 174/29 | N46°42.00' W88°23.00' |
| 07 AGL B 38 MSL to direct to | LL | CMX 168/27 | N46°44.50' W88°19.50' |
| 02 AGL B 38 MSL to direct to | M | CMX 151/26 | N46°48.00' W88°10.00' |
| 02 AGL B 38 MSL to direct to | N | CMX 126/29 | N46°54.00' W87°54.00' |
| 02 AGL B 38 MSL to (ALTERNATE ENTRY) turn right and descend to | O | CMX 098/47 | N47°05.00' W87°20.00' |
| 02 AGL B 38 MSL to direct to | P | CMX 096/51 | N47°06.00' W87°14.00' |
| 02 AGL B 23 MSL to turn right to | Q | CMX 098/67 | N47°02.00' W86°52.00' |
| 02 AGL B 23 MSL to direct to | R | CMX 105/74 | N46°53.00' W86°44.00' |
| 02 AGL B 23 MSL to climb and turn left to | S | ESC 012/55 | N46°37.00' W86°49.00' |
| 02 AGL B 30 MSL to direct to | T | ESC 012/52 | N46°34.00' W86°49.50' |
| 02 AGL B 30 MSL to turn left and descend to | U | ESC 028/26 | N46°06.50' W86°48.00' |
| 02 AGL B 30 MSL to direct to | V | ESC 039/23 | N46°01.00' W86°45.00' |
| 02 AGL B 23 MSL to turn right to | W | ESC 074/26 | N45°50.50' W86°30.00' |
| 02 AGL B 23 MSL to direct to | X | ESC 088/27 | N45°44.00' W86°27.00' |
| 02 AGL B 23 MSL to (Start Maneuver Area) direct to | Y | ESC 130/30 | N45°24.00' W86°33.00' |
| 02 AGL B 23 MSL to (End Maneuver Area) turn left to | Z | TVC 266/66 | N44°32.00' W87°05.00' |
| 02 AGL B 23 MSL to direct to | AA | TVC 258/54 | N44°26.50' W86°45.50' |
| 02 AGL B 23 MSL to (TA/TF Termination) turn left and climb to | AB | ESC 125/45 | N45°17.50' W86°13.50' |
| 23 MSL B 170 MSL to direct to cross | AC | ESC 121/44 | N45°20.83' W86°12.00' |

| | | | |
|--|----|------------|--------------------------|
| at or above 80 MSL 80 MSL B 170 MSL continue climb and turn right to cross | AD | ESC 094/38 | N45°40.50' W86°11.50' |
| at or above 110 MSL continue climb to cross | AE | ESC 084/42 | N45°47.50' W86°05.00' |
| 110 MSL B 170 MSL to continue climb and turn right to | AF | PLN 292/54 | N45°52.50' W85°53.00' |
| 110 MSL B 170 MSL to continue climb to cross | AG | PLN 294/47 | N45°52.50' W85°44.00' |
| 170 MSL to Re-Entry: direct to | AH | PLN 294/37 | N45°49.00' W85°30.00' |
| 02 AGL B 23 MSL to turn left to | Z1 | TVC 266/66 | N44°32.00' W87°05.00' |
| 02 AGL B 23 MSL to direct to | AI | TVC 258/54 | N44°26.50' W86°45.50' |
| 02 AGL B 23 MSL to turn left to | AJ | ESC 125/45 | N45°17.50' W86°13.50' |
| 02 AGL B 23 MSL to thence via published route. | Y1 | ESC 130/30 | N45°24.00' W86°33.00' |
| Alternate Exit: direct to | | | |
| 02 AGL B 23 MSL to turn left to | WI | ESC 074/26 | N45°50.50' W86°30.00' |
| 02 AGL B 23 MSL to (TA/TF Termination Point) Contact Minneapolis ARTCC 385.45 23 MSL B 70 MSL climb direct to cross 70 MSL to | AU | ESC 078/28 | N45°49.00' W86°26.00' |
| 70 MSL B 130 MSL continue climb direct to cross | AV | ESC 090/46 | N45°43.00' W86°00.00' |
| 130 MSL to or as assigned Alternate Entry: Cross | AW | PLN 279/46 | N45°40.00' W85°46.00' |
| 38 MSL to thence via published route. | O1 | CMX 098/47 | N47°05.00' W87°20.00' |

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Whiteman (SZL 344.6).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR
Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW command directives within published altitude blocks from G to AB, and Z1 to Y1 (re-entry), and from W1 to AU (alternate exit). When command directives preclude TF/VC operations, aircrews will maintain IFR altitudes for each TF route segment. Minimum altitudes above 200' AGL are established to provide at least 100' vertical clearance of known manmade obstructions within the route width. Obstructions under 200' AGL were not considered in the route design. The entire route is designated non-mountainous. Regulations governing operations below 600' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to KK; 3 NM left and 4 NM right of centerline from KK to II; 4 NM either side of centerline from II to M; 3 NM left and 4 NM right of centerline from M to N; 4 NM either side of centerline from N to U; 3 NM left and 4 NM right of centerline from U to X; 4 NM either side of centerline from X to AH; 4 NM either side of centerline from WI to AW.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designated for MARSAs operations established by coordinated scheduling.
- (2) Route Lost Communications (LC) altitude is FL 200.
- (3) Aircraft will monitor 379.1 from J to M.
- (4) Due to an environmentally sensitive area in the vicinity of N46-54.0 W87-53.5, aircrews conducting terrain following/visual contour operations will maintain level flight passing N46-53.0, W87-56.0. Aircrews will not begin descent back to minimum TA/TF altitudes until after crossing the Lake Superior shoreline.
- (5) All turn radii are depicted as a 7.5 NM arc.
- (6) Aircrews will advise Minneapolis ARTCC prior to route entry of number of aircraft and estimate to the exit of Big Bear MOA (Point II): i.e. (Call Sign) flight of (number of aircraft), entering IR-609, estimate Point II at ---- Z. In addition, aircrews with planned delays in Big Bear MOA will file entry IR-609 to IMT 307/32 delay ---- minutes, IR-609 to exit fix.
- (7) Aircrews should be aware of large geese populations during Aug thru Nov and also Apr near the lakes at N46-36.0 W88-35.0 and N46-16.0 W86-51.0. Overflight of these lakes should be avoided during these migratory seasons.
- (8) Aircrews should be aware of fire detection aircraft that could be encountered along the route of flight. Aircraft VFR and normally at 1000' AGL or higher.
- (9) Aircrews will avoid overflight of the lake at N45-54.0 W86-39.0. If in doubt of aircraft location in this area climb to IFR altitude.
- (10) Alternate Exit A: Aircrews may expect early climb out instructions from Minneapolis ARTCC if no conflicting traffic is on IR-609/610.
- (11) Aircrews utilizing the Alternate Exit on IR-609 with or without a planned delay in the Big Bear MOA will file IR-609A.
- (12) Prior to each flight the individual unit must contact the Northeast Air Defense Sector, DSN 587-3700, to insure the Big Bear MOA is scheduled/deconflicted.
- (13) Alternate Entry: Pt 01.
- (14) Aircrew will monitor Minneapolis ARTCC on 322.5 between Pt B and I.
- (15) Uncharted obstructions:
 - (a) Tower 690' AGL 1480' MSL (N46-52.62 W88-08.81);
 - (b) Tower 630' AGL 1280' MSL (N45-48.16 W86-27.40);
 - (c) Tower 260' AGL 1000' MSL (N45-12.82 W87-59.69);
 - (d) Tower 210' AGL 1810' MSL (N45-23.90 W88-38.80).
- (16) Consult sectional chart data prior to flight to determine proximity of Category C, D, and E airspace.

FSS's Within 100 NM Radius:

GRB, LAN

IR-610

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

IR ROUTES

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr.,
Minot AFB, ND 58705 DSN 453-2002/3527,
C701-723-2002/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| Cross at FL210 to or as assigned direct to | A | | N46°21.95' W79°25.39' |
| FL210 to FL210 B 100 MSL descend direct to cross | B | | N46°43.00' W79°20.00' |
| 100 MSL to 100 MSL B 60 MSL turn left and descend to cross | C | | N47°07.00' W79°14.00' |
| 60 MSL to direct to | D | | N47°15.00' W79°25.00' |
| 60 MSL to turn right to | E | YSB 058/47 | N47°09.00' W79°56.00' |
| 60 MSL to descend direct to | F | YSB 054/44 | N47°09.00' W80°03.00' |
| 40 MSL B 60 MSL to direct to | G | YSB 021/45 | N47°22.00' W80°35.00' |
| 40 MSL to (TA/TFR Initiation Point) direct to | GG | YSB 001/54 | N47°31.00' W81°00.00' |
| 04 AGL B 40 MSL to turn left to | H | YTS 230/50 | N47°56.00' W82°10.00' |
| 02 AGL B 40 MSL to direct to | I | YTS 236/54 | N47°56.00' W82°20.00' |
| 02 AGL B 40 MSL to turn right to | J | SSM 037/73 | N47°25.00' W83°20.00' |
| 02 AGL B 40 MSL to direct to | K | SSM 035/69 | N47°24.00' W83°27.00' |
| 02 AGL B 40 MSL to (End TA/TFR Point) direct to | LL | SSM 357/60 | N47°24.00' W84°30.00' |
| 40 MSL to (Start TA/TFR Point) turn left to | L | SSM 342/64 | N47°24.00' W84°55.00' |
| 02 AGL B 40 MSL to direct to | M | SSM 337/65 | N47°22.50' W85°02.50' |
| 02 AGL B 40 MSL to turn left and descend to | N | | N46°41.00' W86°43.00' |
| 02 AGL B 40 MSL to direct to | T | | N46°34.00' W86°49.50' |
| 02 AGL B 30 MSL to turn left and descend to | U | ESC 028/26 | N46°06.50' W86°48.00' |
| 02 AGL B 30 MSL to direct to | V | ESC 039/23 | N46°01.00' W86°45.00' |
| 02 AGL B 23 MSL to turn right to | W | ESC 074/26 | N45°50.50' W86°30.00' |
| 02 AGL B 23 MSL to direct to | X | ESC 088/27 | N45°44.00' W86°27.00' |

| | | | |
|--|----|------------|--------------------------|
| 02 AGL B 23 MSL to (Start Maneuver Area) direct to | Y | ESC 130/30 | N45°24.00' W86°33.00' |
| 02 AGL B 23 MSL to (End Maneuver Area) turn left to | Z | TVC 266/66 | N44°32.00' W87°05.00' |
| 02 AGL B 23 MSL to direct to | AA | TVC 258/54 | N44°26.50' W86°45.50' |
| 02 AGL B 23 MSL to (TA/TFR Termination Point) turn left and climb to | AB | ESC 125/45 | N45°17.50' W86°13.50' |
| 23 MSL B 170 MSL to direct to cross | AC | ESC 121/44 | N45°20.50' W86°12.00' |
| at or above 80 MSL 80 MSL B 170 MSL continue climb and turn right to cross | AD | ESC 094/38 | N45°40.50' W86°11.50' |
| at or above 110 MSL continue climb to cross | AE | ESC 084/42 | N45°47.50' W86°05.00' |
| 110 MSL B 170 MSL to continue climb and turn right to | AF | PLN 292/54 | N45°52.50' W85°53.00' |
| 110 MSL B 170 MSL to continue climb to cross | AG | PLN 294/47 | N45°52.50' W85°44.00' |
| 170 MSL to Re-Entry: direct to | AH | PLN 294/37 | N45°49.00' W85°30.00' |
| 02 AGL B 23 MSL to turn left to | Z1 | TVC 266/66 | N44°32.00' W87°05.00' |
| 02 AGL B 23 MSL to direct to | AI | TVC 258/54 | N44°26.50' W86°45.50' |
| 02 AGL B 23 MSL to turn left to | AJ | ESC 125/45 | N45°17.50' W86°13.50' |
| thence via published route. Alternate Exit: direct to | Y1 | ESC 130/30 | N45°24.00' W86°33.00' |
| 02 AGL B 23 MSL to turn left to | WI | ESC 074/26 | N45°50.50' W86°30.00' |
| 02 AGL B 23 MSL to (TA/TFR Termination Point) (Contact Minneapolis ARTCC 385.45) | AU | ESC 078/28 | N45°49.00' W86°26.00' |
| 23 MSL B 70 MSL climb direct to cross | AV | ESC 090/46 | N45°43.00' W86°00.00' |
| 70 MSL to 70 MSL B 130 MSL continue climb direct to cross | AW | PLN 279/46 | N45°40.00' W85°46.00' |
| 130 MSL to or as assigned. | | | |

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Whiteman (SZL 344.6).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR
Terrain Following (TF)/Visual Contour operations are authorized IAW command directives within published altitude blocks from GG to LL and from L to AB. When command directives preclude

TF/ Visual Contour Operations, aircrews will maintain IFR altitudes for each TF route segment. Minimum altitudes above 200' AGL are established to provide at least 100' vertical clearance of known manmade obstructions within the route width. Obstructions under 200' AGL were not considered in the route design. The entire route is designated non-mountainous. Regulations governing operations below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to U; 3 NM left and 4 NM right of centerline from U to X; 4 NM either side of centerline from X to AH. Re-Entry; 4 NM either side of centerline from AB to Y1; 4 NM either side of centerline from WI to AW.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designed for MARSAs operations established by coordinated scheduling.
- (2) Route lost communications altitude is FL 200.
- (3) Aircrews will contact North Bay Terminal Control on 233.4 or 236.6 MHZ upon handoff from Toronto Center.
- (4) Route centerline is depicted as 7.5 NM arc turns.
- (5) Aircrews should be aware of large geese populations during Aug thru Nov and Apr near the lakes at N46-16 W86-51. Avoid overflight of these lakes during the migratory season.
- (6) Aircrews will avoid overflight of the lake at N45-54 W86-39. If in doubt of aircraft location in this area, climb to the IFR altitude.
- (7) Aircrews will notify Toronto ARTCC upon handoff, of any planned delays in Canadian airspace.
- (8) Aircrews will inform Toronto ARTCC of planned exit, Canada time (N47-10-30 W85-32-30) prior to IR-610 entry.
- (9) Prior to route entry, aircrews will pass estimates for crossing (W81-30) to North Bay TCU and exit Canada time to Toronto Center.
- (10) Upon handoff to Toronto Center, aircrews will advise of any planned delays in Canadian airspace.
- (11) Alternate Exit A: Aircrews may expect early climb out instructions from Minneapolis ARTCC if no conflicting traffic is on IR-609/610.

FSS's Within 100 NM Radius:

GRB, LAN

IR-613

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/46, C605-988-57455746.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at 100 MSL to or a assigned descend to cross | A | PIR 221/47 | N43°55.00' W101°01.00' |
| 70 MSL to direct to | B | PHP 116/20 | N43°51.00' W101°18.00' |

| | | | |
|--|----|------------|---------------------------|
| 70 MSL to direct to | C | PHP 154/17 | N43°47.00' W101°34.00' |
| 01 AGL B 70 MSL to direct to | D | PHP 154/41 | N43°24.00' W101°26.50' |
| 01 AGL B 70 MSL to direct to | E | PHP 154/52 | N43°13.00' W101°23.00' |
| 01 AGL B 70 MSL to direct to | F | PHP 158/72 | N42°53.00' W101°23.00' |
| 01 AGL B 70 MSL to direct to | G | LBF 328/78 | N42°15.00' W101°23.00' |
| 01 AGL B 70 MSL to direct to | H | LBF 309/45 | N41°37.50' W101°23.00' |
| 01 AGL B 70 MSL to climb direct to cross | I | LBF 335/25 | N41°27.00' W100°53.00' |
| 110 MSL to or as assigned (Contact Denver ARTCC 397.85 after passing I) Alternate Entry to Point C Cross | J | LBF 016/25 | N41°25.00' W100°30.00' |
| 100 MSL to or as assigned direct to | K | PHP 077/1 | N44°03.50' W101°39.50' |
| 100 MSL to or as assigned descend direct to cross | L | PHP 154/8 | N43°55.50' W101°37.00' |
| at or below 50 MSL Thence via published route. | C1 | PHP 154/17 | N43°47.00' W101°34.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from C to I.

ROUTE WIDTH - 8 NM either side of centerline from A to C; 12 NM right and 6 NM left of centerline from C to D; 10 NM right and 25 NM left of centerline from D to F; 16 NM right and 25 NM left of centerline from F to G; 16 NM right and 13 NM left of centerline from G to H; 4 NM right and 15 NM left of centerline from H to I; 4 NM either side of centerline from I to J. Alternate Entry: 4 NM either side of centerline from K to L; 12 NM right and 6 NM left of centerline from L to C.

Special Operating Procedures:

- (1) Route designed for tactical low level formation, road reconnaissance, radar low level navigation, ground attack tactics and aerial defense tactics.
- (2) IR-613 is opposite direction traffic of IR-514. 114 FW will not schedule opposite and conflicting traffic at the same time.
- (3) Route is same direction as IR-500 from G to I.
- (4) Avoid the following noise sensitive areas by a minimum of 1500' AGL or 1 NM; Racetrack N43-15 W100-15; St. Francis N43-08 W100-55; Ranch N42-26 W101-44.
- (5) Route is surveyed to 500' AGL with sections to 100' AGL. These altitudes will not guarantee obstacle clearance throughout the route. Give special attention to a 1029' AGL tower at N42-40.75 W101-52.75.
- (6) All airports and LaCreek National Wildlife Refuge shall be avoided by 1500' AGL or 3 miles.
- (7) Contact Denver ARTCC 269.6 after passing I on route climb out.

IR ROUTES

- (8) Lost communications: After exit at J, if IMC, climb within 35 miles to FL230 and comply with FAR 91.185 DOD/IFR supplement.

FSS's Within 100 NM Radius:

HON, OLU

IR-614

ORIGINATING ACTIVITY: 183 FW/OSF, Capital Airport, Springfield, IL 62707 DSN 892-8202.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| Cross at 30 MSL to or as assigned | A | SPI 064/21 | N40°00.00' W89°16.00' |
| 10 AGL B 30 MSL to | B | VLA 029/11 | N39°15.00' W89°02.00' |
| 05 AGL B 30 MSL to | C | VLA 256/26 | N39°01.00' W89°42.00' |
| 05 AGL B 30 MSL to | D | STL 020/37 | N39°26.00' W90°12.00' |
| 05 AGL B 80 MSL to Alternate Entry/Exit: D | E | UIN 108/35 | N39°37.00' W90°35.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 7 NM either side of centerline from A to C.

Excluding the area from N38-55 W89-35 to N38-58 W89-38 to N38-56 W89-43. Then from C to D which is bounded by N38-52 W89-44 to N39-18 W90-18 to N39-34 W90-07 to N39-08 W89-42 to point of beginning. Then from D to E which is bounded by N39-18 W90-18 to N39-31 W90-39 to N39-47 W90-30 to N39-34 W90-07 to point of beginning.

Special Operating Procedures:

- (1) Route is to be flown in VMC only (3000' ceiling and 5 NM visibility). Report passing C to Kansas City Center on 327.1. Request units desiring to fly IR-614 contact the 183 FW/OSF for LOA and route briefing. Minimum altitude on the route is 500' AGL.

FSS's Within 100 NM Radius:

COU, HUF, IKK, STL

IR-618

ORIGINATING ACTIVITY: 181 TFW (ANG), Hulman Regional Airport, 1100 S. Petercheff Street, Terre Haute, IN 47803-5067 DSN 724-1234.

SCHEDULING ACTIVITY: Atterbury Range, JFAC-IN/Det 1, Bldg 124, Edinburg, IN 46124 DSN 569-2114, C812-526-1114.

HOURS OF OPERATION: Sunrise-Sunset, Tue-Sun, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | TTH 156/14 | N39°16.00' W87°08.00' |
| 05 AGL B 30 MSL to | B | OOM 207/27 | N38°45.00' W86°53.00' |
| 05 AGL B 60 MSL to | C | OOM 192/36 | N38°33.00' W86°47.00' |
| 05 AGL B 30 MSL to | D | OOM 181/54 | N38°15.00' W86°39.00' |
| 05 AGL B 30 MSL to (Contact Indianapolis ARTCC 269.4) | E | ABB 284/26 | N38°42.00' W86°10.00' |
| 05 AGL B 50 MSL to | F | OOM 127/25 | N38°53.00' W86°11.00' |
| 05 AGL B 50 MSL to (50 MSL if using alternate exit G. Contact Indianapolis APP 317.8) | G | SHB 208/36 | N39°06.00' W86°12.00' |
| 05 AGL B 50 MSL to (Enter R-3401 only with range control of-ficer clearance) | H | SHB 208/26 | N39°15.00' W86°06.00' |

TERRAIN FOLLOWING OPERATIONS: Contour flying authorized for entire route in VMC.

ROUTE WIDTH - 3 NM left and 4 NM right of centerline from A to B; 8 NM left and 4 NM right of centerline from B to C; 3 NM left and 4 NM right of centerline from C to D; 3 NM left and 7 NM right of centerline from D to E; 5 NM either side of centerline from E to H.

Special Operating Procedures:

- (1) Clearance to fly the route does not constitute clearance into R-3401; this clearance must be obtained from range control officer.
- (2) Point G Alternate Exit for aircraft not scheduled into R-3401.
- (3) Point G Alternate Entry for aircraft scheduled into R-3401 that are not flying entire route. Route is MARSA with VR-619, VR-621, VR-613, VR-1679, VR-1631, VR-1640, VR-1641, VR-1617, IR-620. MARSA accomplished by scheduling.
- (4) Prior to entering R-3401, report to Indianapolis ARTCC at point E on 269.45.
- (5) Avoid overflight of cities, towns, and villages to extent possible.
- (6) Upon R-3401 entry, request range control officer that off IR-618 and working VFR on R-3401.
- (7) Use caution for light aircraft operating in the vicinity of an unmarked private airport at Pt E.
- (8) Noise Sensitive Area: Avoid overflight of Freetown, IN, and surrounding area, below 1000' AGL.

FSS's Within 100 NM Radius:

BNA, DAY, HUF, IKK, LOU

IR-644

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr.,
Minot AFB, ND 58705 DSN 453-2639/3527,
C701-723-2639/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long | | | | |
|---|----|--------------|---------------------------|--|----|------------|---------------------------|
| Cross at 150 MSL to or as assigned direct to | A | MLS 053/91 | N46°56.00' W103°53.00' | 07.5 AGL B 34 MSL to (Start Maneuver Area) direct to | S | JMS 268/47 | N47°02.00' W99°49.00' |
| 150 MSL to (TFR Initiation Point) descend direct to | CA | MLS 052/101 | N47°01.00' W103°41.50' | 07.5 AGL B 34 MSL to (End Maneuver Area) Primary TA/TFR Ter- mination Point turn right to U | T | BIS 316/19 | N47°02.00' W100°55.00' |
| 02 AGL B 150 MSL to continue descent direct to | CB | MLS 051/108 | N47°05.00' W103°32.00' | 34 MSL to climb direct to | U | BIS 308/25 | N47°05.50' W101°03.00' |
| 05 AGL B 120 MSL to direct to | B | MLS 050/126 | N47°14.00' W103°09.50' | 34 MSL B 60 MSL to climb direct to | V | BIS 308/36 | N47°13.00' W101°13.50' |
| 06 AGL B 40 MSL to climb direct to cross | C | DIK 330/29 | N47°19.00' W102°58.00' | 60 MSL B 130 MSL to continue climb and turn left to | W | BIS 308/45 | N47°20.00' W101°22.00' |
| 40 MSL to (End TFR Point) direct to | CC | DIK 340/31 | N47°22.50' W102°51.00' | 60 MSL B 130 MSL to continue climb direct to cross | X | BIS 306/50 | N47°22.50' W101°29.00' |
| 40 MSL to turn right to | D | DIK 345/32 | N47°24.00' W102°47.00' | 130 MSL to direct to | Y | BIS 303/52 | N47°22.50' W101°34.00' |
| 40 MSL to (Start TA/TFR Point) direct to | E | DIK 352/34 | N47°25.00' W102°41.00' | 130 MSL to climb and turn left to | Z | DIK 012/35 | N47°23.00' W102°24.00' |
| 02 AGL B 40 MSL to direct to | F | DIK 007/36 | N47°25.00' W102°27.00' | 130 MSL B FL240 to continue climb direct to | AA | DIK 002/28 | N47°18.00' W102°35.00' |
| 08 AGL B 40 MSL to (TA/TFR Termination Point) direct to | G | BIS 309/49 | N47°23.50' W101°25.00' | 130 MSL B FL240 to (Contact Minneapolis ARTCC 380.3) FL 180 B FL 240 continue climb direct to cross | AB | DIK 003/14 | N47°05.00' W102°40.50' |
| 40 MSL to turn left to | H | BIS 318/43 | N47°23.00' W101°12.00' | FL240 to or as assigned Re-Entry Cross | AC | DIK 183/4 | N46°48.00' W102°48.00' |
| 40 MSL to direct to | I | BIS 326/43 | N47°25.50' W101°04.00' | 34 MSL to (End Maneuver Area) turn right to | T1 | BIS 316/19 | N47°02.00' W100°55.00' |
| 40 MSL to (TA/TFR Initiation Point) descend direct to | J | BIS 338/47 | N47°32.00' W100°52.50' | 34 MSL to climb and continue right turn to | U1 | BIS 308/25 | N47°04.50' W101°03.00' |
| 07.5 AGL B 40 MSL to direct to | K | BIS 342/50 | N47°35.00' W100°48.00' | 34 MSL B 50 MSL to direct to | RA | BIS 330/33 | N47°17.00' W100°55.00' |
| 07.5 AGL B 30 MSL to turn right to | L | DVL 259/43 | N48°03.50' W99°59.00' | 50 MSL to descend and turn right to | RB | JMS 289/44 | N47°17.00' W99°37.00' |
| 07.5 AGL B 30 MSL to direct to | M | DVL 250/32 | N47°59.50' W99°40.50' | 34 MSL B 50 MSL to continue right turn to | Q1 | JMS 285/34 | N47°10.00' W99°26.00' |
| 07.5 AGL B 30 MSL to direct to | N | DVL 211/36 | N47°38.50' W99°27.50' | 07.5 AGL B 34 MSL to Alternate Exit: XX Cross | R1 | JMS 269/38 | N47°02.00' W99°37.00' |
| 07.5 AGL B 30 MSL to climb direct to | O | JMS 301/43 | N47°24.00' W99°28.00' | 34 MSL to climb direct to | U1 | BIS 308/25 | N47°04.50' W101°03.00' |
| 07.5 AGL B 34 MSL to direct to | P | JMS 295/39 | N47°18.00' W99°27.00' | 34 MSL B 60 MSL to climb direct to cross | V1 | BIS 308/36 | N47°13.00' W101°13.50' |
| 07.5 AGL B 34 MSL to turn right to | Q | JMS 285/34 | N47°10.00' W99°26.00' | 60 MSL B 130 MSL to (Contact Minneapolis ARTCC 279.6) continue climb to cross | W1 | BIS 308/45 | N47°20.00' W101°22.00' |
| 07.5 AGL B 34 MSL to (Contact Bismark APP CON 346.6) direct to | R | JMS 269/38 | N47°02.00' W99°37.00' | 130 MSL to or as assigned Thence via the pub- lished route. | XX | BIS 308/58 | N47°30.00' W101°34.50' |

IR ROUTES

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW Command Directives within the published altitude blocks from CA to CC, E to G, J to T, and Q to T (Re-entry). VMC Terrain Avoidance (TA)/(VC) operations are authorized IAW Command Directives within the published altitude blocks from E to G, J to T, and Q to T (Re-entry). When Command Directives preclude TF/TA/VC operations, aircrews will maintain the IFR altitude for each TF/TA route segment. Minimum altitudes above 200' AGL, are established to provide 100' vertical clearance of known man-made obstructions within the route corridor. Obstructions under 200' AGL were not considered in the route design. Command Directives may require additional obstruction clearance to TF/TA/VC operations. The entire route is nonmountainous.

ROUTE WIDTH - 3 NM left and 2 NM right of centerline from A to CB; 4 NM either side of centerline from CB to N; 4 NM left and 3 NM right of centerline from N to O; 4 NM either side of centerline from O to S; 4 NM left and 6 NM right of centerline from S to T; 4 NM either side of centerline from T to AC; Re-Entry; 4 NM either side of centerline from T to R; 4 NM either side of centerline from U1 to XX.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designated for MARSAs operations established by coordinated scheduling.
- (2) Lost communications (LC) procedures: Route LC altitude is FL 240.
- (3) Centerline between the following points is depicted as a 7.5 NM radius arc: D to E, H to I, L to M, Q to R, T to U, W to X, Z to AA, Re-Entry; T to U to RA, and RB to Q to R.
- (4) Aircrews are advised of VMC helicopter operations from Point O to Point S and Z to AC.
- (5) Aircrews should be aware of numerous migration waterfowl along the route. Special precautions should be taken in the area of the Missouri River.
- (6) Noise Sensitive Areas: Avoid by 1/4 NM or 1000.
 - (a) Fox Farm N47-19.6 W100-33.5.
- (7) Uncharted Obstructions:
 - (a) Crane 260' AGL (N47-21.9 W101-12.6);
 - (b) Tower 200' AGL (N47-27.3 W101-09.0);
 - (c) Tower 300' AGL (N47-25.3 W103-01.1);
 - (d) Smokestack 200' AGL (N47-11.2 W103-06.8);
 - (e) Smokestack 300' AGL (N47-16.4 W101-17.4);
 - (f) Tower 265' AGL (N47-08.4 W100-57.1);
 - (g) Delete Tower 300' AGL (N47-19.5 W099-53.3);
 - (h) Microwave Tower 210' AGL (N46-59.6 W100-07.2);
 - (i) Microwave Tower 220' AGL (N47-08.6 W100-46.2);
 - (j) Microwave Tower 200' AGL (N48-01.5 W99-53.4);
 - (k) Microwave Tower 210' AGL (N47-03.3 W100-41.9);
 - (l) Radio Tower 200' AGL (N47-21.4 W101-37.7).

FSS's Within 100 NM Radius:

GFK

IR-649

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr., Minot AFB, ND 58705 DSN 453-2639/3527, C701-723-2639/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 150 MSL to or as assigned direct to | A | MLS 053/91 | N46°56.00' W103°53.00' |
| 150 MSL to (TFR Initiation Point) descend direct to | CA | MLS 052/101 | N47°01.00' W103°41.50' |
| 02 AGL B 150 MSL to continue descent direct to | CB | MLS 051/108 | N47°05.00' W103°32.00' |
| 05 AGL B 120 MSL to direct to | B | MLS 050/126 | N47°14.00' W103°09.50' |
| 06 AGL B 40 MSL to climb direct to cross | C | DIK 330/29 | N47°19.00' W102°58.00' |
| 40 MSL to (End TFR Point) direct to | CC | DIK 340/31 | N47°22.50' W102°51.00' |
| 40 MSL to turn right to | D | DIK 345/32 | N47°24.00' W102°47.00' |
| 40 MSL to (Start TA/TFR Point) direct to | E | DIK 352/34 | N47°25.00' W102°41.00' |
| 02 AGL B 40 MSL to direct to | F | DIK 007/36 | N47°25.00' W102°27.00' |
| 08 AGL B 40 MSL to (TA/TFR Termination Point) direct to | G | BIS 309/49 | N47°23.50' W101°25.00' |
| 40 MSL to turn left to | H | BIS 318/43 | N47°23.00' W101°12.00' |
| 40 MSL to direct to | I | BIS 326/43 | N47°25.50' W101°04.00' |
| 40 MSL to descend direct to | J | BIS 338/47 | N47°32.00' W100°52.50' |
| 07.5 AGL B 40 MSL to direct to | K | BIS 342/50 | N47°35.00' W100°48.00' |
| 07.5 AGL B 30 MSL to turn left to | BA | MOT 113/45 | N47°49.00' W100°24.00' |
| 30 MSL to (Contact Minot APP CON 363.8) climb direct to cross | BB | MOT 101/38 | N48°00.00' W100°25.50' |
| 52 MSL to | BC | MOT 096/23 | N48°08.00' W100°45.00' |

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW Command Directives within the published altitude blocks from CA to CC, and E to G, J to BA. VMC Terrain Avoidance (TA/VC) operations are authorized IAW Command Directives within the published altitude blocks from E to G, J to BA. When Command Directives preclude TF/TA/VC operations, aircrews will maintain the IFR altitude for each TF/TA route

segment. Minimum altitudes above 200' AGL are established to provide 100' vertical clearance of known man-made obstructions within the route corridor. Obstructions under 200' AGL were not considered in the route design. Command Directives may require additional obstruction clearance to TF/TA/VC operations. The entire route is nonmountainous.

ROUTE WIDTH - 3 NM left and 2 NM right of centerline from A to CB; 4 NM either side of centerline from CB to BC.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.
- (2) Lost communications (LC) procedures: Route LC altitude is FL 240.
- (3) Aircrews should be aware of numerous migrating waterfowl along the route. Special precautions should be taken in the area of the Missouri River.
- (4) Exit procedures: Contact Minot AFB APP CON 363.8. When crossing Point BB and give ETA to KMIB 115 030 with altitude, airspeed and ETA to overhead Minot AFB. Cross Point BC at 250 KIAS.
- (5) Uncharted Obstructions:
 - (a) Crane 260' AGL (N47-21.9 W101-12.6);
 - (b) Tower 200' AGL (N47-27.3 W101-09.0);
 - (c) Tower 300' AGL (N47-25.3 W103-01.1);
 - (d) Smokestack 200' AGL (N47-11.2 W103-06.8);
 - (e) Smokestack 300' AGL (N47-16.4 W101-17.4);
 - (f) Tower 265' AGL (N47-08.4 W100-57.1);
 - (g) Delete Tower 300' AGL (N47-19.5 W099-53.3);
 - (h) Microwave Tower 210' AGL (N46-59.6 W100-07.2);
 - (i) Microwave Tower 220' AGL (N47-08.6 W100-46.2);
 - (j) Microwave Tower 200' AGL (N48-01.5 W99-53.4);
 - (k) Microwave Tower 210' AGL (N47-03.3 W100-41.9);
 - (l) Radio Tower 200' AGL (N47-21.4 W101-37.7).

FSS's Within 100 NM Radius:

HON, GFK

IR-654

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr., Minot AFB, ND 58705 DSN 453-2002/3527, C701-723-2002/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 170 MSL to or as assigned | A | | N59°18.00' W120°00.00' |
| 170 MSL B 40 MSL descend direct to cross | | | |
| 40 MSL to (TA/TFR Initiation Point) direct to | B | | N59°07.00' W121°00.00' |

| | | | |
|---|----|--|---------------------------|
| SFC B 40 MSL to turn left to | C | | N58°58.00' W121°50.00' |
| SFC B 40 MSL to direct to | D | | N58°50.00' W122°00.00' |
| SFC B 40 MSL to climb direct to | E | | N57°40.00' W121°45.00' |
| SFC B 50 MSL to direct to | F | | N57°30.00' W121°50.00' |
| 03.5 AGL B 50 MSL to climb direct to | G | | N56°35.00' W122°10.00' |
| SFC B 90 MSL to continue climb and turn right to | H | | N56°30.00' W122°12.00' |
| SFC B 90 MSL to direct to | I | | N56°24.00' W122°23.00' |
| SFC B 90 MSL to turn left to | J | | N56°11.00' W123°57.00' |
| SFC B 90 MSL to direct to | K | | N56°03.00' W124°07.00' |
| SFC B 90 MSL to descend direct to | L | | N55°32.00' W124°00.00' |
| SFC B 90 MSL to turn right to | M | | N55°07.00' W124°04.00' |
| SFC B 70 MSL to direct to | N | | N55°00.00' W124°15.00' |
| SFC B 70 MSL to turn left to | O | | N54°39.00' W125°54.00' |
| SFC B 70 MSL to direct to | P | | N54°36.00' W126°01.00' |
| SFC B 70 MSL to climb and turn left to | Q | | N54°00.00' W126°40.00' |
| SFC B 90 MSL to continue climb to | R | | N53°55.00' W126°42.00' |
| SFC B 90 MSL to continue climb and turn right to | S | | N53°52.00' W126°41.00' |
| SFC B 90 MSL to direct to | T | | N53°44.00' W126°46.00' |
| SFC B 90 MSL to turn left to | U | | N53°32.00' W127°13.00' |
| SFC B 90 MSL to direct to | V | | N53°25.00' W127°19.00' |
| SFC B 90 MSL to Contact Comox Base Ops on 316.5 prior to entry into CYR 157 Alternate Entry: BA Cross | W | | N51°56.00' W127°00.00' |
| 170 MSL to or as assigned | BA | | N59°40.00' W123°20.00' |
| 170 MSL B 40 MSL descend direct to cross | | | |
| 40 MSL to (TA/TFR Initiation Point) direct to | BB | | N59°15.00' W122°40.00' |
| SFC B 40 MSL to turn right to | BC | | N58°54.00' W122°03.00' |

IR ROUTES

SFC B 40 MSL to D1 N58°50.00'
(thence via published route) W122°00.00'
Alternate Entry; BL
Cross
170 MSL to BL N55°10.00'
or as assigned W123°25.00'
170 MSL B 70 MSL
direct to
70 MSL B 170 MSL to N1 N55°00.00'
(TA/TFR Initiation Point) W124°15.00'
(Thence via published route)

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775), Cold Lake Canada (CYOD 344.6).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW Command Directives within published altitudes from B to W and BB to D1 for Alternate Entry BA. This route is nonmountainous from B to F and mountainous from F to W. Minimum altitudes, other than the surface are established to provide at least 100' vertical separation of known man-made obstructions. Obstructions under 200' AGL were not considered in the route design. The route corridor provides airspace for 500' lateral separation from man-made obstacles. When Command Directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each leg segment.

ROUTE WIDTH - 4 NM either side of centerline entire route.

Special Operating Procedures:

- (1) Route survey for this route will not be accomplished until it is needed. Users must advise this unit 120 days prior to date of intended use and provide a route survey.
- (2) Participating aircraft separation: Route is designed for MARSAs operations established by coordinated scheduling.
- (3) Lost Communications (LC) procedures are IAW FLIP AP/1B.
- (4) Centerline between designated turn points is depicted as a 7.5 NM radius arc unless otherwise specified.
- (5) IR-654 terminates in CYD157. The scheduling agency for CYD157 is Base OPS, Comox BC (DSN 237-2210/2460).
- (6) IR-654 will normally only be flown during four one-day periods per year, during the following time blocks: March, May 15-June 20, September, and November 15-December 15. Flights must be approved by NDHQ/DAOT, Ottawa, Canada, via the CLFO at Det 1, HQ ACC/DOSR.
- (7) Due to changing environmental concerns, minimum AGL altitude for route segments will be determined from the preflight of the route. The minimum altitudes will be sent by priority message to participating units at least 24 hours prior to ETD.
- (8) Due to B-52 performance check criteria B-52 aircrews must:
 - (a) Start a climb at Point G (N56-35 W122-10) to be at or above 5000' MSL and visually confirm clearance of terrain at Point I (N56-24 W122-23);
 - (b) From Point J (N56-11 W123-07) to Point L (N55-32 W124-00) aircrews should proceed visually and descend to no lower than 5500' MSL to ensure clearance of sheer terrain 10 NM short of Point L;
 - (c) Enroute to Point O (N54-39 W125-54) aircrews must be especially vigilant due to rapidly rising terrain;

- (d) Departing Point S (N53-52 W126-41) aircrews must be especially vigilant due to rapidly rising terrain;
- (e) Because of rugged terrain and excessive dropout, be careful before following the TA trace.
- (9) An Altitude Reservation (ALTRV) must be filed and approved prior to flying IR-654.
- (10) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/2382 at least 8 hours prior to mission brief time.

IR-655

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr., Minot AFB, ND 58705 DSN 453-2002/3527, C701-723-2002/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 170 MSL to or as assigned | A | | N63°42.00' W109°47.00' |
| 170 MSL B 40 MSL descend direct to cross | | | |
| 40 MSL to (TA/TFR Initiation Point) direct to | B | | N63°30.00' W107°30.00' |
| SFC B 40 MSL to turn right to | C | | N63°26.50' W106°58.00' |
| SFC B 40 MSL to direct to | D | | N63°16.50' W106°46.00' |
| SFC B 40 MSL to turn right to | E | | N62°24.50' W107°33.00' |
| SFC B 40 MSL to direct to | F | | N62°20.50' W107°41.00' |
| SFC B 40 MSL to turn left to | G | | N61°34.00' W110°46.00' |
| SFC B 40 MSL to direct to | H | | N61°26.00' W110°54.00' |
| SFC B 40 MSL to direct to | I | | N60°30.00' W110°40.00' |
| SFC B 40 MSL to direct to | J | | N59°18.00' W110°00.00' |
| SFC B 40 MSL to direct to | K | | N58°30.00' W110°00.00' |
| SFC B 40 MSL to turn left to | L | | N57°40.00' W110°38.00' |
| SFC B 40 MSL to direct to | M | | N57°30.00' W110°32.00' |
| SFC B 40 MSL to turn right to | N | | N57°17.00' W109°39.00' |
| SFC B 40 MSL to direct to | O | | N57°08.50' W109°31.00' |
| SFC B 40 MSL to turn left to | P | | N56°13.50' W109°58.50' |

| | | | | | |
|--|----|---------------------------|---|----|---------------------------|
| SFC B 40 MSL to Contact Cold Lake Terminal on 322.8 (230.6 Backup) direct to | Q | N56°07.00' W109°56.50' | 170 MSL to or as assigned 170 MSL B 40 MSL descend direct to cross | BJ | N60°00.00' W111°00.00' |
| SFC B 40 MSL to turn right to | R | N55°39.00' W109°18.00' | 40 MSL to (TA/TFR Initiation Point) | J1 | N59°18.00' W110°00.00' |
| SFC B 40 MSL to direct to | S | N55°30.00' W109°18.00' | thence via published route. | | |
| SFC B 40 MSL to turn right to | T | N55°06.00' W109°50.00' | | | |
| SFC B 40 MSL to direct to | U | N55°03.00' W110°08.00' | | | |
| SFC B 40 MSL to turn left to | V | N55°18.00' W110°50.00' | | | |
| SFC B 40 MSL to Contact Jimmy Lake RSO 255.4 (295.3 Backup) direct to | W | N55°07.00' W111°07.00' | | | |
| SFC B 40 MSL to turn left to | X | N54°55.00' W110°50.00' | | | |
| SFC B 40 MSL to direct to | Y | N54°53.00' W110°40.00' | | | |
| SFC B 40 MSL to direct to | Z | N54°53.00' W109°58.00' | | | |
| SFC B 40 MSL to (TA/TFR Termination Point) climb direct to | AA | N54°50.00' W109°00.00' | | | |
| 40 MSL B 170 MSL to Contact Cold Lake Terminal for handover or further clearance. 40 MSL B 170 MSL continue climb to cross | AB | N54°48.00' W108°34.00' | | | |
| 170 MSL to or as assigned Alternate Entry: BA cross | AC | N54°45.00' W108°00.00' | | | |
| 170 MSL to or as assigned 170 MSL B 40 MSL descend direct to cross | BA | N63°36.00' W104°06.00' | | | |
| 40 MSL to (TA/TFR Initiation Point) turn left to | BB | N63°25.00' W106°31.00' | | | |
| SFC B 40 MSL to direct to | BC | N63°20.00' W106°43.00' | | | |
| SFC B 40 MSL to thence via published route. Alternate Entry: BJ Cross | E1 | N62°24.00' W107°33.00' | | | |

PMSV CONTACTS: Primary Home Station. Alternates; Ellsworth (RCA 375.775), Minot (MIB 342.5), Cold Lake Canada (CYOD 344.6).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW Command directives within published altitudes from B to AA and BB to AA for Alternate Entry BA. This route is nonmountainous. Minimum altitudes, other than surface are established to provide at least 100' vertical separation of known man-made obstructions. Obstructions under 200' AGL were not considered in the route design. The route corridor provides airspace for 500' lateral separation from man-made obstacles. When Command directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each leg segment.

ROUTE WIDTH - 4 NM either side of centerline entire route.

Special Operating Procedures:

- (1) Route survey for this route will not be accomplished until it is needed. Users must advise this unit 120 days prior to date of intended use and provide a route survey.
- (2) Participating aircraft separation: Route is designated for MARSAs operations established by coordinated scheduling.
- (3) Lost communications (LC) procedures are IAW FLIP AP/1B.
- (4) Centerline between designated turn points is depicted as a 7.5 NM arc unless otherwise specified.
- (5) Aircraft traverse CYD204 and CYR204. This range is restricted and will only be used with the approval of Canadian Forces National Headquarters Director of Air Operations and Training (NDHG/DAOT), Ottawa, Canada.
- (6) Aircrews using Jimmy Lake Scoring Range will not connect RCD until clearance is received. Manned scoring towers are located approximately 2300' either side of the bomb/rocket circle. Aircrews will not broadcast a tone but call 'Bombs Away' at release.
- (7) Hung Ordinance procedure: Proceed to Point AA, contact Cold Lake terminal on 322.8 and inform them of intentions to proceed to hung ordinance pattern at 50 MSL. All switches will be safed. The four corners of the box are:
 - (a) N55-17-30 W109-01-00;
 - (b) N55-17-30 W109-27-00;
 - (c) N55-00-30 W109-27-00;
 - (d) N55-00-30 W109-01-00. Aircraft will orbit until aircraft commander has confirmed weapon is safely stored for RTB.
- (8) If IFR conditions exist, aircraft will fly flight planned route at 40 MSL. Weapons releases are not authorized if the weather in the range is below 1500' AGL and 3 NM visibility.
- (9) IR-655 will normally be flown only four one-day periods per year, during the following periods: Mar, May 15-Jun 20, Sep, and Nov 15-Dec 20. Flights must be approved by NDHG/DAOT, Ottawa, Canada, via the CFLO at Det 1, HQ ACC/DOSR.

IR ROUTES

- (10) Due to changing environmental concerns minimum AGL altitudes for route segments will be determined from the preflight of the route. The minimum altitudes will be sent by priority message to participating units at least 24 hours prior to ETD.
- (11) An Altitude Reservation (ALTRV) must be filed and approved prior to flying IR-655.
- (12) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/2382 at least 8 hours prior to mission brief time.

IR-656

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr., Minot AFB, ND 58705 DSN 453-2002/3527, C701-723-2002/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at FL250 to or as assigned direct to | A | | N49°00.00' W100°45.00' |
| FL250 to or as assigned direct to | B | | N50°00.00' W100°30.00' |
| FL250 to or as assigned FL 250 B 40 MSL descend direct to cross | C | | N51°40.00' W101°07.00' |
| 70 MSL to 70 MSL B 40 MSL continue descent to cross | CD | | N52°35.00' W101°30.00' |
| 40 MSL to direct to | D | | N53°00.00' W101°40.00' |
| 40 MSL to (Start TA/TFR) direct to | E | | N53°30.00' W103°00.00' |
| SFC B 40 MSL to direct to | F | | N54°10.00' W103°30.00' |
| 04.5 AGL B 40 MSL to direct to | G | | N54°40.00' W103°30.00' |
| SFC B 40 MSL to direct to | H | | N55°50.00' W103°45.00' |
| SFC B 40 MSL to direct to | I | | N56°59.00' W103°02.00' |
| 06 AGL B 40 MSL to direct to | J | | N57°30.00' W105°03.00' |
| SFC B 40 MSL to direct to | K | | N57°40.00' W107°30.00' |
| SFC B 40 MSL to CYR204 entry routes and altitudes as directed by Cold Lake Ops. Cross | L | | N56°20.00' W109°00.00' |

| | | |
|--|---|---------------------------|
| 40 MSL to (Exit of CYR204) climb direct to | S | N54°46.00' W109°00.00' |
| FL290 to | T | N53°35.00' W110°00.00' |

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF)/visual contour (VC) operations are authorized within published altitudes from E through L. This route is nonmountainous. Minimum altitudes, other than the surface are established to provide at least 100' vertical separation of known man-made obstructions. Obstructions under 200' AGL were not considered in the route design. The route corridor provides airspace for 500' lateral separation from man-made obstacles. When Command directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each leg segment.

ROUTE WIDTH - 4 NM either side of centerline from A to L.

Special Operating Procedures:

- Route survey for this route will not be accomplished until it is needed. Users must advise this unit 120 days prior to date of intended use and provide a route survey.
- Flights must be approved by NDHG/DAOT Ottawa, Canada via the CFLO at DET 1, HQ ACC/DOSR DSN 271-3450.
- Participating aircraft separation: the route is designated for MARSAs operations established by coordinated scheduling.
- Additional info: Aircraft will operate between 300'AGL and 4000' MSL from Pt E to Pt L. Aircrews will report Pt A and Pt C to Winnipeg Center on 295.4. Aircraft will meet Canadian points by times plus or minus 5 minutes. Aircraft commanders will file IFFFP info on DD-175. Aircraft shall maintain accuracy of navigation route width of 4 NM either side of centerline for the entire route. All aircrews must file an Altitude Reservation (ALTRV) to fly IR-656. A canned ALTRV is available from DET 1, HQ ACC/DOSR at DSN 271-2334, in the airspace information file.
- Lost communication (LC) procedures: Route LC altitude is FL290.
- Aircraft traverse CYR204 and CYD205, this range is restricted and will only be approved by Canadian Forces National Headquarters Director of Air Operations and Training (NDHG/DAOT) Ottawa, Canada.
- Aircrews will contact Cold Lake Terminal Control on 322.8 at Pt S (N34-46 W109-00).
- Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/2382 at least 8 hours prior to mission brief time.

IR-678

ORIGINATING ACTIVITY: 5 OSS/A-3C, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2002/3527, C701-723-2002/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|-----------|---------------------|---------------------------|
| Cross at 90 MSL to or as assigned descend direct to | A | ISN 006/31 | N48°45.00' W103°30.00' |
| 05 AGL B 90 MSL to turn right to | B | ISN 040/38 | N48°38.00' W103°00.00' |
| 07 AGL B 40 MSL to (TA Initiation Point) direct to | C | MOT 273/66 | N48°33.50' W102°53.00' |
| 02 AGL B 40 MSL to turn left to | D | MOT 254/56 | N48°12.00' W102°41.00' |
| 02 AGL B 40 MSL to direct to | E | MOT 248/51 | N48°07.00' W102°33.00' |
| 06 AGL B 40 MSL to direct to | F | MOT 221/30 | N47°58.00' W101°53.00' |
| 02 AGL B 40 MSL to turn left to | G | MOT 172/27 | N47°49.00' W101°21.00' |
| 06 AGL B 40 MSL to direct to | H | MOT 164/26 | N47°49.50' W101°15.00' |
| 06 AGL B 40 MSL to descend direct to | I | MOT 129/28 | N47°53.50' W100°52.00' |
| 04.5 AGL B 40 MSL to turn right to | J | MOT 106/38 | N47°57.00' W100°28.50' |
| 05 AGL B 30 MSL to direct to | K | MOT 103/42 | N47°57.00' W100°21.00' |
| 04 AGL B 30 MSL to direct to | L | DVL 208/35 | N47°38.50' W99°24.00' |
| 07 AGL B 30 MSL to direct to | LA | DVL 179/37 | N47°30.50' W99°00.00' |
| 06 AGL B 30 MSL to turn left to | M | FAR 288/56 | N47°10.50' W98°05.00' |
| 05 MSL B 30 MSL to direct to | N | FAR 302/53 | N47°19.50' W97°49.50' |
| 06 AGL B 30 MSL to turn right to | O | MOT 089/135 | N47°45.50' W98°01.00' |
| 07 AGL B 30 MSL to direct to | P | GFK 254/31 | N47°53.50' W97°57.00' |
| 10 AGL B 30 MSL to turn left to | Q | GFK 272/22 | N48°01.50' W97°44.00' |
| 02 AGL B 30 MSL to direct to | R | GFK 293/24 | N48°10.00' W97°41.50' |
| 06 AGL B 30 MSL to turn left to | S | GFK 306/38 | N48°24.00' W97°52.00' |
| 06 AGL B 30 MSL to direct to | T | DVL 042/39 | N48°32.50' W98°10.00' |
| 06 AGL B 30 MSL to direct to | U | DVL 028/38 | N48°38.00' W98°22.00' |
| 02 AGL B 30 MSL to turn left to | V | DVL 019/39 | N48°41.50' W98°29.00' |
| 02 AGL B 30 MSL to direct to | W | DVL 012/38 | N48°42.50' W98°36.00' |
| 06 AGL B 30 MSL to climb direct to | X | DVL 328/32 | N48°36.50' W99°15.00' |
| 02 AGL B 50 MSL to direct to | Y | DVL 306/41 | N48°35.00' W99°40.00' |
| 02 AGL B 50 MSL to turn left to | Z | MOT 058/57 | N48°34.00' W99°56.00' |
| 02 AGL B 50 MSL to direct to | AA | MOT 057/55 | N48°33.50' W99°59.50' |

| | | | |
|---|----|------------|---------------------------|
| 02 AGL B 50 MSL to direct to | AB | MOT 058/44 | N48°30.00' W100°15.00' |
| 02 AGL B 50 MSL to (End TA Point) turn right and climb to | AC | MOT 059/31 | N48°25.00' W100°34.00' |
| 50 MSL B 100 MSL to continue climb to | AD | MOT 046/24 | N48°28.00' W100°46.50' |
| 50 MSL B 100 MSL to turn left to | AE | MOT 360/32 | N48°46.50' W101°06.00' |
| 100 MSL to direct to cross | AF | MOT 338/29 | N48°45.00' W101°24.00' |
| 100 MSL to or as assigned | AG | MOT 282/24 | N48°25.50' W101°50.00' |

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR

Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW Command Directives within the published altitude blocks from C to AC and N to AC (Alternate Entry) and from C to O (Alternate Exit). When Command Directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each TF route segment. Minimum altitudes above 200' AGL are established to provide at least 100' vertical clearance of known man-made obstructions within the route width. Obstructions under 200' AGL were not considered in route design. The entire route is designated non-mountainous. Regulations governing operations below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 3 NM left and 4 NM right of centerline from B to H; 4 NM left and 2 NM right of centerline from H to I; 4 NM left and 7 NM right of centerline from I to K; 9 NM left and 7 NM right of centerline from K to L; 9 NM left and 6 NM right of centerline from L to M; 4 NM either side of centerline from M to Q; 4 NM left and 3 NM right of centerline from Q to R; 6 NM left and 8 NM right of centerline from R to U; 6 NM left and 2 NM right of centerline from U to X; 4 NM left and 2 NM right of centerline from X to Y; 2 NM either side of centerline from Y to AB; 3 NM left and 2 NM right of centerline from AB to AC; 4 NM either side of centerline from AC to AG.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designed for MARSA operations established by coordinated scheduling.
- (2) Lost communications (LC) procedure: Route LC altitude is 100 MSL.
- (3) Centerline between turn points is depicted as a 7.5NM radius arc unless otherwise specified.
- (4) Aircrews should be aware of numerous migrating waterfowl along the route. Special precautions should be taken in the area of Lake Sakakawea.
- (5) Prior to each flight the individual unit must contact Western Air Defense Sector, DSN 984-4604, to insure the Tiger MOA is scheduled/deconflicted.
- (6) Contact UND Supervisor of flying 24 hours prior to route use at C701-777-7880.
- (7) Point N is designated as an Alternate Entry.
- (8) Aircrews contact Minot APP CON passing AB on 363.8
- (9) Contact Minneapolis ARTCC at W on 269.6 concerning traffic advisories near Rugby, ND airport. If requested by Minneapolis ARTCC crews will climb and maintain 50 MSL from Y to AC then resume climb-out procedures.

IR ROUTES

- (10) When using the Alternate Exit, aircrews will notify Grand Forks APP CON at DSN 362-6544 at least 24 hours prior to use. Crews will pass the following information: aircraft call sign, type aircraft, exit time. Aircrews using the Alternate Exit will end TA/VFR at Point O.
- (11) Aircrews are advised of many small towns located along this route. Compliance with AFI 11-202 Vol 3 is essential.
- (12) Aircrews are advised of a 2000' tower located outside of corridor near Point N (N47-16.5 W97-20.5).
- (13) Point S is designated as an Alternate Exit.
- (14) Aircrews will contact Grand Forks Approach at point N on 294.7 or 318.1.
- (15) Be advised that numerous VFR air operations take place near the route. Review sectional chart data for Category C, D, and E airspace prior to flight.
- (16) Do not accelerate to above 250KIAS until established within the confines of the route unless required by aircraft flight manual to maintain safe maneuverability.
- (17) Uncharted Obstructions:
 - (a) Grain Elevator 250' AGL (N48-37.5 W099-22.62);
 - (b) Tower 411' AGL (N48-37.7 W098-21.7);
 - (c) Tower 250' AGL (N48-37.82 W097-58.56);
 - (d) Multiple Towers 250' AGL (N48-00.43 W097-55.62);
 - (e) Multiple Towers 280' AGL (N47-49.71 W100-45.6);
 - (f) Tower 300' AGL (N48-27.5 W102-46.6);
 - (g) Tower 250' AGL (N47-47.40 W100-00.4);
 - (h) Tower 200' AGL (N47-46.6 W099-54.4);
 - (i) Grain Elevator 250' AGL (N47-39.8 W099-37.7);
 - (j) Grain Elevator 220' AGL (N47-27.5 W099-07.7);
 - (k) Grain Elevator 200' AGL (N47-10.2 W098-27.4);
 - (l) Tower 300' AGL (N48-25.7 W102-53.4);
 - (m) Remove the towers annotations at N48-35.4 W102-52.1 (459' AGL), N48-29.22 W098-05.82 (350' AGL), N48-37.7 W098-21.7 (314' AGL), N48-28.21 W097-58.31 (299' AGL), N47-41.51 W097-54.56 (372' AGL).

FSS's Within 100 NM Radius:

GFK, HON

IR-714

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| Cross at 20 MSL to or 30 MSL as assigned | A | CCV VORTAC | N37°20.85' W75°59.86' |
| 20 MSL to or 30 MSL as assigned | B | HCM 060/17 | N37°37.00' W76°26.00' |
| 20 MSL to or 30 MSL as assigned | C | BRV 230/25 | N38°01.00' W77°42.00' |
| 30 MSL to or 40 MSL as assigned | D | GVE 013/14 | N38°15.00' W78°07.00' |

| | | | |
|-------------------------|---|------------|--------------------------|
| 60 MSL to | E | LDN 232/16 | N38°40.00' W78°27.00' |
| 60 MSL to | F | ESL 134/17 | N39°03.00' W78°43.00' |
| 60 MSL to 12 NM SE of G | | | |
| SFC B 60 MSL to | G | ESL 268/11 | N39°12.00' W79°13.30' |
| SFC B 60 MSL to | H | ROA 021/59 | N38°17.00' W79°42.30' |
| 60 MSL to | I | GVE 280/58 | N38°05.00' W79°23.00' |
| 60 MSL to | J | GVE 196/22 | N37°39.00' W78°14.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from 12 NM SE of G to I.

ROUTE WIDTH - 5 NM either side of centerline from A to D; 5 NM left and 3 NM right of centerline from D to F; 5 NM either side of centerline from F to G; 3 NM left and 5 NM right from G to H; 5 NM either side of centerline from H to J.

Special Operating Procedures:

- (1) Route reservations and brief required..
- (2) No alternate Entry or Exit authorized.
- (3) To fly this route all aircraft must have an operable navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana, NAS must use a stereo flight plan. To conduct terrain following operations under actual IMC or at night, aircraft must be equipped with an operable ground mapping radar or terrain following radar.
- (4) Where two altitudes are indicated, the lower published altitude is the primary route altitude. The higher altitude will be assigned by ATC when required to provide separation from other IFR operations.
- (5) Mandatory reporting points. UHF or VHF radio reports are required when passing:
 - (a) Pt A to Norfolk approach on 372.1;
 - (b) Pt B to Richmond approach on 319.8;
 - (c) 18 NM SE of Pt. E, Pt. F, Pt I and Pt J to Richmond Approach Control on 132.85 or 257.75.
- (6) Return altitude 15,000' MSL. Lost communications altitude 6,000' MSL.
- (7) Hazards:
 - (a) Extensive civilian fish-spotter aircraft from SFC to 5,000' AGL over Chesapeake Bay, between Pt A and Pt B from Apr to Nov;
 - (b) Ultralight activity in the vicinity of Pt B;
 - (c) Evers MOA is active with continuous daytime operations from 1000' AGL to FL 180. Contact 1FW scheduling, 1 OSS/OSO Langley AFB, VA DSN 574-2559/2483 for MOA flight information/deconfliction prior to scheduling.
- (8) Do Not fly over:
 - (a) N38-03.5 W77 47.6, remain 2 NM from Nuclear Power Plant;
 - (b) N37 58.5 W78 54.0, remain 2 NM from Devil's Knob;
 - (c) N37 59.0 W77 31.0, remain at least 1 NM South of Lake Caroline.
- (9) N38 26.2 W79 50.1, Do not transmit on UHF radio within 15 NM of National Radio Astronomy Observatory. Avoid Observatory by 4 NM.

FSS's Within 100 NM Radius:

AOO, DCA, EKN, MIV, RDU

IR-715

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| Cross at 30 MSL to | A | FKN 121/5 | N36°41.00' W76°55.00' |
| 30 MSL to Passing B begin climb to be at 70 MSL by 4 NM SE of C | B | LVL 165/4 | N36°45.00' W77°52.00' |
| 70 MSL to | C | LVL 310/19 | N36°59.00' W78°14.00' |
| 70 MSL to | D | SBV 259/19 | N36°35.00' W79°24.00' |
| 70 MSL to | E | ROA 125/23 | N37°09.00' W79°40.00' |
| 70 MSL to | F | ROA 061/21 | N37°32.00' W79°42.00' |
| 80 MSL to | G | BKW 094/33 | N37°48.00' W80°26.00' |
| 80 MSL to | H | EKN 216/29 | N38°29.00' W80°24.00' |
| 80 MSL to | I | EKN 164/14 | N38°42.00' W79°59.00' |
| 80 MSL to | J | EKN 187/42 | N38°13.00' W80°06.00' |
| 80 MSL to | K | ROA 020/39 | N37°58.00' W79°51.00' |
| 80 MSL to | L | ROA 053/40 | N37°47.00' W79°26.00' |
| 80 MSL to | M | GVE 237/36 | N37°38.00' W78°44.00' |

ROUTE WIDTH - 5 NM either side of centerline from A to L;
3 NM either side of centerline from L to M.

Special Operating Procedures:

- (1) Route reservation and brief required.
- (2) No alternate Entry or Exit authorized.
- (3) To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana, NAS must use a stereo flight plan.
- (4) Mandatory reporting points. UHF radio reports are required when passing:
 - (a) Pt A to Norfolk Approach Control on 249.9;
 - (b) Pt M to Washington ARTCC on 380.3.
- (5) Return altitude 15,000' MSL. Lost communications altitude 8000' MSL.

(6) Hazards:

- (a) Farmville MOA is active from 0930-1430 local and 1600-1700 local, Mon-Fri, from 300' AGL to 5000' MSL. Monitor Washington ARTCC controlling frequency 317.7, Do not check-in. Contact Supervisor of Flying, 1st TFW, Langley VA, DSN 574-2303 for MOA flight information prior to scheduling route;
- (b) Evers MOA is active with continuous daytime operations from 1000' AGL to FL 180. Contact 1FW scheduling, 1 OSS/OSO Langley AFB, VA DSN 574-2559/2483 for MOA flight information/deconfliction prior to scheduling;
- (c) Avoid Ostrich Farm between Points A and B at N36-39 W77-41 by 3 NM and 1000' AGL.

(7) N38-26.2 W78-50.1, Do Not transmit on UHF radio within 15 NM of National Radio Astronomy Observatory. Avoid observatory by 4 NM.

FSS's Within 100 NM Radius:

AOO, DCA, EKN, FLO, RDU

IR-718

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|--------------------------|
| Cross at 70 MSL to | A | FKN 121/5 | N36°41.00' W76°55.00' |
| 70 MSL to | B | TYI 217/18 | N35°43.00' W77°54.00' |
| 70 MSL to or 80 MSL as assigned | C | RDU 230/19 | N35°39.00' W79°04.00' |
| 70 MSL to or 80 MSL as assigned | D | CLT 094/44 | N35°12.00' W80°04.00' |
| 70 MSL to or 80 MSL as assigned | E | CLT 127/23 | N34°59.00' W80°33.00' |
| 70 MSL to or 80 MSL as assigned | F | FLO 295/26 | N34°24.00' W80°09.00' |
| 70 MSL to or 80 MSL as assigned | G | FLO 195/22 | N33°52.00' W79°45.00' |
| 70 MSL to or 80 MSL as assigned | H | ILM 040/2 | N34°23.00' W77°51.00' |
| 70 MSL to or 80 MSL as assigned | I | NCA 318/21 | N34°56.00' W77°46.00' |
| 70 MSL to or 80 MSL as assigned | J | TYI 109/40 | N35°49.00' W76°54.00' |

ROUTE WIDTH - 5 NM either side of centerline from A to G;
2 NM either side of centerline from G to 20 NM east of G; 5 NM either side of centerline from 20 NM east of G to J.

Special Operating Procedures:

- (1) Route reservation and brief required.

IR ROUTES

- (2) No alternate Entry or Exit authorized.
- (3) To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use stereo flight plan.
- (4) Where two altitudes are indicated, the lower altitude is the primary route altitude. The higher altitude will be assigned by ATC when required to provide separation from other IFR operations.
- (5) Return altitude 15,000 MSL. Lost communications altitude 7000' MSL.
- (6) Hazards: Exercise caution in the vicinity of R-5314. Numerous MTRs terminate in this area. Military aircraft may be holding VFR over Phelps Lake or at the Alligator River bridge awaiting clearance into Dare bombing range.
- (7) Caution: IR-719 crosses between Points A and B.

FSS's Within 100 NM Radius:

AND, DCA, RDU

IR-719

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| Cross at 70 MSL to | A | HPW 263/7 | N37°18.00' W77°16.00' |
| 70 MSL to Maintain 70 MSL until 23 NM East of C then | B | FAK 246/27 | N37°18.00' W78°19.00' |
| 60 MSL to or 80 MSL as assigned | C | LYH 025/5 | N37°20.00' W79°12.00' |
| 60 MSL to or 80 MSL as assigned | D | ROA 181/34 | N36°47.00' W80°02.00' |
| 60 MSL to or 80 MSL as assigned | E | GSO 288/44 | N36°14.00' W80°51.00' |
| 60 MSL to or 80 MSL as assigned until 29 NM SW of G. Then descend to 50 MSL or 80 MSL as as- signed 24 NM SW of G. | F | GSO 062/2 | N36°04.00' W79°56.00' |
| 50 MSL to or 80 MSL as assigned | G | SBV 090/6 | N36°41.00' W78°54.00' |
| 50 MSL to or 80 MSL as assigned | H | LVL 121/18 | N36°42.00' W77°34.00' |
| 50 MSL to or 80 MSL as assigned | I | TYI 109/32 | N35°51.00' W77°04.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Route reservation and brief required.

- (2) No alternate Entry or Exit authorized.
- (3) To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use stereo flight plan.
- (4) Where two altitudes are indicated, the lower altitude is the primary route altitude. The higher altitude will be assigned by ATC when required to provide separation from other IFR operations.
- (5) Return altitude 15,000' MSL. Lost communications altitude 5000' MSL.
- (6) Mandatory reporting point: Report passing 35NM northeast of Pt E to Greensboro Approach on 233.2.
- (7) Hazards:
 - (a) Farmville MOA is active from 0930-1430 local and 1600-1700 local, Monday-Friday, from 300' AGL to 5000' MSL. Monitor Washington ARTCC on 317.7, do not check-in. Contact Supervisor of Flying, 1st TFW, Langley VA, DSN 574-2559/2483 for MOA flight information prior to scheduling route;
 - (b) Exercise caution in the vicinity of R-5314. Numerous MTRs terminate in this area. Military aircraft may be holding VFR over Phelps Lake or at the Alligator River Bridge awaiting clearance into Dare bombing range;
 - (c) Avoid Ostrich Farm in vicinity of Point H on centerline at N36-39 W77-41 by 1 NM or 1000' AGL;
 - (d) Avoid uncharted tower in vicinity of Point D at N36-50.3 W79-55.1 height 310' AGL 1430' MSL;
 - (e) Caution: Multiple IR's cross at Points A-F and H-I.

FSS's Within 100 NM Radius:

AND, DCA, EKN, RDU

IR-720

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| Cross at 70 MSL to | A | RIC VORTAC | N37°30.14' W77°19.22' |
| 70 MSL to | B | GVE 355/7 | N38°08.00' W78°11.00' |
| 70 MSL to or 80 MSL as assigned | C | CSN 220/11 | N38°29.00' W78°00.00' |
| 70 MSL to or 80 MSL as assigned | D | LDN 009/5 | N38°56.00' W78°12.00' |
| 70 MSL to or 80 MSL as assigned | E | EKN 091/12 | N38°56.00' W79°51.00' |
| 70 MSL to or 80 MSL as assigned Descend to 50-60 MSL at F, then maintain | F | GVE 287/45 | N38°09.00' W79°05.00' |
| 50 MSL to or 60 MSL as assigned | G | GVE 280/16 | N38°02.00' W78°30.00' |

50 MSL to H HPW 254/15 N37°14.00'
 or 60 MSL as assigned. W77°25.00'
 Climb to cross 20 NM
 S of H at 60 MSL
 60 MSL to I CVI 247/23 N36°10.00'
 W77°17.00'

03 AGL B 30 MSL to H GSO 231/27 N35°44.83'
 W80°22.83'
 03 AGL B 30 MSL to I GSO 180/41 N35°21.60'
 W79°56.00'
 03 AGL B 30 MSL to J SSC 024/43 N34°39.00'
 W80°11.30'
 30 MSL to K SSC 024/33 N34°30.00'
 W80°15.00'

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Route reservation and brief required.
- (2) No alternate Entry or Exit authorized.
- (3) To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use stereo flight plan.
- (4) Where two altitudes are indicated, the lower altitude is the primary route altitude. The higher altitude will be assigned by ATC when required to provide separation from other IFR operations.
- (5) Return altitude 15,000' MSL. Lost communications altitude 6000' MSL.
- (6) Hazards:
 - (a) Evers MOA is active with continuous daytime operations from 1000' AGL to FL 180. Contact 1FW scheduling, 1 OSS/OSO Langley AFB, VA DSN 574-2559/2483 for MOA flight information/deconfliction prior to scheduling route;
 - (b) N37-47.2 W77-49.5 - Uncharted airport with Ultralight flight activity in the vicinity.

FSS's Within 100 NM Radius:

AOO, DCA, EKN, MIV, RDU

IR-721

ORIGINATING ACTIVITY: 20 OSS/OSOA, Shaw AFB, SC 29152-5000 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152 Duty hrs DSN 965-1118/1119, C803-895-1118/1119. Non Duty hrs DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------------|----|--------------|--------------------------|
| 60 MSL B 80 MSL to or as assigned | A | ROA VORTAC | N37°20.61' W80°04.23' |
| 60 MSL B 80 MSL to or as assigned | B | ROA 181/17 | N37°03.50' W80°03.00' |
| 03 AGL B 80 MSL to | C | ROA 195/27 | N36°53.80' W80°11.00' |
| 03 AGL B 60 MSL to | D | GSO 336/42 | N36°40.00' W80°22.00' |
| 03 AGL B 50 MSL to | E | GSO 326/34 | N36°30.00' W80°24.00' |
| 03 AGL B 50 MSL to | F | GSO 297/35 | N36°17.00' W80°38.50' |
| 03 AGL B 40 MSL to | G | GSO 249/34 | N35°48.50' W80°36.67' |

TERRAIN FOLLOWING OPERATIONS: Authorized from B to J. Maintain top of the altitudes between B to J unless Terrain Following Operations are approved with entry clearance from Roanoke approach.

ROUTE WIDTH - 5 NM either side of centerline from A to I; 1 NM left and 9 NM right of centerline from I to J; on centerline from J to K.

Special Operating Procedures:

- (1) Monitor Greensboro Approach 327.075 passing Pt C.
- (2) Monitor Charlotte Approach 307.8 passing Pt H and report Pt J level at 3000' MSL.
- (3) Contact Shaw RAPCON 385.6 passing Pt J.
- (4) CAUTION: VR-042 crosses left to right Pt C to Pt D (Deconflict DSN 433-1228).
- (5) CAUTION: VR-087 crosses from right to left, Pt I to Pt J (Deconflict with 20 OSS/OSOS).
- (6) Mission permitting, avoid the following environmentally sensitive areas (woodpecker concentrations) by 500' vertically or 1000' horizontally: N32-25.5 W80-01.2 and N35-25.2 W80-02.2.
- (7) CAUTION: Glider activity in vicinity of Mount Airy Airport, NC (N36-27.5 W80-33.1). Also an uncharted airfield at N36-18.4 W80-33.0. Avoid by 1000' AGL and 2 NM.
- (8) Avoid: Pee Dee National Wildlife Refuge by 2000' AGL (N35-05 W080-03) and the Sandhill National Wildlife Refuge by 2000' AGL (N34-35 W80-13). Charted boundary exceeds 5 NM radius.
- (9) Noise Sensitive Areas: Avoid each by 1000' AGL and 1 NM
 - (a) N36-03 W80-43W;
 - (b) N36-43 W80-18W;
 - (c) N35-40.0 W80-20.5W;
 - (d) N35-47.3 W80-26.0;
 - (e) N35-43.0 W80-25.2;
 - (f) Congressional noise sensitive area (cattle farm) N36-28.8 W80-27.5 by
- (10) AVOID: Towers
 - (a) 275' AGL (3150' MSL) N36-40.0 W80-23.3;
 - (b) 225' AGL (1000' MSL) N35-23.0 W79-58.6;
 - (c) 225' AGL (810' MSL) N34-59.5 W80-15.9;
 - (d) 300' AGL N35-52.4 W80-33.6;
 - (e) 300' AGL N34-42.2 W80-16.5;
 - (f) 300' AGL N34-59.7 W80-10.6 (just west of a charted tower);
 - (g) 225' AGL N36-42.9 W80-20.1;
 - (h) 200' AGL N36-42.97 W80-19.89;
 - (i) 250' AGL N36-19.38 W80-33.71;
 - (j) 300' AGL N36-16 W80-35;
 - (k) 300' AGL N35-47 W80-21;
 - (l) 200' AGL N35-24.55 W79-57.35;
 - (m) 200' AGL N35-33.4 W80-06;
 - (n) 250' AGL N35-36.49 W80-17.02;
 - (o) 300' AGL N35-14.32 W79-59.69.

IR ROUTES

- (11) Avoid: 4 uncharted private grass strips:
 (a) N35-54.9 W80-36.9, 2000' runway;
 (b) N35-16.0 W80-07.0, 2000' runway;
 (c) N35-14.3 W79-59.7, 4000' runway;
 (d) N37-18.28 W80-06;
 Note: Avoid each by 1000' AGL and 2 NM.
- (12) Include route entry/exit times in the remarks section of the flight plan.
- (13) VR-1721 may be flown, weather permitting, if the controlling agency delays or refuses clearance to fly IR-721. Check FLIP AP/1B guidance for specifics on VR-1721.
- (14) AVOID: Peregrine Falcon nesting area (endangered species): N36-20.4 W80-28.5. Avoid by 1500' above cliff/tree height and 1 NM (15 Feb through 15 Jul).
- (15) Unpublished towers found by route surveys 200' AGL and above are listed in this SOP. Make entry times plus or minus 5 minutes or reschedule.
- (16) CAUTION: Bird activity: 2 landfills at N35-25 W79-56 and N35-00.38 W80-09.78.
- (17) AVOID: Class D airspace at Stanly Co Airport (N35-24.9 W80-09.1), Sfc to and including 3100' MSL within a 3.9 NM radius; contact tower on 291.9/126.275 passing H (Twr hrs 0900-2200L Mon-Fri).

FSS's Within 100 NM Radius:

AND, EKN, RDU

IR-723

ORIGINATING ACTIVITY: FACSFAC, Penscola, FL
 32508-5217, DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Mon-Fri,
 occasionally weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------------|----|--------------|--------------------------|
| Cross at 90 MSL to or as assigned | A | HNN 048/14 | N38°55.00' W81°49.00' |
| 90 MSL to or as assigned | B | BKW 357/23 | N38°10.00' W81°12.00' |
| 90 MSL to or as assigned | C | BKW 133/14 | N37°38.00' W80°53.00' |
| 90 MSL to or as assigned | D | PSK 350/15 | N37°20.00' W80°48.00' |
| 90 MSL to or as assigned | E | PSK 251/20 | N36°57.00' W81°05.00' |
| 90 MSL to or as assigned | F | PSK 218/20 | N36°48.00' W80°56.00' |
| 90 MSL to or as assigned | G | HMV 091/31 | N36°28.00' W81°29.00' |
| 90 MSL to or as assigned | H | HMV 118/47 | N36°07.00' W81°15.00' |
| 100 MSL to or as assigned | I | SUG 048/30 | N35°45.00' W81°50.00' |
| 100 MSL to or as assigned | J | SUG 051/6 | N35°28.00' W82°11.00' |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: 1200-2200Z++ Mon-Fri. To schedule use on Sat, Sun or prior to 1430Z++ on Mon, call prior to 2200Z++ on previous Friday.
- (2) Conflicts: (De-conflict with appropriate Scheduling Activity)
 - (a) Opposite direction IR-080 from Point A to E.
 - (b) Crosses IR-081 at Point E, opposite direction from Point G to I.
 - (c) Crosses IR-082 at Point I.
 - (d) Opposite direction to IR-083 from Points H to I.
 - (e) Same direction as IR-608 from Point D to F.

FSS's Within 100 NM Radius:

AND, CLE, DAY, EKN, RDU

IR-726

ORIGINATING ACTIVITY: 20 OSS/OSOA, Shaw AFB, SC
 29152-5000 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC
 29152-5000 Duty hours DSN 965-1118/1119,
 C803-895-1118/1119 Fax DSN 965-4804 After hours 20
 FW/Command Post DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | PSK 263/23 | N37°00.00' W81°11.00' |
| 03 AGL B 60 MSL to | B | PSK VORTAC | N37°05.26' W80°42.77' |
| 03 AGL B 60 MSL to | C | PSK 187/19 | N36°46.00' W80°43.00' |
| 03 AGL B 60 MSL to | D | PSK 218/31 | N36°39.00' W81°03.00' |
| 03 AGL B 70 MSL to | E | PSK 226/44 | N36°33.00' W81°20.00' |
| 01 AGL B 70 MSL to | F | HMV 111/38 | N36°15.00' W81°23.00' |
| 01 AGL B 70 MSL to | G | HMV 125/36 | N36°08.00' W81°30.00' |
| 01 AGL B 70 MSL to | H | SPA 007/45 | N35°47.40' W81°51.00' |
| 100 MSL to | I | SPA 347/46 | N35°47.00' W82°10.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route except terminate low level to cross Point I at 10,000' MSL.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 10 NM either side of centerline from B to C; 5 NM left and 15 NM right of centerline from C to D; 10 NM either side of centerline from D to E; On centerline to 10 NM right of centerline from E to F; 1 NM left and 10 NM right of centerline from F to G; 5 NM left and 10 NM right of centerline from G to H; 5 NM either side of centerline from H to I.

Special Operating Procedures:

- (1) Monitor Atlanta ARTCC 263.0 at Pt F.
- (2) Contact Atlanta ARTCC 263.0 at Pt H.
- (3) Alternate Entry: Pt G.
- (4) Avoid: Fire towers by 500' entire route.
- (5) Avoid: Linville Gorge near Pt. H by 2000' AGL.
- (6) CAUTION: Pt E to F rapidly rising terrain. MEA and top of route structure can create a vertical bottleneck. Difference between MEA and top of the route as low as 1000'.
- (7) CAUTION: VR-042 same direction Pt A to C and then crosses left to right at Pt E. (Deconflict with DSN 433-1228).
- (8) CAUTION: Pt D to F, IR-723, IR-081 cross the route. IR-082 same direction IR-083 opposite direction between Pt H and I (deconflict with DSN 922-2735).
- (9) CAUTION: VR-093 crosses left to right at Pt E (deconflict with 20 OSS/OSOS).
- (10) Avoid: Pulaski, Dublin, Radford, VA and areas between by 1500'/2 NM.
- (11) Avoid: New River Valley Airport (N37-08.2 W80-40.8) by 1500'/3 NM.
- (12) CAUTION: five towers 250' AGL at:
 - (a) N36-58.67 W80-55.5;
 - (b) N37-01.4 W81-10.28;
 - (c) N36-49.72 W80-34.33;
 - (d) N36-29.35 W81-10.6;
 - (e) N36-27.92 W81-13.47.
- (13) Congressional Noise Sensitive Areas: Sparta, NC (N36-30.0 W81-07.0); church (N36-20.5 W081-23.0); horse training stable (N36-34.6 W081-22.4); Glendale Springs, NC (N36-20.9 W81-22.9) avoid each by 1000' AGL and 1 NM.
- (14) Avoid: Table rock, NC congressional noise sensitive area (N35-50.5 W81-48.5) by 1500'/1 NM.
- (15) Avoid: Active Army Munitions Plant (N37-12.0 W80-33.0); avoid by 1500' AGL/2 NM.
- (16) Avoid three Noise Sensitive Areas:
 - (a) Boone, NC, N36-13.1 W81-40.7, avoid by 1500' AGL/2 NM;
 - (b) N36-06.9 W81-31.7, avoid by 1500' AGL/2 NM;
 - (c) N36-12.5 W81-35.2, avoid by 1500' AGL/1.5 NM.
- (17) CAUTION: Two Towers 200' AGL located at
 - (a) N36-29.2 W081-05.8;
 - (b) N37-03.5 W080-46.8.
- (18) VR-1726 may be flown, weather permitting, if the controlling agency delays or refuses clearance to fly IR-726. Check FLIP AP/1B for specifics on VR-1726.
- (19) Make entry times plus or minus 5 minutes or reschedule. Include route entry/exit times in the remarks section of the flight plan. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
- (20) Cross Point I level at 10,000' MSL.

FSS's Within 100 NM Radius:

AND, EKN, RDU

IR-743

ORIGINATING ACTIVITY: 20 OSS/OSOA, Shaw AFB, SC 29152-5000 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152 Duty hrs DSN 965-1118/1119, C803-895-1118/1119. Non Duty hrs DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------|----|--------------|--------------------------|
| Cross at 70 MSL to maintain | A | HMV 054/49 | N36°58.00' W81°21.00' |
| 01 AGL B 70 MSL to | B | HMV 023/26 | N36°51.00' W81°57.00' |
| 01 AGL B 70 MSL to | C | GZG VOR-DME | N36°49.51' W82°04.74' |
| 01 AGL B 60 MSL to | D | HMV 302/34 | N36°42.00' W82°45.00' |
| 01 AGL B 60 MSL to | E | HMV 289/34 | N36°35.00' W82°49.00' |
| 03 AGL B 50 MSL to | F | VXV 071/44 | N36°11.00' W83°03.00' |
| 03 AGL B 60 MSL to | G | VXV 085/36 | N35°59.00' W83°10.00' |
| 03 AGL B 90 MSL to | H | VXV 097/32 | N35°52.00' W83°14.00' |
| 03 AGL B 90 MSL to | I | VXV 115/37 | N35°40.00' W83°11.50' |
| 03 AGL B 90 MSL to | J | VXV 124/41 | N35°33.00' W83°10.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to J. Terminate terrain following so as to pass 'J' at 9000' MSL.

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Special Operating Procedures:

- (1) Monitor Tri-City Approach Control on 317.5 at C.
- (2) Contact Atlanta ARTCC on 269.5 passing H.
- (3) CAUTION: Heavy helicopter traffic from Pt A to D. weather permitting helicopter traffic around 4500' MSL. Hospital helicopter traffic to/from Lebanon, VA (N36-54.1 W82-04.5).
- (4) CAUTION: Local weather phenomenon from Pt C to D causes fog bank north of Clinch Mt. Ridge. Helicopters may be just below fog bank.
- (5) Towers:
 - (a) 250' AGL (3779' MSL) cluster centered at N35-54.0 W83-18.2;
 - (b) 200' AGL (2100' MSL) N36-26.8 W82-56.6;
 - (c) 250' AGL (1400' MSL) N36-00.25 W083-06.29.
- (6) CAUTION: Numerous powerlines above 100' AGL throughout the route.
- (7) CAUTION: Heavy civil IFR traffic crossing on V16, V185 and V136 immediately above route altitude block Pt. D to H. NOTE: Knoxville Approach Control has very good radar coverage in this area (frequency 360.8/353.6).
- (8) CAUTION: Hang gliding activity N35-54.5 W83-17.8.
- (9) Congressional Noise Sensitive Areas: Glade Spring, VA (N36-47 W81-47). Farm area (N36-13.3 W83-00.8). Avoid by 1000' AGL and 1 NM.
- (10) VR-1743 may be flown, weather permitting, if the controlling agency delays or refuses clearance to fly IR-743. Check FLIP AP/1B guidance for specifics on VR-1743.
- (11) CAUTION: IR-002 same direction Pt F to J (Deconflict with 20 OSS/OSOS).
- (12) Avoid: Uncharted uncontrolled public airport Hawkins, Co. (N36-27.7 W83-53.2) by 1500' AGL/3 NM.

IR ROUTES

- (13) Make entry times plus or minus 5 minutes or reschedule. Include route entry/exit times in the remarks section of the flight plan. Unpublished towers 200' AGL and above are listed in this SOP.

FSS's Within 100 NM Radius:

AND, EKN, RDU

IR-760

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| 20 MSL B 30 MSL to | A | CCV VORTAC | N37°20.85' W75°59.86' |
| 20 MSL B 30 MSL to | B | HCM 054/15 | N37°37.00' W76°29.00' |
| 20 MSL B 30 MSL to | C | BRV 230/25 | N38°01.00' W77°42.00' |
| 20 MSL B 30 MSL to 20 MSL B 30 MSL until 10 NM SE of D then climb to | D | GVE 330/22 | N38°19.00' W78°26.00' |
| 50 MSL B 60 MSL to | E | CSN 275/35 | N38°38.00' W78°37.00' |
| 60 MSL to | F | ESL 057/7 | N39°18.20' W78°52.00' |
| SFC B 60 MSL to | G | ESL 261/25 | N39°07.00' W79°31.00' |
| SFC B 60 MSL to | H | EKN 165/47 | N38°11.00' W79°44.00' |
| SFC B 60 MSL to climb to cross | I | ROA 031/50 | N38°05.00' W79°36.00' |
| 60 MSL to | J | LYH 352/44 | N37°58.00' W79°27.00' |
| 60 MSL to | K | GVE 236/31 | N37°41.00' W78°39.00' |
| 60 MSL to | L | GVE 196/22 | N37°39.00' W78°14.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from F to J. (IFR lost communications altitude during terrain following is 60 MSL).

ROUTE WIDTH - 3 NM either side of centerline entire route.

Special Operating Procedures:

- Route reservation and brief required.
- No alternate Entry or Exit authorized.
- To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use stereo flight

plan. To conduct terrain following operations under actual IMC or at night, aircraft must be equipped with an operable ground mapping radar or terrain following radar.

- Where two altitudes are indicated, the lower is the primary route altitude. The higher altitude will be assigned by ATC when required to provide separation from other IFR operations.
- Mandatory reporting points: VHF or UHF radio reports are required when passing:
 - Pt A to Norfolk Approach Control on 372.1;
 - Pt B to Richmond Approach Control on 319.8;
 - Pt D, Pt F and Pt K to Richmond Approach Control on 132.85 or 257.8.
- Return altitude 15,000' MSL. Lost communications altitude 6000' MSL.
- Hazards:
 - Caution: IR-720, IR-761 and IR-762 cross at multiple points;
 - Extensive civilian fish-spotter aircraft from SFC to 5000' AGL over Chesapeake Bay, between Pt A and Pt B from Apr to Nov;
 - Ultralight activity in the vicinity of Pt B;
 - Extensive helicopter operations between Pt D and Pt J;
 - Evers MOA is active with continuous daytime operations from 1000' AGL to FL 180. Contact 1FW scheduling, 1 OSS/OSO Langley AFB, VA DSN 574-2559/2483 for MOA flight information/deconfliction prior to scheduling;
- Avoid: N39-19.9 W78-55.1 - Elementary school.
- N38-26.6 W79-50.1 - Do Not transmit on UHF radio within 15 NM of National Radio Astronomy Observatory. Avoid Observatory by 4 NM.
- Do not fly over: N37-59.0 W77-31.0W - Remain at least 1 NM South of Lake Caroline.

FSS's Within 100 NM Radius:

AOO, DCA, EKN, IPT, MIV, RDU

IR-761

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| Cross at 70 MSL to | A | LYH 026/29 | N37°42.00' W79°01.00' |
| 70 MSL to | B | LYH 345/18 | N37°32.00' W79°22.00' |
| 70 MSL to | C | ROA 052/22 | N37°35.00' W79°44.00' |
| 70 MSL to | D | ROA 334/14 | N37°33.00' W80°13.20' |
| SFC B 60 MSL to | E | BKW 163/17 | N37°31.00' W80°59.00' |

| | | | |
|------------------------------------|---|------------|--------------------------|
| SFC B 60 MSL to | F | BKW 221/20 | N37°30.50' W81°21.60' |
| SFC B 60 MSL to | G | GZG 060/16 | N36°58.00' W81°48.00' |
| SFC B 60 MSL to | H | GZG 334/28 | N37°14.00' W82°21.00' |
| SFC B 60 MSL to | I | ECB 131/33 | N37°49.00' W82°22.50' |
| 60 MSL to or 70 MSL as assigned | J | ECB 093/25 | N38°09.00' W82°23.00' |
| 60 MSL to or 70 MSL as assigned | K | BKW 359/22 | N38°09.00' W81°11.00' |
| 60 MSL to or 70 MSL as assigned | L | BKW 053/34 | N38°10.00' W80°36.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from D to I. (IFR lost communications altitude during terrain following is 60 MSL).

ROUTE WIDTH - 5 NM either side of centerline from A to D; 3 NM either side of centerline from D to F; 3 NM left and 5 NM right of centerline from F to G; 5 NM either side of centerline from G to L.

Special Operating Procedures:

- (1) Route reservation and brief required.
- (2) No alternate Entry or Exit authorized
- (3) To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use stereo flight plan. To conduct terrain following operations under actual IMC or at night, aircraft must be equipped with an operable ground mapping radar or terrain following radar.
- (4) Where two altitudes are indicated, the lower published altitude is the primary route altitude. The higher altitude will be assigned by ATC only when required to provide separation from other IFR operations.
- (5) Mandatory reporting points. UHF radio reports are required when passing:
 - (a) Pt A to Washington ARTCC on 317.7;
 - (b) Pt D, report 'Going Terrain Following' to Washington ARTCC on 317.7;
 - (c) 10 NM East of Pt. E to Indianapolis ARTCC on 253.5;
 - (d) Pt G to Atlanta ARTCC on 319.9;
 - (e) Pt H to Indianapolis ARTCC on 253.5;
 - (f) Pt. J to Charleston Approach Control on 398.95;
 - (g) Pt. L to Washington ARTCC on 353.9 or 317.7.
- (6) Return altitude 15,000' MSL. Lost communications altitude 6000' MSL.
- (7) Hazard: There are numerous uncontrolled airports from Pt D to Pt I.
- (8) Avoid uncharted tower between Points E and F at N37-06.9 W082-04.1. Height 259' AGL 2432' MSL.

FSS's Within 100 NM Radius:

DAY, DCA, EKN, RDU

IR-762

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, Oceana NAS, Virginia Beach, VA 23460 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC VACAPES, Oceana NAS, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | LYH 048/20 | N37°30.00' W78°57.00' |
| 70 MSL to | B | LYH 342/46 | N37°58.00' W79°37.00' |
| 70 MSL to | C | EKN 229/21 | N38°39.00' W80°24.00' |
| 60 MSL to | D | MGW 214/16 | N39°19.00' W80°02.00' |
| 60 MSL to | E | MGW 118/11 | N39°29.00' W79°38.00' |
| 60 MSL to | F | ESL 079/22 | N39°20.00' W78°32.00' |
| SFC B 50 MSL to SFC B 50 MSL to 15 NM NE of H, then climb to cross 12 NM NE of H at 70 MSL, then climb to cross H at 90 MSL | G | ESL 185/19 | N38°55.00' W78°59.00' |
| 90 MSL to | H | ROA 031/50 | N38°05.00' W79°36.00' |
| 90 MSL to | I | ROA 031/30 | N37°47.00' W79°47.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Pt F to 15 NM NE of Pt H.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 5 NM right and 2 NM left of centerline from C to E; 5 NM either side of centerline from E to I.

Special Operating Procedures:

- (1) Route reservation and brief required.
- (2) No alternate Entry or Exit authorized.
- (3) To fly this route all aircraft must have an operable inertial navigation system (INS) or global positioning system (GPS). Aircraft operating from Oceana NAS must use stereo flight plan. To conduct terrain following operations under actual IMC or at night, aircraft must be equipped with an operable ground mapping radar or terrain following radar.
- (4) Remain North of route centerline between Pt E and Pt F.
- (5) Descend to 5000' MSL or below by 5 NM SSW of Pt F.
- (6) Mandatory reporting points. UHF radio reports are required when passing:
 - (a) Pt A to Washington ARTCC on 263.1;
 - (b) Pt C to Clarkburg Approach Control on 280.1;
 - (c) Pt F to Washington ARTCC on 285.6;
 - (d) Pt H to Washington ARTCC on 317.7.
- (7) Return altitude 15,000' MSL. Lost communications altitude 9000' MSL.
- (8) Caution:
 - (a) IR-714, IR-715, IR-720 and IR-761 cross at several points;
 - (b) Evers MOA is active with continuous daytime operations from 1000' AGL to FL 180. Contact 1FW scheduling, 1 OSS/OSO Langley AFB, VA DSN 574-2559/2483 for

IR ROUTES

MOA flight information/deconfliction prior to scheduling route.

FSS's Within 100 NM Radius:

AOO, DCA, EKN, IPT, RDU

IR-800

ORIGINATING ACTIVITY: Eastern Air Defense (EADS)

DSN 587-6247/6313.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| Cross at 170 MSL to or as assigned direct to | A | BGR 142/52 | N44°22.00' W67°52.00' |
| 170 MSL to turn right to | B | BGR 112/40 | N44°48.00' W67°56.00' |
| 170 MSL to Then descend direct to | C | BGR 104/45 | N44°54.00' W67°49.00' |
| 100 MSL B 170 MSL to then turn right and continue descent to cross | D | BGR 102/52 | N44°56.00' W67°40.00' |
| at or above 100 MSL then continue descent direct to cross | E | BGR 103/57 | N44°56.00' W67°32.00' |
| 30 MSL to (Primary TA/TFR Initiation Point) turn right to | F | BGR 114/73 | N44°44.00' W67°11.00' |
| 30 MSL to direct to | G | BGR 122/74 | N44°33.00' W67°12.00' |
| 30 MSL to turn right to | H | BGR 132/60 | N44°27.00' W67°35.00' |
| 30 MSL to direct to | I | BGR 129/49 | N44°33.00' W67°48.00' |
| 30 MSL to direct to | J | BGR 117/45 | N44°44.00' W67°50.00' |
| 02 AGL B 30 MSL to (Start TA/TFR Point, Point Alpha contact Boston ARTCC 290.5 and advise changing to enroute freq passing Point Alpha.) direct to | K | BGR 091/44 | N45°04.00' W67°54.00' |
| 02 AGL B 30 MSL to direct to | L | MLT 156/36 | N45°09.00' W67°55.00' |
| 02 AGL B 30 MSL to turn left to | M | MLT 072/30 | N45°53.50' W67°57.50' |
| 02 AGL B 30 MSL to climb direct to | N | MLT 062/31 | N45°58.50' W68°01.00' |
| 02 AGL B 40 MSL to turn right to | O | MLT 048/32 | N46°03.00' W68°09.50' |

| | | | |
|---|----|------------|--------------------------|
| 02 AGL B 40 MSL to (Pt Bravo. Start Maneuver Area) direct to | P | MLT 042/33 | N46°05.50' W68°13.00' |
| 05 AGL B 40 MSL to (End Maneuver Area) turn left to | Q | PQI 288/20 | N46°45.50' W68°35.00' |
| 02 AGL B 40 MSL to direct to | R | PQI 294/22 | N46°47.50' W68°37.50' |
| 02 AGL B 40 MSL to turn left to | S | PQI 317/38 | N47°03.00' W68°55.00' |
| 02 AGL B 40 MSL to direct to | T | PQI 315/47 | N47°05.00' W69°08.50' |
| 02 AGL B 40 MSL to direct to | U | PQI 298/60 | N46°53.00' W69°32.50' |
| 02 AGL B 40 MSL to turn left and climb to | V | PQI 289/73 | N46°42.50' W69°51.00' |
| 02 AGL B 53 MSL to direct to | W | PQI 285/76 | N46°38.00' W69°55.00' |
| 02 AGL B 53 MSL to climb direct to cross | X | MLT 299/66 | N45°45.00' W70°04.00' |
| 02 AGL B 57 MSL to turn right to | Y | MLT 294/66 | N45°39.00' W70°05.00' |
| 02 AGL B 57 MSL to direct to | Z | MLT 290/68 | N45°35.00' W70°08.00' |
| 02 AGL B 57 MSL to (Reporting 70 deg 30' W to Boston ARTCC 346.4 primary or 290.5 secondary.) turn right to | AA | YSC 131/38 | N45°03.00' W70°58.00' |
| 02 AGL B 57 MSL to climb direct to | AB | YSC 137/36 | N45°01.00' W71°03.00' |
| 02 AGL B 80 MSL to | AC | YSC 148/30 | N44°59.00' W71°15.00' |
| 02 AGL B 80 MSL continue climb and turn left to cross | AD | YSC 157/29 | N44°57.00' W71°21.00' |
| 80 MSL to (End TA/TFR) direct to | AE | YSC 172/30 | N44°52.00' W71°30.00' |
| 80 MSL to (Point Charlie) (Report passing Point Charlie to Boston ARTCC 282.2) direct to | AF | YSC 194/36 | N44°43.60' W71°45.00' |
| 80 MSL to 80 MSL B 120 MSL or as assigned then within 80 MSL B 120 MSL climb direct to cross | AG | YSC 208/42 | N44°38.00' W71°58.00' |
| 120 MSL to or as assigned Re-Entry: Ashland Maneuver Area (End Maneuver Area) turn left to | R1 | PQI 294/22 | N46°47.50' W68°37.50' |
| 02 AGL B 40 MSL to direct to | S1 | PQI 317/38 | N47°03.00' W68°55.00' |
| 02 AGL B 40 MSL to turn left and climb to | | | |

| | | | |
|--|----|------------|--------------------------|
| 02 AGL B 50 MSL to direct to | BF | PQI 303/46 | N46°56.00' W69°12.00' |
| 10 AGL B 50 MSL to direct to | BG | PQI 266/36 | N46°31.00' W68°53.00' |
| 10 AGL B 50 MSL to descend direct to | BH | MLT 009/28 | N46°03.00' W68°39.00' |
| 10 AGL B 50 MSL to turn left to | BI | MLT 011/22 | N45°57.00' W68°36.00' |
| 10 AGL B 40 MSL to direct to | BJ | MLT 037/19 | N45°53.00' W68°23.00' |
| 10 AGL B 40 MSL to turn left to | BK | MLT 046/23 | N45°56.00' W68°16.50' |
| 01 AGL B 40 MSL to (Start Maneuver Area) Thence via published route. Alternate Exit : BR Cross 40 MSL to 40 MSL B 150 MSL climb to cross at or above 120 MSL (Contact Boston ARTCC on 346.4) continue climb and turn left to 120 MSL B 150 MSL to 120 MSL B 150 MSL continue climb direct to cross 150 MSL to or as assigned Alternate Entry: AX Cross 60 MSL to or as assigned direct to 60 MSL to 40 MSL B 60 MSL descend direct to cross 40 MSL to direct to 40 MSL to 40 MSL B 30 MSL descend direct to cross 30 MSL to thence via published route. | P1 | MLT 044/32 | N46°04.50' W68°12.00' |
| | T1 | PQI 315/47 | N47°05.00' W69°08.50' |
| | U1 | PQI 298/60 | N46°53.00' W69°32.50' |
| | BQ | PQI 285/59 | N46°40.00' W69°31.50' |
| | BR | PQI 277/49 | N46°34.00' W69°14.00' |
| | AX | BGR 162/63 | N44°00.00' W68°00.00' |
| | AY | BGR 147/56 | N44°16.00' W67°51.00' |
| | AZ | BGR 138/52 | N44°25.00' W67°49.00' |
| | I1 | BGR 129/49 | N44°33.00' W67°48.00' |
| | J1 | BGR 117/45 | N44°44.00' W67°50.00' |

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Whiteman (SZL 344.6).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR

Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW command directive within published altitude blocks from K to AD and from S to P (re-entry). When command directives preclude TF/VC operations, aircrews will maintain IFR altitude for each TF route segment. Minimum altitudes above 200' AGL, are established to provide at least 100' vertical clearance of known manmade obstructions within the route width. Obstructions under 200' AGL were not considered in the route design. The route is designated mountainous from W to AE and S1 to BJ on the re-entry. The remainder of the route in

designated non-mountainous. Regulations governing operations below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to M; 2 NM either side of centerline from M to P; 8 NM left and 4 NM right of centerline from P to N46-43.5 W68-34.0; 8 NM left and 3 NM right of centerline from N46-43.5 W68-34.0 to Q; 4 NM either side of centerline from Q to X; 3 NM left and 4 NM right of centerline from X to Z; 4 NM either side of centerline from Z to AG; 4 NM either side of centerline from T1 to BR; 4 NM either side of centerline from AX to J1; 4 NM either side of centerline from R1 to P1.

Special Operating Procedures:

- (1) Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.
- (2) Lost communication (LC) procedures: Route LC altitude is 12,000' MSL. Desired deviation from this procedure must be filed IAW FLIP AP/1B, and verified with Boston ARTCC prior to route entry.
- (3) Route designated for SN missions.
- (4) Tactical Descent: (This procedure applies to all aircraft scheduled to conduct auto TF letdown and will require a specific ATC clearance, which specifies that the auto TF letdown is approved. Cross A at 170 MSL or as assigned, then maintain 170 MSL thru E, then within SFC B 170 MSL begin auto TF letdown, cross F within SFC B 30 MSL; thence via published route.
- (5) Bangor, ME VORTAC entry: ATC shall advise aircrews upon entry request into IR-800 when Houston/Princeton, ME IFR procedures are in effect. Upon receipt of such an advisory, aircraft shall cross point ALPHA (N45-04-00 W67-54-00) at 4000' MSL and maintain 4000' MSL until passing point BRAVO (N46-05-30 W68-13-00). After passing point BRAVO then resume normal procedures. IFR/VFR terrain following and visual contour operations between these two points are prohibited.
- (6) Re-Entry procedures: Aircraft scheduled for maneuver area re-entry shall, in all cases, advise ATC at the entry point of the number of re-entries at the maneuver area.
- (7) Centerline between all turn points is a 7.5 NM radius arc unless specified otherwise.
- (8) Aircraft flying command directed contour terrain following altitudes may be required to fly higher minimum tracking altitude as listed in 99 ECRG 50-3 for TTR scored activity. In no case will aircraft fly below command directed contour/terrain following altitude.
- (9) ATC shall advise aircrews upon entry request into IR-800 when Machias, ME IFR procedures are in effect. Upon receipt of such an advisory, aircraft shall descend to cross E at or above 100 MSL, cross F at 40 MSL and maintain 40 MSL until K. Descend to cross L at 30 MSL, then resume normal procedures. Auto TF letdown will not be authorized when this procedure is in effect. IFR/VFR terrain following and visual contour operations from A thru K are prohibited.
- (10) Alternate Entry: ATC shall advise aircrews upon alternate entry request into IR-800 when Machias, ME, IFR procedures are in effect. Upon receipt of such an advisory, aircraft shall descend to cross point I1 (N44-33-00 W67-48-00) at 4000' MSL and maintain 4000' MSL until point K (N45-04-00 W67-54-00). Descend to cross L (N45-09-00 W67-55-00) at 3000' MSL, then resume normal procedures. IFR/VFR terrain following and visual contour operations from AX through K are prohibited.
- (11) Noise Sensitive Areas:
 - (a) Residence at N46-35.6 W68-26.8;

IR ROUTES

- (b) Residence at N46-36.6 W68-27.1;
- (c) Residence at N46-35.0 W68-26.5;
- (d) Residence at N45-10.8 W67-53.8;
- (e) Residence at N46-25.2 W68-27.5;
- (f) Residence at N45-45.0 W67-56.6;
- (g) Residence at N46-24.4 W67-56.8.

FSS's Within 100 NM Radius:

BGR, BTV

IR-801

ORIGINATING ACTIVITY: 174 FW, Det 1, Ft. Drum, NY
13608 DSN 772-5990/2835, C315-772-5990.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| Cross at 80 MSL to or as assigned direct to | A | PLB 130/58 | N44°16.00' W72°18.00' |
| 80 MSL to direct to | B | PLB 130/58 | N44°16.00' W72°19.00' |
| 80 MSL to direct to | C | BTV 166/31 | N43°57.00' W72°50.00' |
| 80 MSL to (Request Saranac Lake IFR traffic advisory from Boston ARTCC) | D | BTV 187/37 | N43°47.00' W73°04.00' |
| 70 MSL B 80 MSL Cross | | | |
| 70 MSL to | E | GFL 050/30 | N43°45.00' W73°12.00' |
| 70 MSL to direct to | F | GFL 039/30 | N43°48.00' W73°19.00' |
| 70 MSL to direct to | G | BTV 264/22 | N44°16.00' W73°39.00' |
| 02 AGL B 70 MSL to direct to | H | BTV 288/24 | N44°25.00' W73°45.00' |
| 02 AGL B 70 MSL to direct to | I | PLB 240/17 | N44°29.00' W73°48.00' |
| 07 AGL B 60 MSL to | J | PLB 285/18 | N44°41.00' W73°56.00' |
| 07 AGL B 60 MSL to | K | MSS 127/28 | N44°44.00' W74°07.00' |
| 02 AGL B 60 MSL to | L | MSS 139/24 | N44°41.00' W74°16.00' |
| 02 AGL B 60 MSL to Descend to cross | M | MSS 172/21 | N44°35.00' W74°32.00' |
| 02 AGL B 35 MSL to (Start Maneuver Area) | N | MSS 192/28 | N44°27.00' W74°42.00' |
| 35 MSL to | O | ART 084/45 | N44°11.00' W75°05.00' |
| 02 AGL B 35 MSL to | P | ART 098/26 | N43°59.00' W75°28.00' |
| 02 AGL B 35 MSL to (End Maneuver Area) | Q | ART 111/20 | N43°54.00' W75°37.00' |

| | | | |
|---|----|------------|--------------------------|
| 35 MSL to Cross | R | ART 119/17 | N43°52.00' W75°41.00' |
| 60 MSL to (Point Jerry) | S | ART 154/13 | N43°47.00' W75°53.00' |
| (Report passing Point Jerry to Wheeler Sack APP Primary 347.7 or Secondary 299.85) | | | |
| 60 MSL to Cross | T | ART 232/19 | N43°42.50' W76°20.50' |
| 70 MSL to | U | ART 255/22 | N43°47.00' W76°31.00' |
| 60 MSL B 70 MSL Cross | | | |
| at or below 140 MSL | V | ART 278/15 | N43°56.00' W76°25.00' |
| 70 MSL B 140 MSL to Cross | W | ART 281/9 | N43°57.00' W76°17.00' |
| 170 MSL to | X | ART 270/5 | N43°56.00' W76°11.00' |
| 170 MSL to | Y | ART 236/4 | N43°54.00' W76°08.00' |
| 170 MSL to Re-Entry: A Cross | Z | ART 170/25 | N43°34.00' W75°51.00' |
| 35 MSL to climb direct to cross | R1 | ART 119/17 | N43°52.00' W75°41.00' |
| 60 MSL to (Point Jerry) turn right to | S1 | ART 154/13 | N43°47.00' W75°53.00' |
| 60 MSL to direct to | AA | ART 197/1 | N43°56.00' W76°04.00' |
| 60 MSL to direct to | AB | ART 052/14 | N44°08.00' W75°51.00' |
| 60 MSL to direct to | AC | MSS 240/44 | N44°24.00' W75°27.00' |
| 60 MSL to turn right to | AD | MSS 218/18 | N44°38.00' W74°54.00' |
| 60 MSL to 35 MSL B 60 MSL turn right and descend to cross | AE | MSS 191/18 | N44°37.00' W74°42.00' |
| 35 MSL to (Start Maneuver Area) then via published route. | N1 | MSS 192/28 | N44°27.00' W74°42.00' |
| Re-entry B: climb direct to cross | | | |
| 60 MSL to (Point Jerry) (Contact Wheeler Sack APP Primary 347.7 or Secondary 299.85 and report Point Jerry) turn right to | S2 | ART 154/13 | N43°47.00' W75°53.00' |
| 60 MSL to direct to | BA | ART 197/1 | N43°56.00' W76°04.00' |
| 60 MSL to turn right to | BB | ART 036/26 | N44°21.00' W75°49.00' |
| 60 MSL to turn right to cross | BC | ART 045/33 | N44°24.50' W75°39.00' |
| 30 MSL B 60 MSL to descend direct to cross | BD | ART 055/33 | N44°21.50' W75°32.50' |

| | | | |
|--|----|------------|--------------------------|
| 02 AGL B 30 MSL to direct to | BE | ART 064/31 | N44°16.00' W75°30.00' |
| 02 AGL B 30 MSL to turn left to | BF | ART 074/29 | N44°11.00' W75°28.00' |
| 02 AGL B 30 MSL to turn right and climb to cross | BG | ART 081/30 | N44°08.00' W75°25.00' |
| 02 AGL B 35 MSL to Thence via the published route. | P1 | ART 098/26 | N43°59.00' W75°28.00' |

PMSV CONTACTS: Primary Home Station. Alternate Minot (MIB 342.5).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR

Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW command directives with published altitude blocks from G to Q. When command directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each TF route segment. Minimum altitudes above 200' AGL are established to provide 100' vertical clearance of known man-made obstructions within the route width. Obstructions under 200' AGL were not considered in the route design. The route is designated mountainous from B to N and non-mountainous from N to Q. Regulations governing operations below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to N; 4 NM left and 3 NM right of centerline from N to O; 5 NM left and 3 NM right of centerline from O to P; 4 NM left and 3 NM right of centerline from P to R; 4 NM either side of centerline from R to Z. Re-Entry A: Entire segment is 4 NM either side of centerline. Re-Entry B: 4 NM either side of centerline from S to BA; 3 NM left and 4 NM right of centerline from BA to BD; 2 NM either side of centerline from BD to BE; 6 NM left and 2 NM right of centerline from BE to BF; 6 NM left and 3 NM right of centerline from BF to BG; 4 NM left and 3 NM right of centerline from BD to P.

Special Operating Procedures:

- (1) Participating Aircraft Separation: Route is designated for MARSAs operations established by coordinated scheduling.
- (2) Lost communications (LC) procedures: Route LC altitude is 17,000' MSL. Desired deviation from this procedure must be filed IAW FLIP AP/1B, Chapter 1, and verified with Boston ARTCC prior to route entry.
- (3) Route designated for SN missions.
- (4) ATC will advise aircrews flying IR-801 of traffic in the Saranac Lake ILS pattern upon request for a Saranac Lake ILS advisory. If unable to obtain a Saranac Lake ILS advisory or when advised by ATC of Saranac Lake ILS traffic, aircrews will maintain 7000' MSL from G to H then descend to cross I at 6000' MSL and maintain 6000' MSL to L.
- (5) Crews conducting operations below the minimum IFR altitude in the Fort Drum Maneuver Area should make special note of towers at the following locations: N44-14.0 W75-07.5 (205' AGL), N43-59.5 W75-35.3 (300' AGL), N43-52.2 W75-44.2 (943' AGL), N43-50.5 W75-45.1 (300' AGL), and N43-52.5 W75-43.1 (1000' AGL).
- (6) Re-entry procedures: Aircraft scheduled for Maneuver Area Re-entries shall in all cases advise ATC at the entry point of the number of re-entries desired.
- (7) Aircrews should be especially vigilant for aircraft transiting to and from R-5201. Aircrews will monitor 255.4 from points A to N, for aircraft call crossing the IR route. Aircrews will also make an 'IP-INBOUND' call on this frequency. Aircraft

with additional activity will again monitor this frequency while on the re-entry to Point S and continue IP call-in procedures.

- (8) For Re-entry B: Aircrews will monitor Wheeler Sack Approach on primary 347.7 or secondary 299.85 and will report Point Jerry (S) on every re-entry. If no contact with Wheeler Sack by Point BA, maintain highest IFR altitude until re-establishing contact with Wheeler Sack Approach and when cleared published routing by Wheeler Sack Approach or when the aircrew is established on the published route exit.
- (9) For Re-entry B: Following initial pass on weapons range, aircrews will climb to IFR altitudes for subsequent re-entries. Aircrews will maintain IFR altitudes for all subsequent re-entries until Point BD. Provided clearance is received from Wheeler Sack Approach and contact is again made with the range, aircrews are cleared for TA altitudes at Point BD through Point BG.
- (10) Aircrews will report their final progress of Point Jerry to Boston ARTCC on primary 377.1 or secondary 323.0.
- (11) Aircraft will remain 1.5 NM right of centerline from G to N to avoid environmentally sensitive areas.
- (12) Noise Sensitive Areas:
 - (a) Village at N43-55.8 W75-35.5;
 - (b) Farm at N44-10.6 W75-04.0.

FSS's Within 100 NM Radius:

BTV, BUF, IPT

IR-802

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr., Minot AFB, ND 58705 DSN 453-2002/3527, C701-723-2002/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| Cross at FL210 to or as assigned (pass Pt G ETA to SIDECAR) direct to | A | XBG TACAN | N48°19.77' W70°59.72' |
| FL210 to (Primary TA/TFR Initiation Point) descend direct to cross | B | XBG 020/45 | N49°05.00' W70°59.50' |
| 50 MSL to turn right to | C | XBG 020/80 | N49°40.00' W71°00.00' |
| SFC B 50 MSL to direct to | CC | XBG 022/84 | N49°44.00' W70°56.00' |
| SFC B 50 MSL to turn left to | D | XBG 049/140 | N50°21.00' W69°13.00' |
| SFC B 50 MSL to direct to | DD | XBG 047/147 | N50°29.00' W69°14.00' |
| SFC B 50 MSL to turn left to | E | XBG 027/147 | N50°45.00' W70°30.00' |

IR ROUTES

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|---|----|-------------|--------------------------|
| SFC B 50 MSL to direct to | EE | XBG 026/144 | N50°43.00' W70°38.00' |
| SFC B 50 MSL to descend and turn right to | F | XBG 020/110 | N50°10.00' W71°00.00' |
| SFC B 50 MSL to direct to | FF | XBG 018/107 | N50°06.80' W71°07.00' |
| SFC B 40 MSL to (See Special Operating Procedure 8) direct to | G | XBG 002/112 | N50°06.00' W71°55.00' |
| SFC B 60 MSL to direct to | GG | XBG 358/115 | N50°05.50' W72°07.00' |
| SFC B 60 MSL to descend and turn left to | H | XBG 349/123 | N50°05.00' W72°37.00' |
| SFC B 60 MSL to direct to | I | XBG 347/124 | N50°03.00' W72°43.00' |
| 04 AGL B 40 MSL to turn left to | J | XBG 314/97 | N48°58.00' W73°14.00' |
| 04 AGL B 40 MSL to direct to | JJ | XBG 312/96 | N48°55.00' W73°14.50' |
| 03 AGL B 40 MSL to turn left and descend to | K | XBG 277/83 | N48°00.00' W73°00.00' |
| SFC B 40 MSL to direct to | KK | XBG 274/79 | N47°57.00' W72°53.00' |
| SFC B 35 MSL to climb direct to cross | L | XBG 264/45 | N48°00.00' W72°00.00' |
| FL200 to or as assigned. | M | XBG TACAN | N48°19.77' W70°59.72' |

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Whiteman (SZL 344.6).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW command directives from C to L (see Special Operating Procedure 8). When command directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each affected TF route segment. Minimum altitudes, other than surface, provide at least 100' vertical clearance of known man-made obstructions. Obstructions under 200' AGL were not considered in route design. The entire route is nonmountainous. Regulations governing aircraft operations below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 10 NM either side of centerline from B to H; 8 NM right and 6 NM left of centerline from H to J; 8 NM either side of centerline from J to K; 4 NM either side of centerline from K to M.

Special Operating Procedures:

- (1) Participating aircraft separation: Route designated for MARSAs operations established by coordinated scheduling.
- (2) Route Lost Communications altitude is FL 200.
- (3) Route designated for SN missions.
- (4) Aircraft must enter Canada using either of the following routing:
 - (a) Quebec VORTAC (YQB 121/67 direct YQB direct Bagotville VORTAC (XBG) (Point A) at FL 210; or
 - (b) Sherbrooke VORTAC (YSC) 200/35 direct XBG (Point A) at FL 210.

- (5) Aircrews will contact the NORAD Control Facility on AICC (364.2 MHz) upon entering Canadian airspace and pass ETA's for Points A, G and L.
- (6) When handed to Bagotville Terminal Control Unit (TCU), aircrews will pass ETA's for I and L.
- (7) If high altitude intercept activity is planned, delay start descent until threat identification or Point C, whichever is sooner. Tactical descent is authorized.
- (8) Aircraft will climb at Point G until radio and radar contact is established with SIDECAR. After being cleared by SIDECAR, aircrews may descend back to TF altitude.
- (9) Aircraft aborting route will start climb to FL 170 and turn left to 180 degrees magnetic heading until contact with the NORAD control facility or Bagotville TCU.
- (10) Aircrews scheduled for IR-802 will file for 'BOZ 1 (IR-802)' on DD Form 175.
- (11) IR-802 (BOZ I) is cleared for CELL operations.
- (12) Aircrews should be cautious of a 200' AGL tower located at N48-59.0 W73-17.0.
- (13) Aircrews are advised of a power line at N47-58.3 W72-26.4 that runs North to South between Point KK and L. Caution must be used when approaching this area.

IR-803

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr., Minot AFB, ND 58705 DSN 453-2002/3527, C701-723-2002/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| Cross at FL210 to or as assigned (pass Pt G ETA to SIDECAR) direct to | A | XBG TACAN | N48°19.77' W70°59.72' |
| FL210 to (Primary TA/TFR Initiation Point) descend direct to cross | B | | N49°05.00' W70°59.50' |
| 04 AGL B FL210 to direct to | C | | N49°40.00' W71°00.00' |
| 04 AGL B 50 MSL to turn left and descend to | F1 | | N50°02.50' W71°00.00' |
| SFC B 50 MSL to direct to | FF | | N50°06.80' W71°07.00' |
| SFC B 40 MSL to (See Special Operating Procedure 8) climb direct to | G | | N50°06.00' W71°55.00' |
| SFC B 60 MSL to direct to | GG | | N50°05.50' W72°07.00' |
| SFC B 60 MSL to descend and turn left to | H | XBG 349/123 | N50°05.00' W72°37.00' |

| | | | |
|---|----|------------|--------------------------|
| SFC B 60 MSL to direct to | I | | N50°03.00' W72°43.00' |
| 04 AGL B 40 MSL to turn left to | J | | N48°58.00' W73°14.00' |
| 04 AGL B 40 MSL to direct to | JJ | XBG 312/96 | N48°55.00' W73°14.50' |
| 03 AGL B 40 MSL to turn left and descend to cross | K | | N48°00.00' W73°00.00' |
| 35 MSL to (TA/TFR Termination Point) direct to | KK | | N47°57.00' W72°53.00' |
| 35 MSL to climb direct to cross | L | | N48°00.00' W72°00.00' |
| FL200 to or as assigned. | M | XBG TACAN | N48°19.77' W70°59.72' |

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Whiteman (SZL 344.6).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC
Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW command directives from C to L (see Special Operating Procedures 8). When command directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each affected TF route segment. Minimum altitudes, other than surface, provide at 100' vertical clearance of known man-made obstructions. Obstructions under 200' AGL were not considered in route design. The entire route is nonmountainous. Regulations governing aircraft operations below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 10 NM either side of centerline from B to H; 8 NM right and 6 NM left of centerline from H to J; 8 NM either side of centerline from J to K; 4 NM either side of centerline from K to M.

Special Operating Procedures:

- (1) Participating aircraft separation: Route designated for MARSAs operations established by coordinated scheduling.
- (2) Route Lost Communications altitude is FL 200.
- (3) Route designated for SN missions.
- (4) Aircraft must enter Canada using either of the following routing:
 - (a) Quebec VORTAC (YQB) 121/67 direct YQB direct Bagotville VORTAC (XBG) (Point A) at FL 210; or
 - (b) Sherbrooke VORTAC (YSC) 200/35 direct XBG (Point A) at FL 210.
- (5) Aircrews will contact the NORAD control facility on AICC (364.2 MHz) upon entering Canadian airspace and pass ETA's for Points A, G, and L.
- (6) When handed to Bagotville Terminal Control Unit (TCU), aircrews will pass ETA's for I and L.
- (7) If high altitude intercept activity is planned, delay start descent until threat identification or Point C, whichever is sooner. Tactical descent is authorized.
- (8) Aircraft will climb at Point G until radio and radar contact is established with SIDECAR. After being cleared by SIDECAR, aircrews may descend back to TF altitudes.
- (9) Aircraft aborting route will start climb to FL 170 and turn left to 180 degrees magnetic heading until contact with NORAD control facility or Bagotville TCU.
- (10) Aircrews scheduled for IR-803 will file for 'BOZ II (IR-803)' on DD Form 175.

(11) Aircrews should be cautious of a 200' AGL tower located at N48-59 W73-17.

(12) Aircrews are advised of a power line at N47-58.3 W72-26.4 that runs North to South between Point KK and L. Caution must be used when approaching this area.

IR-804

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr., Minot AFB, ND 58705 DSN 453-2002/3527, C701-723-2002/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| Cross at 170 MSL to or as assigned direct to | A | BGR 142/52 | N44°22.00' W67°52.00' |
| 170 MSL to turn right to | B | BGR 112/40 | N44°48.00' W67°56.00' |
| 170 MSL to descend direct to | C | BGR 104/45 | N44°54.00' W67°49.00' |
| 170 MSL to turn right and continue descend to cross at or above 100 MSL | D | BGR 102/52 | N44°56.00' W67°40.00' |
| continue descent direct to cross | E | BGR 103/57 | N44°56.00' W67°32.00' |
| 30 MSL to (Primary TA/TFR Initiation Point) turn right to | F | BGR 114/73 | N44°44.00' W67°11.00' |
| 02 AGL B 30 MSL to direct to | G | BGR 122/74 | N44°33.00' W67°12.00' |
| 02 AGL B 30 MSL to turn right to | H | BGR 132/60 | N44°27.00' W67°35.00' |
| 02 AGL B 30 MSL to (End TA/TFR Point) direct to | I | BGR 129/49 | N44°33.00' W67°48.00' |
| 30 MSL to (Start TA/TFR Point) direct to | J | BGR 117/45 | N44°44.00' W67°50.00' |
| 02 AGL B 30 MSL to (Point Alpha CTC Boston ARTCC 290.5 and advise changing to en-route freq passing Point Alpha.) direct to | K | BGR 091/44 | N45°04.00' W67°54.00' |
| 02 AGL B 30 MSL to direct to | L | MLT 156/36 | N45°09.00' W67°55.00' |
| 02 AGL B 30 MSL to turn left to | M | MLT 072/30 | N45°53.50' W67°57.50' |
| 02 AGL B 30 MSL to direct to | N | MLT 062/31 | N45°58.50' W68°01.00' |
| 02 AGL B 30 MSL to turn right to | O | MLT 048/32 | N46°03.00' W68°09.50' |

IR ROUTES

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|---|----|------------|--------------------------|--|----|-------------|--------------------------|
| 02 AGL B 40 MSL to (Start Manuever Area) direct to | P | MLT 042/33 | N46°05.50' W68°13.00' | 06 AGL B 20 MSL to direct to | AN | | N47°56.00' W65°24.00' |
| 05 AGL B 40 MSL to (End Maneuver Area) turn left to | Q | PQI 288/20 | N46°45.50' W68°35.00' | 06 AGL B 20 MSL to turn right to | AO | | N48°07.00' W64°30.00' |
| 02 AGL B 40 MSL to direct to | R | PQI 294/22 | N46°47.50' W68°37.50' | 02 AGL B 20 MSL to direct to | AP | | N47°58.50' W64°16.00' |
| 02 AGL B 40 MSL to 30 MSL B 90 MSL turn right and climb to cross | S | PQI 315/36 | N47°01.00' W68°53.00' | 02 AGL B 20 MSL to (TA/TFR Termination Point) (Contact Moncton ARTCC 294.5 or 346.9 for climb out instructions. If no contact maintain 40 MSL until Pt. AR and then squawk 7600 and continue route climb out profile) | AQ | | N47°07.00' W64°30.00' |
| at or above 50 MSL continue climb direct to cross | T | PQI 328/41 | N47°11.00' W68°53.00' | 02 AGL B 160 MSL climb direct to cross | | | |
| at or above 70 MSL 70 MSL B 90 MSL turn left (Contact Boston ARTCC on 239.05 and advise passing Point U. Continue to monitor until passing AA.) continue climb to cross | U | PQI 342/41 | N47°18.00' W68°43.00' | at or above 60 MSL turn right and continue climb to | AR | | N46°43.50' W64°49.00' |
| 90 MSL to turn right to | V | PQI 004/51 | N47°35.00' W68°27.00' | 60 MSL B 160 MSL to continue climb direct to cross | AS | | N46°40.00' W64°55.00' |
| 90 MSL to direct to | W | PQI 011/53 | N47°38.50' W68°20.50' | 160 MSL to | AT | | N46°26.00' W65°54.00' |
| 90 MSL to descend direct to cross | X | PQI 032/57 | N47°42.00' W67°50.00' | (Contact Moncton ARTCC 294.5 or as assigned on level off and again passing AT) direct to | | | |
| 10 AGL B 90 MSL to direct to | Y | PQI 041/60 | N47°43.00' W67°35.00' | 160 MSL to direct to | AU | YFC 320/21 | N46°04.00' W66°52.00' |
| 10 AGL B 30 MSL to direct to | Z | | N47°43.50' W67°12.00' | 160 MSL to (Exit Canada) (Contact Boston ARTCC 290.5 or as assigned) | AV | PNN 059/19 | N45°35.00' W67°25.50' |
| 02 AGL B 30 MSL to direct to | AA | | N47°39.00' W66°35.00' | direct to | | | |
| 02 AGL B 30 MSL to turn right to | AB | | N47°39.00' W66°10.00' | 160 MSL to | AW | PNN VOR-DME | N45°19.75' W67°42.25' |
| 02 AGL B 30 MSL to climb direct to | AC | | N47°26.00' W66°02.00' | Re-entry: | | | |
| 02 AGL B 40 MSL to turn left to | AD | | N46°59.00' W66°48.00' | 02 AGL B 40 MSL to (End Maneuver Area) direct to | Q1 | PQI 288/20 | N46°45.50' W68°35.00' |
| 02 AGL B 40 MSL to direct to | AE | | N46°50.00' W66°50.00' | 02 AGL B 40 MSL to direct to | R1 | PQI 294/22 | N46°47.50' W68°37.50' |
| 02 AGL B 40 MSL to turn left to | AF | | N46°44.00' W66°46.00' | 02 AGL B 50 MSL to turn left to | S1 | PQI 315/36 | N47°01.00' W68°53.00' |
| 02 AGL B 40 MSL to descend direct to | AG | | N46°44.00' W66°26.00' | 02 AGL B 50 MSL to direct to | BF | PQI 303/46 | N46°56.00' W69°12.00' |
| 02 AGL B 40 MSL to turn right to | AH | | N47°06.50' W66°09.00' | 10 AGL B 50 MSL to direct to | BG | PQI 266/36 | N46°31.00' W68°53.00' |
| 02 AGL B 30 MSL to direct to | AI | | N47°10.00' W66°03.00' | 10 AGL B 50 MSL to descend direct to | BH | MLT 009/28 | N46°03.00' W68°39.00' |
| 06 AGL B 30 MSL to turn left and descend to cross | AJ | | N47°18.50' W65°27.50' | 10 AGL B 50 MSL to turn left to | BI | MLT 011/22 | N45°57.00' W68°36.00' |
| 20 MSL to direct to | AK | | N47°28.00' W65°20.50' | 10 AGL B 40 MSL to direct to | BJ | MLT 037/19 | N45°53.00' W68°23.00' |
| 20 MSL to direct to | AL | | N47°41.50' W65°27.50' | 10 AGL B 40 MSL to turn left to | BK | MLT 046/23 | N45°56.00' W68°16.50' |
| 06 AGL B 20 MSL to turn right to | AM | | N47°47.00' W65°30.00' | | | | |

10 AGL B 40 MSL to P1 MLT 044/32 N46°04.50'
(Start Maneuver Area) W68°12.50'
Thence via published
route.
Alternate Exit: AQ
Cross

20 MSL to AQ1 N47°07.00'
(TA/TFR Termination W64°30.00'
Point)
(Contact Moncton
ARTCC 294.5 or 346.9
for climb out instruc-
tions. If no contact
maintain 40 MSL until
Pt AR then squawk
7600 and continue
route climb out pro-
file)
20 MSL B 160 MSL
turn left and climb to
cross

at or above 60 MSL AR1 N46°43.50'
60 MSL B 160 MSL W64°49.00'
continue climb to 160
MSL (Contact Moncton
ARTCC on 294.5
while climbing and re-
quest clearance. Main-
tain IR-804 routing at
160 MSL until contact
with Moncton
ARTCC).

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Whiteman (SZL 344.6).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR

Terrain Following (TF)/Visual Contour (VC) operations are authorized IAW command directives within published altitude blocks from F to I, J to S, X to AK, and AL to AQ. At no time will flight below 1000' AGL be accomplished between X and Z. If interceptor activity is available, aircrews will comply with NORAD requests to fly at higher TF/VC altitudes. In this instance TF/VC route segments may be flown as high as 1000' AGL. When command directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each TF route segment. Minimum altitudes, above 200' AGL, are established to provide at least 100' vertical clearance of known manmade obstructions within the route width. Obstructions under 200' AGL were not considered in the route design. The route is designated non-mountainous from F to K and AH to AQ, and mountainous from X to AH and S1 to BJ on re-entry. Regulations governing operations below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from A to M; 2 NM either side of centerline from M to P; 8 NM left and 4 NM right of centerline from P to N46-43.5 W68-34.0; 8 NM left and 3 NM right of centerline from N46-43.5 W68-34.0 to Q; 4 NM either side of centerline from Q to AP; 8 NM left and 6 NM right of centerline from AP to AQ; 4 NM either side of centerline from AQ to AW.

Special Operating Procedures:

- (1) Participating aircraft separation: Route designated for MARSAs operations established by coordinated scheduling.
- (2) Route lost communications altitude is 160 MSL.

- (3) Aircraft using IR-804 must own the corresponding times on IR-800. IR-800 and IR-804 are identical until Point R.
- (4) Aircrews will contact the NORAD control facility (364.2) prior to entering low level and confirm intercept/no intercept activity. If intercept activity is available, pass Point AA time to NORAD and brief Joint Manual 55-200 required items. If intercept activity is confirmed by NORAD, aircrews must climb just prior to AA and attempt to re-establish contact with the NORAD control facility. Climb will be initiated until radio contact is established or the IR altitude is reached. Once reaching the IR altitude, maintain IR altitude(s) until radio contact with NORAD. If, prior to entering low level, NORAD confirms that there is no fighter activity, the aircrew need not re-establish contact with NORAD during the low level portions of the route and may remain at prescribed TF/visual contour altitudes.
- (5) All flights through IR-804 must be scheduled the week prior and a scheduling message sent. This message must be sent so as to arrive in the offices of the recipients not later than the start of the last working day of the week. Canadian and US national holidays must be considered as non-working days. This message must contain Zulu arrival time estimates for Point A, abeam Target A, point T, Point X, Point AA, Point AT, and Point AW. When the Alternate Exit at AQ is to be used, the estimate to AQ will be provided in lieu of AT and AW times. The message must contain the using units identification (i.e. 380 BMW), type of aircraft, route nomenclature (IR-804), and Zulu date of flight. Units may only use times which appear on the scheduling message. IR-805 may be substituted by like aircraft for scheduled IR-804 times. However, IR-804 may not be substituted for IR-805.
- (6) Inflight filing of IR-804 is not allowed.
- (7) All scheduled route points must be flown within plus/minus 3 minutes of scheduled times. Command Directives may prescribe closer timing and will be followed.
- (8) At entry pass ETA's of Point T and AW (Route Exit) to Boston Center. If Alternate Exit AQ is used pass Point AQ times instead of AW.
- (9) Intercepts may occur anywhere along the route between AA and AT. All intercept activity will be IAW Joint Manual 55-200 and Command Directives.
- (10) During intercept activity NORAD will be the primary controlling agency. The applicable frequency (or assigned) must be monitored during intercept activity.
- (11) Centerline between all points will be depicted as a 7.5 NM radius arc.
- (12) Tactical Descent: This procedure applies to all aircraft scheduled to conduct auto TF letdown and will require a specific ATC clearance, which specifies that the auto TF letdown is approved. Cross A at 170 MSL or as assigned then maintain 170 MSL thru E then within surface B 170 MSL begin auto TF letdown to cross F within surface B 2800 MSL; thence via published route.
- (13) Bangor, ME VORTAC entry: ATC shall advise aircrews upon entry request into IR-804 when Houston/Princeton, ME IFR procedures are in effect. Upon receipt of such an advisory, aircraft shall cross point ALPHA (N45-04.0 W67-54.0) at 4000' MSL and maintain 4000' MSL until passing point BRAVO (N46-05.5 W68-13.0). After passing point BRAVO resume normal procedures. IFR/VFR terrain following and visual contour operations between these two points are prohibited.
- (14) ATC shall advise aircrews upon entry request into IR-804 when Machias, ME IFR procedures are in effect. Upon receipt of such an advisory, aircraft shall descend to circle E at or above 100 MSL, cross F at 40 MSL and maintain 40

IR ROUTES

MSL until K. Descend to L at 30 MSL, then resume normal procedures. Auto T/F letdown will not be authorized when this procedure is in effect. IFR/VFR terrain following and visual contour operations from A through K are prohibited.

- (15) Aircrews are restricted to IFR altitude (3000' MSL) from point K (N45-04 W67-54) to crossing N45-25. This is effective only on Tuesdays between 0800-1000 local EST/EDT (1300-1500Z/1200-1400Z). This restriction is due to helicopter operations in the area from the surface to 1500' AGL.
- (16) Aircrews will monitor Moncton Area Control Center on 346.9 once they enter the low level structure.
- (17) Re-entry procedures: Aircraft scheduled for maneuver area re-entry shall in all cases advise ATC at the entry point of the number of re-entries desired.
- (18) Noise Sensitive Areas:
 - (a) Residence at N46-35.6 W68-26.8;
 - (b) Residence at N46-36.6 W68-27.1;
 - (c) Residence at N46-35.0 W68-26.5;
 - (d) Residence at N46-24.5 W67-55.8.

FSS's Within 100 NM Radius:
BGR

IR-805

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.

SCHEDULING ACTIVITY: 23 BS/DOS, 300 Summit Dr., Minot AFB, ND 58705 DSN 453-2002/3527, C701-723-2002/3527.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| Cross at FL230 to or as assigned direct to | T | PQI 328/41 | N47°11.00' W68°53.00' |
| FL230 to FL 230 B 90 MSL (Contact Boston ARTCC 239.05 and advise passing Point U. Continue to monitor until passing AA.) descend direct to cross | U | PQI 342/41 | N47°18.00' W68°43.00' |
| 90 MSL to turn right to | V | PQI 004/51 | N47°35.00' W68°27.00' |
| 90 MSL to direct to | W | PQI 011/53 | N47°38.50' W68°19.50' |
| 90 MSL to (TA/TFR Initiation Point) | X | PQI 032/57 | N47°42.50' W67°50.00' |
| 90 MSL B 10 AGL descend direct to cross | | | |
| 10 AGL B 90 MSL to | Y | PQI 041/60 | N47°43.00' W67°35.00' |
| 10 AGL B 30 MSL to | Z | | N47°43.50' W67°12.00' |

| | | | |
|---------------------|----|-------------|--------------------------|
| 02 AGL B 30 MSL to | AA | | N47°39.00' W66°35.00' |
| 02 AGL B 30 MSL to | AB | | N47°39.00' W66°10.00' |
| 02 AGL B 30 MSL to | AC | | N47°26.00' W66°02.00' |
| 02 AGL B 40 MSL to | AD | | N46°59.00' W66°48.00' |
| 02 AGL B 40 MSL to | AE | | N46°50.00' W66°50.00' |
| 02 AGL B 40 MSL to | AF | | N46°44.00' W66°46.00' |
| 02 AGL B 40 MSL to | AG | | N46°44.00' W66°26.00' |
| 02 AGL B 40 MSL to | AH | | N47°06.50' W66°09.00' |
| 02 AGL B 30 MSL to | AI | | N47°10.00' W66°03.00' |
| 02 AGL B 30 MSL to | AJ | | N47°18.50' W65°27.50' |
| 20 MSL to | AK | | N47°28.00' W65°20.50' |
| 20 MSL to | AL | | N47°41.50' W65°27.50' |
| 06 AGL B 20 MSL to | AM | | N47°47.00' W65°30.00' |
| 06 AGL B 20 MSL to | AN | | N47°56.00' W65°24.00' |
| 06 AGL B 20 MSL to | AO | | N48°07.00' W64°30.00' |
| 02 AGL B 20 MSL to | AP | | N47°58.50' W64°16.00' |
| 02 AGL B 20 MSL to | AQ | | N47°07.00' W64°30.00' |
| at or above 60 MSL | AR | | N46°43.50' W64°49.00' |
| 60 MSL B 160 MSL to | AS | | N46°40.00' W64°55.00' |
| 160 MSL to | AT | | N46°26.00' W65°54.00' |
| 160 MSL to | AU | YFC 320/21 | N46°04.00' W66°52.00' |
| 160 MSL to | AV | PNN 059/19 | N45°35.00' W67°25.50' |
| 160 MSL to | AW | PNN VOR-DME | N45°19.75' W67°42.25' |

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Whiteman (SZL 344.6).

TERRAIN FOLLOWING OPERATIONS: IFR/VFR
Terrain Following (TF)/visual contour (VC) operations are authorized IAW Command Directives within published altitude blocks from X to AK, and AL to AQ. At no time will flight below 1000' AGL be accomplished between X and Z. If interceptor activity is available, aircrews will comply with NORAD requests to fly at higher TF/VC altitudes. In this instance TF/VC route segments may be flown as high as 1000' AGL. When command directives preclude TF/VC operations, aircrews will maintain the IFR altitude for each TF route segment. Minimum altitudes, above 200' AGL, are established to provide at least 100' vertical clearance of known manmade obstructions within the route width. Obstructions under 200' AGL were not considered in the

route design. The route is designated non-mountainous from AH to AQ and mountainous from X to AH and S1 to BJ on re-entry. Regulations governing operations below 500' AGL must be complied with.

ROUTE WIDTH - 4 NM either side of centerline from T to AP; 8 NM left and 6 NM right of centerline from AP to AQ; 4 NM either side of centerline from AQ to AW.

Special Operating Procedures:

- (1) Participating aircraft separation: Route designated for MARSA operations established by coordinated scheduling.
- (2) Route lost communications altitude is 160 MSL.
- (3) Det 1, HQ ACC/DOSR may not schedule IR-805 and IR-804 for more than eight flights in any 24 hour period without special approval of Canadian National Defense Headquarters (NDHQ) and Canadian Department of Transport (DOT) for each occasion.
- (4) Aircrews will contact the NORAD control facility (364.2) prior to entering low level and confirm intercept /no intercept activity. If intercept activity is available pass point AA time to NORAD and Brief Joint Manual 55-200 required items. If intercept activity is confirmed by NORAD, aircrews must climb just prior to AA and attempt to re-establish contact with the NORAD control facility. Climb will be initiated until radio contact is established or the IR altitude is reached. Once reaching altitude maintain IR altitude(s) until radio contact with NORAD. If, prior to entering low level, NORAD confirms that there is no fighter activity, the aircrew need not re-establish contact with NORAD during the low level portions of the route and may remain at prescribed TF/visual contour altitudes.
- (5) All flights through IR-805 must be scheduled the week prior and a scheduling message sent. This message must be sent so as to arrive in the offices of the recipients not later than the start of the last working day of the week. Canadian and US national holidays must be considered as non-working days. This message must contain Zulu arrival time estimates for point T, X, AA, AT and AW. When the Alternate Exit at AQ is to be used, the estimate to AQ will be provided in lieu of AT and AW times. The message must contain the units identification (i.e. 380 BMW), type of aircraft, route nomenclature (IR-805), and Zulu date of flight. Units may only use times which appear on the scheduling message. IR-805 may be substituted by like aircraft for scheduled IR-804 times. However, IR-804 may not be substituted for IR-805.
- (6) All scheduled route points must be flown within plus or minus 3 minutes of scheduled times. Command Directives may prescribe closer timing and will be followed.
- (7) At least ten minutes prior to route entry pass ETA to Point T to Boston ARTCC.
- (8) Intercepts may occur anywhere along the route between Points AA and AT. All intercept activity will be IAW Joint Manual 55-200 and Command Directives.
- (9) During intercept activity NORAD will be the primary Controlling Agency. The applicable frequency (or assigned) must be monitored during intercept activity.
- (10) At Entry Pass ETA for point AW (Point Exit) to Boston ARTCC. If Alternate Exit is to be used, pass point AQ time instead of AW.
- (11) Centerline between the following points will be depicted as a 7.5 NM radius arc: V to W, AB to AC, AD to AE, AF to AG, AH to AI, AJ to AK, AM to AN, AO to AP, and AR to AS.
- (12) Inflight filing of IR-805 is not allowed.

(13) Aircrews will monitor Moncton Area Control Center on 346.9 once they enter the low level structure.

FSS's Within 100 NM Radius:

BGR

IR-850

ORIGINATING ACTIVITY: Commander, Naval Air Warfare Center Weapons Division, Code 52E000E, NAWS, Pt. Mugu, CA 93042-5008 DSN 351-7527, C805-989-7527.

SCHEDULING ACTIVITY: Commander, Naval Air Warfare Center Weapons Division, Code 52911GE, NAWS, Pt. Mugu, CA 93042-5008 DSN 351-7545, C805-989-7545.

HOURS OF OPERATION: Sunrise-Sunset by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 40 MSL B 60 MSL to | A | BGR 134/52 | N44°28.50' W67°47.00' |
| 40 MSL B 60 MSL to | B | PNN 233/28 | N44°56.30' W68°03.00' |
| 40 MSL B 60 MSL to | C | PNN 261/21 | N45°09.30' W68°08.10' |
| 15 AGL B 50 MSL to | D | MLT 160/21 | N45°19.00' W68°12.00' |
| 15 AGL B 50 MSL to | E | MLT 022/23 | N45°58.00' W68°30.00' |
| 20 AGL B 60 MSL to | F | MLT 014/39 | N46°13.50' W68°37.00' |
| 20 AGL B 60 MSL to | G | MLT 012/44 | N46°18.50' W68°39.50' |
| 20 AGL B 60 MSL to | H | MLT 003/49 | N46°22.00' W68°51.00' |
| 20 AGL B 60 MSL to | I | MLT 357/40 | N46°12.00' W68°53.00' |
| 20 AGL B 60 MSL to | J | MLT 360/36 | N46°09.00' W68°49.00' |
| 20 AGL B 60 MSL to | K | MLT 002/23 | N45°57.00' W68°41.00' |
| 20 AGL B 60 MSL to | L | MLT 305/21 | N45°40.50' W69°00.00' |
| 15 AGL B 60 MSL to | M | MLT 272/34 | N45°24.50' W69°16.50' |
| 15 AGL B 60 MSL to | N | BGR 338/37 | N45°18.00' W69°27.00' |
| 05 AGL B 60 MSL to | O | BGR 326/37 | N45°12.50' W69°34.00' |
| 05 AGL B 60 MSL to | P | AUG 026/46 | N45°05.00' W69°38.50' |
| 05 AGL B 60 MSL to | Q | AUG 024/39 | N44°58.00' W69°42.00' |
| 05 AGL B 60 MSL to | R | AUG 016/37 | N44°56.50' W69°49.50' |
| 05 AGL B 60 MSL to | S | AUG 010/35 | N44°53.50' W69°54.50' |
| 05 AGL B 60 MSL to | T | AUG 005/33 | N44°51.50' W69°58.20' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point V to Y.

ROUTE WIDTH - 5 NM either side of centerline from A to Q; 5 NM left and 4 NM right of centerline from Q to S; 3 NM either side of centerline from S to W; 5 NM left and 3 NM right of centerline from W to X. 5 NM either side of centerline from X to Y1.

Special Operating Procedures:

- (1) For use in VMC conditions only.
- (2) Route continuation from Point O to D authorized.
- (3) Route continuation from Point F to P authorized.
- (4) Route continuation from Point A2 to Y authorized.
- (5) Alternate Entry/Exit Points: A, B, D, F, Y.
- (6) Remain east of centerline from Points G through J to avoid overflight of Baxter State Park.
- (7) Maintain altitude block in Y, Z, A1, A2 pattern until in receipt of IFR clearance.

FSS's Within 100 NM Radius:
BGR, BTV

IR-852

ORIGINATING ACTIVITY: Commander, Naval Air Warfare Center Weapons Division, Code 52EOOOE, NAWS, Pt. Mugu, CA 93042-5008 DSN 351-7527, C805-989-7527.

SCHEDULING ACTIVITY: Commander, Naval Air Warfare Center Weapons Division, Code 52911GE, NAWS, Pt. Mugu, CA 93042-5008 DSN 351-7547, C805-989-7545.

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 40 MSL B 60 MSL to | A | BGR 134/52 | N44°28.50' W67°47.00' |
| 40 MSL B 60 MSL to | B | PNN 233/28 | N44°56.30' W68°03.00' |
| 40 MSL B 60 MSL to | C | PNN 261/21 | N45°09.30' W68°08.10' |
| 15 AGL B 40 MSL to | D | MLT 179/23 | N45°13.50' W68°19.20' |
| 15 AGL B 40 MSL to | E | MLT 236/28 | N45°12.50' W68°54.50' |
| 15 AGL B 50 MSL to | F | MLT 272/34 | N45°24.50' W69°16.50' |
| 15 AGL B 60 MSL to | G | BGR 338/37 | N45°18.00' W69°27.00' |
| 05 AGL B 60 MSL to | H | BGR 326/37 | N45°12.50' W69°34.00' |
| 05 AGL B 60 MSL to | I | AUG 026/46 | N45°05.00' W69°38.50' |
| 05 AGL B 60 MSL to | J | AUG 024/39 | N44°58.00' W69°42.00' |
| 05 AGL B 60 MSL to | K | AUG 016/37 | N44°56.50' W69°49.50' |
| 05 AGL B 60 MSL to | L | AUG 010/35 | N44°53.50' W69°54.50' |

| | | | |
|--------------------|----|------------|--------------------------|
| 05 AGL B 60 MSL to | M | AUG 005/33 | N44°51.50' W69°58.20' |
| SFC B 60 MSL to | N | AUG 352/34 | N44°50.00' W70°09.00' |
| SFC B 60 MSL to | O | AUG 352/41 | N44°56.00' W70°13.00' |
| SFC B 60 MSL to | P | AUG 345/49 | N45°00.00' W70°25.00' |
| 15 AGL B 60 MSL to | Q | AUG 340/53 | N45°01.00' W70°33.80' |
| 15 AGL B 60 MSL to | R | AUG 332/46 | N44°51.00' W70°35.00' |
| 15 AGL B 60 MSL to | S | AUG 342/43 | N44°53.50' W70°23.00' |
| SFC B 60 MSL to | P1 | AUG 345/49 | N45°00.00' W70°25.00' |

TERRAIN FOLLOWING OPERATIONS: Terrain following authorized from L to P.

ROUTE WIDTH - 5 NM either side of centerline except from H to J where it is 4 NM right (west) of centerline; J to N where it is 3 NM either side of centerline, and, from N to O where it is 5 NM left (southwest) and right (northeast) of centerline.

Special Operating Procedures:

- (1) For use in VMC only.
- (2) Route continuation from S to P authorized.
- (3) Alternate Entry/Exit points: A, B, D, F, P.
- (4) Maintain altitude B in P, Q, R, S pattern until in receipt of IFR clearance.

FSS's Within 100 NM Radius:
BGR, BTV

IR-900

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at or below 70 MSL | A | TAL 149/56 | N64°16.00' W151°44.00' |
| 01 AGL B 70 MSL to | B | BIG 253/97 | N64°08.00' W149°23.00' |
| 01 AGL B 77 MSL to | C | BIG 255/86 | N64°10.00' W148°58.00' |
| 01 AGL B 90 MSL to | D | BIG 255/39 | N64°05.00' W147°10.00' |
| 01 AGL B 83 MSL to Alternate Exit Track into R-2211: | E | BIG 274/26 | N64°12.00' W146°36.00' |

IR ROUTES

01 AGL B 90 MSL to D BIG 255/39 N64°05.00'
W147°10.00'

01 AGL B 77 MSL to AE EIL 200/22 N64°23.00'
W147°40.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route through Eielson MOA and R-2202 to the southern border of Birch MOA. Alternate exits place you at either Point D within the Eielson MOA, or AE in R-2211.
- (3) Restricted operations in and around active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R-2202 and R-2211 are required.
- (4) Contact Blair Lakes Range Control on primary 229.4, secondary 264.7 prior to entering R-2211. They may not be open. Eielson Range Control provides area deconfliction.
- (5) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). If filing the route past Point C and the Eielson MOA is active, expect ATC to give route and MOA clearance prior to route entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (6) All route points collocated with IR-916, VR-1900 and VR-1916.
- (7) VR-1905, VR-1915, IR-905 and IR-915 cross at Point A.
- (8) VR-937, VR-938, IR-919 and IR-921 cross at Point D.
- (9) Primary Entry: Point A. Alternate Entry: Point D.
- (10) Primary Exit: Point E. Alternate Exit: Points D and AE.
- (11) Remain clear of isolated cabins on segment B to C. Staying south of centerline will help ensure most cabins are avoided. In IMC conditions maintain 1,000' AGL minimum.
- (12) Use CAUTION for VFR traffic entering/exiting the mouth of the Wood River, segment C to D, and in the vicinity of the Nenana River on segment B to C for light aircraft transiting to/from Windy Pass.
- (13) Use CAUTION for uncharted Newman Airstrip (N63-58-41 W147-15-42) on segment C to D. See 11 AF Noise/Flight Sensitive Areas List (NFSL), item 6. Remain clear by 1 NM or 5,000' AGL, 15 May-15 Jun, 15 Nov-15 Dec. <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (14) Use CAUTION for hunting cabins and uncharted airstrips in vicinity of Gold King Creek (N64-11-47 W147-55-57) located on segment C to D. See NFSL, item 42. Remain clear by 3 NM or 1,500' AGL, continuous.

- (15) Use CAUTION for uncharted airstrips at N64-07.1 W148-00.0, N64-06.5 W147-33.2 and lake with float planes at N64-13 W150-53 (Mucho Lake).
- (16) Use CAUTION upon route exit when within/below the confines of the Birch MOA for traffic in the VFR Corridor along the Alaska Hwy. Remain above 3,500' MSL from the south side of the Tanana River to 1/2 NM north of the Alaska Hwy. See Birch MOA description in the Alaska Airspace Handbook at the web page mentioned above.
- (17) Route Entry: MPY1 (285.4/133.1), Exit: MPY2 (319.2/120.9).
- (18) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (19) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, MCG, ORT, TKA

IR-901

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| Cross | | | |
| at or below 65 MSL | A | BET 071/150 | N60°55.00' W156°44.00' |
| 01 AGL B 66 MSL to | B | SQA 190/24 | N60°45.00' W156°01.00' |
| 01 AGL B 72 MSL to | C | ILI 275/37 | N60°01.00' W156°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will ease the process.
- (2) Primary route into/under Naknek 2 MOA.
- (3) Restricted operations in and around active Special Use Airspace (SUA). Coordinated scheduling with the 3 WG for SUA deconfliction is required. If the affected SUA is active, you must remain clear or below until given approval. Radio contact may be difficult.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). If any affected MOAs are active, expect ATC to give route and MOA clearance prior to route entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.

- (5) LOWAT approved on route segments when within the confines of the (active) NAKNEK MOA. Coordinate use with the SA.
- (6) All route points collocated with IR-911, VR-931, and VR-932.
- (7) IR-903, IR-913, VR-933, and VR-934 cross at Point A.
- (8) Entry Point: A.
- (9) Primary Exit: Point C.
- (10) Remain clear of lodge located on the Mulchatna River (N60-24 W155-54) on segment B to C, by 1500' AGL or 1 NM (1 May-30 Sep). See 11 AF Noise/Flight Sensitive Areas List (NFSL), item 20. (<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>).
- (11) Route Entry: SVW (387.1), Exit: AKN (354.0/124.8).
- (12) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (13) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

ENA, ILI, MCG, HOM, DLG

IR-902

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| Cross | | | |
| at or below 40 MSL | A | MCG 117/36 | N62°31.00' W154°43.00' |
| 01 AGL B 40 MSL to | B | MCG 211/20 | N62°44.00' W156°10.00' |
| 01 AGL B 70 MSL to | C | UNK 104/86 | N63°04.00' W158°04.00' |
| 01 AGL B 40 MSL to | D | UNK 080/45 | N63°45.00' W159°02.00' |
| 01 AGL B 40 MSL to | E | UNK 062/67 | N64°02.00' W158°11.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will ease the process.
- (2) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity. Ask for clearance at least five minutes prior to route entry.

- (3) All route points collocated with IR-912, VR-1902, and VR-1912.
- (4) IR-905, IR-915, VR-1905 and VR-1915 cross at Points A and B.
- (5) Primary Entry: Point A. Alternate Entry: Point B.
- (6) Primary Exit: Point E. Alternate Exit: Point B.
- (7) During odd number years, avoid overflight below 1500' AGL of segment B to C during the Iditarod Sled Dog Race. On segments C through E, remain at least 1 NM E of the Yukon River shore during the race period, for approximately first two weeks in March.
- (8) Remain clear of Peregrine Falcon Nests on segment D to E. Remain 1 NM E of the Yukon River shore or 2000' AGL, (15 Apr-31 Aug).
- (9) Remain above 1500' AGL on segments C through E during moose hunting season, (27 Aug-30 Sep).
- (10) Segments B to E are flown over Innoko National Wildlife Refuge and Wilderness Areas. Remain clear of human activity if seen by at least 1/2 mile. (1 May-30 Sep).
- (11) Use CAUTION for McGrath Airport Class E Airspace, 5 NM outside the route, segment A to B.
- (12) Hunting camp located on Iditarod River at N63-10.9 W158-18.0.
- (13) Route Entry: MCG (353.8/128.1), Exit: GAL (290.2/127.0).
- (14) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (15) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

MCG, TKA

IR-903

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| Cross at 70 MSL to | A | TKA 224/133 | N61°29.00' W154°27.00' |
| 01 AGL B 70 MSL to | B | MCG 163/83 | N61°34.00' W155°42.00' |
| 01 AGL B 60 MSL to | C | SQA 234/34 | N60°55.00' W156°44.00' |
| 01 AGL B 60 MSL to | D | BET 084/111 | N60°28.00' W158°07.00' |
| 01 AGL B 60 MSL to | E | AKN 318/76 | N59°54.00' W157°38.00' |
| 01 AGL B 60 MSL to | F | AKN 306/70 | N59°42.00' W158°00.00' |
| 01 AGL B 60 MSL to | G | AKN 302/53 | N59°25.00' W157°48.00' |

IR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will ease the process.
- (2) Primary route through Stony A/B MOAs, Naknek 1 MOA, and beneath the floor of Naknek 1 MOA. Alternate Entry/Exit Point C places you north of Naknek 1 MOA.
- (3) Restricted operations in and around active Special Use Airspace (SUA). Coordinated scheduling with the 3 WG for SUA deconfliction is required. If the affected SUA is active, you must remain clear or below until given approval. Radio contact may be difficult.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). If Stony A/B or Naknek 1 MOA are active, expect ATC to give route and MOA clearance prior to route entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of the SUA.
- (5) LOWAT approved on route segments when within the confines of (active) MOA airspace. Coordinate use with the SA.
- (6) All route points collocated with IR-913, VR-933 and VR-934.
- (7) IR-905, IR-915, VR-1905 and VR-1915 cross at Point A.
- (8) IR-901, IR-911, VR-931 and VR-932 cross at Point C.
- (9) Primary Entry: Point A. Alternate Entry: Point C.
- (10) Primary Exit: Point G. Alternate Exit: Point C.
- (11) Use CAUTION for rapidly rising terrain east of Point A.
- (12) Remain clear of Tikchik Lodge located on Nuyakuk Lake (N59-58 W158-28) west of segment D to E, by 1500' AGL or 3 NM. See 11 AF Noise/Flight Sensitive Areas List (NFSL), DOPAA item B. (<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>).
- (13) Use CAUTION for Koliganek Airport Class E Airspace, 4 NM outside the route, segment E to F.
- (14) Route Entry: SVW (387.1), Exit: DLG (282.35/132.75).
- (15) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (16) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

ENA, ILI, MCG, HOM, DLG

IR-905

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| at or below 170 MSL | A | TKA 192/80 | N61°15.00' W151°49.00' |
| 01 AGL B 170 MSL to | B | TKA 208/92 | N61°23.00' W152°41.00' |
| 01 AGL B 170 MSL to | C | TKA 218/89 | N61°37.00' W152°54.00' |
| 01 AGL B 135 MSL to | D | TKA 223/109 | N61°36.00' W153°40.00' |
| 01 AGL B 145 MSL to | E | TKA 224/133 | N61°29.00' W154°27.00' |
| 01 AGL B 95 MSL to | F | TKA 231/139 | N61°41.00' W154°51.00' |
| 01 AGL B 83 MSL to | G | MCG 161/42 | N62°15.00' W155°36.00' |
| 01 AGL B 73 MSL to | H | MCG 117/36 | N62°31.00' W154°43.00' |
| 01 AGL B 50 MSL to | I | MCG 069/49 | N62°58.00' W153°50.00' |
| 01 AGL B 70 MSL to | J | MCG 026/56 | N63°36.00' W154°07.00' |
| 01 AGL B 86 MSL to | K | MCG 013/66 | N63°53.00' W154°18.00' |
| 01 AGL B 75 MSL to | L | TAL 186/67 | N64°10.00' W153°15.00' |
| 01 AGL B 75 MSL to Alternate Exit Track A: | M | TAL 149/56 | N64°16.00' W151°44.00' |
| 01 AGL B 83 MSL to | G | MCG 161/42 | N62°15.00' W155°36.00' |
| 01 AGL B 70 MSL to Alternate Entry Track: | AH | MCG 211/20 | N62°44.00' W156°10.00' |
| 01 AGL B 50 MSL to Alternate Exit Track: | I1 | MCG 069/49 | N62°58.00' W153°50.00' |
| 01 AGL B 170 MSL to | C1 | TKA 218/89 | N61°37.00' W152°54.00' |
| 01 AGL B 135 MSL to | D1 | TKA 223/109 | N61°36.00' W153°40.00' |
| 01 AGL B 70 MSL to | J | MCG 026/56 | N63°36.00' W154°07.00' |
| 01 AGL B 86 MSL to | K1 | MCG 013/66 | N63°53.00' W154°18.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline, except near Point C. From a point 10 NM southeast of Point C to a point 4 NM west of Point C the route will be 5 NM right and 3 NM left of centerline. This avoids a national park.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will ease the process.
- (2) Primary route through Stony A/B MOAs, and in/under Galena MOA. Alternate Entry Points E, H and I place you either in or just north of Stony A MOA. Alternate Exit Points C, D, E, H, J, K and AH are either just outside MOA boundaries or within. The routing; G to AH will take you through/under Stony B MOA.

- (3) Restricted operations in and around active Special Use Airspace (SUA). Coordinated scheduling with the 3 WG for SUA deconfliction is required. If the affected SUA is active, you must remain clear or below until given approval.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). If Stony A/B or Galena MOA are active, expect ATC to give route and MOA clearance prior to route entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (5) LOWAT approved on route segments when within the confines of an ACTIVE MOA. Coordinate use with the SA.
- (6) All route points collocated with VR-1905, VR-1915 and Points A through K on IR-915.
- (7) IR-903, IR-913, VR-933 and VR-934 cross at Point E.
- (8) IR-902, IR-912, VR-1902 and VR-1912 cross at Points H and AH.
- (9) IR-900, IR-916, VR-1900 and VR-1916 cross at Point M.
- (10) Primary Entry: Point A. Alternate Entry: Points E, H and I.
- (11) Primary Exit: Point M. Alternate Exit: Points C, D, E, H, J, K and AH.
- (12) Segment B through E, be aware of Lake Clark National Park immediately south of the route boundary.
- (13) Segment H to I, avoid overflight below 1,500' AGL on the South Fork of the Kuskokwim River during the Iditarod Sled Dog Race, approximately the first two weeks of March. Check with SA for exact dates.
- (14) Use CAUTION, ensure you cross Point H when NW bound, at or below 5,000' MSL.
- (15) Segment K to L, remain clear of Nowitna National Wild and Scenic River by 2 NM or 2,000' AGL from 15 May to 15 July. See 11 AF Noise/Flight Sensitive Areas List (NFSL), item number 44.
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (16) Use CAUTION for 20' radio relay tower on top of mountain at Point G.
- (17) Use CAUTION for McGrath Airport Class E Airspace, 9 NM outside the route, Segment G to AH. Anchorage International Airport - highly congested airspace immediately east of Point A. Departing traffic north bound traverses the Susitna River valley. Arrivals from the north follow same routing. Also, low VFR traffic along powerlines east/west bound along north shore of Cook Inlet from Point McKenzie to Mt. Spurr all summer long.
- (18) Route Entry: SVW (387.1), Exit: MPY1 (285.4/133.1).
- (19) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (20) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

ENA, PAQ, ILI, MCG, HOM, TKA, FAI

IR-909

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| Cross | | | |
| at or below 106 MSL | A | BIG 076/39 | N63°54.00' W144°16.00' |
| 01 AGL B 106 MSL to | B | BIG 050/52 | N64°15.00' W143°50.00' |
| 01 AGL B 106 MSL to | C | BIG 335/28 | N64°28.00' W145°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route under and through Buffalo, Yukon 3A Low and Yukon 1 MOAs. Alternate Entry/Exit B places you within Yukon 1 MOA.
- (3) Restricted operations in and around active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). Expect ATC to give route and MOA clearance prior to route entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of the SUA.
- (5) LOWAT approved on route segments when within (active) MOA airspace. Coordinate with the SA.
- (6) All route points collocated with IR-939, VR-1909 and VR-1939.
- (7) IR-926, IR-927, VR-1926 and VR-1927, cross at Point A.
- (8) IR-917, IR-918, VR-935 and VR-936 cross at Points A, B and C.
- (9) IR-928, IR-929, VR-1928 and VR-1929 cross at Point C.
- (10) Primary Entry: Point A. Alternate Entry: Point B.
- (11) Primary Exit: Point C. Alternate Exit: Point B.
- (12) Seasonal Caribou calving sensitive area entire route (15 May-15 July); see local OGV FCIF's for details and locations. Also see Airspace Presentation link listed in number 13.
- (13) Numerous sensitive areas near Alaska Highway. See 11 AF Noise/Flight Sensitive Areas List (NFSL), (<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>).

IR ROUTES

- (14) Use CAUTION for Pogo Mine on segment B to C. Remain clear of mine by 5 NM or 4500' MSL centered on N64-25.8 W144-48.2, and Goodpaster River by 2 NM or 4500' MSL from southern border of Yukon 1 MOA to airstrip located at N64-28 W144-55 continuous. Mine has high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity year round. See 11 AF NFSL item number 43.
- (15) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. One known camp is located at N64-17 W144-16 and uses a helicopter for re-supply.
- (16) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3500' MSL when within 2 NM of the highway (Buffalo) or within 1/2 mile north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the 11 AF NFSL.
- (17) Route Entry: BIG (322.5/135.3), Exit: MPY2 (319.2/120.9)
- (18) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (19) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS) See Alaska Supplement.

IR-911

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| Cross | | | |
| at or below 72 MSL | A | ILI 277/37 | N60°01.00' W156°00.00' |
| 01 AGL B 72 MSL to | B | SQA 190/24 | N60°45.00' W156°01.00' |
| 01 AGL B 66 MSL to | C | BET 071/150 | N60°55.00' W156°44.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will ease the process.
- (2) Primary route into /under Naknek 2 MOA.

- (3) Restricted operations in and around active Special Use Airspace (SUA). Coordinated scheduling with the 3 WG for SUA deconfliction is required. If the affected SUA is active, you must remain clear or below until given approval. Radio contact may be different.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). If any affected MOAs are active, expect ATC to give route and MOA clearance prior to route entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (5) LOWAT approved on route segments when within the confines of the (active) Naknek MOA. Coordinate use with the SA.
- (6) All route points collocated with IR-901, VR-931 and VR-932.
- (7) IR-903, IR-913, VR-933 and VR-934 cross at Point C.
- (8) Entry: Point A.
- (9) Exit: Point C.
- (10) Remain clear of lodge located on the Mulchatna River (N60-24 W155-54) on segment A to B, by 1500' AGL or 1 NM (1 May-30 Sep). See 11 AF Noise/Flight Sensitive Areas List (NFSL), item 20. (<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>).
- (11) Route Entry: AKN (354.0/124.8), Exit: SVW (387.1).
- (12) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (13) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

ENA, ILI, MCG, HOM, DLG

IR-912

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| Cross | | | |
| at or below 40 MSL | A | UNK 062/67 | N64°02.00' W158°11.00' |
| 01 AGL B 40 MSL to | B | UNK 080/45 | N63°45.00' W159°02.00' |
| 01 AGL B 40 MSL to | C | UNK 104/86 | N63°04.00' W158°04.00' |
| 01 AGL B 70 MSL to | D | MCG 211/20 | N62°44.00' W156°10.00' |
| 01 AGL B 40 MSL to | E | MCG 117/36 | N62°31.00' W154°43.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will ease the process.
- (2) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity. Ask for clearance at least five minutes prior to route entry.
- (3) All route points collocated with IR-902, VR-1902 and VR-1912.
- (4) IR-905, IR-915, VR-1905 and VR-1915 cross at Points D and E.
- (5) Primary Entry: Point A. Alternate Entry: Point B.
- (6) Primary Exit: Point E. Alternate Exit: Point D.
- (7) During odd number years, avoid overflight below 1500' AGL of segment C to D during the Iditarod Sled Dog Race. On segments A through C remain at least 1 NM E of the Yukon River shore during the race period, approximately first two weeks in March.
- (8) Remain clear of Peregrine Falcon Nests on segment A to B. Remain 1 NM E of the Yukon River shore or 2000' AGL, (15 Apr-31 Aug).
- (9) Remain above 1500' AGL on segments A to C during moose hunting season, (27 Aug-30 Sep).
- (10) Segments A to D are flown over Innoko National Wildlife Refuge and Wilderness Areas. Remain clear of human activity if seen by at least 1/2 mile. (1 May-30 Sep).
- (11) Use CAUTION for McGrath Airport Class E Airspace, 5 NM outside the route, segment D to E.
- (12) Hunting camp located on Iditarod River at N63-10.9 W158-18.
- (13) Route Entry: GAL (290.2/127.0), Exit: MCG (353.8/128.1)
- (14) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (15) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

MCG, TKA

IR-913

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| Cross | | | |
| at or below 64 MSL | A | AKN 302/53 | N59°25.00' W157°48.00' |

| | | | |
|---------------------|---|-------------|---------------------------|
| 01 AGL B 64 MSL to | B | AKN 306/70 | N59°42.00' W158°00.00' |
| 01 AGL B 64 MSL to | C | AKN 318/76 | N59°54.00' W158°38.00' |
| 01 AGL B 64 MSL to | D | BET 084/111 | N60°28.00' W158°07.00' |
| 01 AGL B 74 MSL to | E | SQA 234/34 | N60°55.00' W156°44.00' |
| 01 AGL B 60 MSL to | F | MCG 163/83 | N61°34.00' W155°42.00' |
| 01 AGL B 100 MSL to | G | TKA 224/133 | N61°29.00' W154°27.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will ease the process.
- (2) Primary route through Stony A/B MOAs, Naknek 1 MOA, and beneath the floor of Naknek 1 MOA. Alternate Entry/Exit Point E places you north of Naknek 1 MOA.
- (3) Restricted operations in and around active Special Use Airspace (SUA). Coordinated scheduling with the 3 WG for SUA deconfliction is required. If the affected SUA is active, you must remain clear or below until given approval. Radio contact may be difficult.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). If Stony A/B or Naknek 1 MOA are active, expect ATC to give route and MOA clearance prior to route entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of the SUA.
- (5) LOWAT approved on route segments when within the confines of (active) MOA airspace. Coordinate use with the SA.
- (6) All route points collocated with IR-903, VR-933 and VR-934.
- (7) IR-905, IR-915, VR-1905 and VR-1915 cross at Point G.
- (8) IR-901, IR-911, VR-931 and VR-932 cross at Point E.
- (9) Primary Entry: Point A. Alternate Entry: Point E.
- (10) Primary Exit: Point G. Alternate Exit: Point E.
- (11) Use CAUTION for rapidly rising terrain east of Point G.
- (12) Remain clear of Tikchik Lodge located on Nuyakuk Lake (N59-58 W158-28) west of segment C to D, by 1500' AGL or 3 NM. See 11 AF Noise/Flight Sensitive Areas List (NFSL), DOPAA item B. (<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>).
- (13) Use CAUTION for Koliganek Airport Class E Airspace, 4 NM outside the route, segment B to C.
- (14) Route Entry: DLG (282.35/132.75), Exit: SVW (387.1).
- (15) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (16) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

ENA, ILI, MCG, HOM, DLG

IR ROUTES

IR-915

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------|----|--------------|-------------|
| Cross | | | |
| at or below 75 MSL | A | TAL 149/56 | N64°16.00' |
| Alternate Entry Track: | | | W151°44.00' |
| B | | | |
| 01 AGL B 75 MSL to | B | TAL 186/67 | N64°10.00' |
| | | | W153°15.00' |
| 01 AGL B 75 MSL to | C | MCG 013/66 | N63°53.40' |
| | | | W154°18.00' |
| 01 AGL B 86 MSL to | D | MCG 026/56 | N63°36.00' |
| | | | W154°07.00' |
| 01 AGL B 70 MSL to | E | MCG 069/49 | N62°58.00' |
| Alternate Exit Track: | | | W153°50.00' |
| 01 AGL B 50 MSL to | F | MCG 117/36 | N62°31.00' |
| | | | W154°43.00' |
| 01 AGL B 73 MSL to | G | MCG 161/42 | N62°15.00' |
| Alternate Entry Track: | | | W155°36.00' |
| 01 AGL B 83 MSL to | H | TKA 231/139 | N61°41.00' |
| | | | W154°51.00' |
| 01 AGL B 90 MSL to | I | TKA 224/133 | N61°29.00' |
| | | | W154°27.00' |
| 01 AGL B 145 MSL to | J | TKA 223/109 | N61°36.00' |
| | | | W153°40.00' |
| 01 AGL B 135 MSL to | K | TKA 218/89 | N61°37.00' |
| Alternate Entry Track | | | W152°54.00' |
| A: | | | |
| 01 AGL B 70 MSL to | AF | MCG 211/20 | N62°44.00' |
| | | | W156°10.00' |
| 01 AGL B 73 MSL to | G1 | MCG 161/42 | N62°15.00' |
| Alternate Entry Track: | | | W155°36.00' |
| 01 AGL B 86 MSL to | D1 | MCG 026/56 | N63°36.00' |
| | | | W154°07.00' |
| 01 AGL B 70 MSL to | E1 | MCG 069/49 | N62°58.00' |
| Alternate Exit Track: | | | W153°50.00' |
| 01 AGL B 75 MSL to | B | TAL 186/67 | N64°10.00' |
| | | | W153°15.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline, except near Point K. From a point 4 NM W of Point K to Point K the route will be 5 NM left and 3 NM right of centerline. This avoids a national park.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will ease the process.

- (2) Primary route through Stony A/B MOAs, and in/under Galena MOA. Alternate Entry Points D, E, F, AF, H and I place you either in Stony A MOA, Galena MOA, between the two or within/under Stony B MOA. Alternate Exit Points B, F and I are near MOA boundaries. The routing AF to G will take you in/under Stony B MOA.
- (3) Restricted operations in and around active Special Use Airspace (SUA). Coordinated scheduling with the 3 WG for SUA deconfliction is required. If the affected SUA is active, you must remain clear or below until given approval.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). If Stony A/B or Galena MOA are active, expect ATC to give route and MOA clearance prior to route entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (5) LOWAT approved on route segments when within the confines of an ACTIVE MOA. Coordinate use with the SA.
- (6) All route points collocated with IR-905, VR-1905, VR-1915. Note: these three routes southern two points are not included in IR-915.
- (7) IR-903, IR-913, VR-933 and VR-934 cross at Point I.
- (8) IR-902, IR-912, VR-1902 and VR-1912 cross at Points F and AF.
- (9) IR-900, IR-916, VR-1900 and VR-1916 cross at Point A.
- (10) Primary Entry: Point A. Alternate Entry: Points D, E, F, AF, H and I.
- (11) Primary Exit: Point K. Alternate Exit: Points B, F and I.
- (12) Segment B to C, remain clear of Nowitna National Wild and Scenic River by 2 NM or 2,000' AGL from 15 May to 15 July. See 11 AF Noise/Flight Sensitive Areas List (NFSL), item number 44.
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (13) Segment E to F, avoid overflight below 1,500' AGL on the South Fork of the Kuskokwim River during the Iditarod Sled Dog Race, approximately the first two weeks of March. Check with SA for exact dates.
- (14) Use CAUTION, do not climb above 5,000' MSL until 5 NM past Point F when SW Bound on Segment F to G.
- (15) Segment J to K, be aware of Lake Clark National Park immediately south of the route boundary.
- (16) Use CAUTION for 20' radio relay tower on top of mountain at Point G.
- (17) Use CAUTION for McGrath Airport Class E Airspace, 9 NM outside the route, Segment AF to G. Anchorage International Airport - highly congested airspace immediately east of Point K. Departing traffic north bound traverses the Susitna River valley. Arrivals from the north follow same routing. Also, low VFR traffic along powerlines east/west bound along north shore of Cook Inlet from Point McKenzie to Mt. Spurr all summer long.
- (18) Route Entry: MPY1 (285.4/133.1), Exit: SVW (387.1).
- (19) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (20) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:
ENA, PAQ, ILI, MCG, HOM, TKA, FAI

IR-916

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross | | | |
| at or below 83 AGL | A | BIG 274/26 | N64°12.00' W146°36.00' |
| 01 AGL B 100 MSL to | B | BIG 255/39 | N64°05.00' W147°10.00' |
| 01 AGL B 90 MSL to | C | BIG 255/86 | N64°10.00' W148°58.00' |
| 01 AGL B 77 MSL to | D | BIG 253/97 | N64°08.00' W149°23.00' |
| 01 AGL B 70 MSL to Alternate Entry Track from R-2211: | E | TAL 149/56 | N64°16.00' W151°44.00' |
| 01 AGL B 83 MSL to | AA | EIL 200/22 | N64°23.00' W147°40.00' |
| 01 AGL B 100 MSL to Thence via published route. | B1 | BIG 255/39 | N64°05.00' W147°10.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route beginning near Eielson MOA in R-2202. Alternate entry begins in R-2211. Alternate exit B leaves you in Eielson MOA.
- (3) Restricted operations in and around active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R-2202 and R-2211 are required.
- (4) Contact Blair Lakes Range Control on primary 229.4, secondary 264.7 prior to entering R-2211. They may not be open. Eielson Range Control provides area deconfliction.

- (5) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). If Eielson MOA is active, expect ATC to give route and MOA clearance prior to route entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (6) All route points collocated with IR-900, VR-1900 and VR-1916.
- (7) VR-1905, VR-1915, IR-905 and IR-915 cross at Point E.
- (8) VR-937, VR-938, IR-919 and IR-921 cross at Point B.
- (9) Primary Entry: Point A. Alternate Entry: Points AA and B.
- (10) Primary Exit: Point E. Alternate Exit: Point B.
- (11) Remain clear of isolated cabins on segment C to D. Staying south of centerline will help ensure most cabins are avoided. In IMC conditions maintain 1,000' AGL minimum.
- (12) Use CAUTION for VFR traffic entering/exiting the mouth of the Wood River, segment B to C, and in the vicinity of the Nenana River on segment C to D for light aircraft transiting to/from Windy Pass.
- (13) Use CAUTION for uncharted Newman Airstrip (N63-58-41 W147-15-42) on segment B to C. See 11 AF Noise/Flight Sensitive Areas List (NFSL), item 6. Remain clear by 1 NM or 5,000' AGL, 15 May-15 Jun, 15 Nov-15 Dec. <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (14) Use CAUTION for hunting cabins and uncharted airstrips in vicinity of Gold King Creek (N64-11-47 W147-55-57) located on segment B to C. See NFSL, item 42. Remain clear by 3 NM or 1,500' AGL, continuous.
- (15) Use CAUTION for uncharted airstrips at N64-07.1 W148-00.0, N64-06.5 W147-33.2 and lake with float planes at N64-13 W150-53 (Mucho Lake).
- (16) Use CAUTION near primary route entry when within/below the confines of the Birch MOA for traffic in the VFR Corridor along the Alaska Hwy. Remain above 3,500' MSL from the south side of the Tanana River to 1/2 NM north of the Alaska Hwy. See Birch MOA description in the Alaska Airspace Handbook at the web page mentioned above.
- (17) Route Entry: MPY2 (319.2/120.9), Exit: MPY1 (285.4/133.1).
- (18) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (19) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, MCG, ORT, TKA

IR-917

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

IR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross | | | |
| at or below 106 MSL | A | BIG 033/70 | N64°38.00' W143°27.00' |
| 01 AGL B 106 MSL to | B | BIG 041/112 | N64°46.00' W141°47.00' |
| 01 AGL B 106 MSL to | C | BIG 055/70 | N64°13.00' W143°05.00' |
| 01 AGL B 106 MSL to Alternate Exit Track: | D | BIG 076/39 | N63°54.00' W144°16.00' |
| 01 AGL B 106 MSL to | C | BIG 055/70 | N64°13.00' W143°05.00' |
| 01 AGL B 106 MSL to | AD | BIG 050/52 | N64°15.00' W143°50.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route under and through Buffalo, Yukon 3A Low and Yukon 1 MOAs.
- (3) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (5) LOWAT approved on route segments when within the confines of an ACTIVE MOA. Coordinate use with the SA.
- (6) All route points collocated with IR-918, VR-935 (A, B, C and D, and alternate exit track only) and VR-936 (A, B, C and D, and alternate exit track only).
- (7) IR-909, IR-939, VR-1909 and VR-1939 cross at Points D and AD.
- (8) IR-922, IR-923, VR-940 and VR-941 cross at Point C.
- (9) IR-952, IR-953, VR-954 and VR-955 cross at Point C.
- (10) Primary Entry: Point A. Alternate Entry: Points B and C.
- (11) Primary Exit: Point D. Alternate Exit: Points B, C and AD.
- (12) Seasonal Caribou calving sensitive area entire route (15 May-15 July). See local OGV FCIFs for details and locations. Also see Airspace Presentation link listed in number 13.

- (13) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (14) Use CAUTION for uncharted airstrip, Segment B to C at N64-33 W142-31. Remain clear by 1,500' AGL or 1 NM, continuous.
- (15) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. One known camp is located at N64-17 W144-16 and uses a helicopter for resupply. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (16) Use CAUTION for uncharted airstrip at Healy Lake N63-59.5 W144-42.5.
- (17) Cabins located along creek at N64-36 W152-09.5.
- (18) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3,500' MSL when within 2 NM of the highway (Buffalo) or within 1/2 mile north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the NFSL.
- (19) Route Entry: MPY2 (319.2/120.9), Exit: BIG (322.5/135.3).
- (20) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (21) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS) See Alaska Supplement

IR-918

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross | | | |
| at or below 106 MSL | A | BIG 076/39 | N63°54.00' W144°16.00' |
| 01 AGL B 106 MSL to | B | BIG 055/70 | N64°13.00' W143°05.00' |
| 01 AGL B 106 MSL to | C | BIG 041/112 | N64°46.00' W141°47.00' |
| 01 AGL B 106 MSL to Alternate Entry Track: | D | BIG 033/70 | N64°38.00' W143°27.00' |
| 01 AGL B 106 MSL to | AA | BIG 050/52 | N64°15.00' W143°50.00' |
| 01 AGL B 106 MSL to Thence via published route. | B1 | BIG 055/70 | N64°13.00' W143°05.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route under and through Buffalo, Yukon 3A Low and Yukon 1 MOAs.
- (3) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (5) LOWAT approved on route segments when within the confines of an ACTIVE MOA. Coordinate use with the SA.
- (6) All route points collocated with IR-917, VR-935 (except E, F, G and H) and VR-936 (except A, B, C and D).
- (7) IR-909, IR-939, VR-1909 and VR-1939 cross at Points A and AA.
- (8) IR-922, IR-923, VR-940 and VR-941 cross at Point B.
- (9) IR-952, IR-953, VR-954 and VR-955 cross at Point C.
- (10) Primary Entry: Point A. Alternate Entry: Point AA.
- (11) Primary Exit: Point D. Alternate Exit: Points B and C.
- (12) Seasonal Caribou calving sensitive area entire route (15 May-15 July). See local OGV FCIFs for details and locations. Also see Airspace Presentation link listed in number 13.
- (13) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (14) Use CAUTION for uncharted airstrip, Segment B to C at N64-33 W142-31. Remain clear by 1,500' AGL or 1 NM, continuous.
- (15) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. One known camp is located at N64-17 W144-16 and uses a helicopter for resupply. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (16) Use CAUTION for uncharted airstrip at Healy Lake N63-59.5 W144-42.5.
- (17) Cabins located along creek at N64-36 W152-09.5.
- (18) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3,500' MSL when within 2 NM of the highway (Buffalo) or within 1/2 mile north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the NFSL.

(19) Route Entry: BIG (322.5/135.3), Exit: MPY2 (319.2/120.9).

(20) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.

(21) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS) See Alaska Supplement

IR-919

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross | | | |
| at or below 110 MSL | A | TKA 064/59 | N62°17.00' W148°00.00' |
| 05 AGL B 110 MSL to | B | TKA 041/88 | N62°51.00' W147°09.00' |
| 05 AGL B 93 MSL to | C | BIG 162/62 | N62°59.00' W145°54.00' |
| 05 AGL B 110 MSL to lower altitude enroute to D is 05 AGL or 60 MSL whichever is higher | D | BIG 158/48 | N63°12.00' W145°45.00' |
| 05 AGL B 129 MSL to lower altitude enroute to E is 05 AGL or 60 MSL whichever is higher | E | BIG 175/25 | N63°37.00' W146°00.00' |
| 01 AGL B 167 MSL to | F | BIG 219/33 | N63°45.00' W146°48.00' |
| 01 AGL B 167 MSL to Alternate Exit Track One into R-2202: | G | BIG 255/39 | N64°05.00' W147°10.00' |
| 05 AGL B 129 MSL to lower altitude enroute to E is 05 AGL or 60 MSL whichever is higher | E | BIG 175/25 | N63°37.00' W146°00.00' |
| 01 AGL B 133 MSL to Alternate Exit Track Two into R-2202: | AF | BIG 219/20 | N63°51.00' W146°22.00' |
| 01 AGL B 167 MSL to | F | BIG 219/33 | N63°45.00' W146°48.00' |
| 01 AGL B 167 MSL to | BG | BIG 222/27 | N63°49.00' W146°38.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

IR ROUTES

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route through and under Fox 1, 2 and 3, Buffalo and Eielson MOAs. Alternate Entry Points D and E place you outside any MOAs in a highly congested air corridor. Alternate Exit Points D, E, AF and BG place you within R-2202.
- (3) Restricted operations in and around active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R-2202 and R-2211 are required.
- (4) Contact Blair Lakes Range Control on primary 229.4, secondary 264.7 prior to entering R-2211. They may not be open. Eielson Range Control provides area deconfliction.
- (5) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). If filing the route through any active MOA airspace, expect ATC to give route and MOA clearance prior to route entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (6) All route points collocated with IR-921, VR-937 and VR-938.
- (7) VR-940, VR-941, IR-922 and IR-923 cross at Point D.
- (8) VR-1926, VR-1927, IR-926 and IR-927 cross at Point E.
- (9) VR-1900, VR-1916, IR-900 and IR-916 cross at Point G.
- (10) Primary Entry: Point A. Alternate Entry: Points D and E.
- (11) Primary Exit: Point G. Alternate Exit: Points D, E, AF and BG.
- (12) Remain clear of Caribou Calving Area, Segment A to B by 1,000' AGL entire route segment, 1 May-30 June. See 11 AF Noise/Flight Sensitive Areas List (NFSL) item 26 on <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (13) Remain clear of Caribou Hunting Area, Segment B to C by 1,000' AGL entire route segment, 1 Aug-30 Sep. See NFSL item 41.
- (14) Remain clear of Fielding Lake State Rec. Sites, Segment C to D (N63-10 W145-40 and N63-11-12 W145-38) by 2,000' AGL or 1 NM, 15 May-30 Sep. See NFSL item 23.
- (15) Use CAUTION, remain below 11,000' MSL when within 4 NM of Victor Airway 481, Segments C to E.
- (16) Remain clear of Delta National Wild and Scenic River, Segment C to E by 5 NM either side of river or 5,000' MSL, 27 June-11 July. See NFSL item 19.
- (17) Remain clear of Donnelly Creek State Rec. Site, near Point E (N63-39-40 W145-53) by 2,000' AGL or 1 NM, 15 May-30 Sep. See NFSL item 24.
- (18) Use CAUTION for Black Rapids Airport, near Point E (N63-32-06 W145-51-39). Remain clear by 3 NM or 1,500' AGL. See Buffalo MOA description in the Alaska Airspace Handbook on web site listed above.

- (19) Use CAUTION for Newman Creek Airstrip, Segment F to G (N63-58-41 W147-15-42). Remain clear by 5,000' AGL or 1 NM, 15 May-15 June and 15 Nov-15 Dec. See NFSL item 6.
- (20) Use CAUTION for high density VFR traffic transiting the Isabel Pass, near Point E.
- (21) During September maintain 1,000' AGL on Segments E to G. This is a MACA safety issue due to high density GA flight operations during the fall hunting season. This is a high use area - including the area covered in R-2202.
- (22) Route Entry: TKA (254.3/125.55), Exit: MPY2 (319.2/120.9), Alternate Exit Point E use BIG (322.5/135.3).
- (23) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (24) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

ENA, FAI, ORT, PAQ, TKA

IR-921

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross | | | |
| at or below 167 MSL | A | BIG 255/39 | N64°05.00' W147°10.00' |
| 01 AGL B 167 MSL to | B | BIG 219/33 | N63°45.00' W146°48.00' |
| 01 AGL B 167 MSL to | C | BIG 175/25 | N63°37.00' W146°00.00' |
| 05 AGL B 129 MSL to lower altitude enroute to D is 05 AGL or 60 MSL whichever is higher | D | BIG 158/48 | N63°12.00' W145°45.00' |
| 05 AGL B 113 MSL to lower altitude enroute to E is 05 AGL or 60 MSL whichever is higher | E | BIG 162/62 | N62°59.00' W145°54.00' |
| 05 AGL B 93 MSL to | F | TKA 041/88 | N62°51.00' W147°09.00' |
| 05 AGL B 110 MSL to Alternate Entry Track One from R-2202: | G | TKA 064/59 | N62°17.00' W148°00.00' |
| 01 AGL B 167 MSL to | AA | BIG 222/27 | N63°49.00' W146°38.00' |
| 01 AGL B 167 MSL to Alternate Entry Track Two from R-2202: | B1 | BIG 219/33 | N63°45.00' W146°48.00' |

01 AGL B 110 MSL to BB BIG 219/20 N63°51.00'
W146°22.00'

01 AGL B 167 MSL to C1 BIG 175/25 N63°37.00'
Thence via published route. W146°00.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route through and under Fox 1, 2 and 3, Buffalo and Eielson MOAs. Alternate Entry Points C and D place you outside any MOAs, and AA and BB are in R-2202. Alternate Exit Points C and D place you outside MOA boundaries.
- (3) Restricted operations in and around active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R-2202 and R-2211 are required.
- (4) Contact Blair Lakes Range Control on primary 229.4, secondary 264.7 prior to entering R-2211. They may not be open. Eielson Range Control provides area deconfliction.
- (5) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). If filing the route through any active MOA airspace, expect ATC to give route and MOA clearance prior to route entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (6) All route points collocated with IR-919, VR-937 and VR-938.
- (7) IR-900, IR-916, Vr1900 and VR-1916 cross at Point A.
- (8) IR-926, IR-927, VR-1926 and VR-1927 cross at Point C.
- (9) IR-922, IR-923, VR-940 and VR-941 cross at Point D.
- (10) Primary Entry: Point A. Alternate Entry: Points C, D, AA and BB.
- (11) Primary Exit: Point G. Alternate Exit: Points C and D.
- (12) Use CAUTION for Newman Creek Airstrip, Segment A to B (N63-58-41 W147-15-42). Remain clear by 5,000' AGL or 1 NM, 15 May-15 June and 15 Nov-15 Dec. See 11 AF Noise/Flight Sensitive Areas List (NFSL), item 6. <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (13) During September maintain 1,000' AGL on Segments A to C. This is a MACA safety issue due to high density GA flight operations during the fall hunting season. This is a high use area - including the area covered in R-2202.
- (14) Use CAUTION for high density VFR traffic transiting the Isabel Pass, near Point C.
- (15) Use CAUTION for Black Rapids Airport, Segment C to D (N63-32-06 W145-51-39). Remain clear by 3 NM or 1,500' AGL. See Buffalo MOA description in the Alaska Airspace Handbook on web site listed above.
- (16) Remain clear of Donnelly Creek State Rec. Site, Segment C to D (N63-39-40 W145-53) by 2,000' AGL or 1 NM, 15 May-30 Sep. See NFSL item 24.
- (17) Remain clear of Delta National Wild and Scenic River, Segment C to E by 5 NM either side of river or 5,000' MSL, 27 June-11 July. See NFSL item 19.
- (18) Use CAUTION, remain below 11,000' MSL when within 4 NM of Victor Airway 481, Segments C to E.
- (19) Remain clear of Fielding Lake State Rec. Sites, Segment D to E (N63-10 W145-40 and N63-11-12 W145-38) by 2,000' AGL or 1 NM, 15 May-30 Sep. See NFSL item 23.
- (20) Remain clear of Caribou Hunting Area, Segment E to F by 1,000' AGL entire route segment, 1 Aug-30 Sep. See NFSL item 41.
- (21) Remain clear of Caribou Calving Area, Segment F to G by 1,000' AGL entire route segment, 1 May-30 June. See NFSL item 26.
- (22) Route Entry: MPY2 (319.2/120.9), Exit: TKA (254.3/125.55), Alternate Exit Points C and D use BIG (322.5/135.3).
- (23) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (24) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT, ENA, PAQ, TKA

IR-922

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|----|--------------|---------------------------|
| Cross | | | |
| at or below 145 MSL | A | BIG 158/48 | N63°12.00' W145°45.00' |
| 01 AGL B 145 MSL to | B | BIG 102/54 | N63°29.00' W144°05.00' |
| 100 MSL B 140 MSL to | C | BIG 079/69 | N63°45.00' W143°10.00' |
| 01 AGL B 110 MSL to | D | BIG 055/70 | N64°13.00' W143°05.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

IR ROUTES

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route SE of Interior MOAs except portion of route transits eastern portion of Buffalo MOA into Yukon 3A Low MOA.
- (3) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (5) All route points collocated with IR-923, VR-940 and VR-941.
- (6) IR-919, IR-921, VR-937 and VR-938 cross at Point A.
- (7) IR-917, IR-918, VR-935 and VR-936 cross at Point D.
- (8) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (9) Remain clear of Fielding Lake State Rec. Sites, Segment A to B (N63-10 W145-40 and N63-11-12 W145-38) by 2,000' AGL or 1 NM, 15 May-30 Sep. See NFSL item 23.
- (10) Maintain 500' AGL or 6,000' MSL whichever is higher minimum until 8 NM past Point A.
- (11) Descend below 14,000' MSL prior to crossing Point B.
- (12) Remain clear of Delta National Wild and Scenic River, Segment A to B by 5 NM either side of river or 5,000' MSL, 27 June-11 July. See NFSL item 19.
- (13) Use CAUTION for high density VFR traffic at the southern mouth of Isabel Pass, Point A
- (14) Remain clear of Dall Sheep Lambing Area beginning 18 NM NE of Point A to Point B, from 3 NM left of centerline to 5 NM right of centerline, by 1,000' AGL, 1 May-30 June. See NFSL item 27.
- (15) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (16) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3,500' MSL when within 2 NM of the highway (Buffalo) or within 1/2 mile north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the Alaska Airspace Handbook.
- (17) Avoid Monte Lake Fishing Lodge N63-30.0 W144-05.0, Segment B to C by 1 NM.
- (18) Seasonal Caribou calving sensitive area, Segment C to D within Yukon 3A Low MOA, (15 May-15 July). See local OGV FCIFs for details and locations.

- (19) Avoid cabins in the vicinity of N63-28.2 W143-56.2, N63-32.8 W143-54.3, N63-54.5 W143-02.5 and N64-06.7 W143-01.
- (20) Maintain 1,500' AGL minimum on Segment B to C during yearly moose hunting season, approximately 1-20 Sep.
- (21) Route Entry/Exit: BIG (322.5/135.3).
- (22) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (23) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS), PAQ, TKA. See Alaska Supplement

IR-923

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|----|--------------|---------------------------|
| Cross | | | |
| at or below 110 MSL | A | BIG 055/70 | N64°13.00' W143°05.00' |
| 01 AGL B 110 MSL to | B | BIG 079/69 | N63°45.00' W143°10.00' |
| 100 MSL B 140 MSL to | C | BIG 102/54 | N63°29.00' W144°05.00' |
| 01 AGL B 145 MSL to | D | BIG 158/48 | N63°12.00' W145°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route SE of Interior MOAs except portion of route transits eastern portion of Buffalo MOA into Yukon 3A Low MOA.
- (3) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and

civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety.

- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (5) All route points collocated with IR-922, VR-940 and VR-941.
- (6) IR-917, IR-918, VR-935 and VR-936 cross at Point A.
- (7) IR-919, IR-921, VR-937 and VR-938 cross at Point D.
- (8) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL)
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (9) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (10) Seasonal Caribou calving sensitive area, Segment A to B within Yukon 3A Low MOA, (15 May-15 July). See local OGV FCIFs for details and locations.
- (11) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3,500' MSL when within 2 NM of the highway (Buffalo) or within 1/2 mile north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the Alaska Airspace Handbook.
- (12) Do not climb above 14,000' MSL until past Point C.
- (13) Remain clear of Dall Sheep Lambing Area beginning 18 NM NE of Point D to Point C, from 3 NM right of centerline to 5 NM left of centerline, by 1,000' AGL, 1 May-30 June. See NFSL item 27.
- (14) Remain clear of Fielding Lake State Rec. Sites, Segment C to D (N63-10 W145-40 and N63-11-12 W145-38) by 2,000' AGL or 1 NM, 15 May-30 Sep. See NFSL item 23.
- (15) Use CAUTION, remain below 11,000' MSL when within 4 NM of Victor Airway 481, Segment C to D.
- (16) Remain clear of Delta National Wild and Scenic River, Segment C to D by 5 NM either side of river or 5,000' MSL, 27 June-11 July. See NFSL item 19.
- (17) Use CAUTION for high density VFR traffic at the southern mouth of Isabel Pass, Point D.
- (18) Maintain 500' AGL or 6,000' MSL whichever is higher minimum beginning at a point 8 NM prior to Point D to the route exit.
- (19) Avoid Monte Lake Fishing Lodge N63-30.0 W144-05.0, Segment B to C by 1 NM.
- (20) Avoid cabins in the vicinity of N63-28.2 W143-56.2, N63-32.8 W143-54.3, N63-54.5 W143-02.5 and N64-06.7 W143-01.
- (21) Maintain 1,500' AGL minimum on Segment B to C during yearly moose hunting season, approximately 1-20 Sep.
- (22) Route Entry/Exit: BIG (322.5/135.3).
- (23) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (24) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS), PAQ, TKA. See Alaska Supplement

IR-926

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross | | | |
| at or below 60 MSL | A | BIG 076/39 | N63°54.00' W144°16.00' |
| 01 AGL B 60 MSL to | B | BIG 100/28 | N63°45.00' W144°51.00' |
| 01 AGL B 80 MSL to | C | BIG 104/15 | N63°51.00' W145°15.00' |
| 01 AGL B 80 MSL to Alternate Exit Track: | D | BIG 202/13 | N63°51.00' W146°04.00' |
| 01 AGL B 60 MSL to | B | BIG 100/28 | N63°45.00' W144°51.00' |
| 01 AGL B 150 MSL to | AC | BIG 175/25 | N63°37.00' W146°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 2.5 NM right and 3 NM left of centerline from B to C; 3 NM either side of centerline from C to a point 12 NM East of D then 3 NM right and 5 NM left of centerline to D; Alternate Exit - 5 NM either side of centerline to a point 8.5 NM West of B then 1 NM right and 5 NM left of centerline to a point 12 NM East of AC, then 5 NM either side of centerline to AC;

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route within R-2202 and Buffalo MOA.
- (3) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R-2202 is required.

IR ROUTES

- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (5) All route points collocated with IR-927, VR-1926 and VR-1927.
- (6) IR-909, IR-939, VR-1909 and VR-1939 cross at Point A.
- (7) IR-919, IR-921, VR-937 and VR-938 cross at Point AC.
- (8) Primary Exit: Point D. Alternate Exit: Point AC.
- (9) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL)
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (10) Remain clear of Lake George, Segment A to B (N63-47 W144-32) by 1,500' AGL or 1 NM continuous. See NFSL item 28.
- (11) Use CAUTION Alaska Highway VFR corridor with confines of Buffalo and Birch MOAs. Remain above 3,500' MSL when within 2 NM of the highway (Buffalo) or within 1/2 mile north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the Alaska Airspace Handbook. Segment B to C runs parallel to the hwy and covers much of this mitigation. Use CAUTION.
- (12) Use CAUTION for U.S. Army's Donnelly Assault Strip (N63-50 W145-43) Segment C to D. Helicopter and C-130 traffic associated with Army and AF exercise operations.
- (13) Use CAUTION Richardson Highway VFR corridor within confines of Buffalo MOA. Remain above 4,000' MSL from the southern MOA boundary, north to the convergence of the Richardson Hwy and Delta River; from 1/2 mile East of the hwy to the west side of the Delta River. Continuing to the northern MOA boundary, 2 NM East of the hwy to 1/2 mile West of the hwy or Alaska Pipeline, whichever is further West. See Buffalo MOA description in the Alaska Airspace Handbook.
- (14) Remain clear of Donnelly Creek State Rec. Site, Segment B to AC (N63-39-40 W145-53) by 2,000' AGL or 1 NM, 15 May-30 Sep. See NFSL item 24.
- (15) Use CAUTION for Black Rapids Airport, Segment B to AC (N63-32-06 W145-51-39). Remain clear by 3 NM or 1,500' AGL. See Buffalo MOA description in the Alaska Airspace Handbook on web site listed above.
- (16) Remain clear of Delta National Wild and Scenic River, Segment B to AC by 5 NM either side of river or 5,000' MSL, 27 June-11 July. See NFSL item 19.
- (17) Use CAUTION for high density VFR traffic at the southern mouth of Isabel Pass, Point AC.
- (18) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (19) Seasonal Caribou calving sensitive area, Segment A to B primarily within Yukon 3A Low MOA but could go south into Buffalo MOA (15 May-15 July). See local OGV FCIFs for details and locations.
- (20) Use CAUTION for Big Delta Airport Class E airspace, 1 NM within the route, Segment C to D.
- (21) Route Entry/Exit: BIG (322.5/135.3).
- (22) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.

(23) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS), PAQ, TKA.
See Alaska Supplement

IR-927

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------|----|--------------|---------------------------|
| Cross | | | |
| at or below 80 MSL | A | BIG 202/13 | N63°51.00' W146°04.00' |
| 01 AGL B 80 MSL to | B | BIG 104/15 | N63°51.00' W145°15.00' |
| 01 AGL B 80 MSL to | C | BIG 100/28 | N63°45.00' W144°51.00' |
| 01 AGL B 80 MSL to | D | BIG 076/39 | N63°54.00' W144°16.00' |
| Alternate Entry Track: | | | |
| at or below 150 MSL | BB | BIG 175/25 | N63°37.00' W146°00.00' |
| 01 AGL B 100 MSL to | C1 | BIG 100/28 | N63°45.00' W144°50.50' |
| Thence via published route. | | | |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM left and 5 NM right of centerline from A to a point 12 NM East of A and 3 NM either side of centerline to B; 2.5 NM left and 3 NM right of centerline from B to C; 5 NM either side of centerline from C to D; Alternate Entry: 5 NM either side of centerline from BB to a point 12 NM East of BB, then 1 NM left and 5 NM right of centerline to a point 8.5 NM West of C1, then 5 NM either side of centerline to C1.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route within R-2202 and Buffalo MOA.
- (3) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories

- will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R-2202 is required.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
 - (5) All route points collocated with IR-926, VR-1926 and VR-1927.
 - (6) IR-909, IR-939, VR-1909 and VR-1939 cross at Point D.
 - (7) IR-919, IR-921, VR-937 and VR-938 cross at Point BB.
 - (8) Primary Entry: Point A. Alternate Entry: Point BB.
 - (9) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL)
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
 - (10) Use CAUTION Richardson Highway VFR corridor within confines of Buffalo MOA. Remain above 4,000' MSL from the southern MOA boundary, north to the convergence of the Richardson Hwy and Delta River; from 1/2 mile East of the hwy to the West side of the Delta River. Continuing to the northern MOA boundary, 2 NM East of the hwy to 1/2 mile West of the hwy or Alaska Pipeline, whichever is further West. See Buffalo MOA description in the Alaska Airspace Handbook.
 - (11) Use CAUTION for U.S. Army's Donnelly Assault Strip (N63-50 W145-43) Segment A to B. Helicopter and C-130 traffic associated with Army and A.F. exercise operations.
 - (12) Remain clear of Donnelly Creek State Rec. Site, Segment BB to C1 (N63-39-40 W145-53) by 2,000' AGL or 1 NM, 15 May-30 Sep. See NFSL item 24.
 - (13) Use CAUTION for Black Rapids Airport, Segment BB to C1 (N63-32-06 W145-51-39). Remain clear by 3 NM or 1,500' AGL. See Buffalo MOA description in the Alaska Airspace Handbook on web site listed above.
 - (14) Remain clear of Delta National Wild and Scenic River, Segment BB to C1 by 5 NM either side of river or 5,000' MSL, 27 June-11 July. See NFSL item 19.
 - (15) Use CAUTION for high density VFR traffic at the southern mouth of Isabel Pass, Point BB.
 - (16) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3,500' MSL when within 2 NM of the highway (Buffalo) or within 1/2 mile north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the Alaska Airspace Handbook. Segment B to C runs parallel to the hwy and covers much of this mitigation. Use CAUTION.
 - (17) Remain clear of Lake George, Segment C to D (N63-47 W144-32) by 1,500' AGL or 1 NM continuous. See NFSL item 28.
 - (18) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
 - (19) Seasonal Caribou calving sensitive area, Segment C to D primarily within Yukon 3A Low MOA but could go south into Buffalo MOA (15 May-15 July). See local OGV FCIFs for details and locations.
 - (20) Use CAUTION for Big Delta Airport Class E airspace, 1 NM within the route, Segment C to D.
 - (21) Route Entry/Exit: BIG (322.5/135.3).
 - (22) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
 - (23) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS), PAQ, TKA. See Alaska Supplement

IR-928

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| Cross | | | |
| at or below 70 MSL | A | BIG 335/28 | N64°28.00' W145°45.00' |
| 01 AGL B 100 MSL to | B | TKA 009/140 | N64°10.00' W147°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route between Yukon 1 and Eielson MOAs, through R2202 and Birch MOA.
- (3) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R2202 is required.
- (4) Route designated for MARSAs operations, which are established by coordinated scheduling with the Scheduling Activity (SA). Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of the SUA.

IR ROUTES

- (5) All route points collocated with IR-929, VR-1928 and VR-1929.
- (6) IR-909, IR-917, IR-918, IR-939, VR-1909, VR-1939, VR-935 and VR-936 cross at Point A.
- (7) Numerous sensitive areas near Alaska Highway. See 11 AF Noise/Flight Sensitive Areas List (NFSL) (<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>).
- (8) Remain clear of Birch Lake State Recreation Area (N64-19 W146-39) by 2000' AGL or 1 NM, (15 May-30 Sep). See NFSL item 10.
- (9) Remain clear of Clear Creek Cabins (N64-13.1 W146-13) by 1500' AGL or 1 NM continuous. See NFSL item 8.
- (10) Use CAUTION for uncharted 50' tower not listed in CHUM (N64-22 W146-11).
- (11) Remain clear of Shaw Creek Youth Camp (N64-16 W146-06) by 1500' AGL or 1 NM continuous. See NFSL item 29.
- (12) Use CAUTION Alaska Highway VFR corridor within confines of Birch MOA. Remain above 3500' MSL when within 1/2 mile north of the highway to the southern bank of the Tanana River, continuous. See Birch MOA description in the Alaska Airspace Handbook. Use CAUTION.
- (13) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (14) Seasonal Caribou calving sensitive area, primarily within Yukon 1 MOA (15 May-15 July); see local OGV FCIFs for details and locations.
- (15) Route Entry/Exit: MPY2 (319.2/120.9).
- (16) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (17) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS), TKA. See Alaska Supplement.

IR-929

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| at or below 100 MSL | A | TKA 009/140 | N64°10.00' W147°00.00' |
| 01 AGL B 70 MSL to | B | BIG 335/28 | N64°28.00' W145°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route between Yukon 1 and Eielson MOAs, through R2202 and Birch MOA.
- (3) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R2202 is required.
- (4) Route designated for MARSAs operations, which are established by coordinated scheduling with the Scheduling Activity (SA). Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of the SUA.
- (5) All route points collocated with IR-928, VR-1928 and VR-1929.
- (6) IR-909, IR-917, IR-918, IR-939, VR-1909, VR-1939, VR-935 and VR-936 cross at Point B.
- (7) Numerous sensitive areas near Alaska Highway. See 11 AF Noise/Flight Sensitive Areas List (NFSL) (<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>).
- (8) Remain clear of Clear Creek Cabins (N64-13.1 W146-13) by 1500' AGL or 1 NM continuous. See NFSL item 8.
- (9) Remain clear of Birch Lake State Recreation Area (N64-19 W146-39) by 2000' AGL or 1 NM, (15 May-30 Sep). See NFSL item 10.
- (10) Use CAUTION for uncharted 50' tower not listed in CHUM (N64-22 W146-11).
- (11) Remain clear of Shaw Creek Youth Camp (N64-16 W146-06) by 1500' AGL or 1 NM continuous. See NFSL item 29.
- (12) Use CAUTION Alaska Highway VFR corridor within confines of Birch MOA. Remain above 3500' MSL when within 1/2 mile north of the highway to the southern bank of the Tanana River, continuous. See Birch MOA description in the Alaska Airspace Handbook. Use CAUTION.
- (13) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (14) Seasonal Caribou calving sensitive area, primarily within Yukon 1 MOA (15 May-15 July); see local OGV FCIF's for details and locations.
- (15) Route Entry/Exit: MPY2 (319.2/120.9).
- (16) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (17) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS), TKA. See Alaska Supplement.

IR-939

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| Cross | | | |
| at or below 106 MSL | A | BIG 335/28 | N64°28.00' W145°45.00' |
| 01 AGL B 106 MSL to | B | BIG 050/52 | N64°15.00' W143°50.00' |
| 01 AGL B 106 MSL to | C | BIG 076/39 | N63°54.00' W144°16.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will ease the process.
- (2) Primary route under and through Buffalo, Yukon 3A Low and Yukon 1 MOAs. Alternate Entry/Exit B places you within Yukon 1 MOA.
- (3) Restricted operations in and around active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety.
- (4) Route designated for MARSAs operations, which are established by coordinated scheduling with the Scheduling Activity (SA). Expect ATC to give route and MOA clearance prior to route entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of the SUA.
- (5) LOWAT approved on route segments when within (active) MOA airspace. Coordinate with the SA.
- (6) All route points collocated with IR-909, VR-1909 and VR-1939.
- (7) IR-926, IR-927, VR-1926, and VR-1927, cross at Point C.

- (8) IR-917, IR-918, VR-935 and VR-936 cross at Point's A, B and C.
- (9) IR-928, IR-929, VR-1928 and VR-1929 cross at Point A.
- (10) Primary Entry: Point A. Alternate Entry: Point B.
- (11) Primary Exit: Point C. Alternate Exit: Point B.
- (12) Seasonal Caribou calving sensitive area entire route (15 May-15 July); see local OGV FCIF's for details and locations. Also see Airspace Presentation link listed in number 13.
- (13) Numerous sensitive areas near Alaska Highway. See 11 AF Noise/Flight Sensitive Areas List (NFSL), (<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>).
- (14) Use CAUTION for Pogo Mine on segment B to C. Remain clear of mine by 5 NM or 4500' MSL centered on N64-25.8 W144-48.2, and Goodpaster River by 2 NM or 4500' MSL from southern border of Yukon 1 MOA to airstrip located at N64-28 W144-55 continuous. Mine has high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity year round. See 11 AF NFSL item 43.
- (15) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. One known camp is located at N64-17 W144-16 and uses a helicopter for re-supply.
- (16) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3500' MSL when within 2 NM of the highway (Buffalo) or within 1/2 mile north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the 11 AF NFSL.
- (17) Route Entry: MPY2 (319.2/120.9), Exit: BIG (322.5/135.3).
- (18) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (19) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS) See Alaska Supplement.

IR-952

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| at or below 170 MSL | A | BIG 041/112 | N64°46.00' W141°47.00' |
| 01 AGL B 170 MSL to | B | BIG 034/116 | N65°00.00' W141°54.00' |
| 01 AGL B 170 MSL to | C | FYU 101/106 | N65°30.00' W141°51.00' |
| 01 AGL B 90 MSL to | D | FYU 099/101 | N65°36.00' W141°56.00' |

IR ROUTES

| | | | |
|-------------------------------------|-----|-------------|---------------------------|
| 01 AGL B 90 MSL to | E | FYU 095/73 | N65°57.00' W142°42.00' |
| 01 AGL B 90 MSL to | F | FYU 102/64 | N65°55.00' W143°12.00' |
| 01 AGL B 90 MSL to | G | FYU 121/74 | N65°33.00' W143°38.00' |
| 01 AGL B 110 MSL to | H | FYU 129/81 | N65°22.00' W143°52.00' |
| 01 AGL B 110 MSL to | I | BIG 010/66 | N64°55.00' W144°20.00' |
| 01 AGL B 110 MSL to | J | BIG 009/63 | N64°53.00' W144°25.00' |
| 01 AGL B 110 MSL to | K | BIG 004/39 | N64°35.00' W145°02.00' |
| 01 AGL B 110 MSL to | L | BIG 352/33 | N64°32.00' W145°23.00' |
| 01 AGL B 110 MSL to | M | EIL 055/14 | N64°42.00' W146°34.00' |
| 01 AGL B 110 MSL to | N | EIL 029/13 | N64°47.00' W146°42.00' |
| 01 AGL B 110 MSL to | O | EIL 013/17 | N64°53.00' W146°42.00' |
| 01 AGL B 110 MSL to | P | FYU 171/80 | N65°18.00' W146°09.00' |
| 01 AGL B 110 MSL to | Q | FYU 168/79 | N65°18.00' W146°00.00' |
| Alternate RACE- TRACK in R-2205: | | | |
| 01 AGL B 110 MSL to | N | EIL 029/13 | N64°47.00' W146°42.00' |
| 01 AGL B 170 MSL to | AO | FYU 170/102 | N64°56.00' W146°20.00' |
| 01 AGL B 170 MSL to | AP | BIG 355/48 | N64°46.00' W145°08.00' |
| 01 AGL B 170 MSL to | L1 | BIG 352/33 | N64°32.00' W145°23.00' |
| 01 AGL B 110 MSL to | M1 | EIL 055/14 | N64°42.00' W146°34.00' |
| 01 AGL B 110 MSL to | N1 | EIL 029/13 | N64°47.00' W146°42.00' |
| Alternate Entry Track: | | | |
| 01 AGL B 90 MSL to | D1 | FYU 099/101 | N65°36.00' W141°56.00' |
| 01 AGL B 90 MSL to | E1 | FYU 095/73 | N65°57.00' W142°42.00' |
| Thence via published route. | | | |
| Alternate Exit Track: | | | |
| 01 AGL B 90 MSL to | F1 | FYU 102/64 | N65°55.00' W143°12.00' |
| 01 AGL B 110 MSL to | M2 | EIL 055/14 | N64°42.00' W146°34.00' |
| 01 AGL B 170 MSL to | L2 | BIG 352/33 | N64°32.00' W145°23.00' |
| 01 AGL B 110 MSL to | M2 | EIL 055/14 | N64°42.00' W146°34.00' |
| 01 AGL B 170 MSL to | AP1 | BIG 355/48 | N64°46.00' W145°08.00' |
| 01 AGL B 110 MSL to | P1 | FYU 171/80 | N65°18.00' W146°09.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route within Yukon 1-4 MOAs to R-2205.
- (3) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R-2205 is required.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (5) All route points collocated with IR-953, VR-954 and VR-955.
- (6) IR-917, IR-918, VR-935 and VR-936 cross at Point A.
- (7) Primary Entry: Point A. Alternate Entry: Point D1.
- (8) Primary Exit: Point Q. Alternate Exit: Points F, M, L1, M1, AP and P.
- (9) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (10) Remain clear of Peregrine Falcon Corridor along Yukon, Charlie and Kandik Rivers, (15 Apr-31 Aug). See NFSL item number 17.
- (11) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (12) Use CAUTION for Pogo Mine adjacent to route at Point K. Remain clear of mine by 5 NM or 4,500' MSL centered on N64-25.8 W144-48.2, and Goodpaster River by 2 NM or 4,500' MSL from southern border of Yukon 1 MOA to airstrip located at N64-28 W144-55 continuous. Mine has high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity year round. See 11 AF NFSL item number 43.
- (13) Remain clear of Salcha River Area certain times of the year, Segment K to M. See NFSL items 4, 5 and 40.
- (14) Remain clear of Pleasant Valley Subdivision by 6,000' MSL, continuous, Segment N to O. See NFSL item number 1.
- (15) Remain clear of Chena River State Recreation Site by 1,500' AGL, (1 May-30 Sep), Segment M to P and the Racetrack to R-2205. See NFSL item number 2.
- (16) Seasonal Caribou calving sensitive area, entire route (15 May-15 July). See local OGV FCIFs for details and locations.
- (17) LOWAT approved on route segments when within the confines of the ACTIVE MOA airspace. Coordinate use with the SA.
- (18) Start a right turn immediately after weapons release in R-2205 to preclude flying into Fairbanks Approach Control Airspace. Ft. Wainwright AAF Class E airspace, less than 1 NM outside the route, Segment M to O. Eielson AFB Class D and E airspace 2 NM outside the route, Segment N to O.

- (19) Route Entry/Exit: MPY2 (319.2/120.9), Points E and F use FYU (381.6/132.7).
- (20) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (21) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS). See Alaska Supplement

IR-953

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| at or below 110 MSL | A | FYU 168/79 | N65°18.00' W146°00.00' |
| 01 AGL B 110 MSL to | B | FYU 171/80 | N65°18.00' W146°09.00' |
| 01 AGL B 110 MSL to | C | EIL 013/17 | N64°53.00' W146°42.00' |
| 01 AGL B 110 MSL to | D | EIL 029/13 | N64°47.00' W146°42.00' |
| 01 AGL B 110 MSL to | E | EIL 055/14 | N64°42.00' W146°34.00' |
| 01 AGL B 110 MSL to | F | BIG 352/33 | N64°32.00' W145°23.00' |
| 01 AGL B 110 MSL to | G | BIG 004/39 | N64°35.00' W145°02.00' |
| 01 AGL B 110 MSL to | H | BIG 009/63 | N64°53.00' W144°25.00' |
| 01 AGL B 110 MSL to | I | BIG 010/66 | N64°55.00' W144°20.00' |
| 01 AGL B 110 MSL to | J | FYU 129/81 | N65°22.00' W143°52.00' |
| 01 AGL B 110 MSL to | K | FYU 121/74 | N65°33.00' W143°38.00' |
| 01 AGL B 90 MSL to | L | FYU 102/64 | N65°55.00' W143°12.00' |
| 01 AGL B 90 MSL to | M | FYU 095/73 | N65°57.00' W142°42.00' |
| 01 AGL B 90 MSL to | N | FYU 099/101 | N65°36.00' W141°56.00' |
| 01 AGL B 90 MSL to | O | FYU 101/106 | N65°30.00' W141°51.00' |
| 01 AGL B 170 MSL to | P | BIG 034/116 | N65°00.00' W141°54.00' |
| 01 AGL B 170 MSL to Alternate Entry Track: | Q | BIG 041/112 | N64°46.00' W141°47.00' |

| | | | |
|--|----|------------|---------------------------|
| 01 AGL B 110 MSL to | E1 | EIL 055/14 | N64°42.00' W146°34.00' |
| 01 AGL B 110 MSL to Thence via published route. Alternate Exit Track: | F1 | BIG 352/33 | N64°32.00' W145°23.00' |
| 01 AGL B 110 MSL to | E2 | EIL 055/14 | N64°42.00' W146°34.00' |
| 01 AGL B 110 MSL to | F2 | BIG 352/33 | N64°32.00' W145°23.00' |
| 01 AGL B 90 MSL to | M | FYU 095/73 | N65°57.00' W142°42.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Early contact with ATC before route entry will increase mission effectiveness.
- (2) Primary route within Yukon 1-4 MOAs.
- (3) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call (in the blind), then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R-2205 is required.
- (4) Route designated for MARSAs operations, established by coordinated scheduling with the Scheduling Activity (SA). Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a (participant) in the SUA. This means you have coordinated with the SA for the use of SUA.
- (5) All route points collocated with IR-952, VR-954 and VR-955.
- (6) IR-917, IR-918, VR-935 and VR-936 cross at Point Q.
- (7) Primary Entry: Point A. Alternate Entry: Points B, E and F.
- (8) Primary Exit: Point Q. Alternate Exit: Point E2.
- (9) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (10) Remain clear of Peregrine Falcon Corridor along Yukon, Charlie and Kandik Rivers, (15 Apr-31 Aug). See NFSL item number 17.
- (11) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (12) Use CAUTION for Pogo Mine adjacent to route at Point G. Remain clear of mine by 5 NM or 4,500' MSL centered on N64-25.8 W144-48.2, and Goodpaster River by 2 NM or 4,500' MSL from southern border of Yukon 1 MOA to airstrip located at N64-28 W144-55 continuous. Mine has

IR ROUTES

high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity year round. See 11 AF NFSL item number 43.

- (13) Remain clear of Salcha River Area certain times of the year, Segment E to G. See NFSL items 4, 5 and 40.
- (14) Remain clear of Pleasant Valley Subdivision by 6,000' MSL, continuous, Segment B to D. See NFSL item number 1.
- (15) Remain clear of Chena River State Recreation Site by 1,500' AGL, (1 May-30 Sep), Segment B to C. See NFSL item number 2.
- (16) Seasonal Caribou calving sensitive area, entire route (15 May-15 July). See local OGV FCIFs for details and locations.
- (17) LOWAT approved on route segments when within the confines of the ACTIVE MOA airspace. Coordinate use with the SA.
- (18) If operating in R-2205, start a right turn immediately after weapons release in R-2205 to preclude flying into Fairbanks Approach Control Airspace. Ft. Wainwright AAF Class E airspace, less than 1 NM outside the route, Segment C to E. Eielson AFB Class D and E airspace 2 NM outside the route, Segment D to E.
- (19) Route Entry/Exit: MPY2 (319.2/120.9), Points L and M use FYU (381.6/132.7).
- (20) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (21) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam/>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS). See Alaska Supplement

VFR MILITARY TRAINING ROUTES (VR)

I. General. FAA Order 7610.4 (Special Military Operations) has specific guidance on Military Training Routes. FAA Order 7610.4 is applicable to all DoD personnel including the Reserve Forces and National Guard. The Order is available from the FAA's website at <http://www.faa.gov/atpubs>. Pilots should be familiar with this Order. VR MTRs are mutually developed by DoD and the FAA to provide for military training/RDT&E requirements that cannot be met under the terms of FAR 91.117 (Aircraft Speed). Accordingly, the FAA has issued a speed authorization to DoD to permit aircraft to exceed 250 knots IAS (below 10,000' MSL) within the lateral and vertical confines of published VR MTRs. Each service component (USAF, USN, USMC, USA, and USCG) issues written guidance, procedures, regulations, or instructions (OPNAVINST 3710.S by the USN for example), which cover MTR flying. Pilots are expected to comply with FARs, FAA Order 7610.4, and applicable service guidance when flying VR MTRs. FAA Regional Air Traffic Division Managers may authorize deviations from the provisions of FAA Order 7610.4. These deviations meet an appropriate level of safety and will be explained in the Route Description, Remarks, or Special Operating Procedures.

II. Route Development. VR Routes shall be developed using the procedures and criteria specified in FAA Order 7610.4. VR MTRs that include one or more segments above 1500 feet AGL shall be identified by three number characters, (for example VR-XXX). VR MTRs with no segment above 1500 feet AGL shall be identified by four number characters, (for example VR-XXXX). Developers/Route Originators will ensure that all VR MTRs are displayed on VFR Sectionals, VFR Terminal Area Charts and Area Planning AP/1B Military Training Route Charts (IR routes 1500 feet and above should be charted on Enroute Low and Area Charts). Route originators will review VR MTR data published in AP/1B and will immediately inform the appropriate authorities when a disparity exists. Route Developers should specify route entry windows in the Remarks/Special Operating Procedures (for example, plus or minus five minutes) in order to ensure aircraft enter on time and provide maximum route deconfliction for other military and civilian pilots.

III. Scheduling and Coordination.

A. Routes shall not be flown unless properly scheduled through the designated originating/scheduling activity listed for that MTR. Normally, a minimum of 2 hours notice is required to ensure civilian and other military users are notified of MTR activation. When scheduling a VR MTR, Automated Flight Service Stations (AFSS) within 100 NM (in some cases more than 100 NM) of the scheduled MTR are notified to provide information to civilian pilots affording the opportunity to avoid the scheduled VR MTR. Military pilots can benefit from this information by contacting the servicing AFSS to view routes that have been activated. On a daily basis and to the maximum extent possible, the MTR Scheduler will confirm (via the tie-in AFSS) the planned utilization of the route. The AFSS handling the flight planning function for the military base where the scheduling unit is located will confirm that FAA Order 7110.10 (Tie-in AFSS) is complied with. Route Schedulers will provide an

hourly schedule for each MTR (route number, aircraft type and number, proposed entry/exit times, and altitude) and pass changes to the tie-in AFSS if a route closes or aircraft cancellations occur. Schedulers/Oriators of VR MTRs will ensure that users are knowledgeable of route procedures. Pilots are ultimately responsible for compliance with route procedures.

B. Pilots will consult FLIP Area Planning and AP/1B Military Training Route Charts to view route conflicts. This chart is the single source document (IR, VR, SR routes) depicting potential route conflicts. Pilots may consult VFR Sectionals for additional planning information (SR not displayed). Routes displayed on the MTR Chart and Sectionals are "route centerline" only and route widths are not to scale. Enroute low IFR charts do not show 4 digit MTRs or SRs; therefore, do not use enroute IFR charts to deconflict VR MTRs. Pilots should be aware of other MTR users (that pose a hazard to the VR MTR) and associated route times to ensure deconfliction. Pilots will make every effort to contact the Originating/Scheduling Activity for routes that conflict with the planned route. If unable to properly plan/deconflict the VR MTR, **DO NOT FLY THE ROUTE.**

IV. Flight Plans.

A. Operations to and from VR MTRs should be conducted on an IFR flight plan. Pilots must have an IFR or VFR flight plan filed to fly a VR MTR (the VFR flight plan must include the specific VR Route).

1. Pilots operating on an IFR flight plan to a VR MTR shall file to the fix/radial/distance (FRD) of the published entry/alternate entry point. Pilots transitioning to IFR upon exiting a VR MTR shall file the FRD of the published exit/alternate exit point.

Example: SAT191036 VR140 STV111017

2. The remarks portion (Field 11) of the flight plan shall contain the VR designator, the letter E and a four digit group indicating the Zulu entry time, the letter X and a four digit group indicating the Zulu exit time, and remarks (if applicable). Use no spaces on the first group.

Example: VR140E1520X1555 Exiting Echo

V. In Flight.

A. Entry/Exit.

1. All entries and exits shall be accomplished at published entry/exit points or alternate entry/exit points.

2. Pilots shall inform the ATC facility if any action on the part of the controller compromises entry procedures for the route. For example, if unable to enter the route within established time limits, it shall be the

VR ROUTES

responsibility of the pilot to inform the ATC facility of potential impact to other aircraft and advise of intentions.

B. Route Adherence.

1. Pilots shall remain within the lateral and vertical confines of the published route at all times. VR MTRs are one-way routes and course reversals are not authorized.
2. When practicable, avoid flight within 1500 feet AGL or 3 NM of airports. Always comply with Special Operating Procedures or Remarks.
3. Pilots flying a VR MTR are responsible for maintaining obstacle clearance, terrain avoidance and compliance with applicable service directions regardless of the route's published altitudes.
4. Route users must obtain permission from the using or controlling agency before entering a restricted area. Filing a flight plan for a VR MTR that terminates in a restricted area is not, by itself, a clearance.

C. Speed. Flights shall be conducted at the minimum speed compatible with mission requirements. When not established on the published route, comply with FAR 91.117 (Aircraft Speed) or the current exemption granted to DoD (FAA Order 7610.4, Appendix 18).

D. Weather. Operations on VR MTRs shall be conducted only when the weather is at or above VFR minima. The flight visibility shall be 5 miles or more and flights shall not be conducted below a ceiling of less than 3000 feet AGL.

E. Communications.

1. Pilots should monitor 255.4 MHz while on VR MTRs, if practicable. Tactical or discrete frequencies may be used. The Remarks/Special Operating Procedures section of the MTR may direct mandatory radio calls on specific radio frequencies to warn other aircraft of possible traffic conflicts.
2. In the event of communications failure (unless otherwise agreed to in a letter of agreement) the pilot should remain VMC, continue the flight VFR, and land as soon as practicable at the most suitable airport.

F. Transponder. Squawk Code 4000 while operating on a VR MTR unless otherwise assigned by ATC.

VI. Aircraft Separation. ATC traffic advisories on a VR MTR are at the discretion of an ATC Controller. They are provided on a controller workload-permitting basis and depend on ATC radio/radar coverage. Since most VR MTRs are flown on 255.4 MHz, expect radio contact on VHF, secondary UHF or guard. IFR aircraft operating on IR MTRs that cross VR MTRs should receive an ATC advisory provided both aircraft are in ATC radar coverage and are squawking appropriately. Separation from military aircraft operating on SRs is completely discretionary. Pilots should know that SR routes have minimum altitudes that are not in radar coverage, therefore, do not expect to get traffic advisories from SR users. Separation from civilian aircraft operating VFR is completely discretionary and subject to the same limitations above. "See and avoid" is paramount and is the pilot's responsibility at all times.

VR-025

ORIGINATING ACTIVITY: GA ANG/CRTC/OTR Townsend Range P.O. BOX 220, GA 31331 DSN 860-3303 C912-963-3303.

SCHEDULING ACTIVITY: GA ANG/CRTC/OTR Townsend Range P.O. BOX 220, GA 31331 DSN 860-3007 C912-963-3007.

HOURS OF OPERATION: 0700-2200 LCL, other times by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|----|--------------|--------------------------|
| 00.5 AGL B 04 MSL to | A | SAV 215/40 | N31°33.70' W81°34.70' |
| 00.5 AGL B 04 MSL to | B | SAV 204/36 | N31°34.30' W81°25.00' |
| 00.5 AGL B 04 MSL to | C | SAV 194/36 | N31°32.90' W81°17.50' |
| 00.5 AGL B 04 MSL to | D | SAV 183/36 | N31°32.80' W81°10.00' |
| 00.5 AGL B 04 MSL to | E | SAV 169/38 | N31°32.70' W80°59.00' |
| 00.5 AGL B 04 MSL to | F | SAV 153/43 | N31°32.50' W80°44.80' |
| 00.5 AGL B 04 MSL to | G | SAV 142/50 | N31°32.50' W80°31.00' |

TERRAIN FOLLOWING OPERATIONS: Authorizes entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B, 10 NM left and 8 NM right of centerline from B to D, 10 NM left and 20 NM right of centerline from D to E, 20 NM left and 20 NM right of centerline from E to G.

Special Operating Procedures:

- (1) CAUTION: Interstste 95 is a major VFR fly way for civil aircraft.
- (2) Route is to used ib conjunction with Townsend Target (R-3007). Do not enter R-3007 without clearance from Townsend Range Control (228.4 or 252.9, 119.225).
- (3) Route shares centerline and is reverse course direction of VR-045.
- (4) Primary Entry Point A, Alternate Entry Points are B and C.
- (5) Primary Exit Point G, Alternate Exit Points are D, E and F.
- (6) Avoid overflifgt of Blackbeard, Harris Neck and Sapelo National Wildlife Refuges by 1500' AGL or 1 NM horizontally.
- (7) Minimum altitude of 1500' AGL fron Point D to G from 1 December to 31 March.
- (8) 1228 MSL Antenna Tower located N31-35.15 W81-20.60.
- (9) 1039 MSL Antenna Tower located N31-37.00 W81-21.50.
- (10) 518 MSL Antenna Tower located N31-30.60 W81-24.00.
- (11) 540 MSL Antenna Tower located N31-26.70 W81-25.60.
- (12) Route crosses VR-1041 and VR-1040 at Point D.

FSS's Within 100 NM Radius: GNV MCN

VR-041

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672.

SCHEDULING ACTIVITY: 4 OSS/OSOS, Seymour Johnson AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non duty 4 FW/CP DSN 722-1973, C919-722-1973.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| As assigned to | A | LYH 026/29 | N37°42.00' W79°01.00' |
| 10 AGL B 105 MSL to | B | LYH 345/18 | N37°32.00' W79°22.00' |
| 05 AGL B 105 AGL to | C | ROA 052/22 | N37°35.00' W79°44.00' |
| 01 AGL B 95 MSL to | D | BKW 141/14 | N37°37.00' W80°55.00' |
| 01 AGL B 95 MSL to | E | BLF 303/13 | N37°25.00' W81°26.00' |
| 01 AGL B 95 MSL to | F | GZG 060/16 | N36°58.00' W81°48.00' |
| 01 AGL B 95 MSL to | G | HMV 352/49 | N37°14.00' W82°21.00' |
| 05 AGL B 105 MSL to | H | ECB 093/25 | N38°09.00' W82°23.00' |
| 05 AGL B 105 MSL to | I | BKW 359/22 | N38°09.00' W81°11.00' |
| 05 AGL B 105 MSL to | J | BKW 053/34 | N38°10.00' W80°36.00' |
| 05 AGL B 105 MSL to | K | LYH 358/49 | N38°04.00' W79°22.00' |
| 05 AGL B 105 MSL to | L | LYH 057/29 | N37°33.00' W78°46.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5NM either side of centerline from A to B; 2NM left and 5NM right of centerline from B to E; 5NM either side of centerline from E to J; 5NM left and 4NM right of centerline from J to K; 3NM left and 1NM right of centerline from K to L.

Special Operating Procedures:

- (1) Users must visit [HTTPS://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPAC E/ROUTES](https://www.mil.seymourjohnson.af.mil/airspac_e/routes) for additional avoidance areas (Falconview.drw/mch files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
- (2) Alternate Entry; B, C, D, E, F, G, H, I, J, K.
- (3) Alternate Exit; B, C,D, E, F, G, H, I, J, K.
- (4) Users must make their schedules entry time plus or minus 5 min or reschedule.
- (5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.

VR ROUTES

- (6) CAUTION: There are numerous powerlines located in mountainous and flat terrain on this route from C to J. Cables that cross large valleys and gorges are extremely difficult to acquire visually depending on sun/environmental conditions.
- (7) A-B:
(a) CROSSING: IR-761 parallel entire leg;
(b) CROSSING: IR-715 right to left at A;
(c) CROSSING: VR-096 left to right at A;
(d) CROSSING: IR-762/VR-1756 left to right 12NM prior to B.
- (8) B-C:
(a) CAUTION: Springwood Gliderport at N37-31.5 W79-41.5. Glider activity on Sat, Sun and Wed from 0900-SS, sfc to 14,000'MSL. Remain right of centerline in vicinity during these times;
(b) CROSSING: IR-761 parallel entire leg;
(c) CROSSING: VR-1756 right to left at C.
- (9) C-D:
(a) AVOID: Town of Sinks Grove (Congressional Noise Sensitive Area) at N37-39.8 W80-32.8 by 1000' or 3NM;
(b) TOWER: 195'AGL (2440'MSL) at N37-37.9 W79-49.9;
(c) TOWER: 199'AGL (3514'MSL) at N37-38.0 W80-34.0;
(d) CAUTION: Uncharted Airfield at N37-33.1 W79-45.1;
(e) CAUTION: Uncharted Airfield at N37-40.0 W79-48.6;
(f) CROSSING: IR-761 parallel until 33NM prior to D;
(g) CROSSING: VR-1756 right to left at C;
(h) CROSSING: IR-715 left to right 51NM prior to D;
(i) CROSSING: IR-608 right to left 43NM prior to D;
(j) CROSSING: IR-043 right to left 26NM prior to D;
(k) CROSSING: IR-080 left to right at D;
(l) CROSSING: IR-723 right to left at D.
- (10) D-E:
(a) CROSSING: IR-080 left to right at D;
(b) CROSSING: IR-723 right to left at D;
(c) CROSSING: IR-761 left to right 13NM prior to E.
- (11) E-F:
(a) CAUTION: Uncharted Airfield at N37-03.0 W81-47.0;
(b) CROSSING: IR-761 parallel entire leg;
(c) CROSSING: VR-093 left to right 1NM prior to F.
- (12) F-G:
(a) CROSSING: IR-761 parallel entire leg;
(b) CROSSING: VR-093 parallel entire leg;
(c) CROSSING: IR-079 left to right 1NM prior to G;
(d) CROSSING: VR-1633 right to left at G;
(e) CAUTION: Charted powerline at N37-06.9 W82-04.1 430'AGL (2604'MSL).
- (13) G-H:
(a) CROSSING: IR-761 parallel entire leg;
(b) CROSSING: IR-079 right to left at G;
(c) CROSSING: VR-1633 right to left at G;
(d) CROSSING: VR-093 right to left 45NM prior to H;
(e) CROSSING: VR-1632 right to left at H.
- (14) H-I:
(a) AVOID: Charleston Class C Airspace 2800'MSL to 5000'MSL;
(b) CROSSING: IR-761 parallel entire leg;
(c) CROSSING: VR-1632 opposite direction until 46NM prior to I;
(d) CROSSING: VR-1633 left to right 3NM prior to I;
(e) CROSSING: IR-723 left to right at I;
(f) CROSSING: IR-080 right to left at I.
- (15) I-J:
(a) CROSSING: IR-761 parallel entire leg;
(b) CROSSING: IR-723 left to right at I;
(c) CROSSING: IR-080 right to left at I.
- (16) J-K:
(a) TOWER: 284'AGL (4204'MSL) at N38-06.7 W80-35.9;
(b) TOWER: 160'AGL (3545'MSL) at N38-02.0 W79-46.8;
(c) CROSSING: IR-715 right to left 50NM prior to K;
(d) CROSSING: VR-043 left to right 39NM prior to K;
(e) CROSSING: IR-608 left to right 37NM prior to K;
(f) CROSSING: IR-715 left to right 30NM prior to K;
(g) CROSSING: IR-762/VR-1756 right to left 19NM prior to K;
(h) CROSSING: IR-760/IR-762/VR-1754/VR-1756 left to right 11NM prior to K;
(i) CROSSING: IR-715 left to right at K.
- (17) K-L:
(a) TOWER: 199'AGL (2029'MSL) at N37-57.9 W79-11.7;
(b) TOWER: 195'AGL (1489'MSL) at N37-34.4 W78-45.7;
(c) CROSSING: IR-714 left to right at K;
(d) CROSSING: IR-760/VR-1722/VR-1754 left to right 24NM prior to L;
(e) CROSSING: IR-715 right to left 10NM prior to L.
- (18) CROSSING ROUTE CONTACT INFORMATION:
(a) IR-079: Pensacola NAS, DSN 922-2735;
(b) IR-080: Pensacola NAS, DSN 922-2735;
(c) IR-608: Pensacola NAS, DSN 922-2735;
(d) IR-714: Oceana NAS, DSN 433-1228;
(e) IR-715: Oceana NAS, DSN 433-1228;
(f) IR-723: Pensacola NAS, DSN 922-2735;
(g) IR-760: Oceana NAS, DSN 433-1228;
(h) IR-761: Oceana NAS, DSN 433-1228;
(i) IR-762: Oceana NAS, DSN 433-1228;
(j) VR-043: Seymour Johnson AFB;
(k) VR-093: Shaw AFB, DSN 965-1118;
(l) VR-1632: Blue Ash ANG, DSN 340-2950;
(m) VR-1633: Blue Ash ANG, DSN 340-2950;
(n) VR-1722: Richmond ANG, DSN 864-6411;
(o) VR-1754: Oceana NAS, DSN 433-1228;
(p) VR-1756: Oceana NAS, DSN 433-1228.

FSS's Within 100 NM Radius:

AOO, DAY, DCA, EKN, RDU

VR-042

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672.

SCHEDULING ACTIVITY: 4 OSS/OSOS, Seymour Johnson AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non-duty 4 FW/CP DSN 722-1973, C919-722-1973.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| As assigned to | A | CVI 129/11 | N36°17.00' W76°41.00' |
| 05 AGL B 105 MSL to | B | TYI 066/23 | N36°10.00' W77°17.00' |

| | | | | |
|---|---|------------|--------------------------|---|
| 05 AGL B 105 MSL to | C | LVL 235/31 | N36°28.00' W78°22.00' | (a) CAUTION: Landfill (potential bird hazard) at N36-07.3 W77-04.0; |
| 05 AGL B 105 MSL to | D | SBV 055/20 | N36°53.00' W78°42.00' | (b) CROSSING: VR-1713/VR-1753 right to left 23NM prior to B; |
| 05 AGL B 105 MSL to | E | SBV 309/22 | N36°53.00' W79°24.00' | (c) CROSSING: IR-062 left to right 9NM prior to B; |
| 05 AGL B 105 MSL to 22 NM east of F then | F | ROA 178/34 | N36°47.00' W80°00.00' | (d) CROSSING: IR-719/IR-720/VR-073 right to left at B. |
| 01 AGL B 105 MSL to | G | PSK 153/20 | N36°48.00' W80°29.00' | (9) B-C: (a) TOWER: 325'AGL (530'MSL) at N36-16.7 W77-54.2; |
| 01 AGL B 105 MSL to | H | GSO 297/53 | N36°24.00' W80°59.00' | (b) CROSSING: IR-719/IR-720/VR-073 right to left at B; |
| 01 AGL B 105 MSL to | I | HMV 069/31 | N36°39.00' W81°33.00' | (c) CROSSING: VR-086 parallel entire leg; |
| 05 AGL B 105 MSL to | J | BLF 187/25 | N36°53.00' W81°14.00' | (d) CROSSING: VR-043 opposite direction entire leg; |
| 01 AGL B 105 MSL to | K | PSK 187/7 | N36°58.00' W80°43.00' | (e) CROSSING: IR-718 right to left 49NM prior to C; |
| 01 AGL B 105 MSL to 35NM east of K then | L | LYH 234/19 | N37°03.00' W79°32.00' | (f) CROSSING: VR-083/VR-096 left to right 19NM prior to C; |
| 05 AGL B 105 MSL to | M | SBV 038/23 | N37°00.00' W78°45.00' | (g) CROSSING: VR-1759 right to left 14NM prior to C. |
| 05 AGL B 105 MSL to | N | FKN 265/28 | N36°36.00' W77°35.00' | (10) C-D: (a) CROSSING: VR-1722 left to right 19NM prior to D; |
| 05 AGL B 105 MSL to | O | FKN 147/11 | N36°35.00' W76°52.00' | (b) CROSSING: IR-062 right to left 18NM prior to D; |
| | | | | (c) CROSSING: IR-719 left to right 14NM prior to D; |
| | | | | (d) CROSSING: IR-715 right to left 3NM prior to D; |
| | | | | (e) CROSSING: VR-083/VR-1061 right to left at D. |
| | | | | (11) D-E; (a) CROSSING: VR-083 parallel entire leg; |
| | | | | (b) CROSSING: VR-1061 parallel until 16NM prior to E; |
| | | | | (c) CROSSING: VR-1722 right to left 14NM prior to E. |
| | | | | (12) E-F: (a) TOWER: 214'AGL (1434'MSL) at N36-51.3 W79-24.1; |
| | | | | (b) CROSSING: IR-715 left to right 23NM prior to F; |
| | | | | (c) CROSSING: VR-083 parallel until 19NM prior to F; |
| | | | | (d) CROSSING: VR-043 right to left 14NM prior to F. |
| | | | | (13) F-G: (a) CROSSING: IR-081/IR-719 right to left 22NM prior to G; |
| | | | | (b) CROSSING: IR-712/VR-1721 right to left 11NM prior to G. |
| | | | | (14) G-H: (a) CROSSING: VR-093 left to right 5NM to H. |
| | | | | (15) H-I; (a) CROSSING: VR-093 parallel entire leg; |
| | | | | (b) CROSSING: IR-723/IR-726/VR-1726 right to left 12NM prior to I; |
| | | | | (c) CROSSING: IR-080/IR-081 left to right at I; |
| | | | | (d) CROSSING: IR-608 right to left at I. |
| | | | | (16) I-J: (a) CROSSING: IR-608 opposite direction entire leg; |
| | | | | (b) CROSSING: IR-080/IR-081 parallel entire leg; |
| | | | | (c) CROSSING: VR-093 right to left 17NM prior to J. |
| | | | | (17) J-K: (a) AVOID: Remain south of centerline entire leg to avoid very noise sensitive area; |
| | | | | (b) TOWER: 200'AGL(2527'MSL) at N36-59.0 W80-49.2; |
| | | | | (c) CAUTION: Landfill (potential bird hazard) at N36-58.5 W81-01.5; |
| | | | | (d) CROSSING: IR-080/IR-081 right to left 23NM prior to K; |
| | | | | (e) CROSSING: IR-608 left to right 23NM prior to K; |
| | | | | (f) CROSSING: IR-723 left to right 16NM prior to K; |
| | | | | (g) CROSSING: IR-726/VR-1726 left to right at K. |
| | | | | (18) K-L: (a) TOWER: 200'AGL(1144'MSL) at N37-04.5 W79-42.3; |
| | | | | (b) CROSSING: IR-726/VR-1726 left to right at K; |
| | | | | (c) CROSSING: IR-081 left to right 33NM prior to K; |
| | | | | (d) CROSSING: VR-043 left to right 31NM prior to K; |
| | | | | (e) CROSSING: IR-721/VR-1721 left to right 27NM prior to K; |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM left and 2 NM right of centerline from A to B; 4 NM either side of centerline from B to C; 1 NM either side of centerline from C to D; 4 NM left and 3 NM right of centerline from D to E; 4 NM either side of centerline from E to G; 3 NM either side of centerline from G to J; 4 NM either side of centerline from J to M; 2 NM left and 4 NM right of centerline from M to O.

Special Operating Procedures:

- (1) Users must visit [HTTPS://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPAC E/ROUTES](https://www.mil.seymourjohnson.af.mil/airspacE/ROUTES) for additional avoidance areas (Falconview.drw/mch files available) or contact 4OSS/OSOS (DSN 722-2129/2124).
- (2) Alternate Entry: B, C, D, E, F, G, H, I, J, K, L, M, N.
- (3) Alternate Exit: B, C, D, E, F, G, H, I, J, K, L, M, N.
- (4) Users must make their schedules entry times plus or minus 5 min or reschedule.
- (5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
- (6) Route users deconflict Farmville MOA with 1 OSS/OSO, DSN 574-2483/2559. Deconfliction is needed when routes are used between 0800-1700 HRS local, Mon-Fri. Make call in the blind on UHF Frequency 377.1 when transiting Farmville MOA Airspace.
- (7) When conducting terrain following operations between F and L, avoid overflight of residential structures to the maximum extent possible. This section of the route is very noise sensitive.
- (8) A-B:

VR ROUTES

- (f) CROSSING: IR-719 left to right 5NM prior to K;
(g) CROSSING: IR-715 right to left 4NM prior to K.
- (19) L-M:
(a) AVOID: Historical structure at N36-59.0 W78-52.0 by 1NM;
(b) TOWER: 191'AGL(1760'MSL) at N37-03.0 W79-31.6;
(c) CROSSING: VR-1722 left to right 17NM prior to M.
- (20) M-N:
(a) CROSSING: VR-083/VR-1061 opposite direction until 12NM prior to N;
(b) CROSSING: IR-715 left to right 46NM prior to N;
(c) CROSSING: VR-1759 left to right 38NM to N;
(d) CROSSING: VR-096 right to left 38NM prior to N;
(e) CROSSING: VR-1722 left to right 30NM to N;
(f) CROSSING: IR-719 left to right 14NM prior to N.
- (21) N-O:
(a) CROSSING: IR-719 left to right 31NM prior to O;
(b) CROSSING: IR-720 left to right 23NM prior to O;
(c) CROSSING: VR-1753 left to right 12NM prior to O;
(d) CROSSING: IR-718/VR-1713 left to right 8NM prior to O.
- (22) CROSSING ROUTE CONTACT INFORMATION:
(a) IR-062: Oceana NAS, DSN 433-1228;
(b) IR-080: Pensacola NAS, DSN 922-2735;
(c) IR-081: Pensacola NAS, DSN 922-2735;
(d) IR-608: Pensacola NAS, DSN 922-2735;
(e) IR-715: Oceana NAS, DSN 433-1228;
(f) IR-718: Oceana NAS, DSN 433-1228;
(g) IR-719: Oceana NAS, DSN 433-1228;
(h) IR-720: Oceana NAS, DSN 433-1228;
(i) IR-721: Shaw AFB, DSN 965-1118;
(j) IR-723: Pensacola NAS, DSN 922-2735;
(k) IR-726: Shaw AFB, DSN 965-1118;
(l) VR-043: Seymour Johnson AFB;
(m) VR-073: Seymour Johnson AFB;
(n) VR-083: Seymour Johnson AFB;
(o) VR-086: Seymour Johnson AFB;
(p) IR-093: Shaw AFB, DSN 965-1118;
(q) VR-096: Seymour Johnson AFB;
(r) VR-1061: Seymour Johnson AFB;
(s) VR-1753: Oceana NAS, DSN 433-1228;
(t) VR-1713: Andrews AFB, DSN 857-3307;
(u) VR-1759: Oceana NAS, DSN 433-1228;
(v) VR-1721: Shaw AFB, DSN 965-1118;
(w) VR-1722: Richmond ANG, DSN 864-6411;
(x) VR-1726: Shaw AFB, DSN 965-1118;
(y) VR-1759: Oceana NAS, DSN 433-1228.

FSS's Within 100 NM Radius:

AND, DCA, EKN, RDU

VR-043

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672.

SCHEDULING ACTIVITY: 4 OSS/OSOS, Seymour Johnson AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non-duty 4 FW/CP DSN 722-1973, C919-722-1973.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | ESL 269/13 | N39°12.00' W79°16.00' |
| 01 AGL B 105 MSL to | B | EKN 084/26 | N39°00.50' W79°33.00' |
| 01 AGL B 105 MSL to | C | EKN 157/25 | N38°33.00' W79°50.00' |
| 01 AGL B 105 MSL to | D | BKW 073/46 | N38°05.00' W80°13.50' |
| 01 AGL B 105 MSL to | E | ROA 004/28 | N37°48.50' W80°04.50' |
| 01 AGL B 105 MSL to | F | ROA 279/29 | N37°23.00' W80°40.00' |
| 10 AGL B 105 MSL to 10 AGL B 105 MSL to 10 NM past G then de- scend to | G | ROA 249/25 | N37°10.00' W80°33.00' |
| 10 AGL B 105 MSL to | H | ROA 178/25 | N36°55.50' W80°01.00' |
| 02 AGL B 105 MSL to | I | SBV 144/7 | N36°35.00' W78°55.00' |
| 02 AGL B 105 MSL to | J | LVL 227/34 | N36°22.50' W78°21.00' |
| 02 AGL B 105 MSL to | K | TYI 006/10 | N36°09.00' W77°42.00' |
| 02 AGL B 105 MSL to | L | CVI 176/28 | N35°55.50' W76°44.50' |
| 02 AGL B 105 MSL to | M | CVI 155/42 | N35°48.00' W76°23.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to F; 3 NM either side of centerline from F to 5 NM NW of G; 1 NM left and 3 NM right of centerline from 5 NM NW of G to G; 3 NM left and 5 NM right of centerline from G to H; 5 NM either side of centerline from H to M.

Special Operating Procedures:

- (1) Users must visit [HTTP://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPACE/ROUTES](http://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPACE/ROUTES) for additional avoidance areas (FALCONVIEW.DRW/MCH files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
- (2) Alternate Entry: B, C, D, E, F, G, H, I, J, K, L.
- (3) Alternate Exit: B, C, D, E, F, G, H, I, J, K, L.
- (4) Users must make their schedules entry time plus or minus 5 min or reschedule.
- (5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
- (6) Evers MOA is active with continuous daytime operations from 1000' AGL to FL 180. Contact 1 FW Scheduling, 1 OSS/OSO, Langley AFB, VA, DSN 574-2559/2483 for MOA flight information/deconfliction prior to scheduling.
- (7) A-B:
(a) CROSSING: IR-760/VR-1754 Parallel entire leg.
- (8) B-C:
(a) TOWER: 150'AGL(3003'MSL) at N38-52.0 W79-35.6;
(b) CROSSING: IR-760/VR-1754 right to left at B;

- (c) CROSSING: IR-720 left to right 26NM prior to C;
- (d) CROSSING: IR-720 right to left 15NM prior to C.
- (9) C-D:
 - (a) AVOID: National Radio Astronomy Observatory at N38-26.2 W79-50.1 by 4NM. Avoid UHF communications within 15NM safety permitting;
 - (b) CAUTION: Powerlines crossing the Greenbar River (N38-18.0 W79-58.0) extend 200'AGL and are very difficult to acquire visually;
 - (c) CROSSING: IR-762/VR-1756 left to right 17NM prior to D;
 - (d) CROSSING: IR-715 right to left 11NM prior to D;
 - (e) CROSSING: IR-608 right to left 5NM prior to D;
 - (f) CROSSING: VR-041 right to left 4NM prior to D.
- (10) D-E:
 - (a) CROSSING: IR-608 parallel entire leg.
- (11) E-F:
 - (a) AVOID: School at N37-48.0 W80-04.0 by 3000' or 1NM;
 - (b) CROSSING: IR-608 parallel entire leg;
 - (c) CROSSING: IR-715/VR-096 left to right 30NM prior to F;
 - (d) CROSSING: VR-041 left to right 20NM prior to F;
 - (e) CROSSING: VR-761 left to right 14NM prior to F.
- (12) F-G:
 - (a) AVOID: Radford Army Ammunition Plant at N37-11.0 W80-32.0 by 1000' or 1NM;
 - (b) CROSSING: IR-608 left to right 13NM prior to G;
 - (c) CROSSING: IR-081 left to right 1NM prior to G.
- (13) G-H:
 - (a) CROSSING: IR-81 parallel entire leg;
 - (b) CROSSING: VR-042 right to left 10NM prior to H;
 - (c) CROSSING: IR-721/VR-1721 left to right 6NM prior to H.
- (14) H-I:
 - (a) CAUTION: Landfill (potential bird hazard) at N36-55.3 W79-51.4;
 - (b) CROSSING: IR-719 left to right 50NM prior to I;
 - (c) CROSSING: VR-042 left to right 41NM prior to I;
 - (d) CROSSING: IR-715 right to left 19NM prior to I;
 - (e) CROSSING: IR-715 left to right 13NM prior to I;
 - (f) CROSSING: VR-1061 left to right 10NM prior to I;
 - (g) CROSSING: VR-1722 parallel 10NM prior to I;
 - (h) CROSSING: IR-719 right to left 5NM prior to I.
- (15) I-J:
 - (a) CROSSING: IR-062 left to right 25NM prior to J;
 - (b) CROSSING: VR-086 left to right 11NM prior to J.
- (16) J-K:
 - (a) TOWER: 325'AGL (530'MSL) at N36-16.7 W77-54.2;
 - (b) CROSSING: VR-083 right to left 17NM prior to K;
 - (c) CROSSING: VR-1759 left to right 10NM prior to K.
- (17) K-L:
 - (a) AVOID: School at N36-03.1 W76-58.3 by 1000' or 1NM;
 - (b) AVOID: School at N36-00.3 W76-57.2 by 1000' or 1NM;
 - (c) CROSSING: IR-718 left to right 39NM prior to L;
 - (d) CROSSING: VR-086 right to left 34NM prior to L;
 - (e) CROSSING: VR-085 parallel 25NM prior to L;
 - (f) CROSSING: IR-719 left to right 21NM prior to L;
 - (g) CROSSING: VR-1046 parallel until 15NM prior to L;
 - (h) CROSSING: IR-062 right to left 10NM prior to L;
 - (i) CROSSING: VR-073 left to right at L.
- (18) L-M:
 - (a) AVOID: Phelps Lake Dock (Congressional Noise Sensitive Area) at N35-47.4 W76-24.7 by 1000' or 0.5NM;
 - (b) TOWER: 250'AGL (266'MSL) silos at N35-49.3 W76-30.8;

- (c) CROSSING: VR-073 parallel entire leg;
- (d) CROSSING: VR-085 left to right 17NM prior to M;
- (e) CROSSING: IR-062 right to left 10NM prior to M;
- (f) CROSSING: VR-1713 left to right 5NM prior to M;
- (g) CROSSING: VR-1753 left to right 5NM prior to M.
- (19) CROSSING ROUTE CONTACT INFORMATION:
 - (a) IR-062: Oceana NAS, DSN 433-1228;
 - (b) IR-081: Pensacola NAS, DSN 922-2735;
 - (c) IR-608: Pensacola NAS, DSN 922-2735;
 - (d) IR-715: Oceana NAS, DSN 433-1228;
 - (e) IR-718: Oceana NAS, DSN 433-1228;
 - (f) IR-719: Oceana NAS, DSN 433-1228;
 - (g) IR-720: Oceana NAS, DSN 433-1228;
 - (h) IR-721: Shaw AFB, DSN 965-1118;
 - (i) IR-760: Oceana NAS, DSN 433-1228;
 - (j) IR-762: Oceana NAS, DSN 433-1228;
 - (k) VR-041: Seymour Johnson AFB;
 - (l) VR-042: Seymour Johnson AFB;
 - (m) VR-073: Seymour Johnson AFB;
 - (n) VR-083: Seymour Johnson AFB;
 - (o) VR-085: Seymour Johnson AFB;
 - (p) VR-086: Seymour Johnson AFB;
 - (q) VR-1046: Cherry Point, DSN 582-4040;
 - (r) VR-1061: Seymour Johnson AFB;
 - (s) VR-1713: Andrews AFB, DSN 857-3307;
 - (t) VR-1753: Oceana NAS, DSN 433-1228;
 - (u) VR-1721: Shaw AFB, DSN 965-1118;
 - (v) VR-1754: Oceana NAS, DSN 433-1228;
 - (w) VR-1756: Oceana NAS, DSN 433-1228;
 - (x) VR-1759: Oceana NAS, DSN 433-1228;
 - (y) VR-1722: Richmond ANG, DSN 864-6411.

FSS's Within 100 NM Radius:

AOO, DCA, EKN, RDU

VR-045

ORIGINATING ACTIVITY: GA ANG/CRTC/OTR Townsend Range, P.O.BOX 220, Townsend, GA 31331, DSN 860-3007 C912-963-3007.

SCHEDULING ACTIVITY: GA ANG/CRTC/OTR Townsend Range, P.O.BOX 220, Townsend, GA 31331, DSN 860-3303 C912-963-3303.

HOURS OF OPERATION: 0700-2200 LCL, Mon-Fri, other time by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|----|--------------|--------------------------|
| 00.5 AGL B 04 MSL to | A | SAV 142/50 | N31°32.50' W80°31.00' |
| 00.5 AGL B 04 MSL to | B | SAV 153/43 | N31°32.50' W80°44.80' |
| 00.5 AGL B 04 MSL to | C | SAV 169/38 | N31°32.70' W80°59.00' |
| 00.5 AGL B 04 MSL to | D | SAV 183/36 | N31°32.80' W81°10.00' |
| 00.5 AGL B 04 MSL to | E | SAV 194/36 | N31°32.90' W81°17.50' |

VR ROUTES

00.5 AGL B 04 MSL to F SAV 204/36 N31°34.30'
W81°25.00'
00.5 AGL B 04 MSL to G SAV 215/40 N31°33.70'
W81°34.70'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 20 NM either side of centerline from A to C; 10 NM left and 20 NM right of centerline from C to D; 10 NM right and 8 NM left of centerline from D to F. 5 NM either side of centerline from F to G

Special Operating Procedures:

- (1) CAUTION: Interstate 95 is a major VFR fly way for civil aircraft.
- (2) Route is to be used in conjunction with Townsend Target (R-3007). Do not enter R-3007 without clearance from Townsend Range Control (228.4 or 252.9, 119.225).
- (3) Route shares centerline and is reverse course direction of VR-025.
- (4) Primary Entry Point A, Alternate Entry Points are B and C.
- (5) Primary Exit Point G, Alternate Exit Points are D, E and F.
- (6) Avoid overflight of Blackbeard, Harris Neck and Sapelo National Wildlife Refuges by 1500' AGL or 1 NM horizontally.
- (7) Minimum altitude of 1500' AGL from Point D to G from 1 December to 31 March.
- (8) 1228 MSL Antenna Tower located N31-35.15 W81-20.60.
- (9) 1039 MSL Antenna Tower located N31-37.00 W81-21.50.
- (10) 518 MSL Antenna Tower located N31-30.60 W81-24.00.
- (11) 540 MSL Antenna Tower located N31-26.70 W81-25.60.
- (12) Route crosses VR-1041 and VR-1040 at Point D.

FSS's Within 100 NM Radius:

GNV MCN

VR-054

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672.

SCHEDULING ACTIVITY: 4 OSS/OSOS, Seymour Johnson AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non-duty 4FW/CP DSN 722-1973, C919-722-1973.

HOURS OF OPERATION: 0700-2100 local Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 01 AGL B 95 MSL to | A | ISO 093/105 | N35°24.70' W75°25.30' |
| 01 AGL B 95 MSL to | B | ISO 093/82 | N35°24.70' W75°53.00' |
| 01 AGL B 95 MSL to | C | ISO 085/81 | N35°35.70' W75°55.70' |

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 2 NM either side of centerline from A to B; 4 NM either side of centerline from B to C.

Special Operating Procedures:

- (1) Users must visit [HTTPS://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPAC E/ROUTES](https://www.mil.seymourjohnson.af.mil/airspac_e/routes) for additional avoidance areas (FALCONVIEW.DRW/MCH files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
- (2) Alternate Entry: B.
- (3) Alternate Exit: B.
- (4) Users must make their scheduled entry time plus or minus 5 min or reschedule.
- (5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
- (6) A-B:
 - (a) AVOID: Entire beach is considered Noise Sensitive - maintain 1000'AGL when within 1NM of coastal areas;
 - (b) CAUTION: Numerous light aircraft along coast;
 - (c) CROSSING: VR-73 left to right at A.
- (7) B-C:
 - (a) CAUTION: Possible conflict of VFR traffic exists in and around the area of Hyde Co Airport (N35-33.7 W75-57.3) located approximately 3NM southwest of C;
 - (b) CROSSING: VR-71 opposite direction entire leg.
- (8) CROSSING ROUTE CONTACT INFORMATION:
 - (a) VR-71: Seymour Johnson AFB;
 - (b) VR-73: Seymour Johnson AFB.

FSS's Within 100 NM Radius:

RDU

VR-058

ORIGINATING ACTIVITY: 20 OSS/OSTA, Shaw AFB, SC 29152 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152 DSN 965-1118/1119, C803-895-1118/1119. Non-duty hrs-DSN 965-5850, C803-895-5850.

HOURS OF OPERATION: Continuous (Jan, Mar, May, Jul, Sep, Nov) VR-092 reverse direction other months

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SPA 264/54 | N34°54.00' W83°00.00' |
| 01 AGL B 80 MSL to | B | SPA 262/85 | N34°46.00' W83°37.00' |
| 01 AGL B 80 MSL to | C | GQO 081/54 | N35°05.00' W84°04.00' |
| 01 AGL B 80 MSL to | D | GQO 054/45 | N35°23.00' W84°24.00' |
| 01 AGL B 50 MSL to | E | GQO 325/51 | N35°40.00' W85°44.00' |
| 01 AGL B 50 MSL to | F | GQO 260/30 | N34°53.00' W85°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 8 NM either side of centerline from A to B; 10 NM either side of centerline from B to F.

Special Operating Procedures:

- (1) Alternate Entry Point: B and D.
- (2) Alternate Exit Point: C, D and E.
- (3) WARNING: Avoid Nuclear Power Oconee, SC (N34-47-05 W082-53-09) avoid by 1 NM/do not overfly.
- (4) CAUTION: Numerous power lines along routes above 100' AGL.
- (5) 6 towers:
 - (a) 200' AGL (3490') N34-50.0 W83-31.0;
 - (b) 500' AGL (1640') N34-51.5 W83-03.5;
 - (c) 728' AGL (2368') N34-43.2 W83-43.0;
 - (d) 225' AGL (925') N35-33.0 W84-47.5;
 - (e) 225' AGL (1175') N35-25.5 W84-38.0;
 - (f) 225' AGL (925') N35-20.0 W84-46.5;
 - (g) 350' AGL (2300') N35-12.3 W85-48.5;
 - (h) 250' AGL (1350') N35-42.0 W85-49.5;
 - (i) 200' AGL (2500') N35-19.3 W84-27.2.
- (6) Avoid 2 noise sensitive areas:
 - (a) N34-42.2 W83-38.1, avoid by 1500' AGL/1 NM.
 - (b) N34-45.9 W83-37.8, avoid by 1000' AGL/1 NM.
 - (c) AVOID Clayton, GA at N34-52.8 W83-24.0, by 1500' AGL/2 NM.
- (7) Congressional noise sensitive area, N35-05 W84-04, avoid by 1500' AGL/5 NM.
- (8) Congressional noise sensitive area, Cocker Creek, TN, N35-16 W84-17, avoid by 1000' AGL/1 NM.
- (9) CAUTION; 3000' runway at Telico Plains, TN, N35-22.8 W84-18.0, intensive student training, avoid by 1500' AGL/3 NM.
- (10) CAUTION: Cahilhowee Glider Port N35-13.8 W84-35.0, numerous glider activities, SFC-5000' within 5 NM.
- (11) Avoid: Congressional noise sensitive area, Athens, TN, N35-26.5 W84-36.0, avoid by 1500' AGL/ 1 NM.
- (12) Power Plant N35-36.1 W84-47.5, avoid by 1000' AGL/1 NM.
- (13) Avoid: Chlorine Gas Plant N35-17.5 W84-45.0, avoid by 1000' AGL/1 NM.
- (14) Avoid; Noise sensitive area, Dayton, TN, N35-28.0 W85-01.0, avoid by 1500' AGL/1 NM.
- (15) CAUTION: Powerlines overhanging valley N35-33.0 W85-03.0.
- (16) CAUTION: VR-1052 same direction B to F (de-conflict DSN 922-2735).
- (17) CAUTION: VR-1055 crosses right to left between C to D (de-conflict DSN 922-2735).
- (18) CAUTION: Hang gliding activity N35-06 W85-30, to N35-23 W85-20.5 to N35-01 W85-23 to N34-46 W85-34 to N35-12.5 W85-32.5.
- (19) CAUTION: IR-078 same direction E to F (de-conflict DSN 922-2735).
- (20) CAUTION: 3 uncharted airfields - avoid by 1000' AGL/2 NM.
 - (a) 1800' Grass strip N35-07.2 W84-16.3;
 - (b) 2500' Grass strip (Rwy 07-25) N35-45.0 W84-54.5;
 - (c) 3000' Hard surface (Rwy 12-30) N35-15.2 W85-23.0.
- (21) CAUTION: Extensive seaplane activity, surface to 1400' at Rock Island, TN, N35-48.0 W85-37.0.
- (22) Avoid: Steam Plant N34-53 W85-45, avoid by 1000' AGL/1 NM.

- (23) Presidential noise sensitive area: Monteagle, TN, N35-16.0 W85-50.0, avoid by 1500' AGL/3 NM.
- (24) After last Exit Point F, above 10,000' MSL contact Atlanta ARTCC (eastbound) on 353.8 or Memphis Center (westbound) on 353.5. Below 10,000' MSL contact Chattanooga Approach on 321.2/379.1 for further IFR clearance.
- (25) Avoid noise sensitive area: Peachtree Community N35-05.7 W83-57.0, avoid by 1500' AGL/1 NM.
- (26) Avoid the following environmental sensitive areas (endangered bats) by 500' vertically or 1000' horizontally unless operationally necessary (N35-33.2 W84-47.5), (N35-24.5 W85-00.8), (N35-32.8 W85-40.3), (N35-15.5 W85-52.3), (N34-59.4 W85-36.6).
- (27) Avoid: Noise sensitive area N35-35.5 W85-12.0 (SE of Pikeville, TN) avoid by 1000' AGL/1 NM.
- (28) Avoid: Congressional (Extremely) noise sensitive area: Ivy Log Mountain N34-55.0 W83-58.7. Minimum altitude 4200' MSL within 2 NM.
- (29) Make entry time plus or minus 5 minutes or reschedule.
- (30) Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
- (31) Be alert for hot air balloons operating from sfc to 12,000' MSL within 10 NM of N34-42.0 W83-44.0.

FSS's Within 100 NM Radius:

ANB, AND, BNA, MCN

VR-060

ORIGINATING ACTIVITY: 187 FW, 5187 Selma Highway, Montgomery, AL 36108-4824 DSN 358-9255, C334-394-7255.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-1700 Local or by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| As assigned to | A | MGM 256/38 | N32°06.00' W87°03.00' |
| 05 AGL B 15 AGL to | B | MGM 262/71 | N32°06.10' W87°42.30' |
| 01 AGL B 15 AGL to | C | GCV 038/37 | N31°33.00' W88°00.00' |
| 01 AGL B 50 MSL to | D | GCV 057/19 | N31°15.00' W88°09.40' |
| 01 AGL B 100 MSL to | E | GCV 273/16 | N31°08.00' W88°48.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 2 NM left and 13.5 NM right of centerline from B to C; 5 NM either side of centerline from C to E.

Special Operating Procedures:

- (1) Cross Millers Ferry Lock and Dam 1000' AGL or above.
- (2) Flights entering at A or B will transmit in the blind their intentions to transit the Camden Ridge MCA 1500' and below on 267.9.
- (3) Alternate Entry/Exit Point: B, C or D.

VR ROUTES

- (4) Hazards A-B:
 (a) Antenna Tower N32-06.3 W87-04.6W (600' MSL).
 (b) Water Tower N32-04.1 W87-17.6 (450' MSL).
 (c) Radio Tower N32-04.4 W87-32.8 (500' MSL).
 (d) Radio Tower N32-07.3 W87-44.0, 1113' MSL (703' AGL).
- (5) Hazards B-C:
 (a) Smokestack N31-50.0 W88-08.0 (300' AGL).
 (b) Noise sensitive: Avoid over-flight of Choctaw National Wildlife Refuge N31-54.0 W88-10.0.
- (6) Hazards C-D:
 (a) Two water towers: N31-27.0N 88-02.0W (350' MSL).
 (b) Fire tower: N31-25.0N W88-08.0W (400' MSL).
 (c) Antenna: N31-18.0 W88-03.0 (100' AGL).
 (d) Antenna: N31-17.0 W88-01.0 (200' AGL).
 (e) Antenna: N31-15.0 W88-08.0 (135' AGL).
 (f) Antenna: N31-11.0 W88-06.0 (150' AGL).
 (g) Noise sensitive: Avoid St. Stephans, AL N31-32.5 W88-03.0 by 1000' AGL and 5 NM.
 (h) Avoid over-flying chemical plant: N31-16.1 W87-59.5.
- (7) Hazards D-E:
 (a) Fire tower: N31-11.0 W88-36.0 (400' MSL).
 (b) Two water towers: N31-09.0 W88-33.0 (300' MSL).
 (c) Antenna: N31-07.0 W88-29.0 (200' AGL).
 (d) Noise sensitive: Avoid if possible chicken farm N31-11.0 W88-24.0.
- (8) Flight beyond D is not authorized unless the Desota MOA is scheduled for your flight.
- (9) Route leg C to E is congruent with VR-179 and opposite direction C to D. Use of this leg requires coordination with the ANG CRTIC, DSN 363-8207.
- (10) CAUTION: Between A and C route crosses/conflicts with VR-1020, VR-1021, VR-1022, VR-1030, VR-1031, VR-1033 and VR-1083. Between C and E route crosses/conflicts with VR-1021, VR-1024 and VR-1083. See and Avoid applies.
- (11) Scheduling activity hours of operations: 0700-1730 central time Tue-Fri, occasional weekends. To schedule use on Sat, Sun, Mon or Tue AM, coordinate prior to 1600 central time the previous Fri.

FSS's Within 100 NM Radius:

ANG, DRI, GWO

VR-071

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour

Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672.

SCHEDULING ACTIVITY: 4 OSS/OSOS, Seymour Johnson

AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non-duty 4FW/CP DSN 722-1973, C919-722-1973.

HOURS OF OPERATION: 0700-2100 local Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 01 AGL B 95 MSL to | A | ISO 084/81 | N35°36.50' W75°55.50' |
| 01 AGL B 95 MSL to | B | ISO 091/81 | N35°27.00' W75°54.50' |

| | | | |
|--------------------|---|------------|--------------------------|
| 01 AGL B 95 MSL to | C | ISO 098/84 | N35°17.00' W75°51.00' |
| 01 AGL B 95 MSL to | D | ISO 104/87 | N35°08.00' W75°48.30' |

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- Users must visit [HTTPS://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPAC E/ROUTES](https://www.mil.seymourjohnson.af.mil/airspac_e/routes) for additional avoidance areas (FALCONVIEW.DRW/MCH files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
- Alternate Entry: B, C.
- Alternate Exit: B, C.
- Users must make their scheduled entry time plus or minus 5 min or reschedule.
- Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
- A-B:
 - CAUTION: Possible conflict of VFR traffic exists in and around the area of Hyde Co Airport (N35-33.7 W75-57.3) located approximately 4NM southwest of A;
 - CROSSING: VR-54 opposite direction entire leg.
- B-C:
 - CROSSING: VR-54 opposite direction until 8NM prior to C;
 - CROSSING: VR-73 right to left at C.
- C-D:
 - AVOID: Entire beach is considered Noise Sensitive - maintain 1000'AGL when within 1NM of coastal areas;
 - CAUTION: Numerous light aircraft along coast;
 - CROSSING: VR-73 right to left at C.
- CROSSING ROUTE CONTACT INFORMATION:
 - VR-54: Seymour Johnson AFB;
 - VR-73: Seymour Johnson AFB.

FSS's Within 100 NM Radius:

RDU

VR-073

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour

Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672.

SCHEDULING ACTIVITY: 4 OSS/OSOS, Seymour Johnson

AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non-duty 4FW/CP DSN 722-1973, C919-722-1973.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 01 AGL B 65 AGL to | A | LVL 228/20 | N36°34.00' W78°10.00' |
| 01 AGL B 65 AGL to | B | LVL 197/16 | N36°33.00' W77°57.50' |

| | | | | |
|--------------------|---|-------------|--------------------------|---|
| 01 AGL B 65 AGL to | C | CVI 296/29 | N36°31.00' W77°27.00' | (f) CROSSING: IR-719 left to right 19NM prior to E; (g) CROSSING: IR-062 right to left 7NM prior to E. |
| 01 AGL B 65 AGL to | D | CVI 247/23 | N36°10.00' W77°17.00' | (10) E-F: |
| 01 AGL B 65 AGL to | E | CVI 190/21 | N36°01.00' W76°53.00' | (a) Transit R-5314J below 1000'AGL unless scheduled for Dare Co Operations and cleared the Range Control Officer; |
| 01 AGL B 65 AGL to | F | CVI 156/42 | N35°47.00' W76°24.00' | (b) AVOID: Phelps Lake Dock (Congressional Noise Sensitive Area) at N35-47.4 W76-24.7 by 1000' or 0.5NM; |
| 10 AGL B 65 AGL to | G | NKT 035/32 | N35°23.00' W76°35.00' | (c) TOWER: 250'AGL(266'MSL) silos at N35-49.3 W76-30.8; |
| 01 AGL B 95 MSL to | H | ISO 098/64 | N35°18.00' W76°16.00' | (d) CAUTION: Aircraft flying approached into Edenton Airport north of corridor at N36-01.5 W76-34.0; |
| 01 AGL B 95 MSL to | I | ISO 098/84 | N35°17.00' W75°51.00' | (e) CROSSING: VR-043 parallel entire leg; |
| 01 AGL B 65 AGL to | J | ISO 093/105 | N35°24.00' W75°25.00' | (f) CROSSING: VR-085 right to left 16NM prior to F; (g) CROSSING: VR-1713 left to right 5NM prior to F; |
| 01 AGL B 65 AGL to | K | CVI 131/84 | N35°38.00' W75°25.00' | (h) CROSSING: VR-1753 left to right 5NM prior to F. |
| 01 AGL B 65 AGL to | L | CVI 137/68 | N35°40.50' W75°46.00' | (11) F-G: |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to G; 2 NM left and one-half NM right of centerline from G to H; 5 NM either side of centerline from H to L.

Special Operating Procedures:

- (1) Users must visit [HTTPS://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPAC E/ROUTES](https://www.mil.seymourjohnson.af.mil/airspac_e/routes) for additional avoidance areas (FALCONVIEW.DRW/MCH files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
- (2) Alternate Entry: B, C, D, E, F, G, H, I, J, K.
- (3) Alternate Exit: B, C, D, E, F, G, H, I, J, K.
- (4) Users must make their schedules entry time plus or minus 5 min or reschedule.
- (5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
- (6) A-B:
 - (a) CROSSING: IR-062 opposite direction entire leg;
 - (b) CROSSING: VR-096 right to left 7NM prior to B;
 - (c) CROSSING: VR-83 right to left at B.
- (7) B-C:
 - (a) CROSSING: VR-083 right to left at B;
 - (b) CROSSING: IR-062 parallel until 8NM prior to C;
 - (c) CROSSING: IR-719 left to right at C.
- (8) C-D:
 - (a) CROSSING: IR-719 parallel entire leg;
 - (b) CROSSING: IR-062 left to right 11NM prior to D;
 - (c) CROSSING: IR-718 left to right 7NM prior to D;
 - (d) CROSSING: VR-042 left to right at D;
 - (e) CROSSING: IR-720 left to right at D.
- (9) D-E:
 - (a) AVOID: School at N36-03.1 W76-58.3 by 1000' or 1NM;
 - (b) AVOID: School at N36-00.3 W76-57.2 by 1000' or 1NM;
 - (c) CAUTION: Landfill (potential bird hazard) at N36-07.3 W77-04.0;
 - (d) CROSSING: VR-042 left to right at D;
 - (e) CROSSING: IR-720 left to right at D;
- (10) E-F:
 - (a) Transit R-5314J below 1000'AGL unless scheduled for Dare Co Operations and cleared the Range Control Officer;
 - (b) AVOID: Phelps Lake Dock (Congressional Noise Sensitive Area) at N35-47.4 W76-24.7 by 1000' or 0.5NM;
 - (c) TOWER: 250'AGL(266'MSL) silos at N35-49.3 W76-30.8;
 - (d) CAUTION: Aircraft flying approached into Edenton Airport north of corridor at N36-01.5 W76-34.0;
 - (e) CROSSING: VR-043 parallel entire leg;
 - (f) CROSSING: VR-085 right to left 16NM prior to F;
 - (g) CROSSING: VR-1713 left to right 5NM prior to F;
 - (h) CROSSING: VR-1753 left to right 5NM prior to F.
- (11) F-G:
 - (a) Transit R-5314J below 1000'AGL unless scheduled for Dare Co Operations and cleared the Range Control Officer;
 - (b) AVOID: Pungo National Wildlife Refuge (N35-42.0 W76-34.0) by 2000';
 - (c) TOWER: 300'AGL(307'MSL) at N35-35.5 W76-29.0;
 - (d) CROSSING: VR-084 right to left 15NM prior to G;
 - (e) CROSSING: IR-012 right to left 4NM prior to G;
 - (f) CROSSING: IR-062 left to right 2NM prior to G;
 - (g) CROSSING: VR-084 right to left at G.
- (12) G-H:
 - (a) AVOID: Swanquater National Wildlife Refuge (N35-20.0 W76-20.0) by 2000';
 - (b) CROSSING: VR-084 right to left at G.
- (13) H-I:
 - (a) AVOID: Swanquater National Wildlife Refuge (N35-20.0 W76-20.0) by 2000';
 - (b) CROSSING: VR-071 left to right at I.
- (14) I-J:
 - (a) AVOID: Entire beach is considered Noise Sensitive - maintain 1000'AGL when within 1NM of coastal areas;
 - (b) CROSSING: VR-071 left to right at I;
 - (c) CROSSING: VR-054 right to left at J.
- (15) J-K:
 - (a) AVOID: Entire beach is considered Noise Sensitive - maintain 1000'AGL when within 1NM of coastal areas;
 - (b) CROSSING: VR-054 right to left at J.
- (16) K-L:
 - (a) Do not enter R-5313 when active (By NOTAM) unledd cleared in;
 - (b) AVOID: Entire beach is considered Noise Sensitive-maintain 1000'AGL when within 1NM of coastal areas;
 - (c) AVOID: Pea Island National Wildlife Refuge (N35-41.0 W75-32.0) by 2000';
 - (d) TOWER: 350'AGL(353'MSL) at N35-41.0 W75-29.2.
- (17) CROSSING ROUTE CONTACT INFORMATION:
 - (a) IR-012: Seymour Johnson AFB;
 - (b) IR-062: Oceana NAS, DSN 433-1228;
 - (c) IR-718: Oceana NAS, DSN 433-1228;
 - (d) IR-719: Oceana NAS, DSN 433-1228;
 - (e) IR-720: Oceana NAS, DSN 433-1228;
 - (f) VR-042: Seymour Johnson AFB;
 - (g) VR-043: Seymour Johnson AFB;
 - (h) VR-054: Seymour Johnson AFB;
 - (i) VR-071: Seymour Johnson AFB;

VR ROUTES

- (j) VR-083: Seymour Johnson AFB;
- (k) VR-084: Seymour Johnson AFB;
- (l) VR-085: Seymour Johnson AFB;
- (m) VR-096: Seymour Johnson AFB;
- (n) VR-1713: Andrews AFB, DSN 857-3307;
- (o) VR-1753: Oceana NAS, DSN 433-1228.

FSS's Within 100 NM Radius:

RDU

VR-083

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672

SCHEDULING ACTIVITY: 4 OSS/OSOS, Seymour Johnson AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non-duty 4FW/CP DSN 722-1973, C919-722-1973.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | FLO 082/38 | N34°21.00' W78°54.00' |
| 05 AGL B 65 MSL to | B | FLO 061/51 | N34°41.00' W78°47.00' |
| 05 AGL B 65 MSL to | C | FLO 043/120 | N35°45.00' W78°04.00' |
| 05 AGL B 65 MSL to | D | FLO 041/124 | N35°52.00' W78°06.00' |
| 10 AGL B 65 MSL to | E | SBV 089/53 | N36°46.00' W77°55.00' |
| 05 AGL B 65 MSL to | F | SBV 055/20 | N36°53.00' W78°42.00' |
| 05 AGL B 65 MSL to | G | SBV 350/13 | N36°53.00' W79°05.00' |
| 05 AGL B 65 AGL to | H | SBV 298/32 | N36°53.00' W79°37.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Users must visit [HTTPS://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPAC E/ROUTES](https://www.mil.seymourjohnson.af.mil/airspacE/routes) for additional avoidance areas (FALCONVIEW.DRW/MCH files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
- (2) Alternate Entry: B, C, D, E, F.
- (3) Alternate Exit: B, C, D, E, F.
- (4) Users must make their schedules entry time plus or minus 5 min or reschedule.
- (5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.

- (6) Route users must deconflict Farmville MOA with 1 OSS/OSO, DSN 574-2483/2559. Deconfliction is needed when routes are used between 0800-1700 hrs local, Mon-Fri. Make a call in the blind on UHF frequency 377.1 when transiting Farmville MOA airspace.
- (7) A-B:
 - (a) AVOID: Horse training stable at N34-40.0 W78-45.0 by 1000' or 1NM;
 - (b) CAUTION: Uncharted Airfield (08/24 and 15/33) at N34-17.7 W79-03.3;
 - (c) CROSSING: VR-087 left to right at A;
 - (d) CROSSING: IR-035/VR-1040/VR-1043 right to left 15NM prior to B;
 - (e) CROSSING: IR-062 left to right 10NM prior to B.
- (8) B-C:
 - (a) AVOID: Fayetteville Class C Airspace 1400'MSL to 4200'MSL;
 - (b) TOWER: 293'AGL (477'MSL) at N35-40.7 W78-04.0;
 - (c) CAUTION: Uncharted grass strip (01/19) at N35-16.3 W78-26.4;
 - (d) CROSSING: VR-1046 right to left 36NM prior to C;
 - (e) CROSSING: IR-718 right to left 3NM prior to C.
- (9) C-D:
 - (a) No restriction.
- (10) D-E:
 - (a) TOWER: 415'AGL(777'MSL) at N36-26.3 W77-57.0;
 - (b) CAUTION: Landfill (potential bird hazard) at N36-03.8 W077-59.6;
 - (c) CROSSING: VR-1046 left to right 41NM prior to E;
 - (d) CROSSING: VR-043 left to right 31NM prior to E;
 - (e) CROSSING: VR-1759 left to right 27NM prior to E;
 - (f) CROSSING: VR-042 right to left 24NM prior to E;
 - (g) CROSSING: VR-086/VR096 right to left 23NM prior to E;
 - (h) CROSSING: IR-062 right to left 14NM prior to E;
 - (i) CROSSING: VR-073 left to right 13NM prior to E;
 - (j) CROSSING: IR-719 left to right 4NM prior to E;
 - (k) CROSSING: VR-042 left to right 3NM prior to E;
 - (l) CROSSING: IR-715 right to left at E.
- (11) E-F:
 - (a) CROSSING: IR-715 left to right at E;
 - (b) CROSSING: VR-1061 parallel entire leg;
 - (c) CROSSING: VR-1722 left to right 27NM prior to F;
 - (d) CROSSING: VR-042 right to left 27NM prior to F;
 - (e) CROSSING: VR-096 left to right 20NM prior to F;
 - (f) CROSSING: VR-1759 right to left 19NM prior to F;
 - (g) CROSSING: IR-715 right to left 6NM prior to F;
 - (h) CROSSING: VR-042 left to right at F.
- (12) F-G:
 - (a) CROSSING: VR-042/VR-1061 parallel entire leg;
 - (b) CROSSING: VR-1722 right to left at G.
- (13) G-H:
 - (a) TOWER: 200'AGL(830'MSL) at N36-56.8 W79-10.7;
 - (b) TOWER: 214'AGL(1034'MSL) at N36-51.3 W79-24.1;
 - (c) CROSSING: VR-1061/VR-1722 right to left at G;
 - (d) CROSSING: VR-042 parallel entire leg;
 - (e) CROSSING: IR-715 left to right 4NM prior to H.
- (14) CROSSING ROUTE CONTACT INFORMATION:
 - (a) IR-035: Shaw AFB, DSN 965-1118;
 - (b) IR-062: Oceana NAS, DSN 433-1228;
 - (c) IR-715: Oceana NAS, DSN 433-1228;
 - (d) IR-718: Oceana NAS, DSN 433-1228;
 - (e) IR-719: Oceana NAS, DSN 433-1228;
 - (f) VR-042: Seymour Johnson AFB;

- (g) VR-043: Seymour Johnson AFB;
- (h) VR-073: Seymour Johnson AFB;
- (i) VR-086: Seymour Johnson AFB;
- (j) VR-096: Seymour Johnson AFB;
- (k) VR-087: Shaw AFB, DSN 965-1118;
- (l) VR-1040: Cherry Point, DSN 582-4040;
- (m) VR-1043: Cherry Point, DSN 582-4040;
- (n) VR-1046: Cherry Point, DSN 582-4040;
- (o) VR-1067: Seymour Johnson AFB;
- (p) VR-1722: Richmond ANG, DSN 864-6411;
- (q) VR-1759: Oceana NAS, DSN 433-1228.

FSS's Within 100 NM Radius:

EKN, NTU, RDU

VR-084

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672.

SCHEDULING ACTIVITY: 4 OSS/OSOS, Seymour Johnson AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non-duty 4FW/CP DSN 722-1973, C919-722-1973.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| 01 AGL B 65 AGL to | A | ILM 194/30 | N33°51.00' W77°57.00' |
| 01 AGL B 65 AGL to | B | ILM 118/8 | N34°18.00' W77°43.00' |
| 01 AGL B 65 AGL to | C | ILM 011/29 | N34°50.00' W77°50.00' |
| 01 AGL B 65 AGL to | D | GSB 138/22 | N35°06.00' W77°38.00' |
| 01 AGL B 65 AGL to | E | NKT 315/31 | N35°12.00' W77°23.00' |
| 01 AGL B 65 AGL to | F | NKT 005/26 | N35°20.00' W76°54.50' |
| 01 AGL B 65 AGL to | G | NKT 015/37 | N35°31.00' W76°48.00' |
| 01 AGL B 65 AGL to | H | NKT 038/52 | N35°39.50' W76°21.00' |
| 01 AGL B 65 AGL to Alternate Exit: F | I | NKT 043/59 | N35°43.00' W76°11.50' |
| 01 AGL B 65 AGL to | F | NKT 005/26 | N35°20.00' W76°54.50' |
| 01 AGL B 65 AGL to | F1 | NKT 035/32 | N35°23.00' W76°35.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM left and 5 NM right of centerline from A to B; 5 NM either side of centerline from B to I.

Special Operating Procedures:

- (1) Users must visit [HTTPS://WWWMIL.SEYMOURJOHNSON.AF.MIL/AIRSPAC E/ROUTES](https://wwwmil.seymourjohnson.af.mil/airspacE/ROUTES) for additional avoidance areas (FALCONVIEW.DRW/MCH files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
- (2) Alternate Entry: B, C, D, E, F, G, F1.
- (3) Alternate Exit: B, C, D, E, F, G.
- (4) Users must make their schedules entry time plus or minus 5 min or reschedule.
- (5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
- (6) CAUTION: Numerous large towers along route.
- (7) A-B:
 - (a) AVOID: Entire beach is considered Noise Sensitive-maintain 1000' when within 1NM of coastal areas;
 - (b) AVOID: Figure 8 island (N34-16.1 W77-44.8) by 1NM;
 - (c) CAUTION: Numerous light aircraft along route;
 - (d) CROSSING: VR-1043 right to left at A;
 - (e) CROSSING: VR-1043 left to right 12NM prior to B.
- (8) B-C:
 - (a) AVOID: Figure 8 island (N34-16.1 W77-44.8) by 1NM;
 - (b) CROSSING: IR-718 parallel 26NM prior to C until C.
- (9) C-D:
 - (a) CROSSING: IR-718 parallel entire leg;
 - (b) CROSSING: IR-062 parallel entire leg;
 - (c) CROSSING: IR-012 left to right 5NM prior to D;
 - (d) CROSSING: VR-1046 right to left at D.
- (10) D-E:
 - (a) CROSSING: VR-1046 right to left at D;
 - (b) CROSSING: IR-718 parallel entire leg;
 - (c) CROSSING: IR-012 parallel entire leg.
- (11) E-F:
 - (a) AVOID: Horse breeding ranch at N35-1601 W77-09.1 by 1NM or 1000';
 - (b) TOWER: 1021'AGL(1037'MSL) at N35-12.0 W77-11.2;
 - (c) CROSSING: IR-012 parallel entire leg.
- (12) F-G:
 - (a) AVOID: Over-fly coastal areas by 1000'AGL;
 - (b) AVOID: Town of Bath at N35-28.5 W76-48.6 by 1.5NM
 - (c) TOWER: 200'AGL(203'MSL) at N35-25.7 W78-44.8;
 - (d) CROSSING: IR-062 left to right 9NM prior to G;
 - (e) CROSSING: VR-1046 left to right 6NM to G.
- (13) G-H:
 - (a) AVOID: Pungo National Wildlife Refuge (N35-42.0 W76-34.0) by 2000';
 - (b) TOWER: 295'AGL(300'MSL) at N35-35.5 W76-29.0;
 - (c) CROSSING: IR-062 right to left 16NM prior to H;
 - (d) CROSSING: VR-73 left to right 7NM prior to H.
- (14) H-I:
 - (a) AVOID: Town of Gumneck at N35-43.4 W76-09.2 by 1500' or 1.5NM;
 - (b) TOWER: 300'AGL(303'MSL) at N35-43.0 W76-09.0;
 - (c) CROSSING: IR-012 parallel until 5NM prior to I.
- (15) F-F1:
 - (a) AVOID: Over-fly coastal areas by 1000'AGL;
 - (b) TOWER: 245'AGL(250'MSL) at N35-20. W76-47.0;
 - (c) CROSSING: VR-1046 left to right 13NM prior to F1;
 - (d) CROSSING: IR-062 left to right 13NM prior to F1;
 - (e) CROSSING: IR-012 parallel entire leg.

VR ROUTES

(16) CROSSING ROUTE CONTACT INFORMATION:

- (a) VR-012: Seymour Johnson AFB;
- (b) IR-062: Oceana NAS, DSN 433-1228;
- (c) IR-718: Oceana NAS, DSN 433-1228;
- (d) IR-073: VR-084: Seymour Johnson AFB;
- (e) VR-1043: Cherry Point, DSN 582-4040;
- (f) VR-1046: Cherry Point, DSN 582-4040.

FSS's Within 100 NM Radius:

RDU

VR-085

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672.

SCHEDULING ACTIVITY: 4 OSS/OSOS, Seymour Johnson AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non-duty 4FW/CP DSN 722-1973, C919-722-1973.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------|----|--------------|--------------------------|
| As assigned to | A | TYI 222/38 | N35°28.00' W78°10.00' |
| 05 AGL B 30 MSL to | B | TYI 179/18 | N35°41.00' W77°40.00' |
| 05 AGL B 30 MSL to | C | TYI 108/16 | N35°55.00' W77°23.00' |
| 05 AGL B 30 MSL to | D | TYI 082/25 | N36°04.00' W77°12.00' |
| 05 AGL B 20 MSL to | E | TYI 099/49 | N35°55.00' W76°42.00' |
| 05 AGL B 20 MSL to | F | CVI 146/33 | N35°58.00' W76°24.00' |
| 05 AGL B 20 MSL to | G | CVI 126/45 | N36°02.00' W76°03.00' |
| 50 MSL to Alternate Exit: E | H | CVI 115/58 | N36°06.00' W75°43.00' |
| 05 AGL B 20 MSL to | E | TYI 099/49 | N35°55.00' W76°42.00' |
| 05 AGL B 20 MSL to | E1 | TYI 102/56 | N35°51.50' W76°34.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to G and E to E1.

ROUTE WIDTH - 5 NM either side of centerline from A to E; 3 NM either side of centerline from E to H; 3 NM either side of centerline from E to E1.

Special Operating Procedures:

- (1) Users must visit [HTTPS://WWWMIL.SEYMOURJOHNSON.AF.MIL/AIRSPAC E/ROUTES](https://wwwmil.seymourjohnson.af.mil/airspacE/ROUTES) for additional avoidance areas (FALCONVIEW.DRW/MCH files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
- (2) Alternate Entry: B, C, D, E, F, G, H.
- (3) Alternate Exit: B, C, D, E, F, G, H, E1.
- (4) Users must make their schedules entry time plus or minus 5 min or reschedule.

- (5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
- (6) A-B:
 - (a) AVOID: Goldsboro-Wayne Airport by 1500' or 3NM;
 - (b) CROSSING: VR-85 parallel entire leg.
- (7) B-C:
 - (a) CAUTION: Landfill (potential bird hazard) at N35-49.5 W77-34.2;
 - (b) CROSSING: VR-085 parallel entire leg;
 - (c) CROSSING: VR-1759 left to right 3NM prior to C.
- (8) C-D:
 - (a) CROSSING: VR-1046 left to right 5NM prior to D;
 - (b) CROSSING: VR-043 left to right 2NM prior to D;
 - (c) CROSSING: IR-719 left to right at D.
- (9) D-E:
 - (a) AVOID: School at N36-03.1 W76-58.3 by 1000' or 1NM;
 - (b) AVOID: School at N36-00.3 W76-57.2 by 1000' or 1NM;
 - (c) CAUTION: Landfill (potential bird hazard) at N36-07.3 W77-04.0;
 - (d) CROSSING: IR-719 left to right at D;
 - (e) CROSSING: VR-043 parallel entire leg;
 - (f) CROSSING: VR-073 parallel entire leg;
 - (g) CROSSING: IR-062 right to left 14NM prior to E.
- (10) E-F:
 - (a) CROSSING: VR-043 left to right at E;
 - (b) CROSSING: VR-073 left to right at E;
 - (c) CROSSING: VR-1713/VR-1753 10NM prior to F.
- (11) F-G:
 - (a) Do not enter 5-5302 when active (By NOTAM) unless cleared in;
 - (b) TOWER: 300'AGL(307'MSL) at N35-59.3 W76-07.9.
- (12) G-H:
 - (a) Contact Oceana Approach 279.2 upon exit for IFR pick-up if required.
- (13) E-E1:
 - (a) AVOID: Phelps Lake Dock (Congressional Noise Sensitive Area) at N35-47.4 W76-24.7 by 1000' or 0.5NM;
 - (b) CROSSING: VR-043 parallel entire leg;
 - (c) CROSSING: VR-073 parallel entire leg;
 - (d) CROSSING: VR-1713 left to right at E1;
 - (e) CROSSING: IR-062 right to left at E1.
- (14) CROSSING ROUTE CONTACT INFORMATION:
 - (a) IR-062: Oceana NAS, DSN 433-1228;
 - (b) IR-719: Oceana NAS, DSN 433-1228;
 - (c) VR-043: Seymour Johnson AFB;
 - (d) VR-073: Seymour Johnson AFB;
 - (e) VR-085: Seymour Johnson AFB;
 - (f) VR-1713: Andrews AFB, DSN 857-3307;
 - (g) VR-1046: Cherry Point, DSN 582-4040;
 - (h) VR-1753: Oceana NAS, DSN 433-1228;
 - (i) VR-1759: Oceana NAS, DSN 433-1228.

FSS's Within 100 NM Radius:

NTU, RDU

VR-086

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672.

SCHEDULING ACTIVITY: 4 OSS/OSOS, Seymour Johnson AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non-duty 4FW/CP DSN 722-1973, C919-722-1973.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | TYI 222/38 | N35°28.00' W78°10.00' |
| 05 AGL B 30 MSL to | B | TYI 179/18 | N35°41.00' W77°40.00' |
| 05 AGL B 30 MSL to | C | TYI 108/16 | N35°55.00' W77°23.00' |
| 05 AGL B 30 MSL to | D | TYI 058/17 | N36°09.00' W77°25.00' |
| 05 AGL B 30 MSL to | E | TYI 336/28 | N36°23.00' W77°59.00' |
| 05 AGL B 30 MSL to | F | RDU 024/38 | N36°28.00' W78°31.00' |
| 05 AGL B 30 MSL to | G | RDU 334/31 | N36°19.00' W79°06.00' |
| 05 AGL B 30 MSL to | H | RDU 273/27 | N35°52.00' W79°20.00' |
| 05 AGL B 30 MSL to | I | RDU 259/32 | N35°44.00' W79°25.00' |
| 05 AGL B 30 MSL to | J | RDU 243/45 | N35°29.00' W79°34.00' |

TERRAIN FOLLOWING OPERATIONS: This route is designated as containing terrain following segments from A to J.

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Special Operating Procedures:

- (1) Users must visit [HTTPS://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPAC E/ROUTES](https://www.mil.seymourjohnson.af.mil/airspacE/routes) for additional avoidance areas (FALCONVIEW.DRW/MCH files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
- (2) Alternate Entry: B, C, D, E, F, G, H, I.
- (3) Alternate Exit: B, C, D, E, F, G, H, I.
- (4) Users must make their schedules entry time plus or minus 5 min or reschedule.
- (5) Avoid towns and populated areas by 1 NM or overfly 1000'AGL; avoid airports by 3 NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
- (6) A-B:
 - (a) AVOID: Goldsboro-Wayne Airport by 1500' or 3NM;
 - (b) CROSSING: VR-86 parallel entire leg.
- (7) B-C:
 - (a) CAUTION: Landfill (potential bird hazard) at N35-49.5 W77-34.2;
 - (b) CROSSING: VR-086 parallel entire leg;
 - (c) CROSSING: VR-1759 left to right 3NM prior to C.
- (8) C-D:
 - (a) CROSSING: VR-1046 left to right 6NM prior to D;
 - (b) CROSSING: VR-043 left to right 4NM prior to D.
- (9) D-E:
 - (a) TOWER: 325'AGL(350'MSL) at N36-16.7 W77-54.2;

- (b) TOWER: 415'AGL(777'MSL) at N36-26.3 W77-57.0;
- (c) CROSSING: VR-042 parallel entire leg;
- (d) CROSSING: IR-718 right to left 29NM prior to E;
- (e) CROSSING: VR-096 left to right at E;
- (f) CROSSING: VR-083 left to right at E.

- (10) E-F:
 - (a) CROSSING: VR-096 left to right at E;
 - (b) CROSSING: VR-083 left to right at E;
 - (c) CROSSING: VR-042 parallel until 7NM prior to F;
 - (d) CROSSING: VR-1759 right to left 20NM prior to F.
- (11) F-G:
 - (a) CAUTION: Landfill (potential bird hazard) at N36-19.6 W78-49.8;
 - (b) CROSSING: VR-043 right to left 2NM prior to G.
- (12) G-H:
 - (a) TOWER: 240'AGL (898'MSL) at N36-17.2 W79-07.0;
 - (b) CAUTION: Landfill (potential bird hazard) at N35-55.7 W79-17.5;
 - (c) CROSSING: VR-1061 parallel entire leg.
- (13) H-I:
 - (a) CROSSING: VR-1061 parallel entire leg.
- (14) I-J:
 - (a) CROSSING: VR-1061 parallel entire leg.
- (15) CROSSING ROUTE CONTACT INFORMATION:
 - (a) IR-718: Oceana NAS, DSN 433-1228;
 - (b) VR-042: Seymour Johnson AFB;
 - (c) VR-043: Seymour Johnson AFB;
 - (d) VR-083: Seymour Johnson AFB;
 - (e) VR-086: Seymour Johnson AFB;
 - (f) VR-096: Seymour Johnson AFB;
 - (g) VR-1046: Cherry Point, DSN 582-4040;
 - (h) VR-1759: Oceana NAS, DSN 433-1228;
 - (i) VR-1061: Seymour Johnson AFB.

FSS's Within 100 NM Radius:

NTU,RDU

VR-087

ORIGINATING ACTIVITY: 20 OSS/OSTA, Shaw AFB, SC 29152 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152 Duty hrs DSN 965-1118/1119, C803-895-1118/1119. Non-duty hrs-DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | FLO 321/45 | N34°47.00' W80°16.00' |
| 03 AGL B 65 MSL to | B | FLO 337/20 | N34°32.00' W79°50.00' |
| 03 AGL B 65 MSL to | C | FLO 061/32 | N34°31.00' W79°06.00' |
| 01 AGL B 65 MSL to | D | FLO 098/50 | N34°09.00' W78°39.00' |
| 01 AGL B 80 MSL to | E | FLO 119/11 | N34°09.00' W79°27.00' |

VR ROUTES

01 AGL B 65 MSL to F VAN 047/34 N33°54.00'
W80°00.00'

01 AGL B 65 MSL to G VAN 024/16 N33°43.30'
W80°21.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to E; 8 NM either side of centerline from E to G.

Special Operating Procedures:

- (1) Route width excludes Florence, SC Control Zone below 3000' AGL and Restricted Area R-6002 when active.
- (2) Alternate Entry: B, C, E, F.
- (3) Alternate Exit: B, C, E, F.
- (4) Use caution when exiting at Pt G for opposite direction traffic exiting VR-088. Aircraft exiting VR-088 may hold for entry to R-6002 at Rimini Bridge N33-30 W80-27.
- (5) CAUTION: IR-721/VR-1721 cross Right to Left 6 NM SE of Pt A. Also VR-1060 starting Point near Point C (deconflict with 20th OSS/OSOS).
- (6) CAUTION: VR-1043 opposite direction Pt A-C and D-G (deconflict DSN 582-4040).
- (7) CAUTION: IR-062 same direction 3000' and above between Pt B and Pt C (deconflict with DSN 433-1228).
- (8) AVOID: Carolina Sandhills Wildlife Refuge by 2000' AGL (SE of Pt A).
- (9) Noise Sensitive Areas:
 - (a) Society Hill, SC, N34-30.8 W79-51.3, avoid by 1 NM;
 - (b) Lake City, SC, N33-52.2 W79-45.5, avoid by 1000' AGL/5 NM.
- (10) Congressional noise sensitive areas, avoid by 1500' AGL/1 NM:
 - (a) Residence N33-50 W80-22;
 - (b) Teal Mill Pond N34-39.8 W80-00.6;
 - (c) Residence N34-04.4 W79-42.6
- (11) CAUTION: Five towers:
 - (a) 426' AGL (509') N34-09.0 W78-51.7;
 - (b) 250' AGL (375') N34-00.1 W80-03.5;
 - (c) 250' AGL (380') N33-48.7 W79-57.0;
 - (d) 360' AGL (490') N34-38.7 W79-02.2;
 - (e) 500' AGL (662') N33-39.5 W80-18.6.
- (12) Avoid: Fire Tower N34-29.6 W79-34.9 by at least 500'.
- (13) CAUTION: Three uncharted (private) duster strips:
 - (a) 5000' (Rwy orient E/W) N34-11 W79-01.5;
 - (b) 2500' (Rwy orient 03/21) N34-02 W79-28.5;
 - (c) 2500' (Rwy orient 07/25) N33-46.2 W80-05.
- (14) CAUTION: Four towers:
 - (a) 250' AGL (360' MSL) at N33-52.7 W80-05.0;
 - (b) 300' AGL (372' MSL) at N33-53.5 W79-41.0;
 - (c) 500' AGL (595' MSL) at N34-03.1 W79-44.0;
 - (d) 450' AGL (550' MSL) at N34-05.1 W79-04.3.
- (15) WARNING: Minimum altitude 500' AGL Pt B to E (1 Jun-31 Oct). Numerous crop spraying aircraft carrying hazardous material operating in the vicinity 300' AGL and below.
- (16) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
- (17) Maintain 1500' AGL until passing B for numerous noise sensitive areas.
- (18) Uncharted Airport (Rwy 08/24 and 15/33), N34-17.7 W79-03.3.

- (19) Congressional Noise Sensitive Area: Galivants Ferry N34-03.4 W79-14.3, avoid by 2000' AGL/2 NM (extremely sensitive).
- (20) CAUTION: Multiple Towers 330' AGL (850' MSL) N34-46.0 W80-15.9.
- (21) CAUTION: Five Towers:
 - (a) 400' AGL (950' MSL) N34-44.8 W80-10.9;
 - (b) 310' AGL (900' MSL) N34-40.4 W80-17.8;
 - (c) 1500' AGL (1650' MSL) N34-11.4 W79-10.5;
 - (d) 200' AGL (500' MSL) N33-57.3 W80-09.9;
 - (e) 400' AGL (850' MSL) N33-45.1 W80-21.4.
- (22) CAUTION: Three Towers:
 - (a) 700' MSL N34-37.6 W79-36.9;
 - (b) 550' MSL N33-58.4 W80-02.2;
 - (c) 500' MSL N34-02.6 W79-13.9.

FSS's Within 100 NM Radius:

AND, RDU

VR-088

ORIGINATING ACTIVITY: 20 OSS/OSTA, Shaw AFB, SC 29152 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152 Duty hrs DSN 965-1118/1119, C803-895-1118/1119. Non-duty hrs-DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | CAE 346/55 | N34°44.00' W81°22.00' |
| 03 AGL B 65 MSL to | B | CAE 292/37 | N34°04.00' W81°45.00' |
| 03 AGL B 65 MSL to | C | CAE 222/24 | N33°33.00' W81°22.00' |
| 03 AGL B 80 MSL to | D | CAE 180/46 | N33°05.00' W81°01.00' |
| 01 AGL B 65 MSL to | E | CAE 168/47 | N33°06.00' W80°50.00' |
| 01 AGL B 65 MSL to | F | VAN 342/10 | N33°38.00' W80°32.00' |
| 01 AGL B 65 MSL to | G | VAN 010/12 | N33°40.80' W80°26.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to F; 8 NM either side of centerline from F to G.

Special Operating Procedures:

- (1) Route width excludes North AF, SC Control Zone and Restricted area R-6002 when active.
- (2) Alternate Entry: B, C, D.
- (3) Alternate Exit: B, C, D.
- (4) CAUTION: VR-1059 crosses left to right from Pt B to C (deconflict with 20 OSS/OSOS).

- (5) Use CAUTION when exiting at Point G for opposite direction traffic on VR-087.
- (6) Avoid: Santee National Wildlife Refuge (Lake Marion). Avoid by 2200' AGL.
- (7) CAUTION: Aircraft hold at Rimini bridge for R-6002 entry (Pt F).
- (8) CAUTION: Tower 300' AGL 2 NM southwest of Point D.
- (9) CAUTION: SR-166 crosses route from N33-23.0 W81-08.0 to N33-17.0 W80-31.0.
- (10) AVOID: Four noise sensitive areas:
 (a) N33-58.0 W81-38.0, avoid by 1000' AGL/2 NM;
 (b) N33-56 W81-30, avoid by 1000' AGL/1 NM;
 (c) N33-55.5 W81-26.2 avoid by 1000' AGL/1 NM;
 (d) N34-01.0 W81-43.5, avoid by 1500' AGL/1 NM.
- (11) Avoid 2 Congressional noise sensitive areas by 1500' AGL/1 NM:
 (a) Willison, SC N33-25.0 W81-25.0;
 (b) N33-47.0 W80-36.8.
- (12) Avoid four noise sensitive areas by 1000' AGL/1 NM:
 (a) N33-39.1 W80-27.1;
 (b) N33-23.3 W81-00.8;
 (c) N33-15.5 W81-11.5;
 (d) N34-17.0 W81-49.2.
- (13) Avoid: Uncharted 2000' private grass strip (N34-29.0 W81-40.0), by 1000' AGL/2 NM.
- (14) Avoid: Uncharted airfield (N33-36.5 W81-14.0) by 1000' AGL/2 NM.
- (15) CAUTION: Four towers:
 (a) 345' AGL (832' MSL) N34-11.8 W81-49.2;
 (b) 250' AGL (750' MSL) N34-13.0 W81-29.8;
 (c) 680' AGL (1280' MSL) N34-45.9 W81-18.0;
 (d) 480' AGL N33-21.1 W80-35.2.
- (16) CAUTION: Three towers:
 (a) 500' AGL (662' MSL) at N33-39.5 W80-18.6;
 (b) 415' AGL (972' MSL) at N34-14.3 W81-33.5;
 (c) 250' AGL (825' MSL) at N34-41.9 W81-33.5.
- (17) CAUTION: Two towers:
 (a) 420' AGL (573') N33-25.5 W80-38.9;
 (b) 260' AGL (787') N33-44.3 W81-31.2.
- (18) Avoid: Five congressional noise sensitive areas by 1000' AGL/1 NM:
 (a) N33-29.7 W81-16.8;
 (b) N33-07.8 W81-13.2;
 (c) N33-47.6 W81-36.0;
 (d) N33-40.N W81-37.5;
 (e) N33-48.2 W81-25.5.
- (19) Avoid Newberry, SC Airport (N34-18.7 W81-38.4). Avoid by 1500' AGL/3 NM. Avoid overflight of the city of Newberry, SC by the same altitude margin.
- (20) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
- (21) AVOID: From abeam Batesburg, SC (N33-54.0 W81-32.0) to Wagner, SC (N33-39.0 W81-22.0) (18 NM) minimum altitude of 1000' AGL due to numerous congressional noise sensitive areas and towers up to 500' AGL.

FSS's Within 100 NM Radius:

AND, MCN

VR-092

ORIGINATING ACTIVITY: 20 OSS/OSTA, Shaw AFB, SC 29152 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152 Duty hrs DSN 965-1118/1119, C803-895-1118/1119. Non-duty hrs-DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: Continuous (Feb, Apr, Jun, Aug, Oct, Dec) VR-058 opposite direction other months

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | GQO 260/30 | N34°53.00' W85°45.00' |
| 01 AGL B 50 MSL to | B | GQO 325/51 | N35°40.00' W85°44.00' |
| 01 AGL B 50 MSL to | C | GQO 054/45 | N35°23.00' W84°24.00' |
| 01 AGL B 80 MSL to | D | GQO 081/54 | N35°05.00' W84°04.00' |
| 01 AGL B 80 MSL to | E | SPA 262/85 | N34°46.00' W83°37.00' |
| 01 AGL B 80 MSL to | F | SPA 264/54 | N34°54.00' W83°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to E; 8 NM either side of centerline from E to F.

Special Operating Procedures:

- Alternate Entry Points: B and D.
- Alternate Exit Points: C, D and E.
- CAUTION: Numerous power lines along route above 100' AGL.
- Avoid by 1500' AGL/3 NM: Monteagle, TN N35-16.0 W85-50.0. Presidential noise sensitive area.
- Avoid by 1000' AGL/1 NM Steam Plant, N34-53.0 W85-45.0.
- CAUTION: Extensive seaplane activity, SFC to 1400' at Rock Island, TN N35-48.0 W85-37.0.
- Avoid by 1000' AGL and 2 NM 3 uncharted private airfields:
 (a) N35-07.2 W84-16.3;
 (b) 2500' grass strip (Rwy 07-25) N35-45.0 W85-54.5;
 (c) 3000' hard surface (Rwy 12-30) N35-15.2 W85-23.0.
- CAUTION: IR-077 same direction A to B (de-conflict with DSN 922-2735).
- CAUTION: Hang gliding activity N35-06.0 W85-30.0; N35-23.0 W85-20.5; N35-01.0 W85-23.0; to N34-46.0 W85-34.0; N35-12.5 W85-32.5.
- CAUTION: VR-1055 crosses left to right C to D (de-conflict with DSN 922-2735).
- CAUTION: VR-1056 same direction A to E (de-conflict with DSN 922-2735).
- CAUTION: Power lines overhanging valley N35-33.0 W85-03.0.
- Avoid noise sensitive area by 1500' AGL/1 NM, Dayton, TN N35-28.0 W85-01.0.
- Avoid chlorine gas plant by 1000' AGL/1 NM, N35-17.5 W84-45.0.

VR ROUTES

- (15) Avoid power plant by 1000' AGL/ 1 NM, N35-36.1 W84-47.5.
- (16) Avoid congressional noise sensitive area by 1500' AGL/1 NM, Athens, TN, N35-26.5 W84-36.0,
- (17) CAUTION: Chilhowee Glider Port N35-13.8 W84-35.0, numerous glider activities, SFC-5000' within 5 NM.
- (18) CAUTION: 3000' runway airport at Telico Plains, TN, N35-22.8 W84-18.0, intensive student training, avoid by 1500'.
- (19) Avoid by 1000' AGL/1 NM Cocker Creek, TN, N35-16.0 W84-17.0 Congressional noise sensitive area.
- (20) Avoid by 1500' AGL/5 NM N35-05.0 W84-04.0, Congressional noise sensitive area.
- (21) Avoid by 1500' AGL/1 NM noise sensitive area, N34-42.2 W83-38.1.
- (22) Avoid 9 towers:
 - (a) 200' AGL (3490') N34-50.0 W83-31.0;
 - (b) 500' AGL (1640') N34-51.5 W83-03.5;
 - (c) 728' AGL (2368') N34-43.1 W83-43.0;
 - (d) 225' AGL (960') N35-33.0 W84-47.5;
 - (e) 225' AGL (1155') N35-25.5 W84-38.0;
 - (f) 225' AGL (925') N35-20.0 W84-46.5;
 - (g) 350' AGL (2300') N35-12.3 W85-48.5;
 - (h) 250' AGL (1350') N35-42.0 W85-49.5;
 - (i) 200' AGL (2500') N35-19.3 W84-27.2.
- (23) WARNING, avoid by 1 NM Nuclear Power Plant, Oconee, SC N34-47.5 W82-53.9. Do not over-fly.
- (24) Noise Sensitive Areas:
 - (a) Peachtree Community N35-05.7 W83-57.0, avoid by 1500' AGL/1 NM;
 - (b) Clayton, GA N34-52.8 W83-24.0, avoid by 1500' AGL/2 NM.
- (25) Avoid the following environmentally sensitive areas (endangered bats) by 500' vertically or 1000' horizontally unless operationally necessary: (N35-33.2 W84-47.5), (N35-32.8 W85-40.3), (N34-59.4 W85-36.6), (N35-24.5 W85-00.8), (N35-15.5 W85 52.3).
- (26) Avoid two noise sensitive areas:
 - (a) By 1000' AGL/1 NM, N34-45.9 W83-37.8.
 - (b) By 1000' AGL/1 NM, N35-35.5 W85-12.0 (SE of Pikeville, TN).
- (27) Avoid Ivy Log Mountain, N34-55.0 W83-58.7, minimum altitude 4200' MSL within 2 NM. Congressional (Extremely) noise sensitive area:
- (28) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
- (29) Be alert for hot air balloons operating from Sfc to 12,000' MSL within 10 NM of N34-42.0 W83-44.0.

FSS's Within 100 NM Radius:

ANB, AND, BNA, HUA, MCN

VR-093

ORIGINATING ACTIVITY: 20 OSS/OSTA, Shaw AFB, SC 29152 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152 Duty hrs DSN 965-1118/1119, C803-895-1118/1119. Non-duty hrs-DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | GSO 301/47 | N36°25.00' W80°50.00' |
| 01 AGL B 80 MSL to | B | GSO 301/83 | N36°41.00' W81°30.00' |
| 01 AGL B 80 MSL to | C | HMV 001/56 | N37°22.00' W82°11.00' |
| 01 AGL B 60 MSL to | D | HMV 340/68 | N37°28.00' W82°43.00' |
| 01 AGL B 60 MSL to | E | HMV 304/76 | N37°04.00' W83°30.00' |
| 01 AGL B 60 MSL to | F | HMV 289/69 | N36°44.00' W83°30.00' |
| 01 AGL B 60 MSL to | G | HMV 289/38 | N36°36.00' W82°53.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 10 NM either side of centerline from B to F; 5 NM either side of centerline from F to G.

Special Operating Procedures:

- (1) Alternate Entry Points: B and C.
- (2) Alternate Exit Points: D, E, and F.
- (3) Congressional noise sensitive areas:
 - (a) Sparta, NC N36-30.0 W81-07.0.
 - (b) Horse Training Stable N36-34.6 W81-22.4.
 - (c) Avoid by 1000' AGL/1 NM Glade Springs, VA N36-47.0 N81-47.0.
- (4) CAUTION: Heavy helicopter traffic from B to C. Hospital helicopter traffic to/from Lebanon, VA N36-54.1 W82-04.5.
- (5) Avoid by 2000' AGL/1 NM either side of a line from N36-39.0 W83-32.5 to N36-40.0 W83-26.0. Cumberland GAP National Historic Park.
- (6) CAUTION: 400' AGL power line located at N37-14 W82-02.
- (7) CAUTION: Four towers:
 - (a) 1156' AGL N37-32.8 W82-26.8;
 - (b) 317' AGL N37-10.8 W83-36.5;
 - (c) 250' AGL N36-38.7 W81-12.5;
 - (d) 200' AGL N37-30.5 W82-15.4.
- (8) CAUTION: 480' AGL tower N37-11.5 W83-10.0.
- (9) CAUTION: 380' AGL tower N36-50 W83-17.9.
- (10) CAUTION: Three towers:
 - (a) 350' AGL N37-18.5 W83-06.2 (multi towers);
 - (b) 300' AGL N36-46.4 W83-18.0;
 - (c) 225' AGL N37-34.6 W82-43.8.
- (11) Avoid by 1500' AGL/3 NM, airfield (hard surface), 3 NM south of Richlands, VA N37-04 W81-48.
- (12) CAUTION: IR-726/VR-1726 crosses right to left from A to B and IR-743/ VR-1743 crosses right to left from B to C (de-conflict with 20 OSS/OSOS).
- (13) CAUTION: VR-042 crosses R to L at A then same direction to B where if then crosses L to R (de-conflict with DSN 433-1228).
- (14) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.

FSS's Within 100 NM Radius:

AND, RDU

VR-094

ORIGINATING ACTIVITY: 1st Aviation Group (GA ARNG), Dobbins ARB, GA 30069, DSN 753-3609, C678-569-3609, Fax DSN 753-3616, C678-569-3616.

SCHEDULING ACTIVITY: 1st Aviation Group (GA ARNG), Dobbins ARB, GA 30069, DSN 753-3602/3611, C678-569-3602/3611/3548/3547, Non-duty hrs C770-315-3677.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | AYS 303/27 | N31°31.00' W83°00.00' |
| 01 AGL B 30 MSL to | B | AYS 315/48 | N31°50.00' W83°13.00' |
| 01 AGL B 30 MSL to | C | AYS 338/57 | N32°09.00' W82°58.00' |
| 01 AGL B 30 MSL to | D | VAN 243/70 | N32°50.00' W81°37.00' |
| 01 AGL B 30 MSL to | E | VAN 221/67 | N32°33.00' W81°12.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline for entire route.

Special Operating Procedures:

- (1) Alternate Entry: Points B and C.
- (2) Alternate Exit: Point D.
- (3) Multiple VR/IR routes cross from Point A to B.
- (4) CAUTION: VR-1004 crosses right to left and the left to right Point C to D. (Deconflict DSN 942-2525).
- (5) CAUTION: VR-1059 and VR-097 same direction at Pt D (deconflict with 20 OSS/OSOS, DSN 965-1118/1119).
- (6) Avoid: Antenna complex N32-41.0 W81-08.1 700' AGL, Avoid by 2 NM.
- (7) Avoid four noise sensitive areas:
 - (a) Adrian, GA, N32-32.0 W82-35.5, avoid by 1500' AGL/1 NM;
 - (b) N32-15.5 W82-45.0, avoid by 1000' AGL/1 NM;
 - (c) Dairy Farm N32-49.9 W81-52.5, avoid by 1500' AGL/1 NM;
 - (d) Farm N32-51.1 W81-40.5, avoid by 1500' AGL/1 NM.
- (8) CAUTION: Powerline 300' AGL N32-58.0 W81-43.2 to N32-44.0 W81-38.6.
- (9) Avoid 6 active private airstrips:
 - (a) Gorton N32-49.5 W81-21.5;
 - (b) 2500' hard sfc rwy (Rwy 18-36) N31-40.8 W82-56.7;
 - (c) 2000' (Rwy 09-27) N32-44.5 W81-14.0;
 - (d) 2000' (Rwy 06-24) N31-30.0 W83-09.5;
 - (e) 2000' (Rwy 04-22) N31-52.5 W83-04.0;
 - (f) 2500' (Rwy 10-28) N32-30.0 W81-58.0.
- (10) CAUTION: 4 towers:
 - (a) 405' AGL 1.5 NM north of Point B;
 - (b) 400' AGL (645') N32-24.5 W82-03.0;
 - (c) 420' AGL (685') N32-31.5 W82-20.0;
 - (d) 500' AGL (800') N32-32.6 W82-18.2.

(11) CAUTION: 5 towers:

- (a) 300' AGL (540') N32-44.6 W81-40.1;
- (b) 300' AGL (480') N32-44.8 W81-36.9;
- (c) 400' AGL (765') N31-34.4 W82-54.2;
- (d) 460' AGL (800') N32-12.3 W82-29.8;
- (e) 210' AGL (550') N32-24.9 W82-40.1

(12) Avoid: Fire tower N32-50.7 W81-18.2 by at least 500'.

(13) CAUTION: New uncharted private grass strips 2000' Rwy 04-22 at N32-34.5 W82-22.5.

(14) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.

FSS's Within 100 NM Radius:

AND, GNV, MCN

VR-095

ORIGINATING ACTIVITY: 1st Aviation Group (GA ARNG), Dobbins ARB, GA 30069 DSN 753-3609, C678-569-3609, FAX DSN 753-3616 C678-569-3616.

SCHEDULING ACTIVITY: 1st Aviation Group (GA ARNG), Dobbins ARB, GA 30069 DSN 753-3602/3611 C678-569-3602/3611/3548/3547, Non-Duty hrs C770-315-6377.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SPA 207/29 | N34°36.00' W82°10.00' |
| 01 AGL B 15 AGL to | B | SPA 208/39 | N34°27.00' W82°16.00' |
| 01 AGL B 15 AGL to | C | SPA 209/61 | N34°07.00' W82°29.00' |
| 01 AGL B 15 AGL to | D | SPA 209/93 | N33°39.00' W82°46.00' |
| 01 AGL B 15 AGL to | E | SPA 212/113 | N33°24.00' W83°03.00' |
| 01 AGL B 40 MSL to | F | VNA 318/54 | N32°53.00' W84°12.00' |
| 01 AGL B 40 MSL to | G | VNA 213/34 | N31°45.00' W83°52.00' |
| 01 AGL B 40 MSL to | H | VNA 190/31 | N31°42.00' W83°37.00' |
| Alternate Exit: | | | |
| 01 AGL B 40 MSL to | F1 | VNA 318/54 | N32°53.00' W84°12.00' |
| 01 AGL B 40 MSL to | FF | VNA 283/59 | N32°27.00' W84°37.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route except 300' AGL minimum from Pt A to D, 15 June to 15 September.

ROUTE WIDTH - 10 NM either side of centerline from A to G and F1 to FF; 5 NM either side of centerline from G to H.

Special Operating Procedures:

- (1) Alternate Entry: Points D, E and F.
- (2) Alternate Exit: Points D, E and F.

VR ROUTES

- (3) Only aircraft scheduled for entry into R-3002 are authorized to fly segment F1 to FF.
- (4) Congressional noise sensitive area, Washington, GA 33-44-00N 82-44-30W. Avoid by 1500' AGL.
- (5) CAUTION: IR-089/090 crosses at 34-13N 84-30W (deconflict with 437 AW, DSN 673-5552, C843-963-5552).
- (6) CAUTION: VR-1059 crosses left to right and right to left from Pt D to E (deconflict with 20 OSS/OSOS, DSN 965-1122).
- (7) CAUTION: VR-1004 crosses right to left and left to right from Pt D to E (deconflict DSN 942-2004).
- (8) CAUTION: IR-019 opposite direction at Pt G (deconflict DSN 942-2004).
- (9) CAUTION: VR-1001 crosses left to right from Pt G to H (deconflict DSN 942-2004).
- (10) CAUTION: Three towers:
 - (a) 420' AGL (994') N33-46.2 W82-36.2;
 - (b) 493' AGL (1043') N33-27.1 W83-14.4;
 - (c) 200' AGL (515') N33-25.5 W83-12.8.
- (11) Avoid three noise sensitive areas by 1500' AGL/1 NM:
 - (a) Ostrich Protection Area N32-56.3 W84-02.2;
 - (b) N34-11.5 W82-25.5;
 - (c) Town of Montezuma, GA N32-18.0 W84-02.0.
- (12) AVOID: Bald eagle nesting grounds, N33-20.4 W83-08.7, avoid by 3 NM, no overflight. Valid 1 Sep to 30 Jun.
- (13) Avoid: Dynamite blasting N32-52.2 W83-49.5 avoid by 1500' AGL/1 NM.
- (14) Avoid five uncharted airfields by 1500' AGL/3 NM:
 - (a) Marshallville, GA N32-26.0 W83-55.0;
 - (b) 5000'x60' hard sfc rwy (Rwy 16-34) N32-03.0 W83-53.7;
 - (c) 2500' grass strip (17/35) N32-08.7 W83-50.8;
 - (d) 3000' asphalt strip N32-04.1 W83-52.8;
 - (e) 3000' strip N32-59.1 W84-05.4.
- (15) CAUTION: Five towers:
 - (a) 225' AGL (725') N33-06.1 W83-36.5;
 - (b) 300' AGL (900') N33-03.0 W83-57.6;
 - (c) 225' AGL (975') N32-31.0 W84-25.7;
 - (d) Two towers 465' AGL (1350') N33-04.1 W84-08.5.
- (16) CAUTION: Four towers:
 - (a) 230' AGL (670' MSL) N31-49.8 W83-44.0;
 - (b) 400' AGL (740' MSL) N31-54.5 W83-54.5;
 - (c) 225' AGL (895' MSL) N32-19.4 W84-31.5;
 - (d) 500' AGL (1060' MSL) N32-58.5 W83-47.9.
- (17) IFR Pickup with Atlanta ARTCC (348.7). IFR Pickup with Jacksonville ARTCC (379.2).
- (18) Avoid: Commercial Ostrich Ranch at N32-54.2 W84-05.4 by 1000' AGL 1 NM.
- (19) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
- (20) CAUTION: Seven Towers:
 - (a) 20' AGL (700' MSL) N31-52.99 W83-45.04;
 - (b) 200' AGL (800' MSL) N32-15.0 W83-51.04;
 - (c) 400' AGL (900' MSL) N34-17.0 W82-13.0;
 - (d) 300' AGL (900' MSL) N33-29.9 W82-48.4;
 - (e) 350' AGL (1200' MSL) N33-31.7 W82-54.3;
 - (f) 350' AGL (1000' MSL) N33-13.7 W83-07.7;
 - (g) 800' AGL (1100' MSL) N31-58.4 W83-57.0.

FSS's Within 100 NM Radius:

ANB, AND, MCN, OZR

VR-096

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672.

SCHEDULING ACTIVITY: 4 OSS/OSOS, Seymour Johnson AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non-duty 4FW/CP DSN 722-1973, C919-722-1973.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | TYI 336/28 | N36°23.00' W77°59.00' |
| 05 AGL B 65 MSL to | B | LYH 085/28 | N37°20.00' W78°39.00' |
| 05 AGL B 65 MSL to | C | LYH 024/29 | N37°43.00' W79°02.00' |
| 05 AGL B 65 MSL to | D | ROA 002/22 | N37°43.00' W80°05.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline entire route.

Special Operating Procedures:

- (1) Users must visit [HTTPS://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPAC E/ROUTES](https://www.mil.seymourjohnson.af.mil/airspacE/routes) for additional avoidance areas (FALCONVIEW.DRW/MCH files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
- (2) Alternate Entry: B, C.
- (3) Alternate Exit: B, C.
- (4) Users must make their schedules entry time plus or minus 5 min or reschedule.
- (5) Avoid towns and populated areas by 1NM or overfly 1000'AGL; avoid airports by 3NM or overfly 1500'AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
- (6) Route users deconflict Farmville MOA with 1 OSS/OSO, DSN 574-2483/2559. Deconfliction is needed when routes are used between 0800-1700 hrs local, Mon-Fri. Make a call in the blind on UHF frequency 377.1 when transiting Farmville MOA Airspace.
- (7) A-B:
 - (a) AVOID: Town of Pamplin (Congressional Noise Sensitive Area) at N37-15.8 W78-41.0 by 2000' or 1NM. Do not use adjacent Pamplin railroad as a simulated target;
 - (b) TOWER: 300'AGL(959'MSL) at N37-02.7 W78-28.1;
 - (c) CROSSING: VR-083 left to right at A;
 - (d) CROSSING: VR-086 right to left at A;
 - (e) CROSSING: VR-042 right to left at A;
 - (f) CROSSING: IR-062 right to left 53NM prior to B;
 - (g) CROSSING: VR-073 left to right 53NM prior to B;
 - (h) CROSSING: VR-1061/VR-083 right to left 35NM prior to B;
 - (i) CROSSING: IR-719 left to right 44NM prior to B;
 - (j) CROSSING: VR-1722 left to right 40NM prior to B;
 - (k) CROSSING: VR-042 left to right 33NM prior to B;
 - (l) CROSSING: VR-1759 right to left 33NM at B;
 - (m) CROSSING: IR-715 right to left 27NM prior to B;

- (n) CROSSING: IR-719 right to left 2NM prior to B.
- (8) B-C:
 - (a) TOWER: 195'AGL(1489'MSL) at N37-34.4 W78-45.7;
 - (b) CROSSING: VR-1722 right to left 28NM prior to C;
 - (c) CROSSING: VR-041/IR-761 right to left 2NM prior to C;
 - (d) CROSSING: IR-715 left to right 2NM prior to C.
- (9) C-D:
 - (a) AVOID: Lowmoor Hospital at N37-47.4 W79-53.0 by 1000' or 1NM;
 - (b) AVOID: School at N37-48.0 W80-04.0 by 3000' or 1NM;
 - (c) TOWER: 195'AGL(2440'MSL) at N37-37.9 W79-49.9;
 - (d) AIRFIELD: 07-25 at N37-40.0 W79-48.6;
 - (e) CAUTION: Numerous powerlines in mountainous areas;
 - (f) CROSSING: IR-715 right to left 46NM prior to D;
 - (g) CROSSING: IR-762/VR-1756 left to right 39NM prior to D;
 - (h) CROSSING: VR-1756 right to left 15NM prior to D;
 - (i) CROSSING: IR-608 right to left 8NM prior to D.
- (10) CROSSING ROUTE CONTACT INFORMATION:
 - (a) IR-062: Oceana NAS, DSN 433-1228;
 - (b) IR-608: Pensacola NAS, DSN 922-2735;
 - (c) IR-715: Oceana NAS, DSN 433-1228;
 - (d) IR-719: Oceana NAS, DSN 433-1228;
 - (e) IR-761: Oceana NAS, DSN 433-1228;
 - (f) IR-762: Oceana NAS, DSN 433-1228;
 - (g) VR-041: Seymour Johnson AFB;
 - (h) VR-042: Seymour Johnson AFB;
 - (i) VR-073: Seymour Johnson AFB;
 - (j) VR-073: Seymour Johnson AFB;
 - (k) VR-086: Seymour Johnson AFB;
 - (l) VR-1061: Seymour Johnson AFB;
 - (m) VR-1722: Richmond ANG, DSN 864-6411;
 - (n) VR-1756: Oceana NAS, DSN 433-1228;
 - (o) VR-1759: Oceana NAS, DSN 433-1228.

FSS's Within 100 NM Radius:

DCA, EKN, NTU, RDU

VR-097

ORIGINATING ACTIVITY: 20 OSS/OSTA, Shaw AFB, SC 29152 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152, Duty hrs DSN 965-1118/1119, C803-895-1118/1119. Non-duty hrs-DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: 0600-2400 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SUG 217/31 | N34°58.80' W82°37.80' |
| 30 MSL B 80 MSL to | B | SUG 229/43 | N34°55.20' W82°54.50' |
| 01 AGL B 80 MSL to | C | SPA 264/54 | N34°54.00' W83°00.00' |
| 01 AGL B 80 MSL to | D | SPA 262/85 | N34°46.00' W83°37.00' |

| | | | |
|--------------------|----|------------|--------------------------|
| 01 AGL B 80 MSL to | E | ODF 261/23 | N34°38.20' W83°45.50' |
| 01 AGL B 80 MSL to | F | ODF 255/27 | N34°34.50' W83°49.90' |
| 01 AGL B 80 MSL to | G | AHN 330/36 | N34°28.30' W83°41.00' |
| 01 AGL B 40 MSL to | H | AHN 338/27 | N34°22.00' W83°32.00' |
| 01 AGL B 40 MSL to | I | AHN 010/17 | N34°14.00' W83°16.00' |
| 01 AGL B 40 MSL to | J | AHN 030/17 | N34°12.00' W83°09.00' |
| 01 AGL B 40 MSL to | K | AHN 045/16 | N34°07.90' W83°06.20' |
| 01 AGL B 15 AGL to | L | AHN 115/23 | N33°47.00' W82°54.00' |
| 01 AGL B 15 AGL to | LL | DBN 006/64 | N33°38.00' W82°49.00' |
| 01 AGL B 15 AGL to | M | DBN 021/38 | N33°09.92' W82°37.48' |
| 01 AGL B 15 AGL to | N | DBN 029/31 | N33°02.02' W82°34.98' |
| 01 AGL B 15 AGL to | O | DBN 055/38 | N32°58.22' W82°14.98' |
| 01 AGL B 15 AGL to | P | DBN 063/43 | N32°56.52' W82°05.98' |
| 01 AGL B 15 AGL to | Q | VAN 221/53 | N32°45.00' W81°03.00' |
| 01 AGL B 15 AGL to | R | VAN 223/41 | N32°55.50' W80°56.60' |
| 01 AGL B 40 MSL to | RR | VAN 227/30 | N33°06.90' W80°50.00' |
| 01 AGL B 40 MSL to | S | VAN 342/10 | N33°38.00' W80°32.00' |
| 01 AGL B 40 MSL to | T | VAN 010/12 | N33°40.80' W80°26.00' |
| 01 AGL B 15 AGL to | O | DBN 055/38 | N32°58.22' W82°14.98' |
| Alternate Exit: O | | | |
| 01 AGL B 15 AGL to | O1 | DBN 047/46 | N33°08.02' W82°12.48' |
| 01 AGL B 15 AGL to | O2 | DBN 043/49 | N33°12.72' W82°13.48' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 8 NM left and 6 NM right of centerline from A to C; 8 NM either side of centerline from C to F; 5 NM either side of centerline from F to J; 5 NM left and 6 NM right of centerline from J to L; 6 NM left and 10 NM right of centerline from L to N; 9 NM left and 10 NM right of centerline from N to P; 10 NM either side of centerline from P to S; 8 NM either side of centerline from S to T.

Special Operating Procedures:

- (1) Alternate Entry: M, N, O and P.
- (2) Alternate Exit: M, N, O, O2, P, Q and S.
- (3) Tie-In FSS Anderson (AND).
- (4) CAUTION: IR-22 crosses between Points A to B, 9000'-10,000' MSL.
- (5) WARNING/AVOID: Nuclear Power Plant, Oconee, SC, 34-47.5N 82-53.9W, avoid by 1 NM, do not overfly.
- (6) Avoid: Two towers:

VR ROUTES

- (a) 300' AGL (1881') N34-50.0 W82-48.2;
(b) 300' AGL (1350') N34-47.8 W82-54.2.
- (7) Avoid: Two towers:
(a) 200' AGL (3490') N34-50.0 W83-31.0;
(b) 500' AGL (1640') N34-51.5 W83-03.5.
- (8) Avoid: Two towers:
(a) 298' AGL (1138') N34-21.5 W83-21.6;
(b) 300' AGL (950') N34-05.7 W83-15.4.
- (9) Four Noise Sensitive Areas:
(a) N34-42.2 W83-38.1, avoid by 1500' AGL/1 NM;
(b) Town of Clayton, GA N34-52.8 W83-24.0, avoid overflight of city and adjacent build-up areas by 1500' AGL/2 NM;
(c) Town of Carnesville, GA N34-19.5 W83-18.2, avoid by 1500' AGL/1 NM;
(d) Town of Ila, GA N34-11.0 W83-16.5, avoid by 1500' AGL/1 NM.
- (10) Fly at or above 1000' AGL between E and F for numerous noise sensitive areas.
- (11) Avoid: Three towers N34-30.6 W83-48.3 200' AGL (2785' MSL).
- (12) CAUTION: Multiple Victor Airways converge at Athens VORTAC between Pts K and L. Exercise increased vigilance while transiting this area. Expect increased traffic between 1 Sep and 30 Nov.
- (13) CAUTION: Noise sensitive area, Comer, GA, N34-03.8 W83-07.5. Avoid by flying east of route center line.
- (14) CAUTION: Traffic crosses Pt L and 2200' MSL then descends into Washington-Wilkes County Airport, GA, N33-46.6 W82-48.9.
- (15) Avoid: Five towers:
(a) 400' AGL (900') N33-46.8 W82-45.4;
(b) 728' AGL (2368') N34-43.2 W83-43.0;
(c) 300' AGL (480') N32-44.8 W81-36.9;
(d) 250' AGL (2450') N34-33.0 W83-46.5;
(e) 250' AGL (1900') N34-34.8 W83-46.5.
- (16) Congressional noise sensitive area: Washington, GA N33-44.1 W82-44.5, avoid by 1500' AGL or 1 NM.
- (17) Avoid: Three towers:
(a) 400' AGL (920') N33-12.7 W82-42.4;
(b) 300' AGL (540') N32-44.6 W81-40.1;
(c) 500' AGL (600') N32-42.8 W80-49.3.
- (18) Use of O-02 authorized only when scheduled to operate in Bulldog D MOA and R-3004.
- (19) AVOID: Stork Farm N32-51.9 W82-02.0, avoid by 1500' AGL/1 NM.
- (20) The following MTRS are scheduled by 20 OSS/OSOS and are deconflicted by computer. Aircrews should still exercise increased vigilance when transiting these areas. CAUTION: VR-058 same direction from Pt A to D. VR-092 opposite direction to Pts C and D. IR-089 same direction from Pt F to K. IR-090 opposite direction from Pt B to G. IR-074 and VR-095 separate at Pt LL from the left. IR-074 continues same direction to Pt N. VR-1059 same direction from Pt L to Q. VR-094 crosses right to left then left to right from Pt P to Q. VR-088 same direction from Pt RR to T.
- (21) CAUTION: VR-097 transits Bulldog MOA (deconflict with 20 OSS/OSOS). When booking VR-097, aircrews should include delay time in Bulldog MOA as applicable. Route users make call in the blind prior to Point M on UHF frequency 343.75 when transiting Bulldog MOA airspace.
- (22) CAUTION: VR-1004 (L-K) crosses right to left west of Pt N (Deconflict DSN 942-2004).
- (23) The following restrictions are located in Bulldog D: AVOID: At N33-16.0 W82-17.2 1465' AGL/(1900' MSL), avoid by 1 NM. AVOID: Noise sensitive area, pond and farm at N33-17.7 W82-16.8, avoid by 1500' AGL/2 NM.
- (24) CAUTION: 14 Towers with cables stretched between centered at N32-40.7 W81-08.1; avoid by 1 NM. Maximum height up to 500' AGL.
- (25) CAUTION: Powerline 300' AGL, crosses N to S between Pts P and Q, N33-02.5 W81-44.0 to N32-45.0 W81-38.5.
- (26) AVOID: Permanently manned fire tower, N32-50.7 W81-18.2 by at least 500'.
- (27) AVOID: Beaufort 3 MOA or (Deconflict DSN 832-7301/7302/7303).
- (28) Avoid two congressional noise sensitive areas:
(a) N33-47.0 W80-36.8 Avoid by 1000' AGL/1 NM;
(b) N34-14.5 W83-22.4 Avoid by 1500' AGL/1 NM.
- (29) Avoid Peregrine Falcon nesting area (endangered species): N35-03.2 W82-42.0 Avoid by 1500' above tree/cliff height and 1 NM (15 Feb thru 15 Jul).
- (30) Avoid: Two towers:
(a) 300' AGL (500' MSL), N33-05.4 W80-50.0.;
(b) 300' AGL (500' MSL), 1 NM south of Pt S.
- (31) Avoid two noise sensitive areas BY 1000' AGL/1 NM:
(a) N34-45.9 W83-46.5;
(b) N33-02.1 W82-14.9 (Vidette, GA).
- (32) CAUTION: SR-166 crosses route from N33-23.0 W81-08.0 to N33-17.0 W80-31.0.
- (33) AVOID: Tower 500' AGL (622' MSL) at N33-39.5 W80-18.6.
- (34) AVOID: Santee National Wildlife Refuge (Lake Marion), avoid by 2200' AGL.
- (35) CAUTION: Aircraft holding at Rimini Bridge for R-6002 (Entry Pt S).
- (36) CAUTION: When exiting Pt T for opposite direction traffic on VR-087.
- (37) Avoid: Four towers:
(a) 420' AGL (573') N33-25.5 W80-38.9;
(b) 415' AGL (536') N32-46.8 W81-07.7;
(c) 300' AGL (1000' MSL) N33-47.9 W82-56.9;
(d) 480' AGL N33-21.1 W80-35.2.
- (38) AVOID: R-6002 when active.
- (39) AVOID: Active private grass strip (Gorton) N32-49.5 W81-21.5, avoid by 1000' AGL/3 NM.
- (40) Avoid four noise sensitive area by 1000' AGL/1 NM:
(a) Structure being used as a tactical target N33-00.5 W82-41.5;
(b) Dairy farm N32-49.9 W81-52.5;
(c) Emu ranch N34-01.5 W82-57.5;
(d) Farm N32-51.1 W81-40.5.
- (41) Avoid: Four towers:
(a) 250' AGL (2450' MSL) N34-33.0 W83-46.5;
(b) 250' AGL (1900' MSL) N34-34.8 W83-46.5;
(c) 300' AGL (900' MSL) N33-29.4 W82-42.2;
(d) 400' AGL (1000' MSL) N33-15.4 W82-35.6.
- (42) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
- (43) Maintain 3000' MSL until passing B.
- (44) CAUTION: Grass airstrip Rwy 25/07 approximately 4000' at N32-50.7 W81-38.3.
- (45) Avoid: Six towers:
(a) 250' AGL (700' MSL) N33-28.2 W80-47.2;
(b) 250' AGL (800' MSL) N33-04.1 W82-07.4;
(c) 200' AGL (600' MSL) N32-57.9 W81-58.7;
(d) 200' AGL (600' MSL) N33-27.6 W80-43.9;

- (e) 200' AGL (600' MSL) N33-28.7 W80-45.9;
 (f) 300' AGL (1300' MSL) N33-30.9 W82-55.4.

FSS's Within 100 NM Radius:

ANB, AND, MCN

VR-100

ORIGINATING ACTIVITY: 27 SOSS/OSTA, 110 E. Sextant Ave, Suite 1081, Cannon AFB, NM 88103 DSN 681-2521.

SCHEDULING ACTIVITY: 27 SOSS/OSOS, 110 E. Sextant Ave, Suite 1080, Cannon AFB, NM 88103 DSN 681-2276.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| As assigned to | A | CVS 232/27 | N34°10.00' W103°48.00' |
| SFC B 110 MSL to (Alternate Entry) | B | CME 042/49 | N33°49.00' W103°49.00' |
| SFC B 110 MSL to (Alternate Entry/Exit) | C | CME 056/43 | N33°36.00' W103°50.00' |
| SFC B 110 MSL to (Alternate Entry/Exit) | D | CME 057/33 | N33°32.00' W104°00.00' |
| SFC B 110 MSL to (Alternate Entry/Exit) | E | CME 344/34 | N33°54.00' W104°40.00' |
| SFC B 110 MSL to (Alternate Entry/Exit) | F | CME 333/34 | N33°53.00' W104°48.00' |
| SFC B 110 MSL to (Alternate Entry/Exit) | G | CME 292/32 | N33°38.00' W105°09.00' |
| SFC B 125 MSL to (Alternate Entry/Exit) | H | CNX 143/44 | N33°41.50' W105°19.50' |
| SFC B 125 MSL to (Alternate Entry/Exit) | I | CNX 167/38 | N33°43.50' W105°40.50' |
| SFC B 125 MSL to (Alternate Entry/Exit) | J | CNX 176/35 | N33°47.50' W105°47.50' |
| SFC B 110 MSL to (Alternate Entry/Exit) | K | CNX 241/16 | N34°17.50' W105°59.50' |
| SFC B 110 MSL to (Alternate Entry/Exit) | L | CNX 280/23 | N34°31.00' W106°06.00' |
| SFC B 110 MSL to (Alternate Entry/Exit) | M | CNX 307/21 | N34°38.00' W105°57.00' |
| SFC B 110 MSL to (Alternate Entry/Exit) | N | CNX 332/14 | N34°35.50' W105°45.00' |
| SFC B 110 MSL to (Alternate Entry/Exit) | O | CNX 012/21 | N34°41.00' W105°30.00' |
| SFC B 110 MSL to (Alternate Entry/Exit) | P | TCC 196/34 | N34°41.00' W103°55.00' |
| SFC B 110 MSL to | Q | CVS 307/25 | N34°41.00' W103°40.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM left and 5 NM right of centerline from A to B; 1.5 NM either side of centerline from B to F; 5 NM either side of centerline from F to N; 5 NM increasing to 28 NM either side of centerline from N to O; 28 NM either side of centerline from O to P; 28 NM left and 2 NM right of centerline from P to Q.

Special Operating Procedures:

- (1) Tie-in FSS: Albuquerque (ABQ).
- (2) Non-27 SOW aircraft entry times are booked no closer than 15 minutes. Users must meet booked entry and exit times plus or minus 5 minutes. If unable to meet planned entry time enter at an alternate entry so as to meet booked exit time or do not enter the route. Route times are planned at 480 Kts ground speed.
- (3) Aircraft must call in the blind route entry and exit on 255.4. Monitor 255.4 while on this route unless operational requirements dictate otherwise.
- (4) Alternate Entry Points: B through P.
- (5) Alternate Exit Points: C through P.
- (6) Segments N through Q designated Maneuver Area.
- (7) Avoid Fort Sumner Airport (N34-29.2 W104-13.1) by 1500' AGL/3 NM to the South, East, and West, and to the PECOS EAST MOA boundary to the North.
- (8) Avoid Gran Guivira National Monument N34-15.0 W106-06.0 by 3 NM.
- (9) Avoid ranch at N34-55.5 W103-45.7 by 1000' AGL/2 NM.
- (10) Avoid by 1500'/1 NM:
 - (a) Ranch (N34-54.9 W105-13.9);
 - (b) Claunch, NM (N34-08.6N W105-59.6).
- (11) Avoid by 1000' and 1 NM;
 - (a) Ranch (N34-54.1 W103-49.5);
 - (b) Ranch (N34-21.7 W104-06.9);
 - (c) Ranch (N34-19.6 W104-43.9);
 - (d) Ranch (N34-16.9 W105-05.2);
 - (e) Ranch (N34-14.2 W104-41.4);
 - (f) Ranch (N34-20.5 W104-23.2);
 - (g) Ranch (N33-45.9 W105-37.6) 1400L-2400L only;
 - (h) White Oaks, NM (N33-45.0 W105-44.2);
 - (i) Ranch (N34-20.8 W104-32.5);
 - (j) Lake Sumner Settlement (N34-37.2 W104-23.9);
 - (k) Ranch (N34-36.5 W104-22.0);
 - (l) San Jose, NM (N35-23.8 W105-28.5);
 - (m) Cattle Co. (N34-46.0 W104-28.9);
 - (n) Ranch (N34-16.3 W104-42.5);
 - (o) San Jose (SOHAM), NM (N35-24.9 W105-29.7);
 - (p) Montoya, NM (N35-05.8 104-03.9);
 - (q) Randall Ranch (N35-02.8 W104-04.7).
- (12) Aircraft not scheduled into R-5104/R-5105 must exit at or prior to P.
- (13) De-confliction between VR-100 and PECOS LOW MOA, IR-109, IR-111, IR- 113, IR-128, IR-180, VR-108, VR-114, and VR-125 will be by 27 SOW scheduling. See and avoid applies to non-27 SOW conflicting routes (IR-133, VR-176, VR-1195 and VR-1107). Consult FLIP AP/1B chart for details.
- (14) CAUTION: Numerous towers and obstructions exist on this route which are hazards to flight at less than 300' AGL. Contact 27 SOSS/OSTA (DSN 681-2521) to obtain a current and complete FAX copy of uncharted/unpublished obstructions.

FSS's Within 100 NM Radius:

ABQ

VR-101

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

VR ROUTES

HOURS OF OPERATION: 0700-2200 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | LZZ 248/33 | N31°03.00' W98°46.00' |
| 05 AGL B 40 MSL to | B | LZZ 341/7 | N31°18.00' W98°10.00' |
| 10 AGL B 40 MSL to | C | LZZ 039/10 | N31°18.00' W98°00.00' |
| 10 AGL B 40 MSL to | D | LZZ 061/19 | N31°18.00' W97°48.00' |
| 10 AGL B 40 MSL to Left at | D1 | LZZ 061/19 | N31°18.00' W97°48.00' |
| 30 MSL to Avoid North Fort Hood and Gatesville. | B1 | LZZ 341/7 | N31°18.00' W98°10.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route in VMC only.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM right and 8 NM left of centerline from B to D.

Special Operating Procedures:

- (1) Route to be used only by aircraft scheduled into R-6302.
- (2) Minimum speed: 300 Knots.
- (3) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly (See and Avoid) and users are encouraged to maintain a continuous visual lookout.
- (4) Units requesting VR-101 shall furnish 301 OG/SUA with planned entry/exit points, times, and planned speeds. Accurate times are critical in the deconfliction process.
- (5) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
- (6) All aircraft will monitor FSS on 255.4 unless assigned a frequency by ARTCC. Users will make an entry and exit call on 255.4.
- (7) Avoid the following areas by 1500' AGL or 1 NM radius: (N31-13.0 W98-23.5), (N31-13.0 W98-12.0), (N31-24.5 W98-05.0), (N31-23.0 W98-01.0), (N31-22.8 W97-54.8), (N31-26.0 W97-44.0).
- (8) Obstructions: None.

FSS's Within 100 NM Radius:

CXO, FTW, SJT

VR-104

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------|----|--------------|--------------------------|
| As assigned to | A | UKW 150/7 | N33°26.00' W97°46.00' |

| | | | |
|---------------------|---|------------|--------------------------|
| 03 AGL B 35 MSL to | B | ADM 205/28 | N33°49.00' W97°27.00' |
| 03 AGL B 35 MSL to | C | ADM 322/11 | N34°22.00' W97°17.00' |
| 03 AGL B 35 MSL to | D | IRW 196/43 | N34°42.00' W97°57.00' |
| 03 AGL B 35 MSL to | E | IRW 235/29 | N35°08.00' W98°08.00' |
| 03 AGL B 35 MSL to | F | IRW 281/35 | N35°32.00' W98°17.00' |
| 03 AGL B 35 MSL to | G | IRW 278/40 | N35°32.00' W98°24.00' |
| 03 AGL B 35 MSL to | H | HBR 026/31 | N35°17.00' W98°42.00' |
| 03 AGL B 35 MSL to | I | HBR 086/10 | N34°51.00' W98°52.00' |
| 24 MSL B 100 MSL to | J | HBR 135/17 | N34°38.00' W98°52.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to E; 3 NM either side of centerline from E to J.

Special Operating Procedures:

- (1) Route will be flown from 300-600 KIAS.
- (2) Alternate Entry Points: D and I.
- (3) Alternate Exit Point: D and I.
- (4) Minimum altitude 1000' AGL at B.
- (5) Avoid the charted grass strip at N34-40 W97-50 by 1000' AGL and 3 NM.
- (6) Noise sensitive areas: avoid by 1000' AGL or 2 NM:
 - (a) Ostrich Ranch at N33-30.4 W97-40.0;
 - (b) Emu Ranch at N33-37.0 W97-36.9;
 - (c) Emu Ranch at N33-46.4 W97-38.1;
 - (d) Ostrich Ranch at N33-47.0 W97-26.5;
 - (e) Ostrich Ranch at N34-24.1 W97-28.5;
 - (f) Ostrich Ranch at N34-31.8 W97-31.8;
 - (g) Ostrich Ranch at N34-32.5 W97-48.7.
- (7) Units requesting VR-104 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
- (8) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.
- (9) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
- (10) Route Conflicts:
 - (a) VR-104 at Point A conflicts with VR-163, VR-1139, VR-1140, VR-1145, VR-1146 along many points of the routes. Call 90 FTS at Sheppard AFB, DSN 736-2675/4995 to deconflict.
 - (b) VR-104 conflicts with Sheppard 1 MOA at Point J (Primary Exit). Contact Sheppard AFB at above number to deconflict.
- (11) Route Segment I to J closed except to aircraft scheduled into R-5601F. Aircraft not scheduled into R-5601 must exit by Point I and remain clear of R-5601F.

FSS's Within 100 NM Radius:

FTW, ICT, MLC

VR-106

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N Sixth St., Altus AFB, OK 73521 DSN 866-6098, C580-481-6098.

SCHEDULING ACTIVITY: 97 OSS/OSK, 400 N Sixth St. Suite 12, Altus AFB, OK 73521 DSN 866-7110.

HOURS OF OPERATION: 0830-0230 local Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 03 AGL B 40 MSL to | A | LTS 247/22 | N34°34.20' W99°42.00' |
| 03 AGL B 40 MSL to | B | CDS 022/17 | N34°36.70' W100°06.50' |
| 03 AGL B 50 MSL to | C | CDS 334/22 | N34°43.70' W100°25.00' |
| 03 AGL B 50 MSL to | D | SYO 245/50 | N35°07.50' W100°36.60' |
| 03 AGL B 50 MSL to | E | SYO 251/30 | N35°16.10' W100°14.80' |
| 03 AGL B 50 MSL to | F | SYO 180/17 | N35°03.70' W99°41.70' |
| 03 AGL B 40 MSL to | G | LTS 247/22 | N34°34.20' W99°42.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to B; 5 NM either side of centerline from B to D; 5 NM right widening to 7 NM right and 5 NM left of centerline from D to E; 7 NM right narrowing to 5 NM right and 5 NM left of centerline from E to F; 10 NM either side of centerline from F to G.

Special Operating Procedures:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313, C580-481-6313.
- (2) Primary Entry: A; Alternate Entry: B; Primary Exit: G; Alternate Exit: F.
- (3) Aircraft accomplishing airdrops at Sooner DZ, report commencement of airdrop run-in not later than 5 minutes prior to Altus Approach Control 257.725, using the phrase (call sign, inbound Sooner DZ, intentions to follow).
- (4) At C, when practicable, avoid Memphis Municipal Airport by 1500' AGL or 3 NM.
- (5) From C to D avoid flight over town of Quail, TX, by 2 NM.
- (6) From D to E avoid flight over town of Shamrock, OK, and when practicable avoid McLean Gray Airport and Shamrock Municipal Airport by 1500' AGL or 3 NM.
- (7) From E to F, when practicable, avoid Haddock Airport by 1500' AGL or 3 NM.
- (8) Contact Altus Approach Control 125.1/257.725 (CH 6) upon exiting F or G. Monitor 255.4 entire route of flight.
- (9) Route designated MARSAs, MARSAs between VR-144, VR-184, VR-190, VR-191, VR-198, VR-199, SR-205, SR-206, SR-208, SR-216, SR-217 and IR-193 is accomplished through restrictive scheduling. VR-106 is the exact routing as IR-193.
- (10) Deconflict with IR-105 (NAS Ft. Worth), VR-159, VR-162, VR-1141, VR-1142, VR-1143, VR-1144 (Sheppard AFB) with appropriate route schedulers. For day low levels on legs C,

D, E, and F, all aircraft will remain east of the McLean-Hedley line (near Point D) and south of I-40 (south of the town of Shamrock, near Point E) in order to avoid the eastern and southern halves of the VR-1141/1142 corridor. The coordinates for this line are approximately N34-43.08 W100-35.68 straight north to N35-14.42 and straight east to W99-52.10.

(11) PMSV: Altus AFB 239.8.

(12) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter route. Aircraft must also exit route within the window of two minutes early to two minutes late.

(13) Use caution for uncharted airfield just beyond Point F, N34-58.5 W99-29.0.

FSS's Within 100 NM Radius:

FTW, SJT

VR-108

ORIGINATING ACTIVITY: 27 SOSS/OSTA, 110 E. Sextant Ave, Suite 1081 Cannon AFB, NM 88103 DSN 681-2521.

SCHEDULING ACTIVITY: 27 SOSS/OSOS, 110 E. Sextant Ave, Suite 1080 Cannon AFB, NM 88103 DSN 681-2276.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| As assigned to | A | DHT 276/58 | N36°23.00' W103°41.00' |
| 01 AGL B 120 MSL to (Alternate Entry) | B | DHT 283/59 | N36°30.00' W103°39.00' |
| 01 AGL B 120 MSL to (Alternate Entry) | C | DHT 292/56 | N36°37.00' W103°30.00' |
| 01 AGL B 80 MSL to (Alternate Entry/Exit) | D | DHT 318/44 | N36°44.00' W103°00.00' |
| 01 AGL B 80 MSL to (Alternate Entry/Exit) | E | TBE 116/37 | N36°53.00' W103°00.00' |
| 01 AGL B 80 MSL to (Alternate Entry/Exit) | F | TBE 156/19 | N36°57.00' W103°31.00' |
| 01 AGL B 150 MSL to (Alternate Entry/Exit) | G | TBE 190/25 | N36°52.00' W103°48.00' |
| 01 AGL B 150 MSL to (Alternate Entry/Exit) | H | TBE 196/28 | N36°51.00' W103°52.00' |
| 01 AGL B 150 MSL to (Alternate Entry/Exit) | I | TBE 189/50 | N36°29.00' W103°58.00' |
| 01 AGL B 130 MSL to (Alternate Entry/Exit) | J | TCC 330/62 | N36°10.00' W103°59.00' |
| 01 AGL B 80 MSL to (Alternate Entry/Exit) | K | TCC 332/36 | N35°46.00' W103°48.00' |
| 01 AGL B 80 MSL to (Alternate Entry/Exit) | L | TCC 330/33 | N35°42.00' W103°48.00' |
| 01 AGL B 80 MSL to (Alternate Entry/Exit) | M | TCC 264/24 | N35°13.50' W104°05.00' |
| 01 AGL B 70 MSL to (Alternate Entry/Exit) | N | TCC 249/22 | N35°07.50' W104°02.00' |
| 01 AGL B 70 MSL to (Alternate Entry) | O | TCC 190/24 | N34°48.50' W103°47.00' |
| 01 AGL B 70 MSL to (Alternate Entry) | M1 | TCC 184/33 | N34°39.00' W103°47.00' |

VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to I; 7.5 NM either side of centerline from I to J; 7.5 NM left and 20 NM right of centerline from J to M1.

Special Operating Procedures:

- (1) Tie-in FSS: Albuquerque (ALB).
- (2) Non 27 SOW aircraft entry times are booked no closer than 15 minutes. Users must meet booked Entry and Exit times plus or minus 5 minutes. If unable to meet planned entry time enter at an Alternate Entry so as to meet booked exit time or do not enter the route. Route times are planned at 480 Kts ground speed.
- (3) Aircraft must call in-the-blind route entry and exit on 255.4. Monitor 255.4 while on this route unless operational constraints dictate otherwise.
- (4) Avoid by 1 NM:
 - (a) Mosquero, NM (N35-46.6 W103-57.4);
 - (b) Black Mesa State Park (N36-50.8 W102-52.7W);
 - (c) Lake Conchos Resorts (N35-22.1 W104-12.5);
 - (d) Ranch (N36-36.8 W103-35.7).
- (5) Avoid the following by 1000' AGL/1 NM:
 - (a) Ranch (N35-55.0 W104-16.8);
 - (b) Ranch (N35-54.6 W104-21.0);
 - (c) Ranch (N34-54.1 W103-49.5);
 - (d) Montoya, NM (N35-05.8 W104-03.9);
 - (e) Bell Ranch HQ (N35-31.7 W104-05.7);
 - (f) Randall Ranch (N35-02.7 W104-04.7).
- (6) Avoid the following by 2 NM:
 - (a) Capulin National Monument (N36-47.0 W103-58.1);
 - (b) Ranch (N34-53.5 W103-48.8);
 - (c) Ranch (N34-55.5 W103-45.7) 1000' AGL;
 - (d) House, NM (N34-38.7 W103-54.2).
- (7) Alternate Entry Points: B through M1.
- (8) Alternate Exit Points: D through N.
- (9) Deconfliction between VR-108 and IR-107, IR-109, IR-111, IR-113 and VR-114 will be by 27 SOW scheduling. (See and Avoid) applies to non-27 FW conflicting routes (VR-1174, VR-1574 and VR-1195, VR-1107). Consult FLIP AP/1B chart for details.
- (10) Aircraft not scheduled into R-5104/R-5105 must exit at or prior to N.
- (11) CAUTION: Numerous towers and obstructions exist on this route which are hazards to flight at less than 300' AGL. Contact 27 SOW/OSTA (DSN 681-2521) to obtain a current and complete FAX copy of unchumed/uncharted obstructions.
- (12) CAUTION: The following obstructions are not found in chum and are not printed on current cartographic materials: Towers less than 200' at the following locations:
 - (a) N34-04.15 W104-01.60
 - (b) N34-04.15 W104-07.72
 - (c) N34-50.31 W103-42.97
 - (d) N34-50.52 W103-42.73
 - (e) N34-51.15 W104-07.72
 - (f) N34-56.00 W104-10.50
 - (g) N34-57.00 W104-11.20
 - (h) N34-59.11 W104-07.78
 - (i) N35-00.42 W104-29.22
 - (j) N35-03.71 W104-02.52
 - (k) N35-06.50 W103-42.00
 - (l) N35-14.00 W104-10.50

- (m) N35-16.50 W104-13.60
- (n) N35-53.77 W104-11.24
- (o) N35-58.60 W104-14.00
- (p) N36-00.61 W104-13.76
- (q) N36-21.50 W104-00.00
- (r) N36-31.36 W103-29.30
- (s) N36-32.44 W103-27.54
- (t) N36-41.50 W103-48.00
- (u) N36-42.33 W103-52.58
- (v) N36-48.88 W103-51.70

FSS's Within 100 NM Radius:

ABQ

VR-114

ORIGINATING ACTIVITY: 27 SOSS/OSTA, 110 E. Sextant Ave, Suite 1081, Cannon AFB, NM 88103 DSN 681-2521.

SCHEDULING ACTIVITY: 27 SOSS/OSOS, 110 E. Sextant Ave, Suite 1080, Cannon AFB, NM 88103 DSN 681-2276.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | TCC 121/47 | N34°38.50' W102°54.00' |
| 01 AGL B 110 MSL to | B | TCC 033/44 | N35°42.00' W102°58.00' |
| 01 AGL B 110 MSL to | C | TCC 344/24 | N35°35.00' W103°38.00' |
| 01 AGL B 110 MSL to | D | TCC 309/27 | N35°32.00' W103°56.50' |
| 01 AGL B 110 MSL to | E | TCC 239/23 | N35°03.50' W104°02.50' |
| 01 AGL B 110 MSL to | F | TCC 186/23 | N34°49.50' W103°44.50' |
| 01 AGL B 110 MSL to | M1 | TCC 184/33 | N34°39.00' W103°47.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 20 NM either side of centerline from A to B; 10 NM left and 20 NM right of centerline from B to M1.

Special Operating Procedures:

- (1) Tie-in FSS: Albuquerque (ABQ).
- (2) Non-27 SOW aircraft entry times are booked no closer than 15 minutes. Users must meet booked entry and exit times plus or minus 5 minutes. If unable to meet planned entry time, enter at an Alternate Entry so as to meet booked exit time or do not enter the route. Route times are planned at 480 knots ground speed.
- (3) Aircraft must call in the blind route entry and exit on 255.4. Monitor 255.4 while on this route unless operational requirements dictate otherwise.
- (4) Alternate Entry: B, C, D and E.
- (5) Alternate Exit: B, C, D, E and F.
- (6) Avoid by 1 NM:
 - (a) Mosquero, NM (N35-46.6 W103-57.4);

- (b) Lake Conchas Resorts (N35-22.1 W104-12.5).
- (7) Avoid by 2 NM:
 - (a) Ranch (N34-55.5 W103-45.7) 1000' AGL;
 - (b) House, NM (N34-38.7 W103-54.2);
 - (c) Ranch (N35-53.5 W103-48.8).
- (8) Avoid by 1000' AGL and 1 NM:
 - (a) Ranch (N34-54.1 W103-49.5);
 - (b) Ranch (N35-48.9 W103-13.9);
 - (c) Montoya, NM (N35-05.8 W104-03.9);
 - (d) Randall Ranch (N35-02.7 W104-04.7);
 - (e) Bell Ranch HQ (N35-31.7 W104-05.7).
- (9) Aircraft not scheduled into R-5104/R-5105 must exit at or prior to Point E.
- (10) Deconfliction between VR-114 and IR-107, IR-109, IR-111, IR-113, VR-100, VR-108, and VR-125 will be by 27 SOW Scheduling. SEE and AVOID applies to Non-27 SOW conflicting routes (VR-1174/1154). Consult FLIP AP/1B chart for details.
- (11) CAUTION: Numerous towers and obstructions exist on this route which are hazards to flight at less than 300' AGL. Contact 27 SOSS/OSTA (DSN 681-2521) to obtain a current and complex FAX copy of uncharted/unpublished obstructions.

FSS's Within 100 NM Radius:
ABQ

VR-118

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset Mon-Sat

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| As assigned to | A | MQP 259/38 | N32°42.00' W98°45.00' |
| 05 AGL B 155 MSL to | B | MQP 272/24 | N32°48.00' W98°28.00' |
| 05 AGL B 155 MSL to | C | MQP 283/20 | N32°51.00' W98°22.00' |
| 05 AGL B 60 MSL to Then within | D | MQP 347/15 | N32°59.00' W98°01.00' |
| 05 AGL B 60 MSL to Then within 05 AGL B 60 MSL to (Start Maneuver Area) | D1 | MQP 347/15 | N32°59.00' W98°01.00' |
| 05 AGL B 155 MSL to | C1 | MQP 283/20 | N32°51.00' W98°22.00' |
| 05 AGL B 155 MSL to | B1 | MQP 272/24 | N32°48.00' W98°28.00' |
| 05 AGL B 155 MSL to Thence via published route. | A1 | MQP 259/38 | N32°42.00' W98°45.00' |

ROUTE WIDTH - 5 NM left and 13 NM right of centerline from A to B and B1 to A1; 3 NM left and 13 NM right of centerline from B to C and C1 to B1; 3 NM either side of centerline from C to D and D1 to C1.

Special Operating Procedures:

- (1) Entry to A will be via radar vectors.
- (2) Pilots will contact Fort Worth ARTCC on 360.6 for flight advisory.
- (3) Route airspeeds from 150 KIAS to 600 KIAS.
- (4) Route designed for F-4 and F-16 FCF profiles.
- (5) C1 to A1 route boundaries designed for FCF profile maneuvering.
- (6) Avoid the residential area around Possum Kingdom Lake.
- (7) Units requesting VR-118 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
- (8) Route Conflicts:
 - (a) VR-118 between Points A/A1 to B/B1 and C/C1 to D/D1 conflicts with VR-158 between F to H and B to C. Call the schedulers of VR-158 at 90 FTS Sheppard AFB, DSN 736-2675/4995 to deconflict.

FSS's Within 100 NM Radius:
FTW, SJT

VR-119

ORIGINATING ACTIVITY: 71 OSS/OSOP, 301 Gritz Street, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.

SCHEDULING ACTIVITY: 32 FTS/DOOT, Vance AFB, OK 73705-5202 DSN 448-6251, C580-213-6251.

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| As assigned to | A | ICT 164/54 | N36°51.00' W97°24.00' |
| 01 AGL B 30 MSL to | B | ANY 200/12 | N36°59.00' W98°17.00' |
| 01 AGL B 30 MSL to | C | ANY 252/10 | N37°07.50' W98°23.00' |
| 01 AGL B 33 MSL to | D | ANY 303/30 | N37°29.00' W98°39.00' |
| 01 AGL B 32 MSL to | E | HUT 243/9 | N37°57.00' W98°07.00' |
| 01 AGL B 32 AGL to (See S.O.P. 9) | F | HUT 351/28 | N38°27.50' W97°56.00' |
| 01 AGL B 100 MSL to within area to G. | G | HUT 351/45 | N38°45.00' W97°56.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to F; 6 NM left and 8 NM right of centerline from F to G.

Special Operating Procedures:

- (1) Alternate Entry Points: C and D.
- (2) Alternate Exit Points: C, D and F.
- (3) Maneuver area will be used in conjunction with Smoky MOA for entry/exit and holding for R-3601.
- (4) Contact Smoky Hill Range Officer prior to F for entry into the maneuver area, Smoky MOA, and R-3601.

VR ROUTES

- (5) Route conflicts with VR-138, VR-152, VR-531, VR-532, VR-533, VR-534, VR-535, VR-536, VR-552 and IR-504. Conflicts will be avoided by MARSAs and scheduling through the Scheduling Activities. Conflicts at R-3601 will be avoided through scheduling of Smoky Hill Range times.
- (6) Avoid the following noise sensitive areas:
- All airports by 1500'/3 NM when practical.
 - Livestock feedlot 3 NM southwest of Manchester (N36-59.0 W98-04.0);
 - Farm 4 NM west of Penalosa (N37-43.0 W98-24.0);
 - Livestock feedlot (N37-32.5 W98-45.0);
 - Livestock feedlot 4 NM east of Saxman (N38-17.0 W98-02.0);
 - Gas refining plant 3 NM east of Cunningham by 1500'/5 NM (N37-38.5 W98-22.5);
 - Feedlot at (N37-33.0 W98-34.0).
- (7) Minimum altitude 500' AGL entire route.
- (8) Exit at F is not scheduled for R-3601, avoid flight into Smoky MOA.
- (9) Altitude data for Pt F: 01 AGL B 25 MSL to (Range Maneuver Area), or 01 AGL B 32 MSL to (if cleared by Wichita Approach Control 325.8 prior to E)

FSS's Within 100 NM Radius:

ICT, MLC

VR-125

ORIGINATING ACTIVITY: 27 SOSS/OSTA, 110 E.Sextant Ave, Suite 1081, Cannon AFB, NM 88103 DSN 681-2521.

SCHEDULING ACTIVITY: 27 SOSS/OSOS, 110 E.Sextant Ave, Suite 1080, Cannon AFB, NM 88103 DSN 681-2276.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------|----|--------------|---------------------------|
| As assigned to | A | CVS 307/25 | N34°41.00' W103°40.00' |
| SFC B 110 MSL to | B | TCC 196/34 | N34°41.00' W103°55.00' |
| SFC B 110 MSL to | C | CNX 012/21 | N34°41.00' W105°30.00' |
| SFC B 110 MSL to | D | CNX 332/14 | N34°35.50' W105°45.00' |
| SFC B 110 MSL to | E | CNX 307/21 | N34°38.00' W105°57.00' |
| SFC B 110 MSL to | F | CNX 280/23 | N34°31.00' W106°06.00' |
| SFC B 110 MSL to | G | CNX 241/16 | N34°17.50' W105°59.50' |
| SFC B 110 MSL to | H | CNX 176/35 | N33°47.50' W105°47.50' |
| SFC B 125 MSL to | I | CNX 167/38 | N33°43.50' W105°40.50' |
| SFC B 125 MSL to | J | CNX 143/44 | N33°41.50' W105°19.50' |
| SFC B 125 MSL to | K | CME 292/32 | N33°38.00' W105°09.00' |
| SFC B 110 MSL to | L | CME 333/34 | N33°53.00' W104°48.00' |

| | | | |
|------------------|----|------------|---------------------------|
| SFC B 110 MSL to | M | CME 344/34 | N33°54.00' W104°40.00' |
| SFC B 110 MSL to | N | CME 057/33 | N33°32.00' W104°00.00' |
| SFC B 110 MSL to | O | CME 056/43 | N33°36.00' W103°50.00' |
| SFC B 110 MSL to | P | CME 042/49 | N33°49.00' W103°49.00' |
| SFC B 110 MSL to | M2 | CVS 232/27 | N34°10.00' W103°48.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM left and 28 NM right of centerline from A to B; 28 NM either side of centerline from B to C; 28 NM either side of centerline decreasing to 5 NM either side of centerline from C to D; 5 NM either side of centerline from D to L; 1.5 NM either side of centerline from L to P; 5 NM left and 3 NM right of centerline from P to M2.

Special Operating Procedures:

- Tie-in FSS: Albuquerque (ABQ).
- Non-27 SOW aircraft entry times are booked no closer than 15 minutes. Users must meet booked Entry and Exit times plus or minus 5 minutes. If unable to meet planned entry time enter at an Alternate Entry so as to meet booked exit time or do not enter the route. Route times are planned at 480 kts ground speed.
- Aircraft must call in-the-blind route entry and exit on 255.4. Monitor 255.4 while on this route unless operational constraints dictate otherwise.
- Alternate Entry Points: B through P.
- Alternate Exit Points: C through P.
- Segment A through D designated maneuver area.
- Avoid Fort Sumner Airport (N34-29.2 W104-13.1) by 1500' AGL and 3 NM to the South, East, and West, and to the PECOS EAST MOA boundary to the North.
- Avoid Gran Quivira National Monument (N34-15.6 W106-05.5) by 3 NM.
- Avoid Ranch (N34-55.5 W103-45.7) by 1000' AGL and 2 NM.
- Avoid by 1500' AGL and 1 NM:
 - Ranch (N34-54.9 W105-13.9);
 - Claunch, NM (N34-08.6 W105-59.6).
- Avoid by 1000' AGL and 1 NM:
 - Ranch (N34-54.1 W103-49.5);
 - Ranch (N34-21.7 W104-06.9);
 - Ranch (N34-19.6 W104-43.9);
 - Ranch (N34-16.9 W105-05.2);
 - Ranch (N34-14.2 W104-41.4);
 - Ranch (N34-20.5 W104-23.2);
 - Ranch (N33-45.9 W105-37.6) 1400L-2400L only;
 - White Oaks, NM (N33-45.0 W105-44.2);
 - Ranch (N34-20.8 W104-32.5);
 - Lake Sumner Settlement (N34-37.2 W104-23.9);
 - Ranch (N34-36.5 W104-22.0);
 - San Jose, NM (N35-23.8 W105-28.5);
 - Cattle Co (N34-46.0 W104-28.9);
 - Ranch (N34-16.3 W104-42.5);
 - San Juan (SOHAM), NM (N34-24.9 W105-29.7);
 - Montoya, NM (N35-05.8 W105-29.7);
 - Randall Ranch (N35-02.8 W104-04.7).

- (12) Aircraft not scheduled into R-5104/R-5105 must exit at or prior to P.
- (13) Deconflictions between VR-125 and PECOS LOW MOA, IR-109, IR-111, IR-113, IR-128, IR-180, VR-100, VR-108, and VR-114 will be by 27 SOW scheduling. (See and Avoid) applies to Non-27 SOW conflicting routes (IR-133, VR-176, and VR-1195/1107). Consult FLIP AP/1B chart for details.
- (14) CAUTION: Numerous towers and obstructions exist on this route which are hazards to flight at less than 300' AGL. Contact 27 SOSS/OSTA (DSN 681-2521) to obtain a current and complete FAX copy of uncharted/uncharted obstructions.

FSS's Within 100 NM Radius:

ABQ

VR-138

ORIGINATING ACTIVITY: 184 ARW (Kansas ANG), McConnell AFB, KS 67221-9010 (1330-2215Z wk, scheduling requirements are 2 hr 15 min prior to low level entry time) DSN 743-7187, C316-759-7187. For weekends, holidays and non-duty day ctc IAB operator DSN 743-6100

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2100 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| As assigned to | A | ICT 173/49 | N36°56.00' W97°35.00' |
| 01 AGL B 30 MSL to | B | ANY 252/10 | N37°07.50' W98°23.00' |
| 01 AGL B 33 MSL to | C | ANY 271/30 | N37°13.50' W98°47.00' |
| 01 AGL B 36 MSL to | D | HUT 236/53 | N37°37.00' W98°56.00' |
| 01 AGL B 36 MSL to | E | HUT 243/50 | N37°44.00' W98°56.00' |
| 01 AGL B 36 MSL to | F | HUT 252/48 | N37°52.00' W98°56.00' |
| 01 AGL B 36 MSL to | G | HUT 269/46 | N38°06.00' W98°54.00' |
| 01 AGL B 35 MSL to (01 AGL but not including 10 AGL to I) | H | SLN 223/56 | N38°19.00' W98°32.00' |
| 01 AGL B 10 AGL to (Unless cleared to operate within Bison MOA, then altitudes assigned by Kansas City ARTCC) | I | SLN 220/30 | N38°35.00' W98°05.00' |
| 01 AGL B 30 MSL to to (Maneuver Area) | J | SLN 201/32 | N38°27.30' W97°56.00' |
| 01 AGL B 100 MSL to within area. | K | SLN 227/18 | N38°45.00' W97°56.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to J; 6 NM left and 8 NM right of centerline from J to K.

Special Operating Procedures:

- (1) Alternate Entry Points: B, C and E.
- (2) Alternate Exit Points: B, D, E and I.
- (3) Exit at I for entry into Bison MOA and if not scheduled for R-3601, avoid flight into Smoky MOA.
- (4) Maneuver area will be used in conjunction with Smoky MOA for entry, exit, and holding for R-3601.
- (5) Contact Smoky Hill Range Officer prior to I for entry into the maneuver area, Smoky MOA, and R-3601.
- (6) Route conflicts with VR-119, VR-152, VR-531, VR-532, VR-536. Conflicts will be avoided by MARSAs and scheduling through the scheduling activities. Conflicts at R-3601 will be avoided through scheduling of Smoky Hill Range times.
- (7) Avoid the following noise sensitive areas:
 - (a) All airports charted on the Wichita Sectional Chart by 1500'/3 NM;
 - (b) Livestock feedlot 2 NM southeast of Seward (N38-08.0 W98-34.0);
 - (c) Livestock feedlot 4 NM south of Ellingwood (N38-19.0 W98-34.0);
 - (d) The town of Lorraine by 1500' (N38-34.0 W98-19.0) by 1500'/5 NM.
 - (e) Feedlot located at N37-22.5 W98-50.0;
 - (f) Feedlot located at N37-44.0 W98-54.0;
 - (g) Feedlot located at N37-55.0 W98-53.5;
 - (h) Feedlot located at N37-59.9 W98-52.0;
 - (i) Feedlot located at N38-03.0 W98-50.5;
 - (j) Feedlot located at N38-07.5 W98-46.0;
 - (k) Feedlot located at N38-29.0 W98-17.5.
- (8) Minimum altitude 500' AGL entire route.

FSS's Within 100 NM Radius:

ICT

VR-140

ORIGINATING ACTIVITY: 12 OSS/OSOA, 501 I Street East, Randolph AFB, TX 78150-4333 DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 560 FTS, 1450 5th Street East, Randolph AFB, TX 78150, DSN 487-3518, C210-652-3518.

HOURS OF OPERATION: Sunrise-Sunset, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SAT 191/36 | N29°05.00' W98°41.00' |
| 05 AGL B 25 MSL to | B | COT 051/20 | N28°38.00' W98°47.00' |
| 05 AGL B 25 MSL to | C | COT 302/17 | N28°39.00' W99°22.00' |
| 05 AGL B 25 MSL to | D | RSG 129/42 | N29°29.00' W99°46.00' |
| 05 AGL B 40 MSL to | E | RSG 095/52 | N29°47.00' W99°20.00' |
| 05 AGL B 45 MSL to | F | RSG 074/31 | N30°04.00' W99°42.00' |

VR ROUTES

| | | | |
|--------------------|---|------------|--------------------------|
| 05 AGL B 40 MSL to | G | JCT 131/25 | N30°17.00' W99°30.00' |
| 05 AGL B 40 MSL to | H | STV 111/17 | N30°04.00' W98°25.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

- (1) Route Conflicts:
 - (a) VR-140 Points B-F overlays VR-168 Points B-F. Also, VR-140 Points E-F overlays IR-149 Points A-C. To deconflict, call the scheduler of VR-168 and IR-149 at COMTRAWLING 2, NAS Kingsville, DSN 876-6518, C361-516-6518. NOTE: The most frequent users of VR-168 are Laughlin T-38 aircraft that usually enter in an easterly heading at VR-168 Point D - a point that is only a few miles from VR-140 Point D.
 - (b) VR-140 Points C-E overlays and flows in the opposite direction to VR-1122 Points C-F. Also, VR-140 Points A-B overlays with VR-156 and VR1105 Points A-B. To deconflict, call the scheduler of VR-1122, VR-156 and VR-1105 at 149 FW, Kelly AFB, DSN 945-5934, C210-925-5934.
- (2) This route overlays VR-156 and VR-1105 from A through D. Contact 149 TFG DSN 945-5934 to deconflict.
- (3) Make the following radio call when approaching both C and D on UHF 255.4 (callsign) (number in flight) (altitude AGL) approaching VR-140 point (C/D).
- (4) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
- (5) Pilots may schedule new entry times with CHEETAH OPS on 343.0.
- (6) Extensive T-6 aircraft operations within 15 NM of Hondo Municipal Airport SR-SS surface to 7500' MSL.
- (7) Avoid all charted and uncharted airports by 1500' AGL and 3 NM:
 - (a) Utopia on the River (uncharted) N29-35.2 W99-31.5.
 - (b) White Oak N30-12.5 W99-05.8.
- (8) Avoid Twin Oaks Game Ranch by 2 NM N29-19.5 W99-41.0 (Noise Sensitive Area).
- (9) Alternate Exit Point: E.
- (10) Apply (See and Avoid) for all segments of route.
- (11) Avoid flying over town of Wimberly at N29-59.55 W98-04.5.
- (12) Numerous uncharted U.S. Navy low levels between Point A and D on VR-140. Recommend extra vigilance for clearing between these points. U.S. Navy aircraft normally fly below 500' AGL on these routes.

FSS's Within 100 NM Radius:

SJT

VR-142

ORIGINATING ACTIVITY: 12 OSS/OSOA, 501 I Street East, Randolph AFB, TX 78150-4333 DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 99 FTS, 1450 5th Street East, Randolph AFB, TX 78150-5000 DSN 487-6746.

HOURS OF OPERATION: Sunrise-Sunset, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| As assigned to | A | LOA 225/14 | N30°59.00' W96°11.00' |
| 05 AGL B 40 MSL to | B | LOA 360/37 | N31°44.00' W95°52.00' |
| 05 AGL B 40 MSL to | C | ACT 048/32 | N31°57.00' W96°45.00' |
| 05 AGL B 40 MSL to (Alternate Exit Point) | D | ACT 128/38 | N31°12.00' W96°46.00' |
| 05 AGL B 40 MSL to | E | CWK 018/27 | N30°47.00' W97°19.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM right and 5 NM expanding to 10 NM left of centerline from A to B; 5 NM right and 10 NM left of centerline from B to D; 5 NM right and 10 NM tapering to 5 NM left of centerline from D to E.

Special Operating Procedures:

- (1) Alternate Exit Pt: D.
- (2) Exit route heading approx 240° for Westbound routing towards Georgetown or Round Rock.
- (3) Exit route heading approx 100° for Eastbound heading.
- (4) Avoid Austin Class C Airspace.
- (5) Avoid Centex VORTAC due to converging airways.
- (6) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route. Pilots may schedule new entry time with Pather Ops on 141.7.
- (7) Route Conflicts:
 - (a) VR-142 between Points D-E conflicts with SR-290 Points C-E and SR-286 Points C-D. To deconflict, call the scheduler of SR-290 and SR-286 at 559 FTS, Randolph AFB, DSN 487-5661, C210-652-5661.

FSS's Within 100 NM Radius:

CXO, DRI, FTW, SJT

VR-143

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | LLO 124/18 | N30°36.00' W98°32.00' |
| 05 AGL B 50 MSL to | B | JCT 103/18 | N30°29.50' W99°30.00' |
| 05 AGL B 50 MSL to | C | JCT 225/16 | N30°26.00' W100°04.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 01 AGL B 50 MSL to | D | RSG 282/53 | N30°21.00' W101°15.00' |
| 01 AGL B 60 MSL to | E | RSG 277/71 | N30°21.00' W101°36.50' |
| 01 AGL B 50 MSL to | F | SJT 253/60 | N31°15.00' W101°36.50' |
| 05 AGL B 50 MSL to | G | SJT 202/40 | N30°48.00' W100°52.00' |
| 05 AGL B 60 MSL to | H | JCT 308/22 | N30°51.30' W100°06.50' |
| 05 AGL B 40 MSL to | I | JCT 032/25 | N30°55.30' W99°30.00' |
| 05 AGL B 60 MSL to | J | LLO 306/15 | N30°58.50' W99°00.00' |
| 05 AGL B 60 MSL to | K | LLO 001/12 | N31°00.00' W98°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 11 NM either side of centerline from A to C; 20 NM left and 11 NM right of centerline from C to D; 20 NM either side of centerline from D to F; 20 NM tapering to 8 NM left and 10 NM right of centerline from F to G; 8 NM left and 14 NM right of centerline from G to H; 8 NM tapering to 6 NM left and 14 NM right of centerline from H to I; 6 NM tapering to 3 NM left and 14 NM right of centerline from I to J; 3 NM left and 14 NM right of centerline from J to K.

Special Operating Procedures:

- (1) Minimum speed: 300 Knots.
- (2) Certain portions of the route between points C and F are cleared for operations at or above 500' AGL only. This area is: Point C to E, north of a line from N30-15.0 W100-04.0 to N30-15.0 W101-30.0; Point E to F, east of a line from N30-15.0 W101-30.0 to N30-55.0 W101-30.0 then north of a line from N30-55.0 W101-30.0 to N30-57.0 W102-00.0.
- (3) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.
- (4) Route Conflicts:
 - (a) VR143 between Points E, F, G conflict with VR1116 between Points G-H. To deconflict, call the scheduler of VR1116 at OC-ALC/10 FLTS at Tinker AFB DSN 336-7719/7710, C405-763-7719.
 - (b) VR143 between Points C to G conflicts in numerous areas with IR169. To deconflict, call schedulers at 87 FTS Laughlin AFB, TX DSN 732-5824/5484, C830-298-5824.
 - (c) The left corridor of VR143 between Points A to B conflicts with the route corridor of VR140 at Point G. To deconflict call the 560 FTS at Randolph AFB, DSN 487-3518/3942, C210-652-3518.
 - (d) SR281 and SR282 conflict with VR143 from Points A to E in numerous places, and SR283 and SR284 conflict with VR143 between Points C to E and F to G. To deconflict, call the 85FTS at Laughlin AFB, TX DSN 732-5121/5329, C830-298-5429.
- (5) Units requesting VR-143 shall furnish 301 OG/SUA with planned Entry/Exit Points, times, and planned speeds. Accurate times are critical in the deconfliction process.
- (6) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

- (7) All aircraft will monitor FSS UHF 255.4 unless assigned a frequency by ARTCC. Users will make an entry and exit call on UHF 255.4.
- (8) Sensitive Areas: Avoid the following areas by 1300' AGL or 1 NM radius: (N30-23-15 W99-55-00), (N30-24-40 W100-42-00), (N30-18-00 W100-38-45), (N31-11-00 W101-32-00), (N30-32-36 W101-54-24), (N30-40-00 W101-42-00), (N31-09-15 W101-20-40). Avoid the following areas by 1500' AGL or 1 NM radius: (N30-49-30 W100-42-15) (N30-53-00 W99-33-00). Avoid the following areas by 1300' AGL or 2 NM radius: (N30-45-00 W99-14-00), (N30-54-50 W98-58-42). Avoid the following areas by 1.5 NM radius: (N30-24-30 W98-43-00), (N30-24-30 W100-37-00). Avoid the radar site at (N30-58-41 W100-33-08) by 5000' AGL and 1 NM. Prior to entering at point A avoid the town of Marble Falls, the Colorado River, Llano River and Lake Buchanan by a minimum of 3000' AGL. To avoid by 1300' AGL or 1 NM: N30-19-40 W99-54-20.
- (9) Obstructions:
 - (a) 559' AGL tower at (N31-12-40 W101-21-00);
 - (b) 319' AGL tower at (N30-26-40 W101-38-20);
 - (c) 200' AGL tower at (N30-27-05 W100-13-21);
 - (d) 500' AGL tower at (N30-43-50 W098-57-12).
- (10) Alternate Entry: B, D, H and I.
- (11) Alternate Exit: B, C, D, G, H, I, and J.

FSS's Within 100 NM Radius:

FTW, SJT

VR-144

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N Sixth St., Altus AFB, OK 73521 DSN 866-6098, C580-481-6098.

SCHEDULING ACTIVITY: 97 OSS/OSK, 400 N Sixth St. Suite 12, Altus AFB, OK 73521 DSN 866-7110.

HOURS OF OPERATION: 0830-0230 Local Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 03 AGL B 40 MSL to | A | LTS 194/25 | N34°16.55' W99°27.57' |
| 03 AGL B 40 MSL to | B | LTS 198/38 | N34°05.40' W99°36.80' |
| 03 AGL B 40 MSL to | C | LTS 269/20 | N34°42.00' W99°39.90' |
| 03 AGL B 40 MSL to | D | SYO 180/17 | N35°03.70' W99°41.70' |

ROUTE WIDTH - 10 NM either side of centerline from A to C; 5 NM either side of centerline from C to D.

Special Operating Procedures:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hrs in advance or contact Altus Command Post for same day scheduling at DSN 866-6313, C580-481-6313.
- (2) Primary Entry: A; Primary Exit: D; Alternate Exit: B and C.
- (3) Aircraft accomplishing airdrops at Sooner DZ will report passing the town of Reed, OK to Altus APP CON 125.1/257.725 (CH 6), using the phrase (call sign, Reed southbound to Sooner DZ, intentions to follow).

VR ROUTES

- (4) From A to C, when practicable avoid Quannah Municipal and Mangum Airports by 1500' AGL or 3 NM.
- (5) From A to B, avoid flight over town of Eldorado, OK.
- (6) At D avoid flight over the town of Chillicothe, TX.
- (7) Contact Altus Approach Control on 257.725 at B. Contact Altus Approach 257.725 when exiting (applies if exiting at B, C, or D).
- (8) Route designated MARSAS, MARSAS between VR-144, VR-184, VR-190, VR-191, VR-198, VR-199, SR-205, SR-206, SR-208, SR-216, and SR-217 is accomplished through restrictive scheduling.
- (9) Deconflict with IR-105 (NAS Fort Worth), VR-159, VR-162, VR-1141, VR-1142, VR-1143, VR-1144 (Sheppard AFB) with appropriate route schedulers. To avoid the corridors of VR-1141, VR-1142, VR-1143, VR-1144 and VR-159, do not fly south of highway 287 between VR-184 Points B, C, D (deconfliction with VR-162 is still required in all cases, and deconfliction with VR-1141, VR-1142, VR-1143, VR-1144 and VR-159 is required if flying south of highway 287). The line along highway 287 is from N34-21 W99-50 southeast to N34-14 W99-22.
- (10) PMSV: Altus AFB 239.8.
- (11) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter route. Aircraft must also exit route within the window of two minutes early to two minutes late.

FSS's Within 100 NM Radius:

FTW, SJT

VR-151

ORIGINATING ACTIVITY: COMDRAWING TWO, NAS Kingsville, TX 78363 DSN 876-6518/6283, C361-516-6518/6283/6108. Hrs 0800-1600 Mon-Fri ONLY (excluding holidays).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daily 0600-2200 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | PSX 175/20 | N28°25.50' W96°19.50' |
| 05 AGL B 20 MSL to | B | PSX 103/38 | N28°32.00' W95°38.00' |
| 05 AGL B 20 MSL to | C | PSX 047/40 | N29°09.00' W95°41.00' |
| 10 AGL B 20 MSL to | D | ELA 113/22 | N29°28.00' W95°57.00' |
| 05 AGL B 20 MSL to | E | ELA 059/16 | N29°46.00' W96°02.00' |
| 05 AGL B 20 MSL to | F | IDU 105/14 | N29°52.00' W96°19.00' |
| 05 AGL B 20 MSL to | G | ELA 227/20 | N29°28.00' W96°38.00' |
| 05 AGL B 20 MSL to | H | PSX 336/21 | N29°06.00' W96°25.00' |
| 05 AGL B 20 MSL to | I | PSX 242/8 | N28°43.00' W96°27.00' |
| 05 AGL B 20 MSL to | J | PSX 209/26 | N28°25.00' W96°36.00' |

TERRAIN FOLLOWING OPERATIONS: None

ROUTE WIDTH - 5 NM either side of centerline from A to B; 3 NM either side of centerline from B to C; 3 NM left and 1 NM right of centerline from C to D; 3 NM either side of centerline from D to J.

Special Operating Procedures:

- (1) Maximum airspeed is 480 KIAS.
- (2) Enter A from Espiritu Santa Bay. Do not overfly Port O'Connor.
- (3) Maintain 1500' MSL until past A.
- (4) Climb to cross C at/above 1000' AGL.
- (5) Alternate Entry Point: C at/above 1000' AGL.
- (6) Maintain 1000' AGL from D until 5 NM past D.
- (7) CAUTION: High Intensity low plane/glider operations during weekends/holidays, located 3 NM ESE of D.
- (8) Alternate Exit Points: H and I.

FSS's Within 100 NM Radius:

CXO, SJT

VR-152

ORIGINATING ACTIVITY: 184 ARW (Kansas ANG), McConnell AFB, KS 67221-9010 (1330-2215Z wkd, sked rqr 2 hr 15 min prior low level entry time) DSN 743-7187, C316-759-7187. Wkends, hol and non-duty days, Ctc McConnell AFB Opr DSN 743-6100 for patch 184th Duty Officer.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-2200 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| As assigned to | A | TIK 016/18 | N35°43.00' W97°14.00' |
| 05 AGL B 45 MSL to | B | TIK 007/26 | N35°51.00' W97°15.00' |
| 05 AGL B 40 MSL to | C | PER 191/32 | N36°14.00' W97°21.00' |
| 05 AGL B 30 MSL to | D | PER 310/24 | N37°02.00' W97°30.00' |
| 05 AGL B 30 MSL to | E | ICT 221/16 | N37°34.00' W97°50.00' |
| 05 AGL B 30 MSL to | F | HUT 198/9 | N37°52.00' W98°01.00' |
| 25 MSL to | G | SLN 204/37 | N38°24.00' W98°01.00' |
| 05 AGL B 100 MSL to | H | SLN 238/20 | N38°47.00' W98°01.00' |

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Whiteman (SZL 344.6).

TERRAIN FOLLOWING OPERATIONS: Authorized from A to F and G to H only. Reverse course/orbit is authorized between G and H.

ROUTE WIDTH - 3 NM either side of centerline from A to F; 2 NM either side of centerline from F to G; on centerline to 9 NM right of centerline from G to H, excluding R-3601.

Special Operating Procedures:

- (1) Approval to fly VR-152 does not constitute authority to enter R-3601.
- (2) Smoky Hill Range clearance is required for entry into R-3601.
- (3) Contact Hutchinson Approach/Tower 325.8 passing F for traffic information through the Hutchinson Terminal Area.
- (4) Alternate Entry Points: B, D, E and G.
- (5) Alternate Exit Point: G.
- (6) VR-152 is the reverse course of VR-552. Other intersecting routes: VR-119, VR-138, VR-532, VR-533, VR-534, VR-535, VR-536. Insure routes are deconflicted.
- (7) Alternate Entry Point B is to be utilized by all aircraft not originating out of Tinker.
- (8) Avoid the following noise sensitive areas:
 - (a) All airports chartered on the Wichita and Dallas/Fort Worth Sectional Charts by 1500'/3 NM;
 - (b) Farm at A (N35-43.0 W97-01.0);
 - (c) Livestock feedlot south of Langston (N35-56.0 W97-14.0);
 - (d) Airport at Perry (N36-18.0 W97-19.0);
 - (e) Farm near Billings (N36-32.0 W97-25.0);
 - (f) Farm (N37-12.0 W97-32.0);
 - (g) Livestock feedlot 1 NM south of Milan (N37-15.0 W97-41.0);
 - (h) Airfield 3 NM west of Cheney Reservoir Dam (N37-42.0 W97-54.0);
 - (i) Farm 3 NM east of Nickerson (N38-09.0 W98-00.0);
 - (j) Farm 7 NM south of Little River (N38-17.0 W98-02.0);
 - (k) Kanopolis Reservoir Dam below 1000' AGL (N38-37.0 W97-52.0);
 - (l) Farm (N38-18.0 W98-02.0) below 1000' AGL .
- (9) All heavy aircraft enter at B.
- (10) Check NOTAMS for rocket firings to FL230 near Argonia, KS (N37-16.0 W97-44.0).

FSS's Within 100 NM Radius:

ICT, MLC

VR-156

ORIGINATING ACTIVITY: 149 FTR GP (TX-ANG), Kelly AFB, TX 78241 DSN 945-5934, C210-925-5934.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-1830 local daily, Prior coordination required for Sun-Mon operations

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|--------------------------|
| As assigned to | A | | N29°05.00' W98°41.00' |
| SFC B 30 MSL to | B | COT 040/19 | N28°40.00' W98°51.00' |
| SFC B 30 MSL to | C | COT 034/16 | N28°39.00' W98°55.00' |

| | | | |
|-----------------|---|------------|--------------------------|
| SFC B 30 MSL to | D | COT 345/16 | N28°44.00' W99°09.00' |
| SFC B 30 MSL to | E | COT 328/32 | N28°57.00' W99°21.00' |
| SFC B 60 MSL to | F | COT 319/33 | N28°56.00' W99°27.00' |
| SFC B 30 MSL to | G | COT 217/30 | N28°07.00' W99°31.00' |
| SFC B 60 MSL to | H | LRD 357/25 | N27°54.00' W99°22.00' |
| SFC B 60 MSL to | I | LRD 065/12 | N27°32.00' W99°12.00' |
| SFC B 30 MSL to | J | LRD 070/17 | N27°32.00' W99°06.00' |
| SFC B 30 MSL to | K | LRD 050/28 | N27°43.00' W98°58.00' |
| SFC B 30 MSL to | L | COT 143/25 | N28°06.00' W98°54.00' |
| SFC B 30 MSL to | M | COT 132/20 | N28°12.00' W98°53.00' |
| SFC B 50 MSL to | N | COT 121/20 | N28°15.00' W98°50.00' |
| SFC B 30 MSL to | O | COT 113/24 | N28°15.00' W98°44.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from F to N.

ROUTE WIDTH - 3 NM either side of centerline from A to L; 5 NM either side of centerline from L to O.

Special Operating Procedures:

- (1) Route usage must be coordinated a minimum of 1+30 prior to entry time.
- (2) Aircraft not scheduled into R-6312 Yankee Range must terminate at M. Dixie scheduled range time may terminate at M. In no case may entry into R-6312 be made without prior coordination and clearance.
- (3) Alternate Entry Points: E, G and H.
- (4) Alternate Exit Points: E, G, H, L and M.

FSS's Within 100 NM Radius:

SJT

VR-158

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. STE 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, C940-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri; OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------|----|--------------|--------------------------|
| As assigned to | A | UKW 264/28 | N33°32.00' W98°23.00' |

VR ROUTES

| | | | |
|--------------------------------|---|------------|--------------------------|
| 05 AGL B 30 MSL to | B | UKW 207/43 | N32°56.00' W98°17.00' |
| 05 AGL B 30 MSL to | C | MQP 220/15 | N32°34.00' W98°13.00' |
| 05 AGL B 30 MSL to | D | JEN 108/4 | N32°08.00' W97°48.50' |
| 05 AGL B 30 MSL to | E | JEN 227/19 | N31°58.00' W98°10.50' |
| 05 AGL B 30 MSL to | F | MQP 228/32 | N32°26.00' W98°32.00' |
| 05 AGL B 30 MSL to | G | MQP 262/30 | N32°44.00' W98°35.00' |
| 05 AGL B 30 MSL to | H | MQP 287/45 | N33°03.00' W98°48.00' |
| 05 AGL B 30 MSL to | I | SPS 176/43 | N33°16.00' W98°41.00' |
| 05 AGL to Cross J at 50 MSL | J | SPS 179/34 | N33°26.00' W98°42.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Position reports shall be made to Fort Worth FSS at Mineral Wells Southbound at C and at Breckenridge, Northbound at G.
- (2) Route conflicts with several IR/VR/SR routes as follows: A to B crosses IR-103, IR-105, SR-270 and VR-1138. B to C crosses VR-118 and IR-139. C to D crosses VR-1110, IR-139 and overlaps SR-270 for entire leg opposite direction. D to E crosses VR-1110 and IR-139. G to H crosses VR-118, VR-1143 and VR-1144. G to I overlaps SR-270. H to I overlaps VR-1143 opposite direction and VR-1144. H to I crosses VR-1138. See and avoid will be used for separation.
- (3) Route will be flown at a maximum of 540 knots.
- (4) Route is designated MARSA.
- (5) Route of flight checked to 500' AGL. Contour flying authorized on entire route.
- (6) Alternate Entry Points: C and D.
- (7) Alternate Exit Points: D and F.
- (8) Pilots must contact 80 FTW T-38 duty officer for current brief on noise sensitive areas and high density traffic areas.
- (9) Use caution when operating between A and B for T-37 aircraft operating at 500'AGL.

FSS's Within 100 NM Radius:

FTW, SJT

VR-159

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. STE 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, C940-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------|----|--------------|---------------------------|
| As assigned to | A | SPS 223/15 | N33°50.00' W98°50.00' |
| 05 AGL B 30 MSL to | B | GTH 048/36 | N34°06.00' W99°43.00' |
| 05 AGL B 30 MSL to | C | GTH 087/14 | N33°45.00' W100°03.00' |
| 05 AGL B 30 MSL to | D | GTH 150/41 | N33°08.00' W100°03.00' |
| 05 AGL B 30 MSL to | E | ABI 050/42 | N32°50.00' W99°09.00' |
| 05 AGL B 50 MSL to | F | SPS 202/41 | N33°24.00' W99°02.00' |
| 05 AGL to Cross G at 50 MSL | G | SPS 214/32 | N33°36.00' W99°02.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route in VMC only.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Route conflicts with several IR/VR/SR routes as follows: A to B overlaps VR-1143 opposite direction and VR-1144 and crosses VR-162, VR-144, VR-184, VR-190, VR-191, IR-103 and IR-105, B to C crosses VR-1141, VR-1142 and VR-162. C to D partially overlaps SR-236 and SR-249 and crosses SR-234, VR-1143 opposite direction and VR-1144 approaching Point D. D to E crosses SR-234, SR-236, SR-249, SR-245, SR-236, SR-240 and SR-242, some several times. E to F crosses VR-1138. See and avoid will be used for separation.
- (2) Routes will be flown at a maximum of 540 knots.
- (3) Route is designated MARSA.
- (4) Alternate Entry: D.
- (5) Alternate Exit: D.
- (6) Pilots must contact 80 FTW T-38 duty officer for current brief on noise sensitive areas and high density traffic areas.
- (7) Noise sensitive areas, avoid by 1000' AGL or 2 NM: Waggoner Estate ranch house N33-56.5 W99-16.6.
- (8) Use caution when operating between A and B for T-37 aircraft operating at 500'AGL.

FSS's Within 100 NM Radius:

FTW, SJT

VR-162

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. STE 6, Sheppard AFB, TX 76311-2056 DSN736-4970, C817-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C817-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------|----|--------------|---------------------------|
| As assigned to | A | UKW 256/32 | N33°27.70' W98°27.50' |
| 05 AGL B 30 MSL to | B | SPS 233/31 | N33°45.00' W99°09.00' |
| 05 AGL B 30 MSL to | C | GTH 054/40 | N34°04.00' W99°37.00' |
| 05 AGL B 30 MSL to | D | HBR 264/32 | N34°54.00' W99°42.00' |
| 05 AGL B 30 MSL to | E | HBR 260/49 | N34°52.00' W100°03.00' |
| 05 AGL B 30 MSL to | F | GTH 019/35 | N34°17.00' W100°00.00' |
| 05 AGL B 30 MSL to | G | GTH 084/25 | N33°45.00' W99°50.00' |
| 05 AGL B 50 MSL to | H | GTH 075/39 | N33°50.00' W99°33.00' |
| 05 AGL to Cross I at 50 MSL | I | SPS 253/35 | N33°55.00' W99°17.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Frequent heavy aircraft using Sooner Drop Zone (N34-34-26 W99-41-33). Contact Altus AFB Command Post DSN 866-6313/6314 or C580-481-6313/6314 for times. Aircraft will report point C to Altus Approach Control on 257.725 to ask if the Drop Zone is Hot. If the Drop Zone is reported Hot, the Aircraft will climb 1500' AGL until they have visual/radar contact with the heavy aircraft. Once visual/radar contact is established, aircraft may return to minimum altitudes.
- (2) Route of flight checked to 500' AGL. Contour flying authorized on entire route.
- (3) Route conflicts with several IR/VR/SR routes as follows: A to B crosses VR-1138. A to B overlaps IR-103. A to D overlaps IR-105. B to C crosses VR-1141, VR-1142 and VR-159, VR-1144, VR1143 cross approaching point C. C is shared with VR-144, VR-190, VR-184, VR-191 and IR-105. C to D overlaps VR-184 opposite direction and VR-144. Second half of C to D overlaps SR-216, SR-205, SR-217 opposite direction and SR-208. C to D crosses VR-198 and VR-199. D to E crosses SR-208. E to F crosses SR-217, VR-198, VR-199, SR-205, SR-206, SR-208 SR-216 and SR-217 and overlaps VR-190 opposite direction and VR-191 around F. F to G crosses VR-1143, VR-1144, VR-1141, VR-1142 and VR-159. H to I crosses IR-105. See and avoid will be used for separation.
- (4) Route will be flown at a maximum of 540 knots.
- (5) Alternate Entry Points: B and D.
- (6) Alternate Exit Point: E.
- (7) Pilots must contact 80 FTW T-38 duty officer for current brief on noise sensitive areas and high density traffic areas.
- (8) Noise sensitive area, avoid by 1000' AGL or 2 NM: Waggoner Estate ranch house at N33-56.5 W99-16.6.
- (9) Use caution when operating just past point A and between B and C for T-37 aircraft operating at 500' AGL.

FSS's Within 100 NM Radius:

FTW, SJT

VR-163

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. STE 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, C940-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SPS 153/19 | N33°41.00' W98°29.00' |
| 05 AGL B 30 MSL to | B | SPS 118/53 | N33°26.00' W97°46.00' |
| 05 AGL B 30 MSL to | C | ADM 205/28 | N33°49.00' W97°27.00' |
| 05 AGL B 30 MSL to | D | ADM 322/11 | N34°22.00' W97°17.00' |
| 05 AGL B 30 MSL to | E | SPS 027/53 | N34°42.00' W97°57.00' |
| 05 AGL B 30 MSL to | F | SPS 029/29 | N34°22.00' W98°13.00' |
| 05 AGL B 30 MSL to | G | SPS 091/34 | N33°53.00' W97°56.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Coordinate with 301 TFW, NAS Fort Worth JRB, TX DSN 739-6903/6904/6905 for scheduling conflicts with VR-104 segments.
- (2) Alternate Entry: B.
- (3) Alternate Exit: E and F.
- (4) Route will be flown at a maximum of 540 knots.
- (5) Pilots must contact 80 FTW T-38 duty officer for current brief on noise sensitive areas and high density traffic areas.
- (6) Route conflicts with several VR/SR routes as follows: A to B partially overlaps VR-1146 opposite direction and VR-1145. A to E overlaps VR-1140 opposite direction and VR-1139. B to E overlaps VR-104. D to E crosses VR-1145, VR-1146, SR-296 and VR-1137, VR-1128 approaching point E. E is shared by VR-1128 and overlapping route. E to F crosses SR-294, SR-295. F to G crosses SR-296. See and avoid will be used for separation.
- (7) Use caution when operating just past Point A and between B and C for T-37 aircraft operating at 500' AGL.
- (8) Noise sensitive area, avoid by 1000' AGL or 2NM: ML NSA at (N33-40.8 W97-43.4).
- (9) All non-Sheppard AFB aircraft must exit at Point F, Sheppard AFB aircraft may continue to Point G in accordance with local regulations.

FSS's Within 100 NM Radius:

FTW, MLC

VR ROUTES

VR-168

ORIGINATING ACTIVITY: COMDRAWING TWO, NAS Kingsville, TX 78363 DSN 876-6518/6283, C361-516-6518/6283/6108. Hrs 0800-1600 Mon-Fri ONLY (excluding holidays).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-2400 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| As assigned to | A | THX 100/1 | N28°30.00' W98°08.00' |
| SFC B 20 MSL to | B | COT 051/20 | N28°38.00' W98°47.00' |
| SFC B 20 MSL to | C | COT 302/17 | N28°39.00' W99°22.00' |
| SFC B 40 MSL to | D | DLF 074/56 | N29°30.00' W99°43.00' |
| SFC B 40 MSL to | E | RSG 095/52 | N29°47.00' W99°20.00' |
| SFC B 40 MSL to | F | RSG 074/31 | N30°04.00' W99°42.00' |
| SFC B 40 MSL to | G | RSG 130/22 | N29°44.00' W100°02.00' |
| SFC B 30 MSL to | H | RSG 162/39 | N29°22.00' W100°12.00' |
| SFC B 30 MSL to | I | COT 304/53 | N29°04.00' W99°51.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline entire route.

Special Operating Procedures:

- Route conflicts with several IR/VR routes as follows: A to B route crosses VR-1121, VR-1105 and VR-1106. B to C crosses VR-1106; B to F underlies VR-140. C to D route crosses VR-156, VR-1122 and VR-1123; D to E route crosses IR-149; F is shared with IR-149 and VR-140; H is shared with IR-149 and IR-170; MARSAs procedures apply.
- Alternate Entry Point: D.
- Maintain 1500' AGL within 3 NM of Three Rivers Muni Airport located at (N28-28-50 W98-12-15) 2 NM NW of Three Rivers, TX.
- Use caution when operating between C and E. Numerous T-6 aircraft operating surface to 6000' MSL within 20 NM of Hondo Municipal Airport located at N29-21 W99-11.
- B-52 aircraft periodically operate VFR from surface to 1000' AGL from C to F; Call sign will be SOPHY 21/22/23; Monitoring 361.4 259.1.
- Use caution when operating between points C and D and in the vicinity of point D for obstructions up to 2700' MSL.

FSS's Within 100 NM Radius:

SJT

VR-176

ORIGINATING ACTIVITY: 150 FW OG/CC 2251, Air Guard Rd. SE, Kirtland AFB, NM 87117-5875 DSN 246-7426.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Normally 1500-2400Z++ daily, usage between 2400-1500Z++ is available

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 01 AGL B 15 AGL to | A | ABQ 239/43 | N34°49.00' W107°39.00' |
| 01 AGL B 15 AGL to | B | GUP 162/62 | N34°27.00' W108°47.00' |
| 01 AGL B 15 AGL to | C | SJN 152/26 | N34°00.00' W109°00.00' |
| 01 AGL B 50 AGL to | D | SJN 165/36 | N33°49.00' W109°06.00' |
| 01 AGL B 50 AGL to | E | SVC 299/70 | N33°25.00' W109°11.00' |
| 01 AGL B 50 AGL to | F | SVC 343/47 | N33°25.00' W108°15.00' |
| 01 AGL B 15 AGL to | G | SVC 007/26 | N33°03.00' W107°59.00' |
| 01 AGL B 15 AGL to | H | DMN 012/19 | N32°34.00' W107°27.00' |
| 01 AGL B 15 AGL to | I | TCC 222/242 | N32°45.00' W107°29.00' |
| 01 AGL B 15 AGL to | J | TCC 231/226 | N33°23.00' W107°36.00' |
| 01 AGL B 15 AGL to | K | ONM 244/29 | N34°14.00' W107°23.00' |
| 01 AGL B 15 AGL to | L | CNX 254/21 | N34°21.00' W106°06.00' |
| 01 AGL B 15 AGL to | M | CNX 181/39 | N33°44.00' W105°50.00' |
| 01 AGL B 15 AGL to | N | HMN 354/27 | N33°19.00' W106°04.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 20 NM either side of centerline from A to B; 12 NM either side of centerline from B to E; 20 NM left and 10 NM right of centerline from E to G; 15 NM left and 10 NM right of centerline from G to H; 10 NM either side of centerline from H to I; 10 NM left and 37 NM right of centerline from I to J; 20 NM left and 38 NM right of centerline from J to K; 10 NM either side of centerline from K to L; 20 NM left and 25 NM right of centerline from L to M; 10 NM either side of centerline from M to N.

Special Operating Procedures:

- From July 1 to March 1 route width from A to B is 20 NM either side of centerline; March 1 to July 1 route width is 20 NM either side of centerline except starting at the N34-10.0 line, adhere to the following corridor: Below N34-10.0 line stay east (left) of centerline between B and E, and remain north (left) of centerline between E and F. This restriction

extends from centerline to the route boundaries. In this corridor all aircraft will fly no lower than 500' AGL. Once East of F resume normal route boundaries and altitudes.

- (2) All transient aircraft must use N34-39.5 W107-37.5 as entry point if planning to enter at point Alpha to avoid over flying by 1 NM Acoma Pueblo Mission (N34-53-50 W107-34-45).
- (3) When flying route March 1 to July 1 and in corridor defined above in SOP (1), Fly no lower than 500' AGL.
- (4) Avoid:
 - (a) Forest Service Helicopter Base N33-30.7 W108-31.8 1 Apr to 15 Aug.
 - (b) All forest fires/smoke by at least 5 NM and/or 5000' AGL.
- (5) Avoid the following towns by .5 NM:
 - (a) Bingham N33-54-45 W106-22-55;
 - (b) Claunch N34-08-40 W105-59-45;
 - (c) Alpine N33-50-55 W109-08-30;
 - (d) Reserve N33-42-58 W108-45-20;
 - (e) Alma N33-22-50 W108-54-20;
 - (f) Mongollon N33-23-55 W108-47-58;
 - (g) Glenwood N33-19-10 W108-52-58;
 - (h) San Lorenzo N32-45-45 W107-55-10.
- (6) Avoid by 1 NM:
 - (a) House N34-08-30 W108-58-00;
 - (b) House N33-57-00 W105-51-00;
 - (c) House N33-34-50 W106-01-10;
 - (d) Gran Quivera National Monument N34-15-50 W106-06-15.
- (7) Avoid by 1.5 NM:
 - (a) Ladder Airstrip N33-00.1 W107-29.05;
 - (b) Wolf Breeding Area N34-17.88 W106-36.88.
- (8) Avoid by 3 NM:
 - (a) Truth or Consequences Airport N33-14-15 W107-15-10;
 - (b) Socorro Airport N34-01-15 W106-54-25;
 - (c) Ranch N32-41.0 W107-13.6;
 - (d) Community N33-12.0 W108-16.0.
- (9) Avoid R-5113 during times of use.
- (10) Avoid artillery range (N34-12-00 W106-57-00 by N34-01-00 W106-57-00 by N34-01-00 W107-07-00) at all times and all altitudes.
- (11) Route users must obtain permission from the controlling agency prior to entry in R-5107B at all times and from the using agency before entering R-5111B, R-5111C, R-5107H and R-5107J when they have been activated. Contact Cherokee Control at DSN 258-8000. Airborne contact will be made with Cherokee Control on 294.6/295.2.
- (12) Alternate Entry Points: B, C, E, J, K, and L
- (13) Alternate Exit Points: D, E, F, H, K, L, and M.
- (14) Re-entry Points: B, C and D.

FSS's Within 100 NM Radius:

ABQ

VR-179

ORIGINATING ACTIVITY: ANG CRTC-Gulfport/OSA, 4715 Hewes Ave, Gulfport, MS 39507-4324 DSN 363-6027, C228-214-6027.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| As assigned to | A | GPT 232/22 | N30°11.00' W89°25.50' |
| 15 AGL B 50 MSL to | B | GPT 120/16 | N30°16.00' W88°49.00' |
| 15 AGL B 50 MSL to | C | GPT 107/23 | N30°17.00' W88°40.00' |
| 15 AGL B 50 MSL to | D | GPT 064/29 | N30°36.00' W88°34.00' |
| 01 AGL B 100 MSL to | E | GPT 027/33 | N30°53.00' W88°46.00' |
| 01 AGL B 100 MSL to | F | GCV 057/19 | N31°15.00' W88°09.40' |
| 01 AGL B 100 MSL to | G | GCV 273/16 | N31°08.00' W88°48.00' |
| Alternate Exit: | | | |
| 01 AGL B 100 MSL to | F1 | GCV 057/19 | N31°15.00' W88°09.40' |
| 01 AGL B 100 MSL to | FA | GCV 038/37 | N31°33.00' W88°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 2 NM left and 8 NM right of centerline from A to B; 2 NM left and 1 NM right of centerline from B to C; 5 NM either side of centerline from C to D; 8 NM left and 5 NM right of centerline from D to E; 5 NM left and 8 NM right of centerline from E to F; 5 NM either side of centerline from F to G; 5 NM either side of centerline from F1 to FA.

Special Operating Procedures:

- (1) Route branches at F to G for Desoto MOA entry or to FA for Pine Hill West MOA entry.
- (2) Alternate Entry Points: C and E.
- (3) Alternate Exit Points: D, E and FA.
- (4) Users shall avoid flight within 3 NM of the chemical plants located at 31-16-10N 87-59-50W.
- (5) Avoid Noise sensitive areas:
 - (a) Fort by 2 NM/2000' AGL N30-13.0 W88-58.0 (A-B).
 - (b) Do not over fly Horn Island within 1 NM N30-14.0 W88-58.0 (B-C).
 - (c) Power Plant by 1 NM/1500' AGL N30-32.5 W88-33.5 (C-D).
 - (d) Llama Farm by 2 NM/1500' AGL N30-32.0 W88-41.0 (C-D).
 - (e) Camp by 1.5 NM/1000' AGL N30-49.2 W88-44.5 (D-E).
- (6) Uncharted Obstructions/Hazards:
 - (a) Numerous fish spotting aircraft 500' AGL to 5500' AGL (A-C).
 - (b) Avoid Airfield by 3 NM/1500' AGL N30-28.0 W88-32.5 (C-D).
 - (c) Tower 1049' MSL/1012' AGL N30-29.0 W88-43.0.
- (7) Minimum altitude from C to D is 1500' AGL.
- (8) Crossing MTR Routes: Consult the Scheduling Unit, FLIP or Sectional Map for actual location of the routes for de-confliction. See and avoid applies. VR-1091 and VR-1092 co-located C to E. VR-1021, VR-1023 and VR-1024 co-located D to E. VR-060 co-located opposite direction F to FA. IR-040 co-located D to E.

VR ROUTES

- (9) When crossing the coast line between C and D, enter on a north heading and cross Highway 30 east of the Pascagoula River at N30-23.0 W88-38.5. Do not fly over land south of Highway 30 and west of Pascagoula River.
- (10) CAUTION: Sky divers within a 2 mile radius of Trent Lott International Airport N30-25.5 W88-28.4 or Radial/DME SJI 204/18; Surface to 21,000' AGL. Operational Times: Fri-Sun 0800 local-sunset.

FSS's Within 100 NM Radius:

DRI

VR-184

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N. Sixth Street, Altus AFB, OK 73521 DSN 866-6098 C580-481-6098.

SCHEDULING ACTIVITY: 97 OSS/OSK, 400 N. Sixth Street, Suite 12, Altus AFB, OK 73521 DSN 866-7110.

HOURS OF OPERATION: 0830-0230 local, Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 03 AGL B 40 MSL to | A | SYO 180/17 | N35°03.70' W99°41.70' |
| 03 AGL B 40 MSL to | B | LTS 221/24 | N34°24.00' W99°38.30' |
| 03 AGL B 40 MSL to | C | LTS 198/38 | N34°05.40' W99°36.80' |
| 03 AGL B 40 MSL to | D | LTS 194/25 | N34°16.20' W99°28.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 10 NM either side of centerline from B to D.

Special Operating Procedures:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hrs in advance or contact Altus Command Post for same day scheduling at DSN 866-6313, C580-481-6313.
- (2) Primary Entry: A; Alternate Entry: B; Primary Exit: D; Alternate Exit: C.
- (3) At A, avoid flight over town of Chillicothe, TX.
- (4) Aircraft accomplishing airdrops aSooner DZ, report commencement of airdrop run-in not later than 5 minutes prior to Altus Approach Control 257.725 using the phrase (call sign, inbound Sooner DZ, intentions to follow).
- (5) From B to D, when practicable avoid Quanah Municipal and Mangum Airports by 1500' AGL or 3 NM.
- (6) From B to C, avoid flight over the town of Eldorado, OK.
- (7) Contact Altus Approach Control 257.725 at D (also contact Altus Approach Control 257.725 if exiting at C). Use caution for uncharted airfield southeast of D (N34-58.5 W99-29.0).
- (8) Route designated MARSAs, MARSAs between VR-144, VR-184, VR-190, VR-191, VR-198, VR-199, SR-205, SR-206, SR-208, SR-216, and SR-217 is accomplished through restrictive scheduling.
- (9) Deconflict with IR-105 (NAS Fort Worth), VR-159, VR-162, VR-1141, VR-1142, VR-1143, VR-1144 (Sheppard AFB) with appropriate route schedulers. To avoid the corridors of

VR-1141, VR-1142, VR-1143, VR-1144 and VR-159, do not fly south of Highway 287 between VR-144 Points A, B, C (deconflict with VR-1141, VR-1142, VR-1143, VR-1144 and VR-159 is required if flying south of Highway 287).

(10) PMSV; Altus AFB 239.8.

(11) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter route. Aircraft must also exit route within the window of two minutes early to two minutes late.

FSS's Within 100 NM Radius:

FTW, SJT

VR-186

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | JCT 350/31 | N31°07.00' W99°50.00' |
| 05 AGL B 40 MSL to | B | SJT 211/23 | N31°05.00' W100°45.00' |
| 01 AGL B 40 MSL to | C | SJT 273/33 | N31°30.00' W101°05.00' |
| 01 AGL B 40 MSL to | D | SJT 318/54 | N32°08.00' W101°01.00' |
| 01 AGL B 50 MSL to | E | SJT 003/42 | N32°03.00' W100°16.00' |
| 05 AGL B 50 MSL to | F | LLO 315/43 | N31°22.00' W99°17.00' |
| 05 AGL B 60 MSL to | G | LZZ 341/7 | N31°18.00' W98°10.00' |
| 10 AGL B 60 MSL to | H | LZZ 058/19 | N31°19.00' W97°48.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Minimum speed: 300 Knots.
- (2) Minimum separation between schedule entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.
- (3) Route conflicts:
 - (a) VR186 between Points B to C conflicts with SR283 Point H (Exit) and SR284 Point A (Entry). Both are on or near the route centerline. To deconflict, call the 85 FTS at Laughlin AFB, TX DSN 732-5121, C830-298-5121/5529.
 - (b) VR186 conflicts with SR242 Points F-G, SR243 Points C-D-E, SR244 Points B-C-D, and SR267 Points B-C. To deconflict, call Dyess AFB, DSN 461-2792. WARNING; If you do not have R6302, Hood MOA and Gray MOA (Fort Hood), you can not proceed past Point G. You must schedule the alternate exit.

- (4) Units requesting VR-186 shall furnish 301 OG/SUA with planned entry/exit points, times, and planned speeds. Accurate times are critical in the deconfliction process.
- (5) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
- (6) All aircraft will monitor FSS on 255.4 unless assigned a frequency by ARTCC. Users will make an entry and exit call on 255.4.
- (7) Route segment G to H closed except to aircraft scheduled into R-6302. Aircraft not scheduled into R-6302 must exit by Point G and remain below 6000' MSL until clear of Brady MOA.
- (8) Sensitive Areas: Avoid the following areas by 1300' AGL or 1 NM radius:
 - (a) (N31-06-45 W100-40-40)
 - (b) (N31-07-30 W99-49-30)
 - (c) (N31-09-35 W99-53-00)
 - (d) (N31-11-00 W100-54-30)
 - (e) (N31-15-30 W100-49-00)
 - (f) (N32-03-00 W100-40-30)
 - (g) (N31-19-00 W99-14-30)
 - (h) (N31-07-00 W99-00-00)
- (9) Obstructions:
 - (a) 295' AGL tower at N31-15-30 W100-47-00
- (10) Alternate Entry: B, C, D, E and G.
- (11) Alternate Exit: D, E, F and G.

FSS's Within 100 NM Radius:

CXO, FTW, SJT

VR-187

ORIGINATING ACTIVITY: 12 OSS/OSOA, 501 I Street East, Randolph AFB, TX 78150-4333 DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 99 FTS, 1450 5TH Street East, Randolph AFB, TX 78150-5000 DSN 487-6746.

HOURS OF OPERATION: Sunrise-Sunset, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | LOA 075/23 | N31°10.00' W95°32.00' |
| 09 AGL B 40 MSL to | B | DAS 357/22 | N30°33.00' W94°38.00' |
| 07 AGL B 40 MSL to | C | LFK 063/25 | N31°19.00' W94°16.00' |
| 07 AGL B 40 MSL to | D | GGG 125/40 | N31°58.00' W94°10.00' |
| 07 AGL B 40 MSL to | E | GGG 198/30 | N31°58.00' W95°00.00' |
| 07 AGL B 40 MSL to | F | LOA 054/44 | N31°28.00' W95°12.50' |
| 06 AGL B 40 MSL to | G | LOA 041/25 | N31°24.00' W95°36.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to D; 10 NM left and 5 NM right of centerline from D to E; 10 NM left tapering to 5 NM left and 5 NM right of centerline from E to F; 5 NM either side of centerline from F to G.

Special Operating Procedures:

- (1) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.
- (2) Route confliction: VR-187 and IR-127 share segments and traffic flow along the entire route, IR-129 conflicts from D to G, VR-106 conflicts at C. Route deconfliction is assured through coordinated scheduling VICTOR airways and VFR flyways cross all route segments.
- (3) Obstructions:
 - (a) 405' AGL tower at N30-55-10 W95-20-00
 - (b) 429' AGL tower at N30-44-30 W94-55-00
 - (c) 460' AGL tower at N30-43-45 W94-54-00
 - (d) 403' AGL tower at N30-42-40 W94-52-00
 - (e) 400' AGL tower at N30-42-40 W94-52-00
 - (f) 444' AGL tower at N30-26-10 W94-41-40
 - (g) 444' AGL tower at N30-46-10 W94-22-30
 - (h) 460' AGL tower at N30-44-00 W94-25-50
 - (i) 478' AGL tower at N31-01-30 W94-05-00
 - (j) 420' AGL tower at N31-56-30 W94-41-00
 - (k) 420' AGL tower at N31-46-00 W95-06-15
- (4) Alternate Entry: B and C.
- (5) Alternate Exit: C.
- (6) Noise Sensitive Areas: Avoid all Noise Sensitive Areas by 1000' or 1/4 NM unless otherwise noted:
 - (a) Residence: N30-54-07 W94-28-40, avoid by 1/2 NM.
- (7) The following Public Use Airports, as depicted on Houston Sectional Chart are within 5 NM of VR-187 route corridor:
 - (a) A to B, Livingston Arprt, Houston Co. Arprt and Trinity Arprt.
 - (b) B to C, Tyler Co. Arprt.
 - (c) C, Pineland Arprt.
 - (d) C to D, San Augustine Co. Arprt and Center Arprt.
 - (e) D to E, Panola Co. Arprt.
 - (f) E to F, Cheokee Co. Arprt.
 - (g) G to H, Houston Co. Arprt.

FSS's Within 100 NM Radius:

CXO, DRI, FTW, MLC, SJT

VR-188

ORIGINATING ACTIVITY: 12 OSS/OSOA, 501 I Street East, Randolph AFB, TX 78150-4333 DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 99 FTS, 1450 5th Street East, Randolph AFB, TX 78150-5000 DSN 487-6746.

HOURS OF OPERATION: Sunrise-Sunset, daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | CQY 065/12 | N32°15.00' W96°00.00' |
| 07 AGL B 15 AGL to | B | GGG 322/28 | N32°49.00' W95°02.00' |

VR ROUTES

| | | | |
|--------------------|---|------------|--------------------------|
| 06 AGL B 15 AGL to | C | GGG 024/23 | N32°45.00' W94°31.00' |
| 06 AGL B 30 MSL to | D | TXK 274/27 | N33°36.00' W94°36.00' |
| 05 AGL B 30 MSL to | E | SLR 008/46 | N33°56.00' W95°17.50' |
| 07 AGL B 30 MSL to | F | SLR 344/37 | N33°49.00' W95°39.00' |
| 05 AGL B 30 MSL to | G | BYP 042/18 | N33°44.50' W95°58.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See-and-Avoid and users are encouraged to maintain a continuous visual lookout.
- (2) Route conflicts: VR-188 is in direct conflict with IR-129 from C to G. VR-188 will not be scheduled if IR-129 is active.
- (3) All aircraft will monitor FSS 255.4 unless assigned a frequency by ARTCC. Users will make an entry and exit call on 255.4.
- (4) Avoid the following by 1300' AGL or 1 NM radius:
 - (a) (N32-24-00 W95-43-05);
 - (b) (N32-42-00 W95-23-30);
 - (c) (N32-49-42 W95-43-07).
- (5) Avoid by 1300' AGL or 1.5 NM radius: (N32-26-45 W95-42-50).
- (6) Avoid Fraser Farm Airport by 2 NM radius and do not fly over (N32-33-45 W95-28-15).
- (7) Avoid Holly Lake Airfield by 1500' AGL or 2 NM radius (N33-00-00 W94-36-00).
- (8) Avoid by 1300' AGL the area bounded by (N32-54-30 W94-45-00) to (N32-55-00 W94-37-30) to (N32-45-00 W94-24-00) to (N32-45-00 W94-36-30).
- (9) Obstructions;
 - (a) 427' AGL tower at (N32-29-50 W95-29-00);
 - (b) 500' AGL tower at (N34-01-15 W95-19-30);
 - (c) 465' AGL tower at (N33-55-00 W95-28-15).
- (10) When practical, avoid flight within 1500' AGL or 3 NM of airports.
- (11) Alternate Entry: C.
- (12) Alternate Exit: D.

FSS's Within 100 NM Radius:

CXO, DRI, FTW, MLC, SJT

VR-189

ORIGINATING ACTIVITY: 188FW ARKANSAS ANG, 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502.

SCHEDULING ACTIVITY: Same as Originating Activity. Route scheduled no more than 72 hr in advance. Minimum separation between scheduled entry times is 15 minutes.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | PGO 211/41 | N34°07.00' W95°05.00' |
| 05 AGL B 40 MSL to | B | PGO 121/54 | N34°09.00' W93°43.00' |
| 05 AGL B 40 MSL to | C | PGO 092/59 | N34°34.00' W93°25.00' |
| 05 AGL B 40 MSL to | D | PGO 083/71 | N34°44.00' W93°11.00' |
| 05 AGL B 40 MSL to | E | PGO 073/74 | N34°57.00' W93°09.00' |
| 05 AGL B 50 MSL to | F | PGO 058/54 | N35°06.00' W93°39.00' |
| 05 AGL B 45 MSL to | G | PGO 108/13 | N34°36.00' W94°22.00' |
| 05 AGL B 45 MSL to | H | PGO 199/16 | N34°26.00' W94°44.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: B, C and E.
- (2) Alternate Exit: E, F and G.
- (3) See and Avoid/restrictive scheduling applies between VR-189 and IR-117, IR-120, IR-121, IR-164, VR-1102, VR-1103, VR-1104, VR-1113, VR 1130, and Hog Low North MOA.
- (4) Call in-the-blind on 305.4 before entering Hog MOA.
- (5) Avoid flight within 1500' AGL or 3 NM all charted airports when practicable.
- (6) Uncharted and not in chum route obstructions:
 - (a) Tower-N35 02.0 W93 21.0 1200' MSL (100' AGL).
 - (b) Tower-N34 12.5 W94 14.0 700' MSL (200' AGL).
 - (c) N34 44.0 W93 14.0 (100' AGL).
- (7) Make entry time plus or minus five minutes or reschedule.
- (8) Caution: Pt A-B overlapped by VR-1104/IR-164.
- (9) Caution: Pt B crossed by Vr-1103/IR-121.
- (10) Caution: Pt C-F, numerous SR routes frequented by flights of multiple C-130's.
- (11) Caution: Pt F-H multiple MTR's and Military traffic in Hog MOA.

FSS's Within 100 NM Radius:

FTW, MLC

VR-190

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N. Sixth Street, Altus AFB, OK 73521 DSN 866-6098 C580-6098.

SCHEDULING ACTIVITY: 97 OSS/OSK, 400 N. Sixth Street, Suite 12, Altus AFB, OK 73521 DSN 866-7110.

HOURS OF OPERATION: 0830-0230 local Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 03 AGL B 40 MSL to | A | LTS 194/25 | N34°16.20' W99°28.00' |
| 03 AGL B 40 MSL to | B | LTS 198/38 | N34°05.40' W99°36.80' |
| 03 AGL B 40 MSL to | C | CDS 120/19 | N34°10.00' W100°00.00' |
| 03 AGL B 40 MSL to | D | CDS 076/13 | N34°23.00' W100°01.70' |
| 03 AGL B 40 MSL to | E | CDS 022/17 | N34°36.70' W100°06.50' |
| 03 AGL B 50 MSL to | F | CDS 334/22 | N34°43.70' W100°25.00' |
| 03 AGL B 50 MSL to | G | SYO 245/50 | N35°07.50' W100°36.60' |
| 03 AGL B 50 MSL to | H | SYO 251/30 | N35°16.10' W100°14.80' |
| 03 AGL B 50 MSL to | I | SYO 180/17 | N35°03.70' W99°41.70' |

eastern and southern halves of the VR-1141/1142 corridor. The coordinates for this line are approximately N34-43.08 W100-35.68 straight north to N35-14.42 and straight east to W099-52.10.

- (12) PMSV: Altus AFB 239.8.
- (13) Aircraft unable to meet thier assigned entry time within the window of two minutes early to two miniuates late must not enter the route. Aircraft must exit the route within the route within the window of two minutes early to two minutes late.
- (14) Use caution for uncharted airfield just beyond Point I, N34-58.50 W099-29.00.

FSS's Within 100 NM Radius:

FTW, SJT

VR-191

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N. Sixth Street, Altus AFB, OK 73521 DSN 866-6098 C580-6098.

SCHEDULING ACTIVITY: 97 OSS/OSK, 400 N. Sixth Street,Suite 12, Altus AFB, OK 73521 DSN 866-7110.

HOURS OF OPERATION: 0830-0230 local Mon-Fri

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 5 NM left narrowing to 4 NM left and 5 NM right of centerline from C to D; 4 NM left and 5 NM right of centerline from D to E; 5 NM right widing to 7 NM right and 5 NM left of centerline from G to H; 7 NM right narrowing to 5 NM right and 5 NM left of centerline from H to I.

Special Operating Procedures:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling DSN 866-6313 or C580-481-6313. Day flights from Point A to E are not permitted due to numerous crossing routes with Sheppard AFB VR routes.
- (2) Primary Entry A; Alternate Entry B, E, and F; Primary Exit I; Alternate Exit E and F.
- (3) At A, avoid flight over the town of Chillicothe, TX.
- (4) Contact Ft. Worth Center 133.5/350.35 at Point C.
- (5) At F. when practicable, avoid Memphis Municipal Airport by 1500' AGL or 3 NM.
- (6) From F to G avoid flight over the town of Quail, TX by 2 NM.
- (7) From G to H avoid flight over the town of Shamrock, OK and when practicable avoid McClean Gray Airport and Shamrock Municipal Airports by 1500' AGL or 3 NM.
- (8) From H to I, when practicable avoid Haddock Airport by 1500' AGL or 3 NM.
- (9) Contact Altus Approach Control 257.725 upon exiting at I. Contact Ft. Worth Center 350.35 or 133.5 upon exiting at E or F. Monitor 255.4 entire route of flight.
- (10) Route designated MARSAs, MARSAs between IR-193, VR-144, VR-184, VR-190, VR-191, VR-198, VR-199, SR-199, SR-205, SR-206, SR-208, SR-216 and SR-217 is accomplished through restrictive scheduling.
- (11) Deconflict with, IR-105 (NAS Fort Worth), VR-159, VR-162, VR-1141, VR-1142, VR-1143, VR-1144 (Sheppard AFB) with appropriate route schedulers, multiple Sheppard AFB crossing routes conflict wiyh VR-190 Points A through D. For day low levels on legs F, G, H and I, will remain east of the McClean-Hedley line (near Point G) and south of I-40 (south of the town of Shamrock, near Point H) in order to avoid the

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 03 AGL B 50 MSL to | A | SYO 180/17 | N35°03.70' W99°41.70' |
| 03 AGL B 50 MSL to | B | SYO 251/30 | N35°16.10' W100°14.80' |
| 03 AGL B 50 MSL to | C | SYO 245/50 | N35°07.50' W100°36.60' |
| 03 AGL B 50 MSL to | D | CDS 334/22 | N34°43.70' W100°25.00' |
| 03 AGL B 40 MSL to | E | CDS 022/17 | N34°36.70' W100°06.50' |
| 03 AGL B 40 MSL to | F | CDS 076/13 | N34°23.00' W100°01.70' |
| 03 AGL B 40 MSL to | G | CDS 120/19 | N34°10.00' W100°00.00' |
| 03 AGL B 40 MSL to | H | LTS 198/38 | N34°05.40' W99°36.80' |
| 03 AGL B 40 MSL to | I | LTS 194/25 | N34°16.20' W99°28.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM left widening to 7 NM left and 5 NM right of centerline from A to B; 7 NM left narrowing to 5 NM left and 5 NM right of centerline from B to C; 5 NM either side of centerline from C to E; 5 NM left and 4 NM right of centerline from E to F; 4 NM right widening to 5 nm right and 5 NM left of centerline from F to G; 5 NM either side of centerline from G to I.

Special Operating Procedures:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313, C580-481-6313. Day flights from F, G, H and I are not permitted due numerous crossing routes with Sheppard Afb VR routes.

VR ROUTES

- (2) Primary Entry A; Alternate Entry: D, E, and F; Primary Exit: I; Alternate Exit D, E.
- (3) From A to B, avoid flight over the town of Shamrock, OK and when practicable avoid Haddock Airport and Shamrock Municipal Airport by 1500' AGL or 3 NM.
- (4) From B to C, when practicable avoid McLean-Gray Airport by 1500' AGL or 3 NM.
- (5) From C to D, avoid flight over the town of Quail, TX bt 2 NM.
- (6) At D, when practicable avoid Memphis Municipal Airport by 1500' AGL or 3 NM.
- (7) Contact Ft. Worth ARTCC on 133.5/350.35 at Point G.
- (8) At I, avoid flight over the town of Chillicothe, TX.
- (9) Contact Altus Approach Control 125.1/257.725 (CH 6) upon exiting at I.
- (10) Route designated MARSAs, MARSAs between VR-144, VR-184, VR-190, VR-191, VR-198, VR-199, SR-205, SR-206, SR-208, SR-216, and SR-217 is accomplished through restrictive scheduling.
- (11) Deconflict with: IR-105 (NAS Ft. Worth), VR-159, VR-162, VR-1141, VR-1142, VR-1143, VR-1144 (Sheppard AFB) with appropriate route scheduling. Multiple Sheppard AFB crossing route conflict with IR-191 F through I. For day low levels on legs A, B, C and D, all aircraft will remain east of McLean-Hedley line (near Point C) and south of I-40 (south of the town of Shamrock, near Point B) in order to avoid the eastern and southern halves of the VR-1141/1142 corridor. The coordinates for this line are approximately N34-43.08 W100-35.68 straight north to N35-14.42 and straight east to W99-14.42.
- (12) PMSV: Altus AFB 239.8.
- (13) Use caution for uncharted airfield just prior to Point A, N34-58.50 W099-29.00.
- (14) Aircraft unable to meet thier assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within two minutes early to two minutes late.

FSS's Within 100 NM Radius: FTW, SJT

VR-196

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd Street, Ste. 6, Laughlin AFB, TX 78843-5222 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 86 FTS/DOS, 307 2nd St, Laughlin AFB, TX 78843 DSN 732-5584, C830-298-5584. Scheduling hrs, 0730-1630 Mon-Fri (excluding hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | FST 192/29 | N30°30.00' W103°12.00' |
| 01 AGL B 79 MSL to | B | FST 195/63 | N30°00.00' W103°30.00' |
| 01 AGL B 79 MSL to | C | FST 204/67 | N30°02.00' W103°43.00' |
| 10 AGL B 81 MSL to | D | FST 217/33 | N30°35.00' W103°27.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 01 AGL B 86 MSL to | E | FST 264/57 | N31°02.00' W104°05.00' |
| 05 AGL B 76 MSL to | F | SFL 092/43 | N31°34.00' W104°16.00' |
| 05 AGL B 98 MSL to | G | SFL 058/15 | N31°50.00' W104°49.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Route:
 - (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
 - (b) This route is covered by the following maps and charts: El Paso Sectional, Low IFR Enroute L-6S,L-6N,TPC H-23A.
 - (c) Alternate Entry: C and D.
 - (d) Alternate Exit: D, E and F.
- (2) Scheduling:
 - (a) Request for weekend use shall be coordinated with the Scheduling Activity between 0730-1630 local Mon-Fri.
 - (b) Aircraft shall be scheduled with a minimum of 10 minutes separation, 35 minutes if a T-38 follows a T-1 on the route.
 - (c) When scheduling VR-196, block off VR-197 for the entire block period of 80 minutes; 40 minutes before and 40 minutes after your entry time.
- (3) Restrictions:
 - (a) For environmental reasons, this route may only be flown by T-1, T-38, and T-45 aircraft.
 - (b) Aircraft unable to enter the route plus or minus 3 minutes of their assigned entry time will not enter the route.
- (4) Conflicts:
 - (a) Use caution for B-1 and B-52 aircraft operating on IR-178 T-U, which overlaps VR-196 from E-F. B-1 and B-52 aircraft will make a blind call on 255.4 when approaching T. Use caution for C-130 aircraft operating on unfamiliar VFR routes in the area.
 - (b) IR-192/194 cross from F-G, (IR-102/141 are closed). Aircrews flying VR-196 that plan to proceed past E, will call 49 OSS/OSA, Holloman AFB, DSN 572-3536, C505-572-3536 to determine if these routes will be in use. If it is determined that aircraft will be on these routes, aircrew will alter route profile as necessary to deconflict.
 - (c) VR-197 is the reverse routing of VR-196. When scheduling VR-196, ensure VR-197 is not being used simultaneously. Call 7 OSS/OSOR, Dyess AFB to deconflict IR-178; DSN 461-3665, C325-696-3665.
- (5) Communications:
 - (a) Users must monitor 255.4 while on the route.
- (6) Noise Sensitive Areas:
 - (a) Upon route exit at Point G, avoid Gaudalupe National Park by 2000' AGL (minimum). If possible, climb to the top of the route to cross G at 9800' MSL.
 - (b) Avoid the town of Alpine by 3 NM radius.
 - (c) Avoid the following sensitive areas by 1300' AGL or 1 NM radius.
 1. N30-21-40 W103-39-40
 2. N30-16-00 W103-04-00

(7) The entire route is designated mountainous terrain.

FSS's Within 100 NM Radius:

SJT

VR-197

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd Street, Ste. 6, Laughlin AFB, TX 78843-5222 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 86 FTS/DOS, 307 2nd St, Laughlin AFB, TX 78843 DSN 732-5584, C830-298-5584. Scheduling hrs, 0730-1630 Mon-Fri (excluding hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | SFL 058/15 | N31°50.00' W104°49.00' |
| 05 AGL B 98 MSL to | B | SFL 092/43 | N31°34.00' W104°16.00' |
| 05 AGL B 76 MSL to | C | FST 264/57 | N31°02.00' W104°05.00' |
| 05 AGL B 86 MSL to | D | FST 217/33 | N30°35.00' W103°27.00' |
| 10 AGL B 81 MSL to | E | FST 204/67 | N30°02.00' W103°43.00' |
| 05 AGL B 79 MSL to | F | FST 195/63 | N30°00.00' W103°30.00' |
| 05 AGL B 79 MSL to | G | FST 192/29 | N30°30.00' W103°12.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Route:
 - (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
 - (b) This route is covered by the following maps and charts: El Paso Sectional, Low IFR Enroute L-6S,L-6N, TPC H-23A.
 - (c) Alternate Entry: D and E.
 - (d) Alternate Exit: B, C and D.
- (2) Scheduling:
 - (a) Request for weekend use shall be coordinated with the Scheduling Activity between 0730-1630 local Mon-Fri.
 - (b) Aircraft shall be scheduled with a minimum of 10 minutes separation, 35 minutes if a T-38 follows a T-1 on the route.
 - (c) When scheduling VR-197, block off VR-196 for the entire block period of 80 minutes; 40 minutes before and 40 minutes after your entry time.
- (3) Restrictions:
 - (a) For environmental reasons, this route may only be flown by T-1, T-38, and T-45 aircraft.

- (b) Aircraft unable to enter the route plus or minus 3 minutes of their assigned entry time will not enter the route.
- (4) Conflicts:
 - (a) Use caution for B-1 and B-52 aircraft operating on IR-178 T-U, which overlaps VR-197 from B-C. B-1 and B-52 aircraft will make a blind call on 255.4 when approaching T. Use caution for C-130 aircraft operating on unfamiliar VFR routes in the area.
 - (b) IR-192/194 cross from A-B,(IR-102/141 are closed). Aircrews flying VR-197 entering prior to E will call 49 OSS/OSA, Holloman AFB, DSN 572-3536, C505-572-3536 to determine if these routes will be in use. If it is determined that aircraft will be on these routes, aircrew will alter route profile as necessary to deconflict.
 - (c) VR-196 is the reverse routing of VR-197. When scheduling VR-197, ensure VR-196 is not being used simultaneously. Call 7 OSS/OSOR, Dyess AFB to deconflict IR-178; DSN 461-3665, C325-696-3665.
- (5) Communications:
 - (a) Users must monitor 255.4 while on the route.
- (6) Noise sensitive areas:
 - (a) Upon route exit at Point A, avoid Guadalupe National Park by 2000' AGL (minimum). If possible, climb to the top of the route to cross A at 9800' MSL.
 - (b) Avoid the town of Alpine by 3 NM radius.
 - (c) Avoid the following areas by 1300' AGL or 1 NM radius.
 - 1. N30-21-40 W103-39-40
 - 2. N30-16-00 W103-04-00
- (7) The entire route is designated mountainous terrain.

FSS's Within 100 NM Radius:

SJT

VR-198

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N. 6th St., Ste. A, Altus AFB, OK 73521 DSN 866-6098, C580-481-6098.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-0300 local, Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 03 AGL B 40 MSL to | A | LTS 186/14 | N34°26.40' W99°20.30' |
| 03 AGL B 40 MSL to | B | LTS 234/16 | N34°32.00' W99°33.50' |
| 03 AGL B 40 MSL to | C | CDS 022/17 | N34°36.70' W100°06.50' |
| 03 AGL B 40 MSL to | D | CDS 334/22 | N34°43.70' W100°25.00' |
| 03 AGL B 50 MSL to | E | PNH 072/50 | N35°22.90' W100°42.00' |
| 03 AGL B 50 MSL to | F | SYO 285/39 | N35°37.30' W100°21.70' |
| 03 AGL B 50 MSL to | G | SYO 297/29 | N35°38.00' W100°06.60' |

VR ROUTES

| | | | |
|--------------------|---|------------|--------------------------|
| 03 AGL B 50 MSL to | H | SYO 320/18 | N35°36.50' W99°49.50' |
| 03 AGL B 40 MSL to | I | SYO 294/7 | N35°24.50' W99°45.00' |
| 03 AGL B 40 MSL to | J | SYO 180/17 | N35°03.70' W99°41.70' |
| 03 AGL B 40 MSL to | K | LTS 333/19 | N34°58.10' W99°24.10' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 10 NM either side of centerline from B to C; 5 NM either side of centerline from C to F; 5 NM left and 4 NM right of centerline from F to G; 5 NM either side of centerline from G to H; 5 NM left and 4 NM right narrowing to 3 NM right of centerline from H to I; 5 NM left and 3 NM right widening to 5 NM right of centerline from I to J; 5 NM either side of centerline from J to K.

Special Operating Procedures:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.
- (2) Primary Entry A; Alternate Entry C; Primary Exit K; Alternate Exit C and J.
- (3) When practicable avoid flight over the towns of Hollis, OK; Eldorado, OK; Sayre, OK; and Quail, TX by 2NM.
- (4) Aircraft accomplishing airdrops at Sooner DZ will report passing the town of Reed OK to Altus APP COM 257.725 using the phrase (callsign, Reed southbound to Sooner DZ, intentions to follow).
- (5) When practicable avoid Olustee Airport, Hollis Airport, Memphis Municipal Airport, McLean-Gray Airport, and Sayre Airport by 1500' AGL or 3 NM.
- (6) Contact Altus APP CON on 257.725 at J. Monitor 255.4 the entire route, except when making mandatory radio call to Altus APP.
- (7) Route designated MARSAs, MARSAs between VR-144, VR-184, VR-190, VR-191, VR-198, VR-199, SR-205, SR-206, SR-208, SR-216, and SR-217 is accomplished through restrictive scheduling.
- (8) Deconflict with: IR-105 (NAS Fort Worth), VR-162, VR-1141, VR-1142, (Sheppard AFB), with appropriate route schedulers. IR-172, IR-173, IR-182 and IR-183 (Vance AFB) cross VR-198 but are deconflicted by altitude (the top of the VR-198 block is below the IR hard altitude). The corridor of IR-145 (Vance AFB) overlaps the corridor of VR-198 Northeast of VR-198 Point H. Avoid the IR-145 corridor at all times. VR-1141/1142 crosses VR-198 near Points E and I. VR-162 crosses VR-198 on the B-C leg. IR-103 crosses VR-198 on the B-C leg and again on the J-K leg.
- (9) PMSV: Altus AFB 239.8.
- (10) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter route. Aircraft must also exit route within the window of two minutes early to two minutes late.
- (11) Use Caution for uncharted airfield between A-B coordinates (N34-58.5 W99-29.0)

FSS's Within 100 NM Radius:

FTW

VR-199

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N. 6th St., Ste. A, Altus AFB, OK 73521 DSN 866-6098, C580-481-6098.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-0300 local, Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 03 AGL B 40 MSL to | A | LTS 333/19 | N34°58.10' W99°24.10' |
| 03 AGL B 40 MSL to | B | SYO 180/17 | N35°03.70' W99°41.70' |
| 03 AGL B 40 MSL to | C | SYO 294/7 | N35°24.50' W99°45.00' |
| 03 AGL B 40 MSL to | D | SYO 320/18 | N35°36.50' W99°49.50' |
| 03 AGL B 50 MSL to | E | SYO 297/29 | N35°38.00' W100°06.60' |
| 03 AGL B 50 MSL to | F | SYO 285/39 | N35°37.30' W100°21.70' |
| 03 AGL B 50 MSL to | G | PNH 072/50 | N35°22.90' W100°42.00' |
| 03 AGL B 50 MSL to | H | CDS 334/22 | N34°43.70' W100°25.00' |
| 03 AGL B 40 MSL to | I | CDS 022/17 | N34°36.70' W100°06.50' |
| 03 AGL B 40 MSL to | J | LTS 234/16 | N34°32.00' W99°33.50' |
| 03 AGL B 40 MSL to | K | LTS 186/14 | N34°26.40' W99°20.30' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM left narrowing to 3 NM left and 5 NM right of centerline from B to C; 3 NM left widening to 4 NM left and 5 NM right of centerline from C to D; 5 NM either side of centerline from D to E; 4 NM left and 5 NM right of centerline from E to F; 5 NM either side of centerline from F to I; 10 NM either side of centerline from I to J; 5 NM either side of centerline from J to K.

Special Operating Procedures:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.
- (2) Primary Entry A; Alternate Entry B and I; Primary Exit K; Alternate Exit I.
- (3) When practicable avoid flight over towns of Hollis, OK; Eldorado, OK; Sayre, OK; and Quail, TX by 2NM.
- (4) Maneuvering Area I to J; Aircraft may slow for airdrop at N34-31 W99-41, report commencement of airdrop run-in NLT 5 minutes prior to Altus APP CON 257.725 using the phrase (Callsign inbound to Sooner DZ, position relative Sooner DZ).
- (5) When practicable avoid Olustee Airport, Hollis Airport, Memphis Municipal Airport, McLean-Gray Airport, and Sayre Airport 1500' AGL or 3NM.

- (6) Contact Altus APP CON 257.725 10 NM west of J. Monitor 255.4 the entire route, except when making mandatory radio call to Altus APP.
- (7) Route designated MARSAs, MARSAs between VR-144, VR-184, VR-190, VR-191, VR-198, VR-199, SR-205, SR-206, SR-208, SR-216, and SR-217 is accomplished through restrictive scheduling.
- (8) Deconflict with: IR-105 (NAS Fort Worth), VR-162, VR-1141, VR-1142, (Sheppard AFB), IR-172, IR-173, IR-182, IR-183 (Vance AFB) cross VR-199 but are deconflicted by altitude (the top of VR-199 block is below the IR routes hard altitude). The corridor of Ir-145 (Vance AFB) overlaps the corridor at all times. VR-1141/1142 crosses VR-199 near Point C and G. VR-162 crosses VR-199 on the I-J leg. IR-193 crosses VR-199 on the A-B leg and again on the I-J leg.
- (9) PMSV: Altus AFB 239.8.
- (10) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter route. Aircraft must also exit route within the window of two minutes early to two minutes late.
- (11) Use Caution for uncharted airfield between J-K coordintes (N34-58.5 W99-29.0)

FSS's Within 100 NM Radius:

FTW

VR-201

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | MVA 218/57 | N38°01.00' W119°01.00' |
| 02 AGL B 100 MSL to | B | MVA 239/58 | N38°20.00' W119°13.00' |
| 02 AGL B 120 MSL to | C | MVA 272/40 | N38°47.00' W118°50.00' |
| 02 AGL B 90 MSL to | D | HZN 176/14 | N39°17.00' W119°04.00' |
| 02 AGL B 90 MSL to | E | HZN 260/9 | N39°32.00' W119°11.00' |
| 02 AGL B 60 MSL to | F | HZN 346/11 | N39°42.00' W118°59.00' |
| 02 AGL B 60 MSL to | G | LLC 096/11 | N40°03.50' W118°22.00' |
| 02 AGL B 60 MSL to | H | LLC 092/21 | N40°01.00' W118°09.00' |
| 02 AGL B 60 MSL to | I | LLC 110/19 | N39°56.00' W118°14.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 6 NM either side of centerline from A to F; 2 NM either side of centerline from F to I.

Special Operating Procedures:

- (1) Alternate Exit: F, G and H.
- (2) Tie-in FSS: Rancho Murietta (RIU).
- (3) Reserving this route does not reserve the Ranch, Churchill or Carson MOA's. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for authorization.
- (4) Aircraft exiting H or I must reserve R-4813 airspace through the NAS Fallon Range Department.
- (5) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSAs while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (6) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (7) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (8) Remain at 1500' AGL within 3 NM of Mono Lake at A. Do not perform aerobatic maneuvers over the water.
- (9) Between A and B, avoid overflight of the historic town of Bodie at N38-12-40 W119-00-40 by at least 3 NM.
- (10) Near B, avoid the town and airport of Bridgeport.
- (11) Between B and C, avoid private airfield at N38-37-00 W119-00-00.
- (12) Caution: C-5/C-141 aircraft flying between 500' to 1000' AGL on crossing route near C.
- (13) Caution: power lines paralleling route between C and D.
- (14) Between C and D, avoid the town of Schurz by 5 NM laterally.
- (15) Between C and D, fly west of centerline to avoid the Ranch and Churchill MOA's unless prior entry has been scheduled. However, avoid the town and airport of Yerington to the west.
- (16) Caution: 333' tower approximately 9 NM southwest of D at N39-08-30 W119-02-30.
- (17) Caution: 80' tower on ridge, on route centerline between C and D at N39-14-20 W119-02-30.
- (18) Caution: VFR traffic crossing route at 8000' around E.
- (19) From D to 5 NM southwest of F, maintain 6000' MSL and route centerline to avoid the extremely noise sensitive areas of Silver Springs and Fernley west of route centerline, and Hazen to the east.
- (20) Caution: 150' microwave tower located between F and G at N39-46 W118-50.

FSS's Within 100 NM Radius:

MCC, OAK, RNO, RIU

VR-202

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

VR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|-----------|---------------------|---------------------------|
| As assigned to | A | ENI 276/50 | N39°22.00' W124°16.00' |
| 02 AGL B 15 AGL to | B | ENI 310/41 | N39°37.00' W123°46.00' |
| 02 AGL B 15 AGL to | C | ENI 330/37 | N39°39.00' W123°28.00' |
| 05 AGL B 30 AGL to | D | RBL 210/28 | N39°47.00' W122°41.00' |
| 30 AGL B 80 MSL to | E | RBL 112/48 | N39°35.00' W121°27.00' |
| 02 AGL B 30 AGL to | F | FMG 284/45 | N39°54.00' W120°30.00' |
| 02 AGL B 15 AGL to | G | LLC 260/49 | N40°12.50' W119°38.30' |
| 02 AGL B 15 AGL to | H | LLC 178/15 | N39°53.00' W118°39.50' |
| 02 AGL B 15 AGL to | I | LLC 096/11 | N40°03.50' W118°22.00' |
| 02 AGL B 15 AGL to | J | LLC 092/21 | N40°01.00' W118°09.00' |
| 02 AGL B 15 AGL to | K | LLC 110/19 | N39°56.00' W118°14.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: B and E.
- (2) Alternate Exit: H, I and J.
- (3) Tie-in FSS: Rancho Murieta (RIU).
- (4) Reserving this route does not reserve the Carson MOA between H and J. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for authorization.
- (5) Reserving this route does not authorize access to the China MOA between E and F. See AP/1A for MOA scheduling if unable to remain below the China MOA.
- (6) Aircraft exiting J or K must reserve Carson MOA and R-4813 airspace through the NAS Fallon Range Department.
- (7) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSAs while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (8) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (9) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (10) Avoid overflight of Laytonville and Dos Rios near C.
- (11) Fly south of route centerline between D and E to avoid the town of Orland and the airports of Haigh and Acrewood.
- (12) Remain alert for C-5/C-141 aircraft flying at 1000' AGL on crossing routes near D.
- (13) Fly south of centerline approaching F to avoid the town of Cromberg by at least 2 NM.

(14) Between F and G, avoid overflight of ranches located N40-01-00 W120-13-00 and N40-06-00 W119-54-00.

FSS's Within 100 NM Radius:

ACV, MCC, OAK, RNO, RIU

VR-208

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-1630 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|-----------|---------------------|---------------------------|
| As assigned to | A | OAL 180/45 | N37°17.00' W118°03.00' |
| 02 AGL B 130 MSL to | B | OAL 142/36 | N37°27.00' W117°30.00' |
| 02 AGL B 130 MSL to | C | TPH 200/26 | N37°41.50' W117°21.50' |
| 02 AGL B 130 MSL to | D | TPH 312/31 | N38°28.00' W117°22.00' |
| 02 AGL B 100 MSL to | E | MVA 039/48 | N39°01.00' W117°11.00' |
| 02 AGL B 120 MSL to | F | MVA 028/71 | N39°24.00' W116°57.00' |
| 02 AGL B 120 MSL to | G | HZN 087/53 | N39°18.00' W117°53.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to B; 5 NM either side of centerline from B to C; 3 NM either side of centerline from C to E; 10 NM either side of centerline from E to G.

Special Operating Procedures:

- (1) Alternate Entry: C.
- (2) Tie-in FSS: Rancho Murieta (RIU).
- (3) Reserving this route does not reserve the Austin or Gabbs MOA's between E and G. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for airspace entry authorization.
- (4) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSAs while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (5) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (6) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (7) Maintain 2000' AGL until over Deep Springs Lake at A.

- (8) Between E and F, avoid the town of Kingston located at N39-12-06 W117-05-00 by 3000' AGL or 5 NM.
- (9) Remain on route centerline at F, do not early turn. Avoid town of Austin at N39-29-30 W117-04-00 and airport at N39-28-05 W117-11-40 by 5 NM.
- (10) Caution: opposite flow traffic on VR-1253 at F.
- (11) Caution: from F to G, VFR traffic between 2000' AGL and 10,500' MSL in Fallon Range VFR corridor above US 50.
- (12) Fly south of centerline to avoid ranches 10-15 NM west of F on route centerline.
- (13) Caution: 299' tower between F and G north of centerline at N39-23-28 W117-18-30.
- (14) Avoid town of Cold Springs at N39-25-00 W117-52-00 north of G by 3000' AGL or 5 NM.
- (15) Maintain vigilance for VFR traffic when exiting route at G. Remain below 2000' AGL in vicinity of VFR corridor.
- (16) Avoid unauthorized entry into R-4816S or R-4804 vicinity G.

FSS's Within 100 NM Radius:

RNO

VR-209

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | TPH 074/32 | N38°01.00' W116°22.00' |
| 02 AGL B 15 AGL to | B | TPH 083/61 | N37°51.00' W115°46.00' |
| 02 AGL B 15 AGL to | C | MMM 323/67 | N37°48.50' W114°47.30' |
| 02 AGL B 15 AGL to | D | MMM 253/11 | N36°46.00' W114°30.00' |
| 02 AGL B 15 AGL to | E | BCE 247/48 | N37°34.00' W113°18.00' |
| 02 AGL B 15 AGL to | F | BCE 232/24 | N37°32.00' W112°46.00' |
| 02 AGL B 15 AGL to | G | MLF 090/24 | N38°15.00' W112°32.00' |
| 02 AGL B 15 AGL to | H | MLF 039/22 | N38°34.00' W112°38.00' |
| 02 AGL B 15 AGL to | I | MLF 317/38 | N38°55.00' W113°23.00' |
| 02 AGL B 15 AGL to | J | ILC 003/47 | N39°00.00' W114°04.00' |
| 30 AGL to | K | ILC 337/48 | N39°02.50' W114°31.20' |
| 02 AGL B 15 AGL to | L | BAM 125/104 | N39°10.00' W115°35.00' |
| 02 AGL B 15 AGL to | M | BAM 153/80 | N39°15.00' W116°40.00' |
| 02 AGL B 15 AGL to | N | OAL 280/11 | N38°05.00' W117°58.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route, except between Points J to K.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: D and H.
- (2) Alternate Exit: D, H, J and L.
- (3) Tie-in FSS: Rancho Murieta (RIU).
- (4) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (5) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (6) Reserving this route does not reserve Nellis AFB Range airspace or the Desert or Reveille MOA's. Contact 99th Range Management Office, Nellis AFB, at DSN 348-4710, C702-652-4710 for range scheduling. Schedule as far in advance as possible. Contact Nellis Control on 343.0 (P), 392.15 (S) for clearance into Nellis AFB airspace.
- (7) Reserving this route does not reserve the Sevier A or B MOA's. Contact the 388th RANS at DSN 777-4401, C810-777-4401 for airspace entry authorization prior to flight. Contact Clover Control on 301.7 or 134.1 prior to Sevier entry. If unable contact, maintain MARSAs, and broadcast route number, crossing time, and altitude in the blind.
- (8) Reserving this route does not reserve NAS Fallon Range airspace. Contact NAS Fallon Range Department, DSN 890-2416/2418, C775-426-2416/2418 for airspace entry authorization prior to flight. Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSAs while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (9) Caution: Watch for power lines between D and E.
- (10) Avoid Pine Valley Mountain Wilderness Area between D and E by 3 NM.
- (11) Avoid Zion National Park between E and F by 3 NM.
- (12) Avoid Cedar Breaks National Monument between F and G by 3 NM.
- (13) Avoid Great Basin National Park between J and K; maintain 3000' AGL.
- (14) Remain west of the town of Carvers between M and N.

FSS's Within 100 NM Radius:

CDC, RNO

VR-222

ORIGINATING ACTIVITY: 57 OSS/OSOS, Nellis AFB, NV 89191-7001 DSN 682-2040, C702-652-2040.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

VR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|-----|--------------|---------------------------|
| As assigned to | A | EED 238/17 | N34°41.00' W114°48.00' |
| 01 AGL B 15 AGL to | B | GFS 135/21 | N34°50.00' W114°58.00' |
| 01 AGL B 15 AGL to | C | GFS 296/14 | N35°17.00' W115°23.50' |
| 01 AGL B 15 AGL to | D | BLD 234/48 | N35°42.00' W115°47.00' |
| 01 AGL B 15 AGL to | E | BTY 137/28 | N36°23.00' W116°29.00' |
| 01 AGL B 15 AGL to | F | BTY 135/11 | N36°38.00' W116°38.00' |
| 05 AGL B 15 AGL to Alternate Entry: C | G | BTY 355/29 | N37°17.00' W116°38.00' |
| as assigned to Alternate Exit: E | C1 | GFS 296/14 | N35°17.00' W115°23.50' |
| 01 AGL B 75 MSL to | E1 | BTY 137/28 | N36°23.00' W116°29.00' |
| 75 MSL B 95 MSL to | E2 | BTY 098/41 | N36°31.00' W115°58.00' |
| 01 AGL B 75 MSL to Alternate Exit: E | E2X | BTY 087/48 | N36°37.00' W115°47.00' |
| 01 AGL B 75 MSL to | EE1 | BTY 137/28 | N36°23.00' W116°29.00' |
| 75 MSL B 95 MSL to | E2 | BTY 098/41 | N36°31.00' W115°58.00' |
| 01 AGL B 75 MSL to | E3 | BTY 093/56 | N36°29.00' W115°39.00' |
| 01 AGL B 15 AGL to | E3X | BTY 086/62 | N36°35.00' W115°30.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to D; 5 NM left and 3 NM right of centerline from D to E; 5 NM either side of centerline from E to G.

Special Operating Procedures:

- (1) Operations within R-4806E and R-4806W, R-4809, or Desert MOA will be conducted IAW AFI 13-212, Nellis AFB Sup 1.
- (2) Numerous route conflicts with MTR crossings.
- (3) Avoid Death Valley Junction/Armadosa, N36-18.0 W116-25.0 by 3 NM/1500' AGL.
- (4) Avoid Ash Meadows National Wildlife Refuge by 2 NM or 2000' AGL.
- (5) Avoid ranch, N36-34.21 W116-35.0, by 1500' AGL and 1 NM.
- (6) Between segments E and F, 150' tower N36-34.3 W116-27.4.
- (7) Multiple power lines, 75' to 100' AGL throughout the MTR.
- (8) Tower 200' N35-14.21 W115-30.1.
- (9) Mill tower on mine site N35-23.0 W115-31.0.
- (10) Multiple towers 200' on hill in draw N34-54.1 W115-03.6.
- (11) Radio tower 30' to 50' on small ranch and landing strip N34-42.0 W114-47.0.
- (12) Multiple towers 150' 35-01.3N 115-08.0W.
- (13) Three towers N35-26.8 W115-33.1.
- (14) Multiple towers 200' N35-29.15 W115-33.58.
- (15) Tower N36-07.9 W116-03.4.

- (16) Antenna on peak 30' to 50' N36-37.7 W116-19.6.
- (17) Multiple towers 150' N36-53.34 W116-39.83.
- (18) Tower 210' N39-09.55 W115-54.09.
- (19) Tower 200' N35-14.21 W115-30.1.
- (20) Radio Tower 140' N35-14.8 W115-25.9.
- (21) Tower 354' N34-56.09 W115-10.48.
- (22) Tower 300' N34-51.84 W114-52.65.
- (23) Microwave tower 150' N35-22.81 W115-08.71.
- (24) Aircrews who suspect they have inadvertently dropped ordinance/objects in southern Nevada will immediately notify 57 WG/SE, DSN 682-6065, C702-652-6065.

FSS's Within 100 NM Radius:

RNO

VR-223

ORIGINATING ACTIVITY: 56 RMO/ASM, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-5855, C623-856-5855.

SCHEDULING ACTIVITY: 56 RMO/ASMS, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-7654, C623-856-7654 (1430Z-2330Z Mon-Fri).

HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wkend/hol when sked with Goldwater Rng/Sell MOA Msn

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | PXR 211/35 | N33°00.00' W112°27.00' |
| 05 AGL B 60 MSL to | B | TUS 281/70 | N32°32.50' W112°11.00' |
| 05 AGL B 80 MSL to | C | TUS 276/47 | N32°20.00' W111°48.00' |
| 05 AGL B 80 MSL to | D | TUS 253/62 | N32°00.00' W112°08.00' |
| 05 AGL B 90 MSL to | E | TFD 204/41 | N32°20.00' W112°23.00' |
| 05 AGL B 90 MSL to | F | TFD 211/36 | N32°27.00' W112°23.50' |
| 05 AGL B 90 MSL to | G | TFD 238/35 | N32°41.00' W112°33.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to C; 4 NM either side of centerline from C to D; 3 NM either side of centerline from D to F; 4 NM either side of centerline from F to G.

Special Operating Procedures:

- (1) Weekend/holiday flights not authorized unless scheduled with Goldwater Range/Sells MOA mission.
- (2) Contact scheduling activity for route briefing.
- (3) Tie-in FSS Prescott (PRC)-Contact prior to entry.
- (4) Primary Entry: A. Alternate Entry: B, C, D and E.
- (5) Primary Exit: G. Alternate Exit: B, C, D, E and F.

- (6) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304, R-2305. Obtain clearance To enter these restricted areas from scheduling activity when scheduling the route.
- (7) Report exit to Gila Bend Range Operations on 272.1 when planning use of R-2301E, R-2304 or R-2305.
- (8) Extremely Noise Sensitive Area: (Tohono O'Odham Reservation) From 23 NM past A to 11 NM past F, avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally or 3000' AGL vertically. Avoid VAYA CHIN 1 NM past Point E, by a minimum of 2 NM horizontally.
- (9) Avoid overflight of all charted/uncontrolled airports by at least 1500' vertically and/or 3 NM horizontally.
- (10) Make LATN location advisory call at each ALPHA Point on 379.4 (example; call sign, VR-223A).
- (11) Route crosses numerous other MTR's as depicted on Sectional Charts. See and avoid concept is paramount.
 - (a) 1 NM past A: Crosses VR-242/VR-268.
 - (b) 9 NM past B: Crosses VR-241.
 - (c) Points C-D: Coincident with VR-239/VR-244.
 - (d) Points D-G: Coincident with VR-239/VR-259.
 - (e) Point F: Crosses VR-241.
- (12) CAUTION:
 - (a) A 254' tower 11.5 NM past A, 2.3 NM left of centerline.

FSS's Within 100 NM Radius:

PRC

VR-231

ORIGINATING ACTIVITY: 56 RMO/ASM, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-5855, C623-856-5855.

SCHEDULING ACTIVITY: 56 RMO/ASMS, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-7654, C623-856-7654 (1430Z-2330Z Mon-Fri).

HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wkend/hol when sked with Goldwater Rng/Sell MOA Msn

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | PXR 272/39 | N33°35.00' W112°43.00' |
| 01 AGL B 70 MSL to | B | BXK 277/42 | N33°42.00' W113°37.00' |
| 01 AGL B 70 MSL to | C | GBN 294/57 | N33°31.80' W113°34.50' |
| 01 AGL B 60 MSL to | D | GBN 263/37 | N32°59.50' W113°25.00' |
| 01 AGL B 50 MSL to | E | GBN 229/36 | N32°41.00' W113°18.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM left and 4 NM right of centerline from B to C; 14 NM left and 6 NM right of centerline from C to D; 8 NM left and 6 NM right of centerline from D to E.

Special Operating Procedures:

- (1) Non 56 FW users request for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity, Scheduling Activity hours 0730-1630 local Mon-Fri.
- (2) When not scheduled in conjunction with Goldwater Range/Sells MOA Mission, aircraft must exit prior to Point D.
- (3) Contact scheduling activity for route briefing.
- (4) Tie-in FSS: Prescott (PRC)-Contact prior to entry.
- (5) Primary Entry: A. Alternate Entry: B, C and D.
- (6) Primary Exit: E. Alternate Exit: B, C and D.
- (7) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304 or R-2305. Obtain clearance to enter these Restricted Areas from Scheduling Activity.
- (8) Report exit to Gila Bend Range Operation on 272.1 when planning use of R-2301E, R-2304 or R-2305.
- (9) Avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally.
- (10) Avoid overflights of all charted/uncontrolled airfields by a minimum of 1500' vertically and/or 3 NM horizontally.
- (11) 5 NM prior to C, make advisory call on 255.4 entering Hope Low Level Corridor (example; call sign, VR-231 Hope Low Level Corridor).
- (12) Route crosses numerous other MTR's as depicted on Sectional Charts. See and avoid concept is paramount.
 - (a) Points C-E: Coincident with VR-243/VR-245 (Hope Corridor).
 - (b) Points C-D: Coincident with VR-1267/VR-1267A/VR-1268.
- (13) CAUTION:
 - (a) High tension powerlines and extensive flight traffic at Point A;
 - (b) Houses/farms 40 NM past A, 1 NM left of centerline;
 - (c) Cross interstate 10, located 5 NM past Point B at a minimum of 500' AGL;
 - (d) A 250' microwave tower 5 1/2 NM past B, 2 NM right of centerline.
 - (e) Uncharted airstrip 7 NM past B, on centerline. Used daily by Department of Interior aircraft;
 - (f) High tension powerlines at C and D;
 - (g) Cross interstate 8, 9 NM past D at a minimum of 500' AGL;
 - (h) Uncharted airstrip 1.8 NM N of Point D.

FSS's Within 100 NM Radius:

PRC

VR-239

ORIGINATING ACTIVITY: 56 RMO/ASM, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-5855, C623-856-5855.

SCHEDULING ACTIVITY: 56 RMO/ASMS, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-7654, C623-856-7654 (1430Z-2330Z M-F).

HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wkend/hol when sked with Goldwater Rng/Sell MOA Msn

VR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------------|----|--------------|---------------------------|
| As assigned to blw 75 MSL. | A | PXR 319/32 | N33°54.00' W112°17.00' |
| 40 MSL B 75 MSL to | B | PXR 346/38 | N34°04.00' W112°00.00' |
| 03 AGL B 95 MSL to | C | PXR 022/46 | N34°04.00' W111°27.00' |
| 03 AGL B 95 MSL to | D | PXR 046/66 | N34°00.30' W110°51.00' |
| 03 AGL B 90 MSL to | E | PXR 081/88 | N33°21.00' W110°13.00' |
| 03 AGL B 90 MSL to | F | TUS 345/41 | N32°47.00' W110°57.00' |
| 03 AGL B 70 AGL to | G | TUS 311/41 | N32°38.00' W111°24.00' |
| 05 AGL B 60 MSL to | H | TFD 180/54 | N32°00.00' W112°08.00' |
| 05 AGL B 90 MSL to | I | TFD 204/41 | N32°20.00' W112°23.30' |
| 05 AGL B 90 MSL to | J | TFD 211/36 | N32°27.00' W112°23.50' |
| 05 AGL B 90 MSL to | K | TFD 238/35 | N32°41.00' W112°33.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point B to K.

ROUTE WIDTH - 5 NM either side of centerline from A to H; 3 NM either side of centerline from H to J; 4 NM either side of centerline from J to K.

Special Operating Procedures:

- (1) Non 56 FW users request for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity, Scheduling Activity hours 0730-1630 local Mon-Fri.
- (2) To avoid noise sensitive areas, user must exit the route prior to Point G when not scheduled in conjunction with Goldwater Range/Sells MOA Mission.
- (3) Contact scheduling activity for route briefing.
- (4) Tie-in FSS: Prescott (PRC)-Contact prior to entry.
- (5) Primary Entry: A. Alternate Entry: B, C and F.
- (6) Primary Exit: K. Alternate Exit: G, H, and I.
- (7) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304, or R-2305. Obtain clearance to enter these Restricted Areas from Scheduling Activity.
- (8) Report exit to Gila Bend Operations 272.1 when planning use of R-2301E, R-2304, or R-2305.
- (9) Extremely Noise Sensitive Area: From 15 NM past G to 11 NM past J, avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally or 3000' AGL vertically. Avoid YAYA CHIN 1 NM past I, by a minimum of 2 NM horizontally.
- (10) Avoid overflight of all charted/uncontrolled airports by a minimum of 1500' vertically and/or 3 NM horizontally.
- (11) From Point E until range entry, make LATN advisory call at each turn point on 379.4 (example; call sign, VR 239E).
- (12) Route crosses numerous other MTR's as depicted on Sectional Charts. See and avoid concept is paramount.
 - (a) Start Point A is 8 NM north of Class B Airspace; use extreme caution for commercial airliners from A-B.

- (b) Points B-C: Right boundary is within 4 NM of Class B Airspace.
- (c) 15 NM past A: Crosses VR-241/VR-244.
- (d) 29 NM past E: Crosses VR-267/VR-268/VR-269.
- (e) Point F crosses VR-241.
- (f) Points F-H: Coincident with VR-244.
- (g) 2 NM past G: Crosses VR-241.
- (h) 27 NM past G to H: Coincident with VR-223.
- (i) Points H-K: Coincident with VR-223/VR-259.
- (j) Point J crosses VR-241.
- (k) Use caution for extensive glider and general aviation activity in vicinity of Lake Pleasant.

(13) CAUTION:

- (a) Powerlines cross at 7 NM and 9 NM past A, 7 NM past B, 5 NM past C, 3 NM past D, 36 NM and 47 NM past E, 8 NM past F, 2 NM prior to G, 2 NM and 18 NM past G;
- (b) Extremely Noise Sensitive Area: Remain right of centerline from 13-22 NM past D;
- (c) San Carlos Airport 8 NM prior to E, 8 NM right of centerline. Extensive traffic during forest fire season;
- (d) Coolidge Dam 18 NM past E. Avoid overflight by a minimum of 1 NM to the left;
- (e) A 231' tower 31 NM past E, 1 1/2 NM left of centerline and a tower is located 2.4 NM left of centerline 2.8 NM past D;
- (f) 1000' smokestack and town of Winkleman 35 NM past E, 2 NM right of centerline;
- (g) A 334' tower 1 NM left of F;
- (h) From 3 NM prior to I-10 to 4 NM past I-10 maintain a minimum altitude of 1500' AGL. Extensive helicopter operations between Picacho Field (N32-40.0 W112-29.1) and Silverbell.
- (i) Avoid overflight of Vaya Chin, 1 NM past Point I, by a minimum of 2 NM horizontally.
- (j) Route crosses numerous other MTR's as depicted on Sectional Charts. See and Avoid concept is paramount.

FSS's Within 100 NM Radius:

PRC

VR-241

ORIGINATING ACTIVITY: 56 RMO/ASM, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-5855, C623-856-5855.

SCHEDULING ACTIVITY: 56 RMO/ASMS, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-7654, C623-856-7654 (1430Z-2330Z M-F).

HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wkend/hol when sked with Goldwater Rng/Sell MOA Msn

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | LUF 336/25 | N33°57.00' W112°28.50' |
| 03 AGL B 90 MSL to | B | LUF 356/38 | N34°10.00' W112°16.00' |
| 03 AGL B 90 MSL to | C | IWA 335/39 | N33°56.50' W111°49.00' |
| 03 AGL B 90 MSL to | D | IWA 359/34 | N33°51.00' W111°30.50' |

| | | | |
|--------------------|---|------------|---------------------------|
| 03 AGL B 90 MSL to | E | IWA 035/30 | N33°38.00' W111°12.50' |
| 03 AGL B 90 MSL to | F | IWA 064/33 | N33°25.50' W111°01.00' |
| 03 AGL B 95 MSL to | G | IWA 091/32 | N33°10.50' W111°02.00' |
| 03 AGL B 75 MSL to | H | TFD 085/48 | N32°47.00' W110°58.00' |
| 03 AGL B 75 MSL to | I | GBN 088/66 | N32°43.00' W111°24.00' |
| 03 AGL B 65 MSL to | J | GBN 103/67 | N32°27.00' W111°29.50' |
| 05 AGL B 65 MSL to | K | GBN 141/34 | N32°26.50' W112°23.50' |

- (g) 25 NM past J: Crosses VR-233.
- (h) At Point K: Converges with VR-223/VR-239/VR-259.
- (13) CAUTION:
 - (a) Avoid overflight of bridge north of Roosevelt Dam (4 NM left of turning Point E) by 1000' vertically and/or 2 NM.
 - (b) High tension powerlines cross 8 NM, 9 NM and 12 NM past B, at C, cross 2.5 NM prior to D, at E, at F, cross 5 NM past F at G, cross 6 NM and 9.5 NM past G; uncharted powerlines cross 16 NM past G, cross 9 NM past H, cross 2.5 NM and 8 NM and 12 NM past I, from 10 NM past I to 15 NM and 26 NM past J.
 - (c) Numerous homes 2-3 NM past Point F, left of centerline. Fly right of centerline from 1-4 NM past F.
 - (d) Three uncharted towers approximately 100' AGL at India.
 - (e) Extensive flight traffic and parachuting activity in the vicinity of Pinol Airpark 12 NM past I and 8 NM left of centerline. USE CAUTION.
 - (f) Soaring activity in the vicinity of El Toro Airport 5 NM left of centerline at I, USE CAUTION.
 - (g) From I (3 NM prior to I-10) to 4 NM past I-10 maintain a minimum altitude of 1500' AGL. Extensive helicopter operations between Picacho Field (N32-40 W112-29.1) and Silverbell.
 - (h) Avoid overflight of Silver Bell, AZ, 3 NM past J and 1.5 NM left of route centerline.
 - (i) Avoid overflight of Village of Ventana 7 NM prior to K, 2.5 NM right of centerline.
 - (j) Uncharted tower approximately 100' AGL on 7203' peak 2 NM SW of B.
 - (k) Uncharted tower approximately 75' AGL 11 NM past D, 1/2 NM left of centerline.
 - (l) Numerous houses in vicinity of G.

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 3 NM right and 5 NM left of centerline from C to D; 5 NM right and 4 NM left of centerline from D to E; 2 NM right and 4 NM left of centerline from E to F; 2 NM right and 5 NM left of centerline from F to G; 3 NM right and 2 NM left of centerline from G to H; 5 NM either side of centerline from H to I; 3 NM right and 2 NM left of centerline from I to J; 4 NM right and 2 NM left of centerline from J to K.

Special Operating Procedures:

- (1) Non 56 FW user requests for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity, Scheduling Activity hours 0730-1630 local Mon-Fri.
- (2) To avoid noise sensitive areas, user must exit the route prior to Point J when not scheduled in conjunction with Goldwater Range/Sells MOA Mission.
- (3) Contact scheduling activity for route briefing.
- (4) Tie-in FSS; PRC (Prescott).
- (5) Primary Entry: A. Alternate Entry B, C, D, E, F, G, H, I and J.
- (6) Primary Exit: K. Alternate Exit B, C, D, E, F, G, H, I and J.
- (7) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304 or R-2305. Obtain clearance to enter these restricted areas from Scheduling Activity when scheduling the route.
- (8) Report exit to Gila Bend Range Operations 272.1 when planning use of R-2301E, R-2304 or R-2305.
- (9) Extremely Noise Sensitive Area: (Tohono O'Odham Reservation) From 14 NM past J to K, avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally or 3000' AGL vertically.
- (10) Avoid overflight of all charted/uncontrolled airports by at least 1500' vertically and/or 3 NM horizontally.
- (11) From Point G until range entry make a LATN advisory call at each ALPHA Point on 379.4 (example: call sign, VR-241G).
- (12) Route crosses numerous other MTR's as depicted on Sectional Charts. See and avoid concept is paramount.
 - (a) Start Point A is 15 NM north of Class B Airspace; use extreme caution for commercial airliners from A-B.
 - (b) Points C-D: Right boundary is within 4 NM of Class B Airspace.
 - (c) Points D-E: Right boundary is within 5 NM of Class B Airspace.
 - (d) Points A-H: Coincident with VR-244.
 - (e) 7 NM past I: Crosses VR-239/VR-244.
 - (f) 5 NM past J: Crosses VR-239/VR-244.

FSS's Within 100 NM Radius:

PRC

VR-242

ORIGINATING ACTIVITY: 56 RMO/ASM, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-5855, C623-856-5855.

SCHEDULING ACTIVITY: 56 RMO/ASMS, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-7654, C623-856-7654 (1430Z-2330Z M-F).

HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wkend/hol when sked with Goldwater Rng/Sell MOA Msn

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | LUF 336/25 | N33°57.00' W112°28.50' |
| 03 AGL B 90 MSL to | B | DRK 219/18 | N34°31.50' W112°46.00' |
| 03 AGL B 85 MSL to | C | BXK 332/63 | N34°29.00' W113°07.50' |
| 03 AGL B 65 MSL to | D | BXK 319/47 | N34°09.50' W113°15.00' |
| 03 AGL B 65 MSL to | E | BXK 278/54 | N33°47.50' W113°49.50' |

VR ROUTES

| | | | |
|--|----|------------|---------------------------|
| 03 AGL B 60 MSL to | F | GBN 312/24 | N33°17.00' W112°56.00' |
| 03 AGL B 45 MSL to | G | GBN 063/14 | N33°00.50' W112°24.50' |
| 03 AGL B 55 MSL to Alternate Entry: | H | GBN 155/15 | N32°43.00' W112°37.00' |
| 03 AGL B 90 MSL to | AA | PXR 320/48 | N34°08.00' W112°25.50' |
| 03 AGL B 90 MSL to | B1 | DRK 219/18 | N34°31.50' W112°46.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Non 56 FW user requests for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity, Scheduling Activity hours 0730-1630 local Mon-Fri.
- (2) When not scheduled in conjunction with Goldwater Range/Sells MOA Mission, aircraft must exit prior to Point G.
- (3) Contact Scheduling Activity for route briefing.
- (4) Tie-in FSS: Prescott (PRC).
- (5) Primary Entry: A. Alternate Entry: AA, B, C, D, E, F and G.
- (6) Primary Exit: H. Alternate Exit: B, C, D, E, F and G.
- (7) Avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally.
- (8) Avoid overflight of all charted/uncontrolled airfields below 1500' vertically and/or 3 NM horizontally.
- (9) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304, or R-2305. Obtain clearance to enter these areas from Scheduling Activity when scheduling the route.
- (10) Report exit to Gila Bend Range Operations on 272.1 when planning use of R-2301E, R-2304 or R-2305.
- (11) CAUTION:
 - (a) High tension powerlines; cross 25 NM past A, cross 5 NM past B, cross 6 NM past C, cross 19 NM past D, cross at E, cross 25 NM past E, cross 12 NM prior to F, cross at F, and cross 15 NM past F;
 - (b) Tower (est 300') is located 2 NM right of centerline 6 NM past C, and a 240' tower is located 3 NM left of centerline 26 NM past E;
 - (c) Cooper Ranch Airport located 4 NM right of centerline 16 NM past A;
 - (d) Quarter Circle J/S Airport located 4 NM right of centerline 36 NM past A;
 - (e) Baghdad Airport located 7 NM right of C;
 - (f) Utting Siding Airport located 4 NM right of E;
 - (g) Gila Compressor Airport located 2 NM left of centerline 6 NM past F;
 - (h) From Point A to B avoid overflight of Peeples Valley by 2 NM horizontally or 1000' vertically;
 - (i) From Point A to B avoid overflight of Kirkland Junction by 1 NM horizontally or 1000' vertically;
 - (j) Extensive helicopter operations at 300' AGL and below from G to H;
 - (k) Avoid the town of Hope, 7 NM past E by a minimum of 1 NM horizontally;
 - (l) Uncharted airstrip 17 NM past E and 4 NM right of centerline, used daily by Department of Interior aircraft.

- (12) Route crosses numerous other MTR's as depicted on Sectional Charts. See and avoid concept is paramount.
 - (a) Start Point A is 15 NM northwest of Class B Airspace; use extreme caution for commercial airliners from A-B.
 - (b) 21 NM past A: Crosses VR-243.
 - (c) 27 NM past A: Crosses VR-245.
 - (d) 5 NM past B: Crosses IR-250.
 - (e) 9 NM past B: Crosses VR-243.
 - (f) 14 NM past B: Crosses VR-1268/IR-214.
 - (g) 1 NM past C: Crosses VR-245.
 - (h) 20 NM past C: Crosses VR-1268/IR-214.
 - (i) 28 NM past D to 14 NM past E: Crosses VR-1267/VR-1267A/VR-1268/VR-245/VR-243/VR-231.
 - (j) 26 NM past E: Crosses IR-218.
 - (k) 43 NM past E: Crosses IR-218.
 - (l) At G: Crosses VR-267/VR-269/VR-223.
 - (m) Point G to Point H: Coincident with VR-268.
 - (n) Uncharted tower located on McCloud Mt.(N34-25.71 W112-57.78).

FSS's Within 100 NM Radius:

PRC, RNO

VR-243

ORIGINATING ACTIVITY: 56 RMO/ASM, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-5855, C623-856-5855.

SCHEDULING ACTIVITY: 56 RMO/ASMS, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-7654, C623-856-7654 (1430Z-2330Z M-F).

HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wkend/hol when sked with Goldwater Rng/Sell MOA Msn

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | LUF 336/25 | N33°57.00' W112°28.50' |
| 03 AGL B 95 MSL to | B | DRK 159/28 | N34°14.00' W112°24.50' |
| 03 AGL B 95 MSL to | C | DRK 212/30 | N34°21.00' W112°55.00' |
| 03 AGL B 90 MSL to | D | DRK 281/34 | N34°56.50' W113°06.50' |
| 03 AGL B 90 MSL to | E | EED 042/34 | N35°04.50' W113°54.00' |
| 03 AGL B 90 MSL to | F | EED 092/35 | N34°35.50' W113°47.50' |
| 03 AGL B 65 MSL to | G | BXK 276/52 | N33°45.00' W113°47.50' |
| 03 AGL B 65 MSL to | H | GBN 293/57 | N33°31.80' W113°34.50' |
| 03 AGL B 60 MSL to | I | GBN 259/38 | N32°59.50' W113°25.00' |
| 03 AGL B 50 MSL to | J | GBN 229/36 | N32°41.00' W113°18.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to H; 14 NM left and 6 NM right of centerline from H to I; 8 NM left and 6 NM right of centerline from I to J.

Special Operating Procedures:

- (1) Non 56 FW user requests for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity, Scheduling Activity hours 0730-1630 local Mon-Fri.
- (2) When not scheduled in conjunction with Goldwater Range/Sells MOA Mission, aircraft must exit prior to Point I.
- (3) Contact Scheduling Activity for route briefing.
- (4) Tie-in FSS; PRC (Prescott)-Contact prior to entry.
- (5) Primary Entry: A. Alternate Entry: B, C, D, E, F, G and H.
- (6) Primary Exit: J. Alternate Exit: B, C, D, E, F, G, H and I.
- (7) Scheduling this route does not grant permission to enter R-2301E, R-2304 or R-2305. Obtain clearance to enter these restricted areas from Scheduling Activity.
- (8) Report exit to Gila Bend Range Operations on 272.1 when planning use of R-2301E, R-2304, or R-2305.
- (9) Avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally.
- (10) Avoid overflight of all charted/uncontrolled airports by a minimum of 1500' vertically and/or 3 NM horizontally.
- (11) 5 NM prior to H, make advisory call on 255.4 entering Hope Low Level Corridor (example: Call Sign, VR-243, entering Hope Low Level Corridor).
- (12) Route crosses numerous other MTR's as depicted on Sectional Charts. See and avoid concept is paramount.
 - (a) Start Point A is 15 NM northwest of Class B Airspace; use extreme caution for commercial airliners from A-B.
 - (b) 8 NM past A: Crosses VR-245.
 - (c) 8 NM past B: Crosses VR-245.
 - (d) 11 NM past B: Crosses VR-242.
 - (e) 22 NM past B: Crosses IR-250.
 - (f) 23 NM past B: Crosses IR-254.
 - (g) 4 NM past C: Crosses VR-245.
 - (h) 9 NM past C: Crosses IR-254/VR-242.
 - (i) 16 NM past C: Coincident with VR-1268/IR-214 to Point D.
 - (j) 29 NM past C: Crosses IR-254.
 - (k) 2 NM past E to 25 NM past E: Crosses IR-213/IR-214/VR-1268.
 - (l) 3 NM past F: Crosses VR-299.
 - (m) 7 NM past F: Crosses IR-213/IR-214.
 - (n) 15 NM past F: Crosses VR-299.
 - (o) 30 NM past F: Crosses VR-268/IR-214.
 - (p) 45 NM past F: Crosses VR-242.
 - (q) From F-H: Coincident with VR-245.
 - (r) At G: Crosses VR-242/IR-250.
 - (s) 3 NM past G: Crosses VR-1267A.
 - (t) 7 NM past G: Crosses VR-1267/VR-1267A/VR-1268.
 - (u) From H-I: Coincident with VR-1267/VR-1267A/VR-1268.
 - (v) From H-J: Coincident with VR-231/VR-245 (Hope Corridor).
- (13) CAUTION:
 - (a) High tension powerlines cross 15 NM past B, 15 NM past C, 29 NM past D, 12 NM past F, 33 NM past F, at G, at H, and at I;
 - (b) Numerous uncharted airstrips at following points listed: (6 NM past B, 1 NM left of centerline); (11 NM past C, on centerline); (6 NM prior to E); (21 NM past E, 4 NM right of centerline); (7 NM past F, 3 NM left of centerline

- and 3 NM right of centerline); (34 NM past F); (1 NM prior to G); (18 NM past D).
- (c) Noise Sensitive Area 15 NM past B, 1 NM left of centerline. Avoid overflight of Peoples Valley by a minimum of 2 NM horizontally;
- (d) Baghdad Airport 18 NM past C, 7 NM left of centerline;
- (e) Numerous uncharted antenna (100' AGL) at E;
- (f) Ford Motor Airport located 12 NM past E, 9 NM right of centerline;
- (g) Noise Sensitive Area 2 NM past F, 2 NM left of centerline.
- (h) Swansea historical site 25 NM past F, 2 NM right of centerline, avoid by a minimum of 1 NM;
- (i) Noise Sensitive Area 4 NM past G, 2 NM left of centerline (town of Hope). Avoid by a minimum of 1 NM;
- (j) Uncharted tower located on McCloud Mt. (N34-25.71 W112-57.78).
- (k) Tower is located 3.5 NM right of centerline 6.6 NM past G.

FSS's Within 100 NM Radius:

PRC

VR-244

ORIGINATING ACTIVITY: 56 RMO/ASM, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-5855, C623-856-5855.

SCHEDULING ACTIVITY: 56 RMO/ASMS, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-7654, C623-856-7654 (1430Z-2330Z M-F).

HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wkend/hol when sked with Goldwater Rng/Sell MOA Msn

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | LUF 335/25 | N33°57.00' W112°28.80' |
| 03 AGL B 90 MSL to | B | LUF 356/38 | N34°10.00' W112°16.00' |
| 03 AGL B 85 MSL to | C | IWA 335/39 | N33°56.80' W111°49.00' |
| 03 AGL B 85 MSL to | D | IWA 359/33 | N33°51.00' W111°30.80' |
| 03 AGL B 90 MSL to | E | IWA 035/30 | N33°38.00' W111°12.80' |
| 03 AGL B 90 MSL to | F | IWA 064/33 | N33°25.50' W111°01.00' |
| 03 AGL B 95 MSL to | G | IWA 091/32 | N33°10.50' W111°02.00' |
| 03 AGL B 75 MSL to | H | TFD 085/48 | N32°47.00' W110°58.00' |
| 03 AGL B 70 MSL to | I | TUS 311/41 | N32°38.00' W111°24.30' |
| 05 AGL B 65 MSL to | J | TFD 180/54 | N32°00.00' W112°08.00' |
| 05 AGL B 60 MSL to | K | TFD 199/54 | N32°07.00' W112°27.00' |

VR ROUTES

05 AGL B 30 MSL to L TFD 214/61 N32°10.00'
W112°46.30'
05 AGL B 30 MSL to M TFD 237/69 N32°28.00'
W113°11.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 3 NM right and 5 NM left of centerline from C to D; 5 NM right and 4 NM left of centerline from D to E; 2 NM right and 4 NM left of centerline from E to F; 2 NM right and 5 NM left of centerline from F to G; 3 NM right and 2 NM left of centerline from G to H; 3 NM right and 4 NM left of centerline from H to I; 3 NM right and 2 NM left of centerline from I to J; 2 NM right and 2 NM left of centerline from J to L, 2 NM right and 3 NM left of centerline from L to M.

Special Operating Procedures:

- (1) Non 56 FW user requests for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity, Scheduling Activity hours 0730-1630 local Mon-Fri.
 - (2) To avoid noise sensitive areas, user must exit the route prior to Point I when not scheduled in conjunction with Goldwater Range/Sells MOA Mission.
 - (3) Contact Scheduling Activity for route briefing.
 - (4) Tie-in FSS: Prescott (PRC)-Contact prior to entry.
 - (5) Primary Entry: A. Alternate Entry: B, C, H, I, K.
 - (6) Primary Exit: M. Alternate EXIT: J, K, L.
 - (7) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304, or R-2305. Obtain clearance to enter these restricted areas from scheduling activity when scheduling the route.
 - (8) Report to Gila Bend Range Operations 272.1 when planning use of the R-2301E, R-2304, or R-2305.
 - (9) Extremely Noise Sensitive Area: (Tohono O'Odham Reservation) From 15 NM past I to L, avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally or 3000' AGL vertically.
 - (10) Avoid overflight of all charted/uncontrolled airports by at least 1500' vertically and/or 3 NM horizontally.
 - (11) From Point H until range entry, make a location advisory call at each alpha Point on 379.4 (example: Call Sign, VR-244H).
 - (12) Route crosses numerous other MTR's as depicted on Sectional Charts. See and avoid concept is paramount.
 - (a) Start Point A is 15 NM northwest of Class B Airspace; use extreme caution for commercial airliners from A-C.
 - (b) Points C-D: Right boundary is within 4 NM of Class B Airspace.
 - (c) Points D-E: Right boundary is within 5 NM of Class B Airspace.
 - (d) Points A-H: Coincident with VR-241.
 - (e) 4 NM past G: Crosses VR-267/VR-268/VR-269.
 - (f) Points H-J: Coincident with VR-239.
 - (g) 2 NM past I: Crosses VR-241.
 - (h) 14 NM past I: Crosses VR-241.
 - (i) 24 NM past I to J: Coincident with VR-223.
 - (j) From K to M: Coincident with VR-260/VR-263.
- (13) CAUTION:
- (a) Avoid overflight of bridge N of Roosevelt Dam (4 NM left of Turning Pt E) by 1000' vertically and/or 2 NM.

- (b) Powerlines cross at 8 NM and 12 NM past B, at C, 2 NM prior to D, at E, at F, 5 NM past F, at G, 6 NM past G, 9.5 NM past H, 2 NM prior to I, 17 NM past I.
- (c) Numerous homes 2-3 NM past F, left of centerline. Fly right of centerline from 1-4 NM past F.
- (d) Extremely Noise Sensitive Area from 15 NM past I to L. Maintain a minimum of 500' AGL and avoid all villages by a minimum of 1 NM horizontally or 3000' AGL vertically.
- (e) From 3 NM prior to I-10 to 4 NM past I-10 maintain a minimum altitude of 1500' AGL. Extensive Helicopter Operations between Picacho Field (N32-40.0 W111-29.09) and Silverbell.
- (f) Numerous other MTRs cross or are coincident with VR-244. See Flip AP/1B, IFR/VFR Wall Planning Charts, and appropriate Sectional Charts.

FSS's Within 100 NM Radius:

PRC

VR-245

ORIGINATING ACTIVITY: 56 RMO/ASM, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-5855, C623-856-5855.

SCHEDULING ACTIVITY: 56 RMO/ASMS, 7224 N. 139th Drive, Luke AFB, AZ 85309-1420 DSN 896-7654, C623-856-7654 (1430Z-2330Z M-F).

HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wkend/hol when sked with Goldwater Rng/Sell MOA Msn

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------|----|--------------|---------------------------|
| As assigned to below 75 MSL | A | PXR 319/32 | N33°54.00' W112°17.00' |
| 03 AGL B 90 MSL to | B | DRK 191/22 | N34°22.00' W112°40.00' |
| 03 AGL B 90 MSL to | C | DRK 251/62 | N34°36.30' W113°43.00' |
| 03 AGL B 70 MSL to | D | BXK 276/52 | N33°45.00' W113°47.50' |
| 03 AGL B 70 MSL to | E | GBN 294/57 | N33°31.80' W113°34.50' |
| 03 AGL B 60 MSL to | F | GBN 263/37 | N32°59.50' W113°25.00' |
| 01 AGL B 50 MSL to | G | GBN 229/36 | N32°42.00' W113°18.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline from A to D; 2 NM left and 1.5 NM right of centerline from D to E; 14 NM left and 6 NM right of centerline from E to F; 8 NM left and 6 NM right of centerline from F to G.

Special Operating Procedures:

- (1) Non 56 FW user requests for weekend/holiday use shall be coordinated a minimum of 48 hrs in advance of route entry time with the Scheduling Activity, Scheduling Activity hours 0730-1630 local Mon-Fri.
- (2) When not scheduled in conjunction with Goldwater Range/Sells MOA Mission, aircraft must exit prior to Point F.

- (3) Contact Scheduling Activity for route briefing.
- (4) Tie in FSS: Prescott (PRC)-Contact prior to entry.
- (5) Primary Entry; A. Alternate Entry: B, C, D and E.
- (6) Primary Exit: G. Alternate Exit: D, E and F.
- (7) Scheduling this route does not grant permission to enter R-2301E, R-2304 or R-2305. Obtain clearance to enter these restricted areas from Scheduling Activity.
- (8) Report exit to Gila Bend Range Operations on 272.1 when planning use of R-2301E, R-2304 or R-2305.
- (9) Avoid overflight of all towns/settlements/populated areas by a minimum of 1 NM horizontally.
- (10) Avoid overflight of all charted/uncontrolled airports by a minimum of 1500' vertically and/or 3 NM horizontally.
- (11) 5 NM prior to E, make advisory call on 255.4 entering Hope Low Level Corridor (example: call sign, VR-245, entering Hope Low Level Corridor).
- (12) Route crosses numerous other MTR's as depicted on Sectional Charts. See and avoid concept is paramount.
 - (a) Start Point A is 8 NM northwest of Class B Airspace; use extreme caution for commercial airliners from A-B.
 - (b) 9 NM past A: Crosses VR-241/VR-244.
 - (c) 12 NM past A: Crosses VR-243.
 - (d) 26 NM past A: Crosses VR-243.
 - (e) 1 NM past B: Crosses VR-242.
 - (f) From 8 NM past B to 16 NM past B: Crosses VR-243/IR-250/IR-254.
 - (g) From 20 NM past B to 25 NM past B: Crosses VR-242/VR-1268/IR-214.
 - (h) 40 NM past B: Crosses IR-254.
 - (i) From C to E: Coincident with VR-243.
 - (j) From C to 15 NM past C: Crosses VR-299/IR-213/IR-214.
 - (k) 30 NM past C: Crosses VR-1267/VR-1268/IR-214.
 - (l) From 4 NM prior to D to E: Crosses VR-242/VR-1267/VR-1267A/IR-250.
 - (m) From E to F: Coincident with VR-1267/VR-1267A/VR-1268.
 - (n) From E to G: Coincident with VR-231/VR-243 (Hope Corridor).
 - (o) Use caution for extensive glider and general aviation activity in the vicinity of Lake Pleasant.
- (13) CAUTION:
 - (a) Maintain a minimum of 1500' AGL and below 7500' MSL over Lake Pleasant enroute to A;
 - (b) Extensive glider operations in vicinity of A;
 - (c) Remain below Gladden/Baghdad MOA (below 5000' AGL or 7000' MSL, whichever is higher) from B to D;
 - (d) High tension powerlines at B, 41 NM past B, 47 NM past B, 34 NM past C, 38 NM past C, at E, at F;
 - (e) Noise Sensitive Area at B. Avoid Kirkland Junction by a minimum of 1 NM horizontally;
 - (f) Noise Sensitive Area 4 NM past D, 2 NM left of centerline. Avoid town of Hope by a minimum of 11 NM horizontally;
 - (g) A 250' microwave tower 12 NM past D, 1/2 NM left of centerline;
 - (h) Cross Interstate 10, 9 NM past D, at a minimum of 500' AGL;
 - (i) Uncharted airstrip 14 NM past D, 1 1/2 NM left of centerline, used daily by Department of Interior aircraft;
 - (j) Cross Interstate 8, 9 NM past F at a minimum of 500' AGL;
 - (k) Uncharted tower located on McCloud Mt. (N34-25.71 W112-57.78).

FSS's Within 100 NM Radius:

CDC, PRC

VR-249

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462.
Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | BSR 282/15 | N36°18.00' W121°55.00' |
| 30 MSL B 50 MSL to | B | BSR 141/1 | N36°10.00' W121°38.00' |
| 30 MSL B 50 MSL to | C | MQO 294/37 | N35°39.00' W121°20.00' |
| 30 MSL B 50 MSL to | D | MQO 295/17 | N35°26.00' W121°01.00' |
| 30 MSL B 50 MSL to | E | MQO 253/9 | N35°15.00' W120°57.00' |
| 30 MSL B 50 MSL to | F | MQO 145/14 | N35°02.00' W120°40.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Tie-in FSS: San Diego (San).
- (2) 450 Knots TAS maximum.
- (3) Contact Los Angeles ARTCC on 327.8 for return and climb clearance.
- (4) All aircraft contact Monterey Approach Control on 263.6 upon canceling IFR before descending below 6000' prior to Point Alpha.
- (5) All aircraft contact Santa Barbara TRACON on 244.575 prior to E for traffic advisories along the final leg (E-F).
- (6) Warning: The route terminates at F which is located inside of Santa Barbara Terminal Radar Control (TRACON) airspace. Also in the vicinity are San Luis Obispo and Santa Maria airports. Thus a high level of civil and military VFR/ IFR traffic exists in the vicinity of F.

FSS's Within 100 NM Radius:

HHR, OAK, RAL, RIU

VR-259

ORIGINATING ACTIVITY: 162 FW/OGC, 1660 E. El Tigre Way, Tucson, AZ 85706-6086 DSN 844-6371, C520-295-6371.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

VR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------------|----|--------------|---------------------------|
| at or above 10 AGL or as assigned | A | TUS 034/29 | N32°26.00' W110°30.00' |
| 07 AGL B 15 AGL to | B | DUG 334/34 | N32°02.00' W109°45.00' |
| 03 AGL B 50 AGL to | C | DUG 045/31 | N31°45.00' W109°05.00' |
| 03 AGL B 15 AGL to | D | DUG 310/20 | N31°44.00' W109°50.00' |
| 03 AGL B 15 AGL to | E | TUS 127/15 | N31°54.00' W110°43.00' |
| 65 MSL to | F | TUS 216/40 | N31°39.00' W111°30.00' |
| 05 AGL B 30 AGL to | G | TFD 162/74 | N31°39.00' W111°46.00' |
| 05 AGL B 30 AGL to | H | TFD 181/68 | N31°47.00' W112°13.00' |
| 05 AGL B 30 AGL to | I | TFD 180/54 | N32°00.00' W112°08.00' |
| 05 AGL B 30 AGL to | J | TFD 204/41 | N32°20.00' W112°23.30' |
| 05 AGL B 30 AGL to | K | TFD 211/36 | N32°27.00' W112°23.50' |
| 05 AGL B 30 AGL to | L | TFD 238/35 | N32°41.00' W112°33.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to E and F to L.

ROUTE WIDTH - 3NM either side of centerline from A to E; 3NM either side of centerline from E to K; 4NM either side of centerline from K to L.

Special Operating Procedures:

- Alternate Entry: B, C, D, E, F, G and H.
- Alternate Exit: B, C, D, E, F, G and H.
- Route segment from Point A to Point E transit airspace used by civil Unmanned Aerial Vehicle (UAV) flights, trailed by manned chase aircraft, operating VFR during daylight from 6000'MSL to 15000'MSL. VFR traffic advisories are available from Albuquerque Center on 327.15 or 269.3.
- Noise Sensitive Areas 11 NM NE B (city of Cochise). Cross at 1500'AGL.
- From Point B to Point C, VR-259 conflicts head-on with route width of VR-263. Additionally, VR-259 crosses or shares portions of VR-223, VR-239, VR-241, VR-244, and VR-260, which are not deconflicted for the pilot. Extra vigilance is necessary to see and avoid other military aircraft.
- At 10NM past Point B, make an advisory call for Tombstone West 1 MOA and VR-263 traffic on 351.4. At 20NM past Point B, make an advisory call for Tombstone West 2 MOA on 378.1. At 10NM past Point C, return to 351.4 and remain on this frequency until clear of the Tombstone MOA.
- Noise Sensitive Area. .5NM N of D. Avoid N31-44-40 W109-50-00 by 1NM or 1200'AGL.
- Santa Margarita Ranch is a noise sensitive area 1.5NM N of Route Centerline between Points F-G at (N31-40.5 W111-35.1).

- At 10NM past B make advisory call for Tombstone West 1 MOA on 351.4. At 20NM past Point B make an advisory call for Tombstone West 2 MOA on 378.1. At 10NM past Point C return to 351.4 and remain on this frequency until clear of the Tombstone MOA.
- Dynamite plant located at N31-53-50 W110-14-30 (North of D-E).
- From E to 15NM past E maintain 6500'MSL.
- At 15NM past E make advisory call on 264.8 for Fuzzy MOA.
- From Point F to Range Entry Monitor 379.4. Call each alpha point (example: call sign, VR-259 Golf). Extensive A-10 LATN traffic conducted throughout area weekdays.
- This route is characterized by mountainous terrain's. Critical climb points exist between B-D, C-D.
- Route crosses general aviation corridor between IP, (H) and target (I). Watch for traffic entering and departing AJO airport.
- For Alternate Entry between D and E, aircraft awaiting entry time should hold VFR hemispherical altitude between 7500'-9500'MSL to avoid noise impact on Santa Rita Abbey.
- Border patrol flies light aircraft at very low altitude in vicinity of F-G.
- This route crosses numerous other VR routes. The See and Avoid concept is paramount at all times.
- Scheduling this route does not automatically grant permission to enter R-2301E, R-2304 or R-2305. Obtain clearance to enter these restricted areas if necessary from appropriate Scheduling Agency (Luke AFB Command Post).
- Avoid all forest fires/smoke areas by at least 5NM/5000'AGL. Extensive U.S. Forest Service aerial tanker/helicopter activity from 1 April-1 August. Minimum altitude 500'AGL. Use extreme caution near forest service heliport, 14NM past Point C.
- Minimum altitude on any MTR traversing the Tohono O'Odham Indian Reservation (West of Point F) is 500'AGL.
- This route is closed to casual users on weekends unless they have an established range time on the Goldwater Range Complex or a mission essential requirement to fly this route.
- Avoid overflight of any structure on the Tohono O'Odham nation (west of Point F) by a minimum of one nautical mile below 3000'AGL.
- Do not use and person, vehicle or structure as a casual target for dry practice weapons delivery. Avoid multiple crossings of highways to the maximum extent possible.

FSS's Within 100 NM Radius:

PRC

VR-260

ORIGINATING ACTIVITY: 162 FW/OGC, 1660 E. El Tigre Way, Tucson, AZ 85706-8086 DSN 844-6371 C520-295-6371.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------------|----|--------------|---------------------------|
| Cross at 10 AGL to or as assigned | A | TUS 034/31 | N32°27.00' W110°29.00' |
| 03 AGL B 15 AGL to | B | CIE 354/33 | N32°35.00' W109°41.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 03 AGL B 15 AGL to | C | CIE 008/20 | N32°21.00' W109°37.00' |
| 03 AGL B 70 AGL to | D | CIE 215/17 | N31°51.00' W110°00.00' |
| 03 AGL B 15 AGL to | E | TUS 159/21 | N31°45.00' W110°51.00' |
| 65 MSL to | F | TUS 205/28 | N31°43.00' W111°15.00' |
| 05 AGL B 30 AGL to | G | TUS 216/40 | N31°39.00' W111°30.00' |
| 05 AGL B 30 AGL to | H | TFD 162/74 | N31°39.00' W111°46.00' |
| 05 AGL B 30 AGL to | I | TFD 181/68 | N31°47.00' W112°13.00' |
| 05 AGL B 30 AGL to | J | GBN 155/60 | N31°58.00' W112°27.00' |
| 05 AGL B 30 AGL to | K | GBN 153/52 | N32°07.00' W112°27.00' |
| 05 AGL B 30 AGL to | L | GBN 169/47 | N32°10.00' W112°43.00' |
| 05 AGL B 30 AGL to | M | GBN 207/39 | N32°28.00' W113°11.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to E and F to M.

ROUTE WIDTH - 2NM either side of centerline from A to D; 1NM right and 2NM left of centerline from D to E; 2NM right and 1NM left of centerline from E to F; 3NM either side of centerline from F to K; 2NM either side of centerline from K to L; 2NM right and 3NM left of centerline from L to M.

Special Operating Procedures:

- (1) Alternate Entry: B, C, D, E, F, G and H.
- (2) Alternate Exit: B, C, D, E, F, G and H.
- (3) Route segment from Point B to Point E transit airspace used by civil Unmanned Aerial Vehicle (UAV) flights, trailed by manned chase aircraft, operating VFR during daylight from 6000'MSL to 15000'MSL. VFR traffic advisories are available from Albuquerque Center on 327.15 and 269.3.
- (4) Numerous birds vicinity of Wilcox Playa (between C-E).
- (5) Dynamite plant at N31-53-50 W110-14-30 (north of D-E).
- (6) Remain north of peak 9453 at N31-42-00 W110-51-00 (south of E).
- (7) Climb to 1000' AGL 10NM prior to Point E.
- (8) Prior to Point F, make an advisory call on 264.8 for the Fuzzy MOA.
- (9) From Point F to range entry monitor 379.4. Call each alpha point (example: Call sign, VR-260, Golf). Extensive A-10 LATN traffic conducted throughout area weekdays.
- (10) This route is characterized by mountainous terrain. critical climb points exist between A-B, C-D and D-E.
- (11) For Alternate Entry between D and E, aircraft awaiting entry time should hold VFR hemispherical altitude between 7500'-9500'MSL to avoid noise impact on Santa Rita Abbey.
- (12) Border patrol flies light aircraft at very low altitude in vicinity of F-L.
- (13) VR-260 crosses or shares portions of VR-244, VR-259, VR-263, and VR-1233, which are not deconflicted for the pilot. Extra vigilance is necessary to see and avoid other military aircraft.
- (14) This route crosses numerous other VR routes. The See and Avoid concept is paramount at all times.

- (15) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304 or R-2305. Obtain clearance to enter these restricted areas if necessary from appropriate scheduling agency (Luke AFB Command Post).
- (16) Avoid all forest fires/smoke areas by at least 5NM and/or 5000'AGL. Extensive U.S. Forestry Service aerial tanker/helicopter activity from 1 April to 1 August.
- (17) Fly south around Baboquivari Peak. Avoid the peak by 2NM.
- (18) Minimum altitude on any MTR traversing the Tohono O'Odham Indian Reservation is 500'.
- (19) This route is closed to casual users on weekends unless they have an established range time on the Goldwater Range Complex or a mission essential requirement to fly this route.
- (20) Avoid overflight of any structure on the Tohono O'Odham Nation (west of Point F) by a minimum of one nautical mile below 3000'AGL.
- (21) Do not use any person, vehicle or structure as a casual target for dry practice weapons delivery. Avoid multiple crossings of highways to the maximum extent possible.
- (22) Santa Margarita Ranch is a noise sensitive area 1.5 NM N of Route centerline between Points G-H at (N31-40.5 W111-35.1).

FSS's Within 100 NM Radius:
PRC

VR-263

ORIGINATING ACTIVITY: 162 FW/OGC, 1660 E. El Tigre Way, Tucson, AZ, 85706-6086 DSN 844-6371 C520-295-6371.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------|----|--------------|---------------------------|
| Cross at 10 AGL to then | A | TUS 035/29 | N32°25.00' W110°30.00' |
| 01 AGL B 15 AGL to | B | CIE 354/33 | N32°35.00' W109°41.00' |
| 01 AGL B 15 AGL to | C | SSO 021/25 | N32°37.00' W108°58.90' |
| 01 AGL B 15 AGL to | D | SSO 058/42 | N32°29.60' W108°28.20' |
| 01 AGL B 15 AGL to | E | SSO 084/45 | N32°10.80' W108°22.70' |
| 01 AGL B 15 AGL to | F | SSO 113/55 | N31°43.00' W108°23.50' |
| 01 AGL B 15 AGL to | G | SSO 140/44 | N31°36.80' W108°52.00' |
| 01 AGL B 15 AGL to | H | CIE 129/21 | N31°45.00' W109°30.20' |
| 85 MSL to | I | CIE 202/44 | N31°25.90' W110°14.60' |
| 105 MSL to | J | CIE 205/49 | N31°23.00' W110°21.20' |
| 01 AGL B 15 AGL to | K | TUS 146/45 | N31°23.50' W110°35.30' |
| 01 AGL B 15 AGL to | L | TUS 160/34 | N31°31.70' W110°49.50' |

VR ROUTES

| | | | |
|--------------------|---|------------|---------------------------|
| 85 MSL to | M | TUS 180/42 | N31°24.30' W111°04.70' |
| 01 AGL B 30 AGL to | N | TUS 213/48 | N31°32.10' W111°34.40' |
| 05 AGL B 30 AGL to | O | TUS 223/54 | N31°34.50' W111°46.50' |
| 05 AGL B 30 AGL to | P | TUS 243/69 | N31°47.00' W112°13.00' |
| 05 AGL B 30 AGL to | Q | TUS 253/79 | N31°58.00' W112°27.00' |
| 05 AGL B 30 AGL to | R | TUS 259/78 | N32°07.00' W112°27.00' |
| 05 AGL B 30 AGL to | S | GBN 169/47 | N32°10.00' W112°43.30' |
| 05 AGL B 30 AGL to | T | GBN 207/39 | N32°28.00' W113°11.00' |

TERRAIN FOLLOWING OPERATIONS: Permissible on all legs except between H-J and L-M.

ROUTE WIDTH - 2 NM left and 4 NM right of centerline from A to B; 8 NM left and 10 NM right of centerline from B to D; 10 NM either side of centerline from D to E; 15 NM either side of centerline from E to F; 8 NM right and 15 NM left of centerline from F to G; 10 NM right and 13 NM left of centerline from G to H; 2 NM either side of centerline from H to J; 2 NM left and 1 NM right of centerline from J to L; 4 NM right and 2 NM left of centerline from L to M; 4 NM right and 1 NM left of centerline from M to O; 1 NM either side of centerline from O to P; 3 NM either side of centerline from P to R; 2 NM either side of centerline from R to S; 2 NM right and 3 NM left of centerline from S to T.

Special Operating Procedures:

- All Points are Alternate Entry/Exit Points.
- All route reservations and briefings including night and weekend flights must be made during weekdays from 1200Z to 2200Z.
- B-C crosses Morenci MOA. Issue advisory call on 319.3 and remain on frequency until clear.
- E-G transits Tombstone East MOA. Provide advisory call on 286.4 and remain on frequency until clear.
- G-I transits Tombstone West MOA. Provide advisory call on 351.4.
- M-N transits Fuzzy MOA. Provide advisory call on 264.8 and remain on frequency until clear.
- N-S transits Sells LATN Area. Numerous A-10 aircraft conduct location training at random points throughout area. Make advisory call and maintain listening watch on 379.4 until clear.
- Segment H-I and L-M highly noise sensitive. Adhere to 8500' MSL crossing restriction. Flights will be level at 8500' MSL within 2 NM after turn Points H and L.
- Route terminates near R-2301E/R-2304. Restricted area entry through prior scheduling only.
- Route segment A-B passes through the Jackal MOA, which is not routinely scheduled in conjunction with route use. Therefore, MARSAs are in effect through scheduling. Flights will give an advisory call on 379.5 and remain on this frequency until clear.
- Route segments A-B, B-C, F-H and M-N are coincident with Jackal MOA, Morenci, Tombstone and Ruby/Fuzzy MOA's. These route segments are designated as maneuver areas

when the applicable MOA has been scheduled and activated for this purpose. MARSAs will be with aircraft operating in the above MOA's.

- Tie-in FSS: TUS, PRC.
- Avoid airports between the following points by 1500' or 3 NM:
 - A-B Lightning Ranch (N32-25.7 W110-04.5);
 - B-C Lazy B Ranch (N32-33.0 W109-04.3);
 - E-F Playas Ranch (N31-56.0 W108-32.0).
- Avoid the following Noise Sensitive Areas by 1500' or 3 NM:
 - B-C Town of Duncan;
 - J-K Parker Canyon Lake;
 - K-L Town of Patagonia and Patagonia Lake.
- Avoid uncharted microwave towers 150'-200' in height at the following locations: South of Point C (N32-32.3 W108-58.0); Near Point D (N32-29.9 W108-29.5); D-E (N32-22.5 W108-31.5) (N32-21.5 W108-25.0); E-F (N32-04.0 W108-17.5).
- Segment H-I transits VFR TACAN penetration arc to Libby AAF. Contact Libby tower on 284.75 at Point H for advisories.
- Flight Hazard: R-2312, centered 4 NM north of Point I is a tethered balloon, from surface to 14,999' MSL.
- Extremely noise sensitive area from P to T (Tohono O'Odham Reservation). Maintain a minimum of 500' AGL and avoid all villages by 1 NM horizontally or 3000' AGL.
- Avoid the following by 2 NM and 2000' AGL:
 - Ranch between Points A and B (N32-28.0 W109-55.0)
 - Buenos Aires Ranch near Point N (N31-34.0 W111-30.0)
 - White Signal, NM Subdivision NE Point D (N32-31.6 W108-21.2)

FSS's Within 100 NM Radius:

PRC

VR-267

ORIGINATING ACTIVITY: 355 OSS/OSOA, 3895 S. 6th St. Suite 200, Davis-Monthan AFB, AZ 85707 DSN 228-4680, C520-228-4680.

SCHEDULING ACTIVITY: 355 OSS/OSOSO, Davis-Monthan AFB, AZ 85707 1500-2300Z Mon-Fri, no earlier than one duty day prior and NLT 2 hr prior to entry. DSN 228-5777/5330, C520-228-5777/5330.

HOURS OF OPERATION: 1300-0530Z

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------------|----|--------------|---------------------------|
| at or above 10 AGL or as assigned | A | TUS 034/29 | N32°26.00' W110°30.00' |
| 03 AGL B 15 AGL to | B | TUS 018/55 | N32°53.00' W110°22.00' |
| 03 AGL B 60 MSL to | C | TUS 354/62 | N33°07.00' W110°47.00' |
| 10 AGL B 15 AGL to | D | TFD 036/16 | N33°04.00' W111°40.00' |
| 10 AGL B 15 AGL to | E | GBN 064/13 | N33°00.00' W112°25.00' |
| 03 AGL B 15 AGL to | F | GBN 278/18 | N33°04.00' W113°00.00' |

10 AGL B 15 AGL to G GBN 259/33 N32°59.00'
W113°19.00'
03 AGL B 15 AGL to H GBN 230/35 N32°42.00'
W113°18.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline from A to D; 1 NM north and 2 NM south of centerline from D to E; 2 NM north and 1 NM south of centerline from E to F; 2 NM either side of centerline from F to H.

Special Operating Procedures:

- (1) Alternate Entry: B, C, D, E, F and G.
- (2) Alternate Exit: B, C, D, E, F and G.
- (3) Route passes through Restricted Area R2310A between Points C and D. Aircrews must check NOTAM for restricted area status within 48 hours of use. Aircrews cannot penetrate R2310A when active. When R2310 is inactive, remain left (south) of centerline while transiting R2310 due to frequent unscheduled small arms range firing.
- (4) Remain well clear of Estrella Sailport located north of D-E segment. This leg is 1000'AGL minimum.
- (5) First one-half of route traverses rugged terrain. Critical climb point between A-B.
- (6) A-B transits Jackal Low MOA.
- (7) Passing D, be alert for light aircraft at Casa Grande Airport.
- (8) Passing E, be alert for light aircraft at Gila Bend Airport.
- (9) VR-267 crosses or shares portions of VR-223, VR-231, VR-239, VR-241, VR-242, VR-243, VR-244, and VR-245, and IR-218, which are not deconflicted for the pilot. Extra vigilance is necessary to see and avoid other military aircraft.
- (10) IR-218 crosses from the north to south 6 NM west of Painted Rock Dam.
- (11) IR-218 crosses from east to west 7 NM south of Agua Caliente.
- (12) Scheduling this route does not automatically grant permission to enter R-2301E, R-2334 or R-2305. Obtain clearance to enter these restricted areas, if necessary, from appropriate scheduling agency (Luke AFB Command Post).
- (13) Avoid all forest fires/smoke areas by at least 5 NM and/or 5000' AGL. Extensive US. Forestry Service Aerial Tanker/Helicopter activity from 1 April to 1 August.
- (14) Twelve NM prior to G, use caution for hang-gliders on right edge of route in the area of Oatman Mountain (towers 1838'). Hang-glide activity significant on weekends. Please note VR-267 minimum altitude F-G is 1000' AGL.
- (15) Do not overfly trailer parks or other residential areas at Christmas, Arizona (left side of course 3NM short of Point C). Fly around Christmas on the right side of route centerline.

FSS's Within 100 NM Radius:

PRC, RNO

VR-268

ORIGINATING ACTIVITY: 355 OSS/OSOA, 3895 S. 6th St. Suite 200, Davis-Monthan AFB, AZ 85707 DSN 228-4680, C520-228-4680.

SCHEDULING ACTIVITY: 355 OSS/OSOSO, Davis-Monthan AFB, AZ 85707 1500-2300Z Mon-Fri, no earlier than one duty day prior and NLT 2 hr prior to entry. DSN 228-5777/5330, C520-228-5777/5330.

HOURS OF OPERATION: 1300-0530Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------|----|--------------|---------------------------|
| at or above 10 AGL as assigned | A | TUS 034/29 | N32°26.00' W110°30.00' |
| 03 AGL B 15 AGL to | B | TUS 018/55 | N32°53.00' W110°22.00' |
| 03 AGL B 60 MSL to | C | TUS 354/62 | N33°07.00' W110°47.00' |
| 10 AGL B 15 AGL to | D | TFD 036/16 | N33°04.00' W111°40.00' |
| 10 AGL B 15 AGL to | E | GBN 064/13 | N33°00.00' W112°25.00' |
| 03 AGL B 15 AGL to | F | TFD 242/37 | N32°43.00' W112°37.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline from A to D; 2 NM left and 1 NM right of centerline from D to E; 2 NM either side of centerline from E to F.

Special Operating Procedures:

- (1) Alternate Entry: B, C, D and E.
- (2) Alternate Exit: B, C, D and E.
- (3) Route passes through Restricted Area R2310A between Points C and D. Aircrews must check NOTAM for restricted area status within 48 hours of use. Aircrews cannot penetrate R2310A when active. When R2310 is inactive, remain left (south) of centerline while transiting R2310 due to frequent unscheduled small arms range firing.
- (4) Remain well clear of Estrella Sailport located north of D-E segment. This leg is 1000' AGL minimum.
- (5) First one-half of route traverse rugged terrain. Critical climb point between A-B.
- (6) A-B transits Jackal Low MOA.
- (7) Passing D, be alert for light aircraft at Casa Grande Airport.
- (8) Passing E, be alert for light aircraft at Gila Bend Airport.
- (9) VR-268 crosses or shares portions of VR-223, VR-239, VR-241, VR-242, and VR-244, which are not deconflicted for the pilot. Extra vililance is necessary to see and avoid other military aircraft.
- (10) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304 or R-2305. Obtain clearance to enter these restricted areas, if necessary, from appropriate scheduling agency (Luke AFB Command Post).
- (11) Avoid all forest fires/smoke areas by at least 5 NM and/or 5000' AGL. Extensive US. Forestry Service Aerial Tanker/Helicopter activity from 1 April to 1 August.
- (12) From Estrella to East Tactical Range entry Point be alert for rotary wing aircraft below 500'AGL.
- (13) Do not overfly trailer parks or other residential areas at Christmas, AZ. (left side of course 3 NM short of Point C). Fly around Christmas on the right side of the route centerline.

VR ROUTES

FSS's Within 100 NM Radius:

DMN, PRC

VR-269

ORIGINATING ACTIVITY: 355 OSS/OSOA, 3895 S. 6th St. Suite 200, Davis-Monthan AFB, AZ 85707 DSN 228-4680, C520-228-4680.

SCHEDULING ACTIVITY: 355 OSS/OSOSO, Davis-Monthan AFB, AZ 85707 1500-2300Z Mon-Fri, no earlier than one duty day prior and NLT 2 hr prior to entry. DSN 228-5777/5330, C520-228-5777/5330.

HOURS OF OPERATION: 1300-0530Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------------------|----|--------------|---------------------------|
| at or above 10 AGL as assigned. | A | TUS 034/29 | N32°26.00' W110°30.00' |
| 03 AGL B 15 AGL to | B | TUS 018/55 | N32°53.00' W110°22.00' |
| 03 AGL B 60 MSL to | C | TUS 354/62 | N33°07.00' W110°47.00' |
| 10 AGL B 15 AGL to | D | TFD 036/16 | N33°04.00' W111°40.00' |
| 10 AGL B 15 AGL to | E | GBN 064/13 | N33°00.00' W112°25.00' |
| 03 AGL B 15 AGL to | F | GBN 278/18 | N33°04.00' W113°00.00' |
| 03 AGL B 15 AGL to | G | GBN 222/15 | N32°49.00' W112°55.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline from A to D; 2 NM left and 1 NM right of centerline from D to E; 1 NM left and 2 NM right of centerline from E to F; 2 NM either side of centerline from F to G.

Special Operating Procedures:

- (1) Alternate Entry: B, C, D, E and F.
- (2) Alternate Exit: B, C, D, E and F.
- (3) Route passes through Restricted Area R2310A between Points C and D. Aircrews must check NOTAM for restricted area status within 48 hours of use. Aircrews cannot penetrate R2310A when active. When R2310 is inactive, remain left (south) of centerline while transiting R2310 due to frequent unscheduled small arms range firing.
- (4) Remain well clear of Estrella Sailport located north of D-E segment. This leg is 1000' AGL minimum.
- (5) First one-half of route traverse rugged terrain. Critical climb point between A-B.
- (6) A-B transits Jackal Low MOA.
- (7) Passing D, be alert for light aircraft at Casa Grande Airport.
- (8) Passing E, be alert for light aircraft at Gila Bend Airport.
- (9) VR-269 crosses or shares portions of VR-223, VR-239, VR-241, VR-242, and VR-244, which are not deconflicted for the pilot. Extra vigilance is necessary to see and avoid other military aircraft.

- (10) Scheduling this route does not automatically grant permission to enter R-2301E, R-2304 or R-2305. Obtain clearance to enter these restricted areas, if necessary, from appropriate scheduling agency (Luke AFB Command Post).
- (11) Avoid all forest fires/smoke areas by at least 5 NM and/or 5000' AGL. Extensive US. Forestry Service Aerial Tanker/Helicopter activity from 1 April to 1 August.
- (12) Do not overfly trailer parks or other residential areas at Christmas, AZ (left side of course 3 NM short of Point C). Fly around Christmas on the right side of the route centerline.

FSS's Within 100 NM Radius:

PRC, RNO

VR-288

ORIGINATING ACTIVITY: 452 OSS/OSK, March ARB, CA 92518 DSN 447-4376, C909-655-4376.

SCHEDULING ACTIVITY: 452 OSS/OSAA, March ARB, CA 92518 DSN 447-4404/2422, C909-655-4404/2422.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| As assigned to | A | IPL 274/16 | N32°50.00' W115°49.00' |
| SFC B 10 MSL to | B | IPL 263/17 | N32°47.00' W115°51.00' |
| SFC B 30 MSL to | C | IPL 262/30 | N32°48.00' W116°06.00' |
| SFC B 32 MSL to | D | TRM 144/14 | N33°25.00' W116°03.00' |
| SFC B 28 MSL to | E | TRM 108/19 | N33°28.00' W115°50.00' |
| SFC B 15 MSL to | F | IPL 352/28 | N33°13.00' W115°27.00' |
| SFC B 15 MSL to | G | IPL 345/19 | N33°04.00' W115°31.00' |
| SFC B 10 MSL to | H | IPL 307/15 | N32°57.00' W115°42.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Minimum altitude is 300' AGL.
- (2) Minimum altitude between F and G is 1000' AGL.
- (3) Environmental survey valid for C-17 only.
- (4) Tie-in FSS: Prescott (PRC).
- (5) Alternate Entry: G.
- (6) VR-288 is block scheduled with VR-289, VR-296, VR-299 and VR-1211. Users requesting VR-288 will be assigned, and authorized use of all five of these routes for the period of time required. Users requesting routes which have been previously assigned will be referred to the authorized user for coordination and deconfliction.
- (7) This route MARSAs through (See and Avoid) from entry to exit point.

- (8) CAUTION; Route coincides with or crosses other VR and IR routes.
- (9) Numerous other MTRs cross or are coincident with VR-288. See FLIP AP/1B Charts, IFR/VFR Wall Planning Charts and appropriate Sectional/Enroute Low Altitude. (See and Avoid) applies.
- (10) Scheduling this route does not automatically grant permission to enter restricted areas. Contact the appropriate scheduling activity for entry clearance.
- (11) Contact VR-288 scheduling agency as far in advance as possible, but no later than one day in advance by 0200Z++.
- (12) CAUTION: Frequent VFR fixed wing and helicopter traffic along entire route.
- (13) CAUTION: A potential head-on conflict exists with IR-217 and VR-289 between Points C and D and with IR-217 and VR-1266 between Points D and E.

FSS's Within 100 NM Radius:

HHR, RAL, SAN

VR-289

ORIGINATING ACTIVITY: 452 OSS/OSK, March ARB, CA 92518 DSN 447-4376, C909-655-4376.

SCHEDULING ACTIVITY: 452 OSS/OSAA, March ARB, CA 92518 DSN 447-4404/2422, C909-655-4404/2422.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| As assigned to | A | GFS 142/14 | N34°55.00' W115°04.00' |
| SFC B 40 MSL to | B | GFS 206/22 | N34°51.00' W115°28.00' |
| SFC B 45 MSL to | C | GFS 190/40 | N34°31.00' W115°31.00' |
| SFC B 35 MSL to | D | TNP 062/10 | N34°09.00' W115°34.00' |
| SFC B 40 MSL to | E | TNP 110/24 | N33°53.00' W115°23.00' |
| SFC B 40 MSL to | F | TNP 143/28 | N33°41.00' W115°34.00' |
| SFC B 35 MSL to | G | TRM 099/23 | N33°29.00' W115°44.00' |
| SFC B 25 MSL to | H | TRM 096/8 | N33°35.00' W116°00.00' |
| SFC B 30 MSL to | I | IPL 296/36 | N33°08.00' W116°03.00' |
| SFC B 10 MSL to | J | IPL 296/31 | N33°05.00' W115°59.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Minimum altitude is 300'AGL.
- (2) Environmental survey valid for C-17 only.
- (3) Tie-in-FSS: Prescott (PRC).

- (4) Alternate Entry: G and I.
- (5) VR-289 is block scheduled with VR-288, VR-296, VR-299 and VR-1211. Users requesting VR-289 will be assigned, and authorized use of all five of these routes for the period of time required. Users requesting routes which have been previously assigned will be referred to the authorized user for coordination and deconfliction.
- (6) This route MARSAs through (See and Avoid) from entry to exit point.
- (7) CAUTION: Route coincides with or crosses other VR and IR routes.
- (8) Numerous other MTRs cross or are coincident with VR-289. See FLIP AP/1B Charts, IFR/VFR Wall Planning Charts and appropriate Sectional/Enroute Low Altitude Charts, (See and Avoid) applies.
- (9) Scheduling this route does not automatically grant permission to enter restricted areas. Contact the appropriate Scheduling Activity for entry clearance.
- (10) Contact VR-289 Scheduling Agency as far in advance as possible, but no later than one day in advance by 0200Z++.
- (11) CAUTION: Frequent VFR fixed wing and helicopter traffic along entire route
- (12) CAUTION: A potential head-on conflict exists with VR-288 between Points H and I.

FSS's Within 100 NM Radius:

HHR, PRC, RAL, RNO, SAN

VR-296

ORIGINATING ACTIVITY: 452 OSS/OSK, March ARB, CA 92518 DSN 447-4376, C909-655-4376.

SCHEDULING ACTIVITY: 452 OSS/OSAA, March ARB, CA 92518 DSN 447-4404/2422, C909-655-4404/2422.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| As assigned to | A | GFS 142/14 | N34°55.00' W115°04.00' |
| SFC B 40 MSL to | B | PKE 279/22 | N34°15.00' W115°05.00' |
| SFC B 35 MSL to | C | PKE 338/1 | N34°07.00' W114°41.00' |
| SFC B 32 MSL to | D | PKE 090/24 | N34°00.00' W114°13.00' |
| SFC B 25 MSL to | E | BLH 154/11 | N33°25.00' W114°43.00' |
| SFC B 25 MSL to | F | BLH 280/30 | N33°48.00' W115°18.00' |
| SFC B 40 MSL to | G | TRM 070/30 | N33°41.00' W115°34.00' |
| SFC B 35 MSL to | H | TRM 099/23 | N33°29.00' W115°44.00' |
| SFC B 20 MSL to | I | TRM 113/28 | N33°21.00' W115°42.00' |
| SFC B 10 MSL to | J | IPL 322/24 | N33°07.00' W115°42.00' |
| SFC B 10 MSL to | K | IPL 309/18 | N32°59.00' W115°43.00' |

VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Minimum altitude is 300' AGL.
- (2) Environmental survey valid for C-17 only.
- (3) Tie-in FSS: Prescott (PRC).
- (4) Alternate Entry: D and J.
- (5) Alternate Exit: H.
- (6) VR-296 is block scheduled with VR-288, VR-289, VR-299 and of VR-1211. Users requesting VR-296 will be assigned, and authorized use of, all five of these routes for the period of time required. Users requesting routes which have been previously assigned will be referred to the authorized user for coordination and deconfliction.
- (7) This route MARSAs through (See and Avoid) from entry to exit point.
- (8) CAUTION: Route coincides with or crosses other VR and IR routes.
- (9) Numerous other MTRs cross or are coincident with VR-296. See FLIP AP/1B Charts, IFR/VFR Wall Planning Charts and appropriate Sectional/Enroute Low Altitude Charts. (See and Avoid) applies.
- (10) Scheduling this route does not automatically grant permission to enter restricted areas. Contact the appropriate Scheduling Activity for entry clearance.
- (11) Contact VR-296 scheduling agency as far in advance as possible, but no later than one day in advance by 0200Z++.
- (12) CAUTION: Frequent VFR fixed wing and helicopter traffic along entire route.
- (13) CAUTION: A potential head-on conflict exists with VR-1265 between Points E and F.

FSS's Within 100 NM Radius:

HHR, PRC, RAL, RNO, SAN

VR-299

ORIGINATING ACTIVITY: 452 OSS/DOT, March Fld, CA 92518 DSN 447-3846, C909-655-3846.

SCHEDULING ACTIVITY: 452 OSS/DOT, March Fld, CA 92518 DSN 447-4404/2422, C909-655-4404/2422.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | EED 091/7 | N34°44.00' W114°20.00' |
| 03 AGL B 40 MSL to | B | EED 098/46 | N34°28.00' W113°37.00' |
| 03 AGL B 39 MSL to | C | PKE 090/24 | N34°00.00' W114°13.00' |
| 03 AGL B 19 MSL to | D | BLH 136/11 | N33°26.00' W114°39.00' |
| 03 AGL B 30 MSL to | E | BLH 178/29 | N33°07.00' W114°53.00' |
| 03 AGL B 32 MSL to | F | BZA 270/12 | N32°49.00' W114°50.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 03 AGL B 15 MSL to | G | IPL 071/12 | N32°46.00' W115°16.00' |
| 03 AGL B 15 MSL to | H | IPL 348/10 | N32°55.00' W115°30.00' |
| 03 AGL B 10 MSL to | I | IPL 307/15 | N32°57.00' W115°42.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Environmental survey valid for C-17 only.
- (2) Tie-in FSS Prescott (PRC).
- (3) The portion of this route between F and H goes in the opposite direction of route VR-291. The scheduling office has deconflicted all known traffic, however, extra caution in this area is advised.
- (4) CAUTION: High volume rotary-wing and fixed wing traffic SFC to 1000' AGL between Points D and H throughout the entire year.
- (5) Alternate Entry: C and G.
- (6) Alternate Exit: D and E.
- (7) VR-299 is scheduled with VR-288, VR-289, VR-296 and VR-1211. Users requesting VR-299 will be assigned, and authorized use of all five of these routes for the period of time required. Users requesting routes which have been previously assigned will be referred to the authorized user for coordination and deconfliction.
- (8) This route MARSAs through (See and Avoid) from entry to exit point.
- (9) CAUTION: Route coincides with or crosses other VR and IR routes.
- (10) Numerous other MTRs cross or are coincident with VR-299. See FLIP AP/1B, IFR/VFR Wall Planning Charts and appropriate Sectional/Enroute Low Altitude Charts. (See and Avoid) applies.
- (11) Scheduling this route does not automatically grant permission to enter restricted areas. Contact the appropriate scheduling activity for entry clearance.
- (12) Contact VR-299 scheduling agency as far in advance as possible, but no later than one day in advance by 0200Z++.
- (13) CAUTION: Frequent VFR fixed wing and helicopter traffic along entire route.

FSS's Within 100 NM Radius:

HHR, PRC, RAL, RNO, SAN

VR-316

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | BOI 231/50 | N43°14.00' W117°15.00' |
| 01 AGL B 100 MSL to | B | REO 354/36 | N43°11.00' W117°41.00' |
| 01 AGL B 100 MSL to | C | REO 299/42 | N43°07.50' W118°30.00' |
| 01 AGL B 100 MSL to | D | REO 267/75 | N42°55.00' W119°30.00' |
| 01 AGL B 100 MSL to | E | DSD 124/88 | N43°05.50' W120°04.50' |
| 01 AGL B 100 MSL to | F | DSD 104/61 | N43°42.00' W120°07.00' |
| 01 AGL B 105 MSL to | G | DSD 086/81 | N43°55.00' W119°30.00' |
| 01 AGL B 105 MSL to | H | BOI 261/123 | N43°47.70' W119°00.00' |
| 01 AGL B 100 MSL to | I | BOI 258/101 | N43°40.20' W118°30.00' |
| 01 AGL B 90 MSL to | J | BOI 254/81 | N43°33.50' W118°03.00' |
| 01 AGL B 90 MSL to | K | BOI 252/52 | N43°31.50' W117°22.50' |
| 01 AGL B 80 MSL to | L | BOI 250/42 | N43°31.00' W117°08.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 6 NM either side of centerline from A to B; 10 NM either side of centerline from B to D; 5 NM right and 10 NM left of centerline from D to E; 5 NM either side of centerline from E to F; 10 NM either side of centerline from F to H; 5 NM right and 10 NM left of centerline from H to I; 10 NM either side of centerline from I to K; 4 NM either side of centerline from K to L.

Special Operating Procedures:

- (1) Coordinate with 124 TRG Operations (Mon-Fri, 0730-1600 local) (DSN 941-5303/5315) for use.
- (2) Route crosses IR-300 between A to B, K to L and IR-304 between B to C and I to J.
- (3) MARSAs (See and Avoid) conditions apply while operating on this route.
- (4) VR-316 will not be scheduled when VR-319 is in use.
- (5) Pilot shall avoid all airports by 3 NM laterally or 1500' vertically.
- (6) Uncharted airport (N43-12.0 W117-38.5). Overfly at or above 1500' AGL or avoid by 3 NM.
- (7) Uncharted airport (N43-18.0 W117-53.0). Overfly at or above 1500' AGL or avoid by 3 NM.
- (8) Malheur Lake Bird Flyway (N43-11-00 W119-02-00, N43-13-30 W118-47-30, N42-54-00 W118-40-00, N42-51-00 W118-55-30, N42-59-30 W118-53-00). Overfly at or above 1000' AGL.
- (9) Ballance Noise Sensitive Area (N43-14-30 W120-02-30). Overfly at or above 1000' AGL or avoid by 1 NM.
- (10) Chase Noise Sensitive Area (N43-11 W120-01). Overfly at or above 1000' AGL or avoid by 1 NM.
- (11) Uncharted tower 160' AGL (N43-49-15 W118-50-45).
- (12) Uncharted airport (N43-45-30 W118-28-00). Overfly at 1500' AGL or avoid by 3 NM.

- (13) Riverside Sensitive Area (N43-32-00 W118-09-00). Overfly buildings at or above 1000' AGL or avoid by 1 NM.
- (14) All turn points are authorized Alternate Entry and Exit points.
- (15) Bird habitat (N43-55.0 W119-00.0). Avoid by 1500' AGL or 3 NM.
- (16) Bird habitat (N43-44.0 W119-49.0). Avoid by 1500' AGL or 3 NM.
- (17) Note: 1 minute prior to Stinking Water Creek (N43-44.0 W118-26.0), make call on UHF 255.4 with (call sign, 1 minute out, Stinking Water) for route deconfliction.

FSS's Within 100 NM Radius:

BOI, MMV.

VR-319

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| As assigned to | A | BOI 250/42 | N43°31.00' W117°08.50' |
| 01 AGL B 80 MSL to | B | BOI 252/52 | N43°31.50' W117°22.50' |
| 01 AGL B 90 MSL to | C | BOI 254/81 | N43°33.50' W118°03.00' |
| 01 AGL B 90 MSL to | D | BOI 258/101 | N43°40.20' W118°30.00' |
| 01 AGL B 100 MSL to | E | BOI 261/123 | N43°47.70' W119°00.00' |
| 01 AGL B 105 MSL to | F | DSD 086/81 | N43°55.00' W119°30.00' |
| 01 AGL B 105 MSL to | G | DSD 104/61 | N43°42.00' W120°07.00' |
| 01 AGL B 100 MSL to | H | DSD 124/88 | N43°05.50' W120°04.50' |
| 01 AGL B 100 MSL to | I | REO 267/75 | N42°55.00' W119°30.00' |
| 01 AGL B 100 MSL to | J | REO 299/42 | N43°06.50' W118°30.00' |
| 01 AGL B 100 MSL to | K | REO 354/36 | N43°11.00' W117°41.00' |
| 01 AGL B 100 MSL to | L | BOI 231/50 | N43°14.00' W117°15.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 10 NM either side of centerline from B to D; 5 NM left and 10 NM right of centerline from D to E; 10 NM either side of centerline from E to G; 5 NM either side of centerline from G to H; 5 NM left and 10 NM right of centerline from H to I; 10 NM either side

VR ROUTES

of centerline from I to K; 6 NM either side of centerline from K to L.

Special Operating Procedures:

- (1) Coordinate with 124 TRG operations (Mon-Fri, 0730-1600 local) (DSN 941-5303/5315) for use.
- (2) Route crosses IR-300 between A to B, K to L and IR-304 between D to E and J to M.
- (3) MARSAs (See and Avoid) conditions apply while operating on this route.
- (4) VR-319 will not be scheduled when VR-316 is in use.
- (5) Pilot shall avoid all airports by 3 NM laterally or 1500' vertically.
- (6) Riverside sensitive area (N43-32-30 W118-09-30). Overfly buildings at or above 1000' AGL or avoid by 3 NM.
- (7) Uncharted airport (N43-45-30 N118-28-00). Overfly at 1500' AGL or avoid by 3 NM.
- (8) Uncharted tower 160' AGL (N43-49-15 W118-50-45).
- (9) Chase Noise Sensitive Area (N43-11 W120-01). Overfly at or above 1000' AGL or avoid by 1 NM.
- (10) Balance Noise Sensitive Area (N43-14-30 W120-02-30). Overfly at or above 1000' AGL or avoid by 1 NM.
- (11) Malheur Lake Bird Flyway (N43-11-00 W119-02-00, N43-13-30 W118-47-30, N42-54-00 W118-40-00, N42-51-00 W118-55-30, N42-59-30 W118-53-00) Overfly at or above 1000' AGL.
- (12) Uncharted airport (N43-18-00 W117-53-00). Overfly at or above 1500' AGL or avoid by 3 NM.
- (13) Uncharted airport (N43-12-00 W117-38-30). Overfly at or above 1500' AGL or avoid by 3 NM.
- (14) All turn points are authorized alternate Entry and Exit points.
- (15) Bird habitat (N43-55-00 W119-00-00). Avoid by 1500' AGL or 3 NM.
- (16) Bird habitat (N43-44-00 W119-49-00). Avoid by 1500' AGL or 3 NM.
- (17) Note: 1 minute prior to Stinking Water Creek (N43-44-00 W118-26-00) make call on UHF 255.4 with (call sign, 1 minute out, Stinking Water) for route deconfliction.

FSS's Within 100 NM Radius:

BOI, MMV

VR-331

ORIGINATING ACTIVITY: 62 OSS/OSK, 1172 Levitow Blvd., McChord AFB, WA 98438 DSN 382-3615, C253-982-3615.

SCHEDULING ACTIVITY: 62 OSS/OSO, 100 Main St., McChord AFB, WA 98438 DSN 382-9925, C253-982-9925. Duty hrs 0800-1700 local Mon-Fri only, next day req accepted NLT 1200 local. Other times ctc McChord Command Post DSN 382-2635, C253-982-2635.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|---------------------------|
| Cross at 60 MSL to or as assigned. | A | HQM VORTAC | N46°56.82' W124°08.96' |
| 60 MSL to or as assigned. | B | HQM 240/16 | N46°53.80' W124°32.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 02 AGL B 46 MSL to | C | HQM 240/36 | N46°50.00' W125°00.00' |
| 02 AGL B 46 MSL to | X | HQM 216/28 | N46°41.00' W124°42.00' |
| 02 AGL B 46 MSL to | D | HQM 138/28 | N46°31.20' W123°53.00' |
| 05 AGL B 46 MSL to | E | OLM 195/29 | N46°34.00' W123°18.00' |
| 05 AGL B 46 MSL to | F | OLM 136/31 | N46°30.20' W122°35.40' |
| 03 AGL B 46 MSL to | G | OLM 099/20 | N46°49.00' W122°29.00' |
| 03 AGL B 15 AGL to | H | TCM 156/8 | N47°01.00' W122°28.00' |
| 03 AGL B 15 AGL to | I | TCM VORTAC | N47°08.86' W122°28.50' |

TERRAIN FOLLOWING OPERATIONS: 300' AGL modified contour will be conducted in VMC only. After crossing Point B, descend to 300' AGL can be initiated. All structures on the route will be avoided by a minimum of 500' horizontally.

ROUTE WIDTH - 4 NM either side of centerline from A to F; 5 NM either side of centerline from F to I.

Special Operating Procedures:

- (1) All radius must fall within route width.
- (2) Authorized aircraft C-17 and C-130.
- (3) Primary Entry Point A. Alternate Entry Points D and G.
- (4) Primary Exit Point I. There are no Alternate Exit Points.
- (5) Route Communications:
 - (a) Contact Seattle Center 128.3 or 269.0 prior to Point A for clearance.
 - (b) Between Points A and D, monitor Seattle Center 128.3 or 269.0.
 - (c) Between Points D and F, monitor Seattle Center 124.2 or 317.6.
 - (d) Between Points F and I, monitor Seattle Center 126.5 or 391.9.
 - (e) Prior to Point G contact McChord Tower on 124.8 or 259.3 and give intentions after exit.
- (6) Speed:
 - (a) Maintain 250 KCAS or below until route entry.
 - (b) Route may be scheduled at 240 or 300 knots ground speed. Indicate desired speed when scheduling. MARSAs established via coordinated scheduling.
 - (c) Maximum speed on route: 360 KCAS.
- (7) Caution:
 - (a) Deconflict traffic on IR-344 with scheduling activity.
 - (b) Remain on or North of centerline for 5NM either side of Point D. Avoid Oysterville, WA (N46-33.0 W124-02.0) by 2000'AGL or 2NM.
 - (c) Avoid the town of Pe Ell, WA (Point E) by 2NM.
 - (d) Avoid communications antenna 360'AGL (N46-32.0 W123-01.0) by 500' or 1NM.
 - (e) Intense North/South VFR traffic in the vicinity of Interstate 5 between Points E and F.
 - (f) Be alert for parachuting in the vicinity of Toledo-Winlock AFLD.
 - (g) Avoid Mink farm at (N46-33.0 W122-41.8) by 2000'AGL or 2NM.
 - (h) Remain West of Mayfield Lake just East of Point F.
 - (i) Remain below 1500'AGL G-I.

- (8) When practicable avoid by 1500'AGL or 3NM.
 - (a) Martin AFLD (Pvt) (N46-31-09 W124-01-57)
 - (b) Curtis AFLD (Pvt) (N46-35-25 W123-06-16)
 - (c) Harris AFLD (Pvt) (N46-30-53 W122-47-31)
 - (d) Kadwell AFLD (Pvt) (N46-32-15 W122-43-04)
 - (e) Toledo-Winlock AFLD (N46-28-38 W122-48-25)
 - (f) Burnt Ridge AFLD (Pvt) (N46-35-07 W122-37-34)
 - (g) Bear Canyon AFLD (Pvt) (N46-35-56 W122-29-01)
 - (h) Cougar Mtn AFLD (Pvt) (N46-50-49 W122-31-19)
 - (i) Flying B AFLD (Pvt) (N46-52-39 W122-36-04)
 - (j) Western AFLD (Pvt) (N46-55-30 W122-33-14)
 - (k) Asplund AFLD (Pvt) (N46-53-30 W122-22-50)
 - (l) Shady Acres AFLD (N47-04-13 W122-22-16)
 - (m) Spanaway AFLD (N47-05-13 W122-25-53)
- (9) Crews should forward any observes hazard to aviation or concerns to the 62d AW Airspace Manager at DSN 382-4057 or C253-982-4057.

FSS's Within 100 NM Radius:

MMV, SEA

VR-410

ORIGINATING ACTIVITY: 140th Wing /Airspace Office, Buckley AFB, Aurora Co, 80011-9546 DSN 847-9470/9471, C720-847-9470/9471/9955.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0800-1600 local Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 05 AGL B 85 MSL to | A | PUB 245/27 | N38°12.00' W104°59.00' |
| 05 AGL B 85 MSL to | B | PUB 278/23 | N38°26.00' W104°53.00' |

ROUTE WIDTH - 3 NM left and 3 NM right of centerline from A to B.

Special Operating Procedures:

- (1) At Point A , maintain 1000' AGL minimum until crossing Hwy 50, then 500' AGL minimum while in Airburst C MOA.
- (2) Contact Airburst Range on UHF 251.25 before departing Point A.

FSS's Within 100 NM Radius:

DEN

VR-411

ORIGINATING ACTIVITY: 140th Wing /Airspace Office, Buckley AFB, Aurora Co, 80011-9546 DSN 847-9470/9471, C720-847-9470/9471/9955.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0800-1600 local Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 05 AGL B 85 MSL to | A | PUB 278/23 | N38°26.00' W104°53.00' |
| 05 AGL B 85 MSL to | B | PUB 245/27 | N38°12.00' W104°59.00' |

ROUTE WIDTH - 3 NM left and 3 NM right of centerline from A to B.

Special Operating Procedures:

- (1) Exit Airburst C MOA and cross Hwy 50 at and maintain 1000' AGL minimum until reaching Point B.
- (2) If multiple attacks are to be flown, stay on UHF 251.25, Airburst Range and advise entry on to VR-410.
- (3) If departure from Airburst Range is planned, contact Pueblo Approach on UHF 290.5.

FSS's Within 100 NM Radius:

DEN

VR-413

ORIGINATING ACTIVITY: 140th Wing /Airspace Office, Buckley AFB, Aurora Co, 80011-9546 DSN 847-9470/9471, C720-847-9470/9412/9955.

SCHEDULING ACTIVITY: 140th Wing /Airspace Office, Buckley AFB, Aurora Co, 80011-9546 DSN 847-9470/9471, C720-847-9470/9412/9955. Closed to non 140th WG aircraft.

HOURS OF OPERATION: 0800-1600 local Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| Cross at 120 MSL to | A | BRK 295/17 | N39°07.00' W104°55.00' |
| 05 AGL B 110 MSL to | B | BRK 253/39 | N38°54.00' W105°28.00' |
| 05 AGL B 130 MSL to | C | HBU 074/55 | N38°29.00' W105°52.00' |
| 05 AGL B 140 MSL to | D | HBU 087/48 | N38°18.00' W106°02.00' |
| 05 AGL B 140 MSL to | D1 | ALS 332/36 | N37°55.75' W106°00.71' |
| 05 AGL B 140 MSL to | D2 | ALS 347/29 | N37°49.98' W105°48.93' |
| 05 AGL B 110 MSL to | E | ALS 038/13 | N37°29.30' W105°35.80' |
| 05 AGL B 170 MSL to | F | ALS 050/33 | N37°36.00' W105°12.00' |
| 05 AGL B 120 MSL to | G | PUB 203/42 | N37°44.00' W104°57.00' |
| 05 AGL B 80 MSL to | H | PUB 189/23 | N37°56.00' W104°37.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to H.

VR ROUTES

ROUTE WIDTH - 3 NM left and 3 NM right of centerline from A to H.

Special Operating Procedures:

- (1) Vontact Badger Mountain FSS on 122.2 entering the route.
- (2) High density student training in the vicinity of Point A. USAF Academy Flight Training Area for 9500' MSL to 12,000' MSL. Expect T-3A, powered and non-powered gliders and parachute activity. Remain at 3000' AGL until 5 NM past A, then 1500' AGL minimum to B.
- (3) Avoid ranches (N38-54.5 W105-31.5, N38-47.0 W105-35.0) by 2 NM and 1000' AGL.
- (4) Alternate Entry: Pionts B, C, D, E, F, and G.
- (5) Alternate Exit: Pionts B, C, D, E, F, and G.
- (6) Minimum altitude prior to H east of Interstate 25 and west of railroad track is 1000' AGL.
- (7) Contact Pueblo Approach Control at point H on 290.5 for further clearance.

FSS's Within 100 NM Radius:

DEN

VR-510

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/7746, C605-988-5745/5746.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight Hours Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| Cross at 100 MSL to or as assigned. Then descend to | A | LNK 352/47 | N41°42.00' W96°43.00' |
| 01 AGL B 50 MSL to | B | ONL 100/83 | N41°59.00' W96°56.00' |
| 01 AGL B 50 MSL to | C | FSD 181/90 | N42°10.00' W97°08.00' |
| 01 AGL B 50 MSL to | D | FSD 179/46 | N42°53.00' W96°56.00' |
| 01 AGL B 50 MSL to | E | FSD 230/27 | N43°25.00' W97°19.00' |
| 01 AGL B 50 MSL to | F | FSD 269/24 | N43°42.00' W97°19.00' |
| 01 AGL B 50 MSL to | G | HON 167/20 | N44°06.00' W98°17.00' |
| 01 AGL B 50 MSL to | H | HON 218/40 | N43°59.02' W99°00.00' |
| 01 AGL B 50 MSL to | I | PIR 119/42 | N43°56.00' W99°25.00' |
| SFC B 90 MSL to | J | ONL 330/73 | N43°37.00' W99°16.00' |
| SFC B 90 MSL to | K | ONL 344/41 | N43°09.00' W98°47.00' |
| 55 MSL B 90 MSL to Climb to | L | ONL 360/36 | N43°04.00' W98°33.00' |

| | | | |
|------------|---|------------|------------|
| 90 MSL to | M | ONL 026/35 | N42°57.00' |
| Climb to | | | W98°13.00' |
| 100 MSL to | N | ONL 030/37 | N42°56.00' |
| | | | W98°09.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from C to K.

ROUTE WIDTH - 8 NM either side of centerline from A to L; 4 NM either side of centerline from L to N.

Special Operating Procedures:

- (1) Route is common with IR-509 between Points I and N.
- (2) Route conflicts with VR-540/541 between A and B, and IR-508/509/518, VR-1520/1521 between K and L.
- (3) Route is surveyed to 100' AGL. This altitude will not guarantee obstacle clearance throughout this route.
- (4) A minimum of 1000' AGL entire route width from Point A to N42-28 W97-02.
- (5) Avoid flights within 1500' AGL or 3NM of the Chamberlain Airport. Beginning and ending at N43-49 W99-10 to N43-49 W99-25 to N43-42 W99-25 to N43-42 W99-06.5.
- (6) Avoid the following Noise Sensitive Areas by a minimum of 1500' AGL or 1 NM: Farm N41-41 W96-44, feedlot N41-52.5 W96-57.5, ranch N43-44.5 W97-42.5, farm N44-11 W98-27, ranch N44-04 W98-25, ranch N44-10.5 W98-39.5, ranch N43-59 W99-08, ranch N43-57.3 W99-28.5, ranch N43-23 W99-05, ranch N43-06 W98-56, farm N43-01 W98-47, feedlot N44-00.5 W98-18.5.
- (7) Avoid flight within 1500' AGL or 3 NM of the Vermillion Airport.
- (8) Migratory birds along the rivers and lakes during spring and fall.
- (9) Alternate Entry: All points.
- (10) Alternate Exit: All points.

FSS's Within 100 NM Radius:

FOD, HON, OLU

VR-511

ORIGINATING ACTIVITY: 132 FW OG/CC (ANG), 3100 McKinley Ave, Des Moines, IA 50321-2799 DSN 256-8250 C515-256-8250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM, (2 hr prior notification required)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------------------|----|--------------|--------------------------|
| Cross at 100 MSL to or as assigned. | A | PWE 168/12 | N40°00.00' W96°10.50' |
| 15 AGL B 40 MSL to | B | PWE 168/20 | N39°52.00' W96°09.00' |
| 15 AGL B 40 MSL to | C | EMP 326/20 | N38°35.50' W96°19.50' |
| 15 AGL B 40 MSL to | D | EMP 248/23 | N38°12.00' W96°36.50' |
| 15 AGL B 40 MSL to | E | EMP 250/44 | N38°08.50' W97°02.50' |

| | | | |
|---------------------------------|---|------------|--------------------------|
| 15 AGL B 40 MSL to | F | SLN 145/38 | N38°22.00' W97°15.00' |
| 15 AGL B 40 MSL to | G | SLN 092/17 | N38°53.00' W97°16.00' |
| 15 AGL B 40 MSL to | H | SLN 057/17 | N39°03.00' W97°18.00' |
| 15 AGL B 40 MSL to | I | SLN 026/24 | N39°16.00' W97°20.00' |
| 15 AGL B 40 MSL to | J | SLN 014/33 | N39°26.50' W97°22.00' |
| 15 AGL B 40 MSL to | K | PWE 242/33 | N39°59.00' W96°51.50' |
| 15 AGL B 40 MSL to or above. | L | LNK 172/47 | N40°08.00' W96°45.50' |

| | | | |
|---------------------|---|------------|--------------------------|
| 15 AGL B 40 MSL to | B | PWE 242/33 | N39°59.00' W96°51.50' |
| 15 AGL B 40 MSL to | C | SLN 014/33 | N39°26.50' W97°22.00' |
| 15 AGL B 40 MSL to | D | SLN 026/24 | N39°16.00' W97°20.00' |
| 15 AGL B 40 MSL to | E | SLN 057/17 | N39°03.00' W97°18.00' |
| 15 AGL B 40 MSL to | F | SLN 092/17 | N38°53.00' W97°16.00' |
| 15 AGL B 40 MSL to | G | SLN 145/38 | N38°22.00' W97°15.00' |
| 15 AGL B 40 MSL to | H | EMP 250/44 | N38°08.50' W97°02.50' |
| 15 AGL B 40 MSL to | I | EMP 248/23 | N38°12.00' W96°36.50' |
| 15 AGL B 40 MSL to | J | EMP 326/20 | N38°35.50' W96°19.50' |
| 15 AGL B 40 MSL to | K | PWE 168/20 | N39°52.00' W96°09.00' |
| at or above 100 MSL | L | PWE 168/12 | N40°00.00' W96°10.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized B to K.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 8 NM either side of centerline from B to K (except 8 NM left and 20 NM right of centerline between H and I if aircraft are scheduled to conduct operations into R-3602); 4 NM either side of centerline from K to L.

Special Operating Procedures:

- (1) VR-511 is opposite direction traffic of VR-512. 132 FW will not schedule opposite and conflicting traffic at the same time.
- (2) Migratory birds along rivers and lakes during spring and fall.
- (3) Alternate Entry: C, D, E and F.
- (4) Alternate Exit: D, E, F and H.
- (5) Aircrews should be particularly vigilant of other military traffic. IR-502 in the vicinity of B to C and J to K. VR-533/534/535 in the vicinity of C to G, SR-618/619 in the vicinity of B to C.
- (6) Avoid the following route sensitive areas by a minimum of 1 NM: Havensville N39-31 W96-05, Onaga N39-29 W96-10, power plant N39-17 W96-06, farm N38-20.5 W96-30.5, farm N38-21 W97-20, farm N39-26 W97-21, mink farm N39-36 W97-23, mink farm N40-05 W96-50, home N39-14.4 W96-10.8, farm N39-38.7 W96-14.1.
- (7) Avoid flight within 3 NM of the Wamego, Hillsboro, Abilene, Clay Center and Washington Co Airports.

FSS's Within 100 NM Radius:
ICT, OLU

VR-512

ORIGINATING ACTIVITY: 132 FW OG/CC (ANG), 3100 McKinley Ave, Des Moines, IA 50321-2799 DSN 256-8250 C515-256-8250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM, 2hr prior notification required

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|------------|
| at or above 100 MSL | A | PWE 256/26 | N40°08.00' |
| Descend to | | | W96°45.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized from B to K.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 8 NM either side of centerline from B to K (except 20 NM left and 8 NM right of centerline between D and E if aircraft are scheduled to conduct operations into R-3602); 4 NM either side of centerline from K to L.

Special Operating Procedures:

- (1) VR-512 is opposite direction traffic of VR-511. 132 FW will not schedule opposite and conflicting traffic at the same time.
- (2) Aircrews should be particularly vigilant of other military traffic-IR-502 in the vicinity of B to C and J to K: VR-533/534/535 in the vicinity of F to J: SR-618, SR-619 in the vicinity of J to K.
- (3) When exiting at H, maintain VFR and climb within the route boundary to 10,000' MSL or above, then via flight plan route.
- (4) Alternate Entry: C and H.
- (5) Alternate Exit: D and H.
- (6) Avoid the following Noise Sensitive Areas by a minimum of 1 NM: Mink farm- N40-05 W96-50, mink farm N39-36 W97-23, farm N39-26 W97-21, farm N38-21 W97-20, farm N38-20.5 W96-30.5, power plant N39-17 W96-06, Onaga N39-29 W96-10, Havensville N39-31 W96-05W, home N39-14.4 W96-10.8, farm N39-38.7 W96-14.1.
- (7) Avoid flight within 3 NM of these airports: Washington Co, Clay Center, Abilene, Hillsboro and Wamego.

FSS's Within 100 NM Radius:
ICT, OLU

VR-531

ORIGINATING ACTIVITY: 184 ARW (Kansas ANG), McConnell AFB,KS 67221-9010 (1330-2215Z wkcd, sked rqr 2 hr 15 min prior low level entry time) DSN 743-7187, C316-759-7187.

VR ROUTES

Wkends, hol and non-duty days, Ctc McConnell AFB Opr DSN 743-6100 for patch 184th Duty Officer.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-1730 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | ICT 010/41 | N38°24.00' W97°20.00' |
| 01 AGL B 30 MSL to (maximum altitude S of RR from B to Minneapolis, KS is 06 AGL) | B | SLN 031/16 | N39°08.00' W97°25.00' |
| 06 AGL to | C | SLN 300/34 | N39°16.00' W98°12.00' |
| 01 AGL B 30 MSL to 01 AGL to but not including 10 AGL unless cleared to operate within Bison MOA by ATC to as assigned to | D | SLN 247/38 | N38°45.00' W98°24.00' |
| 01 AGL B 30 MSL to (Maneuver Area) Within area | E | SLN 220/30 | N38°35.00' W98°05.00' |
| 01 AGL B 100 MSL to Alternate Exit Route: | F | SLN 201/32 | N38°27.30' W97°56.00' |
| 01 AGL B 30 MSL to | B1 | SLN 031/16 | N39°08.00' W97°25.00' |
| 01 AGL B 30 MSL to | AC | SLN 053/35 | N39°13.00' W96°58.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM tapering down to 3 NM left and 5 NM right of centerline from A to B; 3 NM widening out to 5 NM left and 5 NM right of centerline from B to C; 5 NM either side of centerline from C to F; 6 NM left and 8 NM right of centerline from F to G.

Special Operating Procedures:

- (1) Alternate Exit: B1, E and AC.
- (2) Exit at E for entry to Bison MOA and if not scheduled for R-3601, avoid flight in Smoky MOA.
- (3) Exit via Alternate Exit route B to AC for entry into R-3602, Fort Riley.
- (4) Maneuver area will be used in conjunction with Smoky MOA for entry, exit and holding for R-3601.
- (5) Contact Smoky Hill range officer prior to E for entry into the maneuver area, Smoky MOA, and R-3601.
- (6) Route conflicts with VR-512, VR-532, VR-533, VR-534, VR-535 and IR-505. Conflicts will be avoided by MARSAs and scheduling through the scheduling activities.
- (7) Avoid the following Noise Sensitive Areas:
 - (a) All airports charted on the Wichita Sectional Chart by 1500 AGL/3 NM;
 - (b) Livestock feedlot 4 NM southeast of Roxbury, N38-30 W97-23;

- (c) Farm house by 1500' AGL/3 NM, N39-12 W97-45;
- (d) The town of Lorraine by 1500' AGL/5 NM, N38-34 W98-19.

(8) Minimum altitude 500' AGL entire route.

FSS's Within 100 NM Radius:

ICT, OLU

VR-532

ORIGINATING ACTIVITY: 184 ARW (Kansas ANG),McConnell AFB, KS 67221-9010 (1330-2215Z wkd, sked rqr 2 hr 15 min prior low level entry time) DSN 743-7187, C316-759-7187. Wkends, hol and non-duty days, Ctc McConnell AFB Opr DSN 743-6100 for patch 184th Duty Officer.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-1700 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| As assigned to | A | ICT 221/16 | N37°34.00' W97°50.00' |
| 01 AGL B 15 AGL to | B | HUT 219/46 | N37°29.00' W98°39.00' |
| 01 AGL B 15 AGL to | C | HUT 236/53 | N37°37.00' W98°56.00' |
| 01 AGL B 15 AGL to | D | HUT 243/50 | N37°44.00' W98°56.00' |
| 01 AGL B 15 AGL to Maneuver Area | E | HUT 252/48 | N37°52.00' W98°56.00' |
| 01 AGL B 15 AGL to | F | HYS 186/53 | N38°00.00' W99°35.00' |
| 01 AGL B 15 AGL to | G | HYS 223/18 | N38°40.00' W99°35.00' |
| 01 AGL B 15 AGL to End Maneuver Area | H | HYS 188/11 | N38°40.00' W99°21.00' |
| 01 AGL B 15 AGL to 01 AGL to but not including 10 AGL unless cleared to operate within Bison MOA then as assigned by ATC | I | HYS 130/14 | N38°40.00' W99°05.00' |
| 01 AGL B 15 AGL to | J | SLN 220/30 | N38°35.00' W98°05.00' |
| 01 AGL B 15 AGL to Maneuver Area | K | SLN 201/32 | N38°27.30' W97°56.00' |
| 01 AGL B 100 MSL to within area to L. Alternate Exit; E | L | SLN 227/18 | N38°45.00' W97°56.00' |
| 01 AGL B 15 AGL to | E1 | HUT 252/48 | N37°52.00' W98°56.00' |
| 01 AGL B 06 AGL to | AF | HUT 243/9 | N37°57.00' W98°07.00' |

01 AGL B 06 AGL to K1 HUT 351/27 N38°27.30'
(unless cleared higher W97°56.00'
by Hutchinson Apch
Ctl 325.8 then 01 AGL
B 15 AGL to Maneuver
Area)
01 AGL B 100 MSL to L1 HUT 351/45 N38°45.00'
within area to L1 W97°56.00'

(10) Avoid overflight of cattle farm by 3 NM/1000' coordinates
N38-44.5 W99-25.4.

FSS's Within 100 NM Radius:
ICT

VR-533

TERRAIN FOLLOWING OPERATIONS: Authorized
entire route.

ORIGINATING ACTIVITY: 184 ARW (Kansas
ANG),McConnell AFB, KS 67221-9010 (1330-2215Z wkd, sked rqr
2 hr 15 min prior low level entry time) DSN 743-7187,
C316-759-7187. Wkends, hol and non-duty days, Ctc McConnell
AFB Opr DSN 743-6100 for patch 184th Duty Officer.

ROUTE WIDTH - 5 NM either side of centerline from A to C;
5 NM right and 15 NM left of centerline from C to E; 5 NM
widening out to 15 NM right and 15 NM left of centerline from E
to F; 15 NM either side of centerline from F to G; 15 NM right
and 15 NM tapering down to 3 NM left of centerline from G to H;
15 NM tapering down to 8 NM right and 3 NM left of centerline
from H to I; 8 NM either side of centerline from I to K; 6 NM left
and 8 NM right of centerline from K to L; Alternate Exit-5 NM
either side of centerline from E1 to AF; 6 NM left and 8 NM right
of centerline from AF to L1

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local daily

Special Operating Procedures:

- (1) Alternate Entry: B, C, and D.
- (2) Alternate Exit: B, E, H, J and K.
- (3) Exit at J for entry into Bison MOA, or if not scheduled for R-3601.
- (4) Exit at K on alternate route if not scheduled for R-3601. Avoid flight in Smoky MOA.
- (5) Maneuver area will be used in conjunction with Smoky MOA for entry, exit, and holding for R-3601.
- (6) Contact Smoky Hill range officer prior to J for entry into maneuver area, Smoky MOA, and R-3601.
- (7) Route conflicts with VR-119, VR-138, VR-152, VR-536, VR-531 and IR-505.
- (8) Avoid the following Noise Sensitive Areas:
 - (a) All airports charted on the Wichita Sectional Chart by 1500' AGL/3 NM;
 - (b) Livestock feedlot 3 NM north of Pratt, N37-36 W98-43;
 - (c) Livestock feedlot 4 NM south of Sylvia, N37-54N 98-24;
 - (d) Farm 6 NM north of Bazine by 1500' AGL/5 NM, N38-33 W99-38;
 - (e) Farm 5 NM north of Otis by 1500' AGL/5 NM, N38-37.5 W99-02;
 - (f) Livestock feedlot, N38-47.5 W99-41.0;
 - (g) The town of Lorraine by 1500' AGL/5 NM, N38-34 W98-19;
 - (h) The town of Kinsley by 1500' AGL/5 NM, N37-55 W99-25;
 - (i) Farm, N38-37.5 W99-01.5;
 - (j) The town of Lacrosse by 1500' AGL/5 NM, 38-37.5N 99-01.5W;
 - (k) Feedlot at N37-33.0 W98-34.0;
 - (l) Feedlot at N37-44.0 W98-54.0;
 - (m) Feedlot at N37-55.0 W98-53.5;
 - (n) Feedlot at N38-29.0 W98-17.5;
 - (o) Feedlot at N37-31.5 W98-20.0;
 - (p) Feedlot at N37-30.5 W98-36.0;
 - (q) Feedlot at N37-46.0 W99-34.5;
 - (r) Feedlot at N38-09.5 W99-49.5;
 - (s) Feedlot at N38-13.0 W99-47.0.
- (9) Minimum altitude 500' AGL entire route.

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | ICT 084/40 | N37°44.00' W96°45.00' |
| 01 AGL to but not including 25 MSL | | | |
| 01 AGL B 25 MSL to | B | EMP 179/32 | N37°46.00' W96°13.00' |
| 01 AGL B 30 MSL to | C | EMP 262/8 | N38°17.50' W96°19.00' |
| 01 AGL B 30 MSL to | D | EMP 315/18 | N38°32.00' W96°22.00' |
| 01 AGL B 30 MSL to | E | EMP 290/33 | N38°33.00' W96°45.00' |
| 01 AGL B 30 MSL to | F | SLN 117/33 | N38°37.00' W97°02.00' |
| 01 AGL B 06 AGL or SFC B 30 MSL if cleared by Salina Apch Ctl prior to the town of Roxbury or the SLN 145 deg radial to | | | |
| 01 AGL B 06 AGL to | G | SLN 193/30 | N38°27.30' W97°50.00' |
| 01 AGL B 30 MSL to | H | SLN 201/32 | N38°27.30' W97°56.00' |
| 01 AGL B 100 MSL to within area to I. | I | SLN 227/18 | N38°45.00' W97°56.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized
entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B;
5 NM left and 5 NM tapering down to 2 NM right from B to C; 5
NM left and 2 NM tapering out to 5 NM right from C to D; 5 NM
either side of centerline from D to H; 6 NM left and 8 NM right of
centerline from H to I.

Special Operating Procedures:

- (1) Alternate Entry: B, C and E.
- (2) Alternate Exit: B, C, E and G.
- (3) Exit at G if not scheduled for R-3601, avoid flight within Smoky MOA.
- (4) Maneuver area will be used in conjunction with Smoky MOA for entry, exit, and holding for R-3601.

VR ROUTES

- (5) Contact Smoky Hill range officer prior to G for entry into the maneuver area, Smoky MOA, and R-3601.
- (6) Route conflicts with VR-512, VR-531, VR-534, and VR-535. Conflicts will be avoided by MARSAs and scheduling through the scheduling activities. Conflicts at R-3601 will be avoided through scheduling of Smoky Hill range times.
- (7) Avoid the following Noise Sensitive Areas:
 - (a) All airports on the Wichita and Kansas city Sectional Charts by 1500' AGL/3 NM;
 - (b) The town of Eureka by 1500' AGL/5 NM, N37-49 W96-18;
 - (c) Livestock feedlot 3 NM west of Burdick, N38-36 W96-54;
 - (d) Livestock feedlot 3 NM northwest of Romona, N38-36.5 W97-06.0;
 - (e) The town of Tampa, N38-33 W97-09;
 - (f) Farm, N38-30.0 W97-22.7;
 - (g) Livestock feedlot located 5 NM south of Dunlop, N38-30.0 W96-21.0;
 - (h) Livestock feedlot located 3 NM southwest of Dunlop, N38-32.5 W96-24.0;
 - (i) Livestock feedlot located 3 NM southeast of Wilsey, N38-35.0 W96-38.5;
 - (j) Livestock feedlot located 8 NM northwest of McPherson, N38-29.0 W97-47.0.
- (8) Minimum altitude 500' AGL entire route.

FSS's Within 100 NM Radius:

ICT

VR-534

ORIGINATING ACTIVITY: 184 ARW (Kansas ANG), McConnell AFB, KS 67221-9010 (1330-2215Z wkcd, sked rqr 2 hr 15 min prior low level entry time) DSN 743-7187, C316-759-7187. Wkends, hol and non-duty days, Ctc McConnell AFB Opr DSN 743-6100 for patch 184th Duty Officer.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0730-2000 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | ICT 119/33 | N37°25.00' W97°01.00' |
| 01 AGL B 30 MSL to 01 AGL to but not including 25 MSL | B | BVO 315/41 | N37°23.00' W96°32.00' |
| 01 AGL B 25 MSL to | C | EMP 202/33 | N37°49.00' W96°29.00' |
| 01 AGL B 30 MSL to | D | EMP 268/25 | N38°20.00' W96°40.00' |
| 01 AGL B 30 MSL to 01 AGL or B 06 AGL or SFC B 30 MSL by Salina Apch Ctl prior to the town of Roxbury or the SLN 145 deg radial | E | EMP 290/33 | N38°33.00' W96°45.00' |
| 01 AGL B 06 AGL to | F | SLN 193/30 | N38°27.30' W97°50.00' |

| | | | |
|---------------------------------------|---|------------|--------------------------|
| 01 AGL B 30 MSL to Maneuver Area | G | SLN 201/32 | N38°27.30' W97°56.00' |
| 01 AGL B 100 MSL to within area to H. | H | SLN 227/18 | N38°45.00' W97°56.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to G; 6 NM left and 8 NM right of centerline from G to H.

Special Operating Procedures:

- (1) Alternate Entry: D and E.
- (2) Alternate Exit: D, E and F.
- (3) Exit at F if not scheduled for R-3601, avoid flight within Smoky MOA.
- (4) Maneuver area will be used in conjunction with Smoky MOA for entry, exit, and holding for R-3601.
- (5) Contact Smoky Hill range officer prior to F for entry to maneuver area, Smoky MOA, and R-3601.
- (6) Route conflicts with VR-512, VR-531, VR-535. Conflicts will be avoided by MARSAs and scheduling through the scheduling activities. Conflicts at R-3601 will be avoided through scheduling of Smoky Hill range times.
- (7) Avoid the following Noise Sensitive Areas:
 - (a) All charted airports on the Wichita and Kansas City Sectional Charts by 1500' AGL/3 NM;
 - (b) Uncharted airfield at Atlanta, N37-26 W96-46;
 - (c) Uncharted airfield at Wilmont, N37-22 W96-53;
 - (d) Within 10 NM of Cottonwood Falls, N38-22 W96-33, below 1500 AGL;
 - (e) Livestock feedlot 3 NM west of Burdick, N38-36 W96-54;
 - (f) Livestock feedlot 3 NM northwest of Romona, N38-36.5 W97-06.0;
 - (g) The town of Tampa, N38-33 W97-09W;
 - (h) Livestock feedlot 4 NM southeast of Roxbury, N38-30 W97-23;
 - (i) Livestock feedlot, N38-29 W97-14;
 - (j) Farm, N38-30.0 W97-22.7;
 - (k) Livestock feedlot located 8 NM northwest of McPherson, N38-29.0 W97-47.0;
 - (l) Feedlot located 2 NM west of Lincolnville, N38-30.0 W96-59.0.
- (8) Minimum altitude is 500' AGL entire route.

FSS's Within 100 NM Radius:

ICT

VR-535

ORIGINATING ACTIVITY: 184 ARW (Kansas ANG), McConnell AFB, KS 67221-9010 (1330-2215Z wkcd, sked rqr 2 hr 15 min prior low level entry time) DSN 743-7187, C316-759-7187. Wkends, hol and non-duty days, Ctc McConnell AFB Opr DSN 743-6100 for patch 184th Duty Officer.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-1900 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | ICT 119/33 | N37°25.00' W97°01.00' |
| 01 AGL B 15 AGL to 01 AGL to but not including 25 MSL to C | B | BVO 315/41 | N37°23.00' W96°32.00' |
| 01 AGL B 25 MSL to 01 AGL to but not including 25 MSL | C | EMP 179/32 | N37°46.00' W96°13.00' |
| 01 AGL B 25 MSL to | D | EMP 172/25 | N37°52.00' W96°08.00' |
| 01 AGL B 15 AGL to | E | EMP 262/8 | N38°17.50' W96°19.00' |
| 01 AGL B 15 AGL to | F | EMP 268/25 | N38°20.00' W96°40.00' |
| 01 AGL B 15 AGL to 01 AGL B 06 AGL or SFC B 15 AGL if cleared by Salina Apch Ctl prior to G or the SLN 145 deg rad | G | SLN 150/34 | N38°24.00' W97°20.00' |
| 01 AGL B 06 AGL to | H | SLN 193/30 | N38°27.30' W97°50.00' |
| 01 AGL B 15 AGL to Maneuver Area | I | SLN 201/32 | N38°27.30' W97°56.00' |
| 01 AGL B 100 MSL to within area to J | J | SLN 227/18 | N38°45.00' W97°56.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM left and 15 NM right of centerline from B to D; 5 NM left and 15 NM tapering down to 2 NM right of centerline from D to E; 6 NM left and 8 NM right of centerline from E to J.

Special Operating Procedures:

- (1) Alternate Entry: C and F.
- (2) Alternate Exit: E, F, G and H.
- (3) Exit at H if not scheduled for R-3601, avoid flight within Smoky MOA.
- (4) Maneuver area will be used in conjunction with Smoky MOA for entry, exit, and holding for R-3601.
- (5) Contact Smoky Hill range officer prior to F for entry into the maneuver area, Smoky MOA, and R-3601.
- (6) Route conflicts with VR-512, VR-531, VR-533 and VR-534. Conflicts will be avoided by MARSAs and scheduling through the scheduling activities. Conflicts at R-3601 will be avoided through scheduling at Smoky Hill range times.
- (7) Avoid the following Noise Sensitive Areas:
 - (a) All charted airports on the Wichita and Kansas City Sectional Charts by 1500' AGL/3 NM;
 - (b) Uncharted airfield at Atlanta, N37-26 W96-46;
 - (c) Uncharted airfield at Wilmont, N37-22 W96-53;
 - (d) Livestock farm 3 NM northeast of Moline, N37-24 W96-20;
 - (e) The town of Howard by 1500 AGL/5 NM, N37-28 W96-16;
 - (f) Within 10 NM of Cottonwood Falls, N38-22 W96-33, below 1500' AGL;

- (g) Livestock feedlot 1 NM northeast of Strong City, N38-25 W96-33;
- (h) The town of Tampa, N38-33 W97-09;
- (i) Livestock feedlot 4 NM southeast of Roxbury, N38-30 W97-23;
- (j) The town of Durham, N38-29 W97-13;
- (k) Livestock feedlot, N38-28 W96-14;
- (l) Farm 3 NM northeast of Clements, N38-20 W96-44;
- (m) Farm N38-20.5 W96-30.5;
- (n) Livestock feedlot located 8 NM northwest of McPherson, N38-29.0 W97-47.0;
- (o) Feedlot located 2 NM northwest of Lincolnville, N38-30.0 W96-59.0;
- (p) 500' tower located 2 NM northwest of Marion, N38-22.0 W97-02.5.

(8) Minimum altitude is 500' AGL for entire route.

FSS's Within 100 NM Radius:

ICT

VR-536

ORIGINATING ACTIVITY: 184 ARW (Kansas ANG), McConnell AFB, KS 67221-9010 (1330-2215Z wkcd, sked rqr 2 hr 15 min prior low level entry time) DSN 743-7187, C316-759-7187. Wkends, hol and non-duty days, Ctc McConnell AFB Opr DSN 743-6100 for patch 184th Duty Officer.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-1700 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | HYS 188/11 | N38°40.00' W99°21.00' |
| 01 AGL B 100 MSL to | B | DDC 063/30 | N38°01.00' W99°24.00' |
| 01 AGL B 40 MSL to 01 AGL B 06 AGL until 5 NM east of Pratt Arpt then | C | HUT 243/50 | N37°44.00' W98°56.00' |
| 01 AGL B 40 MSL to 01 AGL B 06 AGL or 01 AGL B 32 MSL (if cleared by Hutchinson Apch Ctl 325.8 prior to D) to Maneuver Area | D | HUT 243/9 | N37°57.00' W98°07.00' |
| 01 AGL B 06 AGL to | E | HUT 351/27 | N38°27.30' W97°56.00' |
| 01 AGL B 100 MSL to within area to F | F | HUT 351/45 | N38°45.00' W97°56.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to E; 6 NM left and 8 NM right of centerline from E to F.

Special Operating Procedures:

- (1) Alternate Entry: C.

VR ROUTES

- (2) Alternate Exit: C and E.
- (3) Exit at E if not scheduled for R-3601, avoid flight into Smoky MOA.
- (4) Maneuver area will be used in conjunction with Smoky MOA for entry, exit, and holding for R-3601.
- (5) Contact Smoky Hill range officer prior to E for entry into the maneuver area, Smoky Hill MOA, and R-3601.
- (6) Route conflicts with VR-119, VR-138, VR-152 and VR-532. Conflicts will be avoided by MARSAs and scheduling through the scheduling activities. Conflicts at R-3601 will be avoided through scheduling of Smoky Hill range times.
- (7) Avoid the following Noise Sensitive Areas:
 - (a) All airports charted on the Wichita Sectional Chart by 1500' AGL/3 NM;
 - (b) Livestock feedlot 3 NM south of Rush Center, N38-26 W99-17;
 - (c) Livestock feedlot 4 NM south of Lewis, N37-45 W99-14;
 - (d) Livestock feedlot 3 NM northeast of Trousdale, N37-51 W99-02;
 - (e) Livestock feedlot 4 NM south of Sylvia, N37-45 W98-24;
 - (f) Livestock feedlot 4 NM east of Saxman, N38-17 W98-02;
 - (g) The town of Kinsley by 1500' AGL/5 NM, N37-55 W99-25;
 - (h) The town of Lacrosse by 1500' AGL/5 NM, N38-37.5 W99-01.5;
 - (i) Feedlot located 4 NM southwest of Macksville, N37-55.0 W98-55.0;
 - (j) Feedlot located at N37-44.0 W98-55.0;
 - (k) Feedlot located 8 NM southwest of Stafford, N37-50.0 W98-40.0.
- (8) Minimum altitude 500' AGL entire route.

FSS's Within 100 NM Radius:

ICT

VR-540

ORIGINATING ACTIVITY: 132 FW OG/CC (ANG), 3100 McKinley Ave, Des Moines, IA 50321-2799 DSN 256-8250 C515-256-8250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM, 2 hr prior notification required

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------------------|----|--------------|--------------------------|
| Cross at 100 MSL to or as assigned. | A | LNK 326/34 | N41°26.00' W97°03.00' |
| Descend to | | | |
| 15 AGL B 40 MSL to | B | LNK 343/43 | N41°38.40' W96°53.00' |
| 15 AGL B 40 MSL to | C | SUX 201/32 | N41°53.00' W96°41.00' |
| 15 AGL B 40 MSL to | D | SUX 127/39 | N41°53.00' W95°43.30' |
| 15 AGL B 40 MSL to | E | SUX 104/39 | N42°05.30' W95°31.40' |
| 15 AGL B 40 MSL to | F | FOD 196/28 | N42°11.40' W94°32.40' |

| | | | |
|--------------------|---|------------|--------------------------|
| 15 AGL B 40 MSL to | G | DSM 295/47 | N41°51.00' W94°32.40' |
| 15 AGL B 40 MSL to | H | LMN 315/42 | N41°09.00' W94°32.40' |
| 15 AGL B 40 MSL to | I | LMN 268/26 | N40°38.00' W94°32.40' |
| 15 AGL B 40 MSL to | J | PWE 060/45 | N40°30.40' W95°19.00' |
| 15 AGL B 40 MSL to | K | PWE 046/21 | N40°25.10' W95°51.00' |
| 15 AGL B 40 MSL to | L | LNK 120/25 | N40°39.40' W96°19.00' |
| 15 AGL B 40 MSL to | M | LNK 120/21 | N40°42.20' W96°23.30' |

TERRAIN FOLLOWING OPERATIONS: Authorized from B thru L.

ROUTE WIDTH - 4 NM either side of centerline from A to B; 8 NM either side of centerline from B to C; 7.5 NM left and 7 NM right of centerline from C to D; 8 NM either side of centerline from D to E; 6.5 NM either side of centerline from E to F; 8 NM either side of centerline from F to H; 5 NM either side of centerline from H to I; 4 NM left and 6 NM right of centerline from I to J; 2 NM left and from 6 NM right of J to N40-39-00 W95-51-18 J to K; 2 NM left of K to 8 NM left of M and from N40-39-00 W95-51-18 to 8 NM right of M, K to M.

Special Operating Procedures:

- (1) Route is designated for tactical low level formation, road reconnaissance, radar low level navigation, ground attack tactics, and aerial defense tactics.
- (2) VR-540 is opposite direction traffic of VR-541. 132 FW will not schedule opposite and conflicting traffic at the same time.
- (3) Aircrews should be aware of VR-510 crossing between B and C.
- (4) Avoid flight within 1500' AGL and 3 NM of the Tekamah, Denison, Carroll, Jefferson, Guthrie Center, Greenfield, Peterson and Auburn airports.
- (5) Cross Point L at 300 KIAS at 40 MSL to M and contact Lincoln Approach Control on 338.3.
- (6) Alternate Entry: E, F and I.
- (7) Alternate Exit: G and K.
- (8) Avoid the following Noise Sensitive Areas by a minimum of 1 NM: Feedlot N41-34 W96-05, farm N41-41 W96-44, feedlot N42-13 W95-09, house N42-10 W94-41, feedlot N42-08 W94-40, horse farm N42-01 W94-39, ranch N41-52 W94-33, chicken farm N41-51 W94-32, feedlot N41-44 W94-40, lake N41-42 W94-22, feedlot N41-08 W94-34, farm N41-08 W94-30, farm N41-06 W94-34, feedlot N41-02 W94-28, farm N41-53.8 W96-18.

FSS's Within 100 NM Radius:

FOD, COU, OLU

VR-541

ORIGINATING ACTIVITY: 132 FW OG/CC (ANG), 3100 McKinley Ave, Des Moines, IA 50321-2799 DSN 256-8250 C515-256-8250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM, 2 hr prior notification required

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | PWE 046/21 | N40°25.10' W95°51.00' |
| 15 AGL B 40 MSL to | B | PWE 060/45 | N40°30.40' W95°19.00' |
| 15 AGL B 40 MSL to | C | LMN 268/26 | N40°38.00' W94°32.40' |
| 15 AGL B 40 MSL to | D | LMN 315/42 | N41°09.00' W94°32.40' |
| 15 AGL B 40 MSL to | E | DSM 295/47 | N41°51.00' W94°32.40' |
| 15 AGL B 40 MSL to | F | FOD 196/28 | N42°11.40' W94°32.40' |
| 15 AGL B 40 MSL to | G | SUX 104/39 | N42°05.30' W95°31.40' |
| 15 AGL B 40 MSL to | H | SUX 127/39 | N41°53.00' W95°43.30' |
| 15 AGL B 40 MSL to | I | SUX 201/32 | N41°53.00' W96°41.00' |
| 15 AGL B 40 MSL to | J | LNK 343/43 | N41°38.40' W96°53.00' |
| 15 AGL B 40 MSL to | K | LNK 326/34 | N41°26.00' W97°03.30' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to J.

ROUTE WIDTH - N40-39-00 W95-51-18 to 6 NM left of B and 2 NM right of centerline from A to B; 6 NM left and 4 NM right of centerline from B to C; 5 NM either side of centerline from C to D; 8 NM either side of centerline from D to F; 6.5 NM either side of centerline from F to G; 8 NM either side of centerline from G to H; 7 NM left and 7.5 NM right of centerline from H to I; 8 NM either side of centerline from I to J; 4 NM either side of centerline from J to K.

Special Operating Procedures:

- (1) Route is designated for tactical low level formation, road reconnaissance, radar low level navigation, ground attack tactics, and aerial defense tactics.
- (2) VR-541 is opposite direction traffic of VR-540. 132 FW will not schedule opposite and conflicting traffic at the same time.
- (3) Aircrews should be aware of VR-510 crossing between I and J.
- (4) Avoid flight within 1500' AGL and 3 NM of the Tekamah, Denison, Carroll, Jefferson, Guthrie Center, Greenfield, Peterson and Auburn Airports.
- (5) Cross K at or above 100 MSL.
- (6) Alternate Entry: C, E, F and G.
- (7) Alternate Exit: D, E, F and G.
- (8) Avoid the following Noise Sensitive Areas by a minimum of 1 NM: Feedlot N41-02 W94-28, farm N41-06 W94-34, farm N41-08 W94-30, feedlot N41-08 W94-34, lake N41-42 W94-22, feedlot N41-44 W94-40, chicken farm N41-51 W94-32, ranch N41-52 W94-33, horse farm N42-01 W94-39, feedlot N42-08 W94-40, house N42-10 W94-41, feedlot N42-13 W95-09, farm N41-41 W98-44, feedlot N41-34 W96-05, farm N41-53.8 W96-18.

FSS's Within 100 NM Radius:

FOD, COU, OLU

VR-544

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/7746, C605-988-5745/5746.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM, 2 hours and 15 minutes prior to entry time required

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|--------------------------|
| SFC B 40 MSL to | A | SLN 208/19 | N38°40.00' W97°51.00' |
| SFC B 40 MSL to | B | SLN 235/33 | N38°40.00' W98°14.00' |
| SFC B 40 MSL to | C | SLN 252/38 | N38°48.00' W98°25.00' |
| SFC B 40 MSL to | D | SLN 270/36 | N39°00.00' W98°23.00' |
| SFC B 40 MSL to | E | SLN 280/36 | N39°06.00' W98°22.00' |
| SFC B 40 MSL to | F | TKO 176/31 | N39°18.00' W98°20.00' |
| SFC B 40 MSL to | G | TKO 176/18 | N39°30.00' W98°18.00' |
| SFC B 40 MSL to | H | TKO 062/22 | N39°55.00' W97°49.00' |
| SFC B 60 MSL to | I | TKO 052/36 | N40°05.50' W97°34.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 7 NM either side of centerline from A to B; 8 NM either side of centerline from B to D; 8 NM east and 4 NM west of centerline from D to E; 8 NM either side of centerline from E to I.

Special Operating Procedures:

- (1) All Points are Alternate Entry/Exit Points.
- (2) Route has the same lateral confines as IR-505 C to K. It is also the reverse of VR-545. VR-531 parallels and crosses route from A to F. Numerous VR routes in the vicinity of R-3601.
- (3) All route reservations and briefings including night and weekend flights must be made during workday hours (Normally Tue-Sat 0700-1730 local).
- (4) R-3601 cannot be entered unless the user has either a scheduled range period at R-3601, or when R-3601 is inactive. Contact R-3601/Smoky MOA scheduling prior to entering R-3601/Smoky MOA at DSN 743-7600, C785-827-9611/9612.
- (5) Route segment within Bison/Smoky MOA is designated for tactical low level aerial defense/offense tactics. Contact Bison/Smoky MOA scheduling prior to using this option at DSN 743-7600, C785-827-9611/9612.

VR ROUTES

- (6) Kansas City Center low altitude frequencies are north end: 322.4; south end: 363.2.
- (7) Route is surveyed to 200' AGL but obstacle clearance is not guaranteed.
- (8) Avoid all airports by at least 3 NM or 1500' AGL. Be especially concerned around Beloit Airport (N39-29.0 W98-08.0) and Rose Port Airport (N39-38.0 W98-22.0W). Note that the route boundaries go around the Lucas Airport (N39-04.0 W98-31.0).
- (9) Avoid livestock farms and towns by 1500' AGL or 1 NM. Be especially concerned for the feedlots at N39-59.0 W97-39.0, N39-48.0 W97-48.0, N39-39.0 W98-05.0, N39-40.0 W98-07.0 and N39-00.0 W98-27.0.
- (10) Uncharted towers located at: N39-53 W98-02, N39-47 W97-49, N38-51 W98-20, N38-51 W98-24, N38-40 W98-30, N38-52 W98-30, N38-51 W98-24.
- (11) Avoid the following Noise Sensitive Areas: N38-44 W97-58, Marquette N38-33 W97-50, Brockville N38-47 W97-52, Kanopolis Dam area N38-37 W97-58.
- (12) Migratory bird flyway in the spring and fall.

FSS's Within 100 NM Radius:

ICT, OLU

VR-545

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7754/7746, C605-988-5745/5746.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM, 2 hours and 15 minutes prior to entry time required

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|--------------------------|
| SFC B 60 MSL to | A | TKO 052/36 | N40°05.50' W97°34.00' |
| SFC B 40 MSL to | B | TKO 062/22 | N39°55.00' W97°49.00' |
| SFC B 40 MSL to | C | TKO 176/18 | N39°30.00' W98°18.00' |
| SFC B 40 MSL to | D | TKO 176/31 | N39°18.00' W98°20.00' |
| SFC B 40 MSL to | E | SLN 280/36 | N39°06.00' W98°22.00' |
| SFC B 40 MSL to | F | SLN 270/36 | N39°00.00' W98°23.00' |
| SFC B 40 MSL to | G | SLN 252/38 | N38°48.00' W98°25.00' |
| SFC B 40 MSL to | H | SLN 235/33 | N38°40.00' W98°14.00' |
| SFC B 40 MSL to | I | SLN 208/19 | N38°40.00' W97°51.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 8 NM either side of centerline from A to E; 8 NM east and 4 NM west of centerline from E to F; 8 NM either side of centerline from F to H; 7 NM either side of centerline from H to I.

Special Operating Procedures:

- (1) All points are Alternate Entry/Exit Points.
- (2) Route has the same lateral confines as IR-505 C to K. It is also the reverse route of VR-544. VR-531 parallels and crosses route from D to I. Numerous VR routes are in the vicinity of R-3601.
- (3) All route reservations and briefings including night and weekend flights must be made during workday hours (Normally Tue-Fri 0700-1730 local).
- (4) R-3601 cannot be entered unless the user has either a scheduled range period at R-3601, or when R-3601 is inactive. Contact R-3601/Smoky MOA scheduling prior to entering R-3601/Smoky MOA at DSN 743-7600, C785-827-9611/9612.
- (5) Route segment within Bison/Smoky MOA is designated for tactical low level aerial defense/offense tactics. Contact Bison/Smoky MOA scheduling prior to using this option at DSN 743-6700, C785-827-9611/9612.
- (6) Kansas City Center low altitude frequencies are north end: 322.4; south end: 363.2.
- (7) Route is surveyed to 200' AGL but obstacle clearance is not guaranteed.
- (8) Avoid all airports by at least 3 NM or 1500' AGL. Be especially concerned around Beloit Airport (N39-29.0 W98-08.0) and Rose Port Airport (N39-38.0 W98-22.0). Note that the route boundaries go around the Lucas Airport (39-04.0N W98-31.0).
- (9) Avoid livestock farms and towns by 1500' AGL or 1 NM. Be especially concerned for the feedlots at N39-59.0 W97-39.0, N39-48.0 W97-48.0, N39-39.0 W98-05.0 N39-40.0 W98-07.0 and N39-00.0 W98-27.0.
- (10) Uncharted towns located at: N39-53 W98-02, N39-47 W97-49, N38-51 W98-20, N38-51 W98-24, N38-40 W98-30, N38-52 W98-30, N38-51 W98-24.
- (11) Avoid the following noise sensitive areas: N38-44 W97-58, Maquette N38-33 W97-50, Brookville N38-47 W97-52, Kanopolis Dam area N38-37 W97-58.
- (12) Migratory bird flyway in the spring and fall.

FSS's Within 100 NM Radius:

ICT, OLU

VR-552

ORIGINATING ACTIVITY: 184 ARW (Kansas ANG), McConnell AFB, KS 67221-9010 (1330-2215Z wkd, sked rqr 2 hr 15 min prior low level entry time) DSN 743-7187, C316-759-7187. Wkends, hol and non-duty days, Ctc McConnell AFB Opr DSN 743-6100 for patch 184th Duty Officer.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| As assigned to | A | SLN 238/20 | N38°47.00' W98°01.00' |
| 05 AGL B 100 MSL to | B | SLN 204/37 | N38°24.00' W98°01.00' |
| 25 MSL to | C | HUT 198/9 | N37°52.00' W98°01.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 05 AGL B 30 MSL to | D | ICT 221/16 | N37°34.00' W97°50.00' |
| 05 AGL B 30 MSL to | E | PER 310/24 | N37°02.00' W97°30.00' |
| 05 AGL B 30 MSL to | F | PER 191/32 | N36°14.00' W97°21.00' |
| 05 AGL B 40 MSL to | G | TIK 007/26 | N35°51.00' W97°15.00' |
| 05 AGL B 45 MSL to | H | TIK 016/18 | N35°43.00' W97°14.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to B and C to H only. Reverse course orbit is authorized between A and B.

ROUTE WIDTH - On centerline to 9 NM left of centerline from A to B, excluding R-3601; 2 NM either side of centerline from B to C; 3 NM either side of centerline from C to H.

Special Operating Procedures:

- (1) Contact Hutchinson Approach/Tower (325.8) passing B for traffic information through the Hutchinson Terminal Area.
- (2) Alternate Entry: B, D and E.
- (3) Alternate Exit: B, C, D, E and F.
- (4) VR-552 is the reverse course of VR-152. Other intersecting routes: VR-119, VR-138, VR-532, VR-533, VR-534, VR-535, VR-536. Insure routes are deconflicted.
- (5) Avoid the following Noise Sensitive Areas:
 - (a) All airports charted on the Wichita and Dallas/Fort Worth Sectional Charts by 1500' AGL/3 NM;
 - (b) Farm at Point H, N35-43 W97-01;
 - (c) Livestock feedlot south of Langston, N35-56 W97-14;
 - (d) Airport at Perry, N36-18 W97-19;
 - (e) Farm near Billings, N36-23 W97-25;
 - (f) Farm, N37-12 W97-32;
 - (g) Livestock feedlot 1 NM south of Milan, N37-15 W97-41;
 - (h) Airfield 3 NM west of Cheny Reservoir Dam, N37-42 W97-54;
 - (i) Farm 3 NM east of Nickerson N38-09 W98-00;
 - (j) Farm 7 NM south of Little River, N38-17 W98-02;
 - (k) Kanopolis Reservoir Dam below 1000' AGL, N38-37 W97-52;
 - (l) Farm below 1000' AGL, N38-18 W98-02.
- (6) All heavy aircraft exit prior to H.
- (7) Check NOTAMs for rocket firings to FL 230 near Argonia, KS (N37-16.0 W97-44.0).

FSS's Within 100 NM Radius:

CT, MLC

VR-604

ORIGINATING ACTIVITY: 148TH FIG (ANG), Duluth Intl, MN 55811 DSN 825-7265.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1400-0500Z++ daily, 0500-1400Z++ allowable

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------------|----|--------------|--------------------------|
| Cross at 100 MSL to Descending to | A | HIB 070/88 | N47°45.00' W90°38.00' |
| 02 AGL B 100 MSL to | B | HIB 081/60 | N47°25.00' W91°15.00' |
| 05 AGL B 50 MSL to | C | HIB 221/17 | N47°06.00' W92°59.00' |
| 02 AGL B 50 MSL to | D | BRD 043/29 | N46°41.00' W93°31.00' |
| 05 AGL B 100 MSL to | E | BRD 096/24 | N46°17.00' W93°27.00' |
| 05 AGL B 50 MSL to | F | DLH 206/36 | N46°17.00' W92°39.00' |
| 05 AGL B 50 MSL to | G | DLH 203/26 | N46°25.00' W92°30.00' |
| 05 AGL B 50 MSL to | H | DLH 095/34 | N46°42.00' W91°24.00' |
| 05 AGL B 100 MSL to | I | IWD 254/41 | N46°21.00' W91°04.00' |
| 02 AGL B 50 MSL to | J | IWD 151/21 | N46°13.00' W89°53.00' |
| 02 AGL B 50 MSL to | K | IWD 065/25 | N46°42.00' W89°34.00' |
| 02 AGL B 50 MSL to | L | IWD 077/38 | N46°40.00' W89°13.00' |
| 02 AGL B 50 MSL to | M | CMX 223/25 | N46°51.00' W88°53.00' |
| 05 AGL B 50 MSL to | N | CMX 134/36 | N46°46.00' W87°50.00' |
| 05 AGL B 100 MSL to | O | IMT 303/20 | N45°59.00' W88°31.00' |
| 02 AGL B 50 MSL to | P | IMT 213/29 | N45°24.00' W88°28.00' |
| 05 AGL B 50 MSL to | Q | RHI 177/18 | N45°20.00' W89°27.00' |
| 05 AGL B 50 MSL to | R | RHI 237/27 | N45°24.00' W90°00.00' |
| 05 AGL B 50 MSL to | S | EAU 053/36 | N45°13.00' W90°46.00' |
| 02 AGL B 100 MSL to | T | DLH 127/64 | N46°05.00' W91°03.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to Q; 4 NM either side of centerline from Q to R; 5 NM either side of centerline from R to T.

Special Operating Procedures:

- (1) Scheduling available through the 148 FIG Mon-Sat to deconflict with VR-607.
- (2) All turn points are authorized entry and exit points.
- (3) Route designated for tactical low level formation, visual/radar low level navigation, ground attack tactics, and simulated weapons delivery.
- (4) Segments A to C are designated a maneuver area. Aircraft will delay 30 minutes between A and C.

FSS's Within 100 NM Radius:

GRB, PNM

VR ROUTES

VR-607

ORIGINATING ACTIVITY: 148TH FIG (ANG), Duluth Intl, MN 55811 DSN 825-7265.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1400-0500Z++ daily, 0500-1400Z++ allowable

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| Cross at 100 MSL to | A | DLH 127/64 | N46°05.00' W91°03.00' |
| 02 AGL B 100 MSL to | B | EAU 053/36 | N45°13.00' W90°46.00' |
| 05 AGL B 50 MSL to | C | RHI 237/27 | N45°24.00' W90°00.00' |
| 05 AGL B 50 MSL to | D | RHI 177/18 | N45°20.00' W89°27.00' |
| 05 AGL B 50 MSL to | E | IMT 213/29 | N45°24.00' W88°28.00' |
| 02 AGL B 50 MSL to | F | IMT 303/20 | N45°59.00' W88°31.00' |
| 05 AGL B 100 MSL to | G | CMX 134/36 | N46°46.00' W87°50.00' |
| 05 AGL B 50 MSL to | H | CMX 223/25 | N46°51.00' W88°53.00' |
| 02 AGL B 50 MSL to | I | IWD 077/38 | N46°40.00' W89°13.00' |
| 02 AGL B 50 MSL to | J | IWD 065/25 | N46°42.00' W89°34.00' |
| 02 AGL B 50 MSL to | K | IWD 151/21 | N46°13.00' W89°53.00' |
| 02 AGL B 50 MSL to | L | IWD 254/41 | N46°21.00' W91°04.00' |
| 05 AGL B 100 MSL to | M | DLH 095/34 | N46°42.00' W91°24.00' |
| 05 AGL B 50 MSL to | N | DLH 203/26 | N46°25.00' W92°30.00' |
| 05 AGL B 50 MSL to | O | DLH 206/36 | N46°17.00' W92°39.00' |
| 05 AGL B 50 MSL to | P | BRD 096/24 | N46°17.00' W93°27.00' |
| 05 AGL B 100 MSL to | Q | BRD 043/29 | N46°41.00' W93°31.00' |
| 02 AGL B 50 MSL to | R | HIB 221/17 | N47°06.00' W92°59.00' |
| 05 AGL B 50 MSL to | S | HIB 081/60 | N47°25.00' W91°15.00' |
| 02 AGL B 100 MSL to | T | HIB 070/88 | N47°45.00' W90°38.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 4 NM either side of centerline from C to D; 5 NM either side of centerline from D to T.

Special Operating Procedures:

- (1) Scheduling available through the 148 FIG Mon-Sat to deconflict with VR-604.
- (2) All turn points are authorized entry and exit points.
- (3) Route designated for tactical low level formation, visual/radar low level navigation, ground attack tactics, and simulated weapons delivery.
- (4) Segments I to L are designated a maneuver area. Aircraft will delay 30 minutes between I and L.

FSS's Within 100 NM Radius:

GRB, PNM

VR-615

ORIGINATING ACTIVITY: 183 FW/OSF, Capital Airport, Springfield, IL 62707 DSN 892-8202.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|--------------------------|
| Cross at 30 MSL to or as assigned. | A | SPI 149/37 | N39°19.00' W89°15.00' |
| 05 AGL B 30 MSL to | B | BIB 111/13 | N38°50.00' W88°14.00' |
| 05 AGL B 30 MSL to | C | RSV 131/7 | N38°56.00' W87°32.00' |
| 05 AGL B 30 MSL to | D | OOM 216/20 | N38°53.00' W86°52.00' |
| 05 AGL B 15 AGL to | E | OOM 150/11 | N38°59.00' W86°30.00' |
| 05 AGL B 15 AGL to | F | OOM 095/24 | N39°06.00' W86°06.00' |
| 05 AGL B 15 AGL to | G | OOM 075/26 | N39°15.00' W86°04.00' |

TERRAIN FOLLOWING OPERATIONS: None

ROUTE WIDTH - 5 NM either side of centerline from A to D; 1 NM left and 2 NM right of centerline from D to E; 2 NM either side of centerline from E to G.

Special Operating Procedures:

- (1) Aircraft will not enter route at D unless scheduled into R-3401 A/B. Aircraft entering/exiting at D avoid R-3404, 4 NM south of D when below 2800' MSL.
- (2) Leg F to G collocated with VR-1617 with deconfliction affected through coordinated scheduling between scheduling/originating agencies.
- (3) Route is to be used day VFR only with 3000' ceiling and 5 NM visibility to enter.
- (4) Minimum altitude 500' AGL with hard altitude of 1500' AGL leg F to G. F to G noise sensitive.
- (5) Contact 183 FW/OSF DSN 892-8202/8203 for route booking and briefing.
- (6) Point D is an Alternate Entry/Exit Point.
- (7) Minimum altitude 2500' MSL within 1 NM Lake Greenwood (Point D).

FSS's Within 100 NM Radius:

COU, DAY, HUF, IKK, LOU, STL

VR-619

ORIGINATING ACTIVITY: Jefferson Range JFAC-IN-DET2, 1661 W. Niblo Rd., Madison, IN 47250 C812-689-7295 DSN 724-1116.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset Tue-Sun, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | TTH 156/14 | N39°16.00' W87°08.00' |
| 05 AGL B 30 MSL to | B | OOM 207/27 | N38°45.00' W86°53.00' |
| 05 AGL B 60 MSL to | C | OOM 192/36 | N38°33.00' W86°47.00' |
| 05 AGL B 30 MSL to | D | OOM 181/54 | N38°15.00' W86°39.00' |
| 03 AGL B 30 MSL to | E | ABB 284/26 | N38°42.00' W86°10.00' |
| 03 AGL B 50 MSL to | F | ABB 336/16 | N38°50.00' W85°46.00' |
| 05 AGL B 50 MSL to | G | ABB 017/23 | N38°57.00' W85°29.00' |

TERRAIN FOLLOWING OPERATIONS: Contour flying entire route in VMC.

ROUTE WIDTH - 3 NM left and 4 NM right of centerline from A to B; 8 NM left and 4 NM right of centerline from B to C; 3 NM left and 4 NM right of centerline from C to D; 3 NM left and 7 NM right of centerline from D to E; 1 NM left and 6 NM right of centerline from E to F; 2 NM left and 6 NM right of centerline from F to G.

Special Operating Procedures:

- Clearance to fly the route does not constitute clearance to enter R-3403. This clearance must be obtained from the Range Control Officer.
- Point F Alternate Exit for aircraft not scheduled into R-3403.
- Point F Alternate Entry for aircraft scheduled into R-3403.
- Route is MARSAs thru See and Avoid with IR-618, VR-621, VR-613, VR-1679, VR-1631.
- Avoid hard surface airports by 3000' vertically or 3 NM horizontally.
- Avoid overflight of cities, towers and villages to extent possible.
- If holding required for entry into R-3403, this may be accomplished within route segment F to G.
- Alternate Entry: Points B, E and F.
- Alternate Exit: Points E and F.
- Request users consider a maximum airspeed of 420 KTAS on all route segments. 480 KTAS from IP to target.
- For R-3403 range entry. Prior to crossing NABB VORTAC (ABB Ch 82) 010 degree radial, ensure that all members of the flight are 17.5 DME north of NABB.

(12) Use caution for light aircraft operating in the vicinity of an unmarked private airport at Point E.

FSS's Within 100 NM Radius:

BNA, CLE, DAY, HUF, IKK, LOU

VR-634

ORIGINATING ACTIVITY: Alpena CRTC/OTM (ANG), 5884 A. Street, Alpena, MI 49707-8125 DSN 741-3509/3226.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | TVC 214/21 | N44°22.00' W85°49.00' |
| 05 AGL B 15 AGL to | B | TVC 283/15 | N44°43.00' W85°54.00' |
| 05 AGL B 15 AGL to | C | TVC 360/20 | N45°00.00' W85°34.00' |
| 05 AGL B 20 AGL to | D | PLN 227/27 | N45°17.00' W85°05.00' |
| 05 AGL B 20 AGL to | E | PLN 158/24 | N45°17.00' W84°24.00' |
| 05 AGL B 15 AGL to | F | PLN 182/46 | N44°52.00' W84°35.00' |
| 05 AGL B 15 AGL to | G | PLN 174/48 | N44°50.00' W84°26.00' |
| 05 AGL B 15 AGL to | H | MBS 342/32 | N44°02.00' W84°21.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- Avoid all watercraft, structures, vehicles, and persons by 500' on Terrain Following segments.
- The techniques for applying MARSAs during all operations on route segments are by scheduling and the See and Avoid concept. This route is the reverse of VR-664 and crosses or is common with portions of VR-1624, VR-1625 and VR-1645. The 127 WG/OG is scheduler for these crossing routes, DSN 273-5055.
- Clearance to fly the route does not constitute clearance into R-4201. Clearance to enter R-4201 must be given by the RCO on 385.7 or 381.1. If not scheduled for R-4201, exit at Alternate Exit D.
- Alternate Entry: C, D, and F.
- Alternate Exit: C, D, and F.
- Minimum altitude for entire route is 1000' AGL from 1 March-15 August.
- Minimum altitude from E to F is 1500' AGL.

FSS's Within 100 NM Radius:

GRB, LAN

VR ROUTES

VR-664

ORIGINATING ACTIVITY: Alpena CRTC/OTM (ANG),
5884 A. Street, Alpena, MI 49707-8125 DSN 741-3509/3226.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | MBS 342/32 | N44°02.00' W84°21.00' |
| 05 AGL B 15 AGL to | B | PLN 174/48 | N44°51.00' W84°26.00' |
| 05 AGL B 15 AGL to | C | PLN 182/46 | N44°52.00' W84°35.00' |
| 05 AGL B 15 AGL to | D | PLN 158/24 | N45°17.00' W84°24.00' |
| 05 AGL B 20 AGL to | E | PLN 227/27 | N45°17.00' W85°05.00' |
| 05 AGL B 20 AGL to | F | TVC 360/20 | N45°00.00' W85°34.00' |
| 05 AGL B 15 AGL to | G | TVC 283/15 | N44°43.00' W85°54.00' |
| 05 AGL B 15 AGL to | H | TVC 214/21 | N44°22.00' W85°49.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized
entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Avoid all watercraft, structures, vehicles, and persons by 500' on Terrain Following segments.
- (2) The techniques for applying MARSAs during all operations on route segments are by scheduling and the See and Avoid) concept. This route is the reverse of VR-634 and crosses or is common with portions of VR-1624, VR-1625 and VR-1645. The 127 WG/OG is scheduler for these crossing routes, DSN 273-5055.
- (3) Clearance to fly the route does not constitute clearance into R-4201. Clearance to enter R-4201 must be given by the RCO on 385.7 or 381.1. If not scheduled for R-4201, enter route at Alternate Entry Point D.
- (4) Alternate Entry: B, C, and D.
- (5) Alternate Exit: B, C, D, E and F.
- (6) Minimum altitude for entire route is 1000' AGL from 1 March-15 August.
- (7) Minimum altitude from C to D is 1500' AGL.

FSS's Within 100 NM Radius:

GRB, LAN

VR-704

ORIGINATING ACTIVITY: DET 1, 193 SOG, 26139 Ammo
Road, Annville, PA 17003-5180 C717-861-2475/2912 Toll Free
800-717-2662 FAX DSN 491-8323 FAX C717-861-8323 DSN
491-2475/2912.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800 local to Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| As assigned to | A | HAR 219/18 | N40°03.00' W77°16.00' |
| 05 AGL B 60 MSL to | B | TON 151/24 | N40°25.00' W78°01.50' |
| 05 AGL B 60 MSL to | C | TON 259/5 | N40°42.50' W78°26.50' |
| 05 AGL B 50 MSL to | D | CIP 149/18 | N40°54.00' W79°13.00' |
| 05 AGL B 50 MSL to | E | CIP 083/10 | N41°11.00' W79°15.00' |
| 01 AGL B 50 MSL to | F | CIP 051/25 | N41°26.50' W79°03.50' |
| 01 AGL B 50 MSL to | G | bfd 181/14 | N41°33.60' W78°35.40' |
| 01 AGL B 50 MSL to | H | ETG 339/18 | N41°28.00' W78°20.50' |
| 01 AGL B 110 MSL to | I | ETG 086/11 | N41°15.50' W77°54.30' |
| 01 AGL B 100 MSL to | J | PSB 075/19 | N41°03.00' W77°36.30' |
| 10 AGL B 100 MSL to | K | RAV 305/29 | N40°45.00' W77°10.50' |
| 10 AGL B 50 MSL to | L | RAV 295/16 | N40°37.00' W76°56.50' |
| 10 AGL B 40 MSL to | M | RAV VORTAC | N40°33.20' W76°35.96' |
| Alternate Exit: | | | |
| 10 AGL B 50 MSL to | L1 | RAV 295/16 | N40°37.00' W76°56.50' |
| 10 AGL B 40 MSL to | N | RAV 240/9 | N40°27.50' W76°44.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized
from E to J.

ROUTE WIDTH - 3 NM either side of centerline from A to H;
10 NM either side of centerline from H to L; centerline of Victor
Airway-170 and 4 NM right of centerline from L to M or L1 to N.

Special Operating Procedures:

- (1) Route must be scheduled 2 hours in advance with DET 1, 193 SOG. Also check for current supplemental route briefing. Units desiring to schedule VR-704 for Sat or Sun must place request no later than 1500 hours on Fri.
- (2) Alternate Entry: B, C, D, E, F, G, H, I, J, K and L.
- (3) Alternate Exit: D, H, I, K and M. Exit toward northeast except Point D exit west.
- (4) Low Level Ground Attack Tactics (GAT), Road Reconnaissance E to J.
- (5) Aircraft not scheduled to operate in R-5802/Kiowa MOA will proceed from L to M.
- (6) Aircraft scheduled to operate in R-5802/Kiowa MOA will proceed from L1 to N, and call 'Balky' 237.2/232.7 prior to entering R-5802/Kiowa MOA for clearance onto the range.
- (7) There is no leg from M to N.
- (8) CAUTION: VR-1757 crosses VR-704 26 NM west of Point A and at Point C.

- (9) CAUTION: Low flying helicopters from Point B to K. Helicopters service strip mines and quarries below 1000' AGL within route airspace. Avoid strip mines and quarries at low altitudes due to temporary obstructions such as cranes.
- (10) CAUTION: Mount Union Airport 33 NM NW of Point A (N40-20-00 W77-53-00), Student training and traffic in pattern to 2000' MSL. Parachute jumps within a 2 NM radius of airport, surface to 7500' MSL. Airport elevation is 560' MSL. Contact flight service for information on parachute jumps at Mount Union Airport.
- (11) CAUTION: Avoid Shirley Airport (Pvt) (N41-14-00 W79-08-30).
- (12) CAUTION: Hang Gliders, weather permitting: Route segment I-J Hyner Mountain (N41-20-00 W77-32-00), L1-N Berry Mountain (N40-32-00 W76-47-00). Between Susquehanna River and R-5802A/B, Kiowa MOA surface to 5000' AGL, Blue Ridge Hang Gliding Club will notify bomb range of operations in this area.
- (13) CAUTION: Penns Cave Airport, 10 NM south of Point J (N40-53-00 W77-35-00). Student training in traffic pattern and local area. Traffic pattern altitude to 2700' MSL over the ridgeline south of the airport. Cross a 3 NM radius of Penns Cave Airport no lower than 3200' MSL.
- (14) CAUTION: Bendigo Airport 3 NM NE of Ravine VORTAC, Point M on Aerobatic Training Area that is defined as a 1 NM radius of Bendigo Airport, from 1500' AGL to, but not including 5000' MSL.
- (15) CAUTION: Noise Sensitive Areas-Avoid by 3 NM or cross no lower than 1500' AGL.
- (a) Kings Gap Environmental Education and Training Center (N40-05-35 W77-16-10);
- (b) Pine Grove Furnace State Park (N40-02-00 W77-18-00);
- (c) Town of Mt. Union (Congressional) (N40-23-00 W77-53-00);
- (d) Private home (N40-32-00 W76-49-30) no 3 NM restriction. All flight members stay left of (quarry) inbound to Fort Indiantown Gap Range;
- (e) Town of Rebersburg (Congressional) (N40-56-40 W77-26-50);
- (f) Private home (N40-38-00 W78-18-50);
- (g) Private farm, very sensitive (N40-35-52 W78-13-00);
- (h) Enders-Fisherville Elementary School (N40-30-30 W76-50-00), avoid direct overflight, low flying sensitive;
- (i) Private home (N40-33-42 W76-57-57) 200 yards southeast of Lunt Airport.;
- (j) Town of Beavertown (N40-45-30 W77-10-20), Weaving Mill- uses sonar equipment that is sensitive to aircraft overflight.
- (16) Note: A 1500' AGL minimum restriction will be placed on the route when the flight evaluation for this route is not current.
- (17) Note: Request for local FSS on OPR any special instructions pertaining to annual (Gypsy Moth Spraying Activities) and (Forest Fire Fighting Operations).
- (18) Bird migration hazard along route 15 Sep-15 Jan and 15 Feb-15 Apr annually.
- (19) Army National Guard Tactical Helicopters operating surface to 3000' AGL. Helicopter VFR training area: (N40-32-40 W76-48-10 to N40-33-00 W76-30-00 to N40-31-10 W76-31-30 to N40-28-00 W76-30-30 to N40-44-30 W76-34-00 to N40-18-08 W76-45-05 to N40-17-00 W76-51-00 to N40-17-50 W76-55-00 to N40-21-30 W76-53-30 to N40-23-10 W76-48-30 to beginning).
- (20) The following is a list of uncharted known airfields that may effect VR-704 use or entry to, or exit from VR-704: Airfields should be avoided by 3 NM or overflown no lower than 1500' AGL, except as noted in caution # 10, 11, 12, 13, and 14 above: Feltenberger (N40-32-40 W77-58-00), Ride Soaring (N40-53-00 W77-54-00), Centerville (N41-01-00 W77-21-00), Schadel (N40-45-00 W76-41-00), Aerobatics Boxes: Kampel (N40-02-00 W76-59-00) 1500' AGL to 4000' MSL/3500 feet square, 0.7 NM of Kampel Airport.
- (21) Unpublished Route Obstructions: The following obstructions are within 100' or less of the base altitude for the listed route segments. Listed heights are approximate and may be greater. Previously charted obstructions are not listed. Ranger Towers which are charted are approximately 60'-75'. Use CAUTION when using Alternate Entry/Exit Points. Uncharted obstructions may exist in these areas outside of route airspace:
- (a) Towers (5), (N40-49-00 W78-57-00) 100' Points C-D;
- (b) Tower, (N41-11-30 W79-11-30) 100' Points E-F;
- (c) Ranger Tower, (N41-19-20 W79-12-50) 60' Points E-F;
- (d) Tower, (N41-14-54 W79-13-00) 100' Points E-F;
- (e) Ranger tower, (N41-24-30 W78-59-10) 60' Points E-F;
- (f) Tower, (N41-19-00 W79-08-00) 60' Points E-F;
- (g) Tower, (N41-20-40 W79-07-00) 60' Points E-F;
- (h) Tower, (N41-17-00 W79-11-20) 60' Points E-F;
- (i) Tower, (N41-16-00 W79-11-40) 60' Points E-F;
- (j) Tower, (N41-28-30 W78-54-00) 60' Points F-G;
- (k) Tower, (N41-34-20 W78-43-20) 100' Points F-G;
- (l) Tower, (N41-36-02 W78-35-13) unk AGL-2600' MSL Points F-G;
- (m) Tower, (N41-03-00 W78-35-13) 150' Point G;
- (n) Tower, (N41-34-00 W78-35-52) 75' Point G;
- (o) Ranger Tower #26, (N41-34-20 W78-28-10) 60' Points G-H;
- (p) Keating VORTAC, (N41-12-54 W78-08-35) 50' Points H-I;
- (q) Ranger Tower #33, (N41-13-15 W78-07-10) 60' Points H-I;
- (r) Tower, (N41-13-10 W78-11-40) 60' Points H-I;
- (s) Power lines, (N41-16-00 W78-09-15) 460' Points H-I;
- (t) Antenna, (N41-20-55 W78-07-09) 60' Points H-I;
- (u) Towers (2), (N41-23-50 W77-51-10) 100' Points H-I;
- (v) Ranger Tower #39 and 4 towers, (N41-23-50 W77-51-10) 60' Points H-I;
- (w) Ranger Tower #29, (N41-20-10 W78-22-00) 60' Points H-I;
- (x) Tower, (N41-25-00 W77-53-00) 60' Points H-I;
- (y) Ranger Tower, (N41-28-00 W78-07-00) 60' Points H-I;
- (z) Antenna tower, (N41-28-52 W78-15-32) 182' Points H-I;
- (za) Antenna tower, (N41-29-15 W78-15-12) 188' Points H-I;
- (zb) Towers (2), (N41-29-30 W78-15-00) 80' Points H-I;
- (zc) Tower, (N41-30-00 W78-13-30) 60' Points H-I;
- (zd) Tower, (N41-22-00 W78-06-50) 100' Points H-I;
- (ze) Power lines (N41-21-30 W77-43-00 to N41-13-00 W78-12-30) Points H-I. DANGER: Power lines cross valleys 60' AGL to 450' AGL and are difficult to see depending on conditions, terrain features, foliage color, aircraft speed and other features. Expect to see wires at 1/4 mile or less. Three aircraft have struck wires in this line. Terrain following is not authorized within 2 NM of these powerlines.
- (zf) Towers (2), (N41-28-52 W78-15-33) 182' Points I-J;
- (zg) Tower, (N41-07-00 W77-43-36) 100' Points I-J;
- (zh) Tower, (N41-06-14 W77-42-14) 100' Points I-J;
- (zi) Towers (3), (N41-06-18 W77-42-24) 80' Points I-J;
- (zj) Tower, (N41-06-42 W77-45-42) 100' Points I-J;
- (zk) Ranger Tower, (N41-10-05 W77-53-20) 60' Points I-J;
- (zl) Tower, (N41-10-30 W77-50-30) 100' Points I-J;

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- (zm)Tower, (N41-12-40 W78-05-20) 100' Points I-J;
- (zn)Tower, (N41-14-00 W77-45-00) 60' Points I-J;
- (zo)Ranger Tower #42, (N41-14-15 W77-45-10) 60' Points I-J;

FSS's Within 100 NM Radius:

AOO, BUF, CLE, DCA, EKN, IPT, MIV

VR-705

ORIGINATING ACTIVITY: DET 1, 193 SOG, 26139 Ammo Road, Annville, PA 17003-5180 C717-861-2475/2912 Toll Free 800-717-2662 FAX DSN 491-8323 FAX C717-861-8323 DSN 491-2475/2912.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800 local-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| As assigned to | A | HAR 219/18 | N40°03.00' W77°16.00' |
| 05 AGL B 60 MSL to | B | TON 151/24 | N40°25.00' W78°01.50' |
| 05 AGL B 60 MSL to | C | TON 259/5 | N40°42.50' W78°26.50' |
| 01 AGL B 60 MSL to | D | ETG 262/23 | N41°05.60' W78°38.00' |
| 01 AGL B 60 MSL to | E | ETG 086/11 | N41°15.50' W77°54.30' |
| 01 AGL B 100 MSL to | F | PSB 075/19 | N41°03.00' W77°36.30' |
| 10 AGL B 100 MSL to | G | RAV 305/29 | N40°45.00' W77°10.50' |
| 10 AGL B 50 MSL to | H | RAV 295/16 | N40°37.00' W76°56.50' |
| 10 AGL B 40 MSL to | I | RAV VORTAC | N40°33.20' W76°35.96' |
| Alternate Exit: | | | |
| 10 AGL B 50 MSL to | H1 | RAV 295/16 | N40°37.00' W76°56.50' |
| 10 AGL B 40 MSL to | J | RAV 240/9 | N40°27.50' W76°44.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized from C to F.

ROUTE WIDTH - 3 NM either side of centerline from A to E; 10 NM either side of centerline from E to H; centerline of Victor Airway-170 and 4 NM right of centerline from H to I or H1 to J.

Special Operating Procedures:

- (1) Route must be scheduled 2 hours in advance with DET 1, 193 SOG. Also check for current route briefing. Units desiring to schedule VR-705 for Sat or Sun must place their scheduling request no later than 1500 hours (local) on Fri.
- (2) Alternate Entry: C, D, E, F, G and H.
- (3) Alternate Exit: D, E, G and I. Exit toward northeast except Point D, exit west.
- (4) Low level Ground Attack Tactics (GAT), Road Reconnaissance C to F.
- (5) Aircraft not scheduled to operate in R-5802/Kiowa MOA will proceed from H to I.

- (6) Aircraft scheduled to operate in R-5802/Kiowa MOA will proceed from H1 to J, and call (Balky) 237.2/232.7 prior to entering R-5802/Kiowa MOA for clearance onto the range.
- (7) There is no leg from I to J.
- (8) CAUTION: VR-1757 crosses VR-705 26NM west of Point A and at Point C.
- (9) CAUTION: Low flying helicopters from Point B to G. Helicopters service strip mines and quarries below 1000' AGL within Route Airspace avoid strip mines and quarries at low altitudes due to temporary obstructions such as cranes.
- (10) CAUTION: Mount Union Airport 33 NM NW of Point A (N40-20-00 W77-53-00), Student training and traffic in pattern to 2000' MSL. Parachute jumps within a 2 NM radius of airport, surface to 7500' MSL. Airport elevation is 560' MSL. Contact flight service for information on parachute jumps at Mount Union Airport.
- (11) CAUTION: Hang Gliders weather permitting: Route Segment E-F Hyner Mountain (N41-20-00 W77-32-00); Route Segment H1-J Berry Mountain (N40-32-00 W76-47-00). Between Susquehanna River and R-5802A/B, Kiowa MOA surface to 5000' AGL, Blue Ridge Hang Gliding Club will notify bomb range of operations in this area.
- (12) CAUTION: Penns Cave Airport 10 NM south of Point F (N40-53-00 W77-35-00). Student training in traffic pattern and local area. Traffic pattern altitude to 2700' MSL over the ridge line south of the airport. Cross a 3 NM radius of Penns Cave Airport no lower than 3200' MSL.
- (13) CAUTION: Bendigo Airport 3 NM NE of Ravine VORTAC, Point I, and an Aerobatics Training Area that is defined as a 1 NM radius of Bendigo Airport, from 1500' AGL to, but not including 5000' MSL.
- (14) CAUTION: Noise Sensitive Areas. Avoid by 3 NM or cross no lower than 1500' AGL:
 - (a) Kings Gap Environmental Education and Training Center (N40-05-35 W77-10-10).
 - (b) Pine Grove Furnace State Park (N40-02-00 W77-18-00).
 - (c) Town of Mt. Union (Congressional) (40-23-00 W77-53-00).
 - (d) Private home (N40-32-00 W76-49-30), no 3 NM restriction. All flight members stay left of Quarry inbound to Fort Indiantown Gap Range.
 - (e) Town of Rebersburg (Congressional) (N40-56-40 W77-26-50).
 - (f) Private home (N40-38-00 W78-15-50).
 - (g) Private farm, very sensitive (N40-35-52 W78-13-00).
 - (h) Enders-Fisherville Elementary School (N40-30-30 W76-50-00). Avoid direct overflight, low flying sensitive.
 - (i) Private home (N40-33-42 W76-57-57) 200 yards southwest of Lunt Airport.
 - (j) Moshannon Valley School District Complex (Congressional) (N40-48-40 W78-24-00) 2 NM right of route boundary, avoid by 1 NM minimum.
 - (k) Town of Beavertown (N40-45-30 W77-10-20) Weaving Mill, uses sonar equipment that is sensitive to aircraft overflight.
- (15) Note: A 1500' AGL minimum restriction will be placed on the route when the flight evaluation for this route is not current.
- (16) Note: Request from local FSS on OPR any special instructions pertaining to annual Gypsy Moth Spraying Activities and Forest Fire Fighting Operations.
- (17) Bird migration hazard along route 15 Sep-15 Jan and 15 Feb-15 Apr annually.
- (18) Army National Guard Tactical Helicopters operating Surface to 3000' AGL. Helicopter VFR training area: (N40-32-40 W76-48-10 to N40-33-00 W76-30-00 to N40-31-10

W76-31-30 to N40-28-00 W76-30-30 to N40-44-30
 W76-34-00 to N40-18-08 W76-45-05 to N40-17-00
 W76-51-00 to N40-17-50 W76-55-00 to N40-21-30
 W76-53-30 to N40-23-10 W76-48-30 to starting point).

(19) The following is a list of uncharted known airfields that may effect VR-705 use or entry, or exit from VR-705. Airfields should be avoided by 3 NM or overflow no lower than 1500' AGL, except as noted in caution #10, 11, 12, and 13 above: Feltenberger (N40-32-40 W77-58-00), Ridge soaring (N40-53-00 W77-54-00), Centervale (N41-01-00 W77-21-00), Schadel (N40-45-00 W76-41-00), Aerobatics Boxes: Kappel (N40-02-00 W76-59-00) 1500' AGL to 4000' MSL/3500 feet square, 0.7 NM of Kappel Airport.

(20) Unpublished Route Obstructions: The following obstructions are within 100' or less of the base altitude for the listed route segments. Listed heights are approximate and may be greater. Previously charted obstructions are not listed. Ranger Towers which are charted are approximately 60'-75'. Use caution when using Alternate Entry and Exit Points. Uncharted obstructions may exist in these areas outside of route airspace:

- (a) Radome, (N41-03-00 W78-34-20) 100' Points C-D;
- (b) Towers (6), (N41-04-30 W78-33-30) 100' Points C-D;
- (b) Tower; (N40-45-30 W78-31-00) 100' Points C-D;
- (c) Microwave tower, (N41-10-07 W78-21-25) 80' Points D-E;
- (d) Keating VORTAC, (N41-12-54 W78-08-35) 50' Points D-E;
- (e) Ranger Tower #33, (N41-13-15 W78-07-10) 60' Points D-E;
- (f) Tower, (N41-13-10 W78-11-40) 60' Points D-E;
- (g) Power lines, (N41-16-00 W78-09-15) 460' Points D-E;
- (h) Microwave tower, (41-40-35 W78-33-01) 125' Points D-E;
- (i) Antenna, (N41-20-55 W78-07-09) 60' Points D-E;
- (j) Ranger Tower, (N41-28-00 W78-07-00) 60' Points D-E;
- (k) Towers (2), (N41-29-30 W78-15-00) 80' Points D-E;
- (l) Tower, (N41-30-00 W78-13-30) 60' Points D-E;
- (m) Tower, (N41-22-00 W78-06-50) 100' Points D-E;
- (n) POWER LINES from, (N41-21-30 W77-43-00 to N41-13-00 W78-12-30) Points D-E. Danger: Power lines cross valleys 60' AGL to 450' AGL and are difficult to see depending on light conditions, terrain features, foliage color, aircraft speed and other features. Expect to see wires at 1/4 mile or less. Three aircraft have struck wires in this line. Terrain following is not authorized within 2 NM of these powerlines.
- (o) Tower, (N41-07-00 W77-43-36) 100' Points E-F;
- (p) Tower, (N41-06-14 W77-42-14) 100' Points E-F;
- (q) Towers (3), (N41-06-18 W77-42-24) 80' Points E-F;
- (r) Tower, (N41-06-42 W77-45-42) 100' Points E-F;
- (s) Tower, (N41-14-00 W77-45-00) 60' Points E-F;
- (t) Ranger Tower, (N41-10-05 W77-53-20) 60' Points E-F;
- (u) Tower, (N41-10-30 W77-50-30) 100' Points E-F;
- (v) Tower, (N41-12-40 W78-05-20) 100' Points E-F;
- (w) Tower, (N41-14-00 W77-45-00) 60' Points E-F;
- (x) Ranger Tower #42, (N41-14-15 W77-45-10) 60' Points E-F.

FSS's Within 100 NM Radius:

AOO, BUF, CLE, DCA, EKN, IPT, MIV

VR-707

ORIGINATING ACTIVITY: DET 1, 193 SOG, 26139 Ammo Road, Annville, PA 17003-5180 C717-861-2475/2912 Toll Free

800-717-2662 FAX DSN 491-8323 FAX C717-861-8323 DSN 491-2475/2912.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800 local-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| As assigned to | A | ETX 337/53 | N41°20.00' W76°18.00' |
| 05 AGL B 50 MSL to | B | ULW 215/13 | N41°54.00' W77°08.00' |
| 05 AGL B 50 MSL to | C | ELZ 199/4 | N42°01.00' W78°01.00' |
| 05 AGL B 50 MSL to | D | BFD 329/19 | N42°02.00' W78°53.00' |
| 01 AGL B 50 MSL to | E | BFD 300/15 | N41°53.00' W78°56.00' |
| 01 AGL B 50 MSL to | F | BFD 181/14 | N41°33.50' W78°35.40' |
| 01 AGL B 50 MSL to | G | ETG 339/18 | N41°28.00' W78°20.50' |
| 01 AGL B 110 MSL to | H | ETG 086/11 | N41°15.50' W77°54.30' |
| 01 AGL B 100 MSL to | I | PSB 075/19 | N41°03.00' W77°36.30' |
| 10 AGL B 100 MSL to | J | RAV 305/29 | N40°45.00' W77°10.50' |
| 10 AGL B 50 MSL to | K | RAV 295/16 | N40°37.00' W76°56.50' |
| 10 AGL B 40 MSL to | L | RAV VORTAC | N40°33.20' W76°35.96' |
| Alternate Exit: | | | |
| 10 AGL B 50 MSL to | K1 | RAV 295/16 | N40°37.00' W76°56.50' |
| 10 AGL B 40 MSL to | M | RAV 240/9 | N40°27.50' W76°44.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Points D to I.

ROUTE WIDTH - 3 NM either side of centerline from A to G; 10 NM either side of centerline from G to K; centerline of Victor Airway-170 and 4 NM right of centerline from K to L or K1 to M.

Special Operating Procedures:

- (1) Route must be scheduled 2 hours in advance with DET 1, 193 SOG. Also check for current route briefing. Units desiring to schedule VR-707 for Sat or Sun must place their schedule request no later than 1500 hours (local) on Fri.
- (2) Alternate Entry: B, C, D, E, F, G, H, I, J and K.
- (3) Low level, Ground Attack Tactics (GAT), road reconnaissance F to I.
- (4) Alternate Exit: H-J and M exit toward northeast.
- (5) Aircraft not scheduled to operate in R-5802/Kiowa MOA will proceed from K1 to L.
- (6) Aircraft scheduled to operate in R-5802/Kiowa will proceed from K to M call Bally 237.2/232.7 prior to entering R-5802/Kiowa MOA for clearance onto the range.
- (7) There is no leg from L to M.
- (8) CAUTION: SR-823 crosses route at Point C and 10 miles east of Point D.

VR ROUTES

- (9) CAUTION: Low flying helicopters from Point F to J. Helicopters service strip mines and quarries below 1000' AGL within route airspace. Avoid strip mines and quarries at low altitudes due to temporary obstructions such as cranes.
- (10) CAUTION: Hang Gliders weather permitting: Route Segment H-I Hyner Mountain (N41-20-00 W77-32-00); K1-M Berry Mountain (N40-32-00 W76-47-00); Between Susquehanna River and R-5802A/B, Kiowa MOA surface to 5000' AGL-Blue Ridge Hang Gliding Club will notify bomb range of operations in this area.
- (11) CAUTION: Penns Cave Airport 10 NM south of Point I (N40-53-00 77-35-00) student training in traffic pattern and local area. Traffic patterns to 2700' MSL over the ridge line south of the airport. Cross a 3 NM radius of Penns Cave Airport no lower than 3200' MSL.
- (12) CAUTION: Bendigo Airport 3 NM northeast of Ravine VORTAC (Point L) and an Aerobatic Training Area that is defined as a 1 NM radius of Bendigo Airport from 1500' AGL to but not including 5000' MSL.
- (13) CAUTION: NOISE SENSITIVE AREAS-Avoid by 3 NM or cross no lower than 1500' AGL.
- (a) Town of Middlebury Center, (N41-51-00 W77-16-30) Congressional;
- (b) Fox Fire Farms, (N41-55-50 77-17-30) Route Segments A to B and B to C closed 1 March through 30 May annually due to new born Silver Fox pups;
- (c) Private home, (N40-32-00 W76-49-30) No 3 NM restriction. All flight members stay left (east) of (Quarry) inbound to Fort Indiantown Gap range;
- (d) Town of Rebersburg (Congressional), (N40-56-40 W77-26-50);
- (e) Enders-Fisherville Elementary School, (N40-30-30 W76-50-00) avoid direct overflight, low flying sensitive;
- (f) Private home, (N40-33-42 W76-57-57) 200 yards southeast of Lunt Airport;
- (g) Town of Beavertown, (N40-45-30 W77-10-20) Weaving Mill-uses sonar equipment that is sensitive to aircraft overflight.
- (14) NOTE: A 1500' AGL minimum restriction will be placed on the route when the flight evaluation for this route is not current.
- (15) Request from local FSS on OPR any special instructions pertaining to annual (Gypsy Moth Spraying Activities) and (Forest Fire Fighting Operations).
- (16) Bird migration hazard along route 15 Sep-15 Jan, 15 Feb-15 May annually.
- (17) Army National Guard tactical helicopters operating surface to 3000' AGL. Helicopter VFR training Area: (40-32-40 W76-48-10 to N40-33-00 W76-30-00 to N40-31-10 W76-31-30 to N40-28-00 W76-30-30 to N40-44-30 W76-34-00 to N40-18-08 W76-45-05 to N40-17-00 W76-51-00 to N40-17-50 W76-55-00 to N40-21-30 W76-53-30 to N40-23-10 W76-48-30 to starting point).
- (18) The following is a list of uncharted known airfields that may effect VR-707 use or entry to, or exit from, VR-707. Airfields should be avoided by 3 NM or overflown no lower than 1500' AGL, except as noted in caution #11 above: Ceres (N42-00-30 W78-15-30), Ridge Soaring (N40-53-00 W77-54-00), Centerville (N41-01-00 W77-21-00), Schadel (N40-45-00 W76-41-00), Aerobatic Boxes: Bendigo (N40-33-30 W76-33-00) (Surface to 5000' MSL, 1 NM radius of airfield): Kampel (N40-02-00 W76-59-00) 1500' AGL to 4000' MSL/3500' feet square, 0.7 NM of Kampel Airport.
- (19) Unpublished Route Obstructions: The following obstructions are within 100' or less of the base altitude for the listed route segments. Listed heights are approximate and may be greater. Previously charted obstructions are not listed. Ranger Towers which are charted are approximately 60'-75'. Use caution when using Alternate Entry and Exit Points. Uncharted obstructions may exist in these areas outside of route airspace:
- (a) Tower, (N41-36-02 W78-35-13) Unk AGL-2600' MSL Points E-F;
- (b) Tower, (N41-43-05 W78-41-30) 370' Points E-F;
- (c) Ranger Tower #14, (N41-50-00 W78-58-30) 60' Points E-F;
- (d) Tower, (N41-03-00 W78-35-13) 150' Point F;
- (e) Antenna, (N41-34-36 W78-36-48) 75' Point F;
- (f) Ranger Tower #26, (N41-34-20 W78-28-10) 60' Points F-G;
- (g) Keating VORTAC, (N41-12-54 W78-08-35) 50' Points G-H;
- (h) Ranger Tower #33, (N41-13-15 W78-07-10) 60' Points G-H;
- (i) Tower, (N41-13-10 W78-11-40) 60' Points G-H;
- (j) Power lines, (N41-16-00 W78-09-15) 460' Points G-H;
- (k) Antenna, (N41-20-00 W78-07-09) 60' Points G-H;
- (l) Towers (2), (N41-23-50 W77-51-10) 100' Points G-H;
- (m) Ranger tower #39 and 4 Antennas, (N41-23-50 W77-51-10) 60' Points G-H;
- (n) Ranger Tower #29, (N41-20-10 W78-22-00) 60' Points G-H;
- (o) Tower, (N41-25-00 W77-53-00) 60' Points G-H;
- (p) Ranger Tower, (N41-28-00 W78-07-00) 60' Points G-H;
- (q) Antenna tower, (N41-28-52 W78-15-32) 182' Points G-H;
- (r) Antenna tower, (N41-29-25 W78-15-20) 188' Points G-H;
- (s) Towers (2), (N41-29-30 W78-15-00) 80' Points G-H;
- (t) Tower, (N41-30-00 W78-13-30) 60' Points G-H;
- (u) Tower, (N41-22-00 W78-06-50) 100' Points G-H;
- (v) Power lines from (N41-21-30 W77-43-00 to N41-13-00 W78-12-30) Points G-H. DANGER: Power lines cross valleys 60' AGL to 450' AGL and are difficult to see depending on light conditions, terrain features, foliage color, aircraft speed and other features. Expect to see wires at 1/4 mile or less. Three aircraft have struck wires in this line. Terrain following is not authorized within 2 NM of these power lines.
- (w) Antenna, (N41-18-00 W77-51-28) 100' Point H;
- (x) Towers (2), (N41-28-52 W78-15-33) 182' Points H-I;
- (y) Tower, (N41-07-00 W77-43-36) 100' Points H-I;
- (z) Tower, (N41-06-14 W77-42-00) 100' Points H-I;
- (za) Towers (3), (N41-06-18 W77-42-24) 80' Points H-I;
- (zb) Tower, (N41-06-42 W77-45-42) 100' Points H-I;
- (zc) Ranger Tower, (N41-10-05 W77-53-20) 60' Points H-I;
- (zd) Tower, (N41-10-30 W77-50-30) 100' Points H-I;
- (ze) Tower, (N41-12-40 W78-05-20) 100' Points H-I;
- (zf) Tower, (N41-14-00 W77-45-00) 60' Points H-I;
- (zg) Ranger Tower #42, (N41-14-15 W77-45-10) 60' Points H-I.

FSS's Within 100 NM Radius:

AOO, BDR, BUF, CLE, DCA, IPT, ISP, MIV

VR-708

ORIGINATING ACTIVITY: 175 FG (ANG), Baltimore, MD 21220-2899 DSN 243-6375.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | EMI 320/30 | N39°49.30' W77°27.30' |
| 01 AGL B 45 MSL to | B | GRV 046/31 | N40°01.50' W78°37.00' |
| 01 AGL B 45 MSL to | C | GRV 074/19 | N39°45.50' W78°39.70' |
| 01 AGL B 55 MSL to | D | THS 237/34 | N39°34.00' W78°31.00' |
| 01 AGL B 55 MSL to | E | ESL 087/32 | N39°18.50' W78°18.40' |
| 01 AGL B 55 MSL to | F | THS 202/18 | N39°39.00' W78°03.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to C; 5 NM either side of centerline from C to D; 7 NM either side of centerline from D to E; 3 NM either side of centerline from E to F.

Special Operating Procedures:

- (1) Route is restricted to A-10 and OA-37 aircraft due to turn radius and noise restriction.
- (2) Maintain 500' AGL until passing THS VORTAC.
- (3) Avoid: Cumberland Valley Airport 14 NM west of A; Timber Ridge Airport at E.
- (4) Forestry service aircraft operations in vicinity of route.
- (5) Tie-in FSS: Leesburg.

FSS's Within 100 NM Radius:

AOO, DCA, EKN, IPT, MIV

VR-724

ORIGINATING ACTIVITY: 174th FW, 6001 E. Molloy Rd, Syracuse, NY 13211-7099 DSN 489-9217.

SCHEDULING ACTIVITY: 174 FW, Det 1, Ft. Drum, NY 13608 DSN 772-5990/2835, C315-772-5990.

HOURS OF OPERATION: 0800-Sunset daily, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or below 50 MSL | A | GFL 278/14 | N43°19.00' W73°56.00' |
| 01 AGL B 70 MSL to | B | GFL 347/23 | N43°41.00' W73°51.00' |
| 01 AGL B 70 MSL to | C | GFL 336/51 | N44°01.00' W74°20.00' |
| 01 AGL B 60 MSL to | D | MSS 194/37 | N44°18.00' W74°43.00' |
| 01 AGL B 60 MSL to | E | MSS 234/31 | N44°31.00' W75°11.00' |
| 01 AGL B 30 MSL to | F | ART 042/25 | N44°19.00' W75°46.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 01 AGL B 30 MSL to | G | ART 056/19 | N44°11.00' W75°45.00' |
| 01 AGL B 30 MSL to | H | ART 069/24 | N44°10.00' W75°36.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to C; 5 NM left and 3 NM right of centerline from C to D; 5 NM either side of centerline from D to E; 3 NM either side of centerline from E to H.

Special Operating Procedures:

- (1) Aircraft not cleared into R-5201 exit at G.
- (2) IR-700 crosses the route between B and C at surface to 6000' MSL.
- (3) IR-700, IR-800 and IR-801 cross the route between D and E at surface to 6000' MSL.
- (4) Alternate Entry: B and D.
- (5) Alternate Exit: G.
- (6) Maintain a minimum of 1000' AGL from Point A to 3 NM past helipad located 9 NM NW of Point B at N43-49.0 W74-02.0.
- (7) After Point D route will be flown to N44-26.2 W75-01.5, N44-27.5 W75-15.0, Point F then on centerline to the end of route.
- (8) At N44-26.2 W75-01.5 climb and maintain 4500' MSL weather permitting or 3000' MSL minimum if a ceiling exists to Point G then descend as required for entry into R-5201.

FSS's Within 100 NM Radius:

BDR, BGR, BTV, BUF

VR-725

ORIGINATING ACTIVITY: 174th FW, 6001 E. Molloy Rd, Syracuse, NY 13211-7099 DSN 489-9217.

SCHEDULING ACTIVITY: 174 FW, Det 1, Ft. Drum, NY 13608 DSN 772-5990/2835, C315-772-5990.

HOURS OF OPERATION: 0800-Sunset daily, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or below 50 MSL | A | GFL 278/14 | N43°19.00' W73°56.00' |
| SFC B 70 MSL to | B | GFL 347/23 | N43°41.00' W73°51.00' |
| SFC B 70 MSL to | C | GFL 336/51 | N44°01.00' W74°20.00' |
| SFC B 60 MSL to | D | MSS 194/37 | N44°18.00' W74°43.00' |
| SFC B 60 MSL to | E | ART 073/33 | N44°13.00' W75°23.00' |
| SFC B 30 MSL to | F | ART 069/24 | N44°10.00' W75°36.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to F.

VR ROUTES

ROUTE WIDTH - 3 NM either side of centerline from A to C; 5 NM left and 3 NM right of centerline from C to D; 5 NM either side of centerline from D to E; 5 NM left and 4 NM right of centerline from E to F.

Special Operating Procedures:

- (1) Aircraft not cleared into R-5201 exit at E.
- (2) IR-700 crosses the route between B and C at surface to 6000' MSL.
- (3) IR-700, IR-800 and IR-801 cross the route between D and E at surface to 3500' MSL.
- (4) Alternate Entry: B and D.
- (5) Alternate Exit: E.
- (6) Maintain a minimum of 1000' AGL from Point A to 3 NM past helipad located 9 NM NW of Point B at N43-49.0 W74-02.0.

FSS's Within 100 NM Radius:

BDR, BGR, BTV

VR-840

ORIGINATING ACTIVITY: Eastern Air Defense (EADS)
DSN 587-6247/6313.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800 local-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|--------------------------|
| As assigned to | A | ENE 003/38 | N44°02.00' W70°49.00' |
| 01 AGL B 50 MSL to | B | NHZ 331/44 | N44°24.00' W70°41.00' |
| 05 AGL B 60 MSL to | C | YSC 147/50 | N44°47.00' W70°54.00' |
| 01 AGL B 70 MSL to | D | YSC 134/46 | N44°58.00' W70°49.00' |
| 01 AGL B 80 MSL to | E | AUG 351/60 | N45°13.00' W70°26.00' |
| 01 AGL B 90 MSL to | F | MLT 299/44 | N45°42.00' W69°33.00' |
| 01 AGL B 100 MSL to | G | MLT 286/31 | N45°33.00' W69°15.00' |
| 01 AGL B 110 MSL to | H | BGR 348/31 | N45°17.00' W69°15.00' |
| 01 AGL B 120 MSL to | I | BGR 326/38 | N45°13.50' W69°35.80' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route with the exceptions noted in Special Operating Procedures.

ROUTE WIDTH - 4 NM either side of centerline from A to C; 3 NM either side of centerline from C to F; 4 NM either side of centerline from F to H; 5 NM either side of centerline from H to I.

Special Operating Procedures:

- (1) Users who wish to schedule these routes must call during normal duty hours (0800-1600, Mon-Fri).

- (2) Users should receive current Operations Briefing when calling to schedule this route. If scheduler does not offer this briefing, ASK FOR IT.
- (3) Airspeed 250 KIAS to max subsonic.
- (4) Alternate Entry: Points B, C, D, E and F.
- (5) There is a high level of low altitude sightseeing and seaplane activity on all lakes for the route.
- (6) Contact Portland Approach (381.2) until past Point C.
- (7) Call Bangor Radio (255.4) with entry and exit times.
- (8) Squawk appropriate codes.
- (9) Route includes 5 NM radius around Point I.
- (10) Maintain a minimum of 1000' AGL within 5 NM of Point A (Mt. Pleasant).
- (11) Maintain 1000' AGL and a 2 NM radius from Hutchinson Pond which is located approximately halfway between Points A and B (N44-15.8 W070-43.2).
- (12) Maintain a minimum of 1500' AGL at Point B until past Androscoggin River, Col. Dyke Airport.
- (13) CAUTION: Heavy hang glider activity on the west edge of route corridor from Point B to C. Activity is seasonal and heaviest from Mar-Nov.
- (14) CAUTION: Numerous light aircraft in the vicinity of Col. Dyke Airport west of Point B, Bald Mountain at N44-57 W70-47 and Rangeley Airport, NE of Point D.
- (15) Minimum altitude from Point B to C is 500' AGL. THIS AREA IS EXTREMELY NOISE SENSITIVE.
- (16) Stay left of centerline from Point A to 10 miles beyond Point D - EXTREMELY NOISE SENSITIVE.
- (17) Maintain minimum of 1500' AGL and 3 NM radius from Bald Mountain, SE of Point D at N44-57 W70-47.
- (18) Avoid Rangeley Airport, NE of Point D, by minimum of 1500' AGL/3 NM radius.
- (19) Maintain 1000' AGL within 3 NM of Point E (Stratton, Eustus, ME).
- (20) Unpainted, unlighted tower on mountain top at N44-32.0 W70-45.0.
- (21) Alternate Exit: Point C.
- (22) Avoid high powered radar site (N45-09.0 W69-51.0) by 5 NM and 5500' MSL.
- (23) IP to target, avoid town of Manson (N45-13.0 W65-28.0) in all cases by 1000' AGL or above. Stay south of centerline IP to target.

FSS's Within 100 NM Radius:

BGR, BTV

VR-841

ORIGINATING ACTIVITY: Eastern Air Defense (EADS)
DSN 587-6247/6313.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800 local-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | ENE 003/38 | N44°02.00' W70°49.00' |
| 01 AGL B 50 MSL to | B | NHZ 331/44 | N44°24.00' W70°41.00' |
| 05 AGL B 60 MSL to | C | YSC 147/50 | N44°47.00' W70°54.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 01 AGL B 70 MSL to | D | YSC 134/46 | N44°58.00' W70°49.00' |
| 01 AGL B 80 MSL to | E | AUG 351/60 | N45°13.00' W70°26.00' |
| 01 AGL B 90 MSL to | F | AUG 006/56 | N45°14.50' W70°03.80' |

VR-842

ORIGINATING ACTIVITY: Eastern Air Defense (EADS)
DSN 587-6247/6313.

SCHEDULING ACTIVITY: Same as Originating Activity

TERRAIN FOLLOWING OPERATIONS: Authorized entire route exceptions noted in Special Operating Procedures.

HOURS OF OPERATION: 0800 local-Sunset daily

ROUTE WIDTH - 4 NM either side of centerline from A to C; 3 NM either side of centerline from C to E; 5 NM either side of centerline from E to F.

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | ENE 003/38 | N44°02.00' W70°49.00' |
| 01 AGL B 50 MSL to | B | NHZ 331/44 | N44°24.00' W70°41.00' |
| 05 AGL B 60 MSL to | C | YSC 147/50 | N44°47.00' W70°54.00' |
| 01 AGL B 70 MSL to | D | AUG 348/45 | N44°58.00' W70°20.00' |
| 01 AGL B 80 MSL to | E | AUG 004/45 | N45°03.00' W70°03.60' |

Special Operating Procedures:

- (1) Users who wish to schedule these routes must call during normal duty hours (0800-1600, Mon-Fri).
- (2) Users should receive current Operations Briefing when calling to schedule this route. If scheduler does not offer this briefing, ASK FOR IT.
- (3) Airspeed 250 KIAS to max subsonic.
- (4) Alternate Entry: Points B, C and D.
- (5) There is a high level of low altitude sightseeing and seaplane activity on all lakes for the route.
- (6) Contact Portland Approach (381.2) until past Point C.
- (7) Call Bangor Radio (255.4) with entry and exit times.
- (8) Squawk appropriate codes.
- (9) Route includes 5 NM radius around Point F.
- (10) Maintain a minimum of 1000' AGL within 5 NM of Point A (Mt. Pleasant).
- (11) Maintain a minimum of 1000' AGL and a 2 NM radius from Hutchinson Pond which is located approximately halfway between Points A and B (N44-15.8 W070-43.2).
- (12) Maintain a minimum of 1500' AGL at Point B until past Androscoggin River, Col. Dyke Airport.
- (13) CAUTION: Heavy hang glider activity on the west edge of route corridor from Point B to C. Activity is seasonal and heaviest from Mar-Nov.
- (14) CAUTION: Numerous light aircraft in the vicinity of Col. Dyke Airport west of Point B, Bald Mountain at N44-57 W70-47 and Rangeley Airport, NE of Point D.
- (15) Minimum altitude from Point B to C is 500' AGL. THIS AREA IS EXTREMELY NOISE SENSITIVE.
- (16) Stay left of centerline from Point B to 10 miles beyond Point D - EXTREMELY NOISE SENSITIVE.
- (17) Maintain minimum of 1500' AGL and 3 NM radius from Bald Mountain, SE of Point D at N44-57 W70-47.
- (18) Avoid Rangeley Airport, NE of Point D, by minimum of 1500' AGL/3 NM radius.
- (19) Maintain 1000' AGL within 3 NM of Point E (Stratton, Eustus, ME).
- (20) Unpainted, unlighted tower on mountain top at N44-32.0 W70-45.0.
- (21) Avoid high powered radar site at N45-09.0 W69-51.0 by 5 NM/5500' MSL.
- (22) Alternate Exit: Point E.

TERRAIN FOLLOWING OPERATIONS: Authorized entire route with exceptions noted in Special Operating Procedures.

ROUTE WIDTH - 4 NM either side of centerline from A to E.

Special Operating Procedures:

- (1) Users who wish to schedule these routes must call during normal duty hours (0800-1600, Mon-Fri).
- (2) Users should receive current Operations Briefing when calling to schedule this route. If scheduler does not offer this briefing, ASK FOR IT.
- (3) Airspeed 250 KIAS to max subsonic.
- (4) Alternate Entry Points: B and C.
- (5) There is a high level of low altitude sightseeing and seaplane activity on all lakes for the route.
- (6) Contact Portland Approach (381.2) until past Point C.
- (7) Call Bangor Radio (255.4) with entry and exit times.
- (8) Squawk appropriate codes.
- (9) Route includes 4 NM radius around Point E.
- (10) Maintain a minimum of 1000' AGL within 5 NM of Point A (Mount Pleasant).
- (11) Maintain 1000' AGL and a 2 NM radius from Hutchinson Pond which is located approximately halfway between point A and B (N44-15.8 W070-43.2).
- (12) Maintain a minimum of 1500' AGL at Point B until past Androscoggin River, Col Dyke Airport.
- (13) CAUTION: Heavy hang glider activity on the west edge of route corridor from Point B to C. Activity is seasonal and heaviest from Mar-Nov.
- (14) CAUTION: Numerous light aircraft in the vicinity of Col Dyke Airport west of Point B.
- (15) Minimum altitude from Point B to C is 500' AGL. THIS AREA IS EXTREMELY NOISE SENSITIVE.
- (16) Stay left of centerline from Point B to 10 miles beyond Point D - EXTREMELY NOISE SENSITIVE.
- (17) Unpainted, unlighted tower on mountain top at N44-32.0 W70-45.0.
- (18) Avoid high powered radar site at N45-09.0 W69-51.0 by 5 NM and 5500' MSL.

FSS's Within 100 NM Radius:
BGR, BTV

VR ROUTES

FSS's Within 100 NM Radius:

BGR, BTV

VR-931

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430/0999.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or below 55 MSL | A | BET 071/150 | N60°55.00' W156°44.00' |
| 01 AGL B 55 MSL to | B | SQA 190/24 | N60°45.00' W156°01.00' |
| 01 AGL B 65 MSL to | C | ILI 275/37 | N60°01.00' W156°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route into/under Naknek 2 MOA.
- (2) Restricted operations in and around active Special Use Airspace (SUA). Coordinated scheduling with the 3 WG for SUA deconfliction is required. If the affected SUA is active, you must remain clear or below until given approval. Radio contact may be difficult.
- (3) All route points collocated with IR-911, IR-901, and VR-932.
- (4) IR-903, IR-913, VR-933 and VR-934 cross at Point A.
- (5) Primary Entry: A.
- (6) Primary Exit: C.
- (7) Remain clear of lodge located on the Mulchatna River (N60-24 W155-54) on segment B to C, by 1500' AGL or 1NM (1 May - 30 Sep). See 11 AF Noise/Flight Sensitive Areas List (NFSL), item 20.
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>
- (8) Route Entry: SVW (387.1), Exit: AKN (354.0/124.8).
- (9) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (10) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

ENA, ILI, MCG, HOM, DLG

VR-932

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430/0999.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506-2130 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or below 65 MSL | A | ILI 277/37 | N60°01.00' W156°00.00' |
| 01 AGL B 65 MSL to | B | SQA 190/24 | N60°45.00' W156°01.00' |
| 01 AGL B 55 MSL to | C | BET 071/150 | N60°55.00' W156°44.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route into/under Naknek 2 MOA.
- (2) Restricted operations in and around active Special Use Airspace (SUA). Coordinated scheduling with the 3 WG for SUA deconfliction is required. If the affected SUA is active, you must remain clear or below until given approval. Radio contact may be difficult.
- (3) All route points collocated with IR-901, IR-911, and VR-931.
- (4) IR-903, IR-913, VR-933 and VR-934 cross at Point C.
- (5) Primary Entry: Point A.
- (6) Primary Exit: Point C.
- (7) Remain clear of lodge located on the Mulchatna River (N60-24 W155-54) on segment A to B, by 1500' AGL or 1NM (1 May-30 Sep). See 11 AF Noise/Flight Sensitive Areas List (NFSL), item 20.
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>
- (8) Route Entry: AKN (354.0/124.8), Exit: SVW (387.1).
- (9) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (10) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

ENA, ILI, MCG, HOM, DLG

VR-933

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506-2130 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or below 80 MSL | A | TKA 224/133 | N61°29.00' W154°27.00' |
| 01 AGL B 80 MSL to | B | MCG 163/83 | N61°34.00' W155°42.00' |
| 01 AGL B 50 MSL to | C | SQA 234/34 | N60°55.00' W156°44.00' |
| 01 AGL B 65 MSL to | D | BET 084/111 | N60°28.00' W158°07.00' |
| 01 AGL B 65 MSL to | E | AKN 318/76 | N59°54.00' W157°38.00' |
| 01 AGL B 55 MSL to | F | AKN 306/70 | N59°42.00' W158°00.00' |
| 01 AGL B 55 MSL to | G | AKN 302/53 | N59°25.00' W157°48.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route through Stony A/B MOAs, Naknek 1 MOA, and beneath the floor of Naknek 1 MOA. Alternate entry/exit Points B thru F place you within Stony A MOA, between Stony and Naknek MOAs or, within/under Naknek 1 MOA.
- (2) Restricted operations in and around active Special Use Airspace (SUA). Coordinated scheduling with the 3 WG for SUA deconfliction is required. If the affected SUA is active, you must remain clear or below until given approval. Radio contact may be difficult.
- (3) All route points collocated with IR-903, IR-913 and VR-934.
- (4) IR-905, IR-915, VR-1905 and VR-1915 cross at Point A.
- (5) IR-901, IR-911, VR-931 and VR-932 cross at Point C.
- (6) Primary Entry: Point A. Alternate Entry: Points B thru F.
- (7) Primary Exit: Point G. Alternate Exit: Points B thru F.
- (8) Use CAUTION for rapidly rising terrain east of Point A.
- (9) Remain clear of Tikchik Lodge located on Nuyakuk Lake (N59-58 W158-28) west of segment D to E, by 1500' AGL or 3NM. See 11 AF Noise/Flight Sensitive Areas List (NFSL), DOPAA item B.
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (10) Use CAUTION for Koliganek Arprt Class E airspace, 4NM outside the route, segment E to F.
- (11) Route Entry: SVW (387.1), Exit: DLG (282.35/132.75).
- (12) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (13) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

ENA, ILI, MCG, HOM, DLG

VR-934

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430/0999.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506-2130 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or below 55 MSL | A | AKN 302/53 | N59°25.00' W157°48.00' |
| 01 AGL B 55 MSL to | B | AKN 306/70 | N59°42.00' W158°00.00' |
| 01 AGL B 55 MSL to | C | AKN 318/76 | N59°54.00' W157°38.00' |
| 01 AGL B 65 MSL to | D | BET 084/111 | N60°28.00' W158°07.00' |
| 01 AGL B 65 MSL to | E | SQA 234/34 | N60°55.00' W156°44.00' |
| 01 AGL B 50 MSL to | F | MCG 163/83 | N61°34.00' W155°42.00' |
| 01 AGL B 80 MSL to | G | TKA 224/133 | N61°29.00' W154°27.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route through Stony A/B MOAs, Naknek 1 MOA, and beneath the floor of Naknek 1 MOA. Alternate entry Points B, C, D, E & F place you north of Naknek 1 MOA, or at the southern boundary of Story B MOA. Alternate exits Points B, C, D, E and F place you at the southern boundary of Story B MOA, north of Naknek 1 MOA or at the northern boundary of Naknek 1 MOA.
- (2) Restricted operations in and around active Special Use Airspace (SUA). Coordinated scheduling with the 3 WG for SUA deconfliction is required. If the affected SUA is active, you must remain clear or below until given approval. Radio contact may be difficult.
- (3) All routes collocated with IR-903, IR-913, and VR-933.
- (4) IR-905, IR-915, VR-1905 and VR-1915 cross at Point G.
- (5) IR-901, IR-911, VR-931 and VR-932 cross at Point E.
- (6) Primary Entry Point-A. Alternate Entry Points-B thru F.
- (7) Primary Exit Point-G. Alternate Exit Points-B thru F.
- (8) Use CAUTION for rapidly rising terrain east of Point G.
- (9) Remain clear of Tikchik Lodge located on Nuyakuk Lake (N59-58 W158-28) west of segment C to D, by 1500' AGL or 3NM. See 11 AF Noise/Flight Sensitive Areas List (NFSL), DOPAA item B.
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (10) Use CAUTION for Koliganek Arprt Class E airspace, 4NM outside of the route, segment B to C.
- (11) Route Entry: DLG (282.35/132.75), Exit: SVW (387.1).

VR ROUTES

- (12) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (13) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

ENA, ILI, MCG, HOM, DLG

VR-935

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| at or below 95 MSL | A | BIG 033/70 | N64°38.00' W143°27.00' |
| 01 AGL B 95 MSL to | B | BIG 041/112 | N64°46.00' W141°47.00' |
| 01 AGL B 95 MSL to | C | BIG 055/70 | N64°13.00' W143°05.00' |
| 01 AGL B 15 AGL to | D | BIG 076/39 | N63°54.00' W144°16.00' |
| 01 AGL B 15 AGL to | E | BIG 037/18 | N64°09.00' W145°08.00' |
| 01 AGL B 15 AGL to | F | BIG 335/28 | N64°28.00' W145°45.00' |
| 01 AGL B 15 AGL to | G | BIG 313/48 | N64°44.00' W146°28.00' |
| 01 AGL B 60 AGL to Alternate Exit Track: | H | EIL 068/13 | N64°39.00' W146°36.00' |
| 01 AGL B 95 MSL to | C | BIG 055/70 | N64°13.00' W143°05.00' |
| 01 AGL B 100 MSL to | AD | BIG 050/52 | N64°15.00' W143°50.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline except; 5 NM right and 0.5 NM left of centerline from D to E.

Special Operating Procedures:

- (1) Primary route under and through Birch, Buffalo, Yukon 3A Low and Yukon 1 MOAs.
- (2) Restricted operations within active Special Use Airspace (SUAS). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUAS deconfliction) is required. If any of the affected SUAS is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed,

and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety.

- (3) All route points collocated with IR-917 (except IR-917 only lies upon A, B, C and D and the alternate exit track), IR-918 (except IR-918 lies upon A, B, C and D and the alternate exit track) and VR-936.
- (4) IR-909, IR-939, VR-1909 and VR-1939 cross at Point D, F and AD.
- (5) IR-922, IR-923, VR-940 and VR-941 cross at Point C.
- (6) IR-952, IR-953, VR-954 and VR-955 cross at Point B.
- (7) IR-928, IR-929, VR-1928 and VR-1929 cross at Point F.
- (8) Primary Entry Point-A. Alternate Entry Points-B through G.
- (9) Primary Exit Point-H. Alternate Exit Points-B through G and AD.
- (10) Seasonal Caribou calving sensitive area entire route (15 May - 15 July); see local OGV FCIFs for details and locations. Also see Airspace Presentation link in No.11.
- (11) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>. Segment F to G, remain clear of Salcha River Valley NFSL items 4, 5 and 40, segment D-E, remain clear of Healy Lake NFSL item 22.
- (12) Use CAUTION for uncharted airstrip, segment B to C at (N64-33.0 W142-31.0). Remain clear by 1500' AGL or 1NM, continuous.
- (13) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. One known camp is located at (N64-17.0 W144-16.0) and uses a helicopter for re-supply. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (14) Use CAUTION for Pogo Mine on segment E-F. Remain clear of mine by 5NM or 4500 MSL centered on (N64-25.8 W144-48.2), and Goodpaster River by 2NM or 4500' MSL from southern border of Yukon 1 MOA to airstrip located at (N64-28.0 W144-55.0) continuous. Mine has high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity year round. See 11 AF NFSL Item No.43.
- (15) Use CAUTION for uncharted airstrip at Healy Lake (N63-59.5 W144-42.5).
- (16) Cabins located along creek at (N64-36.0 W152-09.5).
- (17) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3500 MSL when within 2NM of the highway (Buffalo) or within 0.5 mile north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the NFSL.
- (18) Route Entry: MPY2 (319.2/120.9), Exit: BIG (322.5/135.3).
- (19) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (20) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS) See Alaska Supplement.

VR-936

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| at or below 60 AGL | A | EIL 068/13 | N64°39.00' W146°36.00' |
| 01 AGL B 15 AGL to | B | BIG 313/48 | N64°44.00' W146°28.00' |
| 01 AGL B 15 AGL to | C | BIG 335/28 | N64°28.00' W145°45.00' |
| 01 AGL B 15 AGL to | D | BIG 037/18 | N64°09.00' W145°08.00' |
| 01 AGL B 15 AGL to | E | BIG 076/39 | N63°54.00' W144°16.00' |
| 01 AGL B 15 AGL to | F | BIG 055/70 | N64°13.00' W143°05.00' |
| 01 AGL B 95 MSL to | G | BIG 041/112 | N64°46.00' W141°47.00' |
| 01 AGL B 95 MSL to Alternate Entry Track: | H | BIG 033/70 | N64°38.00' W143°27.00' |
| 01 AGL B 100 MSL to | AE | BIG 050/52 | N64°15.00' W143°50.00' |
| 01 AGL B 15 AGL to | F1 | BIG 055/70 | N64°13.00' W143°05.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline except 5 NM left and 0.5 NM right of centerline from D to E.

Special Operating Procedures:

- (1) Primary route under and through Birch, Buffalo, Yukon 3A Low and Yukon 1 MOAs.
- (2) Restricted operations within active Special Use Airspace (SUAS). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUAS deconfliction) is required. If any of the affected SUAS is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety.
- (3) All route points collocated with IR-917 (except IR-917 only lies upon E, F, G and H), IR-918 (except IR-918 begins at Point E), and VR-935.
- (4) IR-909, IR-939, VR-1909 and VR-1939 cross at Points C, E and AE.

- (5) IR-928, IR-929, VR-1928 and VR-1929 cross at Point C.
- (6) IR-922, IR-923, VR-940 and VR-941 cross at Point F.
- (7) IR-952, IR-953, VR-954 and VR-955 cross at Point G.
- (8) Primary Entry Point: A. Alternate Entry Points: B through G, and AE.
- (9) Primary Exit Point: H. Alternate Exit Points: B through G.
- (10) Seasonal Caribou calving sensitive area entire route (15 May - 15 July); see local OGV FCIFs for details and locations. Also see Airspace Presentation link in No.11.
- (11) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>. Segment B and C, remain clear of Salcha River Valley NFSL items 4, 5, and 40, segment D to E, remain clear of Healy Lake NFSL item 22.
- (12) Use CAUTION for an uncharted airport, segment F to G at (N64-33.0 W142-31.0). Remain clear by 1500' AGL or 1NM, continuous.
- (13) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. One known camp is located at (N64-17.0 W144-16.0) and uses a helicopter for re-supply. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (14) Use CAUTION for Goodpaster River portion of Pogo Mine mitigation on segment C to D. Remain clear of Goodpaster River by 2NM or 4500' MSL from southern border of Yukon 1 MOA to airstrip located at (N64-28.0 W144-55.0), continuous. Remain clear of mine by 5NM or 4500' MSL centered on (N64-25.8 W144-48.2). Mine has high density air activity with helicopters (150'-500' cable long-lines) and mixed wing activity year round. See 11 AF NFSL Item No.43.
- (15) Use CAUTION for uncharted airstrip at Healy Lake (N63-59.5 W144-42.5).
- (16) Cabins located along creek at (N64-36.0 W152-09.5).
- (17) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3500' MSL when within 2NM of the highway (Buffalo) or within 0.5 mile north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the NFSL.
- (18) Route Entry: BIG (322.5/135.3), Exit: MPY2 (319.2/120.9).
- (19) Weather briefing support agencies should request mission forecast from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (20) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS) See Alaska Supplement.

VR-937

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

VR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| at or below 110 MSL | A | TKA 064/59 | N62°17.00' W148°00.00' |
| 05 AGL B 110 MSL to | B | TKA 041/88 | N62°51.00' W147°09.00' |
| 05 AGL B 85 MSL to | C | BIG 162/62 | N62°59.00' W145°54.00' |
| 05 AGL B 85 MSL to lower altitude enroute to D is 05 AGL or 60 MSL whichever is higher | D | BIG 158/48 | N63°12.00' W145°45.00' |
| 05 AGL B 129 MSL to lower altitude enroute to E is 05 AGL or 60 MSL whichever is higher | E | BIG 175/25 | N63°37.00' W146°00.00' |
| 01 AGL B 167 MSL to | F | BIG 219/33 | N63°45.00' W146°48.00' |
| 01 AGL B 167 MSL to Alternate Exit Track One into R-2202: | G | BIG 255/39 | N64°05.00' W147°10.00' |
| 05 AGL B 129 MSL to lower altitude enroute to E is 05 AGL or 60 MSL whichever is higher | E | BIG 175/25 | N63°37.00' W146°00.00' |
| 01 AGL B 113 MSL to Alternate Exit Track Two into R-2202: | AF | BIG 219/20 | N63°51.00' W146°22.00' |
| 01 AGL B 167 MSL to | F | BIG 219/33 | N63°45.00' W146°48.00' |
| 01 AGL B 167 MSL to | BG | BIG 222/27 | N63°49.00' W146°38.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route under and through Fox 1, 2 and 3, Buffalo and Eielson MOAs. Alternate Entry/Exits Points B to F, and Exits AF and BG place you below Fox 1, or in R2202.
- (2) Restricted operations in and around active Special Use Airspace (SUAS). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUAS deconfliction) is required. If any of the affected SUAS is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R2202 and R2211 are required.
- (3) Contact Blair Lakes Range Control on primary 229.4, secondary 264.7 prior to entering R2211. They may not be open. Eielson Range Control provides area deconfliction.

- (4) All route points collocated with IR-919, IR-921 and VR-938.
- (5) IR-922, IR-923, VR-940 and VR-941 cross at Point D.
- (6) IR-926, IR-927, VR-1926 and VR-1927 cross at Point E.
- (7) IR-900, IR-916, VR-1900 and VR-1916 cross at Point G.
- (8) Primary Entry Point: A. Alternate Entry Points: B through F.
- (9) Primary Exit Point: G. Alternate Exit Points: B through F, AF and BG.
- (10) Remain clear of caribou calving area, Segment A to B by 1000' AGL entire route segment, 1 May - 30 June. See 11 AF Noise/Flight Sensitive Areas List (NFSL) item 26 on <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (11) Remain clear of caribou hunting area, Segment B to C by 1000' AGL entire route segment, 1 Aug - 30 Sep. See NFSL item 41.
- (12) Remain clear of Fielding Lake State Rec Sites, Segment C to D (N63-10.0 W145-40.0) and (N63-11.6 W145-38.0) by 2000' AGL or 1NM, 15 May - 30 Sep. See NFSL item 23.
- (13) Use CAUTION, remain below 11,000' MSL when within 4NM of Victor Airway 481, Segments C to E.
- (14) Remain clear of Delta National Wild and Scenic River, Segment C to E by 5NM either side of river or 5000' MSL, 27 June - 11 July. See NFSL item 19.
- (15) Remain clear of Donnelly Creek State Rec. Site, near Point E (N63-39.6 W145-53.0) by 2000' AGL or 1NM, 15 May - 30 Sep. See NFSL item 24.
- (16) Use CAUTION for Black Rapids Airport, near Point E (N63-32.1 W145-51.6). Remain clear by 3NM or 1500' AGL. See Buffalo MOA description in the Alaska Airspace Handbook on web site listed above.
- (17) Use CAUTION for Newman Creek Airstrip, Segment F to G (N63-58.6 W147-15.6). Remain clear by 5000' AGL or 1NM, 15 May - 15 June and 15 Nov - 15 Dec. See NFSL, item 6.
- (18) Use CAUTION for high density VFR traffic transiting the Isabel Pass, near Point E.
- (19) During September maintain 1000' AGL on segments E to G. This is a MACA safety issue due to high density GA flight operations during the fall hunting season. This is a high use area - including the area covered in R22002.
- (20) Route Entry: TKA (254.3/125.55), Exit: MPY2 (319.2/120.9), Alt Exit Pts E use BIG (322.5/135.3).
- (21) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (22) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

ENA, FAI, ORT, PAQ, TKA

VR-938

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| at or below 167 MSL | A | BIG 255/39 | N64°05.00' W147°10.00' |
| 01 AGL B 167 MSL to | B | BIG 219/33 | N63°45.00' W146°48.00' |
| 01 AGL B 167 MSL to | C | BIG 175/25 | N63°37.00' W146°00.00' |
| 05 AGL B 129 MSL to lower altitude enroute to D is 05 AGL or 60 MSL whichever is higher | D | BIG 158/48 | N63°12.00' W145°45.00' |
| 05 AGL B 85 MSL to lower altitude enroute to E is 05 AGL or 60 MSL whichever is higher | E | BIG 162/62 | N62°59.00' W145°54.00' |
| 05 AGL B 85 MSL to | F | TKA 041/88 | N62°51.00' W147°09.00' |
| 05 AGL B 110 MSL to Alternate Entry Track One from R-2202: | G | TKA 064/59 | N62°17.00' W148°00.00' |
| 01 AGL B 167 MSL to | AA | BIG 222/27 | N63°49.00' W146°38.00' |
| 01 AGL B 167 MSL to Alternate Entry Track Two from R-2202: | B | BIG 219/33 | N63°45.00' W146°48.00' |
| 01 AGL B 110 MSL to | BB | BIG 219/20 | N63°51.00' W146°22.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route through and under Fox 1, 2 and 3, Buffalo and Eielson MOAs. Alternate Entry Points B to F, AA and BB begin in R2202 or within the MOAs. Alternate Exit Points B through F place you in a MOA, or near MOA boundaries.
- (2) Restricted operations in and around active Special Use Airspace (SUAS). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUAS deconfliction) is required. If any of the affected SUAS is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R2202 and R2211 are required.
- (3) Contact Blair Lakes Range Control on primary 229.4, secondary 264.7 prior to entering R2211. They may not be open. Eielson Range Control provides area deconfliction.
- (4) All route points collocated with IR-919, IR-921 and VR-937.
- (5) IR-900, IR-916, VR-1900 and VR-1916 cross at Point A.
- (6) IR-926, IR-927, VR-1926 and VR-1927 cross at Point C.
- (7) IR-922, IR-923, VR-940 and VR-941 cross at Point D.

- (8) Primary Entry Point: A. Alternate Entry Points: B through F, AA and BB.
- (9) Primary Exit Point: G. Alternate Exit Points: B through F.
- (10) Use CAUTION for Newman Creek Airstrip, Segment A to B (N63-58.6 W147-15.6). Remain clear by 5000' AGL or 1NM, 15 May - 15 June and 15 Nov - 15 Dec. See 11 AF Noise/Flight Sensitive Areas List (NFSL), item 6. <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (11) During September maintain 1000' AGL on segments A to B. This is a MACA safety issue due to high density GA flight operations during the fall hunting season. This is a high use area - including the area covered in R2202.
- (12) Use CAUTION for high density VFR traffic transiting the Isabel Pass, near Point C.
- (13) Use CAUTION for Black Rapids Airport, Segment C to D (N63-32.1 W145-51.6). Remain clear by 3NM or 1500' AGL. See Buffalo MOA description in the Alaska Airspace Handbook on web site listed above.
- (14) Remain clear of Donnelly Creek State Rec. Site, Segment C to D (N63-39.6 W145-53.0) by 2000' AGL or 1NM, 15 May - 30 Sep. See NFSL item 24.
- (15) Remain clear of Delta National Wild and Scenic River, Segment C to E by 5NM either side of river or 5000' MSL, 27 June - 11 July. See NFSL item 19.
- (16) Remain clear of Fielding Lake State Rec Sites, Segment D to E (N63-10.0 W145-38.0) by 2000' AGL or 1NM, 15 May - 30 Sep. See NFSL item 23.
- (17) Remain clear of caribou hunting area, Segments E to F by 1000' AGL entire route segment, 1 Aug - 30 Sep. See NFSL item 41.
- (18) Use CAUTION, remain below 11,000' MSL when within 4NM of Victor Airway 481, Segments C to E.
- (19) Remain clear of caribou calving area, Segment F to G by 1000' AGL entire route segment, 1 May - 30 June. See NFSL item 26.
- (20) Route Entry: MPY2 (319.2/120.9), Exit: TKA (254.3/125.55), Alt Exit Pts C and D use BIG (322.5/135.3).
- (21) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (22) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT, ENA, PAQ, TKA

VR-940

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| at or below 125 MSL | A | BIG 158/48 | N63°12.00' W145°45.00' |

VR ROUTES

| | | | |
|---------------------|---|------------|---------------------------|
| 01 AGL B 125 MSL to | B | BIG 102/54 | N63°29.00' W144°05.00' |
| 01 AGL B 95 MSL to | C | BIG 079/69 | N63°45.00' W143°10.00' |
| 01 AGL B 90 MSL to | D | BIG 055/70 | N64°13.00' W143°05.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route SE of Interior MOAs except portion of route transits eastern portion of Buffalo MOA into Yukon 3A Low MOA.
- (2) Restricted operations within active Special Use Airspace (SUAS). See AFI 12-212, 11 AF Supplement. Coordinated scheduling with 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUAS deconfliction) is required. If any of the affected SUAS is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety.
- (3) Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to entry. ATC may ask if you are a 'participant' in the SUAS. This means you have coordinated with the Scheduling Activity for the use of the SUAS.
- (4) All route points collocated with IR-922, IR-923 and VR-941.
- (5) IR-919, IR-921, VR-937 and VR-938 cross at Point A.
- (6) IR-917, IR-918, VR-935 and VR-936 cross at Point D.
- (7) Primary Entry Point: A. Alternate Entry Points: B and C.
- (8) Primary Exit Point: D. Alternate Exit Points: B and C.
- (9) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (10) Maintain 500' AGL or 6000' MSL whichever is higher minimum until 8 NM past Point A.
- (11) Remain clear of Fielding Lake State Rec Sites, Segment A to B (N63-10.0 W145-40.0) and (N63-11.2 W145-38.0) by 2000' AGL or 1NM, 15 May - 30 Sep. See NFSL item 23.
- (12) Descend below 14000' MSL prior to crossing Point B.
- (13) Remain clear of Delta National Wild and Scenic River, segment A-B by 5NM either side of river or 5000' MSL, 27 June - 11 July. See NFSL item 19.
- (14) Use CAUTION for high density VFR traffic at the southern mouth of Isabel Pass, Point A.
- (15) Remain clear of Dall Sheep lambing area beginning 18NM NE of Point A to Point B, from 3NM left of centerline to 5NM right of centerline, by 1000' AGL, 1 May - 30 June. See NFSL item 27.
- (16) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.

- (17) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3500' MSL when within 2NM of the highway (Buffalo) or within 0.5 mile north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA description in the Alaska Airspace Handbook.
- (18) Seasonal Caribou calving sensitive area, segment C to D within Yukon 3A Low MOA, (15 May - 15 July). See local OGV FCIFs for details and locations.
- (19) Avoid Monte Lake Fishing Lodge (N63-30.0 W144-05.0), segment B to C by 1NM.
- (20) Avoid cabins in the vicinity of (N63-28.2 W143-56.2), (N63-32.8 W143-54.3), (N63-54.5 W143-02.5) and (N64-06.7 W143-01.0).
- (21) Maintain 1500 AGL minimum on segment B to C during yearly moose hunting season, approximately 1-20 Sep.
- (22) Route Entry/Exit: BIG (322.5/135.3).
- (23) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (24) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS), PAQ, TKA. See Alaska Supplement.

VR-941

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| at or below 90 MSL | A | BIG 055/70 | N64°13.00' W143°05.00' |
| 01 AGL B 90 MSL to | B | BIG 079/69 | N63°45.00' W143°10.00' |
| 01 AGL B 95 MSL to | C | BIG 102/54 | N63°29.00' W144°05.00' |
| 01 AGL B 125 MSL to | D | BIG 158/48 | N63°12.00' W145°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route SE of Interior MOAs except portion of route transits eastern portion of Buffalo MOA into Yukon 3A Low MOA.
- (2) Restricted operations within active Special Use Airspace (SUAS). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson

Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUAS deconfliction) is required. If any of the affected SUAS is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety.

- (3) Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a 'participant' in the SUAS. This means you have coordinated with the Scheduling Activity for the use of the SUAS.
- (4) All route points collocated with IR-922, IR-923 and VR-940.
- (5) IR-919, IR-921, VR-937 and VR-938 cross at Point D.
- (6) IR-917, IR-918, VR-935 and VR-936 cross at Point A.
- (7) Primary Entry Point: A. Alternate Entry Points: B and C.
- (8) Primary Exit Point: D. Alternate Exit Points: B and C.
- (9) Numerous sensitive areas near Alaska Hwy. See 11 AF Flight/Noise Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (10) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cable strung below for carrying cargo.
- (11) Seasonal Caribou calving sensitive area, segment A to B within Yukon 3A Low MOA, (15 May - 15 July). See local OGV FCIFs for details and locations.
- (12) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3500' MSL when within 2NM of the highway (Buffalo) or within 0.5 mile north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the Alaska Airspace Handbook.
- (13) Remain clear of Dall Sheep lambing area beginning 18 NM NE of Point D to Point C, from 3NM right of centerline to 5NM left of centerline, by 1000' AGL, 1 May - 30 June. See NFSL item 27.
- (14) Remain clear of Fielding Lake State Rec Sites, Segment C to D (N63-10.0 W145-40.0) and (N63-11.2 W145-38.0) by 2000' AGL or 1NM, 15 May- 30 Sep. See NFSL item 23.
- (15) Remain clear of Delta National Wild and Scenic River, segment C to D by 5NM either side of river or 5000' MSL, 27 June - 11 July. See NFSL item 19.
- (16) Use CAUTION for high density VFR traffic at the southern mouth of Isabel Pass, Point D.
- (17) Maintain 500' AGL or 6000' MSL whichever is higher minimum beginning at a Point 8 miles prior to Point D to the route exit.
- (18) Avoid Monte Lake Fishing Lodge (N63-30.0 W144-05.0), segment B to C by 1NM.
- (19) Avoid cabins in the vicinity of (N63-28.2 W143-56.2), (N63-32.8 W143-54.5), (N63-54.5 W143-02.5) and (N64-06.7 W143-01.0).
- (20) Maintain 1500' AGL minimum on segment B to C during the yearly moose hunting season, approximately 1-20 Sept.
- (21) Route Entry/Exit: BIG (322.5/135.3).
- (22) Weather briefing support agencies should request mission forecast from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.

(23) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS), PAQ, TKA. See Alaska Supplement.

VR-954

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------|----|--------------|---------------------------|
| at or below 95 MSL | A | BIG 041/112 | N64°46.00' W141°47.00' |
| 01 AGL B 95 MSL to | B | BIG 034/116 | N65°00.00' W141°54.00' |
| 01 AGL B 70 MSL to | C | FYU 101/106 | N65°30.00' W141°51.00' |
| 01 AGL B 60 MSL to | D | FYU 099/101 | N65°36.00' W141°56.00' |
| 01 AGL B 60 MSL to | E | FYU 095/73 | N65°57.00' W142°42.00' |
| 01 AGL B 50 MSL to | F | FYU 102/64 | N65°55.50' W143°12.00' |
| 01 AGL B 60 MSL to | G | FYU 121/74 | N65°33.00' W143°38.00' |
| 01 AGL B 50 MSL to | H | FYU 129/81 | N65°22.50' W143°52.00' |
| 01 AGL B 85 MSL to | I | BIG 010/66 | N64°55.00' W144°20.00' |
| 01 AGL B 80 MSL to | J | BIG 009/63 | N64°53.00' W144°25.00' |
| 01 AGL B 90 MSL to | K | BIG 004/39 | N64°35.00' W145°02.00' |
| 01 AGL B 70 MSL to | L | BIG 352/33 | N64°32.00' W145°23.00' |
| 01 AGL B 75 MSL to | M | EIL 055/14 | N64°42.00' W146°34.00' |
| 01 AGL B 60 MSL to | N | EIL 029/13 | N64°47.00' W146°42.00' |
| 01 AGL B 60 MSL to | O | EIL 013/17 | N64°53.00' W146°42.00' |
| 01 AGL B 75 MSL to | P | FYU 171/80 | N65°18.00' W146°09.00' |
| 01 AGL B 70 MSL to | Q | FYU 168/79 | N65°18.00' W146°00.00' |
| Alternate RACETRACK in R-2205: | | | |
| 01 AGL B 70 MSL to | N | EIL 029/13 | N64°47.00' W146°42.00' |
| 01 AGL B 70 MSL to | AO | FYU 170/102 | N64°56.00' W146°20.00' |

VR ROUTES

| | | | |
|--------------------|----|------------|---------------------------|
| 01 AGL B 90 MSL to | AP | BIG 355/48 | N64°46.00' W145°08.00' |
| 01 AGL B 70 MSL to | L1 | BIG 352/33 | N64°32.00' W145°23.00' |
| 01 AGL B 75 MSL to | M1 | EIL 055/14 | N64°42.00' W146°34.00' |
| 01 AGL B 70 MSL to | N1 | EIL 029/13 | N64°47.00' W146°42.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route within Yukon 1-4 MOAs to R2205.
- (2) Restricted operations within active Special Use Airspace (SUAS). See AFI 12-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUAS deconfliction) is required. If any of the affected SUAS is active, you must remain clear until ERC approves entry. Radio contact may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R2205 is required.
- (3) Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a 'participant' in the SUAS. This means you have coordinated with the Scheduling Activity for the use of the SUAS.
- (4) All route points collocated with IR-952, IR-953 and VR-955.
- (5) IR-917, IR-918, VR-935 and VR-936 cross at Point A.
- (6) Primary Entry Point: A. Alternate Entry Points: B thru P.
- (7) Primary Exit Point: Q. Alternate Exit Points: B thru P, AP, L1, M1 and N1.
- (8) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (9) Remain clear of Peregrine Falcon corridor along Yukon, Charlie and Kandik rivers (15 Apr to 31 Aug). See NFSL Item No.17.
- (10) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (11) Use CAUTION for Pogo Mine adjacent to route at Point K. Remain clear of mine by 5NM or 4500' MSL centered on (N64-25.8 W144-48.2), and GToodpaster River by 2NM or 4500' MSL from southern border of Yukon 1 MOA to airstrip located at (N64-28.0 W144-55.0) continuous. Mine has high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity year round. See 11 AF NFSL Item No43.
- (12) Remain clear of Salcha River area certain times of the year, Segment K to M. See NFSL Items 4, 5 and 40.
- (13) Remain clear of Pleasant Valley Subdivision by 6000' MSL, continuous, Segment N and O. See NFSL Item No.1.

- (14) Remain clear of Chena River State Recreation Site by 1500' AGL (1 May - 30 Sep), Segment M to P and the Racetrack to R2205. See NFSL item No.2.
- (15) Seasonal Caribou calibou sensitive area, entire route (15 May - 15 JULY); see local OGV FCIFs for details and locations.
- (16) Start a right turn immediately after weapons release in R-2205 to preclude flying into Fairbanks Approach Control airspace. Ft Wainwright AAF Class E airspace, less than 1NM outside the route, segment M to O. Eielson AFB Class D and E airspace 2NM outside the route, segment N to O.
- (17) Route Entry/Exit: MPY2 (319.2/120.9), Points E and F use FYU (381.6/132.7).
- (18) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (19) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS) See Alaska Supplement.

VR-955

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or below 70 MSL | A | FYU 168/79 | N65°18.00' W146°00.00' |
| 01 AGL B 70 MSL to | B | FYU 171/80 | N65°18.00' W146°09.00' |
| 01 AGL B 75 MSL to | C | EIL 013/17 | N64°53.00' W146°42.00' |
| 01 AGL B 60 MSL to | D | EIL 029/13 | N64°47.00' W146°42.00' |
| 01 AGL B 60 MSL to | E | EIL 055/14 | N64°42.00' W146°33.50' |
| 01 AGL B 75 MSL to | F | BIG 352/33 | N64°32.00' W145°23.00' |
| 01 AGL B 70 MSL to | G | BIG 004/39 | N64°35.00' W145°02.00' |
| 01 AGL B 90 MSL to | H | BIG 009/63 | N64°53.00' W144°25.00' |
| 01 AGL B 80 MSL to | I | BIG 010/66 | N64°55.00' W144°20.00' |
| 01 AGL B 85 MSL to | J | FYU 129/81 | N65°22.00' W143°52.00' |
| 01 AGL B 50 MSL to | K | FYU 121/74 | N65°33.00' W143°38.00' |
| 01 AGL B 60 MSL to | L | FYU 102/64 | N65°55.00' W143°12.00' |

01 AGL B 50 MSL to M FYU 095/73 N65°57.00'
W142°42.00'

01 AGL B 60 MSL to N FYU 099/101 N65°36.00'
W141°56.00'

01 AGL B 60 MSL to O FYU 101/106 N65°30.00'
W141°51.00'

01 AGL B 70 MSL to P BIG 034/116 N65°00.00'
W141°54.00'

01 AGL B 95 MSL to Q BIG 041/112 N64°46.00'
W141°47.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route within Yukon 1-4 MOAs.
- (2) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R2205 is required.
- (3) Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a 'participant' in the SUA. This means you have coordinated with the Scheduling Activity for the use of the SUA.
- (4) All route points collocated with IR-952, IR-953 and VR-954.
- (5) IR-917, IR-918, VR-935 and VR-936 cross at Point Q.
- (6) Primary Entry Point: A. Alternate Entry Points: B thru P.
- (7) Primary Exit Point: Q. Alternate Exit Points: B thru P.
- (8) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (9) Remain clear of Peregrine Falcon corridor along Yukon, Charlie and Kandik rivers (15 Apr to 31 Aug). See NFSL Item 17.
- (10) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (11) Use CAUTION for Pogo Mine adjacent to route at Point G. Remain clear of mine by 4 NM or 4500' MSL centered on (N64-25.8 W144-48.2), and Good Paster River by 2 NM or 4500' MSL from southern border of Yukon 1 MOA to airstrip located at (N64-28 W144-55), continuous. Mine has high density air activity with helicopters (150'-500' cable long-line) and fixed wing activity year round. See 11 AF NFSL Item 43.
- (12) Remain clear of Salcha River area certain times of the year, Segment E to G. See NFSL Items 4, 5 and 40.
- (13) Remain clear of Pleasant Valley Subdivision by 6000' MSL, continuous, Segment B to D. See NFSL Item 1.

- (14) Remain clear of Chena River State Recreation Site by 1500' AGL, (1 May - 30 Sep), Segment B to C. See NFSL Item 2.
- (15) Seasonal Caribou calving sensitive area, entire route (15 May - 15 July). See local OGV FCIFs for details and locations.
- (16) If operating in R-2205, start a rigght turn immediately after weapons release in R-2205 to preclude flying into Fairbanks Approach Control airspace. Ft. Wainwright AAF Class E airspace, less than 1 NM outside the route, segment C to E. Eielson AFB Class D and E airspace 2 NM outside the route, segment D to E.
- (17) Route Entry/Exit: MPY2 (319.2/120.9), Points L and M use FYU (381.6/132.7).
- (18) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (19) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS) See Alaska Supplement.

VR-1001

ORIGINATING ACTIVITY: FACSACJAX, P.O. Box 40, NAS Jacksonville, FL 32212-0040 DSN 942-2004/2005, C904-542-2004/2005. Auto Brief DSN 942-2275, C904-542-2275.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | AMG 097/25 | N31°29.00' W82°01.00' |
| 02 AGL B 15 AGL to | B | AYS 277/15 | N31°18.00' W82°51.00' |
| 02 AGL B 15 AGL to | C | AYS 294/29 | N31°28.00' W83°04.00' |
| 02 AGL B 15 AGL to | D | AMG 301/28 | N31°47.00' W82°59.00' |
| 02 AGL B 15 AGL to | E | VNA 225/31 | N31°51.00' W83°56.00' |
| 02 AGL B 15 AGL to | F | PZD 254/14 | N31°35.00' W84°33.00' |
| 02 AGL B 15 AGL to | G | PZD 203/29 | N31°12.00' W84°30.00' |
| 02 AGL B 15 AGL to | H | SZW 007/20 | N30°53.00' W84°19.00' |
| 02 AGL B 15 AGL to | I | GEF 216/10 | N30°25.00' W83°54.00' |
| 02 AGL B 15 AGL to | J | GEF 108/33 | N30°22.00' W83°11.00' |

VR ROUTES

| | | | |
|---|----|------------|--------------------------|
| 02 AGL B 15 AGL to NOTE: FOLLOWING SEGMENTS USE LIMITED TO DESIG- NATED SPECIAL EXERCISES ONLY. | K | TAY 091/23 | N30°31.00' W82°06.00' |
| 02 AGL B 15 AGL to | K1 | TAY 091/23 | N30°31.00' W82°06.00' |
| 02 AGL B 15 AGL to | L | SSI 255/16 | N30°58.00' W81°44.00' |
| 02 AGL B 08 MSL to | M | SSI 318/21 | N31°17.50' W81°44.00' |

ROUTE WIDTH - 2 NM either side of centerline from A to H; 5 NM either side of centerline from H to J; 2 NM either side of centerline from J to M.

Special Operating Procedures:

- (1) Alternate Entry: Points B, C, D and J.
- (2) Alternate Exit: Point J.
- (3) Cross Point B, (Pearson, GA.) at 1000' AGL; maintain 1000' AGL until 5 NM past Pearson; noise sensitive area.
- (4) Between Points D-E, do not overfly the town of Arabi, GA. at N31-50.0 W83-45.0; noise sensitive area.
- (5) Between Points E-F, do not overfly the towns of Warwick, GA. at N31-51.0 W83-54.0 and Leesburg, GA. at N31-44.0 W84-10.0; noise sensitive areas. avoid overflight of horse ranch at N31-39.0 W84-17.0.
- (6) 5 NM past Point E, uncharted 500' MSL tower at N31-48.5 W84-02.0.
- (7) Between Points F-G, minimum altitude 500' AGL from May 1-Oct 31 annually, intensive agricultural spraying being conducted. Remain well clear of Morgan, GA at N31-32.0 W84-36.0; noise sensitive area.
- (8) 1 NM West of Point H, uncharted 1250' MSL tower at N30-53.0 W84-20.5.
- (9) Between Point H-I, from N30-40.0 W84-09.0 to N30-30.0 W83-58.0, minimum altitude 500' AGL. Remain on or left of centerline, noise sensitive areas.
- (10) Between Points I-J, do not overfly the town of Lamont, FL at N30-23.0 W83-49.0; noise sensitive area.
- (11) Between Points J-K, avoid overflight of chicken farm at N30-24.0 W82-58.0 and horse ranch at N30-22.3 W83-03.3; noise sensitive areas.
- (12) 2 NM West of Point K, uncharted 400' MSL tower.
- (13) Point K, do not overfly the town of St. George, GA. at N30-31.5 W82-02.0; noise sensitive area.

FSS's Within 100 NM Radius:

ANB, GNV, MCN, PIE

VR-1002

ORIGINATING ACTIVITY: FACS FACJAX, NAS

Jacksonville, FL 32212 DSN 942-2004/2005,
C904-542-2004/2005.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | AYS 131/33 | N30°54.50' W82°04.50' |
| 02 AGL B 15 AGL to | B | TAY 091/23 | N30°31.00' W82°06.00' |
| 02 AGL B 15 AGL to | C | TAY 146/20 | N30°14.00' W82°19.00' |
| 02 AGL B 15 AGL to | D | TAY 165/23 | N30°08.00' W82°25.00' |
| 02 AGL B 15 AGL to | E | CTY 012/24 | N30°00.00' W82°58.00' |
| 02 AGL B 15 AGL to | F | CTY 175/22 | N29°14.00' W83°00.10' |
| 02 AGL B 15 AGL to | G | CTY 290/29 | N29°45.00' W83°35.00' |
| 02 AGL B 15 AGL to | H | SZW 169/30 | N30°03.50' W84°17.00' |
| 15 AGL to | I | GEF 216/10 | N30°25.00' W83°54.00' |
| 02 AGL B 15 AGL to | J | GEF 108/33 | N30°22.00' W83°11.00' |
| 02 AGL B 15 AGL to | K | AYS 226/25 | N30°59.00' W82°54.00' |
| 02 AGL B 15 AGL to | L | AYS 282/35 | N31°23.00' W83°13.00' |
| 02 AGL B 15 AGL to | M | AMG 301/28 | N31°47.00' W82°59.00' |
| 02 AGL B 15 AGL to | N | AMG 320/15 | N31°44.00' W82°42.00' |
| 02 AGL B 15 AGL to | O | AMG 049/29 | N31°51.00' W82°05.00' |
| 02 AGL B 15 AGL to | P | AMG 065/38 | N31°48.00' W81°50.00' |

ROUTE WIDTH - 2 NM either side of centerline from A to F; 5 NM either side of centerline from F to K; 2 NM either side of centerline from K to P.

Special Operating Procedures:

- (1) Alternate Entry: Points C, G, J and K.
- (2) Alternate Exit: Points H, K and O.
- (3) Point B, do not overfly the town of St. George, GA. at N30-31.5 W82-02.0: Noise Sensitive Area.
- (4) Between Points B-C, do not overfly Cuyler Field at N30-22.0 W82-13.5.
- (5) Between Points D-E, do not overfly the town of Columbia, FL at N30-04.1 W82-41.5: Noise Sensitive Area.
- (6) Point E, maintain centerline or north of centerline until past Point E. Do not cut the corner. This will avoid overflight of Flint's Flying Ranch and the town of Branford.
- (7) Between Points E-F, remain west of the Suwannee River until South of N29-30.0. Do not use River as flight path. Do not overfly the town of Old Town, FL at N29-36.0 W82-59.0: Noise Sensitive Area. Minimum altitude 1000' AGL. Intensive Helo logging operations being conducted in the vicinity. Helos operating daily with 400' cable between Old Town and logging area at N29-27.0 W83-01.0.
- (8) Point F, do not overfly Cedar Key, Noise Sensitive Area.
- (9) Start climb so as to cross Point H at 1500' AGL, maintain 1500' AGL until Point I-National Wildlife Refuge.
- (10) Between Points I-J, do not overfly the town of Lamont, FL at N32-23.0 W83-49.0; Noise Sensitive Area.

- (11) Segments J-M traverse Moody Two MOA. Aircraft are required to contact Valdosta Approach Control on 285.6 prior to passing J.
- (12) Between Points J-K, do not overfly the towns of Jennings, FL at N30-36.0 W83-05.5 and Statenville, GA at N30-42.5 W83-01.5; Noise Sensitive Areas.
- (13) Between Points J-K, use caution. Uncharted airfield located at N30-31.0 W83-03.5.
- (14) Route terminates in R-3007. Units not scheduled at Townsend Target exit at Point O.
- (15) Exercise extreme caution U.S. Fish and Wildlife Heliport located at N30-44.5 W82-07.1. Probable VFR helicopter traffic between segments A and B.

FSS's Within 100 NM Radius:

GNV, MCN, PIE

VR-1003

ORIGINATING ACTIVITY: FACSACJAX, NAS

Jacksonville, FL 32212 DSN 942-2004/2005, C904-542-2004/2005.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 02 AGL B 15 AGL to | A | SAV 172/17 | N31°50.00' W81°07.00' |
| 02 AGL B 15 AGL to | B | SSI 352/33 | N31°35.00' W81°35.00' |
| 02 AGL B 15 AGL to | C | SSI 333/29 | N31°28.00' W81°44.00' |
| 02 AGL B 15 AGL to | D | AYS 103/22 | N31°11.00' W82°08.00' |
| 02 AGL B 15 AGL to | E | AYS 131/33 | N30°54.50' W82°04.50' |
| 02 AGL B 15 AGL to | F | TAY 091/23 | N30°31.00' W82°06.00' |
| 02 AGL B 15 AGL to | G | TAY 165/23 | N30°08.00' W82°25.00' |
| 02 AGL B 15 AGL to | H | CTY 012/24 | N30°00.00' W82°58.00' |
| 02 AGL B 15 AGL to | I | CTY 176/22 | N29°14.00' W83°00.10' |
| 02 AGL B 15 AGL to | J | CTY 290/29 | N29°45.00' W83°35.00' |
| 02 AGL B 15 AGL to | K | GEF 108/33 | N30°22.00' W83°11.00' |
| 02 AGL B 15 AGL to | L | AYS 226/25 | N30°59.00' W82°54.00' |
| 02 AGL B 15 AGL to | M | AYS 282/35 | N31°23.00' W83°13.00' |
| 02 AGL B 15 AGL to | N | AMG 320/15 | N31°44.00' W82°42.00' |
| 02 AGL B 15 AGL to | O | AMG 049/29 | N31°51.00' W82°05.00' |
| 02 AGL B 15 AGL to | P | AMG 079/15 | N31°35.00' W82°13.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 02 AGL B 15 AGL to | Q | AYS 103/22 | N31°11.00' W82°08.00' |
| 02 AGL B 15 AGL to | R | AYS 131/33 | N30°54.50' W82°04.50' |

ROUTE WIDTH - 5 NM either side of centerline from A to C; 2 NM either side of centerline from C to I; 5 NM either side of centerline from I to J; 2 NM either side of centerline from J to K; 5 NM either side of centerline from K to L; 2 NM either side of centerline from L to R.

Special Operating Procedures:

- (1) Alternate Entry: Points B, C, D, E, F, G, J, K and L.
- (2) Alternate Exit: Points B, J, K, L and O.
- (3) Vicinity of Point A, do not overfly Wassaw National Wildlife Refuge.
- (4) Segments A-B use conjunction with Townsend Target, units not scheduled on Townsend Target enter at C.
- (5) Between Points A-B, use caution. Aircraft departing Townsend Airport have low visibility due to tree line.
- (6) Between Points C-D, uncharted airport at N31 12.8 W82-06.8.
- (7) Point F, do not overfly town of St. George, GA. at N30-31.5 W82-02.0; Noise Sensitive Area.
- (8) Between Points F-G, do not overfly Cuyler Field at N30-22.0 W82-13.5.
- (9) Between Points G-H, do not overfly the town of Columbia, FL at N30-04.2 W82-41.8.
- (10) Point H, maintain centerline or north of centerline until past Point H. Do not cut the corner. This will avoid overflight of Flint's Flying Ranch and town of Branford.
- (11) Between Points H-I, remain west of the Suwannee River until south of N29-30.0, do not use river as flight path. Do not overfly the town of Old Town, FL at N29-36.0 W82-59.0; Noise Sensitive Area. Minimum altitude 1000' AGL. Intensive Helicopter logging operations being conducted in the vicinity. Helicopters operating daily with 400' cable between Old Town, FL and logging area at N29-27.0 W83-01.0.
- (12) Point I, do not overfly Cedar Key; Noise Sensitive Area, Wildlife Refuge.
- (13) Between Points J-K, avoid the town of Dowling Park at N30-14.5 W83-14.5 by remaining west of the Suwannee River until north of N30-15.0.
- (14) Between Points K-L, use caution, uncharted airfield at N30-31.0 W83-03.5. Do not overfly the towns of Jennings, FL at N30-36.0 W83-05.5 and Stateville, GA. at N30-42.5 W83-01.5; Noise Sensitive Areas.
- (15) Segments K-N traverse Moody Two MOA. Aircraft are required to contact Valdosta Approach Control on 285.6 prior to passing K .
- (16) Exercise extreme caution U.S. Fish and Wildlife Heliport located at N30-44.5 W82-07.1. Probable VFR helicopter traffic between segments E and F.

FSS's Within 100 NM Radius:

GNV, MCN, PIE

VR-1004

ORIGINATING ACTIVITY: FACSACJAX, P.O. Box 40, NAS Jacksonville, FL 32212-0040 DSN 942-2004/2005, C904-542-2004/2005. Auto Brief DSN 942-2275, C904-542-2275.

VR ROUTES

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| As assigned to | A | SSI 255/16 | N30°58.00' W81°44.00' |
| 02 AGL B 15 AGL to | B | AYS 183/10 | N31°06.00' W82°34.00' |
| 02 AGL B 15 AGL to | C | AYS 282/35 | N31°23.00' W83°13.00' |
| 02 AGL B 15 AGL to | D | AMG 301/28 | N31°47.00' W82°59.00' |
| 02 AGL B 15 AGL to | E | VNA 088/27 | N32°13.00' W82°58.00' |
| 05 AGL B 15 AGL to | F | MCN 055/22 | N32°54.00' W83°17.00' |
| 02 AGL B 15 AGL to | G | ATL 122/35 | N33°19.00' W83°51.00' |
| 02 AGL B 15 AGL to | H | ATL 105/41 | N33°27.00' W83°39.00' |
| 02 AGL B 15 AGL to | I | AHN 167/38 | N33°20.00' W83°09.00' |
| 02 AGL B 15 AGL to | J | IRQ 213/46 | N33°02.00' W82°36.00' |
| 02 AGL B 15 AGL to | K | VNA 073/44 | N32°25.00' W82°40.00' |
| 02 AGL B 15 AGL to | L | AMG 320/28 | N31°54.00' W82°52.00' |
| 02 AGL B 15 AGL to | M | AMG 318/15 | N31°43.00' W82°42.00' |
| 02 AGL B 15 AGL to | N | AMG 049/29 | N31°51.00' W82°05.00' |
| NOTE: FOLLOWING SEGMENTS USE LIMITED TO DESIGNATED SPECIAL EXERCISES ONLY. | | | |
| 02 AGL B 15 AGL to | O | SAV 244/38 | N31°48.00' W81°50.00' |
| 02 AGL B 15 AGL to | J1 | IRQ 213/46 | N33°02.00' W82°36.00' |
| 02 AGL B 15 AGL to | KA | DBN 072/38 | N32°49.02' W82°07.98' |
| 02 AGL B 15 AGL to | LA | SAV 277/30 | N32°10.02' W81°47.48' |

ROUTE WIDTH - 5 NM either side of centerline from A to N; 2 NM either side of centerline from N to O; 2 NM either side of centerline from KA to LA.

Special Operating Procedures:

- (1) Alternate Entry: Points D, F, I, J and K.
- (2) Alternate Exit: Points J, I, M and N.
- (3) Between Points B-C, avoid Pearson, GA at N31-18.0 W82-51.0 by 1 NM; Noise Sensitive Area.
- (4) Segments B-D traverse Moody Two MOA. Aircraft are required to contact Valdosta Approach Control on 285.6 prior to passing B.

- (5) Between Points E-F, do not overfly the towns of Dexter at N32-26.0 W83-03.5 and Montrose, GA at N32-34.0 W83-09.0; Noise Sensitive Areas.
- (6) Between Points H-I, do not overfly farm at N33-25.0 W83-16.0; Noise Sensitive Area.
- (7) Alternate exit Point J authorized with scheduled use of Bulldog A MOA.
- (8) Route terminates in R-3007, units not scheduled to Townsend Target, exit at N.

FSS's Within 100 NM Radius:

ANB, AND, GNV, MCN

VR-1005

ORIGINATING ACTIVITY: FACSFACJAX, P.O. Box 40, NAS Jacksonville, FL 32212-0040 DSN 942-2004/2005, C904-542-2004/2005. Auto Brief DSN 942-2275, C904-542-2275.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | EUF 166/20 | N31°37.00' W85°03.00' |
| 02 AGL B 15 AGL to | B | PZD 246/17 | N31°32.00' W84°35.00' |
| 02 AGL B 15 AGL to | C | SZW 007/20 | N30°53.00' W84°19.00' |
| 02 AGL B 15 AGL to | D | GEF 216/10 | N30°25.00' W83°54.00' |
| 02 AGL B 15 AGL to | E | CTY 258/41 | N29°26.00' W83°49.00' |
| 02 AGL B 15 AGL to | F | CTY 201/19 | N29°18.00' W83°10.00' |
| 02 AGL B 15 AGL to | G | CTY 136/17 | N29°24.00' W82°49.00' |
| 05 AGL B 15 AGL to | H | GNV 219/16 | N29°28.00' W82°27.00' |
| 10 AGL B 15 AGL to | I | OCF 023/17 | N29°26.00' W82°06.30' |
| 02 AGL B 15 AGL to | J | OMN 251/34 | N29°07.00' W81°43.00' |

ROUTE WIDTH - 5 NM either side of centerline from A to B; 2 NM either side of centerline from B to C; 5 NM either side of centerline from C to H; 2 NM either side of centerline from H to J.

Special Operating Procedures:

- (1) Alternate Entry: Points D, E, and F.
- (2) Alternate Exit: Points H and I.
- (3) Between Points A-B multiple uncharted towers to 600' MSL. Remain well clear of Morgan, GA at N31-32.0 W84-36.0; Noise Sensitive Area.
- (4) Between Points A-C, minimum altitude 500' from May 1-Oct 31 annually, intensive agricultural spraying being conducted.
- (5) Between Points B-C, uncharted 400' MSL tower at N31-13.0 W84-27.0.

- (6) Between Points C-D, uncharted 800' MSL tower at N30-42.0 W84-14.0.
- (7) Between Points C-D, from N30-40.0 W84-09.0 to N30-30.0 W83-58.0; minimum altitude 500' AGL. Remain on or left of centerline, Noise Sensitive Areas.
- (8) Between Points D-E do not overfly town of Lamont, FL at N30-23.0 W83-49.0; Noise Sensitive Area. Do not overfly mining area at N30-10.5 W83-55.0.
- (9) Between Points F-G remain well south of Noise Sensitive Area centered at N29-22.0 W82-53.0.
- (10) Between Points G-H minimum altitude is 500' AGL; Noise Sensitive Area. Remain well south of centerline, but do not overfly the towns of Otter Creek and Williston, FL. Avoid horse ranch at N29-26.5 W82-38.0 and houses at N29-25.5 W82-54.5; Noise Sensitive Areas.
- (11) 4 NM west of Point G uncharted 600' MSL tower at N29-25.5 W82-53.0.
- (12) Between Points H-I minimum altitude is 1000' AGL; Noise Sensitive Area.
- (13) Between Points I-J do not overfly the towns of Citra, FL at N29-25.0 W82-07.0 and Fort McCoy, FL at N29-21.5 W81-58.0; Noise Sensitive Areas. Do not descend below 500' AGL until south of N29-21.0.
- (14) 4 NM northwest of Point J uncharted 380' MSL tower N29-10.0 W81-45.0.
- (15) Route terminates at R-2910, check Pinecastle Target schedule prior to use.

| | | | |
|--------------------|---|------------|--------------------------|
| 05 AGL B 15 AGL to | J | VRB 290/15 | N27°45.02' W80°45.98' |
| 10 AGL B 15 AGL to | K | ORL 171/29 | N28°04.02' W81°14.98' |
| 10 AGL B 15 AGL to | L | ORL 246/33 | N28°19.02' W81°53.98' |
| 10 AGL B 15 AGL to | M | OCF 181/35 | N28°36.02' W82°13.98' |
| 10 AGL B 15 AGL to | N | OCF 245/23 | N29°01.02' W82°36.98' |
| 10 AGL B 15 AGL to | O | CTY 166/23 | N29°14.02' W82°55.98' |
| 10 AGL B 15 AGL to | P | CTY 284/20 | N29°40.02' W83°25.00' |
| 10 AGL B 15 AGL to | Q | CTY 029/13 | N29°48.02' W82°55.98' |
| 10 AGL B 15 AGL to | R | GNV 334/17 | N29°56.02' W82°25.98' |
| 05 AGL B 15 AGL to | S | GNV 060/10 | N29°47.02' W82°06.98' |
| 05 AGL B 15 AGL to | T | | N29°45.02' W81°48.98' |

ROUTE WIDTH - 2 NM either side of centerline from A to F; 1 NM either side of centerline from F to G; 2 NM either side of centerline from G to L; 1 NM either side of centerline from L to N; 2 NM either side of centerline from N to T.

FSS's Within 100 NM Radius:

ANB, GNV, MCN, PIE

VR-1006

ORIGINATING ACTIVITY: FACSFACJAX, NAS

Jacksonville, FL 32212 DSN 942-2004/2005, C904-542-2004/2005.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | | N30°13.02' W81°52.98' |
| 02 AGL B 15 AGL to | B | CTY 012/24 | N30°00.02' W82°57.98' |
| 02 AGL B 15 AGL to | C | CTY 176/22 | N29°14.02' W83°00.48' |
| 02 AGL B 15 AGL to | D | CTY 216/43 | N29°00.02' W83°29.98' |
| 02 AGL B 15 AGL to | E | RSW 300/50 | N26°55.02' W82°35.98' |
| 10 AGL B 15 AGL to | F | RSW 296/28 | N26°43.02' W82°14.98' |
| 10 AGL B 15 AGL to | G | LBV 082/10 | N26°51.02' W81°11.98' |
| 05 AGL B 15 AGL to | H | PHK 336/21 | N27°06.02' W80°50.98' |
| 05 AGL B 15 AGL to | I | PHK 351/24 | N27°11.02' W80°45.98' |

Special Operating Procedures:

- (1) Point A is useable for units departing from NAS Cecil only.
- (2) Alternate Entry: Points B, E, F, G, K and O.
- (3) Alternate Exit: Points J, N, Q, R and S.
- (4) Between Points A-B, do not overfly the town of Columbia, FL at N30-04.0 W82-41.5; Noise Sensitive Area.
- (5) Point B, maintain centerline or north of centerline until past Point B. Do not cut the corner. This will avoid overflight of Flint's Flying Ranch and the town of Branford.
- (6) Between Points B-C, remain west of the Suwannee River until south of N29-30.0. Do not use River as flight path. Do not overfly the town of Old Town, FL at N29-36.0 W82-59.0; Noise Sensitive Area. Minimum, altitude 1000' AGL. Intensive Helicopter logging operations daily with 400' cable between Old Town and logging area at N29-27.0 W83-01.0.
- (7) Point C, do not overfly Cedar Key or Cedar Key National Wildlife Refuge.
- (8) Between Points F-G, minimum altitude 1000' AGL north of Fort Meyers; Sensitive Area.
- (9) Between Points H-J, minimum altitude 500' AGL.
- (10) Caution: IR-46 crosses the route between Points K-L and runs parallel in the opposite direction crossing the route again between points L-N, contact 347 Rescue Det 1/ROA MacDill AFB DSN 968-4642, C813-828-4642 to deconflict. Minimum between Points K-S 1000' AGL.
- (11) Between Points K-L, avoid overflight of Poinciana housing area at N28-08.5 W81-26.5. Do not overfly Deer Creek Resort at N28-13.0 W81-40.0; Noise Sensitive Area.
- (12) Between Points M-N, there is an uncharted unlit 300' tower at N28-52.1 W82-26.3.
- (13) Near Point N, do not overfly the towns of Inglis at N29-02.0 W82-40.5 or Yankeetown at N29-02.0 W82-43.0, Point N and housing area 1.5 NM SE of dam.

VR ROUTES

- (14) SS-SR remain right of centerline, SR-SS remain left of centerline. Avoid overflight of housing area at N29-53.0 W82-36.0 south of O'Leno State park; Noise Sensitive Area.
- (15) Area near Point S, Waldo, FL is A Noise Sensitive Area. The school located 1 block west of Hwy 301 and 2 blocks north of Hwy 24 is especially critical. Avoid Waldo by 1 NM.
- (16) Point S, Santa Fe Lake area, Noise Sensitive Area. Minimum altitude 500' AGL.
- (17) Route terminates at R-2938, check Stevens Lake Target schedule prior to use. Ensure target is activated prior to entry by Contacting JAX APP on 379.9, 319.9 or 120.75.

FSS's Within 100 NM Radius:

GNV, MIA, PIE

VR-1007

ORIGINATING ACTIVITY: FACSFCJAX, P.O. Box 40, NAS Jacksonville, FL 32212-0040 DSN 942-2004/2005, C904-542-2004/2005. Auto Brief DSN 942-2275, C904-542-2275.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | | N30°13.00' W81°53.00' |
| 10 AGL B 15 AGL to | B | OMN 345/25 | N29°42.00' W81°14.00' |
| 02 AGL B 10 AGL to | C | OMN 105/31 | N29°10.00' W80°32.00' |
| 02 AGL B 10 AGL to | D | ORL 050/40 | N28°58.50' W80°45.00' |
| 05 AGL B 15 AGL to | E | ORL 057/19 | N28°43.00' W81°02.00' |
| 05 AGL B 15 AGL to | F | ORL 092/17 | N28°32.00' W81°01.00' |
| 02 AGL B 15 AGL to | G | ORL 172/28 | N28°05.00' W81°16.00' |

ROUTE WIDTH - 2 NM either side of centerline from A to E; 5 NM either side of centerline from E to F; 2 NM either side of centerline from F to G.

Special Operating Procedures:

- (1) Alternate Entry: Points B and C.
- (2) Alternate Exit: Points C and E.
- (3) Point A is useable for units departing NAS Cecil only.
- (4) Between Points A-B, expedite reaching 1500' AGL, Noise Sensitive Areas junction of St. Johns River and Black Creek.
- (5) South of Point B, do not overfly Marineland at N29-40.0 W81-12.4; Noise Sensitive Area.
- (6) Between Points D-F, minimum altitude 500' AGL for flights of two aircraft, 1000' AGL for flights of more than two aircraft; Noise Sensitive Area.
- (7) Point F, do not overfly Christmas, FL; Noise Sensitive Area.
- (8) Between Points F-G, uncharted 300' MSL tower at N28-22.5 W81-03.0. Avoid overflight of housing area at N28-15.0 W81-10.5; Noise Sensitive Area.

FSS's Within 100 NM Radius:

GNV, PIE

VR-1008

ORIGINATING ACTIVITY: FACSFCJAX, P.O. Box 40, NAS Jacksonville, FL 32212-0040 DSN 942-2004/2005, C904-542-2004/2005. Auto Brief DSN 942-2275, C904-542-2275.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | TAY 146/20 | N30°14.00' W82°19.00' |
| 05 AGL B 15 AGL to | B | GNV 060/10 | N29°47.00' W82°07.00' |
| 05 AGL B 15 AGL to | C | GNV 143/11 | N29°33.00' W82°08.00' |
| 05 AGL B 15 AGL to | D | OCF 039/15 | N29°22.00' W82°03.00' |
| 02 AGL B 15 AGL to | E | OMN 257/35 | N29°10.00' W81°46.00' |

ROUTE WIDTH - 2 NM either side of centerline for entire route.

Special Operating Procedures:

- (1) Alternate Entry: Point B.
- (2) Alternate Exit: Points B and D.
- (3) Flights of more than 2 aircraft must be coordinated with FACSFCJAX.
- (4) Between Points A-B, do not overfly Raifoad. Prison at N30-04.0 W82-11.5 or town of Hampton, FL at N29-52.0 W82-08.0.
- (5) Between Points A-D, minimum altitude 500' AGL.
- (6) Area near Point B, Waldo, FL is a Noise Sensitive Area. The school located 1 block west of Hwy 301 and 2 blocks north of Hwy 24 is especially critical. Avoid Waldo by 1 NM.
- (7) Point B, Santa Fe Lake area; Noise Sensitive Area. Minimum altitude 500' AGL.
- (8) Between Points B-C maintain centerline and use caution, numerous private airports.
- (9) Between Points C-E, do not overfly the towns of Citra at N29-25.0 W82-07.0 and Fort McCoy at N29-21.5 W81-58.0; Noise Sensitive Areas.
- (10) Route terminates at R-2910, check Pinecastle Target schedule prior to use.

FSS's Within 100 NM Radius:

GNV, PIE

VR-1009

ORIGINATING ACTIVITY: FACSFCJAX, P.O. Box 40, NAS Jacksonville, FL 32212-0040 DSN 942-2004/2005, C904-542-2004/2005. Auto Brief DSN 942-2275, C904-542-2275.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | CRG 130/33 | N30°00.00' W81°00.00' |
| 02 AGL B 15 AGL to | B | OMN 345/25 | N29°42.00' W81°14.00' |
| 02 AGL B 15 AGL to | C | OMN 288/19 | N29°24.00' W81°27.00' |
| 02 AGL B 15 AGL to | D | OMN 265/14 | N29°17.00' W81°23.00' |
| 02 AGL B 15 AGL to | E | OMN 239/24 | N29°06.00' W81°30.00' |
| 02 AGL B 15 AGL to | F | OCF 098/26 | N29°07.00' W81°44.00' |

ROUTE WIDTH - 5 NM either side of centerline from A to C;
3 NM either side of centerline from C to F.**Special Operating Procedures:**

- (1) Alternate Entry: Point B.
- (2) Alternate Exit: Point E.
- (3) Vicinity of Point A, extensive military helicopter training.
- (4) Between Points B-D, minimum altitude is 300' AGL.
- (5) Point B, do not overfly town of Summer Haven, Noise Sensitive Area.
- (6) Do not overfly Marineland at N29-40.0 W81-13.0 south of Point B; Noise Sensitive Area.
- (7) Remain East of centerline at Point C.
- (8) Between Points C-D, civilian helicopter training area.
- (9) Between Points C-D, avoid overflight of horse ranch at N29-19.0 W81-22.0.
- (10) Between Points D-E, do not overfly the town of Barberville, FL at N29-11.0 W81-26.0; Noise Sensitive Area.
- (11) Avoid overflight of Lake Woodruff National Wildlife Refuge near Point E.
- (12) Route terminates at R-2910, check Pinecastle Target schedule prior to use.

FSS's Within 100 NM Radius:

GNV, PIE

VR-1010**ORIGINATING ACTIVITY:** FACSFACJAX, P.O. Box 40, NAS Jacksonville, FL 32212-0040 DSN 942-2004/2005, C904-542-2004/2005. Auto Brief DSN 942-2275, C904-542-2275.**SCHEDULING ACTIVITY:** Same as Originating Activity**HOURS OF OPERATION:** Continuous**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | GNV 060/10 | N29°47.00' W82°07.00' |
| 05 AGL B 15 AGL to | B | GNV 115/24 | N29°33.00' W81°51.00' |
| 02 AGL B 15 AGL to | C | GNV 119/29 | N29°29.00' W81°46.00' |

ROUTE WIDTH - 2 NM either side of centerline.**Special Operating Procedures:**

- (1) Alternate Exit: Point B.
- (2) Vicinity of Point A, Santa Fe Lake area, Noise Sensitive Area, minimum altitude 500' AGL until past Point B.
- (3) Points A-B, remain well clear of Interlachen, FL at N29-37.0 W81-53.0 and houses located west of town; Noise Sensitive Areas. Maintain centerline and observe caution, numerous private airports in vicinity.
- (4) Route terminates at R-2906, check Rodman Target schedule prior to use. Remain on centerline or west of centerline when entering R-2906.

FSS's Within 100 NM Radius:

GNV, PIE

VR-1013**ORIGINATING ACTIVITY:** FACSFACJAX, P.O. Box 40, NAS Jacksonville, FL 32212-0040 DSN 942-2004/2005, C904-542-2004/2005. Auto Brief DSN 942-2275, C904-542-2275.**SCHEDULING ACTIVITY:** Same as Originating Activity**HOURS OF OPERATION:** Continuous**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | CHS 074/51 | N33°11.50' W79°05.00' |
| 05 AGL B 15 AGL to | B | CHS 083/35 | N33°01.00' W79°21.20' |
| 02 AGL B 15 AGL to | C | CHS 133/21 | N32°40.70' W79°42.80' |
| 02 AGL B 15 AGL to | D | CHS 180/24 | N32°30.00' W80°00.00' |

ROUTE WIDTH - 2 NM either side of centerline A to D.**Special Operating Procedures:**

- (1) Use restricted to mining flights only.
- (2) CAUTION: VR-1041 crosses between A to B and B to C.
- (3) Direct pilot to controller communications required with either Charleston Approach Control 319.8/120.7 or secondary FACSFACJAX 267.5/120.95 oute entry to exit.
- (4) Do not overfly Bull Island N32-55.0 W79-34.5.

FSS's Within 100 NM Radius:

None

VR-1014**ORIGINATING ACTIVITY:** 14 OSS/OSOP, Columbus AFB, MS 39710-5000 DSN 742-7560/7633, C662-434-7560/7633.**SCHEDULING ACTIVITY:** 37/41 FTS, Columbus AFB, MS 39710-5000 DSN 742-7666/7667, C662-434-7666/7667.**HOURS OF OPERATION:** Sunrise-Sunset daily

VR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | CBM 122/19 | N33°28.50' W88°07.00' |
| 05 AGL B 15 AGL to | B | LDK 304/14 | N33°24.00' W87°45.50' |
| 05 AGL B 15 AGL to | C | LDK 035/12 | N33°25.00' W87°23.50' |
| 05 AGL B 15 AGL to | D | LDK 059/22 | N33°26.00' W87°09.00' |
| 05 AGL B 15 AGL to | E | VUZ 341/14 | N33°53.50' W86°59.00' |
| 05 AGL B 15 AGL to | F | VUZ 330/29 | N34°05.50' W87°10.50' |
| 05 AGL B 15 AGL to | G | MSL 168/20 | N34°23.00' W87°25.00' |
| 05 AGL B 15 AGL to | H | HAB 352/10 | N34°22.00' W88°02.00' |
| 05 AGL B 15 AGL to | I | CBM 008/33 | N34°11.50' W88°21.00' |
| 05 AGL B 15 AGL to | J | CBM 349/23 | N34°01.50' W88°31.50' |

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

- (1) Point A aircraft will Contact Tuscaloosa Tower (126.3/256.7) with position report.
- (2) Point C aircraft will Contact Birmingham Approach (127.675/338.2) with position report.
- (3) Point E aircraft will Contact Birmingham Approach (127.675/338.2) with position report.
- (4) Aircraft will fly at or below 1000' AGL in the following situations: From Points E to F and G to H unless the crew has verified that IR-066, IR-067, VR-1016, VR-1050 and VR-1051 are not being utilized and from Points I to J unless the crew has verified that IR-066, VR-1016 and VR-1050 are not being utilized.
- (5) Aircrews should watch for glider operations out of M40: Monroe County Airport, MS (N33-52.4 W88-29.4). Glider operations usually take place N of M40 from SFC-8000'.
- (6) Alternate Entry/Exit Pts: B, E and F.
- (7) Aircrews calling to schedule VR-1014 will ensure they have checked all applicable Bird Hazard products (examples: <http://www.usahas.com/> and <http://usahas.com/bam/>) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.
- (8) For route briefing, contact scheduling activity.
- (9) To schedule for weekend use, contact scheduling activity prior to 2200Z on Friday.
- (10) CROSSING ROUTES:
 - (a) IR-066 between E and F, G and H, I and J (50 FTS DSN 742-7734/35, C662-434-7734/35).
 - (b) IR-067 between E and F, G and H (48 FTS, CBM, DSN 742-7840, C662-434-7840).
 - (c) VR-1016 between G and H, near I (48 FTS, CBM, DSN 742-7840, C662-434-7840) .
 - (d) VR-1050 near B, between E and F, G and H, I and J (48 FTS, CBM, DSN 742-7840, C662-434-7840).
 - (e) VR-1051 between E and F, G and H (48 FTS, CBM, DSN 742-7840, C662-434-7840).

(11) Exercise caution between Points A and B for civilian aircraft departing/arriving N of Reform, AL Airport.

FSS's Within 100 NM Radius:

ANB, BNA, GWO, MKL.

VR-1016

ORIGINATING ACTIVITY: 14 OSS/OSOP Columbus AFB, MS 39710 DSN 742-7560/7633 C662-434-7560/7633

SCHEDULING ACTIVITY: 48 FTS Columbus AFB, MS 39710 DSN 742-7840/7847 C662-434-7840/7847

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------|----|--------------|--------------------------|
| As assigned to | A | HAB 291/45 | N34°29.00' W88°51.00' |
| 05 AGL B 15 AGL to | B | HAB 176/20 | N33°52.00' W88°00.00' |
| 05 AGL B 15 AGL to | C | HAB 105/16 | N34°07.00' W87°42.00' |
| 05 AGL B 15 AGL to | D | MSL 296/36 | N34°59.00' W88°09.00' |
| 05 AGL B 15 AGL to | E | MSL 357/35 | N35°17.00' W87°31.00' |
| 05 AGL B 15 AGL to | F | GHM 083/13 | N35°51.00' W87°11.00' |
| 05 AGL B 15 AGL to | G | GHM 024/35 | N36°21.00' W87°08.00' |
| Maintain min of 10 AGL to | H | JKS 330/32 | N36°04.00' W88°40.00' |
| 05 AGL B 15 AGL to | I | JKS 211/20 | N35°19.00' W88°35.00' |
| 05 AGL B 15 AGL to | J | JKS 216/35 | N35°08.00' W88°48.00' |
| 05 AGL B 15 AGL to | K | HLI 068/21 | N34°53.00' W89°06.00' |

ROUTE WIDTH - 2 NM either side of centerline from A to C;
5 NM either side of centerline from C to K.

Special Operating Procedures:

- (1) Alternate Entry: Points C, D, E, G, H, I, J and K.
- (2) Alternate Exit: Point D, E, G, H, I, J and K.
- (3) Aircrews calling to schedule VR-1016 will ensure they have checked all applicable Bird Hazard products (example: <http://www.usahas.com/> and <http://usahas.com/bam/>) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.
- (4) CROSSING ROUTES:
 - (a) IR-066 crosses between Points A and B, common route from C to E, common route from I to K (50 FTS, DSN 742-7734, C662-434-7734);
 - (b) IR-067 common route from C to E, common route from G to K (48 FTS, DSN 742-7840, C662-434-7840);
 - (c) VR-1014 crosses between Points A and B, crosses between Points C and D (37/41 FTS, DSN 742-7666, C662-434-7666);

- (d) VR-1050 crosses at Point A, between Points A and B, has common route from Point C to E, common route from Point I and J (48 FTS, DSN 742-7840, C662-434-7840);
- (e) VR-1051 has common route from Point C to E, common route from Point F to K (48 FTS, DSN 742-7840, C662-434-7840);
- (f) IR-77/78 crosses between Points E and F, crosses between Points H and I and already has altitude separation;
- (g) SR-075 crosses near Point K (48 FTS, DSN 742-7840, C662-434-7840);
- (h) SR-061/062 crosses twice between Points F and G (118 AW, DSN 778-6362, C615-399-5662).
- (5) Route Deconfliction:
- (a) IR-066, IR-067, VR-1050, VR-1051: deconfliction by Scheduler using time (if unable to enter within + or - 4 minutes, recoordinate a new entry time.
- (b) VR-1014: plan to fly VR-1016 at 1500' AGL between Point A and B and during the first half of the leg between Points C and D, unless the crew has verified that VR-1014 is not being utilized.
- (c) SR-075 has the same Scheduler and will be able to advise if the route is scheduled.
- (d) Contact the Scheduling Activity for SR-061/062 to verify if these routes are being utilized.

FSS's Within 100 NM Radius:

ANB, BNA, GWO, JBR, LOU, MKL

VR-1017

ORIGINATING ACTIVITY: 187 FW, 5187 Selma Highway, Montgomery, AL 36108-4824 DSN 358-9255, C334-394-7255.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-1730 local, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | MGM 093/38 | N32°09.00' W85°35.00' |
| 05 AGL B 15 AGL to | B | EUF 168/4 | N31°53.00' W85°07.00' |
| 05 AGL B 15 AGL to | C | MAI 053/11 | N30°54.00' W84°57.00' |
| 05 AGL B 15 AGL to | D | MAI 128/15 | N30°38.00' W84°54.00' |
| 05 AGL B 15 AGL to | E | SZW 271/31 | N30°35.00' W84°58.00' |
| 05 AGL B 15 AGL to | F | PFN 034/28 | N30°36.00' W85°23.00' |
| 05 AGL B 15 AGL to | G | PFN 343/21 | N30°33.00' W85°48.00' |
| 05 AGL B 15 AGL to | H | DWG 058/18 | N30°38.00' W86°14.00' |

ROUTE WIDTH - 5 NM either side of centerline from A to C; 4 NM W and 5 NM E of centerline from C to D; 5 NM either side of centerline from D to E; 4 NM N and 3 NM S of centerline from E to G; 5 NM either side of centerline from G to H.

Special Operating Procedures:

- Noise sensitive A to B: Maintain 1000' AGL minimum until 13 NM past A; Avoid N31-42.5 W85-08.0, N31-51.0 W85-09.5 (Schools/Eufaula).
- Hazards B-C: High density helicopter traffic this leg. Remain E of Chattahoochee River to the maximum extent possible. Noise sensitive B to C: Maintain 1000' AGL minimum from 10 NM N of C to C. Avoid N31-17.0 W85-03.0 by 1500' AGL or 4 NM (horse farm). Avoid with no overflight N31-13.4 W85-06.7 (Farley Nuclear Plant).
- Hazards D-E: Avoid N30-35.5 W85-04.2 by 1500' AGL or 3 NM (Airport/Altha F1).
- Hazards E-F; Avoid N30-36.1 W85-05.5, N30-36.1 W85-08.4 (crop dusting airstrips).
- Hazards F-G: Tower N30-36.6 W85-27.1 (499' AGL).
- Alternate Entry: Points B and D.
- Alternate Exit: Point D.
- Flight beyond D is not authorized unless scheduled into R-2914.
- Prior to flight call 325 Tyndall OPS DSN 523-4244 with estimate for E.
- Contact Eglin Mission Control on 262.3 prior to G for clearance into R-2914A.
- NOTE: Concentrated bird activity along the Chattahoochee River. Crop dusting activity is intense during summer and early fall.
- CAUTION: This route crosses, overlaps or runs parallel with IR-015 and VR-1065.
- Scheduling activity hours of operation: 0700-1730 central time, occasional weekends. To schedule use, on Sat, Sun, Mon or Tue AM, coordinate prior to 1600 central time the previous Fri.

FSS's Within 100 NM Radius:

ANB, GNV, MCN

VR-1020

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL 32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ weekdays, occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SJI 043/25 | N31°00.00' W88°00.00' |
| 10 AGL B 15 AGL to | B | MVC 299/10 | N31°33.00' W87°31.00' |
| 10 AGL B 15 AGL to | C | MVC 352/37 | N32°05.00' W87°24.00' |
| 10 AGL B 15 AGL to | D | CEW 352/34 | N31°24.00' W86°44.00' |
| 15 AGL to | E | CEW 016/17 | N31°06.00' W86°34.00' |

ROUTE WIDTH - 5 NM either side of centerline.

VR ROUTES

Special Operating Procedures:

- (1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
- (2) Minimum altitude 1000' AGL except from Point D to E which is 1500' AGL.
- (3) CONFLICTS: (Deconflict with the appropriate Scheduling Activity)
 - (a) Crosses VR-1021, VR-1030 and VR-1082 between Points B-C and C-D.
 - (b) Crosses VR-1085, between Points A-B, B-C, C-D, and at Point D.
 - (c) Same direction as VR-1083 from Points B-E.
 - (d) Same direction as VR-1084 from Points D-E.
 - (e) Crosses IR-057 and IR-059 between Points D-E.
 - (f) Opposite direction to IR-030 between Points D-E; crosses IR-030 between Points A-B, B-C, and C-D.
 - (g) Same direction as IR-031 from Points D-E; crosses IR-031 between Points A-B, B-C, and C-D.
- (4) Aircraft are required to transmit in the blind on 267.9 MHz their intention to transit Camden Ridge MOA after Point B.
- (5) Maximum airspeed 420 KTAS Mon-Fri
- (6) Noise Sensitive Areas: The following areas should be avoided by 1500' AGL or 3 NM:
 - (a) Catherine (town) N32-11.0 W87-28.0.
 - (b) House N32-08.0 W87-25.0.
 - (c) Paper Mill N31-58.0 W87-29.0.
 - (d) Thomasville (Town) N31-55.0 W87-44.0.
 - (e) Choctaw National Wildlife Refuge Area-Centered at N31-48.0 W88-11.0, located along the Tombigbee River.
 - (f) Coffeerville (Town) N31-45.4 W88-05.1.
 - (g) Salipta (Town) N31-38.0 W88-02.0.
- (7) CAUTION: Between Point B and C, N31-35.0 W87-29.4, chimney 375' AGL/444' MSL.
- (8) CAUTION: Between Point C and D, N31-44.5 W87-02.1, antenna tower 248' AGL/788' MSL.

FSS's Within 100 NM Radius:

ANB, GNV

VR-1021

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ weekdays,
occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| Cross at 15 AGL to and remain at 15 AGL until 7 NM NW of Pt A | A | SJI 169/22 | N30°22.00' W88°19.00' |
| 05 AGL B 15 AGL to | B | SJI 263/12 | N30°43.00' W88°36.00' |
| 05 AGL B 15 AGL to | C | MVC 247/35 | N31°16.00' W88°00.00' |
| 05 AGL B 15 AGL to | D | MVC 275/35 | N31°33.00' W88°02.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 05 AGL B 15 AGL to | E | MVC 022/14 | N31°40.00' W87°14.00' |
| 05 AGL B 15 AGL to | F | MVC 058/30 | N31°42.00' W86°50.00' |
| 05 AGL B 15 AGL to | G | MVC 043/36 | N31°52.00' W86°50.00' |
| 05 AGL B 15 AGL to | H | MGM 288/16 | N32°19.00' W86°37.00' |
| 05 AGL B 15 AGL to | I | MGM 320/33 | N32°40.00' W86°43.00' |
| 05 AGL B 15 AGL to | J | LDK 166/23 | N32°53.00' W87°27.00' |
| 05 AGL B 15 AGL to | K | LDK 205/32 | N32°47.00' W87°50.00' |
| 05 AGL B 15 AGL to | L | MEI 064/34 | N32°35.00' W88°11.00' |
| 05 AGL B 10 AGL to | M | MEI 097/41 | N32°14.00' W88°01.00' |
| 05 AGL B 15 AGL to | N | MEI 116/28 | N32°08.00' W88°20.00' |
| 05 AGL B 15 AGL to | O | MEI 146/43 | N31°45.00' W88°24.00' |
| 05 AGL B 15 AGL to | P | MEI 132/51 | N31°45.00' W88°07.00' |
| 05 AGL B 15 AGL to | Q | GCV 046/11 | N31°13.00' W88°19.00' |
| 05 AGL B 15 AGL to | R | GCV 078/24 | N31°09.00' W88°01.00' |

ROUTE WIDTH - 1 NM either side of centerline from A to B; 5 NM either side of centerline from B to G; 2 NM either side of centerline from G to I; 5 NM either side of centerline from I to M; 3 NM left and 5 NM right of centerline from M to N; 5 NM either side of centerline from N to R.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
- (2) Minimum altitude on route is 500' AGL.
- (3) CAUTION: High density low altitude VFR traffic over water prior to Point A.
- (4) Aircraft are required to transmit in the blind on 280.1 MHz their intention to transit Camden Ridge MOA after Point C and at Point O.
- (5) Alternate Entry: Points E and K.
- (6) Alternate Exit: Points C, E, F, K and Q.
- (7) Maximum airspeed 420 KTAS Mon-Fri.
- (8) CAUTION: Avoid direct overflight of industrial plants at Point C; offset to East.
- (9) Aircraft are required to transmit in the blind on 252.9 MHz their intention to transit Birmingham 2 MOA after Point I.
- (10) CAUTION: Between Points G and H, N32-08-31 W86-44-31, antenna tower 1799' AGL/ 2049' MSL.
- (11) Noise Sensitive Areas: The following areas should be avoided by 1500' AGL or 3 NM:
 - (a) Catherine (Town) N32-11.0 W87-28.0.
 - (b) House N32-08.0 W87-25.0.
 - (c) Paper Mill N31-58.0 W87-29.0.
 - (d) Thomasville (Town) N31-55.0 W87-44.0.
 - (e) Choctaw National Wildlife Refuge Area - centered at N31-48.0 W88-11.0, located along the Tombigbee River.
 - (f) Coffeerville (Town) N31-45.4 W88-05.1.

- (g) Salipta (Town) N31-38.0 W88-02.0.
- (12) CAUTION: Between Point D and E, N31-34-28N 87-53-09W, antenna tower 520' AGL/920' MSL.
- (13) CAUTION: Between Point L and M, N32-33-42N 88-11-31W, antenna tower 320' AGL/401' MSL.
- (14) CAUTION: Between Point N and O, N31-52-35 W88-19-14, antenna tower 362' AGL/492' MSL.
- (15) CAUTION: Between Point P and Q, N31-27-58 W88-15-20, antenna tower 220' AGL/401' MSL.
- (16) CAUTION: Between Point D and E, N31-38-08 W87-50-16, antenna tower 218' AGL/528' MSL.
- (17) CAUTION: Between Point B and C, N31-04.4 W88-14.4, antenna tower 415' AGL/695' MSL.
- (18) CAUTION: Between Point P and Q, N31-27-57 W88-16-50, antenna tower 305' AGL/492' MSL.
- (19) CAUTION: Between Point B and C, Point Q to R, N31-08-32 W88-13-08, antenna tower 302' AGL/625' MSL.
- (20) CAUTION: Between Point B and C, N31-04-25 W88-14-22, antenna tower 415' AGL/ 695' MSL.
- (21) CAUTION: Between Point D and E, N31-34-28 W87-53-09, antenna tower 500' AGL/ 900' MSL.
- (22) CAUTION: C-130 Drop Zone near Point H at N32-22.63 W86-36.82, 600'-1200' AGL. Call Maxwell AFB for zone status. DSN 493-7325.
- (23) CAUTION: VR-1021 Points E-N are concurrent legs shared with VR-1030 Points C-L. Aircraft will call on 255.4 one minute prior to each Point. Pilots will make every effort to contact NAS Meridian Scheduling Office to deconflict their route.
- (24) CAUTION: Between Points I-J, N32-47.0 W86-53.9, uncharted antenna tower 420' AGL/973' MSL.
- (25) CONFLICTS: (Deconflict with appropriate Scheduling Activity)
- Crosses VR-060, just East of Points D and at Q.
 - Crosses VR-1020, between Points B-C and C-D.
 - Parallels VR-1022 same direction approaching Point B. Crosses between Points B-C and at F and P.
 - Same starting Point A with VR-1023, parallels same direction from Points A-B.
 - Same direction as VR-1024 from Points A-B, crosses at Q.
 - Crosses VR-1082 between Points D-E and E-F.
 - Crosses VR-1083 between Points B-C, C-D, D-E, E-F, and Q-R.
 - Crosses VR-1085 between Points D-E and E-F.
 - Crosses IR-030/IR-031 between Points D-E and E-F.
 - Crosses IR-037 between Points B-C.
 - Same starting Point A with IR-040, crosses between Points B-C and at Q.

FSS's Within 100 NM Radius:

ANB, GWO, HUA, OZR

VR-1022

ORIGINATING ACTIVITY: FACSAC, Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ weekdays,
occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------|----|--------------|--------------------------|
| Cross at 15 AGL to | A | GPT 113/22 | N30°15.00' W88°41.00' |
| 15 AGL to | B | SJI 230/13 | N30°36.00' W88°34.00' |
| 05 AGL B 15 AGL to | C | SJI 288/24 | N30°53.00' W88°47.00' |
| 05 AGL B 15 AGL to | D | GCV 348/20 | N31°26.00' W88°32.00' |
| 05 AGL B 15 AGL to | E | GCV 021/43 | N31°45.00' W88°07.00' |
| 05 AGL B 15 AGL to | F | MVC 001/22 | N31°50.00' W87°19.00' |
| 05 AGL B 15 AGL to | G | MVC 058/30 | N31°42.00' W86°50.00' |
| Alternate Exit: (See SOP 6) | | | |
| 10 AGL B 15 AGL to | EA | MVC 355/22 | N31°49.50' W87°21.50' |

ROUTE WIDTH - 2 NM either side of centerline from A to B;
5 NM either side of centerline from B to G.

Special Operating Procedures:

- Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
- Daylight only, minimum altitude on route is 500' AGL.
- CAUTION: High density VFR traffic over water prior to Point A until Point B.
- Aircraft are required to transmit in the blind on 280.1 MHz their intention to transit Camden Ridge MOA after Point D.
- Alternate Exit: Points E and F.
- Maximum airspeed 420 KTAS Mon-Fri.
- Alternate Exit EA, (coincident with alternate entry CA, VR-1082) to be used only for transition to VR-1082.
- Noise Sensitive Areas: The following areas should be avoided by 1500' AGL or 3 NM:
 - Catherine (Town) N32-11.0 W87-28.0.
 - House N32-08.0 W87-25.0.
 - Paper Mill N31-58.0 W87-29.0.
 - Thomasville (Town) N31-55.0 W87-44.0.
 - Choctaw National Wildlife Refuge Area centered at N31-48.0 W88-11.0, located along the Tombigee River.
 - Coffeeville (Town) N31-45.4 W88-05.1.
 - Salipta (Town) N31-38.0 W88-02.0
- CAUTION: Between Point D and E, N31-38.2 W88-18.8, antenna tower 360' AGL/ 489' MSL.
- CONFLICTS: (Deconflict with the appropriate Scheduling Activity)
 - Crosses VR-060, between Points C-D and E-F.
 - Same direction as VR-179 between Points A-C. Crosses between C-D.
 - Crosses VR-1020, between Points E-F and F-G.
 - Parallels VR-1021 same direction after Point B. Crosses at Points E and G.
 - Crosses VR-1023 at Point B.
 - Crosses VR-1024, between Points B-C and C-D.
 - Crosses VR-1030, between Points E-F and at Point G.
 - Crosses VR-1083, between Points C-D and E-F and F-G.
 - Crosses VR-1196 at Point C.
 - Crosses IR-037/IR-040 between Points C-D.

VR ROUTES

FSS's Within 100 NM Radius:

ANB, GNV, GWO

VR-1023

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ weekdays,
occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------|----|--------------|------------|
| As assigned to | A | SJI 169/22 | N30°22.00' |
| Maintain 15 AGL until | | | W88°19.00' |
| 7 NM NW of A | | | |
| 05 AGL B 15 AGL to | B | SJI 230/13 | N30°36.00' |
| | | | W88°34.00' |
| 05 AGL B 15 AGL to | C | GPT 354/28 | N30°52.00' |
| Climb to cross 5 NM | | | W89°07.00' |
| SE of D at 10 AGL | | | |
| 10 AGL to | D | LBY 185/13 | N31°12.00' |
| Maintain 10 AGL until | | | W89°23.00' |
| 5 NM WSW of D then | | | |
| 05 AGL B 15 AGL to | E | MCB 138/17 | N31°05.00' |
| | | | W90°03.00' |
| 05 AGL B 15 AGL to | F | MCB 208/21 | N31°00.00' |
| | | | W90°28.00' |
| 05 AGL B 15 AGL to | G | BTR 056/36 | N30°46.00' |
| | | | W90°41.00' |
| 05 AGL B 15 AGL to | H | BTR 084/22 | N30°29.00' |
| | | | W90°52.00' |
| 05 AGL B 15 AGL to | I | MCB 203/45 | N30°38.00' |
| | | | W90°38.00' |
| 05 AGL B 15 AGL to | J | MCB 167/23 | N30°56.00' |
| | | | W90°11.00' |
| 05 AGL B 15 AGL to | K | PCU 345/25 | N30°58.00' |
| | | | W89°49.00' |
| 05 AGL B 15 AGL to | L | PCU 040/13 | N30°43.00' |
| | | | W89°33.00' |
| 05 AGL B 15 AGL to | M | GPT 360/17 | N30°41.00' |
| | | | W89°04.00' |
| 05 AGL B 15 AGL to | N | GPT 067/21 | N30°32.00' |
| | | | W88°42.00' |

ROUTE WIDTH - 1 NM either side of centerline from A to B;
2 NM either side of centerline from B to C; 5 NM either side of
centerline from C to N.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
- (2) Minimum altitude on route is 500' AGL.
- (3) CAUTION: High density VFR traffic from Point A to D.
- (4) Alternate Entry: Point G.
- (5) Alternate Exit: Point G.
- (6) Maximum airspeed 420 KTAS Mon-Fri.

- (7) NOTE: Aircraft are required to transmit in the blind on 297.1 MHz their intention to transit Desota MOA prior to Point C.
- (8) CAUTION: Between Point L and M, N30-42-45 W89-07-11, antenna tower 420' AGL/670' MSL.
- (9) CAUTION: Between Point L and M, N30-42-13 W89-05-27, antenna tower 1176' AGL/1366' MSL.
- (10) CAUTION: At Point D N31-16-08 W89-21-38 antenna tower 379' AGL/749' MSL.
- (11) CAUTION: Between Point K and L, N30-41-19 W89-36-04, antenna tower 440'AGL/631' MSL.
- (12) Cross 5 NM radius centered around N30-47.17 W090-26.32 at 1500' AGL.
- (13) Avoid house located at N30-44.0 W90-24.0 by 1000' AGL or 2 NM.
- (14) CAUTION: Between Points B-C, N30-36-21.7 W88-38-51.08, uncharted antenna tower 755' AGL/865' MSL.
- (15) CONFLICTS: (Deconflict with the appropriate Scheduling Activity)
 - (a) Crosses VR-179 at Point B.
 - (b) Same direction as VR-1021 from Point A-B.
 - (c) Crosses VR-1022 at Point B
 - (d) Same direction as VR-1024 from Points A-E.
 - (e) Crosses VR-1196 between Points C-D, F-G, I-J, and J-K.
 - (f) Crosses IR-037 between Points D-E, K-L and at Point N.

FSS's Within 100 NM Radius:

DRI, GNV, GWO

VR-1024

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ weekdays,
occasional weekends

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------|----|--------------|------------|
| As assigned to | A | SJI 169/22 | N30°22.00' |
| Maintain 15 AGL until | | | W88°19.00' |
| 7 NM NW of A | | | |
| 05 AGL B 15 AGL to | B | SJI 263/12 | N30°43.00' |
| | | | W88°36.00' |
| 05 AGL B 15 AGL to | C | SJI 277/40 | N30°52.00' |
| Climb to cross and | | | W89°07.00' |
| maintain 5 NM SE of D | | | |
| at 10 AGL | | | |
| 10 AGL to | D | LBY 185/13 | N31°12.00' |
| At 5 NM WSW of D | | | W89°23.00' |
| descend to | | | |
| 05 AGL B 15 AGL to | E | MCB 138/17 | N31°05.00' |
| | | | W90°03.00' |
| 05 AGL B 15 AGL to | F | MCB 076/20 | N31°22.00' |
| | | | W89°53.00' |
| 05 AGL B 15 AGL to | G | LBY 316/26 | N31°45.00' |
| | | | W89°39.00' |
| 05 AGL B 15 AGL to | H | MEI 225/32 | N32°02.00' |
| | | | W89°17.00' |
| 05 AGL B 15 AGL to | I | MEI 165/25 | N31°58.00' |
| | | | W88°43.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 05 AGL B 15 AGL to | J | MEI 167/42 | N31°41.00' W88°41.00' |
| 05 AGL B 15 AGL to | K | GCV 328/20 | N31°24.00' W88°40.00' |
| 05 AGL B 15 AGL to | L | GCV 046/11 | N31°13.00' W88°19.00' |
| 05 AGL B 15 AGL to | M | BFM 018/14 | N30°50.00' W87°57.00' |

ROUTE WIDTH - 1 NM either side of centerline from A to B; 2 NM either side of centerline from B to C; 5 NM either side of centerline from C to M.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
- (2) Minimum altitude on route is 500' AGL.
- (3) CAUTION: High density VFR traffic from Point A to D.
- (4) Alternate Entry: Points F, G and H.
- (5) Alternate Exit: Point G.
- (6) Maximum airspeed 420 KTAS Mon-Fri.
- (7) CAUTION: Between Point L and M, N31-08-32 W88-13-08, antenna tower 302' AGL/ 625' MSL.
- (8) CAUTION: Between Point L and M, N31-00-47 W88-06-30, antenna tower 180' AGL/ 455' MSL.
- (9) CAUTION: Between Point L and M, N31-04-25 W88-14-22, antenna tower 415' AGL/ 695' MSL.
- (10) NOTE: Aircraft are required to transmit in the blind on 297.1 MHz their intention to transit Desota MOA prior to Point C.
- (11) CAUTION: Between Point E and F, N31-13-02 W89-59-50, antenna tower 320' AGL/ 705' MSL.
- (12) CAUTION: At Point D, N31-16-02 W89-21-38, antenna tower 379' AGL/ 749' MSL.
- (13) CAUTION: East of Point J, N31-41-12.7 W88-37-08.1, uncharted antenna tower 340' AGL/652' MSL.
- (14) CAUTION: Between Points L-M, N30-53-29.84 W88-07-14, uncharted tower 340' AGL/588' MSL.
- (15) CONFLICTS: (Deconflict with the appropriate Scheduling Activity)
 - (a) Crosses VR-060 at Point L.
 - (b) Crosses VR-179 between Points B-C, K-L and L-M.
 - (c) Same direction as VR-1021 from Points A-B. Crosses between Points L-M.
 - (d) Crosses VR-1022 between Points C-D and K-L.
 - (e) Same direction as VR-1023 from Points A-E.
 - (f) Crosses VR-1033 between Points H-I and I-J.
 - (g) Same Direction as VR-1072 from Points H-I.
 - (h) Crosses VR-1083 between Points L-M.
 - (i) Crosses VR-1196 between Points C-D.
 - (j) Crosses IR-037 between Points D-E.

FSS's Within 100 NM Radius:

DRI, GNV, GWO

VR-1030

ORIGINATING ACTIVITY: COMTRAWING ONE, NAS MERIDIAN, MS 39309-0136 DSN 637-2487, C601-679-2487.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0600Z++ daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------------------------|-----------|---------------------|--------------------------|
| As assigned to | A | MEI 097/41 | N32°14.00' W88°01.00' |
| 05 AGL B 15 AGL to | B | MEI 107/72 | N31°56.00' W87°30.00' |
| 05 AGL B 15 AGL to | C | MEI 113/91 | N31°40.00' W87°14.00' |
| 05 AGL B 15 AGL to | D | MGM 217/41 | N31°42.00' W86°50.00' |
| 05 AGL B 15 AGL to | E | MGM 228/34 | N31°52.00' W86°50.00' |
| 05 AGL B 15 AGL to | F | MGM 288/16 | N32°19.00' W86°37.00' |
| 05 AGL B 15 AGL to | G | MGM 320/33 | N32°40.00' W86°43.00' |
| 05 AGL B 15 AGL to | H | LDK 166/23 | N32°53.00' W87°27.00' |
| 05 AGL B 15 AGL to | I | LDK 205/32 | N32°47.00' W87°50.00' |
| 05 AGL B 15 AGL to Maintain 10 AGL | J | LDK 216/52 | N32°35.00' W88°11.00' |
| at or below 10 AGL | K | MEI 097/41 | N32°14.00' W88°01.00' |
| 05 AGL B 15 AGL to | L | MEI 116/28 | N32°08.00' W88°20.00' |

ROUTE WIDTH - 5 NM either side of centerline from A to E; 10 NM left and 2 NM right of centerline from E to G; 5 NM either side of centerline from G to L.

Special Operating Procedures:

- (1) Aircraft are required to transmit in the blind on 267.9 MHz their intention to transit Camden Ridge MOA prior to Point A. Maximum altitude between Point J and K is 1000' AGL.
- (2) Alternate Entry: Point C.
- (3) Alternate Exit: Points J and K.
- (4) Numerous VR/IR/SR route crossing traffic Points A-D.
- (5) Numerous VR/IR/SR routes using coincident checkpoints A-D.
- (6) Make mandatory voice report on 255.4, 1 min prior to Point B on VR-1030.
- (7) VR-1030 Points C-L are concurrent legs shared with VR-1021 Points E-N. Pilots make every effort to contact FACSFAC Pensacola Scheduling Office to deconflict their route.
- (8) Make mandatory voice report on 255.4, 1 min prior to Point C on VR-1030.
- (9) Numerous SR Route crossings between Points F-H.
- (10) VR-1031 Points I-J run concurrent with VR-1030 Points G-H.
- (11) Make manatory voice report on 255.4, 1 min prior to Point G on VR-1030.
- (12) VR-1033 crosses between Points K-L.

FSS's Within 100 NM Radius:

ANB, GWO

VR-1031

ORIGINATING ACTIVITY: COMTRAWING ONE, NAS MERIDIAN, MS 39309-0136 DSN 637-2487, C601-679-2487.

VR ROUTES

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0600Z++ daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------------------------|----|--------------|--------------------------|
| As assigned to | A | MEI 027/32 | N32°50.00' W88°28.00' |
| 05 AGL B 15 AGL to | B | LDK 259/46 | N33°09.00' W88°27.00' |
| 05 AGL B 15 AGL to | C | LDK 266/37 | N33°15.00' W88°16.00' |
| Maintain 10 AGL at or below 10 AGL | D | LDK 195/13 | N33°03.00' W87°37.00' |
| 10 AGL B 15 AGL to | E | VUZ 168/43 | N32°58.00' W86°45.00' |
| 10 AGL B 15 AGL to | F | VUZ 121/31 | N33°23.00' W86°23.00' |
| 05 AGL B 15 AGL to | G | VUZ 119/58 | N33°10.00' W85°55.00' |
| 05 AGL B 15 AGL to | H | MGM 004/40 | N32°53.00' W86°13.00' |
| 05 AGL B 15 AGL to | I | MGM 320/33 | N32°40.00' W86°43.00' |
| 05 AGL B 15 AGL to | J | LDK 166/23 | N32°53.00' W87°27.00' |
| 05 AGL B 15 AGL to | K | LDK 195/32 | N32°45.00' W87°44.00' |
| 05 AGL B 15 AGL to | L | MGM 263/70 | N32°08.00' W87°41.00' |
| 05 AGL B 15 AGL to | M | MEI 123/34 | N32°02.00' W88°17.00' |

ROUTE WIDTH - 2 NM left and 5 NM right of centerline from A to B; 5 NM either side of centerline from B to C; 2 NM either side of centerline from C to D; 5 NM either side of centerline from D to E; 2 NM either side of centerline from E to F; 5 NM either side of centerline from F to M.

Special Operating Procedures:

- (1) Maximum altitude between Points C and D is 1000' AGL.
- (2) Aircraft are required to transmit in the blind on 267.9 their intention to transit the Camden Ridge MOA prior to Point L.
- (3) Alternate Entry: Points C, E and F.
- (4) Alternate Exit: Point J and K.
- (5) VR-1054 crosses between Points E-F.
- (6) SR-069 crosses between Points F-G.
- (7) SR-071 and SR-072 cross multiple times between Points G-J.
- (8) VR-1054 crosses between Points H-I.
- (9) VR-1055 crosses between points H-J.
- (10) VR-1021 Points I-J and VR-1030 Points G-H are shared legs with VR-1031 Points I-J.
- (11) Make mandatory voice report on 255.4, 1 min prior to Point I on VR-1031.
- (12) VR-1033 and VR-1030 crosses between Points L-M.

FSS's Within 100 NM Radius:

ANB, DRI, GWO, MCN, MKL

VR-1032

ORIGINATING ACTIVITY: COMTRAWING ONE, NAS MERIDIAN, MS 39309 DSN 637-2854, C601-679-2854.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0600Z++ daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | JAN 300/29 | N32°47.00' W90°38.00' |
| 05 AGL B 15 AGL to | B | JAN 269/51 | N32°34.00' W91°10.00' |
| 05 AGL B 15 AGL to | C | MLU 081/27 | N32°34.00' W91°30.00' |
| 05 AGL B 15 AGL to | D | MLU 033/27 | N32°53.00' W91°43.00' |
| 05 AGL B 15 AGL to | E | MLU 340/29 | N32°59.00' W92°12.00' |
| 05 AGL B 15 AGL to | F | ELD 107/21 | N33°07.00' W92°22.00' |
| 05 AGL B 15 AGL to | G | ELD 075/20 | N33°18.00' W92°21.00' |
| 05 AGL B 15 AGL to | H | ELD 076/41 | N33°20.00' W91°56.00' |
| 05 AGL B 15 AGL to | I | ELD 097/88 | N32°53.00' W91°03.00' |
| 05 AGL B 15 AGL to | J | JAN 300/29 | N32°47.00' W90°38.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) 2130' MSL tower located at N33-04-41 W92-13-41.
- (2) CAUTION: Route conflicts with IR-070 at multiple points. To deconflict contact 48 FTS, Columbus AFB, DSN 742-7840, C662-434-7840.

FSS's Within 100 NM Radius:

DRI, GWO

VR-1033

ORIGINATING ACTIVITY: COMTRAWING ONE, NAS MERIDIAN, MS 39309 DSN 637-2854, C601-679-2854.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0600Z++ daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | MEI 356/9 | N32°32.00' W88°48.00' |
| 05 AGL B 15 AGL to | B | MEI 308/37 | N32°48.00' W89°21.00' |
| 05 AGL B 15 AGL to | C | MEI 326/56 | N33°12.00' W89°21.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 05 AGL B 15 AGL to | D | MEI 315/75 | N33°20.00' W89°45.00' |
| 05 AGL B 15 AGL to | E | JAN 062/29 | N32°42.00' W89°38.00' |
| 05 AGL B 15 AGL to | F | JAN 113/24 | N32°19.00' W89°45.00' |
| 05 AGL B 15 AGL to | G | MEI 230/27 | N32°07.50' W89°14.00' |
| 05 AGL B 15 AGL to | H | MEI 191/28 | N31°56.00' W88°57.00' |
| 05 AGL B 15 AGL to | I | MVC 341/29 | N31°56.00' W87°30.00' |
| 05 AGL B 15 AGL to | J | MVC 341/42 | N32°08.00' W87°34.00' |
| 05 AGL B 15 AGL to | K | MEI 106/41 | N32°08.00' W88°03.00' |
| 05 AGL B 15 AGL to | L | MEI 105/16 | N32°17.00' W88°30.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| As assigned to | A | OMN 270/34 | N29°18.00' W81°46.00' |
| 01 AGL B 08 AGL to | B | OMN 257/35 | N29°10.00' W81°46.00' |

ROUTE WIDTH - 2 NM either side of centerline from A to B.

Special Operating Procedures:

- (1) Use restricted to close air support (CAS) training flights only for units scheduled on both R-2907A/B and R-2910.
- (2) Do not overfly central tower located near Point B.
- (3) Entry into A may be offset 2 NM to the north.
- (4) 256' AGL tower located 4 NM west of A.

FSS's Within 100 NM Radius:

GNV, PIE

VR-1040

ROUTE WIDTH - 5 NM either side of centerline from A to D; 8 NM right and 5 NM left of centerline from D to F; and 5 NM either side of centerline from F to K.

Special Operating Procedures:

- (1) 1549' MSL tower located at N32-34-17 W88-53-12.
- (2) Aircraft are required to transmit in the blind on 267.9 MHz their intention to transit the Camden Ridge MOA prior to Point G.
- (3) Alternate Entry: Points F and G.
- (4) Alternate Exit: Point G.
- (5) SR-137 crosses between Points B-C.
- (6) SR-137 crosses between Points D-E.
- (7) VR-1072 and VR-1024 crosses between Points G-H.
- (8) VR-1021 and VR-1024 crosses between Points H-I.
- (9) Multiple VR routes use Point I as turn point.
- (10) Make madatory voice report on 255.4, 1 min prior to Point I on VR-1033.
- (11) VR-060 crosses between Points I-J.
- (12) VR-1030 and VR-1031 cross multiple times between Points I-L.
- (13) CAUTION: Route conflicts with VR-1072 between Points G and H. To deconflict contact 48 FTS, Columbus AFB, DSN 742-7840, C662-434-7840.

FSS's Within 100 NM Radius:

ANB, DRI, GWO, MKL

VR-1039

ORIGINATING ACTIVITY: FACSFACJAX, P.O. Box 40, NAS Jacksonville, FL 32212-0040 DSN 942-2004/2005, C904-542-2004/2005. Auto Brief DSN 942-2275, C904-542-2275.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| | | | |
|----------------------|-----------|---------------------|-----------------|
| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|-----------|---------------------|-----------------|

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|-----------|---------------------|--------------------------|
| As assigned to | A | ILM 229/36 | N33°54.00' W78°22.00' |
| 05 AGL B 15 AGL to | B | ILM 292/20 | N34°26.10' W78°16.00' |
| 02 AGL B 15 AGL to | C | FLO 072/37 | N34°27.00' W78°58.00' |
| 02 AGL B 15 AGL to | D | FLO 190/29 | N33°45.00' W79°44.00' |
| 02 AGL B 15 AGL to | E | CHS 022/39 | N33°31.00' W79°49.00' |
| 02 AGL B 15 AGL to | F | CHS 015/27 | N33°20.00' W79°57.00' |
| 05 AGL B 15 AGL to | G | CHS 318/23 | N33°09.00' W80°22.00' |
| 02 AGL B 15 AGL to | H | NBC 129/15 | N32°20.00' W80°28.00' |
| 05 AGL B 15 AGL to | I | SAV 143/20 | N31°54.00' W80°56.00' |
| 02 AGL B 15 AGL to | J | SSI 030/31 | N31°31.00' W81°11.00' |
| 02 AGL B 15 AGL to | K | CRG 106/24 | N30°15.00' W81°04.00' |
| 02 AGL B 15 AGL to | L | OMN 345/25 | N29°42.00' W81°14.00' |
| 02 AGL B 15 AGL to | M | OMN 288/19 | N29°24.00' W81°27.00' |
| 02 AGL B 15 AGL to | N | OMN 283/22 | N29°23.00' W81°31.00' |

VR ROUTES

ROUTE WIDTH - 2 NM either side of centerline from A to D; 3 NM left and 1 NM right of centerline from D to E; 3 NM either side of centerline from E to H; 4 NM left and 1 NM right of centerline from H to I; 3 NM either side of centerline from I to N.

Special Operating Procedures:

- (1) CAUTION: Intensive civil aircraft near Hilton Head Airport.
- (2) CAUTION: Intensive low altitude helicopter operations between Point J to L in W-158E and W-158F.
- (3) Alternate Entry: Points B, G, H and I.
- (4) Alternate Exit: Points H, L and M.
- (5) 2049' MSL tower located at N34-07-51 W78-11-16.
- (6) 1049' AGL antenna tower located at N33-05-06 W80-22-14 less than 1 NM off centerline between Points G and H.
- (7) Do not overfly within 1 NM of Harbor, Hunting or Fripp Islands (near Point H) below 1500' AGL.
- (8) 1250' AGL antenna located N32-25-07 W80-2824 1 NM right of centerline approaching Point H.
- (9) Noise Sensitive Areas: Vicinity of N31-54 W80-56 and N31-32 W81-11. Remain 1 NM east of centerline from Point H to 10 NM south of J. Do not overfly Wassaw and Blackbeard National Wildlife Refuge located west of Point I and J.
- (10) Penetration of FACSFAC JAX OPAREA requires approval from Point H to Point L. DSN 942-2259, C904-542-2259.
- (11) Noise Sensitive Area: Vicinity of N31-59 W80-51. Remain 1 NM East of Tybee Island/Savannah Beach area.
- (12) Minimum altitude 1000' AGL from N32-46.0 W80-25.0 to N32-32.0 W80-27.0 between Points G and H. Ace Basin National Wildlife Refuge and Bear Island Wildlife Management Area are in vicinity of N32-40.0 W80-25.0.

FSS's Within 100 NM Radius:

AND, GNV, MCN, PIE, RDU, SJU

VR-1041

ORIGINATING ACTIVITY: CG MCAS CHERRY POINT, ATTN RAC-DIROPS, Cherry Point, NC 28533 DSN 582-3466, C252-466-3466.

SCHEDULING ACTIVITY: Central Scheduling Division MCAS Cherry Point, NC 28533 DSN 582-4040/4041, C252-466-4040/4041.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| 02 AGL B 15 AGL to (See Special Operating Proce- dures) | A | NBC 114/18 | N32°23.00' W80°23.00' |
| | B | CHS 159/16 | N32°39.00' W79°54.00' |
| 02 AGL B 15 AGL to | C | CHS 085/36 | N33°00.00' W79°20.00' |
| 02 AGL B 15 AGL to | D | CHS 077/43 | N33°07.00' W79°14.00' |
| 02 AGL B 15 AGL to | E | CHS 060/36 | N33°14.00' W79°27.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 02 AGL B 15 AGL to | F | CHS 015/27 | N33°20.00' W79°57.00' |
| 05 AGL B 15 AGL to | G | CHS 318/23 | N33°09.00' W80°22.00' |
| 05 AGL B 15 AGL to | H | NBC 068/15 | N32°36.00' W80°26.00' |
| 05 AGL B 15 AGL to | I | NBC 114/18 | N32°23.00' W80°23.00' |
| 05 AGL B 10 AGL to | J | SAV 143/20 | N31°54.00' W80°56.00' |
| 02 AGL B 15 AGL to | K | SSI 030/31 | N31°31.00' W81°11.00' |
| 02 AGL B 15 AGL to | L | CRG 106/24 | N30°15.00' W81°04.00' |
| 02 AGL B 15 AGL to | M | OMN 345/25 | N29°42.00' W81°14.00' |
| 02 AGL B 15 AGL to | N | OMN 288/19 | N29°24.00' W81°27.00' |
| 02 AGL B 15 AGL to | O | OMN 283/22 | N29°23.00' W81°31.00' |

ROUTE WIDTH - 3 NM either side of centerline from A to H; 3 NM right and 1 NM left of centerline from H to I; 1 NM right and 4 NM left of centerline from I to J; 3 NM either side of centerline from J to O.

Special Operating Procedures:

- (1) 1500' AGL until 3 NM past Point A and then maintain 200' AGL to 1500' AGL. Do not fly closer than 1 NM from the coast at Point B below 1500' AGL.
- (2) Do not fly within 1 NM of Harbor, Hunting or Fripp Islands (near Points A and I) below 1500' AGL.
- (3) CAUTION: Intensive banner towing and parasailing operations in vicinity of Folly Beach, Sullivans Island, and Isle of Palms, SC (Point A to Point C) from Memorial Day through Labor Day.
- (4) CAUTION: Intensive civil aircraft near Hilton Head Airport.
- (5) CAUTION: Intensive low altitude helicopter operations between Points J and L in W-158E and W-158F.
- (6) Alternate Entry: Points D, G, H and I.
- (7) Alternate Exit: Points E, F, H, I, L and M.
- (8) Penetration of FACSFAC JAX requires approval from Point I to M. DSN 942-2259, C904-542-2259.
- (9) 1049' AGL tower located at N33-05-06 W80-22-14, less than 1 NM off centerline between Points G and H.
- (10) Noise Sensitive Areas: Vicinity of N31-54 W80-56 and N31-32 W81-11. Remain 1 NM east of centerline from Point I to 10 NM south of K. Do not overfly Wassaw and Blackbeard National Wildlife Refuges located west of Point I and J.
- (11) Noise Sensitive Areas: Vicinity of N31-59 W80-51. Remain 1 NM East of Tybee Island/Savannah Beach area.
- (12) Minimum altitude 1000' AGL from N32-46.0 W80-25.0 to N32-32.0 W80-25.0 between Points G and I. Ace Basin National Wildlife Refuge and Bear Island Wildlife Management Area are in vicinity of N32-40.0 W80-25.0.

FSS's Within 100 NM Radius:

AND, GNV, MCN, PIE

VR-1043

ORIGINATING ACTIVITY: CG MCAS CHERRY POINT, ATTN RAC-DIROPS, Cherry Point, NC 28533 DSN 582-3466, C252-466-3466.

SCHEDULING ACTIVITY: Central Scheduling Division MCAS Cherry Point, NC 28533 DSN 582-4040/4041, C252-466-4040/4041.

HOURS OF OPERATION: 0700-2300 Local Daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to (See Special Operating Proce- dures) | A | NKT 266/10 | N34°52.00' W77°04.00' |
| | B | NKT 220/28 | N34°30.00' W77°10.00' |
| 02 AGL B 15 AGL to | C | ILM 193/33 | N33°48.30' W77°56.60' |
| 05 AGL B 15 AGL to | D | ILM 229/36 | N33°54.00' W78°22.00' |
| 05 AGL B 15 AGL to | E | ILM 292/20 | N34°26.10' W78°16.00' |
| 02 AGL B 15 AGL to | F | FLO 072/37 | N34°27.00' W78°58.00' |
| 02 AGL B 15 AGL to | G | FLO 026/20 | N34°32.00' W79°30.00' |
| 02 AGL B 15 AGL to | H | FLO 316/31 | N34°35.00' W80°07.00' |
| 02 AGL B 15 AGL to | I | FLO 293/32 | N34°25.00' W80°16.00' |
| 02 AGL B 15 AGL to | J | FLO 236/21 | N34°01.00' W80°00.00' |
| 02 AGL B 15 AGL to | K | FLO 121/23 | N34°03.00' W79°15.00' |
| 02 AGL B 15 AGL to | L | ILM 249/43 | N34°01.00' W78°38.00' |
| 02 AGL B 15 AGL to (See Special Operat- ing Procedures) | M | ILM 191/16 | N34°05.00' W77°54.00' |
| as assigned to | N | NKT 147/26 | N34°35.00' W76°32.00' |
| 05 AGL B 15 AGL to | N1 | NKT 125/20 | N34°45.50' W76°31.00' |

ROUTE WIDTH - 2 NM either side of centerline from A to I; 1 NM either side of centerline from I to K; 2 NM either side of centerline from K to N1.

Special Operating Procedures:

- (1) Minimum altitude 1000' AGL from Point A until 15 NM past A.
- (2) Penetration of W-122H (Point B to C, Point M to N) requires approval from FACSFAC VACAPES, Oceana, Va.
- (3) Alternate Entry: Points D, E and K.
- (4) Alternate Exit: Points C, M and N.
- (5) 2049' MSL tower located at N34-07-51 W78-11-16.
- (6) Minimum altitude 1000' AGL from K until 10 NM past K.

- (7) Minimum altitude 1500' AGL from 20 NM prior to M until 5 NM past M. (Noise Sensitive Area).
- (8) Minimum altitude N to N1 750' AGL (Noise Sensitive Area N34-47-00 W76-34-00).
- (9) Note: 1 June to 1 Sept: Minimum altitude 1500' AGL/5 NM prior to N until N1, Sat-Sun (Noise Sensitive Area).
- (10) Aircraft requesting R-5306A access shall Contact Cherry Point Approach 360.775/119.75 with mission number, call sign, area(s) and altitude requested. (NOTE: Approval to enter R-5306A does not constitute clearance into the target areas.) Cherry Point Targets frequencies are BT-9 337.0/149.325. BT-11 323.9/141.850.
- (11) Avoid towns and populated areas by 1 NM or overfly 1000' AGL. Avoid airports by 3 NM or overfly 1500' AGL.
- (12) Between Point F and G, VR-087 crosses left to right 5 NM prior to Point G.
- (13) If not scheduled into R-5306A, exit Point N.
- (14) Tie-in FSS: RDU 255.4 MHz.

FSS's Within 100 NM Radius:

AND, RDU

VR-1046

ORIGINATING ACTIVITY: CG MCAS CHERRY POINT, ATTN RAC-DIROPS, Cherry Point, NC 28533 DSN 582-3466, C252-466-3466.

SCHEDULING ACTIVITY: Central Scheduling Division MCAS Cherry Point, NC 28533 DSN 582-4040/4041, C252-466-4040/4041.

HOURS OF OPERATION: 0600-1800 Local Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | NKT 250/17 | N34°46.00' W77°10.00' |
| 15 AGL to (See Special Operating Proce- dures) | B | NKT 276/19 | N34°53.00' W77°15.00' |
| as assigned to | C | GSB 138/22 | N35°06.00' W77°38.00' |
| 02 AGL B 15 AGL to | D | GSB 211/19 | N35°03.00' W78°07.00' |
| 02 AGL B 15 AGL to | E | GSB 278/31 | N35°20.00' W78°36.00' |
| 15 AGL to | F | RDU 150/15 | N35°40.00' W78°37.00' |
| 15 AGL to | G | RDU 073/18 | N35°59.00' W78°26.00' |
| 02 AGL B 15 AGL to | H | RDU 072/31 | N36°04.00' W78°12.00' |
| 02 AGL B 15 AGL to | I | TYI 001/9 | N36°08.00' W77°43.00' |
| 05 AGL B 15 AGL to | J | TYI 098/32 | N35°57.00' W77°03.00' |
| 05 AGL B 15 AGL to | K | NKT 010/41 | N35°35.00' W76°52.00' |

VR ROUTES

05 AGL B 15 AGL to L NKT 012/24 N35°18.00'
W76°51.00'

05 AGL B 15 AGL to L1 NKT 027/21 N35°14.00'
W76°44.50'

01 AGL B 15 AGL to I CBM 019/16 N33°54.00'
W88°20.00'

01 AGL B 15 AGL to J LDK 308/17 N33°27.00'
W87°48.00'

01 AGL B 15 AGL to K VUZ 260/15 N33°38.00'
W87°12.00'

ROUTE WIDTH - 1 NM either side of centerline.

Special Operating Procedures:

- (1) Minimum altitude 1500' AGL until 6 NM past B (extensive helicopter activity) then 02 AGL B 15 AGL to C.
- (2) Alternate Entry: Points C, E, H and L.
- (3) Alternate Exit: Points E, K and L.
- (4) Aircraft entering at Point E, avoid overflight of Dunn, NC.
- (5) Alternate at Point L, authorized for transition from VR-084.
- (6) Points E, F and G noise sensitive.
- (7) Minimum altitude 10 AGL B 15 AGL 5 NM prior to K until 5 NM past Point K.
- (8) Minimum altitude 05 AGL B 15 AGL from Point L to Point L1.
- (9) Aircraft requesting R-5306A access shall Contact Cherry Point Approach 360.775/119.75 with mission number, call-sign, area(s) and altitude requested. (NOTE: Approval to enter R-5306A does not constitute clearance into the target areas). Cherry Point Targets frequencies are BT-9 337.0/149.325, BT-11 323./141.850.
- (10) Avoid towns and populated areas by 1 NM or overfly 1000' AGL. Avoid airports by 3 NM or overfly 1500' AGL.
- (11) If not scheduled into R-5306A, exit Point L.
- (12) Tie-in FSS: RDU 255.4 MHz.

FSS's Within 100 NM Radius:

RDU

VR-1050

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710-5000 DSN 742-7560/7633, C662-434-7560/7633.

SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, MS 39710-5000 DSN 742-7840/7847, C662-434-7840/7847.

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | VUZ 001/16 | N33°56.00' W86°53.00' |
| 15 AGL to | B | HAB 105/16 | N34°07.00' W87°42.00' |
| 01 AGL B 15 AGL to | C | MSL 296/36 | N34°59.00' W88°09.00' |
| 01 AGL B 15 AGL to | D | GHM 183/33 | N35°17.00' W87°31.00' |
| 01 AGL B 15 AGL to | E | DYR 136/55 | N35°19.00' W88°35.00' |
| 01 AGL B 15 AGL to | F | HLI 054/41 | N35°08.00' W88°48.00' |
| 01 AGL B 15 AGL to | G | HLI 115/36 | N34°29.00' W88°51.00' |
| 01 AGL B 15 AGL to | H | CBM 355/45 | N34°23.00' W88°31.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized IAW Command Directives within entire route structure.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Aircraft will report Points B to Anniston (ANB) Flight Service on 255.4 (alternate 122.55) and H to Greenwood (GWO) Flight Station on 255.4 (alternate 122.55).
- (2) Alternate Entry: Points B, C, D, E, F, G, H and J.
- (3) Alternate Exit: Points C, D, E, F, G, H, I and J.
- (4) Army National Guard units conduct tactical helicopter operations from surface to 3000' AGL from N34-45.0 W88-50.0 to N34-20.0 W88-30.0.
- (5) Tie-in FSS: Anniston (ANB).
- (6) Numerous power lines/antennae below 200' AGL may be charted.
- (7) For route briefing contact scheduling activity.
- (8) Aircrews calling to schedule VR-1050 will ensure they have checked all applicable Bird Hazard products (examples: <http://www.usahas.com/> and <http://usahas.com/bam/>) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.
- (9) CROSSING ROUTES:
 - (a) IR-066 common route from Point A to F, crosses between F and G, common route between Point H-I (50 FTS, DSN 742-7734, C662-434-7734);
 - (b) IR-067 common route from Point A to D, and from E to F (48 FTS, DSN 742-7840, C662-434-7840);
 - (c) VR-1014 crosses between Points A and B and between Points B and C and between Points H and I (37/41 FTS, DSN 742-7666, C662-434-7666);
 - (d) VR-1016 starting Point coincident with Point G, common route from Point B and D, and Point E to F, crosses between H and I (48 FTS, DSN 942-7840, C662-434-7840);
 - (e) VR-1051 common route from Point A to D, Point E to F (48 FTS, DSN 742-7840, C662-434-7840);
 - (f) SR-075 crosses twice between F and G (48 FTS, DSN 742-7840, C662-434-7840).
- (10) Route Deconfliction:
 - (a) IR-066, IR-067, VR-1051, VR-1016: Deconflicted by Scheduler using time (if unable to enter within + or - 4 minutes, recoordinate a new entry time).
 - (b) VR-1014: Aircraft flying VR-1050 between Points A and B, until half way between the Points B and C and between Points H and I will fly at 1500' AGL unless crew has verified that VR-1014 in not being utilized.
 - (c) SR-075 has the same Scheduler and will be able to advise if the route is scheduled.

FSS's Within 100 NM Radius:

ANB, BNA, GWO, JBR, MKL.

VR-1051

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710-5000 DSN 742-7560/7633, C662-434-7560/7633.

SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, MS 39710-5000 DSN 742-7840/7847, C662-434-7840/7847.

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | VUZ 001/16 | N33°56.00' W86°53.00' |
| 15 AGL to | B | HAB 105/16 | N34°07.00' W87°42.00' |
| 01 AGL B 15 AGL to | C | MSL 296/36 | N34°59.00' W88°09.00' |
| 01 AGL B 15 AGL to | D | MSL 336/31 | N35°11.00' W87°44.00' |
| 01 AGL B 15 AGL to | E | GHM 083/13 | N35°51.00' W87°11.00' |
| 01 AGL B 15 AGL to | F | GHM 024/35 | N36°21.00' W87°08.00' |
| 10 AGL B 15 AGL to | G | GHM 293/43 | N36°09.00' W88°15.00' |
| 01 AGL B 15 AGL to | H | DYR 082/32 | N36°04.00' W88°40.00' |
| 01 AGL B 15 AGL to | I | HLI 051/56 | N35°19.00' W88°35.00' |
| 01 AGL B 15 AGL to | J | HLI 054/41 | N35°08.00' W88°48.00' |
| 01 AGL B 15 AGL to | K | HLI 068/21 | N34°53.00' W89°06.00' |
| 01 AGL B 15 AGL to | L | SQS 066/28 | N33°38.00' W89°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized IAW Command Directives within entire route structure.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Aircraft will report Point B to Flight Service on 255.4 (Alternate 122.55).
- (2) Alternate Entry: Points B, C, D, F, G, H, I, J and K.
- (3) Alternate Exit: Points C, D, F, G, H, I, J and K.
- (4) Army helicopter training area (Ft. Campbell) lies between Point F and G.
- (5) Army National Guard units conduct tactical helicopter operations from surface to 3000' AGL from N34-45.0 W88-50.0 to N34-20.0 W88-30.0.
- (6) Tie-in FSS: Anniston (ANB).
- (7) Aircraft avoid overflight of Camp McCain, MS maintain 1500' AGL and 2 NM separation from N33-42 W89-43.(Contains laser weaponry, helicopter operations, and controlled firing range).
- (8) To schedule for weekend use, Contact Scheduling Activity prior to 2200Z on Friday.
- (9) Numerous power lines/antennae below 200' AGL may be uncharted.
- (10) For route briefing, contact scheduling agency.

- (11) Aircrews calling to schedule VR-1051 will ensure they have checked all applicable Bird Hazard products (examples: <http://www.usahas.com/> and <http://usahas.com/bam/>) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.
- (12) CROSSING ROUTES:
 - (a) IR-066 common route from Point A to D, crosses between Points D and E, common route from Points I to K (50 FTS, DSN 472-7734, C662-434-7734);
 - (b) IR-067 common route A to D, crosses between D and E, common route from 15 NM prior to G to K (48 FTS, DSN 742-7840, C662-434-7840);
 - (c) IR-068 near Point L (48 FTS, DSN 742-7840, C662-434-7840);
 - (d) IR-077/078 starts/ends near Point I and already has altitude separation;
 - (e) IR-091 crosses between Point K and L, near Point L (50 FTS, DSN 742-7734, C662-434-7734);
 - (f) VR-1014 crosses between Points A and B and between Points B and C (37/41 FTS, DSN 742-7666, C662-434-7666);
 - (g) VR-1016 common route from Point B and D, common route from Point E to K (48 FTS, DSN 743-7840, C662-434-7840);
 - (h) VR-1050 common route from Point A to D, Point I to J (48 FTS, DSN 742-7840, C662-434-7840);
 - (i) SR-061/062 crosses twice between F and G (118 AW, DSN 778-6362, C615-399-5662);
 - (j) SR-073/074 crosses twice between K and L (48 FTS, DSN 742-7840, C662-434-7840);
 - (k) SR-075 crosses near Point K and between K and L (48 FTS, DSN 742-7840, C662-434-7840);
 - (l) SR-221 common route (reciprocal hdg) near Point F (314 OSS/OSTX, DSN 762-7504, C901-291-7504).
- (13) Route Deconfliction:
 - (a) IR-066, IR-067, VR-1050, VR-1016: deconflicted by scheduler using time (if unable to enter within + or - 4 minutes, recoordinate a new entry time).
 - (b) VR-1014: aircraft flying VR-1051 between Points A to B and until half way between Points B to C will fly at or above 1500' AGL unless the crew has verified that VR-1014 is not being utilized.
 - (c) SR-073/SR-074/SR-075 and IR-068 have the same scheduler and will be able to let you know if the route is scheduled to be flown. IR-068 is normally only flown on Tuesdays and Thursdays, a factor only if flying the K to L leg.
 - (d) Contact the different scheduling activities for SR-061/062, SR-221 and IR-091 to verify if they are being utilized: IR-091 is normally flown on Mondays, Wednesdays and Fridays and factor only if flying the K to L leg.
- (14) Avoid flight through an aerobatic practice area (when active) located immediately S of the Whifferdill Airport at Point F. The area is a one square mile box centered on N36-18.5 W087-08.5 from 500 AGL to 4500 MSL. The Whifferdill Airport has agreed to inform the Scheduling Activity for VR-1051 when the practice area will be active and this information will be made available to aircrews when scheduling the route. The aerobatic pilots monitor 123.45 should radio contact become necessary.

FSS's Within 100 NM Radius:

ANB, BNA, GWO, MKL, JBR, LOU.

VR ROUTES

VR-1052

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0500Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | RMG 357/24 | N34°34.00' W85°08.00' |
| 02 AGL B 15 AGL to | B | HRS VORTAC | N34°56.58' W83°54.94' |
| 02 AGL B 15 AGL to | C | HRS 338/20 | N35°15.00' W84°04.00' |
| 02 AGL B 15 AGL to | D | HCH 130/11 | N35°40.00' W84°48.00' |
| 02 AGL B 15 AGL to | E | GQO 316/42 | N35°28.00' W85°44.00' |
| 02 AGL B 15 AGL to | F | RMG 295/28 | N34°22.00' W85°37.00' |
| 02 AGL B 15 AGL to | G | RMG 260/23 | N34°06.00' W85°34.00' |
| 02 AGL B 15 AGL to | H | TDG 080/32 | N33°39.00' W85°25.00' |
| 02 AGL B 15 AGL to | I | MGM 030/46 | N32°52.00' W85°49.00' |
| 10 AGL B 15 AGL to | J | MGM 039/25 | N32°32.00' W85°59.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
- (2) Maintain 1000' AGL minimum over Lake Martin.
- (3) Maintain 1000' AGL minimum within 3 NM radius of Pikeville, TN.
- (4) Maintain 1500' AGL minimum within 3 NM of Zack Airport (N34-36-30 W84-58-48).
- (5) Do not overfly Murphy, NC (N35-05.0 W84-02.0), avoid by 3 NM.
- (6) Do not overfly Mentone, AL (N34-05-30 W85-35-30), avoid by 3 NM.
- (7) Alternate Entry: Points B, C, D, E, F, G, H and I.
- (8) Alternate Exit: Points C, D, E, F, G, H and I.
- (9) Tie-in FSS: Birmingham (BHM).
- (10) Avoid the following noise sensitive area: N33-54.5 W85-33.4 by 5 NM.
- (11) Avoid: tower 200'AGL/890'MSL at N35-03.3 W85-38.2.
- (12) For deconfliction with VR-1056, 2 hours will be required between opposite direction flights.
- (13) CONFLICTS: (Deconflict with the appropriate Scheduling Activity)
 - (a) Crosses VR-058 between Points B-C, D-E and at E. Parallels same direction from Points E-F.

- (b) Crosses VR-092 between Points B-C, D-E and at E. Parallels opposite direction from Points E-F.
- (c) Crosses VR-1054 between Points H-I and at J.
- (d) Crosses VR-1055 between Points A-B and I-J. Parallels same direction from Points G-H.

FSS's Within 100 NM Radius:

ANB, AND, BNA, MCN

VR-1054

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL
32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0500Z++ daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | VUZ 148/31 | N33°13.00' W86°35.00' |
| 01 AGL B 15 AGL to | B | TGE 287/18 | N32°35.00' W86°00.00' |
| 10 AGL B 15 AGL to | C | TGE 227/12 | N32°21.00' W85°51.00' |
| 01 AGL B 15 AGL to | D | EUJ 291/20 | N32°05.00' W85°30.00' |
| 01 AGL B 15 AGL to | E | EUJ 041/12 | N32°06.00' W84°58.00' |
| 01 AGL B 15 AGL to | F | EUJ 060/22 | N32°07.50' W84°45.00' |
| 01 AGL B 15 AGL to | G | CSG 118/36 | N32°19.40' W84°24.20' |
| 01 AGL B 15 AGL to | H | CSG 092/31 | N32°35.00' W84°24.20' |
| 01 AGL B 15 AGL to | I | LGC 094/36 | N33°00.00' W84°30.00' |
| 10 AGL B 15 AGL to | J | LGC 037/10 | N33°11.00' W85°05.00' |
| 01 AGL B 15 AGL to | K | TDG 151/8 | N33°27.00' W85°58.00' |
| (Alternate Exit from Pt E for entry into Moody 3 MOA) | | | |
| 01 AGL B 15 AGL to | E | EUJ 041/12 | N32°06.00' W84°58.00' |
| 10 AGL B 15 AGL to | EA | EUJ 147/20 | N31°40.00' W84°56.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized IAW Command Directives within published altitude blocks.

ROUTE WIDTH - 5 NM either side of centerline from A to K; 5 NM either side of centerline from E to EA.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
- (2) Tie-in FSS: Birmingham (BHM).
- (3) Alternate Entry: Points: B, C, D, E, F, G, H and I.
- (4) Alternate Exit: Points C, D, E, F, G, H, I, J and EA.

- (5) Avoid cities and towns by 1000' vertical and 2000' horizontal.
- (6) Avoid areas of forest fires.
- (7) Do not over fly dish antenna (N32-56.0 W84-33.0). Avoid by 1 NM.
- (8) Flight to Point EA is not authorized unless scheduled into Moody 3 MOA. Moody MOA is scheduled through 23 WG, DSN 460-3531.
- (9) Upon exit at Point EA, climb VFR to 10,500' and contact Jacksonville Center on 353.5 or 359.0 for clearance into Moody 3 MOA. If unable to climb VFR TO 10,500', maintain VFR and contact Cairns Approach Control on 234.4.
- (10) CAUTION: East of Point H, N32-34-37.20 W84-19-25.70, uncharted antenna tower 330' AGL/935' MSL.
- (11) CAUTION: Between Points I-J, N33-01-41 W84-39-55, uncharted antenna tower 1550' AGL/2360' MSL.
- (12) CONFLICTS: (Deconflict with the appropriate Scheduling Activity)
 - (a) Same direction as VR-1017 between points C-D.
 - (b) Crosses VR-1031 between Points A-B.
 - (c) Crosses VR-1052 between Points B-C and J-K.
 - (d) Crosses VR-1055 between Points A-B and J-K.
 - (e) Crosses VR-1056 between Points B-C and J-K.
 - (f) Same direction as IR-017 between Points C-D.
 - (g) Crosses IR-057 between Points C-D. Parallels same direction from D-E.
 - (h) Crosses IR-059 between Points C-D. Parallels opposite direction from D-E.

FSS's Within 100 NM Radius:

ANB, AND, MCN

VR-1055

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL 32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0500Z++ 7 days a week

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | HRS 337/34 | N35°28.13' W84°11.12' |
| 01 AGL B 15 AGL to | B | HRS 337/15 | N35°10.00' W84°02.00' |
| 01 AGL B 15 AGL to | C | RMG 044/37 | N34°36.00' W84°35.00' |
| 01 AGL B 15 AGL to | D | RMG 320/33 | N34°35.00' W85°32.00' |
| 01 AGL B 15 AGL to | E | RMG 242/17 | N34°02.00' W85°25.00' |
| 01 AGL B 15 AGL to | F | LGC 237/6 | N33°00.00' W85°18.00' |
| 01 AGL B 15 AGL to | G | TGE 312/17 | N32°41.00' W85°55.00' |
| 01 AGL B 15 AGL to | H | OKW 159/30 | N32°46.00' W87°02.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
- (2) Exit route at point G if not cleared into Birmingham Two MOA.
- (3) Do not overfly Murphy, NC (N35-05.0 W84-02.0). Avoid by 3 NM.
- (4) Do not overfly Mentone, AL (N34-05-30 W85-35-30). Avoid by 3 NM.
- (5) Alternate Entry: Points B, C, D, E, F and G.
- (6) Alternate Exit: Points C, D, E, F and G.
- (7) Tie-in FSS: Birmingham (BHM).
- (8) Avoid the following noise sensitive area: (N33-54.5 W85-33.4) by 5 NM.
- (9) Avoid: Tower 290' AGL (1190' AMSL) at N35-44.5 W84-20.7.
- (10) COFLICTS: (Deconflict with the appropriate Scheduling Activity)
 - (a) Crosses VR-058 between Points B-C.
 - (b) Crosses VR-092 between Points B-C.
 - (c) Crosses VR-1021 at Point H.
 - (d) Crosses VR-1030 at Point H.
 - (e) Crosses VR-1031 between Points G-H and at H.
 - (f) Opposite direction to VR-1052 between Points A-B. Crosses between B-C, C-D and at G. Parallels same direction from D-F.

FSS's Within 100 NM Radius:

ANB, AND, BNA, MCN

VR-1056

ORIGINATING ACTIVITY: FACSFAC, Pensacola, FL 32508-5217 DSN 922-2735, C850-452-2735.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0500Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | MGM 039/25 | N32°32.00' W85°59.00' |
| 10 AGL B 15 AGL to | B | MGM 030/46 | N32°52.00' W85°49.00' |
| 02 AGL B 15 AGL to | C | TDG 080/32 | N33°39.00' W85°25.00' |
| 02 AGL B 15 AGL to | D | RMG 260/23 | N34°06.00' W85°34.00' |
| 02 AGL B 15 AGL to | E | RMG 295/28 | N34°22.00' W85°37.00' |
| 02 AGL B 15 AGL to | F | GQO 316/42 | N35°28.00' W85°44.00' |
| 02 AGL B 15 AGL to | G | HCH 130/11 | N35°40.00' W84°48.00' |
| 02 AGL B 15 AGL to | H | HRS 338/20 | N35°15.00' W84°04.00' |

VR ROUTES

02 AGL B 15 AGL to I HRS VORTAC N34°56.58'
W83°54.94'

02 AGL B 15 AGL to J RMG 357/24 N34°34.00'
W85°08.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Scheduling Activity operating hours: Mon-Fri, 0600-1600 Central Time. To schedule use on Sat, Sun, or prior to 0830L on Mon, call prior to 1600 on previous Fri.
- (2) Maintain 1000' AGL minimum over Lake Martin.
- (3) Maintain 1000' AGL minimum within 3 NM of Pikesville, TN.
- (4) Maintain 1500' AGL minimum within 3 NM of Zack Airport (N34-36-30 W84-58-48).
- (5) Do not overfly Murphy, NC (N35-05.0 W84-02.0). Avoid by 3 NM.
- (6) Do not overfly Mentone, AL (N34-05-30 W85-35-30). Avoid by 3 NM.
- (7) Alternate Entry: Points B, C, D, E, F, G, H and I.
- (8) Alternate Exit: Points C, D, E, F, G, H and I.
- (9) Tie-in FSS: Birmingham (BHM).
- (10) Avoid the following noise sensitive area: N33-54.5 W85-33.4 by 5 NM.
- (11) For deconfliction with VR-1052, 2 hours will be required between opposite direction flights.
- (12) Avoid: Tower 200'AGL/890'MSL at N35-03.3 W85-38.2.
- (13) CONFLICTS: (Deconflict with the appropriate Scheduling Activity)
 - (a) Parallels VR-058 opposite direction between Points E-F. Crosses between F-G and H-I.
 - (b) Parallels VR-092 same direction between Points E-F. Crosses between F-G and H-I.
 - (c) Opposite direction to VR-1052 for the entire route.
 - (d) Crosses VR-1054 at Point A and between B-C.
 - (e) Crosses VR-1055 between Points A-B and I-J. Parallels opposite direction between C-F. Same direction between H-I.

FSS's Within 100 NM Radius:

ANB, AND, BNA, MCN

VR-1059

ORIGINATING ACTIVITY: 20 OSS/OSTA, Shaw AFB, SC 29152 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152 Duty hrs DSN 965-1118/1119, C803-895-1118/1119. Non-duty hrs-DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------|----|--------------|--------------------------|
| As assigned to | A | CAE 292/37 | N34°04.00' W81°45.00' |

| | | |
|----------------------------|------------|--------------------------|
| 01 AGL B 15 AGL to B | AHN 126/32 | N33°38.00' W82°49.00' |
| 01 AGL B 15 AGL to C | DBN 029/31 | N33°02.02' W82°34.98' |
| 01 AGL B 15 AGL to D | DBN 055/38 | N32°58.22' W82°14.98' |
| 01 AGL B 15 AGL to E | DBN 063/43 | N32°56.52' W82°05.98' |
| 01 AGL B 15 AGL to F | VAN 221/53 | N32°45.00' W81°03.00' |
| 01 AGL B 15 AGL to G | VAN 214/49 | N32°45.50' W80°54.50' |
| 01 AGL B 15 AGL to H | VAN 190/40 | N32°48.00' W80°30.00' |
| 01 AGL B 15 AGL to I | VAN 160/15 | N33°15.00' W80°19.00' |
| 01 AGL B 15 AGL to J | VAN 093/33 | N33°30.00' W79°47.00' |
| 01 AGL B 15 AGL to K | FLO 119/11 | N34°09.00' W79°27.00' |
| 01 AGL B 15 AGL to D | DBN 055/38 | N32°58.22' W82°14.98' |
| Alternate Exit/Entry: D | | |
| 01 AGL B 15 AGL to D1 | DBN 047/46 | N33°08.02' W82°12.48' |
| 01 AGL B 15 AGL to D2 | DBN 041/50 | N33°14.52' W82°15.08' |
| 01 AGL B 15 AGL to D3 | DBN 038/51 | N33°16.52' W82°16.18' |
| 01 AGL B 15 AGL to D4 | DBN 034/52 | N33°18.82' W82°19.78' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline from A to B; 10 NM right and 6 NM left of centerline from B to C; 10 NM right and 9 NM left of centerline from C to E; 10 NM either side of centerline from E to F; 5 NM either side of centerline from F to K; For R-3004 ingress from D to D4, 3 NM left of centerline, 4 NM right of centerline.

Special Operating Procedures:

- (1) Alternate Entry: C, D, E, F, I, J and D2. D2 authorized for re-entry to R-3004 only.
- (2) Alternate Exit: C, D, E, F, G, H, I and J.
- (3) Make a call in the blind on 287.1 passing Point J to advise aircraft working Gamecock C. Use caution exiting Point J for aircraft in Gamecock C 100' AGL and above.
- (4) Congressional Noise Sensitive Area, Washington, GA. N33-44-00 W82-44-30. Minimum altitude is 1500' AGL.
- (5) Wildlife sanctuary at N32-42-00 W80-44-00. Avoid by 1500'/5 NM.
- (6) Use of D-D4 authorized only when scheduled to operate in Bulldog D MOA and R-3004.
- (7) CAUTION: VR-088 crosses right to left Point A to B (deconflict with 20 OSS/OSOS).
- (8) CAUTION: IR-074 and VR-095 join at Point B from the right. IR-074 continues same direction to Point C (deconflict with 20 OSS/OSOS).

- (9) CAUTION: VR-1059 transits Bulldog MOA. When booking VR-1059, aircrews should include delay time in Bulldog A MOA as applicable.
- (10) CAUTION: VR-094 crosses right to left from Point E to F (deconflict with 20 OSS/OSOS).
- (11) CAUTION: IR-018 crosses left to right from Point E to F (deconflict DSN 942-2004).
- (12) CAUTION: VR-1040/1041 opposite direction from Point H to I (deconflict DSN 582-4040).
- (13) Avoid Stork Rookery protection area at N32-45.8 W80-28.7 by 1500' AGL/1 NM.
- (14) Avoid: tower 1495' AGL (1900' MSL) at N33-16.0 W82-17.2 and Noise Sensitive Area (pond and farm) at N33-17.7 W82-16.8. Avoid by 1500' AGL (2000' MSL) 2 NM.
- (15) CAUTION: Eight towers:
- 590' AGL (680' MSL) N33-44.0 W79-42.0;
 - 260' AGL (738' MSL) N33-47.1 W82-25.5;
 - 420' AGL (994' MSL) N33-46.2 W82-36.2;
 - 250' AGL (320' MSL) N33-40.3 W79-47.3;
 - 415' AGL (536' MSL) N32-46.8 W81-07.7.
 - 380' AGL (405' MSL) N32-55.5 W80-29.3;
 - 300' AGL (900' MSL) N33-29.4 W82-40.2;
 - 400' AGL (1000' MSL) N33-15.4 W82-35.6.
- (16) CAUTION: Five towers:
- 400' AGL (930') N33-12.6 W82-42.5;
 - 300' AGL (500') N33-02.9 W82-02.7;
 - 1010' AGL (1049') N33-05.0 W80-22.0;
 - 300' AGL (480') N32-44.8 W81-36.9;
 - 500' AGL (600') N32-42.8 W80-49.3.
- (17) Avoid: Louisville and Louisville Airport by 1500'/3 NM.
- (18) CAUTION: VR-87 crosses right to left at Point K (deconflict 20 OSS/OSOS).
- (19) Avoid: Tower 375' AGL (450' MSL) at 33-26.0N 80-01.6W.
- (20) CAUTION: Power line 300' AGL crosses N to S between E and F, 33-02.5N 81-44.0W to N32-45.0 W81-38.5.
- (21) Avoid: Noise Sensitive Area, stork farm and Lake at 32-52.0N 82-02.5W, avoid by 1500'/1 NM.
- (22) AVOID: N32-41.0 W81-08.1 500' AGL/1 NM, 14 towers with cable in between.
- (23) AVOID: Six Noise Sensitive Areas:
- N33-58.0 W81-38.0, avoid by 1000' AGL/2 NM;
 - Givhans, SC N33-00.8 W80-20.2, avoid by 1000' AGL/1.5 NM;
 - Lake City, SC N33-52.2 W79-45.5, avoid by 1000' AGL/5 NM;
 - Lakewood Plantation, SC N33-42.4 W79-34.4, avoid by 1500' AGL/1 NM;
 - Residential area N34-01.0 W81-43.5, avoid by 1500' AGL/1 NM;
 - Farm N32-51.1 W81-40.5, avoid by 1500' AGL/1 NM.
- (24) Avoid: Active private grass strip N32-49.5 W81-21.5, avoid by 1000' AGL/3 NM.
- (25) Avoid: Permanently manned fire tower, N32-50.7 E81-18.2 by at least 500'.
- (26) CAUTION: When transiting through Bulldog A MOA airspace make call in the blind prior to Point C on UHF frequency 343.75.
- (27) Avoid three Noise Sensitive Areas:
- Vidette GA, N33-02.1 W82-14.9, avoid by 1000' AGL/1 NM;
 - Structure being used as a target at N33-00.5 W82-41.5, avoid by 1000' AGL/1 NM;
 - Dairy farm, N32-49.9 W81-52.5, avoid by 1500' AGL/1 NM.

- (28) Make entry time plus or minus 5 minutes or reschedule. Unpublished towers found by route surveys 200' AGL and above are listed in this SOP.
- (29) Tower at 400' AGL (700' MSL) N32-49.0 W81-58.8.

FSS's Within 100 NM Radius:

AND, MCN, RDU

VR-1061

ORIGINATING ACTIVITY: 4 OSS/OSOR, Seymour Johnson AFB, NC 27531-5004 DSN 722-2672, C919-722-2672.

SCHEDULING ACTIVITY: 4 OSS/OSOS, Seymour Johnson AFB, NC 27531-5004 DSN 722-2129/2124, C919-722-2129/2124. Non-duty 4CF/CP DSN 722-1973, C919-722-1973.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | LVL 200/3 | N36°46.00' W77°55.00' |
| 05 AGL B 15 AGL to | B | SBV 055/20 | N36°53.00' W78°42.00' |
| 05 AGL B 15 AGL to | C | SBV 350/13 | N36°53.00' W79°05.00' |
| 05 AGL B 15 AGL to | D | SBV 323/6 | N36°45.00' W79°06.00' |
| 05 AGL B 15 AGL to | E | SDZ 024/56 | N36°05.00' W79°11.00' |
| 10 AGL B 15 AGL to | F | SDZ 026/26 | N35°37.00' W79°23.00' |
| 05 AGL B 15 AGL to | G | SDZ 026/11 | N35°23.00' W79°30.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- Users must visit [HTTPS://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPAC E/ROUTES](https://www.mil.seymourjohnson.af.mil/airspacE/routes) for additional avoidance areas (FALCONVIEW.DRW/MCH files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
- Alternate Entry: B, C, D, E, F.
- Alternate Exit: B, C, D, E, F.
- Users must make their schedules entry time plus or minus 5 min or reschedule.
- Avoid towns and populated areas by 1NM or overfly 1000' AGL; avoid airports by 3NM or overfly 1500' AGL. Over sparsely populated areas, aircraft may not be operated closer than 500' to any person, vessel, vehicle or structure.
- A-B:
 - CROSSING: IR-715 left to right at A;
 - CROSSING: VR-083 parallel entire leg;
 - CROSSING: VR-1722 left to right 27NM prior to B;
 - CROSSING: VR-042 right to left 27NM prior to B;
 - CROSSING: VR-096 left to right 29NM prior to B;
 - CROSSING: VR-1759 right to left 19NM prior to B;

VR ROUTES

- (g) CROSSING: IR-715 right to left 6NM prior to B;
 (h) CROSSING: VR-042 left to right to B.
- (7) B-C:
 (a) CROSSING: VR-042/VR083 parallel entire leg;
 (b) CROSSING: VR-1722 right to left at C.
- (8) C-D:
 (a) CROSSING: VR-042/VR-083 left to right at C;
 (b) CROSSING: VR-1722 parallel entire leg.
- (9) D-E:
 (a) TOWER: 240'AGL(898'MSL) at N36-17.2 W79-07.0;
 (b) CROSSING: IR-715 left to right 36NM prior to E;
 (c) CROSSING: VR-1722 parallel until 34NM prior to E;
 (d) CROSSING: VR-043 right to left 34NM prior to E;
 (e) CROSSING: VR-719 right to left 28NM prior to E;
 (f) CROSSING: IR-062 left to right 22NM prior to E;
 (g) CROSSING: IR-081 right to left 22NM prior to E;
 (h) CROSSING: VR-086 parallel from 15NM prior to E.
- (10) E-F:
 (a) CAUTION: Landfill (potential bird hazard) at N35-55.7 W79-17.5;
 (b) CROSSING: VR-086 parallel entire leg.
- (11) F-G:
 (a) CAUTION: Uncharted airfield at N35-20.4 W79-26.2;
 (b) CROSSING: IR-718 left to right 6NM prior to G.
- (12) CROSSING ROUTE CONTACT INFORMATION:
 (a) IR-062: Oceana NAS, DSN 433-1228;
 (b) IR-081: Pensacola NAS, DSN 922-2735;
 (c) IR-715: Oceana NAS, DSN 433-1228;
 (d) IR-718: Oceana NAS, DSN 433-1228;
 (e) IR-719: Oceana NAS, DSN 433-1228;
 (f) VR-042: Seymour Johnson AFB;
 (g) VR-043: Seymour Johnson AFB;
 (h) VR-083: Seymour Johnson AFB;
 (i) VR-086: Seymour Johnson AFB;
 (j) VR-096: Seymour Johnson AFB;
 (k) VR-1722: Richmond ANG, DSN 864-6411;
 (l) VR-1759: Oceana NAS, DSN 433-1228.

FSS's Within 100 NM Radius:

NTU, RDU

VR-1065

ORIGINATING ACTIVITY: 347 OSS/OSOS, Moody AFB, GA 31699-1899 DSN 460-4544/3531, C229-257-4544/3531.

SCHEDULING ACTIVITY: 23 OSS/OSOS, Moody AFB, GA 31699-1899 DSN 460-7831/7839 C229-257-7831/7839. Mon-Fri 0830-1700L except holidays.

HOURS OF OPERATION: 0700-2400L daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| Cross at 15 MSL to | A | SZW 072/31 | N30°42.00' W83°48.00' |
| 01 AGL B 15 MSL to | B | SZW 050/16 | N30°43.00' W84°08.00' |
| 01 AGL B 15 MSL to | C | SZW 351/11 | N30°44.00' W84°24.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 01 AGL B 15 MSL to | D | SZW 264/31 | N30°31.00' W84°58.00' |
| 01 AGL B 15 MSL to | E | PFN 034/28 | N30°36.00' W85°23.00' |
| 10 AGL to | F | DWG 014/30 | N30°58.00' W86°23.00' |
| 10 AGL B 15 MSL to | G | DWG 058/18 | N30°38.00' W86°14.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM right and 6 NM left of centerline from A to B; 4 NM right and 5 NM left of centerline from B to C; 5 NM right and 2 NM left of centerline from C to D; 3 NM either side of centerline from D to F; 4 NM either side of centerline from F to G.

Special Operating Procedures:

- (1) Tie-in FSS: Macon.
- (2) Alternate Exit D will be filed and utilized unless scheduled for R-2914A.
- (3) Report over D to Tyndall Approach Control.
- (4) Contact Elgin Mission Control on 262.3 prior to F for clearance into R-2914.
- (5) CAUTION: IR-015 and IR-017 parallel this route from Point D to E. Call 187 FW DSN 358-9255 to deconflict.
- (6) Alternate Entry Point: E.
- (7) Alternate Exit Point: D. Alternate Exit E authorized only with scheduled use of Tyndall C MOA.
- (8) Notify Tyndall RAPCON (DSN 523-2900) of impending use of VR-1065 at least one hour prior to flight penetration of Tyndall C MOA, with an ETA for the east boundary of the Tyndall C MOA.
- (9) Minimum altitude 1500' AGL between Points D and E. Noise Sensitive Area.
- (10) CAUTION: IR-059 runs opposite direction to this route between Points C and F. IR-057 parallels this route between C and F. Call 16 OSS Hulbert Field, DSN 579-6877/7812 to deconflict.
- (11) CAUTION: VR-1001 and VR-1005 cross this route near Point B.
- (12) CAUTION: Numerous VR's and IR's converge near Point F.
- (13) Route entry/exit times must be made plus/minus 5 minutes or route must be rescheduled.
- (14) Do not overfly the town of Miccosukee, FL N30-35.0 W84-02.0. Extreme Noise Sensitive Area.
- (15) Avoid overflight of Compass Lake, FL (N30-36 W85-23) by 1500' or 3 NM. Extreme Noise Sensitive Area.
- (16) CAUTION: Route passes within 5 NM of north side of Tallahassee Class C Airspace.

FSS's Within 100 NM Radius:

GNV, MCN, OZR

VR-1066

ORIGINATING ACTIVITY: 347 OSS/OSKA, Moody AFB, GA 31699-1899 DSN 460-4131, C229-257-4131.

SCHEDULING ACTIVITY: 23 OSS/OSOS, Moody AFB, GA 31699-1899 DSN 460-7831/7839, C229-257-7831/7839. Mon-Fri 0830-1700L except holidays.

HOURS OF OPERATION: 0700-0000 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| Cross at 15 MSL to | A | VAD 090/15 | N30°59.00' W82°54.00' |
| 01 AGL B 15 MSL to | B | VAD 004/25 | N31°23.00' W83°11.00' |
| 01 AGL B 15 MSL to | C | AMG 302/29 | N31°47.50' W82°59.00' |
| 01 AGL B 15 MSL to | D | AMG 344/33 | N32°03.50' W82°41.00' |
| 01 AGL B 15 MSL to | E | AMG 063/22 | N31°42.00' W82°08.00' |
| 01 AGL B 15 MSL to | F | AMG 107/38 | N31°21.00' W81°48.00' |
| 01 AGL B 15 MSL to | G | AMG 148/38 | N31°00.00' W82°07.00' |
| 15 AGL to | H | VAD 121/17 | N30°50.00' W82°54.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 7 NM right and 6 NM left of centerline from B to C; 5 NM either side of centerline from C to D; 3 NM right and 9 NM left of centerline from D to E; 9 NM right and 2 NM left of centerline from E to F; 3 NM right and 8 NM left of centerline from F to G; 3 NM right and 10 NM left of centerline from G to H.

Special Operating Procedures:

- (1) Tie-in FSS: Macon (MCN).
- (2) Alternate Exit Point: E and G.
- (3) Alternate Entry Point: B and F.
- (4) Point G to Highway 441, maintain altitude of 1500' AGL.
- (5) Point A and H are within Moody 2 MOA airspace. Contact Valdosta Approach Control on frequency 259.3 for deconfliction prior to MOA entry.
- (6) Avoid overflight of Hatch Power Plant located at (N31-56.3 W82-20.6) by 1500' or 3NM.
- (7) CAUTION: VR-1002/1003 parallel this route from Point A to B. Contact FACSFAC Jacksonville DSN 942-2004/2005 to deconflict.
- (8) CAUTION: IR-016 runs opposite direction between Point A and B. 23 OSOS will deconflict VR-1066 point A from IR-016 Point A by 30 minutes.
- (9) CAUTION: Point B, VR-1003 crosses this route from SW to NE and VR-1002/1004 parallels this route from Point B to C.
- (10) CAUTION: VR-1001 and VR-1002 cross this route at Point C.
- (11) CAUTION: VR-1004 crosses this route between Point C and D.
- (12) CAUTION: VR-1002/1003 and VR-1004 cross this route 10 NM prior to Point E, with VR-1003 crossing again at Point E.
- (13) IR-023 crosses this route from north to south just past Point E, and from NE to SW at Point G.
- (14) Route entry/exit times must be made plus/minus 5 minutes or route must be rescheduled.
- (15) VR-94 (Shaw AFB, DSN 965-1118/1119) crosses right to left between Points B and C.
- (16) VR-1001 (FACSFACJAX, DSN 942-2004/2005) originates S of centerline in corridor between Points E and F.

(17) VR-1003 (FACSFACJAX, DSN 942-2004/2005) crosses left to right just prior to Point F.

FSS's Within 100 NM Radius:

GNV, MCN

VR-1070

ORIGINATING ACTIVITY: 187 FW, 5187 Selma Highway, Montgomery, AL 36108-4824 DSN 358-9255 C334-394-7255.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2000 local, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | MGM 150/12 | N32°03.00' W86°13.00' |
| 05 AGL B 15 AGL to | B | MVC 078/33 | N31°32.00' W86°43.00' |
| 15 AGL to | C | CEW 059/19 | N30°58.50' W86°21.00' |
| 15 AGL to | D | DWG 055/18 | N30°39.00' W86°14.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized A to B.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 2 NM left and 5 NM right of centerline from B to D.

Special Operating Procedures:

- (1) This route will not be flown unless scheduled into R-2914.
- (2) Hazards A-B: Lighted tower N31-58.5 W86-09.5 (1925' AGL), avoid by 3 NM. Tower N31-56.3 W86-19.3 (190' AGL est.), Tower N31-52.3 W86-22.3 (150' AGL est.), Power line construction from N31-52.0 W86-31.0 to N31-38.0 W86-43.0. Low flying helicopter traffic from A to B left to centerline. Noise sensitive A-B: House N31-45.0 W86-30.0, avoid by 1000' AGL by 1 NM.
- (3) Hazards B-C: Low flying helicopter traffic below 1500' AGL.
- (4) Alternate Entry: B or C.
- (5) Alternate Exit: C.
- (6) Contact Montgomery FSS on 255.4 prior to entry.
- (7) Contact Elgin Range Control on 262.3 prior to C for clearance into R-2914.
- (8) CAUTION: This route crosses, overlaps or runs parallel with VR-1082, VR-1083, VR-1084 and VR-1085.
- (9) Tie-in FSS: Montgomery (MGM).
- (10) Scheduling activity hours of operation 0700-1730 central time Tue-Fri, occasional weekends. To schedule use on Sat, Sun or Mon phone prior to 1600 central time the previous Friday.

FSS's Within 100 NM Radius:

ANB, MCN

VR ROUTES

VR-1072

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710-5000 DSN 742-7560/7633, C662-434-7560/7633.

SCHEDULING ACTIVITY: 48 FTS, Columbus AFB, MS 39710-5000 DSN 742-7840/7847, C662-434-7840/7847.

HOURS OF OPERATION: Normally SR-2100 local, use OT not prohibited

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | JAN 171/27 | N32°03.00' W90°08.00' |
| 15 AGL to | B | JAN 194/31 | N32°01.00' W90°22.00' |
| 05 AGL B 15 AGL to | C | JAN 214/63 | N31°41.00' W90°56.00' |
| 05 AGL B 15 AGL to | D | JAN 214/96 | N31°15.00' W91°20.00' |
| 05 AGL B 15 AGL to | E | JAN 204/99 | N31°03.00' W91°06.00' |
| 05 AGL B 15 AGL to | F | JAN 165/55 | N31°36.00' W89°59.00' |
| 05 AGL B 15 AGL to | G | JAN 125/44 | N32°02.00' W89°31.00' |
| 05 AGL B 15 AGL to | H | MEI 165/25 | N31°58.00' W88°43.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized IAW Command directives within entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) To schedule for weekend use, Contact Scheduling Activity prior to 2200Z on Friday.
- (2) Route not surveyed for obstacles below 500' AGL.
- (3) For route briefing, contact scheduling agency.
- (4) Alternate Exit: E, F, and G.
- (5) **CROSSING ROUTES:**
Deconfliction with: VR-1033 and VR-1024. Plan to exit no later than Point G unless the crew has verified that VR-1033 and VR-1024 are not being utilized.
 - (a) VR-1033 between Point G and H (COMTRAWING ONE NAS Meridian, DSN 637-2487, C601-679-2487).
 - (b) VR-1024 between Point G and H (FACSFACNPA, NAS Pensacola, DSN 922-2735, C850-452-2735).
- (6) Aircrews calling to schedule VR-1072 will ensure they have checked all applicable Bird Hazard products (examples: <http://www.usahas.com/> and <http://usahas.com/bam/>) and are applying appropriate ORM (Operational Risk Management) guidance in accordance with their respective instructions/regulations to reduce the risk of Bird Strikes.

FSS's Within 100 NM Radius:

DRI, GWO.

VR-1076

ORIGINATING ACTIVITY: 156 AW (PRANG) Muniz ANGB, 200 Jose A. (Tony) Santana Ave., Carolina, Puerto Rico 00979-1502 DSN 740-9629, C787-253-7629.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0000Z++ (DAILY)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SJU 225/31 | N18°01.30' W66°17.70' |
| 05 AGL B 15 AGL to | B | SJU 233/35 | N18°01.00' W66°23.50' |
| 05 AGL B 15 AGL to | C | SJU 234/46 | N17°53.00' W66°32.00' |
| 01 AGL B 15 AGL to | D | BQN 200/36 | N17°54.50' W67°13.00' |
| 05 AGL B 15 AGL to | E | BQN 201/23 | N18°07.20' W67°11.30' |
| 05 AGL B 15 AGL to | F | BQN 130/31 | N18°14.40' W66°38.30' |
| 05 AGL B 15 AGL to | G | SJU 286/33 | N18°29.50' W66°33.80' |

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 2 NM either side of centerline from A to C; 5 NM left and 2 NM right of centerline from C to E; 2 NM either side of centerline from E to G.

Special Operating Procedures:

- (1) Two way route (opposite direction designator is VR-1080).
- (2) Alternate Entry Points: C, D and E.
- (3) Alternate Exit Points: D and F.
- (4) Endangered bird species area 1.5 NM radius of N17-57.0 W67-06.0 and N17-58.0 W67-00.0. Do not overfly below 1000' AGL.
- (5) Flights not scheduled to use R-7103 must enter at C.
- (6) **CAUTION:** Certified light aircraft student training area in vicinity of G.
- (7) From Point E to Lago Guaya N18-12.0 W66-50.0 minimum altitude is 1500' AGL for noise abatement. The towns of Cabo Rojo, Maricao and the winding road east from Maricao to 10 NM arc are extreme noise sensitive areas.
- (8) **CAUTION:** Avoid R-7105 (centered N17-58.8 W67-04.9 3 NM radius, surface to 15,000' MSL) which is a tethered unlighted balloon located approximately 10 NM NE of Point D.
- (9) Obtain advance coordination briefing on DSN 740-9629/9645 or C787-253-7629/7645.

FSS's Within 100 NM Radius:

SJU

VR-1077

ORIGINATING ACTIVITY: 156 AW (PRANG) Muniz ANGB, 200 Jose A. (Tony) Santana Ave., Carolina, Puerto Rico 00979-1502 DSN 740-9629, C787-253-7629.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0000Z++ (DAILY)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SJU 088/41 | N18°37.00' W65°18.00' |
| 01 AGL B 15 AGL to | B | NRR 083/45 | N18°28.00' W64°53.00' |
| 10 AGL B 15 AGL to | C | NRR 082/79 | N18°40.00' W64°20.00' |
| 01 AGL B 15 AGL to | D | NRR 089/79 | N18°30.00' W64°17.50' |
| 05 AGL B 15 AGL to | E | NRR 133/73 | N17°35.00' W64°34.00' |
| 01 AGL B 15 AGL to | F | NRR 157/51 | N17°32.00' W65°09.00' |
| 01 AGL B 15 AGL to | G | NRR 146/28 | N17°54.00' W65°17.50' |
| 01 AGL B 15 AGL to | H | NRR 117/22 | N18°08.30' W65°16.80' |

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 2 NM either side of centerline from A to H.

Special Operating Procedures:

- (1) Alternate Entry: B and C.
- (2) Alternate Exit: F and G.
- (3) Do not overfly Great Tobago or Anegada Islands.
- (4) Flights not scheduled to use R-7104 must exit at G or F.
- (5) All aircraft so equipped report Point B to Beef Island Tower (VHF 118.4) and monitor this frequency until 20 NM past Point D.
- (6) Obtain advance coordination briefing on DSN 740-9629/9645 or C787-253-7629/7645.

FSS's Within 100 NM Radius:

SJU

VR-1078

ORIGINATING ACTIVITY: 156 AW (PRANG) Muniz ANGB, 200 Jose A. (Tony) Santana Ave., Carolina, Puerto Rico 00979-1502 DSN 740-9629, C787-253-7629.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0000Z++ (DAILY)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SJU 088/41 | N18°37.00' W65°18.00' |
| 01 AGL B 15 AGL to | B | NRR 083/45 | N18°28.00' W64°53.50' |
| 01 AGL B 15 AGL to | C | NRR 082/79 | N18°40.00' W64°20.00' |
| 01 AGL B 15 AGL to | D | NRR 089/79 | N18°30.00' W64°17.50' |
| 10 AGL B 15 AGL to | E | NRR 133/73 | N17°35.00' W64°34.00' |
| 01 AGL B 15 AGL to | F | NRR 157/51 | N17°32.00' W65°09.00' |
| 01 AGL B 15 AGL to | G | NRR 146/28 | N17°54.00' W65°17.50' |
| 05 AGL B 15 AGL to | H | NRR 255/41 | N17°56.00' W66°17.00' |
| 05 AGL B 15 AGL to | I | SJU 225/31 | N18°01.30' W66°17.70' |

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 2 NM either side of centerline from A to I.

Special Operating Procedures:

- (1) Alternate Entry Points: B, C, E and G.
- (2) Alternate Exit Points: G and H.
- (3) Do not overfly Great Tobago or Anegada Islands.
- (4) Do not overfly town of Salinas (N17-59.0 W66-19.0 below 1000' AGL).
- (5) Flights not scheduled to use R-7103 must exit at H or G.
- (6) All aircraft so equipped report Point B to Beef Island tower (VHF 118.4) and monitor this frequency until 20 NM past Point D.
- (7) Obtain advance coordination briefing on DSN 740-9629/9645 or C787-253-7629/7645.

FSS's Within 100 NM Radius:

SJU

VR-1079

ORIGINATING ACTIVITY: 156 AW (PRANG) Muniz ANGB, 200 Jose A. (Tony) Santana Ave., Carolina, Puerto Rico 00979-1502 DSN 740-9629, C787-253-7629.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0000Z++(DAILY)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SJU 289/24 | N18°29.50' W66°24.00' |
| 10 AGL B 15 AGL to | B | SJU 273/39 | N18°20.40' W66°40.00' |
| 01 AGL B 15 AGL to | C | BQN 262/22 | N18°23.00' W67°29.00' |

VR ROUTES

01 AGL B 15 AGL to D BQN 257/59 N18°06.00'
W68°03.80'
01 AGL B 15 AGL to E BQN 200/36 N17°54.50'
W67°13.00'
01 AGL B 15 AGL to F SJU 234/46 N17°53.00'
W66°32.00'
01 AGL B 15 AGL to G SJU 224/37 N17°55.50'
W66°19.40'
10 AGL B 15 AGL to H SJU 227/31 N18°01.30'
W66°17.70'

TERRAIN FOLLOWING OPERATIONS: Authorized from Point B to H.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry Point: E.
- (2) Alternate Exit Point: G.
- (3) CAUTION: Certified light aircraft student pilot training area in vicinity of Point A.
- (4) Point B to C minimum altitude over land 500' AGL, start descent to 100' AGL after overflying the coast.
- (5) Do not overfly ARECIBO Radar Telescope 5 NM past B (N18-21.0 W66-45.0).
- (6) Point C to D, avoid Mona Island by 1 NM.
- (7) CAUTION: Avoid R-7105 (centered N17-58.8 W67-04.9, 3 NM radius, surface to 15,000' MSL) which is tethered, unlighted balloon located approximately 10 NM NE of Point E.
- (8) Point G to H, cross coastline at minimum of 1000' AGL. Contact Santiago Range Control on 260.9 prior to departing Point G.
- (9) Obtain advance coordination briefing on DSN 740-9629/9645 or C787-253-7629/7645.

FSS's Within 100 NM Radius:

SJU

VR-1080

ORIGINATING ACTIVITY: 156 AW (PRANG) Muniz ANGB, 200 Jose A. (Tony) Santana Ave., Carolina, Puerto Rico 00979-1502 DSN 740-9629, C787-253-7629.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0000Z++ (DAILY)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SJU 286/33 | N18°29.50' W66°33.80' |
| 05 AGL B 15 AGL to | B | BQN 130/31 | N18°14.40' W66°38.30' |
| 05 AGL B 15 AGL to | C | BQN 201/23 | N18°07.20' W67°11.30' |
| 05 AGL B 15 AGL to | D | BQN 200/36 | N17°54.50' W67°13.00' |
| 01 AGL B 15 AGL to | E | SJU 234/46 | N17°53.00' W66°32.00' |

05 AGL B 15 AGL to F SJU 233/35 N18°01.00'
W66°23.50'
05 AGL B 15 AGL to G SJU 227/31 N18°01.30'
W66°17.70'

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 2 NM either side of centerline from A to C; 2 NM left and 5 NM right of centerline from C to E; 2 NM either side of centerline from E to G.

Special Operating Procedures:

- (1) Two way route (opposite direction designator is VR-1076).
- (2) Alternate Entry Points: C and D.
- (3) Alternate Exit Points: D and E.
- (4) CAUTION: Certified light aircraft student training area in vicinity of A.
- (5) From Lago Guaya (N18-12.0 W66-50.0) to Point C minimum altitude is 1500' AGL for noise abatement. The towns of Cabo Rojo, Maricao and the winding road East from Maricao to 15 NM are extreme noise sensitive areas.
- (6) CAUTION: Avoid R-7105 (centered N17-58.8 W67-04.9, 3 NM radius, surface to 15,000' MSL) which is a tethered, unlighted balloon located approximately 10 NM NE of Point D.
- (7) Endangered bird species area 1.5 NM radius of N17-57.0 W67-06.0 and N17-58.0 W67-00.0. Do not overfly below 1500' AGL.
- (8) Point E to F, cross coastline at minimum of 1000' AGL. Contact Santiago Range Control on 260.9 prior to departing Point E. Flights not scheduled to use R-7103 must exit at E.
- (9) Obtain advance coordination briefing on DSN 740-9629/9645 or C787-253-7629/7645.

FSS's Within 100 NM Radius:

SJU

VR-1081

ORIGINATING ACTIVITY: 156 AW (PRANG) Muniz ANGB, 200 Jose A. (Tony) Santana Ave., Carolina, Puerto Rico 00979-1502 DSN 740-9629, C787-253-7629.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0000Z++ (DAILY)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SJU 287/33 | N18°29.50' W66°33.80' |
| 05 AGL B 15 AGL to | B | SJU 263/39 | N18°14.40' W66°38.30' |
| 05 AGL B 15 AGL to | C | BQN 201/23 | N18°07.20' W67°11.30' |
| 05 AGL B 15 AGL to | D | BQN 200/36 | N17°54.50' W67°13.00' |
| 01 AGL B 15 AGL to | E | SJU 234/46 | N17°53.00' W66°32.00' |

01 AGL B 15 AGL to F NRR 183/22 N17°52.00'
W65°35.20'
01 AGL B 15 AGL to G NRR 117/21 N18°08.30'
W65°17.70'

15 AGL to H DWG 055/18 N30°39.00'
Alternate Entry (See W86°14.00'
SOP 5)
10 AGL B 15 AGL to DA MVC 355/22 N31°49.50'
W87°21.50'

TERRAIN FOLLOWING OPERATIONS: Authorized from Point F to G.

ROUTE WIDTH - 2 NM either side of centerline from A to C; 2 NM left and 5 NM right of centerline from C to E; 3 NM either side of centerline from E to G.

Special Operating Procedures:

- (1) Two-way route from A to E (opposite direction designator is VR-1076).
- (2) Alternate Entry: C and D.
- (3) Alternate Exit: D, E and F.
- (4) CAUTION: Certified light aircraft student training area in vicinity of Point A.
- (5) Endangered bird species area 1.5 NM radius of N17-57.0 W67-06.0 and N17-58.0 W67-00.0. Do not overfly below 1500' AGL.
- (6) CAUTION: Avoid R-7105 (centered N17-58.8 W67-04.9, 3 NM radius, surface to 15,000' MSL) which is a tethered, unlighted balloon located approximately 10 NM NE of Point D.
- (7) Obtain advance coordination briefing on DSN 740-9629/9645 or C787-253-7629/7645.

FSS's Within 100 NM Radius:
SJU

VR-1082

ORIGINATING ACTIVITY: 46 OSS/OSCM, 505 North Barrancas Ave, Suite 104, Eglin AFB, FL 32542-6818 DSN 872-5669, C850-882-5669.

SCHEDULING ACTIVITY: 46 OSS/OSCS, 505 North Barrancas Ave, Suite 104, Eglin AFB, FL 32542-6818 DSN 872-5800, C850-882-5800.

HOURS OF OPERATION: Normally 1200-2300Z++
Mon-Fri, available OT

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | CEW 013/12 | N31°01.00' W86°37.00' |
| 01 AGL B 15 AGL to | B | MVC 131/21 | N31°13.00' W87°04.00' |
| 01 AGL B 15 AGL to | C | MVC 214/12 | N31°18.00' W87°30.00' |
| 05 AGL B 15 AGL to | D | MVC 341/29 | N31°56.00' W87°30.00' |
| 05 AGL B 15 AGL to | E | CEW 339/42 | N31°30.00' W86°56.00' |
| 15 AGL to | F | CEW 030/18 | N31°05.00' W86°29.00' |
| 15 AGL to | G | CEW 061/19 | N30°58.00' W86°21.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to E.

ROUTE WIDTH - 2 NM left and 5 NM right of centerline from A to B; 2 NM either side of centerline from B to D; 5 NM left and 2 NM right of centerline from D to E; 2 NM either side of centerline from E to H.

Special Operating Procedures:

- (1) All users must receive the current VR-1082 briefing. This information below incorporates briefing No.82-0301.
- (2) CAUTION: VR-1082 crosses several other training routes. Heavy Navy air training from Point A to D.
- (3) Noise Sensitive Area. Avoid horse farm at (N31-00.8 W86-36.5) by 2NM and 1500' AGL.
- (4) VR-1084 and VR-1085 same direction from Point A.
- (5) Alternate Entry DA (coincident with Alternate Exit EA, VR-1022) to be used only for transition from VR-1022.
- (6) Noise Sensitive Area. Avoid Brewton, AL (N31-07.0 W87-03.0) by 4NM.
- (7) VR-1083, VR-1020, VR-1022 and IR-030/031 cross between Points C and D.
- (8) CAUTION: Sod airfield near (N31-34.1 W087-33.7).
- (9) Avoid Camden and Pine Hill airports by 3NM and 1500' AGL.
- (10) Plan turn at Point D to avoid factory at (N31-58.2 W87-28.5). Remain south of east/west road between the factory and Camden airport.
- (11) Alternate Exit: Points D, F and G.
- (12) Maintain 1500' AGL from Point E to R2914A to avoid Army and Navy training areas.
- (13) VR-1020, VR-1083, VR-1084 and VR-1085 same direction from/near Point E.
- (14) User must have R2914A scheduled to fly past route past Point G. Contact Elgin Mission on 262.3 prior to Point F for clearance into the Elgin MOA/R2914A.
- (15) IR-030/031 activate by NOTAM, IR-030 opposite direction.
- (16) Uncharted obstructions:
 - (a) Tower 450' (150') at N31-11.1 W86-49.9;
 - (b) Tower 450' (150') at N31-11.6 W86-50.9;
 - (c) Tower 641' (320') at N31-12.6 W86-52.3;
 - (d) Tower 450' (150') at N31-11.3 W87-16.7;
 - (e) Tower 350' (120') at N31-11.6 W87-18.6;
 - (f) Tower 535' (168') at N31-17.2 W87-25.4;
 - (g) Tower 400' (150') at N31-14.1 W87-25.2;
 - (h) Pencil Tower 550' (400') at N31-18.5 W87-30.0;
 - (i) Tower 600' (150') at N31-42.8 W87-02.6;
 - (j) Tower 350' (150') at N31-39.5 W87-03.6;
 - (k) Tower 350' (150') at N31-32.6 W86-58.8.
- (17) 1500' (1300') Tower shown on TPC charts at N30-57.0 W86-44.0 does not exist.

FSS's Within 100 NM Radius:
ANB

VR ROUTES

VR-1083

ORIGINATING ACTIVITY: USAFAWC-79 Test and Evaluation Group/CD, Eglin AFB, FL 32542 DSN 872-2024, C904-882-2024.

SCHEDULING ACTIVITY: 85 Test and Evaluation Squadron/DOOS, Eglin AFB, FL 32542 DSN 872-2622, C904-882-2622. Alternate DSN 872-2413, 55 TES OPS desk. Route must be scheduled. between the hours 1330-2200Z weekdays.

HOURS OF OPERATION: Normally 1200-2300Z++
Mon-Fri, route usage is allowable OT

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | GCV 235/14 | N30°59.00' W88°43.00' |
| 01 AGL B 15 AGL to | B | MVC 299/10 | N31°33.00' W87°31.00' |
| 05 AGL B 15 AGL to | C | MVC 352/37 | N32°05.00' W87°24.00' |
| 05 AGL B 15 AGL to | D | MVC 072/27 | N31°34.00' W86°51.00' |
| 15 AGL to | E | CEW 030/19 | N31°05.50' W86°28.50' |
| 15 AGL to | F | CEW 061/19 | N30°58.00' W86°21.00' |
| 15 AGL to | G | DWG 055/18 | N30°39.00' W86°14.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to D.

ROUTE WIDTH - 5 NM either side of centerline from A to G.

Special Operating Procedures:

- (1) CAUTION: VR-1083 crosses several other training routes. Heavy A-37 low altitude tactical training entry Point to the Alabama state line. Maintain 1500' AGL from D to R-2914 to avoid Fort Rucker helicopter training areas.
- (2) Contact Elgin Mission Control on 262.3 prior to F for clearance into Elgin MOA/R-2914.
- (3) Alternate Entry: C.
- (4) Alternate Exit: C, E and F.
- (5) Sod airfield near N31-34.2 W87-34.0.
- (6) Do not overfly factory at N31-58.2 W87-28.5.
- (7) Avoid house (N32-08.0 W87-25.0) by 1500' AGL or 3 NM.
- (8) Avoid Martin Airport (N32-09.2 W87-27.3) by 1500' AGL or 3 NM.
- (9) Noise Sensitive Area: Avoid horse farm at N31-00.8 W86-36.5 by 1500' AGL or 2 NM.
- (10) VR-179, VR-1024, VR-1021, VR-1085, IR-030, IR-031, IR-037 and IR-040 cross between Points A and B.
- (11) VR-1020 same direction between Points B and C.
- (12) VR-1022, VR-1082 and VR-1033 cross between Points B and C.
- (13) VR-1020, VR-1082, VR-1084, VR-1085 and IR-031 same direction near Point F.
- (14) Uncharted obstructions:
 - (a) Tower 200' (150) at N31-15.5 W88-01.2;
 - (b) Tower 350' (150) at N31-39.5 W87-03.6;

- (c) Tower 300' (100) at N31-02.4 W88-43.1;
- (d) Tower 300' (150) at N31-16.5 W88-00.7;
- (e) Tower 550' (300) at N30-52.0 W86-31.0;
- (f) Tower 497' (295) at N31-17.5 W88-04.5;
- (g) Tower 485' (295) at N31-18.3 W88-02.5;
- (h) Tower 400' (150) at N31-31.9 W87-47.3;
- (i) Tower 450' (200) at N31-28.2 W87-50.2;
- (j) Tower 600' (150) at N31-42.8 W87-02.6;
- (k) Tower 350' (200) at N31-28.2 W87-45.0;
- (l) Tower 450' (150) at N31-55.8 W87-15.5;
- (m) Tower 400' (200) at N31-14.0 W88-00.0;
- (n) Fire tower 500' (100) at N31-12.9 W88-06.8;
- (o) Tower 450' (200) at N31-10.5 W88-27.4;
- (p) Tower 450' (150) at N31-56.0 W87-16.3;
- (q) Tower 350' (150) at N31-32.6 W86-58.8;
- (r) Tower 500' (150) at N31-14.5 W88-06.6.

FSS's Within 100 NM Radius:

ANB, DRI

VR-1084

ORIGINATING ACTIVITY: USAFAWC-79 Test and Evaluation Group/CD, Eglin AFB, FL 32542 DSN 872-2024, C904-882-2024.

SCHEDULING ACTIVITY: 85 Test and Evaluation Squadron/DOOS, Eglin AFB, FL 32542 DSN 872-2622, C904-882-2622. Alternate DSN 872-2413, 55 TES OPS desk. Route must be scheduled. between the hours 1330-2200Z weekdays.

HOURS OF OPERATION: Normally 1200-2300Z++
Mon-Fri, route usage is allowable OT

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | CEW 013/12 | N31°01.00' W86°37.00' |
| 01 AGL B 15 AGL to | B | MVC 131/21 | N31°13.00' W87°04.00' |
| 01 AGL B 15 AGL to | C | CEW 357/34 | N31°24.00' W86°41.00' |
| 15 AGL to | D | CEW 019/18 | N31°06.00' W86°33.00' |
| 15 AGL to | E | CEW 059/18 | N30°58.00' W86°22.00' |
| 15 AGL to | F | DWG 058/18 | N30°38.00' W86°14.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to C.

ROUTE WIDTH - 2 NM left and 5 NM right of centerline from A to B; 5 NM either side of centerline from B to F.

Special Operating Procedures:

- (1) Maintain 1500' AGL from Point C to R-2914 to avoid Fort Rucker helicopter training areas.
- (2) Contact Elgin Mission Control on 262.3 prior to Point E for clearance into R-2914.
- (3) CAUTION: Heavy Navy air training from Point A to C.

- (4) Alternate Exit: E.
- (5) Avoid Brewton, AL (N31-07.0 W87-03.0) by 4 NM, noise sensitive area.
- (6) CAUTION: VR-1084 crosses several other training routes.
- (7) IR-030 opposite direction Point C to D. IR-030/031 activated by NOTAM.
- (8) NOISE SENSITIVE AREA: Avoid horse farm at N31-00.8 W86-36.5 by 2 NM or 1500' AGL.
- (9) VR-1082 and VR-1085 same direction from A.
- (10) VR-1020, VR-1082, VR-1085 and IR-031 cross from left to right prior to C.
- (11) Uncharted obstructions:
 - (a) Tower 1500' (1300) at N30-57.0 W86-44.5;
 - (b) Tower 400' (150) at N31-11.6 W86-50.9;
 - (c) Tower 641' (320) at N31-12.6 W86-52.3;
 - (d) Tower 550' (300) at N30-52.0 W86-31.0.

FSS's Within 100 NM Radius:

ANB

VR-1085

ORIGINATING ACTIVITY: 46 OSS/OSCM, 505 North Barrancas Ave, Suite 104, Eglin AFB, FL 32542-6818 DSN 872-5669, C850-882-5669.

SCHEDULING ACTIVITY: 46 OSS/OSCS (ROCC), 505 North Barrancas Ave, Suite 104, Eglin AFB, FL 32542-6818 DSN 872-5800, C850-882-5800.

HOURS OF OPERATION: Normally 1200-2300Z++ Mon-Fri, route usage is allowable OT

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| As assigned to | A | CEW 013/12 | N31°01.00' W86°37.00' |
| 01 AGL B 15 AGL to | B | MVC 131/21 | N31°13.00' W87°04.00' |
| 01 AGL B 15 AGL to | C | MVC 217/22 | N31°11.00' W87°38.00' |
| 01 AGL B 15 AGL to | D | MVC 296/19 | N31°37.00' W87°40.00' |
| 05 AGL B 15 AGL to | E | MVC 022/32 | N31°56.00' W87°05.00' |
| 05 AGL B 15 AGL to | F | MVC 091/32 | N31°25.00' W86°44.00' |
| 15 AGL to | G | CEW 019/18 | N31°06.00' W86°33.00' |
| 15 AGL to | H | CEW 059/18 | N30°58.00' W86°22.00' |
| 15 AGL to Alternate Exit Track from Pt F | I | DWG 058/18 | N30°38.00' W86°14.00' |
| 05 AGL B 15 AGL to | F | MVC 091/32 | N31°25.00' W86°44.00' |
| 15 AGL to | F1 | CEW 338/11 | N31°00.00' W86°45.00' |
| 02 AGL B 10 AGL to | F2 | CEW 198/10 | N30°40.00' W86°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to F and F to F2.

ROUTE WIDTH - 2 NM left and 5 NM right of centerline from A to B; 5 NM either side of centerline from B to I; 3 NM either side of centerline from F to F1 and F2.

Special Operating Procedures:

- (1) All users must receive the current VR-1085 briefing. This information below incorporates briefing No.85-0301.
- (2) CAUTION: VR-1085 crosses several training routes. Heavy Navy air training from Points A to C and in vicinity of Point F.
- (3) Noise Sensitive Area. Avoid horse farm at N31-00.8 W86-36.5 by 2NM and 1500' AGL.
- (4) VR-1082 and VR-1084 same direction from Point A.
- (5) Noise Sensitive Area. Avoid Brewton Al. N31-07.0 W087-03.0 by 4NM.
- (6) IR-031 same direction from Point B. IR-030/031 activated by NOTAM.
- (7) Avoid Prison at N31-08.0 W087-27.5 by 1000' AGL and 1NM.
- (8) CAUTION: Crop duster field near N31-09.2 W087-33.7.
- (9) CAUTION: Crop duster field near N31-19.0 W087-37.6.
- (10) VR-1020, VR-1021, VR-1022 and VR-1083 cross between Points C and D.
- (11) CAUTION: Sod airfield near N31-34.1 W087-33.7.
- (12) Alternate Entry: Point E.
- (13) Alternate Exit: Points E, F, G, H and F2.
- (14) Avoid Grove Hill airport by 3NM and 1500' AGL.
- (15) Maintain 1500' AGL from Point F to R2914A or R2915A to avoid Army and Navy training areas.
- (16) User must have R2914A scheduled to fly route past Point H. Contact Elgin Mission on 262.3 prior to Point G for clearance into the Elgin MOA/R2914A.
- (17) VR-1020, VR-1082, VR-1083,VR-1084 and IR-031 same direction near Point G.
- (18) User must have R2915A scheduled to fly alternate exit track from Point F to F2. Contact Elgin Mission on 315.0 prior to Point F1 for clearance into the Elgin MOA/R2915A.
- (19) Uncharted obstructions:
 - (a) Tower 450' (150') at N31-11.1 W86-49.9;
 - (b) Tower 450' (150') at N31-11.6 W86-50.9;
 - (c) Tower 641' (320') at N31-12.5 W86-52.3;
 - (d) Fire Tower 500' (100') at N31-09.0 W87-13.7;
 - (e) Tower 450' (150') at N31-11.3 W87-16.7;
 - (f) Tower 350' (120') at N31-11.6 W87-18.6;
 - (g) Tower 535' (168') at N31-17.2 W87-25.4;
 - (h) Tower 400' (150') at N31-14.1 W87-25.2;
 - (i) Tower 400' (120') at N31-10.7 W87-26.4;
 - (j) Tower 400' (120') at N31-10.7 W87-27.2;
 - (k) Tower 500' (200') at N31-10.1 W87-27.7;
 - (l) Pencil Tower 550' (400') at N31-18.5 W87-30.0;
 - (m) Tower 450' (150') at N31-06.4 W87-33.2;
 - (n) Tower 600' (150') at N31-26.8 W87-40.3;
 - (o) Tower 350' (200') at N31-28.2 W87-45.0;
 - (p) Tower 400' (150') at N31-31.9 W87-47.3;
 - (q) Tower 450' (150') at N31-56.0 W87-16.3;
 - (r) Tower 450' (150') at N31-55.8 W87-15.5;
 - (s) Tower 600' (150') at N31-42.8 W87-02.6.
- (20) 1500' (1300') Tower shown on TPC charts at N30-57.0 W86-44.0 does not exist.

VR ROUTES

FSS's Within 100 NM Radius:

ANB, DRI

VR-1087

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: Normally 0900-2400Z++ daily, available OT

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | RSW 146/28 | N26°09.00' W81°28.00' |
| 05 AGL B 15 AGL to | B | RSW 117/25 | N26°21.00' W81°21.00' |
| 05 AGL B 15 AGL to | C | PHK 236/7 | N26°43.00' W80°48.00' |
| 10 AGL B 15 AGL to | D | PHK 329/20 | N27°04.00' W80°53.00' |
| 10 AGL B 15 AGL to Coordinate with Avon Park Range Control on 292.2 MHz prior to entering R-2901. | E | PHK 331/38 | N27°20.00' W81°02.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from C to E.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 1 NM either side of centerline from C to D; 5 NM either side of centerline from D to E.

Special Operating Procedures:

- (1) Alternate Entry: B.
- (2) Avoid Immokalee, Clewiston, Palm Beach County, Glades, Okeechobee Airports and uncharted airstrip/housing area at 27-20N 81-02W by 3 NM below 1500' AGL.
- (3) All requests for use of this route must be approved by 347 WG, Det 1 Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity. Contact 347 WG, Det 1/RO during normal duty hours for hazard briefing prior to flight planning.
- (4) Route clearance is valid only plus or minus 30 minutes from scheduled time.
- (5) This route authorized only for aircraft scheduled to enter R-2901.
- (6) Obstruction/hazard/noise sensitive briefing shall be obtained at time of scheduling.
- (7) Avoid overflight of Hendry Correctional Complex at N26-19 W81-16 by 1 NM or 1500' AGL.
- (8) CAUTION; Uncharted grass airstrips located at N26-20 W81-19.2; N26-20.9 W81-26.5.
- (9) CAUTION; Uncharted 200' MSL tower located at N26-17.3 W81-20.2; 150' MSL Microwave tower located at N26-18.4 W81-16.8; 250' MSL tower located N26-27.5 W81-04.5; 315'

MSL Microwave tower located at N26-37.7 W80-55.2; 300' MSL tower located at N26-38.6 W80-55.2; 250' MSL water tower located at N27-04.8 W81-04.2; 300' MSL tower located at N27-07.0 W81-05.0.

- (10) Avoid Fishing Resort/Trailer Park at intersection of Route 70 and the Kissimmee River, 7 NM west of Okeechobee.

FSS's Within 100 NM Radius:

MIA, PIE

VR-1088

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: Normally 0900-2400Z++ daily, available OT

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | RSW 146/28 | N26°09.00' W81°28.00' |
| 05 AGL B 15 AGL to | B | RSW 112/17 | N26°26.00' W81°29.00' |
| 05 AGL B 15 AGL to | C | LBV 117/6 | N26°47.00' W81°18.00' |
| 05 AGL B 15 AGL to | D | PHK 319/20 | N27°02.00' W80°56.00' |
| 10 AGL B 15 AGL to Coordinate with Avon Park Range Control on 292.2 MHz prior to entering R-2901. | E | PHK 328/37 | N27°18.50' W81°04.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from C to E.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: B.
- (2) Avoid Immokalee, Labelle, Hendry Isles and Graham-Moore Haven Airports and uncharted airport/housing area at N27-20.0 W81-02.0 by 3 NM below 1500' AGL.
- (3) All requests for use of this route must be approved by 347 WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
- (4) Route clearance is valid only plus or minus 30 minutes from scheduled time.
- (5) This route authorized only for aircraft scheduled to enter R-2901.
- (6) Obstruction/Hazard/Noise Sensitive Briefing shall be obtained at time of scheduling.
- (7) Avoid overflight of horse ranch at N26-52.0 W81-14.0 by 2 NM or 1500' AGL.

- (8) CAUTION: Uncharted grass airstrips located at N26-20.9 W81-26.5 and N26-49.0 W81-21.5.
- (9) CAUTION: Uncharted 300' MSL tower located at N27-07.0 W81-05.0; 250' MSL water tower located at N27-04.8 W81-04.2; 250' MSL tower located at 26-59.0N 81-07.8W; 225' MSL tower located at N26-45.5 W81-23.7; 200' MSL oil rig located at N26-32.1 W81-27.3; 200' MSL tower located at N26-25.9 W81-26.9.

FSS's Within 100 NM Radius:

MIA, PIE

VR-1089

ORIGINATING ACTIVITY: 347 Rescue Wing, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 Rescue Wing, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: Normally 0900-2400Z++ daily, available OT

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | PHK 236/7 | N26°43.00' W80°48.00' |
| 10 AGL B 15 AGL to | B | PHK 351/24 | N27°11.00' W80°46.00' |
| 05 AGL B 15 AGL to | C | VRB 294/16 | N27°46.00' W80°46.00' |
| 05 AGL B 15 AGL to | D | VRB 310/48 | N28°09.00' W81°13.00' |
| 05 AGL B 15 AGL to | E | VRB 301/49 | N28°03.00' W81°19.00' |
| 05 AGL B 15 AGL to | F | ORL 178/32 | N28°00.00' W81°19.00' |

Coordinate with Avon Park Range Control on 292.2 MHz prior to entering R-2901.

TERRAIN FOLLOWING OPERATIONS: Authorized from C to F.

ROUTE WIDTH - 1 NM either side of centerline from A to B; 5 NM either side of centerline from B to F.

Special Operating Procedures:

- Alternate Entry: B.
- Avoid Okeechobee and River Ranch Resort Airports by 3 NM below 1500' AGL.
- All requests for use of this route must be approved by 347 WG, Det 1 Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity. Contact 347 WG, Det 1/RO during normal duty hours for hazard briefing prior to flight planning.
- Route clearance is valid only plus or minus 30 minutes from scheduled time.
- Florida turnpike - avoid flight within 1/2 NM either side except when crossing perpendicular to road bed.

- This route is authorized only for aircraft scheduled to enter R-2901.
- CAUTION: Uncharted grass airstrip located at N27-41.0 W80-48.5.
- CAUTION: Uncharted 250' MSL tower located at N27-36.0 W80-52.2; 300' MSL microwave tower located at N27-52.0 W80-52.8; 200' MSL grain elevator located at N27-45.3 W80-47.8; 300' MSL grain elevator located at N27-48.1 W80-47.8; 250' MSL microwave tower located at N27-42.6 W80-54.3.
- CAUTION: 516' MSL tower depicted at N27-14.3 W80-45.2 is actually located at N27-14.0 W80-40.5. Drive-in movie theater depicted at N27-14.5 W80-40.5 is actually located at N27-14.3 W80-45.2.

FSS's Within 100 NM Radius:

GNV, MIA, PIE

VR-1097

ORIGINATING ACTIVITY: 347 WG, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347 WG, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | PIE 332/20 | N28°12.00' W82°51.00' |
| 05 AGL B 15 AGL to | B | CTY 190/37 | N28°59.00' W83°09.00' |
| 05 AGL B 15 AGL to | C | CTY 201/19 | N29°18.00' W83°10.00' |

Exit at 15 AGL unless flying VR-1005 at F.

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM left and 3 NM right of centerline from B to C.

Special Operating Procedures:

- All requests for use of this route must be approved by 347 WG, Det 1 Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.
- Contact 347 WG, Det 1/ROA during normal duty hours for hazard briefing prior to flight planning.
- To fly VR-1005, coordinate with appropriate agencies according to FLIP.
- If Approval to fly VR-1005 is not approved, climb 5 NM prior to C to 1500' AGL to exit the route.
- Entry time requirements: VR-1097 entry is schedule de-conflicted with IR-046 which shares common entry Point. Entry outside the scheduled entry time plus or minus 3

VR ROUTES

minutes is not authorized and will require rescheduling. Airspeeds between 360-540 knots ground speed must be maintained for 3 minutes after passing A.

- (6) Avoid watercraft in accordance with regulations.
- (7) 15 Oct to 15 Mar/migratory birds: During heavy migration bird season, flight not authorized from 1 hour before sunset to 1 hour after sunrise.

FSS's Within 100 NM Radius:

GNV, PIE

VR-1098

ORIGINATING ACTIVITY: 347th Rescue WG, Detachment 1/RO, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-2902/4642, C813-828-2902/4642.

SCHEDULING ACTIVITY: 347th Rescue WG, Detachment 1/ROA, 8707 North Golf Course St., MacDill AFB, FL 33621-5205 DSN 968-4642, C813-828-4642.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | MCF 159/23 | N27°30.00' W82°22.00' |
| 05 AGL B 15 AGL to | B | LBV 314/46 | N27°21.70' W82°00.00' |
| 05 AGL B 15 AGL to | C | LBV 319/37 | N27°18.00' W81°50.00' |
| 05 AGL B 15 AGL to | D | LBV 327/26 | N27°11.50' W81°39.00' |
| 05 AGL B 15 AGL to | E | PHK 325/28 | N27°10.00' W80°59.30' |
| 05 AGL B 15 AGL to | F | VRB 237/17 | N27°30.00' W80°45.00' |
| 05 AGL B 15 AGL to | G | VRB 297/25 | N27°50.50' W80°55.00' |
| 05 AGL B 15 AGL to | H | ORL 169/29 | N28°04.00' W81°14.00' |
| 05 AGL B 15 AGL to | I | ORL 181/32 | N28°00.00' W81°21.00' |
| 05 AGL B 15 AGL to | J | ORL 181/46 | N27°46.00' W81°21.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 8 NM left and 3 NM right of centerline from A to B; 5 NM either side of centerline from B to C; 6 NM either side of centerline from C to D; 4 NM either side of centerline from D to E; at E width left reduces to border the Marian 2 MOA; 3 NM either side of centerline from E to H; 6 NM left and 4 NM right of centerline from H to J.

Special Operating Procedures:

- (1) All requests for use of this route must be approved by 347th Rescue WG, Det 1/ROA Scheduling Activity a minimum of one day in advance during normal duty hours. Same day changes or cancellations shall be coordinated through the Scheduling Activity.

- (2) Contact 347th Rescue WG, Det 1/RO, Originating Activity during normal duty hours for hazard briefing prior to flying route.
- (3) This route is only used for flights entering R-2901 with a scheduled range period. There are no alternate exit points.
- (4) Entry/Exit times: For deconfliction with IR/VR routes going to R-2901, enter Point A NET 25 minutes prior to the scheduling Range Start Time (RST) and no later than 30 minutes prior to the Range End Time (RET). Flight must exit the route NET the RST and no later than 10 minutes prior to RET. Airspeeds between 420-540 knots ground speed must be maintained. Entry/exit outside the time windows is not authorized and will require rescheduling.
- (5) See and Avoid: VR-1098 crosses IR-034, IR-050, IR-055, VR-1087 and VR-1088 within 3 NM of Point E. VR-1098 coincides with: IR-049 from Point A to E; with IR-050 and IR-051 from Point A to D; and IR-051, IR-056, VR-1006 and VR-1089 from Point H to J. MARSAs is accomplished by See and Avoid.
- (6) CAUTION: Be alert for light aircraft in vicinity of all major highways along this route. Note, route parallels Florida Turnpike from Point G to I.
- (7) 15 Oct-15 Mar/Migratory birds: During heavy migratory bird season, flight not authorized from 1 hour before sunset to 1 hour after sunrise.
- (8) Possible bird hazard area located approximately N27-20.6 W80-41.4. Avoid this area by 3 NM or above 2000' AGL.
- (9) Alternate Entry: B (A is only authorized on departure from MacDill AFB, FL)
- (10) Use Caution: Entry Point A is within 2 NM of Class B and C Airspace.
- (11) Use Caution: Alternate Entry Point B is within 20 NM of Class B and C Airspace.

FSS's Within 100 NM Radius:

GNV, MIA, PIE

VR-1102

ORIGINATING ACTIVITY: 188FW Arkansas ANG, 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502.

SCHEDULING ACTIVITY: Same as Originating Activity. Route scheduled no more than 72 hr in advance. Minimum separation between scheduled entry times is 15 minutes.

HOURS OF OPERATION: Continuous (except Sunday 1000-1200 local)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | FSM 072/63 | N35°35.00' W93°01.00' |
| 01 AGL B 15 AGL to | B | FSM 086/45 | N35°21.00' W93°21.00' |
| 01 AGL B 15 AGL to | C | FSM 102/44 | N35°09.00' W93°26.00' |
| 01 AGL B 15 AGL to | D | PGO 063/34 | N34°54.00' W93°58.00' |

01 AGL B 15 AGL to E FSM 131/15 N35°12.00'
W94°04.00'

Alternate Entry:
as assigned to AA FSM 055/59 N35°51.00'
then at 01 AGL B 15 W93°12.00'
AGL to Pt B.

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to 35-27N 93-10W, then 3 NM left and 5 NM right of centerline to B; 5 NM left and 8 NM right of centerline from B to C; 5 NM either side of centerline from C to D; 5 NM left and 3 NM right of centerline from D to E. Alternate Entry; 3 NM either side of centerline from AA to B.

Special Operating Procedures:

- (1) Alternate Entry: N/A.
- (2) Alternate Exit: D.
- (3) See and Avoid/restrictive scheduling applies between VR-1102 and IR-117, IR-120, IR-121, IR-164, VR-189, VR-1103, VR-1104, VR-1113, VR-1130, and Hog Low North MOA.
- (4) Call in-the-blind on 305.4 entering the Hog MOA. Clearance to enter R-2402 must be received on 339.05.
- (5) Avoid flight within 1500' AGL or 3 NM all charted airports when practicable.
- (6) Uncharted and not in chum route obstructions:
 - (a) Tower N35-28.705 W93-12.469 (100' AGL).
- (7) CAUTION: Hang gliding activity in vicinity of Mt. Magazine.
- (8) CAUTION: Soaring bird activity in vicinity of Mt. Magazine.
- (9) CAUTION: Entry Point AA MTR crossing to the North.
- (10) CAUTION: Points A-C, numerous SR routes frequented by flights of multiple C-130's.
- (11) CAUTION: Points C-E, multiple MTR's and Military traffic in HOG MOA.

FSS's Within 100 NM Radius:
MLC

VR-1103

ORIGINATING ACTIVITY: 188FW Arkansas ANG, 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502.

SCHEDULING ACTIVITY: Same as Originating Activity. Route scheduled no more than 72 hr in advance. Minimum separation between scheduled entry times is 15 minutes.

HOURS OF OPERATION: Continuous (except Sunday 1000-1200 local)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | TXK 072/50 | N33°40.00' W93°05.00' |
| 01 AGL B 15 AGL to | B | TXK 037/44 | N34°02.00' W93°28.00' |
| 01 AGL B 15 AGL to | C | TXK 006/49 | N34°19.00' W93°51.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 01 AGL B 15 AGL to | D | PGO 082/48 | N34°44.00' W93°38.00' |
| 01 AGL B 15 AGL to | E | PGO 063/34 | N34°54.00' W93°58.00' |
| 01 AGL B 15 AGL to | F | FSM 131/15 | N35°12.00' W94°04.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 2 NM either side of centerline from A to B; 2 NM widening to 6 NM left and 3 NM right of centerline from B to C; 8 NM either side of centerline from C to E; 5 NM left and 3 NM right of centerline from E to F.

Special Operating Procedures:

- (1) Alternate Entry: C.
- (2) Alternate Exit: E.
- (3) See and Avoid/restrictive scheduling applies between VR-1103 and IR-117, IR-120, IR-121, IR-164, VR-189, VR-1102, VR-1104, VR-1113, VR-1130, Hog Low North and South MOAs.
- (4) Call in-the-blind on 305.4 before entering the Hog MOA. Clearance to enter R-2402 must be received on 339.05.
- (5) Avoid flight within 1500' AGL or 3 NM all charted airports when practicable.
- (6) Make entry time plus or minus five minutes or reschedule.
- (7) CAUTION: Points B-F, multiply MTR's and Military traffic in Hog MOA.

FSS's Within 100 NM Radius:
DRI, MLC

VR-1104

ORIGINATING ACTIVITY: 188FW Arkansas ANG, 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502.

SCHEDULING ACTIVITY: Same as Originating Activity. Route scheduled no more than 72 hr in advance. Minimum separation between scheduled entry times is 15 minutes.

HOURS OF OPERATION: Continuous (except Sunday 1000-1200 local)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | PGO 188/29 | N34°12.00' W94°44.00' |
| 01 AGL B 15 AGL to | B | PGO 116/44 | N34°19.00' W93°51.00' |
| 01 AGL B 15 AGL to | C | PGO 082/48 | N34°44.00' W93°38.00' |
| 01 AGL B 15 AGL to | D | PGO 063/34 | N34°54.00' W93°58.00' |
| 01 AGL B 15 AGL to | E | FSM 131/15 | N35°12.00' W94°04.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

VR ROUTES

ROUTE WIDTH - 5 NM either side of centerline from A to B; 8 NM either side of centerline from B to D; 5 NM left and 3 NM right of centerline from D to E.

Special Operating Procedures:

- (1) Alternate Entry: B.
- (2) Alternate Exit: D.
- (3) See and Avoid/restrictive scheduling applies between VR-1104 and IR-117, IR-120, IR-121, IR-164, VR-189, VR-1102, VR-1103, VR-1113, VR-1130, Hog Low North and South MOAs.
- (4) Call in-the-blind on 305.4 before entering the Hog MOA. Clearance into R-2402 must be received on 339.05.
- (5) Avoid flight within 1500' AGL or 3 NM all charted airports when practicable.
- (6) Uncharted and not in chum route obstructions:
 - (a) Tower N34-12.5 W94-14.0 700' MSL (200' AGL).
- (7) Make entry time plus or minus five minutes or reschedule.
- (8) CAUTION: Point B crossing MTR's.
- (9) CAUTION: Points B-E, multiple converging MTR's and military aircraft in Hog MOA.

FSS's Within 100 NM Radius:

MLC

VR-1105

ORIGINATING ACTIVITY: 149 FTR GP (TX-ANG), Kelly AFB, TX 78241 DSN 945-5934, C210-925-5934.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-1830 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|--------------------------|
| As assigned to | A | | N29°05.00' W98°41.00' |
| SFC B 15 AGL to | B | COT 040/19 | N28°40.00' W98°51.00' |
| SFC B 15 AGL to | C | COT 074/20 | N28°30.00' W98°45.00' |
| SFC B 15 AGL to | D | THX 282/22 | N28°38.00' W98°33.00' |
| SFC B 15 AGL to | E | THX 213/19 | N28°16.00' W98°23.00' |
| SFC B 15 AGL to | F | COT 113/24 | N28°15.00' W98°44.00' |

ROUTE WIDTH - 3 NM either side of centerline from A to E; 5 NM either side of centerline from E to F.

Special Operating Procedures:

- (1) Minimum altitude from A to C 500' AGL; from C to D 100' AGL.
- (2) Request for route utilization shall be coordinated minimum of 1 plus 30 prior to entry time.
- (3) MARSAs will apply between aircraft using this route and other routes which enter, cross, coincide and terminate under VMC within the route structure.
- (4) Speed routes will be flown at 300-520 knots.

- (5) Type aircraft: Only jet aircraft assigned to the 149 TFG and/or originating out of Kelly AFB, TX to include aircraft coordinated with the 149 TFC for exercise type operations.
- (6) Alternate Entry Points: D and E.
- (7) Alternate Exit Points: D and E.

FSS's Within 100 NM Radius:

SJT

VR-1106

ORIGINATING ACTIVITY: 149 FTR GP (TX-ANG), Kelly AFB, TX 78241 DSN 969-5934.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-1830 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|--------------------------|
| As assigned to | A | COT 113/24 | N28°15.00' W98°44.00' |
| SFC B 15 AGL to | B | THX 213/19 | N28°16.00' W98°23.00' |
| SFC B 15 AGL to | C | THX 282/22 | N28°38.00' W98°33.00' |
| SFC B 15 AGL to | D | COT 074/20 | N28°30.00' W98°45.00' |
| SFC B 15 AGL to | E | COT 040/19 | N28°40.00' W98°51.00' |
| SFC B 15 AGL to | F | | N29°05.00' W98°41.00' |

ROUTE WIDTH - 5 NM either side of centerline from A to C; 3 NM either side of centerline from C to F.

Special Operating Procedures:

- (1) Minimum altitude from A to D 100' AGL; from D to F 500' AGL.
- (2) Request for route utilization shall be coordinated minimum of 1 plus 30 prior to entry time. Only aircraft assigned to 149 TFG and/or originated out of Kelly AFB, TX to include exercise type operation will use this route.
- (3) MARSAs (See and Avoid) applies between aircraft using this route and other routes crossing or conflicting with this route structure.
- (4) Speed will be 300-520 knots.

FSS's Within 100 NM Radius:

SJT

VR-1107

ORIGINATING ACTIVITY: 150 FW OG/CC, 2251 Air Guard Rd. SE, Kirtland AFB, NM 87117-5875 DSN 246-7426.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-2200 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 01 AGL B 15 AGL to | A | CNX 291/12 | N34°29.00' W105°53.00' |
| 01 AGL B 15 AGL to | B | CNX 074/46 | N34°24.50' W104°45.50' |
| 01 AGL B 15 AGL to | C | CVS 239/28 | N34°13.00' W103°50.50' |
| 01 AGL B 15 AGL to | D | TCC 195/33 | N34°41.50' W103°54.00' |
| 01 AGL B 15 AGL to | E | TCC 239/23 | N35°03.50' W104°02.50' |
| 01 AGL B 15 AGL to | F | ABQ 074/48 | N35°05.00' W105°51.00' |

TERRAIN FOLLOWING OPERATIONS: VFR terrain following authorized entire route IAW Command Directives within published altitude blocks.

ROUTE WIDTH - 15 NM left and 30 NM right of centerline from A to B; 25 NM left and 30 NM right of centerline from B to C; 10 NM either side of centerline from C to E; 26 NM either side of centerline from E to F.

Special Operating Procedures:

- (1) Avoid Ft. Sumner Airport (Segment B-C N34-29-15 W104-12-50) by 3 NM.
- (2) Avoid Double V Ranch private airport (Segment A-B N34-05-30 W104-19-55) by 2 NM.
- (3) Avoid the following by 1 NM: Santa Rosa Lake (N35-02-30 W104-41-00), (Lake Sumner Dam N34-36-25 W104-23-15, (Holcroft Ranch N34-43-06 W104-39-18), (Turkey Ranch N34-17-00 W105-59-45), and (House N34-20-00 W104-23-45).
- (4) Avoid Mine N34-35-30 W105-35-00 by .5 NM or 1000' AGL.
- (5) Avoid the following Houses by .5 NM: (N34-02-45 W104-04-50), (N34-17-00 W104-17-55), (N33-59-00 W104-29-00), (N34-17-40 W104-26-00), (N34-21-00 W104-21-50), (N34-13-40 W103-52-30), (N34-14-00 W103-59-00), (N34-03-00 W104-39-00), (N34-12-45 W104-46-20), (N34-04-20 W104-02-50).
- (6) Avoid ranch (N34-20-31 W104-23-12) by 2 NM and 1500' AGL.

FSS's Within 100 NM Radius:

ABQ

VR-1108

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd St., Ste 6, Laughlin AFB, TX 78843-5222 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 87 FTS/DOS, 570 2nd St., Laughlin AFB, TX 78843 DSN 732-5484, C830-298-5484. Scheduling hrs, 0730-1630 Mon-Fri (excluding hol).

HOURS OF OPERATION: Sunrise-Sunset only

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------|----|--------------|---------------------------|
| As assigned to | A | FST 185/97 | N29°23.50' W103°30.00' |

| | | | |
|--------------------|---|-------------|---------------------------|
| 10 AGL B 15 AGL to | B | FST 172/88 | N29°29.00' W103°04.00' |
| 10 AGL B 15 AGL to | C | FST 155/67 | N29°52.00' W102°40.00' |
| 05 AGL B 15 AGL to | D | FST 155/52 | N30°07.00' W102°44.00' |
| 05 AGL B 15 AGL to | E | DLF 303/101 | N30°26.00' W102°16.00' |
| 05 AGL B 15 AGL to | F | DLF 294/82 | N30°03.00' W102°07.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 8 NM either side of centerline tapering to 10 NM left and 3 NM right of centerline from B to C; 10 NM left and 3 NM right tapering to 3 NM left and 5 NM right of centerline from C to D; 3 NM left and 5 NM right expanding to 8 NM either side of centerline from D to E; 8 NM either side of centerline tapering to 4 NM either side of centerline from E to F.

Special Operating Procedures:

- (1) Route:
 - (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
 - (b) This route is covered by the following maps and charts: San Antonio and El Paso Sectionals, Low IFR Enroute L-6S,L-19 TPC H-23A, TPC H-23B.
 - (c) Alternate Entry: B.
 - (d) Alternate Exit: C, D and E.
- (2) Scheduling:
 - (a) Request for weekend use shall be coordinated with the Scheduling Activity between 0730-1630 local Mon-Fri.
 - (b) Aircraft shall be scheduled with minimum of 10 minutes separation, 35 minutes if a T-38 follows a T-1 on the route.
- (3) Restrictions:
 - (a) For environmental reasons, this route may only be flown by T-1 and T-38 aircraft.
 - (b) Aircraft unable to enter the route plus or minus 3 minutes of their assigned entry time will not enter the route.
 - (c) T-1s arriving early will establish a VFR holding pattern over Big Bend Airport (N29-28.2 W103-56.3) and depart so as to enter the route on time. Call entering holding and departing for the route on 255.4.
- (4) Conflicts:
 - (a) VR-1109 and VR-1117 between A and C.
 - (b) VR-1117 is the reverse routing of VR-1108 between A and C (westward). All users must contact the Scheduling Activity to determine whether conflicting routes are in use. VR-1117 is for weekend use only.
- (5) Communications:
 - (a) Users must monitor 255.4 while on the route.
- (6) Noise Sensitive Areas:
 - (a) Avoid Neville Springs Cavalry Post (N29-22.3 W103-12.5) by 1500' AGL or 1.5 NM.
 - (b) Avoid all charted airfields (if practical) by 3 NM or 1500' AGL. The National Park Airfield (uncharted) is located at (N29-35.6 W103-15.7); avoid by 3 NM or 1500' AGL.
 - (c) Avoid overflight of Panther Junction (Park Headquarters) located at (N29-20 W103-13) by 3 NM or 3000' AGL.

VR ROUTES

- (d) Avoid Terlingua Ranch (N29-27 W103-24) for noise abatement.
- (7) Laughlin Specific Procedures:
 - (a) If a problem is encountered on the western portion of the route and the route must be discontinued, climb to a VFR hemispheric altitude and fly heading 025 until able to continue on planned routing without over-flying Mexico. Call departing the route on 255.4 and attempt contact with Del Rio Approach Control on 270.1 prior to entering the Ranch areas (Laughlin Moa 1).
 - (b) Call exiting the route on 255.4 if returning to Laughlin. Fly a VFR hemispheric altitude below 16,000' and stay west of the DLF 301 radial. Contact Del Rio Approach Control on 270.1 for IFR clearance and recovery. If flying the route again, climb to a VFR hemispheric altitude below 16,000', staying below 9000' MSL inside the DLF 85 DME arc east of the DLF 301 radial. Proceed to the Entry Point. Do not fly south of VR-1108. Ensure second entry time is de-conflicted.
- (8) Route is designated mountainous terrain from Point A to C.

FSS's Within 100 NM Radius:

SJT

VR-1109

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd St., Ste. 6, Laughlin AFB, TX 78843-5222 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 87 FTS/DOS, 570 2nd St., Laughlin AFB, TX 78843 DSN 732-5484, C830-298-5484. Scheduling hrs 0730-1630 Mon-Fri (excl'd hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | FST 185/97 | N29°23.50' W103°30.00' |
| 10 AGL B 15 AGL to | B | FST 172/88 | N29°29.00' W103°04.00' |
| 10 AGL B 15 AGL to | C | FST 155/67 | N29°52.00' W102°40.00' |
| 05 AGL B 15 AGL to | D | FST 138/64 | N30°02.00' W102°21.00' |
| 05 AGL B 15 AGL to | E | DLF 289/78 | N29°55.00' W102°07.00' |
| 05 AGL B 15 AGL to | F | DLF 298/54 | N29°52.00' W101°37.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 8 NM either side of centerline tapering to 10 NM left and 3 NM right of centerline from B to C; 10 NM left and 5 NM right tapering to 5 NM either side of centerline from C to D; 5 NM either side tapering to 3 NM either side of centerline from D to E; 3 NM either side of centerline expanding to 10 NM left and 3 NM right of centerline from E to F.

Special Operating Procedures:

- (1) Route:

- (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
- (b) This route is covered by the following maps and charts: San Antonio and El Paso Sectionals, Low IFR Enroute L-6S,L-19 TPC H-23A, TPC H-23B.
- (c) Alternate Entry: B.
- (d) Alternate Exit: C, D and E.
- (e) Route is closed north of N30-00 between E and F.
- (2) Scheduling:
 - (a) Request for weekend use shall be coordinated with the Scheduling Activity between 0730-1630 local Mon-Fri.
 - (b) Aircraft shall be scheduled with a minimum of 10 minutes separation, 35 minutes if a T-38 follows a T-1 on the route.
- (3) Restrictions:
 - (a) For environmental reasons, this route may only be flown by T-1 and T-38 aircraft.
 - (b) Aircraft unable to enter the route plus or minus 3 minutes of their assigned entry time will not enter the route.
 - (c) T-1s arriving early will establish a VFR holding pattern over Big Bend Airport (N29-28.2 W103-56.3) and depart so as to enter route on time. Call entering and departing holding for the route on 255.4.
- (4) Conflicts:
 - (a) VR-1108 and VR-1117 between A and C.
 - (b) VR-1117 is the reverse routing of VR-1109 between A and C (westward). All users must contact the Scheduling Activity to determine whether conflicting routes are in use. VR-1117 is for weekend use only.
- (5) Communications:
 - (a) Users must monitor 255.4 while on the route.
- (6) Noise Sensitive Areas:
 - (a) Avoid Neville Springs Cavalry Post (N29-22.3 W103-12.5) by 1500' AGL or 1.5 NM.
 - (b) Avoid all charted airfields (if practical) by 3 NM or 1500' AGL. The National Park Airfield (uncharted) is located at (N29-35.6 W103-15.7); avoid by 3 NM or 1500' AGL.
 - (c) Avoid overflight of Panther Junction (Park Headquarters) located at (N29-20 W103-13) by 3 NM or 3000' AGL.
 - (d) Avoid Terlingua Ranch (N29-27 W103-24) for noise abatement.
- (7) Laughlin Specific Procedures
 - (a) If a problem is encountered on the western portion of the route and the route must be discontinued, climb to a VFR hemispheric altitude and fly heading 025 degrees until able to continue on planned routing without over-flying Mexico. Call departing the route on 255.4 attempt contact with Del Rio Approach Control on 270.1 prior to entering the Ranch areas (Laughlin Moa 1).
 - (b) Call exiting the route on 255.4 if returning to Laughlin. Fly a VFR hemispheric altitude below 16,000' west of the DLF 301 radial. Contact Del Rio Approach Control on 270.1 for IFR clearance and recovery. If flying the route again, climb to a VFR hemispheric altitude below 16,000', staying below 9000' MSL inside the DLF 85 DME arc east of the DLF 301 radial. Proceed to the entry point. Do not fly south of VR-1108. Ensure second entry time is de-conflicted.
- (8) Route is designated mountainous terrain from Point A to C.

FSS's Within 100 NM Radius:

SJT

VR-1110

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-2200 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | MQP 198/4 | N32°40.00' W98°02.00' |
| 01 AGL B 15 AGL to | B | JEN 191/11 | N31°58.80' W97°56.50' |
| 01 AGL B 15 AGL to | C | LZZ 014/24 | N31°33.80' W97°58.00' |
| 10 AGL B 15 AGL to | D | LZZ 047/21 | N31°23.00' W97°48.90' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: B and C.
- (2) Alternate Exit: B and C.
- (3) At B contact Gray Approach for clearance into Hood MOA on 244.0.
- (4) Do not proceed beyond C if no clearance into Hood MOA.
- (5) At Point C contact Shoal Creek Range Control for clearance into R-6302 on 238.8.
- (6) Do not proceed beyond D if not cleared onto Shoal Creek Range.
- (7) Exit at Point C if not scheduled for Shoal Creek or Hood MOA CAS missions.
- (8) 1000' AGL minimum from C to R-6302 for Noise Sensitive Areas.
- (9) Units requesting VR-1110 shall furnish 301 OG/SUA with planned entry/exit points, times and planned times for deconfliction.
- (10) Avoid Gattesville and North Ft Hood.
- (11) Avoid the following areas by 1000' or 1 NM radius: N31-25.2 W97-42.2, and N31-22.7 W97-54.7.
- (12) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.
- (13) Units requesting VR 1110 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
- (14) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
- (15) Route Conflicts:
 - (a) VR1110 between Points A to B conflicts with VR158 between Points C to D to E. To deconflict, call the schedulers at the 90 FTS, Sheppard AFB, DSN 736-2675/4995, C940-676-2675/4995.
 - (b) VR1110 conflicts with SR261 Points B and C. To deconflict, call Dyess AFB, DSN 461-2792.

FSS's Within 100 NM Radius:

CXO, FTW, SJT

VR-1113

ORIGINATING ACTIVITY: 188FW Arkansas ANG, 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502.

SCHEDULING ACTIVITY: Same as Originating Activity. Route scheduled no more than 72 hr in advance. Minimum separation between scheduled entry times is 15 minutes.

HOURS OF OPERATION: Continuous (except Sunday 1000-1200 local)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | TIK 142/15 | N35°13.00' W97°13.00' |
| 05 AGL B 15 AGL to | B | MLC 270/32 | N34°55.00' W96°25.00' |
| SFC B 15 AGL to | C | MLC 160/32 | N34°20.00' W95°39.00' |
| SFC B 15 AGL to | D | PGO 288/3 | N34°42.00' W94°40.00' |
| SFC B 15 AGL to | E | PGO 022/10 | N34°50.00' W94°31.00' |
| 10 AGL B 15 AGL to | F | FSM 167/19 | N35°04.00' W94°14.00' |
| 10 AGL B 15 AGL to | G | FSM 141/14 | N35°11.00' W94°07.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to D; 2 NM either side of centerline from D to E; 2 NM left and 10 NM right of centerline from E to F; 2 NM either side of centerline from F to G.

Special Operating Procedures:

- (1) Alternate Entry: B, C and D.
- (2) Alternate Exit: D and F.
- (3) See and Avoid/Restrictive Scheduling applies between VR-1113 and IR-117, IR-120, IR-121, IR-164, VR-1102, VR-1103, VR-1130, VR-189, and Hog Low North MOA.
- (4) Call in-the-blind on 305.4 before entering the Hog MOA. Clearance into R-2402 must be received on 339.05.
- (5) Avoid flight within 1500' AGL or 3 NM all charted airports when practicable.
- (6) Entrance at Point A restricted to aircraft departing Tinker AFB.
- (7) Make entry time plus or minus five minutes or reschedule.
- (8) CAUTION: Points E-G, multiple converging MTR's and military aircraft in HOG MOA.

FSS's Within 100 NM Radius:

FTW, ICT, MLC

VR ROUTES

VR-1116

ORIGINATING ACTIVITY: OC-ALC/10 FLTS, 4805 West Dr, Tinker AFB, OK 73145-3300 DSN 336-7719/7710, C405-736-7719/7710.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours only

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| Cross at 15 AGL to | A | BGS 012/67 | N33°25.50' W100°58.00' |
| 02 AGL B 15 AGL to | B | BGS 011/33 | N32°54.00' W101°14.10' |
| 02 AGL B 15 AGL to | C | BGS 013/28 | N32°48.50' W101°15.50' |
| 02 AGL B 15 AGL to | D | BGS 029/21 | N32°39.00' W101°13.00' |
| 02 AGL B 15 AGL to | E | BGS 039/19 | N32°35.00' W101°12.00' |
| 04 AGL B 15 AGL to | F | BGS 148/39 | N31°46.50' W101°12.50' |
| 02 AGL B 15 AGL to | G | BGS 154/44 | N31°40.50' W101°16.00' |
| 07 AGL B 15 AGL to | H | FST 072/48 | N31°02.50' W102°02.50' |

TERRAIN FOLLOWING OPERATIONS: The area from N35-05.5 W101-08.5 to Point B is designated the TA system calibration maneuver area. Enroute delay in the maneuver area will not exceed 30 minutes without notification to FSS. Pilots will plan all turns in the maneuver area as right turns to remain within route corridor.

ROUTE WIDTH - 3 NM left and 4 NM right of centerline from A to B; 4 NM either side of centerline from B to E; 3 NM left and 4 NM right of centerline from E to H.

Special Operating Procedures:

- (1) Route is for the sole use of OC-ALC test aircraft.
- (2) Alternate Exit: F.

FSS's Within 100 NM Radius:

MLC, SJT

VR-1117

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd St., Ste. 6, Laughlin AFB, TX 78843-5222 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 87 FTS/DOS, 570 2nd St., Laughlin AFB, TX 78843 DSN 732-5484, C830-298-5484. Scheduling hrs, 0730-1630 Mon-Fri (excl'd hol).

HOURS OF OPERATION: Sunrise-Sunset Sat-Sun

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | DLF 298/54 | N29°52.00' W101°37.00' |
| 05 AGL B 15 AGL to | B | DLF 289/78 | N29°55.00' W102°07.00' |
| 05 AGL B 15 AGL to | C | FST 138/64 | N30°02.00' W102°21.00' |
| 05 AGL B 15 AGL to | D | FST 155/67 | N29°52.00' W102°40.00' |
| 10 AGL B 15 AGL to | E | FST 172/88 | N29°29.00' W103°04.00' |
| 10 AGL B 15 AGL to | F | FST 185/97 | N29°23.50' W103°30.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM left and 10 NM right of centerline tapering to 3 NM either side of centerline from A to B; 3 NM either side of centerline expanding to 5 NM either side of centerline from B to C; 5 NM either side of centerline expanding to 5 NM left and 10 NM right of centerline from C to D; 3 NM left and 10 NM right of centerline tapering to 8 NM either side of centerline from D to E; 5 NM either side of centerline from E to F.

Special Operating Procedures:

- (1) Route:
 - (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
 - (b) This route is covered by the following maps and charts: San Antonio and El Paso Sectionals, Low IFR Enroute L-6N,L-19 TPC H-23A,H-23B.
 - (c) Alternate Entry: B.
 - (d) Alternate Exit: C, D and E.
 - (e) Route is closed north of N30-00 between A and B.
- (2) Scheduling:
 - (a) Request for weekend use shall be coordinated with the Scheduling Activity between 0730-1630 Local Mon-Fri.
 - (b) Aircraft shall be scheduled with a minimum of 10 minutes separation, 35 minutes if a T-38 follows a T-1 on the route. Coordinate with preceding aircraft if necessary.
 - (c) Maximum planned time on the route will be 24 min (T-38) or 45 min (T-1).
 - (d) VR-1117 is for weekend use only.
- (3) Restrictions:
 - (a) For environmental reasons, this route may only be flown by T-1 and T-38 aircraft.
 - (b) Aircraft unable to enter the route plus or minus three minutes of their assigned entry time will not enter the route.
 - (c) If Laughlin is the filed destination, then Laughlin weather will be at least 1500/5, and forecasted to remain so for ETE plus 2 hours. The weather must permit aircrews to remain VFR and map read from the point of IFR cancellation to the route entry point, throughout the route and return to Laughlin.
 - (d) If flying the route again, descend VFR to below 9000 ft MSL prior to the DLF 90 DME arc to stay below the RANCH (Laughlin 1) MOA. Proceed to the entry point remaining clear of the RANCH areas unless cleared otherwise by Del Rio App Control. Coordinate with Del Rio approach for a second entry. Ensure second entry is deconflicted.

- (4) Conflicts:
- VR-1117 is the reverse routing of VR-1109.
 - VR-1108 is common from D-F.
 - When flying to the El Paso area, avoid the Valentine MOA (15,000' MSL floor) and R-6318 (Surface to 14,000' MSL). Use caution after route exit for aircraft operating on IR-178 up to 17,000' MSL. Direct routing to El Paso from the VR-1117 exit F intersects IR-178 approximately 17 NM to the northwest. All users must contact the 87 FTS/DOS Laughlin AFB, TX; DSN 732-5484, C830-298-5484 to determine whether routes VR-1108/1109 are in use. Call 7 OSS/OSOR Dyess AFB, TX; DSN 461-3665, C325-696-3665 to deconflict exit routing with IR-178.
- (5) Communications:
- All users must monitor 255.4 while on the route.
 - If recovering to Laughlin, contact Del Rio APP Control UHF (270.1).
 - Contact Albuquerque Center UHF (292.15) for IFR clearance to all other destinations.
- (6) Noise sensitive Areas:
- Avoid all charted airfields (if practical) by 3 NM or 1500' AGL.
 - Avoid the National Park Airfield (uncharted) is at N29-35.6 W103-15.7; avoid by 3 NM or 1500' AGL.
 - Neville Springs Cavalry Post at (N29-22.3 W103-12.5) avoid by 1500' AGL or 1.5 NM.
 - Panther Junction (Park Headquarters) located at (N29-20 W103-13) avoid by 3 NM or 3000' AGL.
 - Avoid the Terlingua Ranch (N29-27 W103-24) for noise abatement.
- (7) Laughlin Specific Procedures:
- Call exiting the route on 255.4, begin a right climbing turn at the Exit Point to a no-wind heading of 046 degrees, and climb VFR to 17,500' MSL. Proceed direct to the DLF 301/90. The route will position you over Hen Egg Mountain (N29-29 W103-36) and Sanderson (N30-09 W102-24). Contact Del Rio Approach Control on 270.1 prior to the DLF 301/90. If returning to Laughlin, request the BRIDGE Arrival.
 - If a problem is encountered on the western portion of the route and the route must be discontinued, climb to a VFR hemispheric altitude and fly heading 025 degrees until able to continue on planned routing without over-flying Mexico. Call departing the route on 255.4 attempt contact with Del Rio Approach Control, UHF (270.1), prior to entering the Ranch (Laughlin 1) MOA.
 - If departing from Laughlin AFB, expect to be cleared the LAEKE transition at 6000ft. Maintain 300 KIAS (T-38) or 250 KIAS (T-1) until entering the route. At DLF 301/54, cancel IFR and descend to the route Entry Point.
- (8) Route is designated Mountainous Terrain from Point D to F.

FSS's Within 100 NM Radius:

SJT

VR-1120

ORIGINATING ACTIVITY: 149 FW (TX ANG), 107 Hensley Street, Kelly AFB, TX 78241-5544 DSN 945-5934, C210-925-5934.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | CWK 168/32 | N29°51.00' W97°28.00' |
| 10 AGL B 15 AGL to | B | THX 036/52 | N29°08.00' W97°28.00' |
| 01 AGL B 15 AGL to | C | THX 227/33 | N28°11.00' W98°40.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized between B and C.

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- Alternate Entry: B.
- Alternate Exit: B.
- Tie-in FSS: Austin (AUS).
- Avoid Kennedy Airport by 3 NM and 1500' AGL.
- Approval to fly route does not include clearance into R-6312.
- Sensitive areas: Cureo, TX (N29-05 W97-18) by 3 NM, 1500' AGL; Helena, TX (N28-57 W97-54) by 1 NM, 1500' AGL; Ranch (N28-28 W98-27) by 1 NM, 1500' AGL.

FSS's Within 100 NM Radius:

CXO, SJT

VR-1121

ORIGINATING ACTIVITY: 149 FW (TX ANG), 107 Hensley Street, Kelly AFB, TX 78241-5544 DSN 945-5934, C210-925-5934.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | THX 227/33 | N28°11.00' W98°40.00' |
| 01 AGL B 15 AGL to | B | THX 036/52 | N29°08.00' W97°28.00' |
| 10 AGL B 15 AGL to | C | CWK 168/32 | N29°51.00' W97°28.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized between A and B.

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- Alternate Entry: B.
- Alternate Exit: B.
- Tie-in FSS: San Angelo (SJT).
- Avoid Kennedy Airport by 3 NM and 1500' AGL.
- Approval to fly route does not include clearance into R-6312.

VR ROUTES

- (6) Sensitive areas: Cuero, TX (N29-05 W97-18) by 3 NM 1500' AGL. Helena TX (N28-57 W97-42) by 1 NM, 1500' AGL. Ranch (N28-28 W98-27) by 1 NM 1500' AGL. Ostrich farm (N28-35.6 W97-59.5) avoid by 3 NM.

FSS's Within 100 NM Radius:

CXO, SJT

VR-1122

ORIGINATING ACTIVITY: 149 FW (TX ANG), 107 Hensley Street, Kelly AFB, TX 78241-5544 DSN 945-5934, C210-925-5934.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SAT 023/26 | N30°01.00' W98°12.00' |
| 01 AGL B 15 AGL to | B | CSI 083/19 | N29°55.00' W98°51.00' |
| 01 AGL B 15 AGL to | C | CSI 201/13 | N29°44.00' W99°20.00' |
| 01 AGL B 15 AGL to | D | CSI 212/40 | N29°25.00' W99°42.00' |
| 01 AGL B 15 AGL to | E | CSI 201/53 | N29°09.00' W99°42.00' |
| 01 AGL B 15 AGL to | F | COT 225/18 | N28°17.00' W99°24.00' |
| 01 AGL B 15 AGL to | G | COT 123/25 | N28°11.00' W98°46.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Closed to all aircraft Except 149 FW aircraft.
- (2) Alternate Entry: B, C and D.
- (3) Alternate Exit: D, E, and F.
- (4) Tie-in FSS: San Angelo (SJT).
- (5) Avoid Uvalde, Cotulla, Kerrville Airports by 3 NM and 1500' AGL.
- (6) Approval to fly route does not include clearance into R-6312.
- (7) Sensitive areas: Ranch (N29-51 W99-09), radio station (N29-49 W99-05), quarry (N29-17 W99-39W), ranch (N29-43 W99-09), Bandera, TX (N29-44 W99-04), Blanco, TX (N30-06 W98-26). Avoid by 1 NM and 1500' AGL. Twin Oaks ranch (N29-19.5 W99-41.0), avoid by 2 NM and do not overfly. Use caution not to overfly enroute to any alternate entry or exit point.
- (8) Remain north of centerline from Point A to B.
- (9) CAUTION: Intensive T-3 student pilot training above 1500' AGL from C to F. Remain below 1500' AGL. Honda Military Supervisor frequency-121.95.

FSS's Within 100 NM Radius:

CXO, SJT

VR-1123

ORIGINATING ACTIVITY: 149 FW (TX ANG), 107 Hensley Street, Kelly AFB, TX 78241-5544 DSN 945-5934, C210-925-5934.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | COT 123/25 | N28°11.00' W98°46.00' |
| 01 AGL B 15 AGL to | B | COT 225/18 | N28°17.00' W99°24.00' |
| 01 AGL B 15 AGL to | C | CSI 201/53 | N29°09.00' W99°42.00' |
| 01 AGL B 15 AGL to | D | CSI 212/40 | N29°25.00' W99°42.00' |
| 01 AGL B 15 AGL to | E | CSI 201/13 | N29°44.00' W99°20.00' |
| 01 AGL B 15 AGL to | F | CSI 083/19 | N29°55.00' W98°51.00' |
| 01 AGL B 15 AGL to | G | SAT 023/26 | N30°01.00' W98°12.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Closed to all aircraft Except 149 FW aircraft.
- (2) Alternate Entry: B, C and D.
- (3) Alternate Exit: D, E and F.
- (4) Tie-in FSS: San Angelo (SJT).
- (5) Avoid Uvalde, Cotulla, Kerrville airports by 3 NM and 1500' AGL.
- (6) Approval to fly route does not include clearance into R-6312.
- (7) Sensitive Areas: Ranch (N29-51 W99-09), radio station (N29-49 W99-05), quarry (N29-17 W99-39), ranch (N29-43 W99-09), Bandera, Texas (N29-44 W99-04), Blanco, Texas (N30-06 W98-26). Avoid by 1 NM and 1500' AGL. Twin Oaks ranch (N29-19.5 W99-41.0), avoid by 2 NM and do not overfly. Use caution not to overfly enroute to any alternate entry or exit point.
- (8) Remain N of centerline from F to G.
- (9) CAUTION: Intensive T-3 student pilot training above 1500' AGL from B to E. Remain below 1500' AGL. Honda Military Supervisor frequency-121.95.

FSS's Within 100 NM Radius:

CXO, SJT

VR-1124

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-2200 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | ACT 237/23 | N31°30.00' W97°41.00' |
| 05 AGL B 15 AGL to | B | ACT 313/27 | N32°01.00' W97°35.70' |
| 05 AGL B 15 AGL to | C | JEN 040/25 | N32°27.00' W97°31.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C.

Special Operating Procedures:

- (1) Contact Gray Approach 5 minutes prior to leaving Shoal Creek with intentions to enter VR-1124 and provide with Entry/Exit times.
- (2) Avoid North Ft Hood and Gattesville.
- (3) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.
- (4) Units requesting VR 1124 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
- (5) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
- (6) Route Conflicts:
 - (a) VR1124 conflicts with SR-261 Points A to B. To deconflict, call Dyess AFB, DSN 461-2792.
 - (b) P49 has been established and extends from the surface to 5000' MSL within a 3 NM radius of N31-34-57 W097-32-37. Flight within this area is prohibited.

FSS's Within 100 NM Radius:

CXO, FTW, SJT

VR-1128

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-2200 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | TIK 142/15 | N35°13.00' W97°13.00' |
| 15 AGL to | B | TIK 148/33 | N34°56.00' W97°06.00' |
| 05 AGL B 15 AGL to | C | TIK 150/51 | N34°39.00' W96°58.00' |
| 05 AGL B 15 AGL to | D | TIK 154/53 | N34°36.00' W97°02.00' |
| 05 AGL B 15 AGL to | E | IRW 164/43 | N34°39.00' W97°28.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 05 AGL B 15 AGL to | F | IRW 196/43 | N34°42.00' W97°57.00' |
| 05 AGL B 15 AGL to | G | IRW 236/29 | N35°08.00' W98°08.00' |
| 05 AGL B 15 AGL to | H | IRW 281/35 | N35°32.00' W98°17.00' |
| 05 AGL B 15 AGL to | I | IRW 278/40 | N35°32.00' W98°24.00' |
| 05 AGL B 15 AGL to | J | HBR 026/31 | N35°17.00' W98°42.00' |
| 05 AGL B 15 AGL to | K | HBR 086/10 | N34°51.00' W98°52.00' |
| 10 AGL B 15 AGL to | L | HBR 135/17 | N34°38.00' W98°52.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized between B and K.

ROUTE WIDTH - 2 NM either side of centerline from A to E; 3 NM either side of centerline from E to L.

Special Operating Procedures:

- (1) Alternate Entry track to E only for 465 TFS aircraft when proceeding from TIK.
- (2) Route designated for 420 knots.
- (3) All bank turns-a minimum planned 45 degrees.
- (4) Alternate Entry: E, F, and H.
- (5) Alternate Exit: J and K.
- (6) Noise Sensitive Areas avoid overflight unless at 6000' MSL or above and or by 2 NM (N34-50.8 W98-49.2).
- (7) Avoid by 1500' or 3 NM all charted airfields.
- (8) Do not overfly Refinery at Wyneewood, OK (N34-38.0 W097-01.0).
- (9) Avoid Noise Sensitive Area southwest Hilton, OK by 3 NM or 1500' (N35-27.0 W98-17.0).
- (10) Avoid the town of Bridgeport, OK by 3 NM or 1500' (N35-33.0 W98-23.0).
- (11) Obstructions:
 - (a) 330' AGL tower at (N34-37-23 W98-52-03).
- (12) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.
- (13) Units requesting VR 1128 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
- (14) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
- (15) Route Conflicts:
 - (a) VR1128 conflicts with IR117 at the entry point. To deconflict, contact the 188 FW, Fort Smith, DSN 962-8185/8271 to coordinate entry time.
 - (b) VR1128 conflicts with VR1139 and VR1140 along many points on the routes. To deconflict, call the 90 FTS, Sheppard AFB, DSN 736-2675/4995.
- (16) Route Segment K to L closed except to aircraft scheduled in R-5601. Aircraft not scheduled into R-5601 must exit by Point K and remain clear of R-5601F.

FSS's Within 100 NM Radius:

FTW, ICT, MLC

VR ROUTES

VR-1130

ORIGINATING ACTIVITY: 188FW Arkansas ANG, 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502.

SCHEDULING ACTIVITY: Same as Originating Activity. Route scheduled no more than 72 hr in advance. Minimum separation between scheduled entry times is 15 minutes.

HOURS OF OPERATION: Continuous (except Sunday 1000-1200 local)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | RZC 277/34 | N36°21.00' W94°49.00' |
| 10 AGL B 15 AGL to | B | RZC 238/36 | N35°58.00' W94°46.00' |
| 10 AGL B 15 AGL to | C | FSM 256/34 | N35°19.00' W94°57.00' |
| 10 AGL B 15 AGL to | D | FSM 234/22 | N35°12.50' W94°39.50' |
| 10 AGL B 15 AGL to | E | FSM 171/19 | N35°04.00' W94°15.50' |
| 05 AGL B 15 AGL to | F | FSM 146/14 | N35°11.00' W94°08.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized from Point B to F.

ROUTE WIDTH - 4 NM left and 3 NM right of centerline from A to C; 3 NM either side of centerline from C to D; 2 NM either side of centerline from D to E; 4 NM left and 5 NM right at E tapering to 5 NM either side of centerline at F.

Special Operating Procedures:

- (1) Alternate Entry: B.
- (2) Alternate Exit: E.
- (3) See and Avoid/Restrictive Scheduling applies between VR-1130 and IR-117, IR-120, IR-121, IR-164, VR-1102, VR-1103, VR-1104, VR-1113, Hog Low North.
- (4) Call in-the-blind on 305.4 before entering the Hog MOA. Clearance into R-2402 must be received on 339.05.
- (5) Avoid flight within 1500' AGL or 3 NM all charted airports when practicable.
- (6) Noise Sensitive Areas (Avoid by 1 NM and 1000' AGL):
 - (a) Sequoyah National Wildlife Refuge;
 - (b) Ostrich farm N35-18.5 W92-21.0.
- (7) Make entry time plus or minus five minutes or reschedule.
- (8) CAUTION: Points E-F, multiple converging MTR's and military aircraft in Hog MOA.

FSS's Within 100 NM Radius:

ICT, MLC

VR-1137

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB, Fort Worth, TX 76127 DSN 739-6903/04/05, C817-782-6903/04/05.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-2200 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | TIK 142/15 | N35°13.00' W97°13.00' |
| 05 AGL B 15 AGL to | B | TIK 106/41 | N35°10.00' W96°37.00' |
| 05 AGL B 15 AGL to | C | TIK 110/45 | N35°06.00' W96°34.00' |
| 05 AGL B 15 AGL to | D | TIK 155/54 | N34°35.00' W97°03.00' |
| 05 AGL B 15 AGL to | E | IRW 187/45 | N34°38.00' W97°50.00' |
| 05 AGL B 15 AGL to | F | IRW 241/41 | N35°06.00' W98°23.00' |
| 05 AGL B 15 AGL to | G | IRW 243/45 | N35°06.00' W98°28.00' |
| 05 AGL B 15 AGL to | H | HBR 086/10 | N34°51.00' W98°52.00' |
| 10 AGL B 15 AGL to | I | HBR 135/17 | N34°38.00' W98°52.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Route designed to 420 knots.
- (2) All bank turns-a minimum planned 45 degree.
- (3) Alternate Entry: D.
- (4) Alternate Exit: F and H.
- (5) Noise Sensitive Areas avoid overflight by 2 NM (N34 58.1 W98 41.3); Noise Sensitive Area avoid overflight unless at 6000' MSL or above and or by 2 NM (N34 50.8 W98 49.2).
- (6) Avoid by 1500' or 3 NM all charted airfields.
- (7) Avoid Turkey Ranch at N35-00.0 W97-01.0 by 1500' and 3 NM.
- (8) Do not overfly refinery at Wyneewood, OK (N34-38.0 W97-01.0).
- (9) Do not overfly the town of Ft. Cobb, OK (N35-06.0 W98-27.0).
- (10) Minimum separation between scheduled entry times is 10 minutes. VR routes are strictly See and Avoid and users are encouraged to maintain a continuous visual lookout.
- (11) Units requesting VR 1137 shall furnish 301 OG/SUA with planned entry/exit points, times and planned speeds. Accurate times are critical in the deconfliction process.
- (12) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
- (13) Route Conflicts:
 - (a) VR1137 conflicts with IR117 and VR1113 at the Entry Point. Additionally both routes cross VR1137 between Points C-D. To deconflict, contact the 188 FW, Fort Smith, DSN 962-8185/8271
 - (b) VR1137 conflicts with VR1139 and VR1140 along many points on the routes. To deconflict, call the 90 FTS, Sheppard AFB, DSN 736-2675/4995.
- (14) Route Segment H to I closed except to aircraft aircraft scheduled into R-5601. Aircraft not scheduled into R-5601 must exit by Point H and remain clear of R-5601F.

FSS's Within 100 NM Radius:

FTW, ICT, MLC

VR-1138

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. Ste 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, C940-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 02 AGL B 15 AGL to | A | SPS 197/23 | N33°39.00' W98°48.00' |
| 02 AGL B 15 AGL to | B | GTH 086/34 | N33°43.00' W99°40.00' |
| 02 AGL B 15 AGL to | C | GTH 123/39 | N33°20.00' W99°46.00' |
| 02 AGL B 15 AGL to | D | MQP 298/45 | N33°11.00' W98°43.00' |
| 02 AGL B 15 AGL to | E | MQP 293/37 | N33°03.00' W98°37.00' |
| 02 AGL B 15 AGL to | F | MQP 353/20 | N33°03.50' W97°59.00' |
| 02 AGL B 15 AGL to | G | SHP 158/32 | N33°28.00' W98°21.50' |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Position report will be made to Fort Worth FSS at Graham, eastbound at Point E.
- (2) Route conflicts with several IR/VR/SR routes as follows: A to B crosses IR-103, IR-105 and VR-162. B to C crosses SR-236 and SR-149. C to D crosses SR-249, SR-236 and VR-159. D to E crosses VR-158, VR-1143 and VR-1144. E to F crosses VR-158. At Point F, SR-228 and SR-270 cross opposite direction. F to G crosses SR-270, IR-103 and IR-105. See and avoid will be used for separation.
- (3) Route will be flown at a maximum of 540 knots.
- (4) Route flight checked to 500' AGL. Contour flying authorized entire route.
- (5) Alternate Entry: B, C, D and E.
- (6) Alternate Exit: B, C, D and E.
- (7) When practicable, avoid flight within 1500' AGL or 3 NM of the following airports: Cooper Muni, Munday, Knox City, Haskell Muni, Throckmorton, Olney, Graham, Possum Kingdom and Jacksboro.
- (8) Pilots must Contact 80 FTW T-38 duty officer for current brief on noise sensitive areas and high density traffic areas.
- (9) Noise Sensitive Area, avoid by 1000' AGL or 2 NM: Waggoner Ranch at N33-56.5 W99-16.6.
- (10) Use caution when operating just past Point B for T-37 aircraft operating at 500' AGL.

FSS's Within 100 NM Radius:

FTW, SJT

VR-1139

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. Ste 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, C940-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 02 AGL B 15 AGL to | A | SHP 153/27 | N33°33.00' W98°20.00' |
| 02 AGL B 15 AGL to | B | UKW 150/7 | N33°26.00' W97°46.00' |
| 02 AGL B 15 AGL to | C | ADM 205/28 | N33°49.00' W97°27.00' |
| 02 AGL B 15 AGL to | D | ADM 310/13 | N34°22.00' W97°21.00' |
| 02 AGL B 15 AGL to | E | IRW 196/43 | N34°42.00' W97°57.00' |
| 02 AGL B 15 AGL to | F | IRW 236/29 | N35°08.00' W98°08.50' |
| 02 AGL B 15 AGL to | G | IFI 221/25 | N35°32.00' W98°24.00' |
| 02 AGL B 15 AGL to | H | HBR 023/23 | N35°11.00' W98°49.00' |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Position report will be made to McAlester FSS at Chickasha, northbound at Point F.
- (2) Route conflicts with several VR/SR routes as follows: A to B overlaps VR-1146 opposite direction and VR-1145. A to E overlaps VR-163. B to H overlaps VR-104. E to H overlaps VR-1128. D to E crosses VR-1145, VR-1146 and SR-296. At E crosses VR-1137 and VR-1128. E to F crosses SR-294, SR-295 and SR-296. See and avoid will be used for separation.
- (3) Route will be flown at a maximum of 540 knots.
- (4) Route flight checked to 500' AGL. Contour flying is authorized on entire route.
- (5) Alternate Entry: B, D, E, F and G.
- (6) Alternate Exit: B, D, E, F and G.
- (7) VR-1139 is reverse course of VR-1140. VR-1140 will not be scheduled/flown when VR-1139 is in use.
- (8) Prior coordination required with VR-1128, VR-1137 and VR-104.
- (9) When practicable, avoid flight within 1500' AGL or 3 NM of the following airports: Bowie, Nocona, Healdton, Duncan, Chickasha, Anadarko, Weatherford, Ardmore Downtown, Cordell and Carnegie.
- (10) Pilots must Contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.
- (11) Noise Sensitive Areas, avoid by 1000' AGL or 2 NM: EMPI Ranch at N34-32.5 W97-48.7; ML NSA at N33-40.8 W97-43.4.

VR ROUTES

(12) Use caution for T-37 aircraft operating at 500' AGL at the following locations: between B and C, between D and E, just past E and between F and G.

FSS's Within 100 NM Radius:

FTW, ICT, MLC

VR-1140

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. Ste 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, C940-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 02 AGL B 15 AGL to | A | HBR 023/23 | N35°11.00' W98°49.00' |
| 02 AGL B 15 AGL to | B | IFI 221/25 | N35°32.00' W98°24.00' |
| 02 AGL B 15 AGL to | C | IRW 236/29 | N35°08.00' W98°08.50' |
| 02 AGL B 15 AGL to | D | IRW 196/43 | N34°42.00' W97°57.00' |
| 02 AGL B 15 AGL to | E | ADM 310/13 | N34°22.00' W97°21.00' |
| 02 AGL B 15 AGL to | F | ADM 205/28 | N33°49.00' W97°27.00' |
| 02 AGL B 15 AGL to | G | UKW 150/7 | N33°26.00' W97°46.00' |
| 02 AGL B 15 AGL to | H | SHP 153/27 | N33°33.00' W98°20.00' |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Position report will be made to McAlester FSS at Chickasha, southbound at Point C.
- (2) Route conflicts with several VR/SR routes as follows: C to D crosses SR-294, SR-295 and SR-296. At D crosses VR-1137 and VR-1128. D to E crosses SR-296, VR-1145 and VR-1146. A to G overlaps VR-104 opposite direction. A to D overlaps VR-1128 opposite direction. D to H overlaps VR-163 opposite direction. G to H overlaps VR-1145 opposite direction and VR-1146. See and avoid will be used for separation.
- (3) Route will be flown at a maximum of 540 knots.
- (4) Route flight checked to 500' AGL, contour flying is authorized on entire route.
- (5) Alternate Entry: B, D, E, F and G.
- (6) Alternate Exit: B, D, E, F and G.
- (7) VR-1140 is reverse course of VR-1139. VR-1139 will not be scheduled/flown when VR-1140 is in use.
- (8) Prior coordination required with VR-1128, VR-1137 and VR-104.

(9) When practicable, avoid flight within 1500' AGL or 3 NM of the following airports: Bowie, Nocona, Healdton, Duncan, Chickasha, Anadarko, Weatherford, Ardmore Downtown, Cordell and Carnegie.

(10) Pilots must Contact 80 FTW T-38 duty officer for current brief on noise sensitive areas and high density traffic areas.

(11) Noise Sensitive Areas, avoid by 1000' AGL or 2 NM: EMPI Ranch at N34-32.5 W97-48.7; ML NSA at N33-40.8 W97-43.4.

(12) Use caution for T-37 aircraft operating at 500' AGL at the following locations: between B and C, around D, between D and E, and between F and G.

FSS's Within 100 NM Radius:

FTW, ICT, MLC

VR-1141

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. Ste 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, C940-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at 45 MSL to | A | SYO 078/8 | N35°21.00' W99°28.70' |
| 02 AGL B 15 AGL to Position report to Amarillo FSS at Pt B | B | PNH 070/53 | N35°25.00' W100°39.00' |
| 02 AGL B 15 AGL to | C | CDS 317/31 | N34°48.50' W100°38.20' |
| 02 AGL B 15 AGL to | D | CDS 252/15 | N34°20.00' W100°35.00' |
| 02 AGL B 15 AGL to | E | CDS 217/19 | N34°09.10' W100°34.30' |
| 02 AGL B 15 AGL to | F | GTH 002/13 | N33°59.50' W100°16.90' |
| 02 AGL B 15 AGL to | G | GTH 051/25 | N33°58.50' W99°54.10' |
| 02 AGL B 15 AGL to | H | SPS 237/20 | N33°51.50' W98°57.80' |

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 10 NM either side of centerline from A to C; 10 NM at C tapering to 7 NM at D; 7 NM either side of centerline from D to E; 7 NM either side of centerline at E widening to 8 NM either side of centerline at F; 8 NM either side of centerline at F widening to 10 NM either side of centerline at G; 10 NM either side of centerline from G to H.

Special Operating Procedures:

- (1) Position report will be made to Fort worth FSS at McAllen, southbound at Point B.

- (2) Route conflicts with several IR/VR routes as follows: A to B crosses VR-198 and VR-199. Around B crosses IR-172, IR-173, IR-182, IR-183, VR-198 and VR-199. B to C crosses VR-190 and VR-191. C to D crosses IR-155 opposite direction. E to F crosses IR-154 and IR-155 opposite direction. F to G crosses VR-1143 and VR-1144. G to H crosses VR-163, VR-159, IR-103 and IR-105. See and avoid will be used for separation.
- (3) Route will be flown at a maximum of 540 knots.
- (4) Route flight checked to 500' AGL. Contour flying authorized entire route.
- (5) Primary Entry: A. Alternate Entry: B and C.
- (6) Primary Exit: H. Alternate Exit: F.
- (7) VR-1141 is reverse course of VR-1142. VR-1141 will not be scheduled/flown when VR-1142 is in use.
- (8) Prior coordination required with IR-155, IR-105, and IR-103.
- (9) When practicable, avoid flight within 1500' AGL or 3 NM of the following airports: Sayre, Haddock, Shamrock, Mclean/Gray Co, Clarendon, Memphis, Foard Co, Wheelen Muni and Richard's.
- (10) Pilots must Contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.
- (11) Noise Sensitive Area, avoid by 1000' AGL or 2 NM: Waggoner Estate Ranch house at N33-56.5 W99-16.6.
- (12) Use caution when operating between G and H for T-37 aircraft operating at 500' AGL.

FSS's Within 100 NM Radius:

FTW

VR-1142

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. Ste 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, C940-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| Cross at 35 MSL to | A | SPS 237/20 | N33°51.50' W98°57.80' |
| 02 AGL B 15 AGL to | B | GTH 051/25 | N33°58.50' W99°54.10' |
| 02 AGL B 15 AGL to | C | GTH 002/13 | N33°59.50' W100°16.90' |
| 02 AGL B 15 AGL to | D | CDS 217/19 | N34°09.10' W100°34.30' |
| 02 AGL B 15 AGL to | E | CDS 252/15 | N34°20.00' W100°35.00' |
| 02 AGL B 15 AGL to | F | CDS 317/31 | N34°48.50' W100°38.20' |
| 02 AGL B 15 AGL to Position report to Amarillo FSS at Pt G | G | PNH 070/53 | N35°25.00' W100°39.00' |
| 02 AGL B 15 AGL to | H | SYO 078/8 | N35°21.00' W99°28.70' |

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 10 NM either side of centerline from A to B; 10 NM tapering to 8 NM either side of centerline from B to C; 8 NM either side of centerline at C tapering to 7 NM either side of centerline at D; 7 NM either side of centerline from D to E; 7 NM either side of centerline at E widening to 10 NM at F; 10 NM either side of centerline from F to H.

Special Operating Procedures:

- (1) Position report will be made to Fort worth FSS at McAllen, Eastbound at Point G.
- (2) Route conflicts with several IR/VR routes as follows: A to B crosses VR-163 VR-159, IR-103 and IR-105. B to C crosses VR-1143 and VR-1144. C to D crosses IR-154 and IR-155. E to F crosses IR-155. F to G crosses VR-190, VR-191, VR-198 and VR-199. Around G crosses IR-172, IR-173, IR-182 and IR-183. G to H crosses VR-198 and VR-199. See and avoid will be used for separation.
- (3) Route will be flown at a maximum of 540 knots.
- (4) Route flight checked to 500' AGL. Contour flying authorized entire route.
- (5) Primary Entry: A. Alternate Entry: B and D.
- (6) Primary Exit: H. Alternate Exit: G.
- (7) VR-1142 is the reverse course of VR-1141. VR-1142 will not be scheduled or flown when VR-1141 is in use.
- (8) Prior coordination required with IR-155, IR-105 and IR-103.
- (9) When practicable, avoid flight within 1500' AGL or 3 NM at the following airports: Sayre; Haddock; Shamrock; Mclean/Gray Co; Clarendon; Memphis; Foard Co; Wheeler Muni and Richards.
- (10) Pilots must Contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.
- (11) Noise Sensitive Area, avoid by 1000' AGL or 2 NM: Waggoner Estate Ranch house at N33-56.5 W99-16.6.
- (12) Use caution when operating between A and B for T-37 aircraft operating at 500' AGL.

FSS's Within 100 NM Radius:

FTW

VR-1143

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. Ste 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, C940-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 02 AGL B 15 AGL to | A | SPS 169/36 | N33°23.50' W98°35.00' |
| 02 AGL B 15 AGL to | B | MQP 252/46 | N32°36.00' W98°54.00' |
| 02 AGL B 15 AGL to | C | ABI 348/34 | N33°03.00' W99°53.00' |

VR ROUTES

02 AGL B 15 AGL to D GTH 208/15 N33°35.00'
W100°31.00'

02 AGL B 15 AGL to E CDS 120/20 N34°09.00'
W99°58.50'

02 AGL B 15 AGL to F SPS 239/20 N33°52.00'
W98°57.50'

02 AGL B 15 AGL to B CDS 120/20 N34°09.00'
W99°58.50'

02 AGL B 15 AGL to C GTH 208/15 N33°35.00'
W100°31.00'

02 AGL B 15 AGL to D ABI 348/34 N33°03.00'
W99°53.00'

02 AGL B 15 AGL to E MQP 252/46 N32°36.00'
W98°54.00'

02 AGL B 15 AGL to F SPS 169/36 N33°23.50'
W98°35.00'

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Position reports will be made to Fort worth FSS at BreckenRidge, westbound at Point B and at Stamford, westbound at Point C.
- (2) Route conflicts with several IR/VR/SR routes as follows: A to B partially overlaps VR-158 and SR-270 opposite direction and crosses VR-1138. B to C partially overlaps VR-159 opposite direction and crosses SR-242, VR-240, VR-236 and VR-249. C to D partially overlaps VR-159 opposite direction and crosses SR-233, SR-236 and SR-249 opposite direction and SR-234. D to E crosses VR-1141, VR-1142. E is shared with VR-191 and VR-190. E to F partially overlaps VR-190 opposite direction and VR-191. E to F completely overlaps VR-159 opposite direction. E to F crosses VR-162, IR-105, IR-103, VR-1141, VR-1142, VR-184 and VR-144. See and avoid will be used for separation.
- (3) Route will be flown at a maximum of 540 knots.
- (4) Route flight checked to 500' AGL. Contour flying authorized entire route.
- (5) Alternate Entry: B, C, D and E.
- (6) Alternate Exit: B, C, D and E.
- (7) VR-1143 is the reverse course of VR-1144. VR-1144 will not be scheduled/flown when VR-1143 is in use.
- (8) When practicable, avoid flight within 1500' AGL or 3 NM of the following airports: Foard Co; Quanah; Richards; Haskell Muni; Arledge; Albany; Stephens Co; Graham; Olney; Eastland and Lockett.
- (9) Pilots must Contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.
- (10) Noise sensitive areas, avoid by 1000'AGL or 2NM: Waggoner Ranch at (N33-56.5 W99-16.6).
- (11) Use caution when operating between E and F for T-37 aircraft operating at 500'AGL.

FSS's Within 100 NM Radius:

FTW, SJT

VR-1144

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. Ste 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, C940-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 02 AGL B 15 AGL to | A | SPS 239/20 | N33°52.00' W98°57.50' |

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Position report made to Fort worth FSS at Paducah, southbound at Point B, and at Stamford, southeast bound at Point D.
- (2) Route conflicts with several IR/VR/SR routes as follows: A to B partially overlaps VR-191 opposite direction and overlaps VR-159 and VR-190. A to B crosses VR-1141 opposite direction, IR-103, IR-105, VR-162, VR-1142, VR-184 and VR-144. B to C crosses VR-1141 and VR-1142. C to D crosses SR-233, SR-234, SR-236, SR-249 and SR-245. C to E partially overlaps VR-159. D to E crosses SR-245, SR-236, SR-249, SR-240 and SR-242. E to F partially overlaps SR-270 and VR-158 and crosses VR-1138. See and avoid will be used for separation.
- (3) Route will be flown at a maximum of 540 knots.
- (4) Route flight checked to 500' AGL. Contour flying authorized entire route.
- (5) Alternate Entry: B, C, D and E.
- (6) Alternate Exit: B, C, D and E.
- (7) VR-1144 is the reverse course of VR-1143. VR-1143 will not be scheduled/flown when VR-1144 is in use.
- (8) When practicable, avoid flight within 1500' AGL or 3 NM of the following airports: Foard Co; Quanah; Richards; Haskell Muni; Arledge; Albany; Stephens Co; Graham; Olney; Eastland and Lockett.
- (9) Pilots must contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.
- (10) Noise sensitive areas, avoid by 1000'AGL or 2NM: Waggoner Ranch at (N33-56.5 W99-16.6).
- (11) Use caution when operating between A and B for T-37 aircraft operating at 500'AGL.

FSS's Within 100 NM Radius:

FTW, SJT

VR-1145

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. Ste 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, C940-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 02 AGL B 15 AGL to | A | SHP 140/25 | N33°37.00' W98°14.00' |
| 02 AGL B 15 AGL to | B | UKW 150/7 | N33°26.00' W97°46.00' |
| 02 AGL B 15 AGL to | C | BYP 288/38 | N33°48.00' W96°56.00' |
| 02 AGL B 15 AGL to | D | BYP 307/33 | N33°55.00' W96°43.00' |
| 02 AGL B 15 AGL to | E | BYP 348/30 | N34°02.50' W96°18.00' |
| 02 AGL B 15 AGL to | F | ADM 046/37 | N34°35.00' W96°35.00' |
| 02 AGL B 15 AGL to | G | ADM 006/21 | N34°33.00' W97°05.00' |
| 02 AGL B 15 AGL to | H | ADM 273/28 | N34°17.00' W97°44.00' |
| 02 AGL B 15 AGL to | I | SHP 090/23 | N33°55.00' W98°01.50' |

ROUTE WIDTH - 10 NM either side of centerline from A to C; 10 NM left and 5 NM right of centerline from C to D; 10 NM either side of centerline from D to I.

Special Operating Procedures:

- (1) Position report will be made to Fort Worth FSS at Ada, westbound at Point F.
- (2) Route conflicts with several VR/SR routes as follows: A to B overlaps VR-1140 opposite direction, VR-163 and VR-1139. B is shared with VR-104. G is shared with VR-1128 and VR-1137. G to H crosses SR-296 opposite direction, VR-104, VR-163, VR-1140 and VR-1139. See and avoid will be used for separation.
- (3) Route will be flown at a maximum of 540 knots.
- (4) Route flight checked to 500' AGL. Contour flying authorized on entire route.
- (5) Alternate Entry: B, E, F, G and H.
- (6) Alternate Exit: B, E, F, G and H.
- (7) VR-1145 is reverse course of VR-1146. VR-1146 will not be scheduled/flown when VR-1145 is in use.
- (8) When practicable, avoid flight within 1500' AGL or 3 NM of the following airports: Bowie, Gainesville, Lake Texoma, Durant, Sulphur, Healdton, Crazy Horse Muni, and Pauls Valley.
- (9) Pilots must contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.
- (10) Use caution for T-37 aircraft operating at 500'AGL at the following locations: when operating between B and C and from F to H opposite direction.

FSS's Within 100 NM Radius:

FTW, MLC

VR-1146

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. Ste 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, C940-676-4970. E-mail 80ossairman at sheppard.af.mil

SCHEDULING ACTIVITY: 90 FTS/DOTOD, Sheppard AFB, TX 76311 DSN 736-2675/4995, C940-676-2675/4995.

HOURS OF OPERATION: Sunrise-Sunset Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 02 AGL B 15 AGL to | A | SHP 090/23 | N33°55.00' W98°01.50' |
| 02 AGL B 15 AGL to | B | ADM 273/28 | N34°17.00' W97°44.00' |
| 02 AGL B 15 AGL to | C | ADM 006/21 | N34°33.00' W97°05.00' |
| 02 AGL B 15 AGL to | D | ADM 046/37 | N34°35.00' W96°35.00' |
| 02 AGL B 15 AGL to | E | BYP 348/30 | N34°02.50' W96°18.00' |
| 02 AGL B 15 AGL to | F | BYP 307/33 | N33°55.00' W96°43.00' |
| 02 AGL B 15 AGL to | G | BYP 288/38 | N33°48.00' W96°56.00' |
| 02 AGL B 15 AGL to | H | UKW 150/7 | N33°26.00' W97°46.00' |
| 02 AGL B 15 AGL to | I | SHP 140/25 | N33°37.00' W98°14.00' |

ROUTE WIDTH - 10 NM either side of centerline from A to F; 10 NM right and 5 NM left of centerline from F to G; 10 NM either side of centerline from G to I.

Special Operating Procedures:

- (1) Position report will be made to Fort Worth FSS at Ada, eastbound at Point D.
- (2) Route conflicts with several VR/SR routes as follows: A to B crosses VR-163. B to C crosses SR-296 opposite direction, VR-104, VR-163, VR-1139 and VR-1140. C is shares with VR-1128 and VR-1137. H is shared with VR-104. H to I overlaps VR-163 and VR-1139 opposite direction and VR-1140. See and avoid will be used for separation.
- (3) Route will be flown at a maximum of 540 knots.
- (4) Route flight checked to 500' AGL. Contour flying authorized on entire route.
- (5) Alternate Entry: B, C, D, E and H.
- (6) Alternate Exit: B, C, D, E and H.
- (7) VR-1146 is reverse course of VR-1145. VR-1145 will not be scheduled/flown when VR-1146 is in use.
- (8) When practicable, avoid flight within 1500' AGL or 3 NM of the following airports: Bowie, Gainesville, Lake, Texoma, Durant, Sulphur, Healdton, Crazy Horse Muni, and Pauls Valley.
- (9) Pilots must contact 80 FTW T-38 duty officer for current brief on Noise Sensitive Areas and high density traffic areas.
- (10) Use caution for T-37 aircraft operating at 500'AGL at the following locations: from B to D and between G and H.

FSS's Within 100 NM Radius:

FTW, MLC

VR-1175

ORIGINATING ACTIVITY: OC-ALC/10 Flight Test Sqdn, 4805 West Dr, Tinker AFB, OK 73145-3300 DSN 336-7719/7710, C405-736-7719/7710.

VR ROUTES

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 02 AGL B 15 AGL to | A | DHT 355/32 | N36°37.00' W102°28.00' |
| 02 AGL B 15 AGL to | B | CIM 031/14 | N36°39.80' W104°40.10' |
| 02 AGL B 15 AGL to | C | CIM 311/26 | N36°50.60' W105°11.70' |
| 02 AGL B 15 AGL to | D | ALS 152/25 | N36°56.30' W105°40.90' |
| 02 AGL B 15 AGL to | E | ALS 198/28 | N36°56.60' W106°07.00' |
| 02 AGL B 15 AGL to | F | SAF 329/36 | N36°06.40' W106°17.10' |
| 02 AGL B 15 AGL to | G | SAF 298/44 | N36°01.20' W106°44.70' |
| 02 AGL B 15 AGL to | H | ABQ 344/49 | N35°51.50' W106°52.10' |
| 02 AGL B 15 AGL to | I | RSK 157/58 | N35°47.00' W107°55.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Maintain on or right (north) of centerline from Point C to N36-54 W105-26 (12 miles east of Ute Peak).
- (2) Maintain on or left (south) of centerline from Point D (Ute Peak) to west side of Rio Grande River.
- (3) Maintain within 2 NM of centerline from 4 NM prior until 4 NM after Point G (Mining Mountain).
- (4) Primary Entry: A, Alternate Entry: D.
- (5) Primary Exit: I, Alternate Exit: B,D and F.
- (6) Route is for the sole use of 10 FLTS flight test aircraft.

FSS's Within 100 NM Radius:

ABQ

VR-1176

ORIGINATING ACTIVITY: OC-ALC/10 Flight Test Sqdn, 4805 West Dr, Tinker AFB, OK 73145-3300 DSN 336-7719/7710, C405-736-7719/7710.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 02 AGL B 15 AGL to | A | RSK 157/58 | N35°47.00' W107°55.00' |
| 02 AGL B 15 AGL to | B | ABQ 344/49 | N35°51.50' W106°52.10' |

| | | | |
|--------------------|---|------------|---------------------------|
| 02 AGL B 15 AGL to | C | SAF 298/44 | N36°01.20' W106°44.70' |
| 02 AGL B 15 AGL to | D | SAF 329/36 | N36°06.40' W106°17.10' |
| 02 AGL B 15 AGL to | E | ALS 198/28 | N36°56.60' W106°07.00' |
| 02 AGL B 15 AGL to | F | ALS 152/25 | N36°56.30' W105°40.90' |
| 02 AGL B 15 AGL to | G | CIM 311/26 | N36°50.60' W105°11.70' |
| 02 AGL B 15 AGL to | H | CIM 031/14 | N36°39.80' W104°40.10' |
| 02 AGL B 15 AGL to | I | DHT 355/32 | N36°37.00' W102°28.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Maintain within 2 NM of centerline from 4 NM prior until 4 NM after Point C (Mining Mountain).
- (2) Maintain on or right (south) of centerline from west side of Rio Grande River to Point F (Ute Peak).
- (3) Maintain on or left (north) of centerline from N36-54 W105-26 (12 miles east of Ute Peak) to Point G.
- (4) Primary Entry: A, Alternate Entry: F.
- (5) Primary Exit: I, Alternate Exit: F and H.
- (6) Route is for the sole use of 10 FLTS flight test aircraft.

FSS's Within 100 NM Radius:

ABQ

VR-1182

ORIGINATING ACTIVITY: 188FW Arkansas ANG, 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502.

SCHEDULING ACTIVITY: Same as Originating Activity. Route scheduled no more than 72 hr in advance. Minimum separation between scheduled entry times is 15 minutes.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | FSM 013/18 | N35°40.00' W94°09.00' |
| 10 AGL B 15 AGL to | B | ARG 269/73 | N36°10.00' W92°27.00' |
| SFC B 15 AGL to | C | ARG 249/46 | N35°53.00' W91°52.00' |
| SFC B 15 AGL to | D | ARG 205/20 | N35°49.00' W91°09.00' |
| SFC B 15 AGL to | E | ARG 176/33 | N35°34.00' W90°57.00' |
| SFC B 15 AGL to | F | ARG 155/37 | N35°32.00' W90°41.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: N/A.
- (2) Alternate Exit: B.
- (3) See and Avoid/restrictive scheduling applies between VR-1182 and IR-120 and VR-1102.
- (4) Use caution between Points A and B and Points B and C due to IR-174 crossing SFC B 30.
- (5) Avoid flight within 1500' AGL or 3 NM all charted airports when practicable.
- (6) Uncharted and not in CHUM Route Obstructions.
- (7) Large power line crossing river N35-54.9 W91-56.4 (100' AGL).
- (8) CAUTION: Large birds soaring in vicinity of river cliffs.
- (9) Make entry time plus or minus five minutes or reschedule.
- (10) CAUTION: Possible military traffic entering VR-1102 half way between points A and B.
- (11) CAUTION: Multiple IR routes crossing 26 nm West of Pt B and 8 nm East of Pt B.
- (12) CAUTION: Numerous SR routes crossing Pt A-E. Flights of multiple C-130's common in the vicinity of Pt B.
- (13) Uncharted Towers: N35 54.20 W93 28.52 Altitude Unknown N36 08.77 W92 40.10 Altitude Unknown N36 04.38 W92 35.26 Altitude Unknown N35 49.61 W91 37.57 Altitude Unknown N35 36.41 W90 53.39 Altitude Unknown N35 33.45 W90 42.69 Altitude Unknown
- (14) Height of towers charted at N35 53.22 W91 43.37 are of questionable accuracy, possibly 100' higher than charted (estimated altitude 1678 MSL 838 AGL).

FSS's Within 100 NM Radius:

GWO, MKL, MLC

VR-1195

ORIGINATING ACTIVITY: 150 FW OG/CC, 2251 Air Guard Rd. SE, Kirtland AFB, NM 87117-5875 DSN 246-7426.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-2200 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | ABQ 074/48 | N35°05.00' W105°51.00' |
| 01 AGL B 15 AGL to | B | TCC 239/23 | N35°03.50' W104°02.50' |
| 01 AGL B 15 AGL to | C | TCC 195/33 | N34°41.50' W103°54.00' |
| 01 AGL B 15 AGL to | D | CVS 237/28 | N34°13.00' W103°50.50' |
| 01 AGL B 15 AGL to | E | CNX 074/46 | N34°24.50' W104°45.50' |
| 01 AGL B 15 AGL to | F | CNX 291/12 | N34°29.00' W105°53.00' |

TERRAIN FOLLOWING OPERATIONS: VFR terrain following authorized entire route IAW Command Directives within the published altitude blocks.

ROUTE WIDTH - 26 NM either side of centerline A to B; 10 NM either side of centerline B to D; 25 NM right and 30 NM left of centerline D to E; 15 NM right and 30 NM left of centerline E to F.

Special Operating Procedures:

- (1) Avoid Ft. Sumner Airport (segment D-E N34-29-45 W104-12-50), and Santa Rosa Airport (segment A-B, N34-56-15 W104-38-50) by 3 NM.
- (2) Avoid Double V Ranch private airport (segment D-E, N34-05-30 W104-19-55) by 2 NM.
- (3) Avoid the following by 1 NM: (Conchas Lake N34-22-20 W104-12-26), (Santa Rosa Lake N35-02-30 W104-41-00), (Lake Sumner Dam N34-36-25 W104-23-15), (Holcroft Ranch N34-43-06 W104-39-18).
- (4) Avoid mine N34-35-30 W105-35-00 by .5 NM or 1000' AGL.
- (5) Avoid the following houses by .5 NM: (N35-14-00 W104-34-00), (N34-59-00 W105-13-00), (N34-54-00 W103-50-00), (N34-21-00 W104-21-50).
- (6) Avoid the following towns by .5 NM; Rowe (N35-29-40 W105-40-30), San Jose (N35-23-50 W105-28-30), Bernal (N35-23-35 W105-19-00).
- (7) Alternate Exit Points: D and E.
- (8) Avoid ranch (N34-20.52 W104-23.2) by 2 NM and 1500' AGL.

FSS's Within 100 NM Radius:

ABQ

VR-1196

ORIGINATING ACTIVITY: ANG CRTC-Gulfport/OSA, 4715 Hewes Ave, Gulfport, MS 39507-4324 DSN 363-6027, C228-214-6027.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | AEX 098/18 | N31°12.00' W92°09.00' |
| 05 AGL B 15 AGL to | B | BTR 330/39 | N31°05.00' W91°36.00' |
| 05 AGL B 15 AGL to | C | BTR 051/39 | N30°50.00' W90°40.00' |
| 05 AGL B 15 AGL to | D | PCU 355/26 | N30°59.90' W89°44.00' |
| 05 AGL B 15 AGL to | E | GPT 026/32 | N30°53.00' W88°47.00' |
| 05 AGL B 15 AGL to | F | LBY 120/32 | N31°07.00' W88°50.00' |
| 15 AGL to | G | LBY 133/26 | N31°06.00' W89°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

VR ROUTES

ROUTE WIDTH - 3 NM either side of centerline for entire route.

Special Operating Procedures:

- (1) Only units deployed to Gulfport Combat Readiness Training Center (CRTC) may use VR-1196.
- (2) Alternate Entry: C, E and F.
- (3) Alternate Exit: E and F.
- (4) Unpublished obstructions:
 - (a) Tower at N31-00 W91-23, estimated 200' AGL;
 - (b) Tower at N31-00 W89-51, estimated 250' AGL;
 - (c) Tower at N29-53 W89-03, estimated 200' AGL.
- (5) Restrictions: Do not proceed beyond F when R-4401 is active without radio clearance from Shelby Range 297.1.
- (6) Terrain following operations will be conducted only in VMC. VFR minimum altitudes are: 500' AGL from A to F; 1500' AGL from F to G.
- (7) Tie-in FSS: Lake Charles (LCH).
- (8) Noise Sensitive Areas:
 - (a) A-B N31-03.5 W91-35.3 Dam construction-avoid by 2 NM/1500' AGL;
 - (b) B-C N30-55.3 W90-54.3 Preserve-avoid by 2 NM/1500' AGL;
 - (c) C-D N30-55.0 W89-24.3 Ostrich farm-avoid by 2 NM/1500' AGL;
 - (d) D-E N30.55.0 W89-27.0 Farm-avoid by 2 NM/1000' AGL;
 - (e) E-F N31-30.0 W90-20.0 Residence-avoid by 2 NM/1000' AGL.
- (9) Uncharted Obstructions/Hazards: Uncharted obstructions/hazards are those found through route surveys and other means and do not include data found in the CHUM: Points C-D (N30-51.1 W90-40.0) Tower 1254' MSL/1025' AGL.
- (10) The following are crossing MTR's. Consult the FLIP or sectional maps for actual location and the Scheduling Unit for the route for deconfliction. Additionally, See and Avoid. VR-1023 crosses Point C to Point D. IR-037 crosses Point C to Point D. VR-1023 and VR-1024 crosses Point D to Point E. VR-1083 crosses at Point E. VR-060 crosses at Point F.

FSS's Within 100 NM Radius:

DRI

VR-1205

ORIGINATING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSAA, 235 E. Flightline Rd., Edwards AFB, CA 93523-6460 DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSR, 300 E. Yeager Blvd., Edwards AFB, CA 93524 DSN 527-4110 C661-277-4110

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | OAL 222/10 | N37°55.00' W117°57.00' |
| 02 AGL B 15 AGL to | B | BTY 244/46 | N36°40.00' W117°41.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 02 AGL B 15 AGL to | C | NID 010/38 | N36°15.00' W117°21.00' |
| 02 AGL B 15 AGL to | D | NID 031/34 | N36°04.00' W117°11.00' |
| 02 AGL B 15 AGL to | E | NID 069/30 | N35°44.00' W117°05.00' |
| 02 AGL B 15 AGL to | F | EDW 050/35 | N35°14.00' W117°05.00' |
| 02 AGL B 15 AGL to | G | EDW 082/23 | N34°56.00' W117°16.00' |
| 02 AGL B 15 AGL to | H | DAG 247/34 | N34°53.00' W117°16.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: C.
- (2) Alternate Exit: D and G.
- (3) Monitor 315.9 (R-2508 low level frequency) passing Point B.
- (4) Users must schedule into complex MOA's/Restricted Areas when these areas are active:
 - (a) R-2508 MOA's-Contact CCF at DSN 527-2508.
 - (b) R-2524-Contact NAWC Echo Range scheduling at DSN 437-9128/9131.
 - (c) R-2515-Contact AFFTC scheduling at DSN 527-4110.
- (5) Crossing 36 degrees North attempt contact with either China Control 301.0 or Echo Control 381.9 for entry into R-2524. If no contact, do not enter even if you have scheduled R-2524.
- (6) Route conflicts: Between Point A and D, IR-236/IR-200/IR-425, BETWEEN D and F, IR-236.
- (7) Uncharted obstructions: 100' single short unlit tower N34-53.94 W117-17.28.

FSS's Within 100 NM Radius:

HHR, RAL, RNO, SAN

VR-1206

ORIGINATING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSAA, 235 S. Flightline Rd, Edwards AFB, CA 93523-6460 DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSR, 300 E. Yeager Blvd, Edwards AFB, CA 93524 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | GMN 081/10 | N34°47.00' W118°40.00' |
| 02 AGL B 15 AGL to | B | PMD 035/20 | N34°51.00' W117°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Avoid Rosamond Airport by 3 miles.
- (2) Avoid General Fox Airport Class D Airspace.
- (3) Do not enter Edwards Class D airspace without ATC approval.
- (4) Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1, California, Flt Haz, R-2508.
- (5) Special Coordination Procedures-Route conflicts with IR-200, IR-211, IR-425, VR-1257, VR-1265, and VR-1293. See and Avoid for all conflicts.
- (6) Point A within 3 NM of two Victor Airways lowest MEA 9000' MSL.
- (7) CAUTION: Bird attractant areas located at N34-46.94 W118-09.92, N34-49.6 W118-08.04 and N34-47.58 W118-08.05 sewage disposal ponds.
- (8) CAUTION: Rosemond, Buckhorn and Rogers Lake Beds attract large flocks of birds when flooded during winter months.
- (9) Uncharted obstructions:
 - (a) Tower 100' at N34-52.3 W118-07.0
 - (b) Tower 100' at N34-52.16 W117-45.43
 - (c) Lite tower aprx 200' at N34-49.6 W118-10.5.
 - (d) 150' Lit tower N34 49.04 W117 53.74
- (10) Route Conflicts: VR-1206/1265/1257 and IR-200/211 are coincidental then exit north. IR-425 has same ground track but is opposite direction.

FSS's Within 100 NM Radius:

HHR, RAL, SAN

VR-1211

ORIGINATING ACTIVITY: 452 OSS/DOT, March Fld, CA 92518 DSN 447-3846, C909-655-3846.

SCHEDULING ACTIVITY: 452 OSS/DOT, March Fld, CA 92518 DSN 447-4404/2422, C909-655-4404/2422.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | IPL 308/25 | N33°05.00' W115°49.00' |
| 03 AGL B 10 MSL to | B | IPL 345/28 | N33°13.00' W115°31.00' |
| 03 AGL B 10 MSL to | C | IPL 069/34 | N32°49.00' W114°50.00' |
| 03 AGL B 15 MSL to | D | IPL 071/12 | N32°46.00' W115°16.00' |
| 03 AGL B 15 MSL to | E | IPL 348/10 | N32°55.00' W115°30.00' |
| 03 AGL B 10 MSL to | F | IPL 307/15 | N32°57.00' W115°42.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Minimum altitude between D and E is 1000' AGL.
- (2) Environmental survey valid for C-17 only.
- (3) Tie-in FSS: Prescott (PRC).
- (4) CAUTION: High volume of rotary and fixed wing aircraft SFC to 1000' between Points B and D throughout year.
- (5) Alternate Entry: E.
- (6) VR-1211 is block scheduled with VR-288, VR-289, VR-296 and VR-299. Users requesting VR-1211 will be assigned, and authorized use of all five of these routes for the period of time required. Users requesting routes which have been previously assigned will be referred to the authorized user for coordination and deconfliction.
- (7) This route MARSAs through See and Avoid from entry to exit point.
- (8) CAUTION: Route coincides with or crosses other VR and IR routes.
- (9) Numerous other MTR's cross or are coincident with VR-1211. See FLIP AP/1B Charts, IFR/VFR Wall Planning Charts and appropriate Sectional Enroute Low Altitude Charts. See and Avoid applies.
- (10) Scheduling this route does not automatically grant permission to enter restricted areas. Contact the appropriate Scheduling Activity for entry clearance.
- (11) Contact VR-1211 Scheduling Agency as far in advance as possible, but no later than one day in advance by 0200Z.
- (12) CAUTION: Frequent VFR fixed wing and helicopter traffic along entire route.

FSS's Within 100 NM Radius:

HHR, RAL, SAN

VR-1214

ORIGINATING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSAA, 235 S. Flightline Rd, Edwards AFB, CA 93523-6460 DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSR, 300 E. Yeager Blvd, Edwards AFB, CA 93524 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | DAG 199/37 | N34°27.00' W117°00.00' |
| 15 AGL to | B | DAG 198/31 | N34°32.00' W116°55.00' |
| 05 AGL B 15 AGL to | C | DAG 161/7 | N34°51.00' W116°34.00' |
| 01 AGL B 15 AGL to | D | DAG 026/32 | N35°22.00' W116°09.00' |
| 01 AGL B 15 AGL to | E | DAG 008/56 | N35°49.00' W116°08.00' |
| 01 AGL B 10 AGL to | F | BTY 130/48 | N36°08.00' W116°11.00' |
| 01 AGL B 10 AGL to | G | BTY 111/30 | N36°30.00' W116°15.00' |
| 01 AGL B 10 AGL to | H | BTY 135/11 | N36°38.00' W116°38.00' |

VR ROUTES

| | | | |
|--------------------|---|------------|---------------------------|
| 01 AGL B 15 AGL to | I | BTY 288/9 | N36°53.00' W116°54.00' |
| 01 AGL B 15 AGL to | J | BTY 304/43 | N37°21.00' W117°19.00' |
| 01 AGL B 15 AGL to | K | BTY 322/40 | N37°25.00' W117°04.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to I (excluding restricted airspace); 5 NM left and 15 NM right of centerline from I to K (excluding restricted airspace).

Special Operating Procedures:

- (1) Route terminates at the R-4807 boundary.
- (2) Between I and K, right side of route is coincident with the R-4807 boundary, exit authorized anywhere between the points if meeting authorized range time.
- (3) Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N34-27.4 W117-01.7; N34-33.7 W117-04.7; N34-51.2 W116-47.2; N34-57.8 W116-40.4; N35-17.1 W116-05.0; N35-58.1 W116-16.2; N36-51.7 W116-47.2; N37-17.4 W117-03.3.
- (4) Cross I-40 in vicinity of Point C and I-15 between C and D at or above 500' AGL.
- (5) Aircrews transiting the Silver MOA located between Points C and E shall contact the 57 Wing/OSOS, Nellis AFB, NV (DSN 682-2040) to deconflict from other air activities. Aircrews will pass the Entry Point and Point E crossing times and any revisions or updates.
- (6) Aircrews will broadcast in the blind on 399.85 when crossing the southern boundary of the Silver MOA the following (SUNDANCE, call sign, number and type aircraft, crossing Silver MOA boundary)
- (7) Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1, California, Flt Haz, R-2508. Contact R-2508 Central Coordinating Facility (CCF) (DSN 527-2508) for authorization to enter/operate in R-2508 complex.
- (8) Alternate Exit: Points G and I. Caution exiting Point G for traffic arrival/departure to Desert Rock Airport. Exit to west between I and J authorized to enter R-2508 Saline work area.
- (9) Alternate Entry: Points B, C, E and G.
- (10) Noise Sensitive Areas: Point A Lucerne Valley and Newberry Springs between B and C. Avoid by flying as far east of the western border of Troy Lake as possible within the route corridor. Avoid town of Tecopa, N35-51.0 W116-13.0 between Points E and F by 1 NM horizontally or 1500' vertically. Approaching Point H remain East of the centerline until 3 NM North of Point H.
- (11) Maintain 1500' AGL until 5 NM past Point B on leg B to C.
- (12) Avoid horse ranch and buildings between E and F located at N35-53.0 W116-09.0 by 1 NM laterally or 1500' vertically. Avoid Ash Meadows National Wildlife Refuge at N36-23.00 W116-17-00 by 2 NM or 1500' vertically.
- (13) Avoid Desert Rock Airport N36-37.0 W116-02.0 by not less than 7 NM to the southwest.
- (14) Check NOTAMS for model rocket firings. This activity occurs from SFC to 8,000' MSL at the VCV088R022 (Southern California Logistics - Victorville) located between Points A and B.

(15) Route Conflicts: Route VR-1214 runs concurrent with VR-1215 until Point D and coincidental with VR-1265 until C then diverges east; Point B to C VR-1218 route width overlaps from the east, IR-212/213/217 route width overlaps from the south and then turns eastward; Point C VR-1265 diverges east; Point C to D VR-1217/1218 cross east to west; approaching N35-06 to N35-27 see SOP notes 6 and 7 for Silver MOA procedures; North of Point F VR-222 crosses SE to NW; at Point G IR-286 merges from the east and is coincidental until H and route widths overlap until J, then crosses from SE to NW from J to K; at Point H VR-222 crosses south to north.

(16) Obstructions: four unlit microwave towers (100') at N35-04 W116-23; three unlit 150' towers at N36-56.20 W116-51.20; single unlit 200' tower at N37-10.76 W116-55.83; three unlit 100' towers at N37-18.02 W117-15.66, single unlit 200' tower at N37-27.05 W117-10.21.

(17) Numerous Victor Airways within 5 NM of Point A lowest MEA 9000' MSL. Numerous Victor Airways above entire route MEA between Point B and C 7500' MSL, Between C and D 10000' MSL, between Point E and K 11000' MSL.

FSS's Within 100 NM Radius:

HHR, RAL, RNO, SAN

VR-1215

ORIGINATING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSAA, 235 S. Flightline Rd, Edwards AFB, CA 93523-6460 DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSR, 300 E. Yeager Blvd, Edwards AFB, CA 93524 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | DAG 199/37 | N34°27.00' W117°00.00' |
| 15 AGL to | B | DAG 198/31 | N34°32.00' W116°55.00' |
| 05 AGL B 15 AGL to | C | DAG 161/7 | N34°51.00' W116°34.00' |
| 01 AGL B 15 AGL to | D | DAG 026/32 | N35°22.00' W116°09.00' |
| 01 AGL B 15 AGL to | E | DAG 005/43 | N35°38.00' W116°17.00' |
| 01 AGL B 15 AGL to | F | DAG 339/46 | N35°44.00' W116°41.00' |
| 01 AGL B 15 AGL to | G | DAG 325/48 | N35°43.00' W116°55.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 NM either side of centerline (excluding restricted airspace).

Special Operating Procedures:

- (1) Route terminates at the R-2524 restricted area boundary. Clearance to fly the route does not constitute clearance into restricted area. This clearance must be obtained from the appropriate Scheduling Agency.
- (2) Avoid R-2502 (include Leach Lake Tactical Range) unless you are scheduled.
- (3) Alternate Exit: Exit authorized at Point E and beyond. Contact High Desert TRACON (Joshua Approach) for clearance into MOA/Ranges.
- (4) Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1, California, Flt Haz, R-2508. Schedule MOA, Ranges or Restricted Areas through the R-2508 Central Coordinating Facility (CCF) DSN 527-2508.
- (5) Aircrews transiting the Silver MOA located between Points C and E shall contact the 57 Wing/OSOS, Nellis AFB, NV (DSN 682-2040) to deconflict from other air activities. Aircrews will pass the entry point and Point E crossing times and any revisions or updates.
- (6) Aircrews will broadcast in the blind on 399.85 when crossing the southern boundary of the Silver MOA the following (SUNDANCE, call sign, number and type aircraft, crossing Silver MOA boundary)
- (7) Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N34-27.4 W117-01.7; N34-33.7 W117-04.7; N34-51.2 W116-47.2; N34-57.8 W116-40.4; N35-17.1 W116-05.0.
- (8) Cross I-40 in vicinity of Point C and I-15 between C and D at or above 500' AGL.
- (9) Noise Sensitive Areas: Point A Lucerne Valley and Newberry Springs between B and C. Avoid by flying as far east of the western border of Troy Lake as possible within the route corridor.
- (10) Maintain 1500'AGL until 5 NM past Point B on leg B to C.
- (11) Alternate Entry: B, C and E.
- (12) Monitor 315.9 (R-2508 low level frequency) passing Point D.
- (13) Check NOTAMS for Model Rocket Firings. This activity occurs from the surface to 8000'AGL at the VCV (Victorville-Southern California International) 08 8022 located between Points A and B.
- (14) Numerous Vector Airways within 5 NM of Point A lowest MEA 9000'MSL. Numerous Victor Airways above entire route lowest MEA between Point B and C 7500'MSL, and between C and D 10000'MSL.
- (15) Obstructions: Between Points C and D, a grouping of four 100' unlit microwave towers (N35-04 W116-23).
- (16) Route conflicts: VR-1265 is coincidental until C then diverges east; VR-1214 is coincidental until Point D then diverges north; B to C VR-1218 route width overlaps from the east, IR-212/213/217 route width overlaps from the south and turns eastward; Point C VR-1265 diverges east; C to D VR-1217 and VR-1218 cross east to west; approaching N35-06 to N35-27 see SOP notes 6 and 7 for Silver MOA procedures; At Point E IR-212 merges from southeast and is coincidental until Point G.

FSS's Within 100 NM Radius:

HHR, RAL, RNO, SAN

VR-1217

ORIGINATING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSAA, 235 S. Flightline Rd, Edwards AFB ,CA 93523-6460 DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSR, 300 E. Yeager Blvd, Edwards AFB, CA 93524 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | DAG 209/53 | N34°19.00' W117°19.00' |
| 15 AGL to | B | DAG 187/38 | N34°22.00' W116°52.00' |
| 05 AGL B 15 AGL to | C | DAG 123/13 | N34°48.00' W116°24.00' |
| 01 AGL B 15 AGL to | D | DAG 083/20 | N34°55.00' W116°11.00' |
| 01 AGL B 15 AGL to | E | DAG 282/10 | N35°02.00' W116°45.00' |
| 01 AGL B 15 AGL to | F | DAG 272/22 | N35°04.00' W117°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 2 NM either side of centerline from A to B; 5 NM either side of centerline from B to F.

Special Operating Procedures:

- (1) Maintain 1500'AGL until past Point B on leg B to C.
- (2) Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N34-22.6 W117-18.7; N34-15.8 W116-51.3; N34-25.1 W116-37.1; N34-57.7 W116-40.3.
- (3) Cross I-40 in vicinity of C and I-15 between D and E at or above 500' AGL.
- (4) Avoid R-2501 between B and C.
- (5) Exit anywhere beyond E.
- (6) Alternate Entry: B.
- (7) Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1, California, Flt Haz, R-2508. Schedule R-2508 MOA/Ranges/Restricted Areas through the R-2508 Central Coordinating Facility (CCF) DSN 527-2508.
- (8) Avoid Harvard Recreation Area by 1000' AGL and 2 NM, N34-58.0 W116-40.0.
- (9) Ultralight activity within 10 NM Rabbit Dry Lake (N34-27.0 W117-00.0) up to 10000'MSL; Most active on weekends and holidays.
- (10) Crossing the Barstow MOA eastern boundary, contact either SPORT (343.7/132.75) or JOSHUA (335.6/133.65).
- (11) Use caution in the Barstow MOA for helicopters at or below 3,000' AGL crossing Coyote Drylake between Barstow and the National Training Center at Ft. Irwin.

VR ROUTES

- (12) Obstructions: Four 100' unlit microwave towers located at: N35-02.5 W116-54.8 near Point F. 300' powerlines south side of route (N34-59.3 W116-39.8; N34-59.3 W116-44.5; N35-01.9 W116-48.6; N35-02.7 W116-53.4; N35-03.3 W116-55.6; N34-58.9 W117-02.1) between Points D-F. 300' tall tower with lights located at: N34-39.0 W116-39.0.
- (13) Numerous Victor Airways within 5NM of Point A lowest MEA 9000'MSL. Numerous Victor Airways above entire route with MEA's of Point A-D MEA 9000'MSL, Point D-E 7500'MSL.
- (14) Route Conflicts: At Point A VR-1265 merges from northwest and diverges to the northeast. VR-1257 is coincidental from Point A-B and then exits east. Point A-D VR-1214/1215 route width overlaps. Points A-F VR-1218 route width overlaps entire route. Point C-D VR-1265 merges from the west then transitions northeast of Point D. Point B-D IR-212/213/217 merges from the south, overlap and diverge northeast of Point D. Point D-E VR-1214/1215/1265 cross south to north. Point E to F VR-1218 route width overlaps.
- (15) Aircrews transiting the Silver MOA located between Points D and E shall contact the 57th FWW/DOOS, Nellis AFB, NV (DSN) 682-2040 for De-Confliction. Aircrews will pass Points D and E crossing times and any revisions or updates.
- (16) Aircrews crossing the Eastern boundary of the Silver MOA will broadcast in the blind on 399.85 the following:
Sundance (call sign, number and type aircraft) crossing Silver MOA boundary.

FSS's Within 100 NM Radius:

HHR, RAL, RNO, SAN

VR-1218

ORIGINATING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSAA, 235 S. Flightline Rd, Edwards AFB, CA 93523-6460 DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSR, 300 E. Yeager Blvd, Edwards AFB, CA 93524 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | DAG 209/53 | N34°19.00' W117°19.00' |
| 15 AGL to | B | DAG 186/38 | N34°22.00' W116°51.50' |
| 02 AGL B 15 AGL to | C | DAG 190/21 | N34°38.50' W116°45.50' |
| 02 AGL B 15 AGL to | D | DAG 099/22 | N34°49.00' W116°10.50' |
| 02 AGL B 15 AGL to | E | GFS 199/27 | N34°45.00' W115°29.00' |
| 02 AGL B 15 AGL to | F | GFS 280/22 | N35°17.00' W115°35.00' |
| 02 AGL B 15 AGL to | G | DAG 056/14 | N35°02.50' W116°18.00' |
| 02 AGL B 15 AGL to | H | DAG 279/19 | N35°05.50' W116°56.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized 10 NM after B, for remainder of route.

ROUTE WIDTH - 2 NM either side of centerline from A to B. 5 NM either side of centerline from B to H except for R-2501N airspace on leg C to D and R-2502E on leg G to H.

Special Operating Procedures:

- Alterate entry point: B
- Maintain 1500'AGL until past Point B on leg B to C.
- Cross I-40 between C and D and D to F and I-15 between G and H at or above 500' AGL.
- Avoid R-2501 between C and D.
- Aircrews transiting R-2508 complex airspace are required to see FLIP, Area Planning, AP/1, California, Flt Haz, R-2508. Schedule R-2508 complex MOAs/Ranges/Restricted Areas through the R-2508 Central Coordinating Facility (CCF) DSN 527-2508.
- Aircrews transiting the Silver MOA located between Points F and G shall contact the 57FWW/DOOS, Nellis AFB, NV (DSN 682-2040) for authorization to transit. Aircrews will pass the entry point, Point F and Point G crossing times and any revisions or updates.
- Aircrews will broadcast in the blind on 399.85 when crossing the eastern boundary of the Silver MOA the following:
SUNDANCE (call sign, number and type aircraft) crossing Silver MOA boundary.
- On leg E to F, avoid state recreation area left of centerline at N34-52-00 W115-31-00 by 2 NM (Noise Sensitive Area) and ranching operation right of centerline at N35-06-00 W115-24-00. Do not overfly Clipper Mountain 3 NM past Point E.
- Open pit mining operation located on leg C-D at N34-45 W116-20.0 (approximately 1 NM left of centerline and 7 NM before Point D. Avoid overflight by 1 NM. Open pit blasting occurs on an unscheduled basis.
- Crossing the Barstow MOA eastern boundary, contact either SPORT (343.7/132.75) or JOSHUA (335.6/133.65).
- Use caution in the Barstow MOA for helicopters at or below 3000'AGL crossing Coyote Drylake between Barstow and the National Training Center at Ft. Irwin.
- Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N34-22.6 W117-18.7; N34-15.8 W116-51.3; N34-43.7 W116-09.2; N34-57.7 W116-40.3.
- Noise sensitive area over the community of Lucerne Valley, 6.15 NW of Point B. Uncharted obstructions between Point B and C: single unlit tower approx 200' at N34-32.360 W116-45.98; single unlit 50' tower at N34-40.6 W116-48.6; between Point C and D: multi unlit 100' towers at N34-38.93 W116-37.4; single unlit 100' tower at N34-38.93 W116-37.4; single unlit 100 tower at N34-38.93 W116-31.94; Noise sensitive area 6.64nm ESE of HEC vortac; single lit tower at N34-45.8 W116-18.76; Point D to Point E: unlit 300' tower at N34-43.84 W115-52.14; single 100' unlit tower at N34-43.158 W115-39.169; single unlit 125' tower at N34-46.14 W115-38.0; Point E to F: Noise sensitive area 7.15nm North of Point E just left of centerline; Points F to G: 2 unlit 150' towers at N35-08.22 W116-13.54; Points G to H: 4 100' unlit micro-wave towers at N35-04 W116-23; Multi unlit 100' tower at N35-04.3 W116-22.49; Points G to H: Multi unlit 100' towers at N35-06.22 W116-32.77; single unlit 100' tower at N35-02.5 W116-54.8; single unlit 100' tower at N35-06 W116-36; single unlit 75' tower at N35-05.3

W116-56.3; 300' Power lines South side of Route (N34-59.3 W116-39.8; N34-59.3 W116-44.5; N35-01.9 W116-48.6 N35-02.7 W116-50.8 N35-03.2 W116-53.4; N35-03.3 W116-55.6; N35-03.3 W116-55.6; N34-58.9 W117-02.1).

- (14) Numerous Victor Airways within 5NM of Point A lowest MEA 9000'MSL from Point A to E. Numerous Victor Airways above entire route with 1000'MSL MEA's from Point E-F.
- (15) Route Conflicts: At Point A VR-1265 merges from northwest and overlaps until Point D, then merges between Point F-G. VR-1214/1215 route width overlaps from Point A-D diverges to the northeast to cross route S-N between Point G-H. VR-1257 is coincidental from Point A-B and then exits east. VR-1217 route overlaps Point A-D and Point G-H. Point C-D IR-212/213/217 merge from the south, overlap and diverge northeast of Point D and merge between Point F-G from S-N. Point D-F IR-252 crosses S-N. Point F VR-222 crosses S-NW. CAUTION: At Point E VR-289 is opposite direction from NE-S.

FSS's Within 100 NM Radius:

HHR, RAL, RNO, SAN

VR-1233

ORIGINATING ACTIVITY: 355 OSS/OSOA, 3895 S. 6th St. Suite 200, Davis-Monthan AFB, AZ 85707 DSN 228-4680 C520-228-4680.

SCHEDULING ACTIVITY: 355 OSS/OSOSO, Davis-Monthan AFB, AZ 85707 1500-2300Z Mon-Fri, no earlier than one duty day prior and NLT 2 hr prior to entry. DSN 228-5777/5330, C520-228-5777/5330.

HOURS OF OPERATION: 1300-0530Z

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| Cross at 10 AGL to or above as assigned | A | TUS 034/31 | N32°27.00' W110°29.00' |
| 10 AGL B 15 AGL to | B | TUS 055/60 | N32°29.00' W109°50.00' |
| 03 AGL B 15 AGL to | C | TUS 068/107 | N32°24.00' W108°51.00' |
| 03 AGL B 15 AGL to | D | TCS 226/84 | N32°32.70' W108°42.30' |
| 03 AGL B 15 AGL to | E | TCS 231/67 | N32°47.00' W108°28.00' |
| 10 AGL B 15 AGL to | F | TCS 232/43 | N32°59.00' W108°03.00' |
| 05 AGL B 15 AGL to | G | TCS 265/28 | N33°21.00' W107°49.80' |
| 03 AGL B 15 AGL to | H | TCS 329/39 | N33°54.00' W107°31.00' |
| 03 AGL B 15 AGL to | I | ONM 211/13 | N34°11.00' W107°00.00' |
| 10 AGL B 15 AGL to | J | ONM 125/14 | N34°10.00' W106°38.00' |
| 10 AGL B 15 AGL to | K | ONM 125/42 | N33°49.00' W106°16.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3NM either side of centerline.

Special Operating Procedures:

- (1) Route users must obtain permission from the controlling agency prior to entry into R-5107C. Contact Cherokee Control at DSN 258-8000. Airborne contact will be made with Cherokee Control on 294.6/295.2 or 126.95.
- (2) Alternate Entry: B, C, D, E, F, G, H, I and J.
- (3) Alternate Exit: B, C, D, E, F, G, H, I and J.
- (4) Route segment from Point A to Point C transit airspace used by civil Unmanned Aerial Vehicle (UAV) flights, trailed by manned chase aircraft, operating VFR during daylight from 6000'MSL to 15000'MSL. VFR traffic advisories are available from Albuquerque Center on 327.15 or 269.3.
- (5) VR-1233 crosses or shares portions of VR-176, VR-260, VR-263, SR-210, SR-211, IR-113 and IR-133, which are not deconflicted for the pilot. Extra vigilance is necessary to see and avoid other military aircraft.
- (6) This route crosses other VR routes. The See and Avoid concept is paramount.
- (7) Uncharted helipad at N33-00-37 W108-02-18. Uncharted 150' transmission power line running east-west crosses VR-1233 centerline at N33-30-59 W107-44-15.
- (8) Avoid all forest fires/smoke areas by at least 5 NM and/or 5000'AGL. If unable to avoid fire area and remain within vertical and horizontal limits of route, abort the route and either re-enter at next alternate entry point or fly alternate mission. Extensive U.S. Forestry Service aerial tanker/helicopter activity from 1 Apr to 1 Aug.

FSS's Within 100 NM Radius:

ABQ

VR-1250

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | FOT 309/23 | N41°00.00' W124°30.00' |
| 02 AGL B 15 AGL to | B | FOT 351/33 | N41°12.50' W124°06.50' |
| 02 AGL B 15 AGL to | C | FOT 028/37 | N41°06.00' W123°38.00' |
| 02 AGL B 15 AGL to | D | FJS 232/31 | N41°17.00' W123°27.00' |
| 02 AGL B 15 AGL to | E | FJS 150/5 | N41°22.00' W122°47.00' |
| 02 AGL B 15 AGL to | F | FJS 109/26 | N41°11.00' W122°21.00' |
| 02 AGL B 15 AGL to | G | FJS 100/38 | N41°08.00' W122°04.00' |
| 02 AGL B 15 AGL to | H | FJS 087/66 | N41°08.00' W121°24.00' |

VR ROUTES

| | | | |
|--------------------|---|------------|---------------------------|
| 02 AGL B 15 AGL to | I | FMG 295/66 | N40°15.00' W120°45.00' |
| 02 AGL B 15 AGL to | J | FMG 303/44 | N40°05.00' W120°17.00' |
| 02 AGL B 15 AGL to | K | FMG 012/22 | N39°51.00' W119°26.00' |
| 02 AGL B 15 AGL to | L | HZN 346/11 | N39°42.00' W118°59.00' |
| 02 AGL B 15 AGL to | M | LLC 096/11 | N40°03.50' W118°22.00' |
| 02 AGL B 15 AGL to | N | LLC 092/21 | N40°01.00' W118°09.00' |
| 02 AGL B 15 AGL to | O | LLC 110/19 | N39°56.00' W118°14.50' |

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry Points: E and H.
- (2) Alternate Exit Points: J, L, M, and N.
- (3) Tie-in FSS: Rancho Murieta (RIU).
- (4) Reserving this route does not reserve the Carson MOA or R-4813 between L and O. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for authorization.
- (5) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSAs while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (6) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (7) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (8) Ensure coast-in at Big Lagoon only. Avoid overflight of Trinidad at B.
- (9) Caution: Extensive helo logging operations staging from Hoopa airport 3 NM south of C.
- (10) Avoid Marble Mountain, Trinity Alps, and Russian Wilderness Areas between C and E by 3 NM.
- (11) Maintain 1500' AGL over Castle Crags Wilderness Area at F.
- (12) Fly the southern boundary between F and G to avoid the town of Dunsuir.
- (13) Fly the extreme northern boundary between G and H to avoid the town of Dana and houses vicinity Big Lake.
- (14) Be alert for C-5/C-141 aircraft flying at 1000' AGL on a crossing route between G and H.
- (15) Between I and J maintain 1000' AGL and pass north of lake at N40-11 W120-36. Be alert for Helo logging traffic.
- (16) Pass North of Doyle at N40-01-30 W120-06-20 between J and K.
- (17) Caution: Beware of glider operations between J and K near Pyramid Lake.

FSS's Within 100 NM Radius:

ACV, MCC, RNO, RIU

VR-1251

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | FOT 175/52 | N39°50.00' W124°30.00' |
| 02 AGL B 15 AGL to | B | FOT 175/26 | N40°15.00' W124°22.00' |
| 02 AGL B 15 AGL to | C | FOT 066/22 | N40°42.00' W123°45.00' |
| 02 AGL B 15 AGL to | D | CEC 136/43 | N41°08.00' W123°51.00' |
| 02 AGL B 15 AGL to | E | CEC 089/31 | N41°37.00' W123°35.00' |
| 10 AGL B 15 AGL to | F | FJS 326/30 | N41°56.00' W122°59.00' |
| 02 AGL B 15 AGL to | G | OED 114/27 | N42°10.00' W122°28.00' |
| 02 AGL B 15 AGL to | H | OED 051/37 | N42°41.00' W122°08.00' |
| 02 AGL B 15 AGL to | I | LMT 025/40 | N42°39.00' W121°07.00' |
| 02 AGL B 15 AGL to | J | LMT 090/53 | N41°53.00' W120°36.00' |
| 02 AGL B 15 AGL to | K | LKV 129/58 | N41°40.00' W119°49.00' |
| 02 AGL B 15 AGL to | L | LLC 261/45 | N40°12.50' W119°32.50' |
| 02 AGL B 15 AGL to | M | LLC 178/15 | N39°53.00' W118°39.50' |
| 02 AGL B 15 AGL to | N | LLC 096/11 | N40°03.50' W118°22.00' |
| 02 AGL B 15 AGL to | O | LLC 092/21 | N40°01.00' W118°09.00' |
| 02 AGL B 15 AGL to | P | LLC 110/19 | N39°56.00' W118°14.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: D and H.
- (2) Alternate Exit: D, H, L, M, N and O.
- (3) Tie-in FSS: Rancho Murieta (RIU).
- (4) Reserving this route does not authorize access to the Carson MOA or R-4813 between M and P. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for authorization.
- (5) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS

Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.

- (6) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (7) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (8) Between B and C fly south of centerline to avoid the town of Petrolia at N40-19-30 W124-17-15.
- (9) Between E and F fly south of centerline and maintain 1500' AGL until 20 NM past E to avoid a Bald Eagle Nesting Area southwest of Happy Camp.
- (10) Caution: 310' tower 3 NM south of G at N42-07-25 W122-28-38.
- (11) Maintain 1500' AGL from 25 NM south until 5 NM east of H over the Sky Lakes Wilderness Area.
- (12) Approaching I remain north of centerline and avoid private airport at N42-39-07 W121-19-40.
- (13) Between J and K fly south of route centerline to avoid house on west bank of Goose Lake at N41-52 W120-29 and avoid houses on the east side of Upper Lake.
- (14) Caution: power lines paralleling route to east between K and L.

FSS's Within 100 NM Radius:

ACV, MCC, RNO, RIU

VR-1252

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | BTY 308/30 | N37°12.00' W117°07.00' |
| 02 AGL B 15 AGL to | B | OAL 111/16 | N37°50.00' W117°30.00' |
| 02 AGL B 15 AGL to | C | OAL 339/19 | N38°19.00' W117°48.00' |
| 02 AGL B 15 AGL to | D | MVA 040/19 | N38°44.00' W117°42.00' |
| 02 AGL B 15 AGL to | E | MVA 009/49 | N39°18.00' W117°34.00' |
| 02 AGL B 15 AGL to | F | LLC 111/51 | N39°35.00' W117°43.00' |
| 02 AGL B 15 AGL to | G | LLC 107/34 | N39°48.00' W117°58.00' |
| 02 AGL B 15 AGL to | H | LLC 111/19 | N39°56.00' W118°14.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: B.
- (2) Alternate Exit: E, F and G.
- (3) Tie-in FSS: Rancho Murieta (RIU). For route scheduling after hours call 800-752-7860.
- (4) Reserving this route does not authorize access to NAS Fallon Range MOA's or restricted areas 4816 N/S or 4813. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for airspace entry authorization.
- (5) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (6) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (7) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (8) Caution: avoid the Fallon Range VFR corridor and extensive civilian VFR traffic surrounding US Hwy 50 approaching E, between 2000' AGL and 10,500' MSL.
- (9) Avoid overflight of Hudson Airport at N39-33 W117-45 approaching F.

FSS's Within 100 NM Radius:

RNO

VR-1253

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | MMM 256/28 | N36°47.00' W114°51.00' |
| 02 AGL B 15 AGL to | B | ILC 264/42 | N38°22.00' W115°16.00' |
| 02 AGL B 15 AGL to | C | ILC 276/43 | N38°31.00' W115°14.00' |
| 02 AGL B 15 AGL to | D | ILC 307/56 | N39°00.00' W115°07.00' |
| 02 AGL B 15 AGL to | E | BAM 103/87 | N39°48.00' W115°19.00' |
| 02 AGL B 15 AGL to | F | BAM 132/30 | N40°08.00' W116°36.00' |
| 02 AGL B 15 AGL to | G | MVA 028/71 | N39°24.00' W116°57.00' |

VR ROUTES

| | | | |
|--------------------|---|------------|---------------------------|
| 02 AGL B 15 AGL to | H | TPH 046/31 | N38°16.00' W116°27.00' |
| 02 AGL B 15 AGL to | I | TPH 075/48 | N38°00.00' W116°01.00' |
| 02 AGL B 15 AGL to | J | TPH 083/61 | N37°51.00' W115°46.00' |
| 15 AGL to | K | MMM 293/83 | N37°37.60' W115°38.00' |
| 02 AGL B 15 AGL to | L | MMM 283/64 | N37°17.00' W115°27.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: B, E, F, G and I.
- (2) Alternate Exits: C, E, G and I.
- (3) Tie-in FSS: Rancho Murieta (RIU).
- (4) Reserving this route does not reserve NAS Fallon Range airspace. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for airspace entry authorization.
- (5) Reserving this route does not reserve Nellis AFB Range airspace or the Desert or Reveille MOA's. Contact the 99th Range Management Office, Nellis AFB, DSN 348-4710, C702-652-4710 for range scheduling. Schedule as far in advance as possible.
- (6) Contact Nellis Control on 343.0 (P), 392.15 (S) for clearance into Nellis AFB airspace.
- (7) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSAs while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (8) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (9) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (10) Approaching G, be on the lookout for civilian traffic between 2000' AGL and 10,500' MSL along the Fallon Range VFR corridor over US Hwy 50.
- (11) Caution: opposite flow traffic on the VR-208 at G.

FSS's Within 100 NM Radius:

CDC, RNO

VR-1254

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | FJS 061/69 | N41°38.00' W121°18.00' |
| 02 AGL B 15 AGL to | B | LMT 090/53 | N41°53.00' W120°36.00' |
| 02 AGL B 15 AGL to | C | LKV 130/58 | N41°40.00' W119°50.00' |
| 02 AGL B 15 AGL to | D | LLC 291/90 | N41°04.00' W120°07.00' |
| 02 AGL B 15 AGL to | E | LLC 261/45 | N40°12.50' W119°32.50' |
| 02 AGL B 15 AGL to | F | LLC 178/15 | N39°53.00' W118°39.50' |
| 02 AGL B 15 AGL to | G | LLC 096/11 | N40°03.50' W118°22.00' |
| 02 AGL B 15 AGL to | H | LLC 092/21 | N40°01.00' W118°09.00' |
| 02 AGL B 15 AGL to | I | LLC 110/19 | N39°56.00' W118°14.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized from B to I.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Exit: F.
- (2) Tie-in FSS: Rancho Murieta (RIU).
- (3) Reserving this route does not reserve the Carson MOA or R-4813 between F and I. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for airspace entry authorization.
- (4) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSAs while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (5) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (6) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (7) Avoid Eagleville airport, 15 NM north of D.
- (8) Between B and C fly south of route centerline to avoid house on west bank of Goose Lake at N41-52 W120-29 and avoid houses on the east side of Upper Lake.

FSS's Within 100 NM Radius:

ACV, MCC, RNO, RIU

VR-1255

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | BTY 226/69 | N36°15.00' W118°00.00' |
| 02 AGL B 15 AGL to | B | BTY 297/55 | N37°25.00' W117°35.00' |
| 02 AGL B 15 AGL to | C | OAL 280/38 | N38°17.00' W118°29.00' |
| 02 AGL B 15 AGL to | D | MVA 270/21 | N38°40.00' W118°27.00' |
| 02 AGL B 15 AGL to | E | MVA 272/40 | N38°47.00' W118°50.00' |
| 02 AGL B 15 AGL to | F | HZN 260/9 | N39°32.00' W119°11.00' |
| 02 AGL B 15 AGL to | G | HZN 346/11 | N39°42.00' W118°59.00' |
| 02 AGL B 15 AGL to | H | LLC 096/11 | N40°03.50' W118°22.00' |
| 02 AGL B 15 AGL to | I | LLC 092/21 | N40°01.00' W118°09.00' |
| 02 AGL B 15 AGL to | J | LLC 110/19 | N39°56.00' W118°14.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: B and C.
- (2) Alternate Exit: E, G, H and I.
- (3) Tie-in FSS: Rancho Murieta (RIU).
- (4) Aircraft entering at A or transiting R-2508 airspace are required to see FLIP-Area Planning-AP/1-California-FLT HAZ-R-2508. Contact R-2508 Central Coordinating Facility at C661-277-2508, DSN 527-2508 for entry approval prior to flight.
- (5) Reserving this route does not reserve the Ranch, Churchill or Carson MOA's or R-4813. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for authorization.
- (6) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSAs while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (7) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (8) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (9) After R-2508 entry and check-in with Joshua Approach, approaching A, check-in on R-2508 low altitude common frequency, 315.9 with callsign, number and type aircraft, and intentions. Monitor 315.9 until exiting R-2508 complex.
- (10) Caution: high migratory bird activity between A and B during daylight hours.

(11) Caution: approaching A be alert for 420' antenna at N36-11-33 W118-00-24, and 196' antenna at N36-12-32 W118-00-07.

(12) Avoid overflight of Olancho at A.

(13) Caution: opposite flow traffic on VR-1205 between A and C.

(14) Caution: intensive hang glider activity in the vicinity of Dolomite and northeast shore of Owens Lake between A and B.

(15) Caution: power lines paralleling route between E and F.

(16) Between Points E and F, avoid the town of Schurz by 5 NM laterally.

(17) Caution: 330' tower between E and F at N39-08-30 W119-08-00.

(18) Between E and F, fly west of centerline to avoid the Ranch and Churchill MOA's unless prior entry has been scheduled. However, avoid the town and airport of Yerington to the west by 1500' or 3 NM.

(19) Caution: 80' tower on ridge, on route centerline between E and F at N39-14-20 W119-02-30.

(20) Maintain 1500' AGL from 3 NM south of Lahontan Reservoir until 5 NM southwest of G.

(21) Caution: VFR traffic crossing route above 8000' MSL along main highways west of HZN VORTAC.

(22) At E, avoid the extremely noise sensitive areas of Silver Springs and Fernley west of centerline, and Hazen to the east.

(23) Caution: 150' microwave tower located between G and H at N39-46 W118-50.

FSS's Within 100 NM Radius:

HHR, MCC, RAL, RNO, RIU

VR-1256

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | PRB 218/21 | N35°28.00' W120°58.00' |
| 15 AGL to | B | PRB 195/9 | N35°33.00' W120°43.00' |
| 02 AGL B 15 AGL to | C | AVE 185/17 | N35°23.00' W120°06.00' |
| 02 AGL B 15 AGL to | D | AVE 145/19 | N35°21.00' W119°51.00' |
| 02 AGL B 15 AGL to | E | FLW 350/6 | N35°12.00' W119°51.00' |
| 02 AGL B 15 AGL to | F | FLW 088/23 | N35°00.00' W119°25.00' |

TERRAIN FOLLOWING OPERATIONS: 5NM beyond B through F.

ROUTE WIDTH - 2 NM either side of centerline.

VR ROUTES

Special Operating Procedures:

- (1) Tie-in FSS: Rancho Murieta (RIU).
- (2) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (3) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (4) Cross Point A at 1500'AGL.
- (5) Avoid Hunter MOA complex and the Oak Country Airport north of centerline between A and B.
- (6) Avoid the town of Cayucos south of centerline between A and B by 3 NM.
- (7) Cross B at 1500' AGL.
- (8) Avoid town of Atascadero southeast of B by 3 NM.
- (9) California Valley between C and E is an Extreme Noise Sensitive Area. Fly north of centerline from 5 NM west of C to D to avoid a schoolhouse and the town of Simmler.
- (10) Caution: at D and east of centerline between D and E, intensive hang glider activity during daylight hours from surface to 10,000' MSL along Temblor Mountain Range.

FSS's Within 100 NM Radius:

HHR, NTD, OAK, RAL, VBG

VR-1257

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, Rm 121, NAS Lemoore, CA 93246-5022 DSN 949-1034, C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | BSR 142/10 | N36°02.00' W121°34.00' |
| 02 AGL B 15 AGL to | B | BSR 082/19 | N36°08.00' W121°15.00' |
| 15 AGL to | C | ROM 262/19 | N36°11.00' W121°03.00' |
| 02 AGL B 15 AGL to | D | ROM 301/5 | N36°12.00' W120°44.00' |
| 02 AGL B 15 AGL to | E | FLW 002/13 | N35°18.00' W119°47.00' |
| 02 AGL B 15 AGL to | F | FLW 088/23 | N35°00.00' W119°25.00' |
| 02 AGL B 15 AGL to | G | GMN 038/5 | N34°51.00' W118°47.00' |
| 10 AGL B 15 AGL to | H | LHS 355/7 | N34°48.00' W118°33.00' |
| 10 AGL B 15 AGL to | I | LHS 107/11 | N34°35.00' W118°23.00' |
| 10 AGL B 15 AGL to | J | PMD 150/9 | N34°29.00' W118°01.00' |
| 10 AGL B 15 AGL to | K | EDW 138/45 | N34°19.00' W117°19.00' |
| 10 AGL B 15 AGL to | L | HEC 194/26 | N34°25.00' W116°43.00' |
| 02 AGL B 15 AGL to | M | TNP 251/39 | N34°04.00' W116°33.05' |

| | | | |
|--------------------|---|------------|---------------------------|
| 25 AGL to | N | TNP 217/24 | N33°52.00' W116°08.55' |
| 02 AGL B 15 AGL to | O | TRM 073/18 | N33°39.00' W115°48.00' |
| 10 AGL B 15 AGL to | P | JLI 350/11 | N33°19.00' W116°34.00' |
| 02 AGL B 15 AGL to | Q | JLI 143/5 | N33°04.00' W116°33.00' |
| 02 AGL B 15 AGL to | R | JLI 084/29 | N33°04.00' W116°01.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from B to R.

ROUTE WIDTH - 2 NM either side of centerline from A to M; 2 NM left and 1 NM right of centerline from M to O; 2 NM either side of centerline from O to R.

Special Operating Procedures:

- (1) Weather minimums 3000' ceiling and 5 miles visibility.
- (2) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of Sunset and Sunrise.
- (3) Tie-in FSS: Fresno (FAT).
- (4) Alternate Entry: E, F, H, K and P.
- (5) Alternate Exit: E, H, K, O and Q.
- (6) Pilots exiting route at Point R must obtain target times in R-2510 prior to flying route.
- (7) Avoid the Monastery in Lucia near Point A.
- (8) CAUTION: High density Army Helicopter OPS in and around R-2513 between Points A and B. Cross Points A and B at 1500' AGL.
- (9) Maintain centerline between Points B and C.
- (10) Avoid King City enroute to Point C by 3 NM.
- (11) Avoid airfield and buildings 1 NM southeast of Parkfield between Points D and E.
- (12) Cross I-5 between Points F and G at 1500' AGL. CAUTION: Unscheduled blasting at G (N34-51 W118-46) by National Cement Co.(debris up to 2000' AGL).
- (13) Cross Hwy 14 between Points I and J at 1500' AGL.
- (14) Avoid Aqua Dulce Airport between Points I and J by 3 NM.
- (15) Avoid Crystal Airport area west of Point J.
- (16) Cross I-15 between Points J and K at 1500' AGL.
- (17) Maintain route centerline between Points J and K to avoid glider activity near Crystal Airport and the Table Mountain Observatory 4 miles west of Wrightwood.
- (18) When exiting at Point K, beware of aircraft descending from FL 240 to 8000' outbound on the Palmdale 104 radial.
- (19) Avoid Morongo Valley at Point M.
- (20) Cross Point O at 1500' AGL.
- (21) CAUTION: Beware extensive glider operations between Points O and Q.
- (22) Between Points O and P remain on or left of centerline and cross Hwy between Points O and P at 1500' AGL.
- (23) Remain completely east of Hot Springs Mountain Ridge Line (near Point P) to avoid extremely heavy glider traffic from Warner Springs Ranch Airport.
- (24) Between Points Q and R avoid Carroll Airport and Aqua Caliente Springs Airport.
- (25) CAUTION:
 - (a) 110' tower 2 NM east of Point A on route centerline;
 - (b) 114' tower 5 NM southeast of Point E on route centerline;
 - (c) 120' tower at Point G;

- (d) 199' tower at Point K (N34-24-01 W117-20-36);
- (e) 199' tower 1.5 NM northeast of Point M (N34-03-54 W116-32-42);
- (f) 140' tower 4.5 NM East of Point O.

FSS's Within 100 NM Radius:

HHR, NTD, NZY, OAK, RAL, RIU, SAN, VBG

VR-1259

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | TPH 074/32 | N38°01.00' W116°22.00' |
| 02 AGL B 15 AGL to | B | TPH 083/61 | N37°51.00' W115°46.00' |
| 02 AGL B 15 AGL to | C | ILC 214/41 | N37°49.00' W115°03.00' |
| 02 AGL B 15 AGL to | D | ILC 220/11 | N38°09.00' W114°35.00' |
| 02 AGL B 15 AGL to | E | BQU 101/76 | N40°10.00' W114°18.00' |
| 02 AGL B 15 AGL to | F | BQU 076/45 | N40°43.00' W114°46.00' |
| 02 AGL B 15 AGL to | G | BQU 128/13 | N40°35.00' W115°36.00' |
| 02 AGL B 15 AGL to | H | BAM 094/32 | N40°22.00' W116°16.00' |
| 02 AGL B 15 AGL to | I | LLC 071/23 | N40°08.00' W118°04.00' |
| 02 AGL B 15 AGL to | J | LLC 092/21 | N40°01.00' W118°09.00' |
| 02 AGL B 15 AGL to | K | LLC 111/19 | N39°56.00' W118°14.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to I; 2 NM either side of centerline from I to K.

Special Operating Procedures:

- (1) Alternate Entry: F.
- (2) Alternate Exit: F, I and J.
- (3) Tie-in FSS: Rancho Murieta (RIU).
- (4) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (5) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (6) Reserving this route does not reserve Nellis AFB Range airspace or the Desert or Reveille MOA's. Contact the 99th Range Management Office, Nellis AFB, DSN 348-4710,

C702-652-4710 for range scheduling. Schedule as far in advance as possible. Contact Nellis Control on 343.0 (P), 392.15 (S) for clearance into Nellis AFB airspace.

- (7) Reserving this route does not reserve Gandy MOA. Contact the 388th RANS at DSN 777-4401, C801-777-4401 for airspace entry authorization prior to flight. Contact Clover Control on 301.7 or 134.1 prior to Gandy entry. If unable, maintain MARSAs, and broadcast route number, crossing time, and altitude in the blind.
- (8) Caution: numerous crossing routes between A and C, and F and I.
- (9) Reserving this route does not reserve NAS Fallon Range airspace. Contact NAS Fallon Range Department, DSN 890-2416/2418, C775-426-2416/2418 for airspace entry prior to flight. Contact Desert Control on 126.6 or 322.35 prior to Range entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSAs while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (10) Between H and I, avoid ranch at N40-18-30 W116-35-00 by 1500' or 3 NM.

FSS's Within 100 NM Radius:

CDC, RNO

VR-1260

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | TPH 075/28 | N38°01.00' W116°27.00' |
| 02 AGL B 15 AGL to | B | TPH 072/61 | N38°03.00' W115°45.00' |
| 02 AGL B 15 AGL to | C | TPH 059/84 | N38°22.00' W115°19.00' |
| 02 AGL B 15 AGL to | D | BAM 120/126 | N39°00.00' W115°07.00' |
| 02 AGL B 15 AGL to | E | BAM 103/87 | N39°48.00' W115°19.00' |
| 02 AGL B 15 AGL to | F | BAM 134/33 | N40°05.00' W116°35.00' |
| 02 AGL B 15 AGL to | G | BAM 182/31 | N40°05.00' W117°09.00' |
| 02 AGL B 15 AGL to | H | LLC 073/22 | N40°07.00' W118°06.00' |
| 02 AGL B 15 AGL to | I | LLC 092/21 | N40°01.00' W118°09.00' |
| 02 AGL B 15 AGL to | J | LLC 111/19 | N39°56.00' W118°14.50' |

VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: E.
- (2) Alternate Exit: E and H.
- (3) Tie-in FSS: Rancho Murieta (RIU).
- (4) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (5) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (6) Reserving this route does not reserve Nellis AFB Range airspace or the Reveille MOA. Contact the 99th Range Management Office, Nellis AFB, DSN 348-4710, C702-652-4710 for range scheduling. Schedule as far in advance as possible. Contact Nellis Control on 343.0 (P), 392.15 (S) for clearance into Nellis AFB airspace.
- (7) Reserving this route does not reserve NAS Fallon Range airspace. Contact NAS Fallon Range Department, DSN 890-2416/2418, C775-426-2416/2418 for airspace entry authorization prior to flight. Contact Desert Control on 126.6 or 322.35 prior to Range entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.

FSS's Within 100 NM Radius:

CDC, RNO

VR-1261

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | ENI 273/48 | N39°19.00' W124°15.00' |
| 02 AGL B 15 AGL to | B | ENI 311/48 | N39°43.00' W123°50.00' |
| 02 AGL B 15 AGL to | C | RBL 243/49 | N39°58.00' W123°17.00' |
| 02 AGL B 15 AGL to | D | RBL 270/43 | N40°19.00' W123°08.00' |
| 02 AGL B 15 AGL to | E | FJS 125/32 | N41°01.00' W122°23.00' |
| 02 AGL B 15 AGL to | F | FJS 071/60 | N41°26.00' W121°28.00' |
| 02 AGL B 15 AGL to | G | FMG 331/94 | N41°04.00' W120°07.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 02 AGL B 15 AGL to | H | LLC 261/45 | N40°12.50' W119°32.50' |
| 02 AGL B 15 AGL to | I | LLC 178/15 | N39°53.00' W118°39.50' |
| 02 AGL B 15 AGL to | J | LLC 096/11 | N40°03.50' W118°22.00' |
| 02 AGL B 15 AGL to | K | LLC 092/21 | N40°01.00' W118°09.00' |
| 02 AGL B 15 AGL to | L | LLC 110/19 | N39°56.00' W118°14.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized from B to L.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: E.
- (2) Alternate Exit: E and H.
- (3) Tie-in FSS: Rancho Murieta (RIU).
- (4) Reserving this route does not reserve the Carson MOA or R-4813 between H and J. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for authorization.
- (5) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSA while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (6) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (7) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (8) Between C and D, cross the Yolla Bolly Middle Eel Wilderness Area (N40-04 W123-14) at 1500' AGL.
- (9) Between D and E, cross the Chanchelulla Wilderness Area (N40-26 W123-00) at 1500' AGL.
- (10) Between D and E, avoid the noise sensitive town of Lewiston (N40-42 W122-48).

FSS's Within 100 NM Radius:

ACV, MCC, OAK, RNO, RIU

VR-1262

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------|----|--------------|---------------------------|
| As assigned to | A | BSR 151/32 | N35°40.00' W121°30.00' |

| | | | | |
|--------------------|---|------------|---------------------------|---|
| 02 AGL B 15 AGL to | B | PRB 219/21 | N35°28.00' W120°59.00' | (11) From 5 NM to 20 NM east of C, fly south of centerline to avoid the Extremely Noise Sensitive Area of California Valley, the town of Simmler, and a schoolhouse. |
| 15 AGL to | C | AVE 197/19 | N35°23.00' W120°11.00' | (12) Caution: 20 NM east of C, intensive hang glider activity during daylight hours from surface to 10,000 MSL along Temblor Mountain Range. |
| 02 AGL B 15 AGL to | D | EHF 211/21 | N35°14.00' W119°24.00' | (13) Caution: 269' tower north of D located at N35-17-00 W119-25-30. |
| 10 AGL B 15 AGL to | E | GMN 323/15 | N35°02.00' W118°58.00' | (14) At D, fly north of centerline to avoid the towns of Taft and Ford City. |
| 02 AGL B 15 AGL to | F | GMN 079/13 | N34°47.00' W118°36.00' | (15) Caution: numerous towers located between D and I: (a) 218' tower south of D-E centerline at N35-05-30 W119-15-00. |
| 02 AGL B 15 AGL to | G | EDW 250/31 | N34°56.00' W118°21.00' | (b) 299' tower north of D-E centerline at N35-08 W119-06. |
| 02 AGL B 15 AGL to | H | GMN 040/32 | N35°06.00' W118°19.00' | (c) 304' tower north of D-E centerline at N35-04-00 W118-59-30. |
| 02 AGL B 15 AGL to | I | EDW 310/23 | N35°18.00' W118°00.00' | (d) 246' tower north of E-F centerline at N35-02 W118-55. |
| 02 AGL B 15 AGL to | J | NID 293/15 | N35°51.00' W117°56.00' | (e) 577' tower east of G at N34-55-11 W118-19-01. |
| 02 AGL B 15 AGL to | K | BTY 226/69 | N36°15.00' W118°00.00' | (f) 235' windmills east of G-H centerline at N35-04 W118-19. |
| 02 AGL B 15 AGL to | L | BTY 235/49 | N36°32.00' W117°43.00' | (g) 292' tower southeast of H-I centerline at N35-07-30 W118-12-30. |
| 02 AGL B 15 AGL to | M | BTY 282/50 | N37°11.00' W117°40.00' | (16) Caution: numerous airports located between D and I: (a) Taft at N35-08-30 W119-26-00. |
| 02 AGL B 15 AGL to | N | OAL 176/32 | N37°29.00' W117°55.00' | (b) Tejon Ag at N34-59-30 W118-55-00. (c) Quail Lake at N34-46-30 W118-44-00. (d) Skyotee at N34-50 W118-25. (e) Lloyd at N34-55 W118-19. (f) Mountain Valley at N35-06-30 W118-26-00. (g) Tehachapi at N35-08-30 W118-26-00. (h) Mojave at N35-04-00 W118-09-00 (avoid by 3000' AGL or 5 NM). (i) California City at N35-09-30 W118-01-00 (intensive parachuting activity surrounding California City, surface to 15,000'). |

TERRAIN FOLLOWING OPERATIONS: C through N.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: B, F, H, I and K.
- (2) Alternate Exit: F, J and K.
- (3) Tie-in FSS: Rancho Murieta (RIU).
- (4) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (5) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (6) Ensure Hunter Low MOA scheduling deconfliction when scheduling this route with COMSTRKFIGHTWINGPAC.
- (7) Scheduling this route does not authorize entry into the R-2508 complex. Contact the R-2508 Central Coordinating Facility at DSN 527-2508 or C661-277-2508 for entry authorization and area familiarization briefing. Aircrews transiting the R-2508 complex are required to review FLIP-Area Planning-AP/1-California-Flight Hazards-R-2508, prior to flight. Segregation of air carrier operations in the Inyokern Corridor inside the Isabella MOA may result in denial of MOA airspace to MTR users. Contact Joshua Approach Control prior to entry into the Isabella MOA for entry approval.
- (8) Between A and B, fly west of centerline to avoid the California Sea Otter Refuge and the town of Cambria by 3 NM.
- (9) Cross B at 1500' AGL. Maintain 1500' AGL to C - Extremely Noise Sensitive Area. Fly north of centerline from B to 10 NM east of B to avoid the town of Cayucos, then cross over and stay south of centerline until east of Hwy 101 to avoid the town of Atascadero.
- (10) Avoid the Machesna Wilderness and Beartrap Canyon condor study areas south of C by 3 NM.
- (17) After R-2508 entry and check-in with Joshua Approach, check-in on R-2508 low altitude common frequency, 315.9 with callsign, number and type aircraft, and intentions. Monitor 315.9 until exiting R-2508 Complex.
- (18) Caution: high migratory bird activity between G and L during daylight hours.
- (19) Caution: high density, low altitude civil and military air traffic between G and I.
- (20) Avoid unauthorized entry into Inyokern VFR corridor between I and J.
- (21) Avoid unauthorized entry into R-2505 between I and K.
- (22) Caution: approaching K be alert for 420' antenna at N36-11-33 W118-00-24, and 196' antenna at N36-12-32 W118-00-07.
- (23) Avoid overflight of Olancho at K.

FSS's Within 100 NM Radius:

HHR, NTD, NZY, OAK, RAL, SAN, VBG

VR-1264

ORIGINATING ACTIVITY: Commander, Strike Fighter Wing, U.S. Pacific Fleet, 001 K Street, NAS Lemoore, CA 93246-5022 DSN 949-1034 (1530-2400Z Mon-Fri), C559-998-1034.

SCHEDULING ACTIVITY: Same as Originating Activity

VR ROUTES

HOURS OF OPERATION: Daylight hours, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | OAL 176/32 | N37°29.00' W117°55.00' |
| 02 AGL B 15 AGL to | B | OAL 208/21 | N37°45.00' W118°05.00' |
| 02 AGL B 15 AGL to | C | OAL 336/19 | N38°19.00' W117°49.00' |
| 02 AGL B 15 AGL to | D | MVA 040/19 | N38°44.00' W117°42.00' |
| 02 AGL B 15 AGL to | E | MVA 009/49 | N39°18.00' W117°34.00' |
| 02 AGL B 15 AGL to | F | LLC 111/51 | N39°35.00' W117°43.00' |
| 02 AGL B 15 AGL to | G | LLC 107/34 | N39°48.00' W117°58.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 6 NM either side of centerline.

Special Operating Procedures:

- (1) Tie-in FSS: Rancho Murieta (RIU).
- (2) Avoid all towns and airports along route by 1500' AGL or 3 NM.
- (3) Aircraft flying this route at night may be operating without flashing collision avoidance lights. Exercise extreme caution between the hours of sunset and sunrise.
- (4) Reserving this route does authorize access into the Fallon Range Complex, R-4816, or R-4813. Contact NAS Fallon Range Department at DSN 890-2416/2418 or C775-426-2416/2418 prior to flight for range entry authorization.
- (5) Between A and B, fly east of centerline to avoid the noise sensitive valley of Fish Lake, and the private airports of Dyer (N37-37 W118-00) and Circle L (N37-43-30 W118-04-30).
- (6) Between B and C, avoid the airport of Coaldale (N38-01-30 W117-53-00).
- (7) Caution: between B and 20 NM north of C, watch for aircraft on multiple crossing low levels, and merging traffic from the right at C on VR-1252 route.
- (8) Aircraft scheduled for NAS Fallon airspace shall attempt contact with Desert Control on 126.6 or 322.35 prior to entry at D. If unable to contact Desert prior to penetrating NAS Fallon airspace, maintain route, continue periodic calls and MARSAs while in MOA's until contact is established. Entry into Restricted Areas is not authorized without prior contact. Notify Desert of intentions to maneuver off route once established in MOA/Restricted Areas.
- (9) Caution: avoid the Fallon Range VFR corridor and extensive civilian VFR traffic surrounding US Hwy 50 approaching E, between 2000' AGL and 10,500' MSL.

FSS's Within 100 NM Radius:

RIU, RNO

VR-1265

ORIGINATING ACTIVITY: G-3, 3D MAW, MCAS Miramar, San Diego, CA 92145 DSN 267-9462, C858-577-9462.
Non-working hours DSN 267-9517/9518, C858-577-9517/9518.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| As assigned to | A | RZS 049/23 | N34°41.00' W119°21.00' |
| 02 AGL B 15 AGL to | B | GMN 121/4 | N34°45.00' W118°48.00' |
| 10 AGL B 15 AGL to | C | GMN 079/13 | N34°47.00' W118°36.00' |
| 10 AGL B 15 AGL to | D | PMD 245/16 | N34°35.00' W118°23.00' |
| 10 AGL B 15 AGL to | E | PMD 150/9 | N34°29.00' W118°01.00' |
| 10 AGL B 15 AGL to | F | PMD 102/42 | N34°19.00' W117°19.00' |
| 02 AGL B 15 AGL to 15 AGL until 10 NM past G then | G | DAG 199/37 | N34°27.00' W117°00.00' |
| 02 AGL B 15 AGL to | H | DAG 161/7 | N34°51.00' W116°34.00' |
| 02 AGL B 15 AGL to | I | GFS 238/52 | N34°52.00' W116°11.00' |
| 02 AGL B 15 AGL to | J | GFS 310/25 | N35°28.00' W115°28.00' |
| 02 AGL B 15 AGL to | K | EED 288/20 | N34°57.00' W114°49.00' |
| 02 AGL B 15 AGL to | L | TNP 042/4 | N34°09.00' W115°42.00' |
| 02 AGL B 15 AGL to | M | TNP 109/26 | N33°52.00' W115°20.00' |
| 02 AGL B 15 AGL to | N | BLH 167/17 | N33°19.00' W114°46.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Weather minimums 3000' and 5 miles.
- (2) Avoid Conover Airport between A and B, Aqua Duke Airport between D and E, Hesperia Air Lodge at F, Hart Mine Airport between J and K, and Desert Center Airport between M and N by 2000' or 3 NM.
- (3) Fly on or north of centerline between E and F to avoid Table Mountain Observatory at N34-23.0 W117-39.0, and glider activity near Crystal Airport.
- (4) Cross I-15 between E and F at 1500' AGL.
- (5) Comply with R-2501 restrictions when exiting at H or L.
- (6) Contact Los Angeles Center on 285.6 for IFR clearance when exiting R-2501.
- (7) Contact Yuma Approach Control on 314.0 or 374.8 for IFR clearance when exiting at Point N.

- (8) Alternate Entry: H and L.
- (9) Alternate Exit: H and L.
- (10) Avoid Newberry Springs N34-49.5 W116-38.3 by 1 NM (Noise Sensitive Area).
- (11) Special Coordination Instructions-Route conflicts with IR-211 between Points A and C, VR-1262 at Point C, VR-1257 between Points C and F, VR-232 at Point C, IR-200 between Points C and D, IR-425 between Points C and D, VR-1217 at Point F and between H and I, VR-1218 at Point F and between Point I and J, VR-1214 between G and H, IR-218 between M and N, VR-1206 at Point C, IR-212 between H and I, IR-213 between H and J, IR-217 between H and N, IR-216 between L and M, IR-214 at Point M, VR-1225 between I and L, VR-296 between K and L, IR-252 between K, I/M and N, IR-250 between K and L, VR-289 between K and M, IR-248 between L and M, VR-1267 between M and N, and VR-1268 between M and N.
- (12) Separation Criteria-scheduling coordinated by user for IR conflicts and See and Avoid for VR conflicts.
- (13) CAUTION: Tower located at N35-29-27 W115-33-27 between Points I and J 4.5 NM northwest of Point J.

FSS's Within 100 NM Radius:

HHR, PRC, RAL, RNO, SAN

VR-1266

ORIGINATING ACTIVITY: Commanding Officer, Yuma MCAS, Box 99160 Yuma, AZ 85369-9160 DSN 269-2326/2077, C928-269-2326/2077.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-1800 local (daylight hours)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | BZA 331/12 | N32°58.00' W114°40.00' |
| 02 AGL B 15 AGL to | B | BLH 233/22 | N33°27.00' W115°10.00' |
| 02 AGL B 15 AGL to | C | BLH 253/30 | N33°34.00' W115°21.00' |
| 02 AGL B 15 AGL to | D | TRM 084/29 | N33°34.00' W115°35.00' |
| 02 AGL B 15 AGL to | E | TRM 097/23 | N33°30.00' W115°44.00' |
| 02 AGL B 15 AGL to | F | JLI 350/11 | N33°19.00' W116°34.00' |
| 02 AGL B 15 AGL to | G | JLI 130/10 | N33°00.00' W116°28.00' |
| 02 AGL B 15 AGL to | H | JLI 085/32 | N33°03.00' W115°58.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to C; 2 NM either side of centerline from C to F; 1 NM right and 2 NM left of centerline from F to G; 2 NM either side of centerline from G to H.

Special Operating Procedures:

- (1) Alternate Entry: B.
- (2) Alternate Exit: E and F.
- (3) Comply with R-2507/2510 restrictions/scheduling.
- (4) Remain clear of Imperial National Wildlife Refuge below 3000' AGL between A and B.
- (5) Remain below 7000' MSL between E and F and between F and G.
- (6) Alternate Exit E is an alternate exit point only when used in conjunction with entry into R-2507. Remain at or below 1500' until established in R-2507.
- (7) Contact Yuma Range Control on 274.0 prior to exiting R-2507. Contact Los Angeles ARTCC on 291.7 prior to exiting R-2510, for return IFR clearance.
- (8) Extensive hang glider activity in the Warner Springs, Mount Laguna to San Felipe Valley and Hot Springs Area. Aggressive lookout doctrine required between Points F and G. Turn prior to (east of) Point F and remain east of centerline between Points F and G. Do not over-fly Warner Springs Airfield.
- (9) Do not overfly Aqua Caliente Springs Airport (N32-58 W116-18) below 3000' AGL.
- (10) Tie-in FSS requires confirmation of route usage a minimum of 2 hours prior to scheduled entry time.
- (11) High volume of rotary wing and FW traffic SFC-1000' AGL between A and C throughout the entire year.
- (12) Towers and powerlines from 120' to 300' AGL from the north end of the Salton Sea to Niland to Brawley within 2 NM of Hwy 111.
- (13) Avoid private airstrip located at N33-28 W115-53.

FSS's Within 100 NM Radius:

HHR, RAL, RNO, SAN

VR-1267

ORIGINATING ACTIVITY: Commanding Officer, Yuma MCAS, Box 99160 Yuma, AZ 85369-9160 DSN 269-2326/2077, C928-269-2326/2077.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-1800 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | BZA 331/12 | N32°58.00' W114°40.00' |
| 02 AGL B 15 AGL to | B | BLH 233/22 | N33°27.00' W115°10.00' |
| 02 AGL B 15 AGL to | C | BLH 290/20 | N33°47.00' W115°06.00' |
| 02 AGL B 15 AGL to | D | PKE 114/13 | N33°58.00' W114°29.00' |
| 02 AGL B 15 AGL to | E | PKE 076/46 | N34°05.00' W113°46.00' |
| 02 AGL B 15 AGL to | F | BLH 068/54 | N33°43.00' W113°42.00' |
| 02 AGL B 15 AGL to | G | BLH 090/59 | N33°21.00' W113°37.00' |

VR ROUTES

02 AGL B 15 AGL to H GBN 269/40 N33°06.00'
W113°27.00'
02 AGL B 15 AGL to I BZA 077/42 N32°45.00'
W113°46.00'

02 AGL B 15 AGL to D GBN 269/40 N33°06.00'
W113°27.00'
02 AGL B 15 AGL to E BZA 077/42 N32°45.00'
W113°46.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to D; 4 NM either side of centerline from D to E; 2 NM either side of centerline from E to I.

Special Operating Procedures:

- (1) Remain clear of Imperial National Wildlife Refuge below 3000' AGL between A and B.
- (2) Alternate Exits: C, G, and H.
- (3) Comply with R-2301 restrictions/scheduling.
- (4) Contact Yuma Range Control on 274.0 while within the confines of R-2301 for IFR return clearance.
- (5) Tie-in FSS requires confirmation of route usage a minimum of 2 hours prior to scheduled entry time.
- (6) High volume of rotary wing and FW traffic SFC-1000' AGL between A and C throughout the entire year.
- (7) Avoid the town of Hope (N33-43.3 W113-42.0) by 1 NM or 1500' minimum AGL.
- (8) Alternate Exit Point: G is an alternate exit point only when used in conjunction with entry into R-2308 A/B. Remain at or below 1500' AGL until established in R-2308 A/B.
- (9) Alternate Exit Point: H, exit at or above 1000' AGL to avoid Noise Sensitive Areas and crop dusting activities to the south.
- (10) Exit Point I will be used only in conjunction with entry into R-2301.
- (11) CAUTION: Numerous crop dusting activities in vicinity of farmlands between H and I. Remain at or above 1000' AGL between H and I.
- (12) Tower located at N32-43-36 W113-44-47 near Point I up to 315' AGL.

FSS's Within 100 NM Radius:

PRC, RAL, RNO, SAN

VR-1267A

ORIGINATING ACTIVITY: Commanding Officer, Yuma MCAS, Box 99160 Yuma, AZ 85369-9160 DSN 269-2326/2077, C928-269-2326/2077.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-1800 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 02 AGL B 15 AGL to | A | BLH 091/21 | N33°30.00' W114°21.00' |
| 02 AGL B 15 AGL to | B | BLH 068/54 | N33°43.00' W113°42.00' |
| 02 AGL B 15 AGL to | C | BLH 090/59 | N33°21.00' W113°37.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 2 NM either side of centerline from A to E.

Special Operating Procedures:

- (1) Alternate Exit: C and D.
- (2) Alternate Exit Point C is an alternate exit point only when used in conjunction with entry into R-2308 A/B. Remain at or below 1500' AGL until established in R-2308 A/B.
- (3) Alternate exit D, exit at or above 1000' AGL to avoid Noise Sensitive Area and crop dusting activities to the south.
- (4) Exit Point E will be used only in conjunction with entry into R-2301.
- (5) Comply with R-2301 restrictions/scheduling.
- (6) Contact Yuma Range Control on 274.0 while within the confines of R-2301 for IFR return clearance.
- (7) CAUTION: Numerous crop dusting activities in vicinity of farmlands between D and E. Remain at or above 1000' AGL between D and E.
- (8) Tie-in FSS requires confirmation of route usage a minimum of 2 hours prior to scheduled entry time.
- (9) Tower located at N32-43-36 W113-44-47 near Point E up to 315' AGL.

FSS's Within 100 NM Radius:

PRC, SAN

VR-1268

ORIGINATING ACTIVITY: Commanding Officer, Yuma MCAS, Box 99160 Yuma, AZ 85369-9160 DSN 269-2326/2077, C928-269-2326/2077.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-1800 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | BZA 331/12 | N32°58.00' W114°40.00' |
| 02 AGL B 15 AGL to | B | BLH 233/22 | N33°27.00' W115°10.00' |
| 02 AGL B 15 AGL to | C | BLH 290/20 | N33°47.00' W115°06.00' |
| 02 AGL B 15 AGL to | D | PKE 114/13 | N33°58.00' W114°29.00' |
| 02 AGL B 15 AGL to | E | PKE 076/46 | N34°05.00' W113°46.00' |
| 02 AGL B 15 AGL to | F | DRK 221/40 | N34°19.00' W113°08.00' |
| 02 AGL B 15 AGL to | G | DRK 251/25 | N34°40.00' W112°59.00' |
| 02 AGL B 15 AGL to | H | DRK 281/34 | N34°57.00' W113°06.50' |

| | | | |
|--------------------|---|------------|---------------------------|
| 02 AGL B 15 AGL to | I | EED 075/31 | N34°46.00' W113°51.00' |
| 02 AGL B 15 AGL to | J | EED 081/28 | N34°43.00' W113°55.00' |
| 02 AGL B 15 AGL to | K | PKE 076/46 | N34°05.00' W113°46.00' |
| 02 AGL B 15 AGL to | L | BLH 068/54 | N33°43.00' W113°42.00' |
| 02 AGL B 15 AGL to | M | GBN 269/40 | N33°06.00' W113°27.00' |
| 02 AGL B 15 AGL to | N | BZA 077/42 | N32°45.00' W113°46.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to D; 4 NM either side of centerline from D to E; 1 NM left and 4 NM right of centerline from E to H; 1 NM either side of centerline from H to I; 2 NM either side of centerline from I to N.

Special Operating Procedures:

- (1) Alternate Exit: L, M and N.
- (2) Exit L is an Alternate Exit only when used in conjunction with entry into restricted areas R-2308 A/B. Remain at or below 1500' AGL until established within R-2308 A/B.
- (3) Alternate Exit M, exit at or above 1000' AGL to avoid Noise Sensitive Area and crop dusting activities to the south.
- (4) Exit Point N will be used only in conjunction with entry into R-2301.
- (5) Comply with R-2301 restrictions/scheduling.
- (6) Contact Yuma Range Control on 274.0 while within the confines of R-2301 for IFR return clearance.
- (7) CAUTION: Numerous crop dusting activities in vicinity of farm lands between M and N. Remain at or above 1000' AGL between M and N.
- (8) Tie-in FSS requires confirmation of route usage a minimum of 2 hours prior to scheduled entry time.
- (9) High volume of rotary and fixed wing traffic SFC-1000' AGL between A and C.
- (10) Critical Bald Eagle breeding and nesting areas in the vicinity of Alamo Lake (N34-16.0 W113-34.0), below the Baghdad 1 MOA and to the north towards Mohan Peak (Point H) mid-Dec through mid-June. Recommended 1500' AGL when crossing Aquarius Mountains between H and I.
- (11) Tower located at N32-43-36 W113-44-47 near Point N up to 315' AGL.

FSS's Within 100 NM Radius:

PRC, RAL, RNO, SAN

VR-1293

ORIGINATING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSAA, 235 S. Flightline Rd, Edwards AFB, CA 93523-6460 DSN 527-2446, C661-277-2446.

SCHEDULING ACTIVITY: COMMANDER AFFTC, 412 OSS/OSR, 300 E. Yeager Blvd, Edwards AFB, CA 93524 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| As assigned to | A | LHS 011/9 | N34°48.70' W118°30.00' |
| SFC B 15 AGL to | B | EDW 270/32 | N35°07.00' W118°21.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) This route authorized only in direct support of AFFTC's test program.
- (2) Aircrews must be aware of airports within or near route corridor limits. Avoid flight within 1500' vertical or 3 NM horizontal of these airports when practical. Particular vigilance must be given to the following airports: N35-06.1 W118-25.4; N35-08.1 W118-26.4.
- (3) Special Coordination Procedures-Route conflicts with VR-1257 between points G-H, VR-1262 between F-H, SR-390 between A-B, IR-200 between E-I, and IR-425 between AD-AH.
- (4) Segregation of air carrier operations in the Isabella MOA may result in denial of MOA airspace to MTR users.
- (5) Users must schedule into complex MOA/Restricted Areas when these areas are active:
 - (a) R-2508 MOAs-Contact CCF at DSN 527-2508.
 - (b) R-2515-Contact AFFTC scheduling at DSN 527-4110/3940.
- (6) Contact Joshua Approach on 335.6/134.05 immediately upon entering the Isabella MOA.
- (7) Avoid Mojave Airport (N35-03.6 W118-09.1) Class D airspace when exiting at point B.
- (8) Victor Airways crosses route 7 NM northeast of Point A MEA 10,000 MSL.
- (9) Route Conflicts: VR-1206/VR-1265/VR-1257 all cross west to east at the Entry Point; IR-200/IR-211/IR-425 have same ground track with IR-425 being opposite direction; VR-1262 crosses from SW to NE.
- (10) Obstructions:
 - (a) Use caution crossing the R-2508 boundary, numerous windmills of various heights with some in excess of 350' AGL.
 - (b) 199' unlit tower, difficult to see, N35-52.6 W118-29.5
 - (c) 200' lit tower N35-07.84 W118-21.02

FSS's Within 100 NM Radius:

HHR, RAL, RNO, SAN

VR-1300

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous or by NOTAM

VR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| As assigned to | A | BOI 102/35 | N43°16.50' W115°30.00' |
| 01 AGL B 15 AGL to | B | BOI 094/78 | N43°04.00' W114°32.00' |
| 01 AGL B 15 AGL to | C | BOI 085/86 | N43°14.00' W114°16.50' |
| 01 AGL B 15 AGL to | D | PIH 257/26 | N42°54.00' W113°14.50' |
| 01 AGL B 15 AGL to | E | PIH 224/28 | N42°38.50' W113°12.00' |
| 01 AGL B 15 AGL to | F | PIH 203/42 | N42°19.80' W113°15.70' |
| 01 AGL B 15 AGL to | G | BYI 120/37 | N42°07.00' W113°18.50' |
| 01 AGL B 15 AGL to | H | BYI 153/32 | N42°03.00' W113°45.00' |
| 01 AGL B 15 AGL to | HH | BYI 182/43 | N41°54.50' W114°12.00' |
| 01 AGL B 15 AGL to | I | BOI 150/130 | N41°26.00' W115°34.00' |
| 01 AGL B 15 AGL to | J | BOI 163/117 | N41°36.50' W116°12.00' |
| 01 AGL B 15 AGL to | K | BOI 185/109 | N41°52.00' W117°06.00' |
| 01 AGL B 15 AGL to Alternate Exit: Y | L | BOI 206/59 | N42°50.00' W117°06.00' |
| 01 AGL B 15 AGL to | I1 | BOI 150/130 | N41°26.00' W115°33.50' |
| 01 AGL B 15 AGL to | X | BOI 149/119 | N41°37.00' W115°33.50' |
| 01 AGL B 15 AGL to | Y | BOI 146/97 | N42°00.00' W115°33.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM left and 6 NM right of centerline from B to C; 7 NM either side of centerline from C to D; 4 NM either side of centerline from D to G; 8 NM left and 5 NM right of centerline from G to H; 8 NM either side of centerline from H to K; 5 NM either side of centerline from K to L; 4 NM either side of centerline from X to Y.

Special Operating Procedures:

- Route crossing at several Points, be especially vigilant for crossing traffic.
- Due to bird strike potential, minimum altitude from 5 NM prior to and 5 NM past Point E is 1000' AGL.
- Avoid the following Noise Sensitive Areas by 1500' AGL or 3 NM:
 - City of Rocks (N42-05-00 W113-43-00);
 - Marys River area (N41-39-00 W115-06-00, N41-33-00 W115-20-00, N41-23-00 W115-14-00, N41-28-00 W114-59-00);
 - Mountain City (N41-50-30 W115-57-30);
 - Ranch (N41-43-50 W115-58-50);
 - Ward Ranch/uncharted airport (N42-03-00 W113-29-07);
 - Shoshone Ice Caves (N43-10-00 W114-20-30);
 - Richfield area (N43-07-00 W114-11-30);
 - Henry area (N41-42-10 W114-49-00).

- Avoid all airports by overflight of 1500' AGL vertically or 3 NM laterally: Uncharted airports (N41-55-30 W114-07-00), (N41-26-00 W115-47-00), (N41-39-00 W114-49-50).
- Uncharted obstructions:
 - Tower 190' AGL (N43-17-30 W113-11-50);
 - Tower 100' AGL (N42-35-24 W113-11-50);
 - Tower 75' AGL (N42-30-00 W113-10-00) on top of hill;
 - Tower 200' AGL (N43-09-45 W114-19-50).
- All turn points are considered Alternate Entry/Exit points.

FSS's Within 100 NM Radius:

BOI

VR-1301

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| 01 AGL B 15 AGL to | A | BOI 324/48 | N44°19.00' W116°33.00' |
| 01 AGL B 15 AGL to | B | BKE 117/21 | N44°35.00' W117°28.00' |
| 01 AGL B 15 AGL to | C | BKE 177/43 | N44°09.00' W118°06.00' |
| 01 AGL B 15 AGL to | D | IMB 117/46 | N44°05.00' W118°59.00' |
| 01 AGL B 15 AGL to | E | IMB 166/78 | N43°21.00' W119°53.00' |
| 01 AGL B 15 AGL to | F | REO 264/50 | N42°46.00' W118°58.00' |
| 01 AGL B 15 AGL to | G | REO VORTAC | N42°35.43' W117°52.09' |
| 01 AGL B 15 AGL to | H | REO 075/39 | N42°32.00' W117°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- Route crossing at several points, be especially vigilant for crossing traffic.
- Noise Sensitive Areas: Overfly at 1500' or avoid by 3 NM. Buildings (N44-08.0 W118-59.0).
- Avoid all airports by overflight by 1500' AGL or 3 NM. Uncharted airport: (N42-45.0 W118-28.0).
- Uncharted obstructions: None above 100' AGL.
- Ultralight activity: (N44-10.0 W118-14.0).
- All turn points are entry and exit points.
- Exit at Point H does not constitute clearance into Owyhee MOA.

FSS's Within 100 NM Radius:

BOI, MMV, RNO

VR-1302

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | BKE 133/29 | N44°25.00' W117°30.00' |
| 01 AGL B 15 AGL to | B | BOI 258/105 | N43°41.00' W118°36.00' |
| 01 AGL B 15 AGL to | C | REO 338/29 | N43°04.00' W117°54.00' |
| 01 AGL B 15 AGL to | D | REO 125/30 | N42°11.00' W117°28.00' |
| 01 AGL B 15 AGL to | E | REO 098/43 | N42°15.60' W117°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- Route crossing at several points, be especially vigilant for crossing traffic.
- Noise Sensitive Areas: Overfly at 1500' AGL or avoid by 3 NM. Buildings (N42-46.0 W117-53.0).
- Avoid all airports by overflight by 1500' AGL or 3 NM. Uncharted airports: (N44-08.0 W117-52.0), (N43-57.3 W118-08.0), (N43-45.3 W118-28.0), (N43-34.3 W118-33.0), (N42-47.0 W117-51.0).
- Uncharted obstructions: None above 100' AGL.
- Ultralight activity: (N44-10.0 W118-14.0).
- All turn points are entry and exit points.
- Exit at Point E does not constitute clearance into Owyhee MOA.
- Mine (N43-52.1 W118-14.5): Overfly at 1000' AGL and avoid by 3NM.

FSS's Within 100 NM Radius:

BOI, MMV, RNO

VR-1303

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| As assigned to | A | BOI 206/59 | N42°50.00' W117°06.00' |
| 01 AGL B 15 AGL to | B | BOI 185/109 | N41°52.00' W117°06.00' |
| 01 AGL B 15 AGL to | C | BOI 163/117 | N41°36.50' W116°12.00' |
| 01 AGL B 15 AGL to | D | BOI 150/130 | N41°26.00' W115°33.50' |
| 01 AGL B 15 AGL to | E | BYI 182/43 | N41°54.50' W114°12.00' |
| 01 AGL B 15 AGL to | F | BYI 153/32 | N42°03.00' W113°45.00' |
| 01 AGL B 15 AGL to | G | BYI 120/37 | N42°07.00' W113°18.50' |
| 01 AGL B 15 AGL to | H | PIH 203/42 | N42°19.80' W113°15.70' |
| 01 AGL B 15 AGL to | I | PIH 224/28 | N42°38.50' W113°12.00' |
| 01 AGL B 15 AGL to | J | PIH 257/26 | N42°54.00' W113°14.50' |
| 01 AGL B 15 AGL to | K | BOI 085/86 | N43°14.00' W114°16.50' |
| 01 AGL B 15 AGL to | L | BOI 094/78 | N43°04.00' W114°32.00' |
| 01 AGL B 15 AGL to Alternate Exit: Y | M | BOI 102/35 | N43°16.50' W115°30.00' |
| 01 AGL B 15 AGL to | D1 | BOI 150/130 | N41°26.00' W115°33.50' |
| 01 AGL B 15 AGL to | X | BOI 149/119 | N41°37.00' W115°33.50' |
| 01 AGL B 15 AGL to | Y | BOI 146/97 | N42°00.00' W115°33.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized the entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 8 NM either side of centerline from B to F; 5 NM left and 8 NM right of centerline from F to G; 4 NM either side of centerline from G to J; 7 NM either side of centerline from J to K; 6 NM left and 5 NM right of centerline from K to L; 5 NM either side of centerline from L to M; 4 NM either side of centerline from X to Y.

Special Operating Procedures:

- Route crossing at several points, be especially vigilant for crossing traffic.
- Due to bird strike potential, minimum altitude between 5 NM prior to and 5 NM past Point I is 1000' AGL.
- Avoid the following Noise Sensitive Areas by 1500' AGL or 3 NM:
 - City of Rocks (N42-05-00 W113-43-00);
 - Marys River area (N41-39-00 W115-06-00, N41-33-00 W115-20-00, N41-23-00 W115-14-00, N41-28-00 W114-59-00);

VR ROUTES

- (c) Mountain City (N41-50-30 W115-57-30);
 - (d) Ranch (N41-43-50 W115-58-50);
 - (e) Ward Ranch/uncharted airport (N42-03-00 W113-29-07);
 - (f) Shoshone Ice Caves (N43-10-00 W114-20-30);
 - (g) Richfield area (N43-07-00 W114-11-30);
 - (h) Henry area (N41-42-10 W114-49-00).
- (4) Avoid all airports by overflight of 1500' AGL vertically or 3 NM laterally: Uncharted airports (N41-55-30 W114-07-00, N41-26-00 W115-47-00, N41-39-00 W114-49-50).
- (5) Uncharted obstructions:
- (a) Tower 190' AGL (N43-17-30 W113-11-50);
 - (b) Tower 100' AGL (N42-35-24 W113-11-50);
 - (c) Tower 75' AGL (N42-30-00 W113-10-00) on top of hill;
 - (d) Tower 200' AGL (N43-09-45 W114-19-50).
- (6) All turn points are considered Alternate Entry/Exit points.

FSS's Within 100 NM Radius:

BOI

VR-1304

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------|----|--------------|---------------------------|
| Cross at 130 MSL to | A | BOI 069/48 | N43°35.50' W115°08.30' |
| 01 AGL B 15 AGL to | B | BOI 056/100 | N43°59.20' W114°00.50' |
| 01 AGL B 15 AGL to | C | PIH 300/65 | N43°39.00' W113°40.50' |
| 01 AGL B 15 AGL to | D | PIH 298/55 | N43°31.00' W113°32.50' |
| 01 AGL B 15 AGL to | E | PIH 295/40 | N43°18.50' W113°19.50' |
| 01 AGL B 15 AGL to | F | PIH 257/26 | N42°54.00' W113°14.50' |
| 01 AGL B 15 AGL to | G | PIH 224/28 | N42°38.50' W113°12.00' |
| 01 AGL B 15 AGL to | H | PIH 203/42 | N42°19.80' W113°15.70' |
| 01 AGL B 15 AGL to | I | BYI 120/37 | N42°07.00' W113°18.50' |
| 01 AGL B 15 AGL to | J | BYI 153/32 | N42°03.00' W113°45.00' |
| 01 AGL B 15 AGL to | JJ | BYI 182/43 | N41°54.50' W114°12.00' |
| 01 AGL B 15 AGL to | K | BOI 147/132 | N41°26.00' W115°33.50' |
| 01 AGL B 15 AGL to | L | BOI 163/117 | N41°36.50' W116°12.00' |
| 01 AGL B 15 AGL to | M | BOI 185/109 | N41°52.00' W117°06.00' |

| | | | |
|--------------------|----|-------------|---------------------------|
| 01 AGL B 15 AGL to | N | BOI 196/75 | N42°30.00' W117°06.00' |
| 01 AGL B 15 AGL to | O | BOI 206/59 | N42°50.00' W117°06.00' |
| 01 AGL B 15 AGL to | K1 | BOI 147/132 | N41°26.00' W115°33.50' |
| 01 AGL B 15 AGL to | X | BOI 146/121 | N41°37.00' W115°33.50' |
| 01 AGL B 15 AGL to | Y | BOI 143/99 | N42°00.00' W115°33.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 8 NM either side of centerline from A to F; 4 NM either side of centerline from F to I; 5 NM right and 8 NM left of centerline from I to J; 8 NM either side of centerline from J to M; 5 NM either side of centerline from M to O; 4 NM either side of centerline from X to Y; Alternate Exit; Y, 8 NM either side of centerline from K1 to X.

Special Operating Procedures:

- (1) Route crossing at several Points, be especially vigilant for crossing traffic.
- (2) Due to bird strike potential, minimum altitude from 5 NM prior to and 5 NM past Point G is 1000' AGL.
- (3) Noise Sensitive Areas: 1500' AGL minimum altitude from 5 NM prior to and 5 NM past Galena Highway (located between Points A and B).
- (4) Avoid the following Noise Sensitive Areas by 1500' AGL or 3 NM:
 - (a) City of Rocks (N42-05-00N W113-43-00).
 - (b) Marys River area: (N41-39-00N W115-06-00, N41-33-00N W115-20-00, N41-23-00N W115-14-00, N41-28-00 W114-59-00).
 - (c) Mountain City (N41-50-30 W115-57-30).
 - (d) Ranch (N41-43-50 W115-58-50).
 - (e) Ward Ranch/uncharted airport (N42-03-00 W113-29-07).
 - (f) Craters of the Moon National Monument (N43-27-45 W113-33-00).
 - (g) Henry area (N41-42-10 W114-49-00).
- (5) Helicopter ski operations in the Boulder and Pioneer Mountains (east of W114-30-00) are conducted in daylight hours from 1 Dec to 30 Apr. Maintain 1500' AGL minimum altitude between Points A and B during this time frame.
- (6) Avoid all airports by overflight of 1500' AGL vertically or 3 NM laterally. Uncharted airports (N41-55-30 W114-07-00), (N41-26-00 W115-47-00), (N41-39-00 W114-49-50).
- (7) Uncharted obstructions:
 - (a) Tower 190' AGL (N43-17-30 W113-11-50);
 - (b) Tower 100' AGL (N42-35-24 W113-11-50);
 - (c) Tower 75' AGL (N42-30-00 W113-10-00).
- (8) All turn points are considered alternate entry/exit points.

FSS's Within 100 NM Radius:

BOI, MMV, RNO

VR-1305

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| As assigned to | A | BOI 206/59 | N42°50.00' W117°06.00' |
| 01 AGL B 15 AGL to | B | BOI 196/75 | N42°30.00' W117°06.00' |
| 01 AGL B 15 AGL to | C | BOI 185/109 | N41°52.00' W117°06.00' |
| 01 AGL B 15 AGL to | D | BOI 163/117 | N41°36.50' W116°12.00' |
| 01 AGL B 15 AGL to | E | BOI 150/130 | N41°26.00' W115°33.50' |
| 01 AGL B 15 AGL to | F | BYI 182/43 | N41°54.50' W114°12.00' |
| 01 AGL B 15 AGL to | G | BYI 153/32 | N42°03.00' W113°45.00' |
| 01 AGL B 15 AGL to | H | BYI 120/37 | N42°07.00' W113°18.50' |
| 01 AGL B 15 AGL to | I | PIH 203/42 | N42°19.80' W113°15.70' |
| 01 AGL B 15 AGL to | J | PIH 224/28 | N42°38.50' W113°12.00' |
| 01 AGL B 15 AGL to | K | PIH 257/26 | N42°54.00' W113°14.50' |
| 01 AGL B 15 AGL to | L | PIH 295/40 | N43°18.50' W113°19.50' |
| 01 AGL B 15 AGL to | M | PIH 298/55 | N43°31.00' W113°32.50' |
| 01 AGL B 15 AGL to | N | PIH 300/65 | N43°39.00' W113°40.50' |
| 01 AGL B 15 AGL to | O | BOI 057/98 | N43°59.20' W114°00.50' |
| 01 AGL B 15 AGL to Alternate Exit: Y | P | BOI 070/46 | N43°35.50' W115°08.30' |
| 01 AGL B 15 AGL to | E1 | BOI 150/130 | N41°26.00' W115°33.50' |
| 01 AGL B 15 AGL to | X | BOI 149/119 | N41°37.00' W115°33.50' |
| 01 AGL B 15 AGL to | Y | BOI 146/97 | N42°00.00' W115°33.50' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to C; 8 NM either side of centerline from C to G; 5 NM left and 8 NM right of centerline from G to H; 4 NM either side of centerline from H to K; 8 NM either side of centerline from K to P; 4 NM either side of centerline from X to Y.

Special Operating Procedures:

- (1) Route crossing at several points, be especially vigilant for crossing traffic.
- (2) Due to bird strike potential, minimum altitude from 5 NM prior to 5 NM past Point G is 1000' AGL.

- (3) Noise Sensitive Areas: 1500' AGL minimum altitude from 5 NM prior to 5 NM past Galena Highway (located between Points O and P).
- (4) Avoid the following Noise Sensitive Areas by 1500' AGL or 3 NM:
 - (a) City of Rocks (N42-05-00 W113-43-00).
 - (b) Marys River area (N41-39-00 W115-06-00, N41-33-00 W115-20-00, N41-23-00 W115-14-00, N41-28-00 W114-59-00).
 - (c) Mountain City (N41-50-30 W115-57-30).
 - (d) Ranch (N41-43-50 W115-58-50).
 - (e) Ward Ranch/uncharted airport (N42-03-00 W113-29-07).
 - (f) Craters of the Moon National Monument (N43-27-45 W113-33-00).
 - (g) Henry area (N41-42-10 W114-49-00).
- (5) Helicopter ski operations in the Boulder and Pioneer Mountains (east of W114-30-00) are conducted in daylight hours from 1 Dec to 30 Apr. Maintain 1500' AGL minimum altitude between Points O and P during this time frame.
- (6) Avoid all airports by overflight of 1500' AGL vertically or 3 NM laterally: Uncharted airports (N41-55-30 W114-07-00), (N41-26-00 W115-47-00), (N41-39-00 W114-49-50).
- (7) Uncharted obstructions:
 - (a) Tower 190' AGL (N43-17-30 W113-11-50).
 - (b) Tower 100' AGL (N42-35-24 W113-11-50).
 - (c) Tower 75' AGL (N42-30-00 W113-10-00).
- (8) All turn points are considered Alternate Entry/Exit Points.

FSS's Within 100 NM Radius:

BOI

VR-1350

ORIGINATING ACTIVITY: Commanding Officer (N38), NAS Whidbey Island, 3730 N. Charles Porter Ave, Oak Harbor, WA 98278-5300 DSN 820-2877, C360-257-2877. Sked hrs 0700-1600 lcl, Mon-Fri. Same day sked between 0700-1130 lcl for entry after 1400 lcl.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | NUW 061/24 | N48°25.80' W122°04.90' |
| 02 AGL B 15 AGL to | B | NUW 074/66 | N48°18.10' W121°01.50' |
| 02 AGL B 15 AGL to | C | EPH 283/48 | N47°49.00' W120°24.00' |
| 15 AGL to | Q | EPH 294/33 | N47°46.20' W120°00.00' |
| 02 AGL B 15 AGL to | D | EPH 321/21 | N47°43.00' W119°35.20' |
| 10 AGL B 15 AGL to | E | EPH 231/28 | N47°14.10' W120°04.00' |
| 02 AGL B 15 AGL to | F | YKM 043/29 | N46°47.00' W119°48.00' |
| 02 AGL B 15 AGL to | G | YKM 085/26 | N46°26.80' W119°50.10' |

VR ROUTES

02 AGL B 15 AGL to H PDT 297/40 N46°11.00'
W119°36.00'
02 AGL B 15 AGL to I LTJ 063/46 N45°47.70'
W120°01.00'
02 AGL B 15 AGL to J PDT 253/31 N45°43.50'
W119°41.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Route speed schedules in 60 knot increments. Average route speed may not exceed 420 knots. Indicate desired speed when scheduling. Advise scheduling agency when MARSA. Route entry times must be within 3 minutes of scheduled time.
- (2) Route not usable Points A to D for other than NAS Whidbey based units.
- (3) Avoid city of Sedro Woolley, WA by 3 NM while transitioning to the route.
- (4) Contact Seattle FSS on 255.4 when entering route.
- (5) Remain on or left of centerline between A and B due to logging activity and head-on traffic on VR-1355.
- (6) Route crosses IR-348 between A and C; IR-327 and IR-328 between C and D; IR-324 and IR-325 between C and E; and IR-341 at D.
- (7) Avoid Silver Fox Farm between C and D, located at N47-47.7 W120-13.5 by 1500' AGL and 2 NM north of centerline.
- (8) CAUTION: Crop dusting activity (seasonal) below 500' AGL between C and J. Fly no lower than 300' AGL from Point F to 5 NM south of Point F during agricultural spray season (1 Apr-31 Aug).
- (9) Alternate Entry: D.
- (10) CAUTION: Head-on traffic with IR-329 between E and I.
- (11) CAUTION: Intensive C-130/C-17 activity inbound to Moses Lake Drop Zone (paradrops) in vicinity of N47-03 W119-40.
- (12) CAUTION: Heavy hangliding activity Apr-Oct off Chelan Butte in the vicinity of D.
- (13) Remain right of centerline between F and G until south of Columbia River to avoid Saddle Mountain National Wildlife Refuge.
- (14) Alternate Exits: F and I.
- (15) Noise Sensitive Areas: Avoid Prosser, WA in vicinity of N46-12 W119-47.0 between Points G and H by 1500' AGL or 3 NM. Exercise extreme caution to avoid buildings/houses Points G to H by 500' AGL.
- (16) Route crosses VR-1351 between Points A and D; VR-1351 between H and J; and VR-1355 between I and J.
- (17) CAUTION: Crop dusting activity in vicinity of Paterson Airport (N45-59.0 W119-34.0) and 100 Circles Airport (N45-53.1 W119-48.2) between Points H and I.
- (18) Boardman Complex (R-5701, R-5706, Boardman MOA), shall be scheduled prior to use. Prior to entering, contact Boardman Range Control on 305.8/126.2.
- (19) CAUTION: Crop dusting activity in vicinity of Taggares Farms Airport, (approximately 10 NM west of Boardman Bull at N45-45.1 W119-56.4) within R-5701. Request advisory from Boardman Range Control.
- (20) Upon entering Boardman Complex, avoid city of Arlington by 3000' AGL or 5 NM.

FSS's Within 100 NM Radius:

MMV, SEA

VR-1351

ORIGINATING ACTIVITY: Commanding Officer (N38), NAS Whidbey Island, 3730 N. Charles Porter Ave, Oak Harbor, WA 98278-5300 DSN 820-2877, C360-257-2877. Sked hrs 0700-1600 lcl, Mon-Fri. Same day sked between 0700-1130 lcl for entry after 1400 lcl.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | NUW 061/24 | N48°25.80' W122°04.90' |
| 02 AGL B 15 AGL to | B | NUW 074/66 | N48°18.10' W121°01.50' |
| 02 AGL B 15 AGL to | C | EPH 283/48 | N47°49.00' W120°24.00' |
| 15 AGL to | Q | EPH 294/33 | N47°46.20' W120°00.00' |
| 02 AGL B 15 AGL to | D | EPH 321/21 | N47°43.00' W119°35.20' |
| 02 AGL B 15 AGL to | E | EPH 001/31 | N47°51.50' W119°08.00' |
| 05 AGL B 15 AGL to | F | GEG 279/42 | N47°54.50' W118°32.00' |
| 05 AGL B 15 AGL to | G | GEG 229/34 | N47°22.50' W118°24.00' |
| 02 AGL B 15 AGL to | H | GEG 191/29 | N47°09.00' W118°00.00' |
| 02 AGL B 15 AGL to | I | PDT 009/61 | N46°35.30' W118°13.20' |
| 02 AGL B 15 AGL to | J | PDT 353/15 | N45°56.70' W118°51.40' |
| 02 AGL B 15 AGL to | K | PDT 297/40 | N46°11.20' W119°36.00' |
| 02 AGL B 15 AGL to | L | LTJ 063/46 | N45°47.70' W120°01.00' |
| 02 AGL B 15 AGL to | M | PDT 253/31 | N45°43.50' W119°41.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Route speed schedules in 60 Kt increments. Average route speed may not exceed 420 Kt. Indicate desired speed when scheduling. Advise scheduling agency when MARSA. Route entry times must be within 3 minutes of scheduled time.
- (2) Route not usable Points A to D for other than NAS Whidbey based units.
- (3) Avoid Sedro Woolley, WA by 3 NM while transitioning to the route.
- (4) Contact Seattle FSS 255.4 when entering route.

- (5) Remain on centerline or left of centerline between Points A and B due to logging activity and conflict with VR-1355.
- (6) Route crosses IR-348 between Points A and C; IR-327 and IR-328 between Points C and G; IR-324 and IR-325 between Points C and H; IR-330 between Points F and G; IR-326 and IR-341 between Points G and J; IR-329 between Points I and J; and VR-1350 between Points A and D, and Points L and M.
- (7) Avoid Silver Fox Farm between Points C and D, located at N47-47.7 W120-13.5 by 1500' AGL and 2 NM north of centerline.
- (8) Alternate Entry: D.
- (9) Route conflicts with IR-341 at Point D.
- (10) CAUTION: Crop dusting activity below 500' AGL between Points D and M. Fly no lower than 300' AGL between Points I and L during agricultural spray season (1 Apr-31 Aug).
- (11) Avoid TPC uncharted Sheffles Airfield located right of centerline at N47-49.0 W118-47.0 by 1500' AGL or 3 NM between Points E and F.
- (12) CAUTION: Forest fire suppression air activity/PBY air tanker water (SCOOP) point at Lake Roosevelt between Points E and F during fire season, normally May-Oct.
- (13) Noise Sensitive Areas: Avoid Ostrich Farm located left of centerline, in vicinity of N47-47.0 W118-24.0, southeast of Point F by 500' AGL or 1 NM.
- (14) Alternate Exits: F and L.
- (15) CAUTION: Heavy hangliding activity Apr-Oct off Chelan Butte in the vicinity of Point D.
- (16) Avoid town of Benge and Clinesmith Airfield (1 NM north of Benge) by 1500' AGL or 3 NM to the east, approximately 14 miles south of Point H.
- (17) CAUTION: Head-on non-deconflicted VR-1354 traffic between Points I and J.
- (18) Uncharted airfield in vicinity N45-54.1 W119-56.1 between Points K and L.
- (19) CAUTION: Crop dusting activity in vicinity of Patterson Airport (N45-59.0 W119-34.0) and 100 Circles Airport (N45-53.1 W119-48.2) between Points K and L.
- (20) Boardman Complex (R-5701, R-5706, Boardman MOA) shall be scheduled prior to use. Prior to entering, contact Boardman Range Control 305.8/126.2.
- (21) CAUTION: Crop dusting activity in vicinity of Taggares Farms Airport (approximately 10 NM west of Boardman Bull at N45-45.1 W119-56.4 within R-5701. Request advisory from Boardman Range Control.
- (22) Upon entering Boardman Complex, avoid the city of Arlington by 3000' AGL or 5 NM.

FSS's Within 100 NM Radius:

MMV, SEA

VR-1352

ORIGINATING ACTIVITY: Commanding Officer (N38), NAS Whidbey Island, 3730 N. Charles Porter Ave, Oak Harbor, WA 98278-5300 DSN 820-2877, C360-257-2877. Sked hrs 0700-1600 lcl, Mon-Fri. Same day sked between 0700-1130 lcl for entry after 1400 lcl.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | IMB 003/8 | N44°46.20' W119°38.20' |
| 02 AGL B 15 AGL to | B | REO 285/67 | N43°12.40' W119°08.30' |
| 02 AGL B 15 AGL to | C | REO 275/21 | N42°44.00' W118°18.00' |
| 02 AGL B 15 AGL to | D | REO 153/17 | N42°19.00' W117°49.00' |
| 02 AGL B 15 AGL to | E | LLC 010/58 | N40°59.00' W117°59.00' |
| 02 AGL B 15 AGL to | F | LLC 073/23 | N40°08.00' W118°04.00' |
| 02 AGL B 15 AGL to | G | HZN 035/49 | N40°01.00' W118°09.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Route speed schedules in 60 Kt increments. Max ground speed not to exceed 420 Kt. Indicate desired speed when scheduling. Advise scheduling agency when MARSA. Route entry times must be within 3 minutes of scheduled time.
- (2) Prior coordination required with NAS Fallon Range Schedules DSN 890-2416/2418, C775-426-2416/2418, for target scheduling.
- (3) If practicable, aircrews requested not to overfly the John Day Fossil Beds National Monument in accordance with FAA Advisory Circular 91-36C.
- (4) From Point A to a point 10 NM south of Dayville, or (where the route crosses the John Day River) the minimum altitude is 1000' AGL. Noise Sensitive Area.
- (5) Avoid the city of Dayville, Oregon in vicinity N44-28.0 W119-32.0 (20 NM south of Point A) by 1500' AGL or 3 NM. Noise Sensitive Area. Avoid flight within 1500' or 3 NM of Land's Inn Airport and Long View Ranch Airport between Points A and B when practicable.
- (6) Route crosses IR-343 at Point A; IR-316 and IR-319 between Points A and B; VR-1301 between Points A and D; IR-304 between Points C and D; IR-300 and IR-303 between Points D and E; SR-300 and SR-301 between Points E and F; VR-1259, VR-1260 and IR-281 at Point F.
- (7) Maintain 1500' AGL between N43-25.0 W119-13.0 and N42-55.0 W118-40.0 to avoid Malheur National Wildlife Refuge between Points A and C.
- (8) CAUTION: Forest fire suppression helicopter activity approximately 19 NM past Point A at Dayview Helibase (N44-27.2 W119-30.7) during fire season, normally May-Oct.
- (9) Alternate Entry Points: C and F.
- (10) Avoid McDermott State Airport near edge of route between D and E by 3 NM.
- (11) CAUTION: Uncharted airports at (N41-35.6 W117-50.0), (N41-31.2 W117-50.4) approximately 36 NM prior to Point E. Crop dusting in this area may be expected in the spring and summer months.
- (12) CAUTION: 150' AGL transmission lines between Points E and F at N40-30.0 W118-00.0.
- (13) Alternate Exit Point: F.
- (14) Pilots exiting at Point G must contact Desert Control on 322.35 prior to entering R-4813.

VR ROUTES

FSS's Within 100 NM Radius:

BOI, MMV, RNO, RIU

VR-1353

ORIGINATING ACTIVITY: Commanding Officer (N38), NAS Whidbey Island, 3730 N. Charles Porter Ave, Oak Harbor, WA 98278-5300 DSN 820-2877, C360-257-2877. Sked hrs 0700-1600 lcl, Mon-Fri. Same day sked between 0700-1130 lcl for entry after 1400 lcl.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | SDO 243/35 | N41°19.00' W118°48.00' |
| 10 AGL B 15 AGL to | B | LKV 093/47 | N42°12.00' W119°32.00' |
| 10 AGL B 15 AGL to | C | LKV 064/11 | N42°31.00' W120°15.00' |
| 05 AGL B 15 AGL to | Q | LKV 321/36 | N43°03.80' W120°47.50' |
| 05 AGL B 15 AGL to | Q1 | LKV 331/59 | N43°28.00' W120°45.00' |
| 05 AGL B 15 AGL to | Q2 | IMB 187/62 | N43°43.50' W120°21.00' |
| 02 AGL B 15 AGL to | D | PDT 226/72 | N45°12.00' W120°30.00' |
| 02 AGL B 15 AGL to | E | PDT 244/38 | N45°38.00' W119°50.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from C to E.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Route speed schedules in 60 Kt increments. Average route speed may not exceed 420 Kt. Indicate desired speed when scheduling. Advise scheduling agency when MARSAs. Route entry times must be within 3 minutes of scheduled time.
- (2) Contact nearest FSS on 255.4 when entering route.
- (3) Route crosses SR-300 and SR-301 between Points A and C. SR-301 is opposite direction.
- (4) Remain south of centerline between 42-10.0N 42-30.0N in the vicinity of Hart Mountain National Wildlife Refuge, between Points B and C.
- (5) Route crosses IR-342 between Points C and D.
- (6) Alternate Entry: C and D.
- (7) At Point Q, aircraft shall make an alert call (in the blind) on 272.15 to inform aircraft operating in Juniper MOA of their presence. The alert call will consist of call sign, route, speed, and estimated time to Juniper MOA.
- (8) CAUTION: Forest fire suppression helicopter activity left of centerline approximately 8 NM south of Point Q1 at Ft. Rock Helibase (N43-26.1 W120-50.6) and Ft. Rock Airstrip (N43-20.4 W120-50.6) during fire season, normally May-Oct.
- (9) Alternate Exit: D.

(10) CAUTION: Crop dusting activity (seasonal) below 500' AGL between Points D and E.

(11) Route crosses IR-342, IR-344 and IR-346 between Points D and E.

FSS's Within 100 NM Radius:

MMV, RNO

VR-1354

ORIGINATING ACTIVITY: Commanding Officer (N38), NAS Whidbey Island, 3730 N. Charles Porter Ave, Oak Harbor, WA 98278-5300 DSN 820-2877, C360-257-2877. Sked hrs 0700-1600 lcl, Mon-Fri. Same day sked between 0700-1130 lcl for entry after 1400 lcl.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | PDT 256/29 | N45°45.00' W119°38.00' |
| 10 AGL B 15 AGL to | B | PDT 283/24 | N45°55.00' W119°25.00' |
| 02 AGL B 15 AGL to | C | PDT 353/15 | N45°56.70' W118°51.50' |
| 02 AGL B 15 AGL to | D | PDT 005/39 | N46°17.20' W118°32.80' |
| 02 AGL B 15 AGL to | E | GEG 177/63 | N46°34.00' W118°06.10' |
| 02 AGL B 15 AGL to | F | GEG 136/35 | N47°02.00' W117°18.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Route speed schedules in 60 Kt increments. Average route speed may not exceed 420 Kt. Indicate desired speed when scheduling. Advise scheduling agency when MARSAs. Route entry times must be within 3 minutes of scheduled time.
- (2) Contact nearest FSS 255.4 when entering route.
- (3) CAUTION: Crop dusting activity in vicinity of Eastern Farms Oregon Airport (approximately 5 NM Northeast of Boardman Bull at N45-46.5 W119-36.4 within R-5701. Request advisory from Boardman Range Control.
- (4) Avoid R-5704 between Points A and B. Remain within the route structure while avoiding the restricted area.
- (5) CAUTION: Crop dusting activity (seasonal) below 500' AGL throughout the entire route. Fly no lower than 300' AGL from Point C and E during agricultural season (1 Apr-31 Aug).
- (6) Alternate Entry: B.
- (7) CAUTION: Head-on traffic with VR-1351 between Points C and D.
- (8) CAUTION: Head-on traffic with IR-326 between Points D and F.
- (9) Route crosses IR-341 between Points D and F.

(10) Cross Point F at 1500' AGL (5100' MSL).

FSS's Within 100 NM Radius:

MMV

VR-1355

ORIGINATING ACTIVITY: Commanding Officer (N38), NAS Whidbey Island, 3730 N. Charles Porter Ave, Oak Harbor, WA 98278-5300 DSN 820-2877, C360-257-2877. Sked hrs 0700-1600 lcl, Mon-Fri. Same day sked between 0700-1130 lcl for entry after 1400 lcl.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | LTJ 063/45 | N45°47.10' W120°02.20' |
| 02 AGL B 15 AGL to | B | LTJ 014/20 | N45°59.40' W120°49.50' |
| 02 AGL B 15 AGL to | C | YKM 256/35 | N46°38.10' W121°16.90' |
| 02 AGL B 15 AGL to | D | SEA 081/40 | N47°19.20' W121°20.50' |
| 02 AGL B 15 AGL to | E | SEA 040/62 | N47°57.70' W120°59.40' |
| 02 AGL B 15 AGL to | F | NUW 076/53 | N48°17.50' W121°20.40' |
| 02 AGL B 15 AGL to | Q | NUW 073/24 | N48°20.70' W122°04.00' |
| 10 AGL B 15 AGL to | G | NUW 071/16 | N48°21.50' W122°15.90' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Route speed schedules in 60 Kt increments. Average route speed may not exceed 420 Kt. Indicate desired speed when scheduling. Advise scheduling agency when MARSAs. Route entry times must be within 3 minutes of scheduled time.
- (2) Contact Seattle FSS 255.4 when entering route.
- (3) CAUTION: Crop dusting activity (seasonal) below 500' AGL between Points A and B. Fly no lower than 300' AGL between Points A and B during agricultural spray season (1 Apr-31 Aug).
- (4) Avoid buildings/houses on centerline by 500' AGL 7 NM prior to Point B.
- (5) Alternate Entry: B.
- (6) Non-Boardman Target Range (R-5701/R-5706) aircraft shall enter at Point B only.
- (7) CAUTION: Forest fire suppression helicopter activity right of centerline approximately 19 NM past Point B at Ft. Simcoe Helibase (N46-20.8 W120-51.1) during fire season, normally May-Oct.
- (8) Avoid ski areas in the vicinity of Stevens Pass and Snoqualmie Pass between Points D and E.

(9) Alternate Exit: E.

(10) Route crosses IR-348, VR-1350 and VR-1351 between Points E and Q.

(11) CAUTION: Hang gliders may be encountered surface to 4000' AGL from F to G.

(12) Avoid overflight of Stillaguamish River between Points F and G.

(13) Avoid Lake Cavanaugh by 1 NM laterally or 1500' vertically between Points F and G.

(14) At Point Q, contact Whidbey Approach on 270.8.

FSS's Within 100 NM Radius:

MMV, SEA

VR-1422

ORIGINATING ACTIVITY: 388 RANS/RST, 6606 Cedar Lane, Hill AFB, UT 84056-5812, DSN 777-4401, C801-777-4401.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2400 lcl Mon-Thurs, 0700-1800 lcl Fri, 0800-1700 lcl Sat

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | OGD 282/29 | N41°26.00' W112°40.00' |
| 01 AGL B 15 AGL to | B | MLD 205/28 | N41°51.00' W112°52.00' |
| 01 AGL B 15 AGL to | C | MLD 218/38 | N41°50.00' W113°09.00' |
| 02 AGL B 15 AGL to | D | LCU 039/18 | N41°32.00' W113°30.00' |
| 01 AGL B 15 AGL to | E | LCU 254/10 | N41°22.00' W114°04.00' |
| 01 AGL B 15 AGL to | F | LCU 256/25 | N41°23.00' W114°23.00' |
| 05 AGL B 15 AGL to | G | BVL 293/38 | N41°08.00' W114°24.00' |
| 01 AGL B 15 AGL to | H | BVL 279/27 | N40°55.00' W114°17.00' |
| 01 AGL B 15 AGL to | I | BVL 308/11 | N40°53.00' W113°54.00' |
| 01 AGL B 15 AGL to | | R-6404B | |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Contact scheduling agency one day in advance not later than 2000Z++.
- (2) Traffic advisories available-Clover Control 285.65 or 363.5.
- (3) If planning to enter restricted area at termination of route, contact Clover Control for clearance into R-6404B prior to beginning route.
- (4) Without restricted area clearance, exit route at H, climb clear of restricted areas and contact Clover Control.

VR ROUTES

- (5) Thiokol Corporation static test fires pyrotechnic rocket motors and flares 5 miles either side of VR-1422, from A to B.
- (6) Due to bird strike potential with indigenous waterfowl, recommend contacting Clover Control for current bird migration/nesting advisories.
- (7) Aircrews should be especially vigilant between C and I for aircraft in the Lucian MOA. Aircraft are (See and Avoid) MARSAs with other ROUTE/MOA users.
- (8) Alternate Entry Points: D and H.
- (9) Alternate Exit Points: D and H.
- (10) Tie-in FSS: Cedar City, FSS for notification BYI, BQU, IDA, RNO.
- (11) Powerline running north-south perpendicular to MTR (75' tall) between Point B-C (N41-50 W113-09). Microwave tower approximately one mile south of centerline (200' tall) between Point D-E (N41-27 W113-42). Powerline running SE-NW to centerline, then due north on northside of MTR centerline (75' tall) between D-E (N41-24 W113-56). Microwave tower one mile south of MTR centerline (100' tall) between E-F (N41-21 W114-05). Dirt airstrip one mile south of MTR centerline between E-F (N41-22 W114-15). Powerline running NW-SE through MTR centerline between H-I (N40-50 W114-18).

FSS's Within 100 NM Radius:

CDC

VR-1423

ORIGINATING ACTIVITY: 388 RANS/RST, 6606 Cedar Lane, Hill AFB, UT 84056-5812, DSN 777-4401, C801-777-4401.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2400 lcl Mon-Thurs, 0700-1800 lcl Fri, 0800-1700 lcl Sat

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| As assigned to | A | OGD 282/29 | N41°26.00' W112°40.00' |
| 01 AGL B 15 AGL to | B | MLD 205/28 | N41°51.00' W112°52.00' |
| 01 AGL B 15 AGL to | C | MLD 218/38 | N41°50.00' W113°09.00' |
| 01 AGL B 15 AGL to | D | LCU 039/18 | N41°32.00' W113°30.00' |
| 01 AGL B 15 AGL to | E | LCU 076/15 | N41°21.00' W113°30.00' |
| 01 AGL B 15 AGL to 01 AGL B 15 AGL to R-4604A | F | LCU 090/30 | N41°13.00' W113°12.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Contact scheduling agency one day in advance not later than 2000Z++.
- (2) Traffic advisories available-Clover Control 285.65 or 363.5.

- (3) If planning to enter restricted area at termination of route, Contact Clover Control for clearance into R-6404B prior to beginning route.
- (4) Without restricted area clearance, exit route at E, climb clear of restricted areas and Contact Clover Control.
- (5) Thiokol Corporation static test fires pyrotechnic rocket motors and flares 5 miles either side of VR-1422, from A to B.
- (6) Due to bird strike potential with indigenous waterfowl, recommend contacting Clover Control for current migration/nesting advisories.
- (7) Aircrews should be especially vigilant between C and F for aircraft in the Lucian MOA. Aircraft are (See and Avoid) MARSAs with other route/MOA users.
- (8) Alternate Entry: D. Primary Entry: A.
- (9) Alternate Exit: D. Primary Exit: F.
- (10) Tie-in FSS: Cedar City, FSS for notification BYI, BQU, IDA, RNO.
- (11) Powerline running north-south perpendicular to MTR (75' tall) between Point B-C (N41-50 W113-09).

FSS's Within 100 NM Radius:

CDC

VR-1427

ORIGINATING ACTIVITY: 140th Wing /DOT, Buckley ANGB, Aurora, CO 80011-9546 DSN 847-9466, C303-340-9470/9472.

SCHEDULING ACTIVITY: 140th Wing /DOT, Buckley ANGB, Aurora, CO 80011-9546 DSN 847-9472, C720-847-9472.

HOURS OF OPERATION: 0800-1600 local Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------------------------------|----|--------------|---------------------------|
| Cross at 15 AGL to or as assigned. | A | GLD 200/27 | N39°00.00' W102°00.00' |
| 03 AGL B 15 AGL to | B | GLD 178/41 | N38°43.00' W101°51.00' |
| 03 AGL B 15 AGL to | C | LAA 096/34 | N38°01.00' W102°00.00' |
| 03 AGL B 15 AGL to | D | LAA 143/23 | N37°51.00' W102°29.00' |
| 03 AGL B 15 AGL to | E | TBE 359/21 | N37°36.00' W103°31.00' |
| 03 AGL B 15 AGL to | F | TBE 302/30 | N37°36.00' W104°03.00' |
| 03 AGL B 15 AGL to | G | PUB 189/23 | N37°56.00' W104°37.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM left and 5 NM right of centerline from A to G.

Special Operating Procedures:

- (1) Route intersects IR-414/424 at Pt A; route crosses IR-177/500 between C and D; route crosses IR-409, IR-150/500 and IR-177/501 between D and E; route crosses IR-110 between E and F; route coincides with IR-409 from F to G.
- (2) Alternate Entry: B, C, D, E, and F.
- (3) Alternate Exit: B, C, D, E, and F.
- (4) Avoid the following environmentally sensitive locations by 1500' AGL from 1 May through 31 July:
 - (a) N37-32-18 W103-40-36
 - (b) N37-36-54 W103-47-56
 - (c) N37-39-46 W104-15-22
 - (d) N37-58-35 W104-45-09

FSS's Within 100 NM Radius:

DEN

VR-1445

ORIGINATING ACTIVITY: 388 RANS/RST, 6606 Cedar Lane, Hill AFB, UT 84056-5812, DSN 777-4401, C801-777-4401.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2400 lcl Mon-Thurs, 0700-1800 lcl Fri, 0800-1700 lcl Sat

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| SFC B 12 AGL to | A | BVL 081/23 | N40°40.30' W113°15.10' |
| SFC B 12 AGL to | B | BVL 058/26 | N40°50.10' W113°12.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Contact scheduling agency one day in advance not later than 1600 local.
- (2) Route connects R-6406 and R-6404.
- (3) VR-1445/1446 will only be used by aircraft scheduled into Utah Test and Training Range (UTTR).

FSS's Within 100 NM Radius:

CDC

VR-1446

ORIGINATING ACTIVITY: 388 RANS/RST, 6606 Cedar Lane, Hill AFB, UT 84056-5812, DSN 777-4401, C801-777-4401.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2400 lcl Mon-Thurs, 0700-1800 lcl Fri, 0800-1700 lcl Sat

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------|----|--------------|---------------------------|
| SFC B 12 AGL to | A | BVL 058/26 | N40°50.10' W113°12.00' |
| SFC B 12 AGL to | B | BVL 081/23 | N40°40.10' W113°15.10' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 10 NM either side of centerline.

Special Operating Procedures:

- (1) Contact scheduling agency one day in advance not later than 1600 local.
- (2) Route connects R-6404 and R-6406.
- (3) VR-1445/1446 will only be used by aircraft scheduled into Utah Test and Training Range (UTTR).

FSS's Within 100 NM Radius:

CDC

VR-1520

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7745/7746, C605-988-5745/7746.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Daylight hours, Mon-Sat, OT By NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | LNK 265/21 | N40°56.90' W97°12.20' |
| 10 AGL B 15 AGL to | B | LNK 288/49 | N41°17.00' W97°42.00' |
| 05 AGL B 15 AGL to | C | OBH 009/17 | N41°39.00' W98°15.00' |
| 01 AGL B 15 AGL to | D | OBH 310/24 | N41°40.00' W98°43.00' |
| 01 AGL B 15 AGL to | E | ONL 191/31 | N41°59.00' W98°56.00' |
| 01 AGL B 15 AGL to | F | ONL 217/29 | N42°08.00' W99°10.00' |
| 01 AGL B 15 AGL to | G | ONL 242/63 | N42°08.00' W100°01.00' |
| 01 AGL B 15 AGL to | H | ONL 283/38 | N42°43.00' W99°29.00' |
| 01 AGL B 15 AGL to | I | ONL 352/32 | N43°00.00' W98°40.00' |
| 01 AGL B 15 AGL to | J | ONL 069/32 | N42°34.00' W97°59.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from B to J.

ROUTE WIDTH - 8 NM either side of centerline between A and J.

VR ROUTES

Special Operating Procedures:

- (1) VR-1520 is opposite direction of VR-1521, IR-508 D to J, IR-507 A to C, common with IR-517 A to C and IR-518 D to J.
- (2) 114 FW will not schedule opposite and conflicting traffic on IR-508/518 and VR-1521 at the same time.
- (3) Route is surveyed to 500' AGL with sections to 100' AGL. These altitudes will not guarantee obstacle clearance throughout the route.
- (4) Migratory birds along rivers and lakes in spring and fall.
- (5) Oneill MOA overlaps the route between Points C and E. If VR-1520 is not used in conjunction with Oneill MOA, the user must deconflict Oneill MOA with the 114 FW when scheduling the route.
- (6) Each point along the route is an Entry and an Exit Point.
- (7) Maintain a minimum of 1500' AGL entire route width from N41-03.0 W97-21.0 to Point B.
- (8) Agricultural spraying (seasonal) in the vicinity of Point C.
- (9) Remain at least 1.5 NM away from either side of a line from N41-58 W98-53 to N41-46 W98-40.
- (10) Avoid the following Noise Sensitive Areas by a minimum of 1500' AGL or 1 NM: Ranch N42-19.5 W99-46.5, Dairy N42-12.0 W99-42.0, Farm N41-48.0 W98-45.0, Farms N42-43.5 W99-35.2, N41-42.0 W98-37.0, N41-42.25 W98-32.1, N41-38.5 W98-34.0, N41-38.0 W98-32.0, N41-40.0 W98-19.0.
- (11) Avoid flight within 1500' AGL or 3 NM of the Adams at Primrose and Rock County Airports.
- (12) Uncharted towers located at (N42-32.1 W99-40.1), (N42-06.0 W98-00.0), (N42-06.0 W98-05.0), (N42-52.0 W98-41.0), and (N41-48.3 W98-58.0).
- (13) Avoid Bald Eagle Nesting Area at Karl Mundt National Wildlife Refuge N43-00.9 W98-31.6 by 1 NM or 1500' AGL.
- (14) Avoid Bird Nesting Areas by 1500' or 1 NM March through October: N42-47.0 W99-22.6, N42-43.3 W99-35.7.

FSS's Within 100 NM Radius:

HON, OLU

VR-1521

ORIGINATING ACTIVITY: 114 FW (ANG), Joe Foss Field, Sioux Falls, SD 57104-0264 DSN 798-7745/7746, C605-988-5745/5746.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Daylight hours, Mon-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| As assigned to | A | ONL 069/32 | N42°34.00' W97°59.00' |
| 01 AGL B 15 AGL to | B | ONL 352/32 | N43°00.00' W98°40.00' |
| 01 AGL B 15 AGL to | C | ONL 283/38 | N42°43.00' W99°29.00' |
| 01 AGL B 15 AGL to | D | ONL 242/63 | N42°08.00' W100°01.00' |
| 01 AGL B 15 AGL to | E | ONL 217/29 | N42°08.00' W99°10.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 01 AGL B 15 AGL to | F | ONL 191/31 | N41°59.00' W98°56.00' |
| 01 AGL B 15 AGL to | G | OBH 310/24 | N41°40.00' W98°43.00' |
| 01 AGL B 15 AGL to | H | OBH 009/17 | N41°39.00' W98°15.00' |
| 01 AGL B 15 AGL to | I | LNK 288/49 | N41°17.00' W97°42.00' |
| 01 AGL B 15 AGL to | J | LNK 265/21 | N40°56.90' W97°12.20' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to I.

ROUTE WIDTH - 8 NM either side of centerline between A and J.

Special Operating Procedures:

- (1) VR-1521 is opposite direction of VR-1520, IR-518 A to G, IR-517 H to J, and common with IR-508 A to G, IR-507 G to J.
- (2) 114 FW will not schedule opposite direction and conflicting traffic on IR-508/518 and VR-1520 at the same time.
- (3) Route is surveyed to 500' AGL with sections to 100' AGL. These altitudes will not guarantee obstacle clearance throughout the route.
- (4) Migratory birds along rivers and lakes in spring and fall.
- (5) Oneill MOA overlaps the route between F and H. If VR-1521 is not used in conjunction with Oneill MOA, the user must deconflict Oneill MOA with the 114 FW when scheduling the route.
- (6) Each point along the route is an entry and an exit point.
- (7) Maintain a minimum of 1500' AGL entire route width from Point I to N41-03.0 W97-21.0.
- (8) Agricultural spraying (seasonal) in the vicinity of Point H.
- (9) Remain at least 1.5 NM away from either side of a line from N41-58 W98-53 to N41-46 W98-40.
- (10) Avoid the following Noise Sensitive Areas by a minimum of 1500' AGL or 1 NM: Ranch N42-19.5 W99-46.5, Dairy N42-12.0 W99-42.0, Farm N41-48.0 W98-45.0, Farms N42-43.5 W99-35.2, N41-42.0 W98-37.0, N41-42.25 W98-32.1, N41-38.5 W98-34.0, N41-38.0 W98-32.0, N41-40.0 W98-19.0.
- (11) Avoid flight within 1500' AGL or 3 NM of the Adams at Primrose and Rock County Airports.
- (12) Uncharted towers located at (N42-32.1 W99-40.1), (N42-06.0 W98-00.0), (N42-06.0 W98-05.0), (N42-52.0 W98-41.0) and (N41-48.3 W98-58.0W).
- (13) Avoid Bald Eagle Nesting Area at Karl Mundt National Wildlife Refuge N43-00.9 W98-31.6 by 1 NM or 1500' AGL.
- (14) Avoid Bird Nesting Areas by 1500' or 1 NM March through October: N42-47.0 W99-22.6, N42-43.3 W99-35.7.

FSS's Within 100 NM Radius:

OLU, HON

VR-1525

ORIGINATING ACTIVITY: 509 OSS/OSKA, 905 Spirit Blvd, Whiteman AFB, MO 65305 DSN 975-1713/1754, C660-687-1713/1754. After hrs contact Comd Post C660-687-3778.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset Tue-Sun

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | BUM 021/32 | N38°45.00' W94°10.00' |
| 05 AGL B 15 AGL to | B | BUM 085/31 | N38°15.00' W93°50.00' |
| 05 AGL B 15 AGL to | C | SZL 187/51 | N37°54.00' W93°45.00' |
| 05 AGL B 15 AGL to | D | SZL 146/52 | N37°59.00' W93°00.00' |
| 05 AGL B 15 AGL to | E | MAP 289/30 | N37°48.00' W92°21.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to D; 3 NM either side of centerline from D to E.

Special Operating Procedures:

- (1) Primary Entry: A.
- (2) Primary Exit: E.
- (3) Alternate Entry: B and C.
- (4) Alternate Exit: C and D.
- (5) Route designated for SN, RR, and PR.
- (6) MARSA (See and Avoid) scheduling applies after aircraft enter route until standard separation is provided after exiting route.
- (7) Avoid overflight of the following Noise Sensitive Areas: Hog farm 2.5 NM south of Point C (N37-51.5 W93-45.0), horse farm 5 NM southwest of Point D (N37-56.5 W93-05.0) and the towns of Clinton and Osceola.
- (8) Flights scheduling VR-1525 to enter Cannon Range are reminded that Point E does not end in the Cannon Restricted Area (R-4501) nor does it end in the Cannon MOA. All flights exiting VR-1525 are reminded to slow down to comply with FAR speed restrictions for aircraft operating below 10,000' for their particular aircraft. Flights proceeding to Cannon Range must be above 1500' AGL prior to crossing interstate Highway 44 and comply with all Cannon Range restrictions. Flights will avoid overflight of Ft Leonard wood and Forney AAF.

FSS's Within 100 NM Radius:

COU, ICT, STL

VR-1546

ORIGINATING ACTIVITY: 188FW Arkansas ANG , 4850 Leigh Ave., Fort Smith, AR 72903-6096 DSN 778-5502.

SCHEDULING ACTIVITY: Same as Originating Activity. Route scheduled no more than 72 hr in advance. Minimum separation between scheduled entry times is 15 minutes.

HOURS OF OPERATION: Continuous (except Sunday 1000-1200 local)

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | RZC 324/29 | N36°39.00' W94°26.00' |
| 05 AGL B 15 AGL to | B | RZC 005/38 | N36°52.00' W94°00.00' |
| 05 AGL B 15 AGL to | C | DGD 239/31 | N36°48.00' W93°28.00' |
| 05 AGL B 10 AGL to | D | DGD 251/6 | N37°00.00' W93°00.00' |
| 05 AGL B 15 AGL to | E | DGD 013/18 | N37°18.30' W92°45.50' |
| 05 AGL B 15 AGL to | F | MAP 253/39 | N37°28.00' W92°35.00' |
| 05 AGL B 15 AGL to | G | MAP 267/29 | N37°37.00' W92°24.30' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to B; 2 NM left and 4 NM right of centerline from B to C; 3 NM either side of centerline from C to G.

Special Operating Procedures:

- (1) Alternate Entry: C.
- (2) Alternate Exit: D and F.
- (3) Aircraft will not proceed beyond Point F unless authorized to operate in the Cannon MOA.
- (4) Avoid flight within 1500' AGL or 3 NM all charted airports when practicable.
- (5) Uncharted and not in Chum Route Obstructions:
 - (a) Tower-N36-49.3 W93-43.5 1650' MSL (150' AGL);
 - (b) Tower-N36-48.5 W93-31.5 1185' MSL (185' AGL);
 - (c) Tower-N37-09.0 W92-53.0 1600' MSL (100' AGL).
- (6) Make entry time plus or minus five minutes or reschedule.
- (7) CAUTION: Monett Airport 2.5 nm North of Pt B.
- (8) Contact Cannon Range on 392.2/139.45 for clearance into the Cannon MOA/Range.

FSS's Within 100 NM Radius:

COU, MLC, STL

VR-1616

ORIGINATING ACTIVITY: ANG CRTG, Camp Douglas, WI 54618-5001 DSN 871-1445 C608-427-1445.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise to Sunset Mon-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | MCW 360/53 | N43°58.00' W93°12.00' |
| 05 AGL B 15 AGL to | B | FGT 141/25 | N44°17.00' W92°52.00' |
| 05 AGL B 15 AGL to | C | ODI 334/37 | N44°28.00' W91°50.00' |

VR ROUTES

| | | | |
|---|----|------------|--------------------------|
| 05 AGL B 15 AGL to | D | ODI 013/30 | N44°24.00' W91°18.00' |
| 05 AGL B 15 AGL to | E | ODI 032/31 | N44°21.00' W91°04.00' |
| 05 AGL B 15 AGL to | F | VOK 320/34 | N44°23.00' W90°46.00' |
| 05 AGL B 15 AGL to | G | VOK 329/27 | N44°20.00' W90°35.00' |
| 01 AGL B 15 AGL to Alternate Exit: G | H | VOK 023/19 | N44°14.00' W90°05.00' |
| 05 AGL B 15 AGL to | G | VOK 329/27 | N44°20.00' W90°35.00' |
| 01 AGL B 15 AGL to | HH | VOK 301/20 | N44°07.00' W90°40.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from B to HH.

ROUTE WIDTH - 2 NM left and 4 NM right of centerline from A to B; 4 NM either side of centerline from B to E; 4 NM left and 2 NM right of centerline from E to F; 3 NM either side of centerline from F to H and G to HH.

Special Operating Procedures:

- (1) Route normally will be flown in conjunction with range missions to either R-6901 or R-6904. On entering the route, contact Volk Mission Coordinator, call-sign Phoenix, UHF 346.525. Clearance to fly VR-1616 does not constitute clearance to enter either R-6901 or R-6904. Clearance to enter R-6904 is required from the Range Control Officer on UHF 358.2/297.1, VHF 132.025, FM 34.2; and to enter R-6901 from Fort McCoy Range Control on UHF 247.4, VHF 123.45/124.6, or FM 41.90.
- (2) B52's and B1's will use Point C as the entry point into VR-1616.
- (3) Alternate Entry: C and E.
- (4) Alternate Exit: D, E, F, and G.
- (5) All aircraft will maintain 1000' AGL B 1500' AGL from 3 NM west of the Mississippi River to Point C.
- (6) Noise Sensitive Areas: Avoid by 2000' AGL or 1.5 NM unless otherwise indicated:
 - (a) Points E-F; Mink Ranch N44-26.0 W90-54.5, avoid by 2500; AGL or 1.5 NM;
 - (b) Points C-D; Farm N44-28.0 W91-31.0;
 - (c) Points G-H; Saddle Mound Wildlife/Recreational Area N44-21.0 W90-31.5;
 - (d) Points G-H; Necedah National Wildlife Refuge (charted).
- (7) Possible route conflicts:
 - (a) Points C-G; transit Falls 1 MOA;
 - (b) Points F-H; transit Volk West MOA;
 - (c) Point G crossing traffic on SR-785;
 - (d) Points B-C, E-F and G-HH crossing traffic on SR-768;
 - (e) Endpoint H coincides with VR-1650 endpoint G at Hardwood Range (R-6904).
- (8) Soaring raptors prevalent SFC to 2000' AGL for entire route throughout the year during the mid-day time period.
- (9) Waterfowl feeding flights SFC to 2000' AGL between Points G-H from Oct-Dec during the dawn/dusk time period.
- (10) Waterfowl migratory flights SFC to 5000' AGL between Points A-B from Oct-Nov during the night time period.

FSS's Within 100 NM Radius:

FOD, GRB, PNM

VR-1617

ORIGINATING ACTIVITY: 180th TFG/DO (ANG), Toledo Express Airport, Swanton, OH 43558 DSN 580-4084.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-2100 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| at or below 15 AGL | A | TOL 211/24 | N41°14.00' W84°02.00' |
| 05 AGL B 15 AGL to | B | ROD 303/31 | N40°32.00' W84°39.00' |
| 05 AGL B 15 AGL to | C | ROD 274/42 | N40°16.00' W84°58.00' |
| 05 AGL B 15 AGL to | D | SHB 068/28 | N39°48.00' W85°15.00' |
| 05 AGL B 15 AGL to | E | SHB 137/28 | N39°17.00' W85°25.00' |
| 05 AGL B 15 AGL to | F | SHB 199/42 | N38°58.00' W86°08.00' |
| 05 AGL B 15 AGL to Enter R-3401 Atterbury Range. | G | SHB 205/26 | N39°15.00' W86°04.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from C to G.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: C.
- (2) Alternate Exit: D, E and F.
- (3) All aircraft will maintain 1000' AGL from C to D.
- (4) Avoid overflight of Freetown, IN and surrounding area, below 1000' AGL. Noise sensitive area.

FSS's Within 100 NM Radius:

CLE, DAY, HUF, IKK, LAN, LOU

VR-1624

ORIGINATING ACTIVITY: 127WG, 28252 Wilbur Wright Blvd., Selfridge ANGB, MI 48045 DSN 273-4663.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| 10 AGL B 15 AGL to | A | ECK VORTAC | N43°15.35' W82°43.07' |
| 05 AGL B 15 AGL to | B | ECK 357/49 | N44°04.00' W82°55.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | C | ASP 190/25 | N44°02.00' W83°26.00' |

| | | | | |
|---|----|------------|--------------------------|--|
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | D | ASP 231/21 | N44°12.00' W83°44.00' | (a) Avoid overflying any structure below 1000'AGL; (b) Avoid Hillman Airport (N45-05 W83-55) by 3 NM; (c) Avoid Bald Eagle nesting areas by 1NM and 1000' AGL from 1 Feb-1 Aug: (N44-57 W83-52, N45-02 W83-53, N45-09 W83-58.5, N45-15 W83-58). |
| 05 AGL B 15 AGL to | E | ASP 328/16 | N44°39.00' W83°38.00' | (6) Point G to H: (a) Uncharted sod airstrip: (N45-16 W84-05); (b) CAUTION: 1349' AGL (2409' MSL) tower (N45-08 W84-09.8); (c) Avoid Clear Lake State Park: (N45-07.5 W84-10.8 by 1 NM); (d) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N45-07 W84-15); (e) Avoid Johannesburg (N44-59 W84-27.3) by 1 NM. |
| 10 AGL B 15 AGL to | F | APN 245/19 | N44°55.00' W83°56.00' | (7) Point H to I: Avoid Bald Eagle nesting areas by 1NM and 1000' AGL from 1 Feb-1 Aug: (N44-53.4 W84-34.2). |
| 05 AGL B 15 AGL to | G | APN 302/23 | N45°14.70' W84°02.90' | (8) Point F to F1: (a) Avoid overflying any structure below 1000 AGL; (b) Avoid Hillman Airport: (N45-05 W83-55 by 3 NM); (c) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N44-57 W83-52, N45-02 W83-53, N45-09 W83-58.5). |
| 05 AGL B 15 AGL to | H | APN 270/41 | N45°00.00' W84°31.40' | (9) Point F1 to F2: (a) CAUTION: 1349' AGL (2409' MSL) tower (N45-08.3 W84-09.8); (b) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N45-04.5 W84-07, N45-07 W84-15W); (c) Avoid Clear Lake State Park: (N45-07.5 W84-10.8) by 1 NM; (d) Avoid Heatherton: (N45-01 W84-22.2) by 1 NM. |
| 05 AGL B 15 AGL to Alternate Exit: | I | APN 261/45 | N44°52.00' W84°34.80' | (10) Point F2 to F3: Avoid Johannesburg: (N44-59 W84-27.3) by 1 NM. |
| 10 AGL B 15 AGL to | F | APN 245/19 | N44°55.00' W83°56.00' | (11) Point F3 to F4: Avoid Bald Eagle nesting area by 1NM and 1000' AGL from 1 Feb-1 Aug: (N44-53.4 W84-34.2). |
| 05 AGL B 15 AGL to | F1 | APN 280/19 | N45°05.80' W83°59.80' | (12) Clearance to fly the route does not constitute clearance into R-4201 which must be given by the RSO on 385.7/381.1. Do not proceed beyond Point H (F3) unless cleared into R-4201. |
| 05 AGL B 15 AGL to | F2 | APN 274/37 | N45°02.70' W84°26.00' | (13) All Points are Alternate Entry/Exit Points. |
| 05 AGL B 15 AGL to | F3 | APN 270/41 | N45°00.00' W84°31.40' | (14) VR-1624 is opposite direction traffic with VR-1644, VR-1627 A to C and VR-1647 alternate route A1 to B2. VR-1624 alternate route is opposite direction traffic with VR-1644 alternate route and VR-1647 alternate route B1 to B3. 127 TFW will not schedule opposite and conflicting traffic at the same time. |
| 05 AGL B 15 AGL to | F4 | APN 261/45 | N44°52.00' W84°34.80' | (15) See and Avoid concept applies. Route conflicts with several VR and SR routes. |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to G; 2 NM either side of centerline from G to H; 3 NM left and 4 NM right of centerline from H to I; 4 NM either side of centerline from F to F1; 2 NM left and 3 NM right of centerline from F1 to F2; 2 NM either side of centerline from F2 to F3; 3 NM left and 4 NM right of centerline from F3 to F4.

Special Operating Procedures:

- (1) Avoid all watercraft, structures, vehicles, and persons by 500' AGL minimum on all route segments; over water portion and Point C- 100' AGL minimum; over land or within 1 NM of land- 500' AGL minimum.
- (2) Point A to B:
 - (a) Minimum altitude: 1000' AGL first 5 NM;
 - (b) Uncharted sod airstrip (N43-34.0 W82-47.0).
- (3) Point D to E:
 - (a) Do not fly over pit mine at water plant (N44-12.55 W83-42.55) Point D by 1 NM due to unannounced mine blasting.
 - (b) Uncharted sod airstrip (N44-16.0 W83-47.0);
 - (c) Avoid Stier Airport (N44-31.0 W83-41.0) by 3 NM;
 - (d) Avoid Glennie (N44-33.0 W83-43.0) by 3 NM;
 - (e) Avoid the following nesting areas by 1 NM and 1000' AGL during listed time frames: (Kirtland's Warbler from 1 May-15 Aug: N44-20.0 W83-38.5, N44-22.0 W83-38.0, N44-34.0 W83-35.0); (Great Blue Heron from 15 Mar-15 Aug: N44-34.6 W83-42.7); (Common Loon from 1 Apr-15 Jul: N44-36.0 W83-36.3); (Bald Eagle from 1 Feb-1 Aug: N44-26.3 W83-38.5, N44-27.5 W83-45.5).
- (4) Point E to F:
 - (a) Uncharted sod airstrips: (N44-48.0 W83-48.0, N44-52 W83-53, N44-54 W83-55);
 - (b) Avoid the following nesting areas by 1 NM and 1000' AGL during listed time frames: (Common Loon from 1 Apr-15 Jul: N44-40.7 W83-36.3); (Bald Eagle from 1 Feb-1 Aug: N44-46.5 W83-53, N44-53N 83-55).
- (5) Point F to G:

FSS's Within 100 NM Radius:

CLE, LAN

VR-1625

ORIGINATING ACTIVITY: 127th OG/CC, Selfridge ANGB, MI 48045-5029 DSN 273-5055.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

VR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | ECK VORTAC | N43°15.35' W82°43.07' |
| 05 AGL B 15 AGL to | B | ECK 357/49 | N44°04.00' W82°55.00' |
| 05 AGL B 15 AGL to | C | ASP 045/28 | N44°49.00' W83°00.00' |
| at or below 15 AGL (Below 05 AGL only over water) (Alternate Exit D to enter VR-1624 for northern range entry) | D | APN 245/19 | N44°55.00' W83°56.00' |
| 05 AGL B 15 AGL to | E | APN 246/43 | N44°43.00' W84°25.00' |
| 05 AGL B 15 AGL to | F | APN 255/48 | N44°47.00' W84°36.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Point A: Maintain minimum altitude of 1000' AGL first 5 NM.
- (2) Avoid all watercraft, structures, vehicles, and persons by 500' on terrain following segments.
- (3) Points C to D: Maintain minimum altitude 1000' AGL from Landfall to D. Noise Sensitive Area.
- (4) Points E to F: Maintain minimum altitude 1000' AGL within 3 NM of Lovells, N44-48 W84-29.
- (5) Route conflicts with VR-1624, VR-1627, VR-1638, SR-701/702. (See and Avoid) concept applies
- (6) This route is flown in conjunction with Range Missions in the R-4201 restricted area. Route terminates at R-4201 restricted area boundary. Clearance to fly the route does not constitute clearance into R-4201. This clearance must be obtained from range scheduling, Phelps-Collins ANG FTS, DSN 722-3760. Prior to entering R-4201 obtain inflight clearance instructions from Range Officer on 385.7 or 381.1. Do not proceed beyond E unless scheduled for R-4201.
- (7) Alternate Entry: B, C and D.
- (8) Alternate Exit: B, C, D and E.

FSS's Within 100 NM Radius:

CLE, LAN

VR-1626

ORIGINATING ACTIVITY: 127th OG/CC, Selfridge ANGB, MI 48045-5029 DSN 273-5055/5719.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | MBS 329/36 | N44°02.00' W84°33.00' |

| | | | |
|--|---|------------|--------------------------|
| 05 AGL B 15 AGL to | B | TVC 130/23 | N44°26.00' W85°08.00' |
| 05 AGL B 15 AGL to | C | TVC 214/21 | N44°22.00' W85°49.00' |
| 05 AGL B 15 AGL to | D | HIC 326/28 | N43°57.00' W86°05.00' |
| 05 AGL B 15 AGL to Contact Chicago ARTCC on assigned frequency and climb VFR until receiving IFR clearance. | E | HIC 130/26 | N43°18.00' W85°15.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline from A to B; 1 NM either side of centerline from B to C; 3 NM either side of centerline from C to E.

Special Operating Procedures:

- (1) Alternate Entry: B, C, and D.
- (2) Alternate Exit: B, C, and D.

FSS's Within 100 NM Radius:

GRB, LAN

VR-1627

ORIGINATING ACTIVITY: 127th OG/CC, Selfridge ANGB, MI 48045-5029 DSN 273-5055.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| 01 AGL B 15 AGL to | A | ASP 045/28 | N44°49.00' W83°00.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | B | APN 041/13 | N45°16.00' W83°23.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | C | PLN 069/41 | N45°56.00' W83°48.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | D | PLN 061/34 | N45°57.00' W84°00.00' |
| 01 AGL B 15 AGL to | E | PLN 097/20 | N45°37.40' W84°12.00' |
| 05 AGL B 15 AGL to | F | APN 302/23 | N45°14.70' W84°02.90' |
| 05 AGL B 15 AGL to | G | APN 270/41 | N45°00.00' W84°31.40' |
| 05 AGL B 15 AGL to Alternate Exit: | H | APN 261/45 | N44°52.00' W84°34.80' |
| 01 AGL B 15 AGL to | E | PLN 097/20 | N45°37.40' W84°12.00' |
| 05 AGL B 15 AGL to | E1 | APN 280/19 | N45°05.80' W83°59.80' |

| | | | |
|--------------------|----|------------|--------------------------|
| 05 AGL B 15 AGL to | E2 | APN 274/37 | N45°02.70' W84°26.00' |
| 05 AGL B 15 AGL to | E3 | APN 270/41 | N45°00.00' W84°31.40' |
| 05 AGL B 15 AGL to | E4 | APN 261/45 | N44°52.00' W84°34.80' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline from A to E; 4 NM left and 3 NM right of centerline from E to F; 2 NM either side of centerline from F to G; 3 NM left and 4 NM right of centerline from G to H; 4 NM left and 3 NM right of centerline from E to E1; 2 NM left and 3 NM right of centerline from E1 to E2; 2 NM either side of centerline from E2 to E3; 3 NM left and 4 NM right of centerline from E3 to E4.

Special Operating Procedures:

- (1) Avoid all watercraft, structures, vehicles, and persons by 500' AGL minimum on all route segments; over water portion and Point C- 100' AGL minimum; over land or within 1 NM of land- 500' AGL minimum.
- (2) Point A to B:
 - (a) Uncharted lighthouse on middle Island (N45-11 W83-19);
 - (b) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N45-01.5 W83-16).
- (3) Point B to C:
 - (a) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N45-16.5 W83-26);
 - (b) Approaching Drummond Island, turn over first landfall and go direct to Point D. Do not penetrate land in area of Point C by more than 1 NM. If over land fly 1000' AGL minimum.
- (4) Point C to D: Uncharted lighthouse 100' AGL south entrance of De Tour Channel (N45-57 W83-54).
- (5) Point D to E:
 - (a) Uncharted lighthouse 100' AGL (N45-46 W84-08);
 - (b) Flight is prohibited within 2 NM of the Lake Huron shoreline from St. Vital Point (N45-57 W84-00) west to Huron Point (N45-58 W84-04) below 1500' AGL.
 - (c) Flight within 1 NM of Saddlebag Island (N45-57.2 W84-02.6) is prohibited below 1500' AGL.
- (6) Point E to F:
 - (a) Avoid overflying any structure below 1000' AGL;
 - (b) Avoid Ocqueoc (N45-24.6 W84-05.3) and Millersburg (N45-20.3 W84-03.7) by 1 NM;
 - (c) Uncharted sod airstrip (N45-16 W84-05);
 - (d) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N45-15 W83-58).
- (7) Point F to G:
 - (a) CAUTION: 1349' AGL (2409' MSL) tower (N45-08.3 W84-09.8);
 - (b) Avoid Clear Lake State Park (N45-07.5 W84-10.8) by 1 NM;
 - (c) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N45-07 W84-15);
 - (d) Avoid Johannesburg (N44-59 W84-27.3) by 1 NM.
- (8) Point G to H: Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb to 1 Aug: (N44-53.4 W84-34.2).
- (9) Point E to E1:
 - (a) Avoid overflying any structure below 1000' AGL;
 - (b) Avoid Ocqueoc (N45-24.6 W84-05.3) and Millersburg (N45-20.3 W84-03.7) by 1 NM;

- (c) Uncharted sod airstrip (N45-16 W84-05);
- (d) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N45-15 W83-58, N45-09 W83-58).
- (10) Point E1 to E2:
 - (a) CAUTION: 1349' AGL (2409' MSL) tower (N45-08.3 W84-09.8);
 - (b) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N45-04.5 W84-07, N45-07 W84-15);
 - (c) Avoid Clear Lake State Parks (N45-07.5 W84-10.8) by 1 NM;
 - (d) Avoid Heatherton (N45-01 W84-22.2) by 1 NM.
- (11) Point E2 to E3: Avoid Johannesburg (N44-59 W84-27.3) by 1NM.
- (12) Point E3 to E4: Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N44-53.4 W84-34.2).
- (13) Clearance to fly the route does not constitute clearance into R-4201 which must be given by the RSO on 385.7/381.1. Do not proceed beyond Point G (E3) unless cleared into R-4201.
- (14) All points are Alternate Entry and Exit Points.
- (15) VR-1627 is opposite direction traffic with VR-1647, VR-1644 A to C, and VR-1644 alternate route A1 to B2. VR-1627 alternate route is opposite direction traffic with VR-1647 alternate route and VR-1644 A to B and first 5 NM of B to C. 127 TFN will not schedule opposite and conflicting traffic at the same time.
- (16) Route transits Huron MOA between Points A-C.
- (17) (See and Avoid) concept applies. Route conflicts with several VR and SR routes.

FSS's Within 100 NM Radius:

LAN

VR-1628

ORIGINATING ACTIVITY: 127th OG/CC, Selfridge ANGB, MI 48045-5029 DSN 273-5055.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| 01 AGL B 15 AGL to | A | ASP 045/28 | N44°49.00' W83°00.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | B | APN 041/13 | N45°16.00' W83°23.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | C | PLN 069/41 | N45°56.00' W83°48.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | D | PLN 061/34 | N45°57.00' W84°00.00' |
| 05 AGL B 15 AGL to | E | PLN 021/21 | N45°58.00' W84°32.00' |
| 05 AGL B 15 AGL to | F | SSM 255/26 | N46°16.00' W84°55.00' |
| 01 AGL B 15 AGL to | G | SSM 258/52 | N46°10.00' W85°31.00' |
| 05 AGL B 15 AGL to | H | ESC 059/59 | N46°13.00' W85°52.00' |

VR ROUTES

01 AGL B 15 AGL to I ESC 333/16 N45°58.00'
W87°16.00'

01 AGL B 15 AGL to J N46°26.00'
W88°20.00'

Climb VFR and contact Minneapolis ARTCC for IFR clearance.

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Avoid all watercraft, structures, and persons by 500' AGL minimum on all route segments.
- (2) Point A to B:
 - (a) Uncharted lighthouse on Middle Island (N45-11 W83-19);
 - (b) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb-1 Aug:(N45-01.5 W83-16.0).
- (3) Point B to C:
 - (a) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb-1 Aug: (N45-16.5 W83-26.0);
 - (b) Approaching Drummond Island, turn over first landfall and go direct to Point D. Do not penetrate land in area of Point C by more than 1 NM. If over land, fly 1000' AGL minimum.
- (4) Point C to D: Uncharted lighthouse 100' AGL south entrance of De Tour Channel (N45-57 W83-54).
- (5) Point D to E:
 - (a) Flight is prohibited within 2 NM of the Lake Huron shoreline from St. Vital Point (N45-58 W84-00) west to Huron Point (N45-58 W84-04) below 1500' AGL;
 - (b) Flight within 1 NM of Saddlebag Island (N45-57.2 W84-02.6) is prohibited below 1500' AGL;
 - (c) Avoid Lindberg Airport (N46-02.5 W84-25.0) by 3 NM.
- (6) Point E to F: Uncharted 100' AGL tower (N46-13.0 W84-57.0).
- (7) Point F to G: Uncharted 100' AGL Tower (N46-13.0 W84-57.0).
- (8) Point G to H:
 - (a) Uncharted 200' AGL tower (N46-12.0 W85-51.0);
 - (b) Avoid Germfask (N46-14.8 W85-55.6) by 2 NM and 1000' AGL.
- (9) Point H to I:
 - (a) Uncharted 200' AGL tower (N45-59.0 W87-09.0).
- (10) All Points are Alternate Entry/Exit Points.
- (11) SR-782 starts between Point B to C. IR-609 and IR-610 cross between Point H to I. VR-604 and reciprocal VR-607 cross between Point I to J. VR-1636 and reciprocal VR-1666 share common legs from mid-point H through J.
- (12) Route transits Huron MOA between Point A through C.
- (13) See and Avoid concept applies. Route conflicts with several VR and SR routes.

FSS's Within 100 NM Radius:

GRB, LAN

VR-1629

ORIGINATING ACTIVITY: 127th OG/CC, Selfridge ANGB, MI 48045 DSN 273-5055/5719.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or below 15 AGL | A | CMX 248/58 | N46°46.00' W89°46.00' |
| SFC B 15 AGL to | B | CMX 233/48 | N46°40.00' W89°23.00' |
| SFC B 15 AGL to | C | | N46°35.00' W88°28.00' |
| SFC B 15 AGL to | D | | N46°52.00' W87°44.00' |
| SFC B 15 AGL to | E | | N46°31.00' W86°40.00' |
| SFC B 15 AGL to | F | | N46°37.00' W86°03.00' |
| SFC B 15 AGL to | G | SSM 264/21 | N46°21.00' W84°49.00' |

Contact Minneapolis ARTCC on assigned frequency and climb VFR until receiving IFR clearance.

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) This route is reverse of VR-1639. The 127 TFW is the controlling agency for both VR routes.
- (2) Route conflicts with VR-604/607 and IR-601. At conflict points, See and Avoid concept will apply.
- (3) Alternate Entry: B, C, D, E, and F.
- (4) Alternate Exit: B, C, E and F.

FSS's Within 100 NM Radius:

GRB

VR-1631

ORIGINATING ACTIVITY: 123 ACS, Blue Ash, OH 45242 DSN 340-2950, C513-936-2950.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | LCK 172/17 | N39°32.00' W82°51.00' |
| 03 AGL B 15 AGL to | B | YRK 030/28 | N39°03.00' W82°42.00' |
| 03 AGL B 15 AGL to | C | YRK 355/14 | N38°53.00' W83°01.00' |
| 03 AGL B 15 AGL to | D | FLM 113/30 | N38°29.00' W83°43.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 03 AGL B 15 AGL to | E | FLM 244/15 | N38°31.50' W84°35.20' |
| 03 AGL B 15 AGL to | F | ABB 087/22 | N38°36.20' W85°10.00' |
| 03 AGL B 15 AGL to | G | ABB 107/11 | N38°32.00' W85°25.00' |
| 03 AGL B 15 AGL to | H | ABB 284/26 | N38°42.00' W86°10.00' |
| 03 AGL B 15 AGL to | I | OOM 100/19 | N39°06.00' W86°13.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: B, C, D, E, F, F, G, H.
- (2) Alternate Exit: B, C, D, E, F, G, H.
- (3) Minimum altitude for F-4 and F-111 aircraft is 500' AGL (unless otherwise stated).
- (4) Watch for helicopters between A and D.
- (5) CAUTION: Numerous other MTR cross or are coincident with VR-1631. See FLIP AP/1B IFR/VFR Planning Charts. (See and Avoid) applies.
- (6) All route reservations and briefings, including weekend flights, must be made during 123 ACS operating hours 0730-1630 local Mon-Fri. 123 ACS will mail user a copy of route descriptions and obstructions when requested.
- (7) Use caution for light aircraft operating in the vicinity of an unmarked private airport at Point H.
- (8) Avoid overflight of Freetown, IN, and surrounding area, below 1000' AGL. Noise sensitive area.

FSS's Within 100 NM Radius:

CLE, DAY, EKN, HUF, IKK, LOU

VR-1632

ORIGINATING ACTIVITY: 123 ACS, Blue Ash, OH 45242 DSN 340-2950, C513-936-2950.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | LCK 175/12 | N39°37.00' W82°53.00' |
| 03 AGL B 15 AGL to | B | HNN 321/34 | N39°11.00' W82°31.00' |
| 03 AGL B 15 AGL to | C | HNN 222/13 | N38°35.00' W82°12.00' |
| 03 AGL B 15 AGL to | D | HVQ 302/11 | N38°26.50' W81°58.70' |
| 03 AGL B 15 AGL to | E | HVQ 238/24 | N38°07.00' W82°11.00' |
| 03 AGL B 15 AGL to | F | ECB 090/14 | N38°10.00' W82°37.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 03 AGL B 15 AGL to | G | FLM 096/30 | N38°38.00' W83°41.00' |
| 03 AGL B 15 AGL to | H | YRK 306/27 | N38°53.40' W83°27.10' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: B, C, D, E, F and G.
- (2) Alternate Exit: B, C, D, E, F and G.
- (3) Minimum altitude for F-4 and F-111 aircraft is 500' AGL (unless otherwise stated).
- (4) Be especially vigilant for helicopter operations entire route.
- (5) CAUTION: Numerous other MTR cross or are coincident with VR-1632. See FLIP AP/1B IFR/VFR Wall Planning Chart and appropriate Sectional/Enroute Low Altitude Charts. (See and Avoid) applies.
- (6) All route reservations and briefings, including weekend flights, must be made during 123 ACS operating hours 0730-1630 local Mon-Fri. 123 ACS will mail user a copy of route descriptions and obstructions when requested.
- (7) Scheduling of VR-1632 does not give automatic scheduling of Brush Creek MOA. To fly G-H, Brush Creek must be scheduled.

FSS's Within 100 NM Radius:

CLE, DAY, EKN, LOU

VR-1633

ORIGINATING ACTIVITY: 123 ACS, Blue Ash, OH 45242 DSN 340-2950, C513-936-2950.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | LCK 175/12 | N39°37.00' W82°53.00' |
| 05 AGL B 15 AGL to | B | HNN 035/23 | N39°05.00' W81°46.00' |
| 05 AGL B 15 AGL to | C | HVQ 075/43 | N38°34.00' W80°54.00' |
| 05 AGL B 15 AGL to | D | HVQ 121/28 | N38°08.00' W81°15.00' |
| 05 AGL B 15 AGL to | E | AZQ 106/46 | N37°14.00' W82°20.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

- (1) Alternate Entry: B, C, D.
- (2) Alternate Exit: B, C, D.
- (3) Be especially vigilant for helicopter operations entire route.

VR ROUTES

- (4) Route is designated mountainous Point C to E.
- (5) CAUTION: Numerous other MTR cross or are coincidental with VR-1633. See FLIP AP/1B IFR/VFR Wall Planning Charts and appropriate Sectional/Enroute Low Altitude Charts. (See and Avoid) applies.
- (6) All route reservations and briefings, including weekend flights, must be made during 123 ACS operating hours 0730-1630 local Mon-Fri. 123 ACS will mail users a copy of route restrictions and obstructions, when requested.

FSS's Within 100 NM Radius:

CLE, DAY, EKN

VR-1635

ORIGINATING ACTIVITY: 183 FW/OSF, Capital Airport, Springfield, IL 62707 DSN 892-8202.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset only

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | SPI 064/21 | N40°00.00' W89°16.00' |
| 05 AGL B 15 AGL to | B | VLA 029/11 | N39°15.00' W89°02.00' |
| 05 AGL B 15 AGL to | C | VLA 256/26 | N39°01.00' W89°42.00' |
| 05 AGL B 15 AGL to | D | STL 020/37 | N39°26.00' W90°12.00' |
| 05 AGL B 15 AGL to | E | UIN 108/35 | N39°37.00' W90°35.00' |

ROUTE WIDTH - 7 NM either side of centerline from A to C; C to D bounded by N38-56 W89-43; N38-52 W89-44; N39-18 W90-18; N39-34 W90-07; N39-08 W89-42. D to E bounded by N39-34 W90-07; N39-18 W90-18; N39-20 W90-42; N39-48 W90-42; N39-48 W90-32.

Special Operating Procedures:

- (1) Minimum altitude 500' AGL.
- (2) Route coincident with IR-614. Separation of aircraft using IR-614 and VR-1635 to be accomplished by scheduling. Contact 183 FW/OSF DSN 892-8202/8203 for scheduling and route briefing (Tue-Sun, 0800-1630 local).
- (3) FSS tie-in is St. Louis (STL).
- (4) Alternate Exit: D.

FSS's Within 100 NM Radius:

COU, HUF, IKK, STL

VR-1636

ORIGINATING ACTIVITY: Alpena CRTIC/OTM (ANG), 5884 A. Street, Alpena, MI 49707-8125 DSN 741-3509/3226.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 01 AGL B 15 AGL to | A | TVC 345/49 | N45°27.00' W85°53.00' |
| 01 AGL B 15 AGL to | B | ESC 081/31 | N45°48.00' W86°21.00' |
| 05 AGL B 15 AGL to | C | ESC 037/25 | N46°03.00' W86°44.00' |
| 05 AGL B 15 AGL to | D | ESC 333/16 | N45°58.00' W87°16.00' |
| 01 AGL B 15 AGL to | E | | N46°26.00' W88°20.00' |
| 01 AGL B 15 AGL to | F | | N46°35.00' W88°28.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Avoid all Watercraft, structures, vehicles and persons by 500' AGL on terrain following segments.
- (2) The techniques for applying MARSAs during all operations on route segments is by scheduling and the See and Avoid concept.
- (3) Users must coordinate with 127 TFW, DSN 273-5055, for those segments crossing VR-1628 and VR-1639.
- (4) Alternate Entry: C, D and E.
- (5) Alternate Exit: C, D and E.
- (6) Minimum altitude between B and F is 1000' AGL from 1 Mar to 30 Jul.

FSS's Within 100 NM Radius:

GRB

VR-1638

ORIGINATING ACTIVITY: 180TH TFG/DO, Toledo Express Airport, Swanton, OH 43558 DSN 580-4084.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-2100 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or below 15 AGL | A | TOL 211/24 | N41°14.00' W84°02.00' |
| 05 AGL B 15 AGL to | B | ROD 303/31 | N40°32.00' W84°39.00' |
| 05 AGL B 15 AGL to | C | ROD 274/42 | N40°16.00' W84°58.00' |
| 05 AGL B 15 AGL to | D | SHB 068/28 | N39°48.00' W85°15.00' |
| 05 AGL B 15 AGL to | E | SHB 137/28 | N39°17.00' W85°25.00' |
| 05 AGL B 15 AGL to | F | ABB 022/27 | N39°00.00' W85°25.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from C to F.

ROUTE WIDTH - 2 NM either side of centerline from entire route.

Special Operating Procedures:

- (1) Clearance to fly route does not constitute clearance into R-3403. This clearance must be obtained from scheduling agency.
- (2) Point E is Alternate Exit for aircraft not scheduled into R-3403.
- (3) Alternate Entry: C.
- (4) Alternate Exit: E.
- (5) All aircraft will maintain 1000' AGL from C to D.

FSS's Within 100 NM Radius:

CLE, DAY, HUF, IKK, LAN, LOU

VR-1639

ORIGINATING ACTIVITY: 127th OG/CC, Selfridge ANGB, MI 48045 DSN 273-5055.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| at or below 15 AGL | A | SSM 264/21 | N46°21.00' W84°49.00' |
| SFC B 15 AGL to | B | | N46°37.00' W86°03.00' |
| SFC B 15 AGL to | C | | N46°31.00' W86°40.00' |
| SFC B 15 AGL to | D | | N46°52.00' W87°44.00' |
| SFC B 15 AGL to | E | | N46°35.00' W88°28.00' |
| SFC B 15 AGL to | F | CMX 233/48 | N46°40.00' W89°23.00' |
| SFC B 15 AGL to Contact Minneapolis ARTCC on assigned frequency and climb VFR until receiving IFR clearance. | G | CMX 248/58 | N46°46.00' W89°46.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) This route is reverse of VR-1629. The 127 TFW is the controlling agency for both VR routes.
- (2) Route conflicts with VR-604/607 and IR-601. At conflicting points, (See and Avoid) concept will apply.
- (3) Alternate Entry: B, D.
- (4) Alternate Exit: D, F.

FSS's Within 100 NM Radius:

GRB

VR-1640

ORIGINATING ACTIVITY: 122 FW, Ft. Wayne IAP, IN 46809-0122 DSN 786-1202.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0300Z++ daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | FWA 258/32 | N40°52.00' W85°53.00' |
| 05 AGL B 15 AGL to | B | FWA 264/44 | N40°54.00' W86°09.00' |
| 05 AGL B 15 AGL to | C | FWA 269/77 | N40°57.00' W86°53.00' |
| 05 AGL B 15 AGL to | D | FWA 255/108 | N40°30.00' W87°28.00' |
| 05 AGL B 15 AGL to | E | FWA 243/110 | N40°07.00' W87°19.00' |
| 05 AGL B 15 AGL to | F | FWA 229/110 | N39°45.00' W86°59.00' |
| 05 AGL B 15 AGL to | G | FWA 224/119 | N39°32.00' W86°58.50' |
| 05 AGL B 15 AGL to | H | FWA 220/130 | N39°18.00' W86°58.00' |
| 05 AGL B 15 AGL to | I | FWA 217/136 | N39°09.50' W86°57.70' |
| 05 AGL B 15 AGL to | J | FWA 211/142 | N38°56.00' W86°45.00' |
| 05 AGL B 15 AGL to | K | FWA 201/129 | N38°58.00' W86°12.00' |
| 05 AGL B 15 AGL to | L | FWA 203/114 | N39°13.00' W86°08.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM left and 5 NM right of centerline from A to B; 5 NM left and 8 NM right of centerline from B to C; 10 NM left and 8 NM right of centerline from C to D; 10 NM either side of centerline from D to F; 5 NM left and 3 NM right of centerline from F to G; 9 NM left and 3 NM right of centerline from G to H; 9 NM left and 10 NM right of centerline from H to I; 4 NM left and 10 NM right of centerline from I to J; 3 NM left and 10 NM right of centerline from J to K; 7 NM left and 8 NM right of centerline from K to L.

Special Operating Procedures:

- (1) Clearance to fly the route does not constitute clearance into R-3401. This clearance must be obtained from the scheduling agency.
- (2) Route is the reverse of VR-1642 from A to F. Route is concurrent with VR-1641 from F to L. Route is concurrent with VR-615 from J to L. Route is concurrent with VR-619/IR-618 from H to J. Route is concurrent with

VR ROUTES

VR-1631, VR-1679, IR-618, VR-1617 from I to J. Route is the reverse of VR-1667 from J to L. See and Avoid concept applies.

- (3) Avoid overflight of cities, towns, and villages to maximum extent.
- (4) Avoid hard surfaced airports by 3 NM horizontally.
- (5) Avoid lake west of Point F by 2 NM.
- (6) Avoid Vermillion Airport on leg D-E by 6 NM.
- (7) If holding is required for entry into R-3401, this may be accomplished within route segment K to L.
- (8) Point K Alternate Exit for aircraft not scheduled into R-3401.
- (9) Point K Alternate Entry for aircraft scheduled into R-3401.
- (10) Alternate Entry: B, F and K.
- (11) Alternate Exit: D, F, H and K.
- (12) Noise Sensitive Areas: School at N40-56 W86-18 on leg B-C; chicken farm at N40-52 W86-47 on leg B-C; chicken farm at N40-58 W86-46 on leg B-C; town of Wolcott at N40-45 W87-03 on leg C-D; town of West Lebanon at N40-16 W87-23 on leg D-E; town of Covington at N40-08 W87-23 on leg D-E; lake at N39-53 W87-05 on leg E-F; Harden Lake at N39-45 W87-04 on leg E-F; horse farm at N39-38 W86-54 on leg F-G; town on Poland at N39-27 W86-56 on leg G-H; town of Patricksburg at N39-18 W86-56 on leg G-H; day care center at N39-00 W86-45 on leg I-J; Freetown at N38-58 W86-08 on leg K-L.
- (13) CAUTION:
 - (a) 300' AGL tower N40-15 W87-15;
 - (b) 475' AGL tower N40-34.8 W87-16.1;
 - (c) 300' AGL tower N40-56.6 W86-38.5 (12 Mile MOA);
 - (d) 550' AGL tower N40-34.5 W87-19.0.

FSS's Within 100 NM Radius:

CLE, DAY, HUF, IKK, LAN, LOU

VR-1641

ORIGINATING ACTIVITY: 122 FW, Ft. Wayne IAP, IN 46809-0122 DSN 786-1202.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0300Z++ daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | OKK 227/21 | N40°17.00' W86°24.00' |
| 05 AGL B 15 AGL to | B | TTH 036/20 | N39°45.00' W86°59.00' |
| 05 AGL B 15 AGL to | C | TTH 076/13 | N39°32.00' W86°58.50' |
| 05 AGL B 15 AGL to | D | TTH 129/17 | N39°18.00' W86°58.00' |
| 05 AGL B 15 AGL to | E | OOM 275/16 | N39°09.50' W86°57.70' |
| 05 AGL B 15 AGL to | F | OOM 209/14 | N38°56.00' W86°45.00' |
| 05 AGL B 15 AGL to | G | OOM 121/22 | N38°58.00' W86°12.00' |
| 05 AGL B 15 AGL to | H | OOM 081/23 | N39°13.00' W86°08.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 6 NM left and 10 NM right of centerline from A to B; 5 NM left and 3 NM right of centerline from B to C; 9 NM left and 3 NM right of centerline from C to D; 9 NM left and 10 NM right of centerline from D to E; 4 NM left and 10 NM right of centerline from E to F; 3 NM left and 10 NM right of centerline from F to G; 7 NM left and 8 NM right of centerline from G to H.

Special Operating Procedures:

- (1) Clearance to fly the route does not constitute clearance into R-3401. This clearance must be obtained from the scheduling agency.
- (2) Route is concurrent with VR-1642 from A to B. Route is concurrent with VR-1640 from B to H. Route is concurrent with VR-615 from F to H. Route is concurrent with VR-1631, VR-1679, VR-1617, IR-618 from G to H. See and Avoid concept applies.
- (3) Avoid overflight of cities, towns, and villages to maximum extent.
- (4) Avoid lake west of Point B by 2 NM.
- (5) Avoid hard surfaced airports by 3 NM horizontally.
- (6) If holding is required for entry into R-3401, this may be accomplished within route segments G and H.
- (7) Route concurrent with VR-619/IR-618 from Point D to F.
- (8) Point G Alternate Exit for aircraft scheduled into R-3401.
- (9) Point G Alternate Entry for aircraft scheduled into R-3401.
- (10) Alternate Entry: B and G.
- (11) Alternate Exit: B and G.
- (12) Noise Sensitive Areas: Horse farm at N39-38 W86-54 on leg B-C; town of Poland at N39-27 W86-57 on leg C-D; town of Patricksburg at N39-18 W86-57 on leg D-E; day care center at N39-00 W86-45 on leg E-F; town of Freetown at N38-58 W86-08 on leg G-H.
- (13) CAUTION:
 - (a) 200' AGL tower N39-35 W87-00;
 - (b) 520' AGL double towers plotted as 420' AGL N39-53 W86-43.

FSS's Within 100 NM Radius:

CLE, DAY, HUF, IKK, LOU

VR-1642

ORIGINATING ACTIVITY: 122 FW, Ft. Wayne IAP, IN 46809-0122 DSN 786-1202.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0100Z++ daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | OKK 227/21 | N40°17.00' W86°24.00' |
| 05 AGL B 15 AGL to | B | TTH 036/20 | N39°45.00' W86°59.00' |
| 05 AGL B 15 AGL to | C | BVT 202/29 | N40°07.00' W87°19.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 05 AGL B 15 AGL to | D | BVT 259/18 | N40°30.00' W87°28.00' |
| 05 AGL B 15 AGL to | E | BVT 019/25 | N40°57.00' W86°53.00' |
| 05 AGL B 15 AGL to | F | FWA 264/44 | N40°54.00' W86°09.00' |
| 05 AGL B 15 AGL to | G | FWA 258/32 | N40°52.00' W85°53.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 6 NM left and 10 NM right of centerline from A to B; 10 NM either side of centerline from B to D; 8 NM left and 10 NM right of centerline from D to E; 8 NM left and 5 NM right of centerline from E to F; 5 NM left and 4 NM right of centerline from F to G.

Special Operating Procedures:

- (1) Clearance to fly the route does not constitute clearance to leave the boundaries of the low level and fly within 12 mile MOA. This clearance must be obtained from the scheduling agency.
- (2) Sorties scheduled into 12 mile MOA will exit at F and contact Grissom Approach.
- (3) Avoid overflight of cities, towns, and villages to the maximum extent.
- (4) Route is the reverse of VR-1640 from Point B to G. Route is concurrent with VR-1641 from Point A to B. See and Avoid concept applies.
- (5) Avoid hard surface airports by 3 NM horizontally.
- (6) Avoid Cecil M. Harden Lake by 2 NM.
- (7) Alternate Entry: B and D.
- (8) Alternate Exit: F.
- (9) Avoid Vermillion Airport on leg C to D by 6 NM.
- (10) Noise Sensitive Areas:
 - (a) Harden Lake at N39-45 W87-04 on leg B-C;
 - (b) Lake at N39-53 W87-05 on leg B-C;
 - (c) Town of Covington at N40-08 W87-23 on leg C-D;
 - (d) Town of West Lebanon at N40-16 W87-23 on leg C-D;
 - (e) Town of Wolcott at N40-45 W87-03 on leg D-E;
 - (f) Chicken farm at N40-52 W86-57 on leg D-E;
 - (g) Chicken farm at N40-58 W86-46 on leg E-F;
 - (h) School at N40-56 W86-18 on leg E-F.
- (11) CAUTION:
 - (a) 300' AGL tower N40-15 W87-15;
 - (b) 475' AGL tower N40-34.8 W87-16.1;
 - (c) 300' AGL tower N40-56.6 W86-38.5 (12 Mile MOA);
 - (d) 550' AGL tower N40-34.5 W87-19.0.

FSS's Within 100 NM Radius:

CLE, DAY, HUF, IKK, LAN, LOU

VR-1644

ORIGINATING ACTIVITY: 127WG, 28252 Wilbur Wright Blvd., Selfridge ANGB, MI 48045 DSN 273-4663.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|------------------|--|
| As assigned to | A | APN 261/45 | N44°52.00' W84°34.80' |
| 05 AGL B 15 AGL to | B | APN 270/41 | N45°00.00' W84°31.40' |
| 05 AGL B 15 AGL to | C | APN 302/23 | N45°14.70' W84°02.90' |
| 05 AGL B 15 AGL to | D | APN 245/19 | N44°55.00' W83°56.00' |
| 10 AGL B 15 AGL to | E | ASP 328/16 | N44°39.00' W83°38.00' |
| 05 AGL B 15 AGL to | F | ASP 231/21 | N44°12.00' W83°44.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | G | ASP 190/25 | N44°02.00' W83°26.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | H | ECK 357/49 | N44°04.00' W82°55.00' |
| 05 AGL B 15 AGL to Alternate Entry: D as assigned to | I | ECK VORTAC A1 | N43°15.35' W82°43.07' N44°52.00' W84°34.80' |
| 05 AGL B 15 AGL to | B1 | APN 270/41 | N45°00.00' W84°31.40' |
| 05 AGL B 15 AGL to | B2 | APN 274/37 | N45°02.70' W84°26.00' |
| 05 AGL B 15 AGL to | C1 | APN 280/19 | N45°05.80' W83°59.80' |
| 05 AGL B 15 AGL to | D1 | APN 245/19 | N44°55.00' W83°56.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM left and 3 NM right of centerline from A to B; 2 NM either side of centerline from B to C; 4 NM either side of centerline from C to I; 4 NM left and 3 NM right of centerline from A1 to B1; 2 NM either side of centerline from B1 to B2; 3 NM left and 2 NM right of centerline from B2 to C1; 4 NM either side of centerline from C1 to D.

Special Operating Procedures:

- (1) Avoid all watercraft, structures, vehicles and persons by 500' AGL minimum on all route segments over water portion and Point G - 100' AGL minimum over land or within 1 NM of land - 500' AGL minimum.
- (2) Point A to B; avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb through 1 Aug: N44-53.4 W84-34.2.
- (3) Point B to C:
 - (a) Avoid Johannesburg - N44-59.0 W84-27.3 by 1 NM;
 - (b) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb through 1 Aug: (N45-07.0 W84-15.0);
 - (c) Avoid Clear Lake State Park (N45-07.5 W84-10.8) by 1 NM;
 - (d) CAUTION: 1349' AGL (2409' MSL) tower (N45-08.3 W84-09.8);
 - (e) Uncharted sod airstrip (N45-16.0 W84-05.0).
- (4) Point C to D:
 - (a) Avoid overflying any structure below 100' AGL;
 - (b) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb through 1 Aug: (N45-15.0 W83-58.5);

VR ROUTES

- (N45-15.0 W83-58.0); (N45-09.0 W83-58.5); (N45-02.0 W83-53.0); (N44-57.0 W83-52.0);
- (c) Avoid Hillman Airport (N45-05.0 W83-55.0) by 3 NM.
- (5) Point D to E:
- (a) Uncharted sod airstrips: (N44-54.0 W83-55.0); (N44-52.0 W83-53.0); (N44-48.0 W83-48.0);
- (b) Avoid the following nesting areas by 1 NM and 1000' AGL during listed time frames: (Common Loon from 1 Apr through 15 Jul: N44-40.7 W83-36.3); (Bald Eagle from 1 Feb through 1 Aug: N44-53.0 W83-55.0; N44-46.3 W83-53.0).
- (6) Point E to F:
- (a) Avoid Stier Airport (N44-31.0 W83-41.0) by 3 NM;
- (b) Avoid Glennie (N44-33.0 W83-43.0) by 3 NM;
- (c) Uncharted sod airstrip (N44-16.0 W83-47.0);
- (d) Avoid the following nesting areas by 1 NM and 1000' AGL during listed time frames: (Common Loon from 1 Apr through 15 Jul: N44-36.0 W83-36.3); (Great Blue Heron from 15 Mar through 15 Aug: 44-34.6N 83-42.7W); (Bald Eagle from 1 Feb through 15 Aug: N44-27.5 W83-45.5); (Kirtland's Warbler from 1 May through 15 Aug: N44-20.0 W83-38.5; N44-22.0 W83-38.0; N44-34.0 W83-35.0).
- (e) Do not overfly open pit mine at water plant (N44-12.55 W83-42.88 Point F by 1 NM due to unannounced mine blasting.
- (7) Point H to I:
- (a) Uncharted sod airstrip (N43-34.0 W82-47.0);
- (b) Minimum altitude 1000' AGL last 5 NM.
- (8) Point A1 to B1: Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb through 1 Aug: N44-53.4 W84-27.2.
- (9) Point B1 to B2: Avoid Johannesburg (N44-59.0 W84-27.3) by 1 NM.
- (10) Point B2 to C1:
- (a) Avoid Heatherton (N45-01.0 W84-22.2) by 1 NM;
- (b) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb through 1 Aug: (N45-07.0 W84-04.5), (N45-04.5 W84-07.0);
- (c) Avoid Clear Lake State Park (N45-07.5 W84-10.8) by 1 NM;
- (d) CAUTION: 1349' AGL (2409' MSL) tower (N45-08.3 W84-09.8).
- (11) Point C1 to D1:
- (a) Avoid overflying any structure below 1000' AGL;
- (b) Avoid Hillman Airport (N45-05.0 W83-55.0);
- (c) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb through 1 Aug: (N45-09.0 W83-58.5); (N45-02.0 W83-53.0); (N44-57.0 W83-52.0).
- (12) Clearance to fly route does not constitute clearance into R-4201 which must be given by the RSO on 385.7/381.1. Do not proceed to Point A (A1) unless cleared into R-4201.
- (13) All Points are Alternate Entry and Exit Points.
- (14) VR-1644 is opposite direction traffic with VR-1624, VR-1627 F to H, and VR-1627 alternate route E2 to E4. VR-1644 alternate route is opposite direction traffic with VR-1624 alternate route and VR-1627 alternate route E1 to E4. 127 TFW will not schedule opposite and conflicting traffic.
- (15) (See and Avoid) concept applies. Route conflicts with several VR and SR routes.

FSS's Within 100 NM Radius:

CLE, LAN

VR-1645

ORIGINATING ACTIVITY: 127TH OG/CC, Selfridge ANGB, MI 48045-5029 DSN 273-5055.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | APN 255/48 | N44°47.00' W84°36.00' |
| 05 AGL B 15 AGL to | B | APN 246/43 | N44°43.00' W84°25.00' |
| 05 AGL B 15 AGL to | C | APN 245/19 | N44°55.00' W83°56.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | D | ASP 045/28 | N44°49.00' W83°00.00' |
| 01 AGL B 15 AGL to | E | ECK 357/49 | N44°04.00' W82°55.00' |
| 05 AGL B 15 AGL to | F | ECK VORTAC | N43°15.35' W82°43.07' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Avoid all watercraft, structures, vehicles and persons by 500' on terrain following segments.
- (2) This route can be flown in conjunction with range missions in the R-4201 restricted area. Route begins at R-4201 boundary. Clearance to fly the route does not constitute clearance into R-4201. This clearance must be obtained from Range Scheduling, Phelps-Collins ANG FTS, DSN 722-3760. Prior to entering R-4201 obtain inflight clearance/instructions from Range Officer on 385.7 or 381.1. Begin route at alternate entry B unless scheduled for R-4201.
- (3) Route is reverse of VR-1625. In addition, route conflicts with VR-1624, VR-1644, VR-1627, VR-1628. The 127 TFW is the scheduling agency for common Point C (VR-1624, VR-1645), D (VR-1627, VR-1647, VR-1648), and Point E to F (VR-1624). At conflicting Points, See and Avoid concept will apply.
- (4) Route conflicts with SR-701/702.
- (5) Points A to B: Maintain minimum altitude 1000' AGL 3 NM of Lovells (N44-48 W84-29).
- (6) Points C to D: Maintain minimum altitude of 1000' AGL over land. Noise Sensitive Area. 1 NM after landfall maintain minimum altitude of 100' AGL.
- (7) Points E to F: Maintain minimum altitude of 1000' AGL last 5 miles. Noise Sensitive Area.
- (8) Alternate Entry: B, C, D and E.
- (9) Alternate Exit: B, C, D and E.

FSS's Within 100 NM Radius:

CLE, LAN

VR-1647

ORIGINATING ACTIVITY: 127TH OG/CC, Selfridge
ANGB, MI 48045-5029 DSN 273-5055.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | APN 261/45 | N44°52.00' W84°34.80' |
| 05 AGL B 15 AGL to | B | APN 270/41 | N45°00.00' W84°31.40' |
| 05 AGL B 15 AGL to | C | APN 302/23 | N45°14.70' W84°02.90' |
| 05 AGL B 15 AGL to | D | PLN 097/20 | N45°37.40' W84°12.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | E | PLN 061/34 | N45°57.00' W84°00.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | F | PLN 069/41 | N45°56.00' W83°48.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | G | APN 041/13 | N45°16.00' W83°23.00' |
| 01 AGL B 15 AGL to (Below 05 AGL only over water) | H | ASP 045/28 | N44°49.00' W83°00.00' |
| Alternate Entry Track: D as assigned to | A1 | APN 261/45 | N44°52.00' W84°34.80' |
| 05 AGL B 15 AGL to | B1 | APN 270/41 | N45°00.00' W84°31.40' |
| 05 AGL B 15 AGL to | B2 | APN 274/37 | N45°02.70' W84°26.00' |
| 05 AGL B 15 AGL to | C1 | APN 280/19 | N45°05.80' W83°59.80' |
| 05 AGL B 15 AGL to | D1 | APN 327/42 | N45°37.40' W84°12.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized
entire route.

ROUTE WIDTH - 4 NM left and 3 NM right of centerline
from A to B; 2 NM either side of centerline from B to C; 3 NM left
and 4 NM right of centerline from C to D; 4 NM either side of
centerline from D to H; 4 NM left and 3 NM right of centerline
from A1 to B1; 2 NM either side of centerline from B1 to B2; 3
NM left and 2 NM right of centerline from B2 to C1; 3 NM left
and 4 NM right of centerline from C1 to D.

Special Operating Procedures:

- (1) Avoid all watercraft, structures, vehicles and persons by
500' AGL minimum on all route segments over water
portion - 100' AGL minimum over land or within 1 NM of
land - 500' AGL minimum.
- (2) Points A to B: Avoid Bald Eagle nesting area by 1 NM and
1000' AGL from 1 Feb through 1 Aug: (N44-53.4 W84-34.2).
- (3) Points B to C:

- (a) Avoid Johannesburg (N44-59.0 W84-27.3) by 1 NM;
 - (b) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL
from 1 Feb through 1 Aug: (N45-07.0 W84-15.0);
 - (c) Avoid Clear Lake State Park (N45-07.5 W84-10.8) by 1
NM;
 - (d) CAUTION: 1349' AGL (2409' MSL) tower (N45-08.3
W84-09.8).
- (4) Point C to D:
 - (a) Avoid overflying any structure below 1000' AGL;
 - (b) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL
from 1 Feb through 1 Aug: (N45-15.0 W83-58.5);
 - (c) Uncharted sod airstrip (N45-16.0 W84-05.0);
 - (d) Avoid Millersburg (N45-20.3 W84-03.7), and Ocqueoc
(N45-24.6 W84-05.3) by 1 NM.
 - (5) Points D to E:
 - (a) Uncharted lighthouse 100' AGL (N45-46.0 W84-08.0);
 - (b) Flight within 1 NM of Saddlebag Island (N45-57.2
W84-02.6) is prohibited below 1500' AGL;
 - (c) Flight is prohibited within 2 NM of the Lake Huron
shoreline from St. Vital Point (45-57.0N 84-00.0W) west
to Huron Point (N45-58.0 W84-04.0) below 1500' AGL.
 - (6) Points E to F:
 - (a) Uncharted lighthouse 100' AGL south entrance of De
Tour Channel (N45-57.0 W83-54.0);
 - (b) Approaching Drummond Island, do not penetrate land in
area of Point F by more than 1 NM. If over land, fly
minimum of 1000' AGL.
 - (7) Points F to G: Avoid Bald Eagle nesting area by 1 NM and
1000' AGL from 1 Feb through 1 Aug: (N45-16.5 W83-26.0).
 - (8) Point G to H:
 - (a) Uncharted lighthouse 100' AGL on Middle Island
(N45-11.6 W83-19.5);
 - (b) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL
from 1 Feb through 1 Aug: (N45-16.5 W83-16.0).
 - (9) Points A1 to B1: Avoid Bald Eagle nesting area by 1 NM and
1000' AGL from 1 Feb through 1 Aug: (N45-53.4N
84-34.2W).
 - (10) Points B1 to B2: Avoid Johannesburg (N44-59.0 W84-27.3)
by 1 NM.
 - (11) Points B2 to C1:
 - (a) Avoid Heatherton (N45-01.0 W84-22.2) by 1 NM;
 - (b) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL
from 1 Feb through 1 Aug: (N45-07.0 W84-15.0);
(N45-04.5 W84-07.0);
 - (c) Avoid Clear Lake State Park (N45-07.5 W84-10.8) by 1
NM;
 - (d) CAUTION: 1349' AGL (2409' MSL) tower (N45-08.3
W84-09.8).
 - (12) Points C1 to D1:
 - (a) Avoid overflying any structure below 1000' AGL;
 - (b) Avoid Hillman Airport (N45-05.0 W83-55.0) by 3 NM;
 - (c) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL
from 1 Feb through 1 Aug: (N45-09.0 W83-58.5);
(N45-15.0 W83-58.0);
 - (d) Uncharted sod airstrip (N45-16.0 W84-05.0);
 - (e) Avoid Millersburg (N45-20.3 W84-03.7) and Ocqueoc
(N45-24.6 W84-05.3) by 1 NM.
 - (13) Clearance to fly the route does not constitute clearance into
R-4201 which must be given by the RSO on 385.7/381.1. Do
not proceed to Point A (A1) unless cleared into R-4201.
 - (14) All points are alternate Entry/Exit Points.

VR ROUTES

- (15) VR-1647 is opposite direction traffic with VR-1627, VR-1624 G to H, and VR-1624 alternate route F2 to F4, VR-1647 alternate route is opposite direction traffic with VR-1624 alternate route F1 to F4. 127 TFW will not schedule opposite and conflicting traffic.
- (16) Route transits Huron MOA between Points F through H.
- (17) See and Avoid concept applies. Route conflicts with several VR and SR routes.

FSS's Within 100 NM Radius:

LAN

VR-1648

ORIGINATING ACTIVITY: 127TH OG/CC, Selfridge ANGB, MI 48045-5029 DSN 273-5055.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| 01 AGL B 15 AGL to | A | | N46°26.00' W88°20.00' |
| 01 AGL B 15 AGL to | B | ESC 333/16 | N45°58.00' W87°16.00' |
| 01 AGL B 15 AGL to | C | ESC 059/59 | N46°13.00' W85°52.00' |
| 05 AGL B 15 AGL to | D | SSM 258/52 | N46°10.00' W85°31.00' |
| 01 AGL B 15 AGL to | E | SSM 255/26 | N46°16.00' W84°55.00' |
| 05 AGL B 15 AGL to | F | PLN 021/21 | N45°58.00' W84°32.00' |
| 05 AGL B 15 AGL to | G | PLN 061/34 | N45°57.00' W84°00.00' |
| 01 AGL B 15 AGL to (below 05 AGL only over water) | H | PLN 069/41 | N45°56.00' W83°48.00' |
| 01 AGL B 15 AGL to (below 05 AGL only over water) | I | APN 041/13 | N45°16.00' W83°23.00' |
| 01 AGL B 15 AGL to | J | ASP 045/28 | N44°49.00' W83°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side of centerline.

Special Operating Procedures:

- (1) Avoid all watercraft, structures, vehicles and persons by 500' AGL minimum on all segments.
- (2) Point B to C: Uncharted 200' AGL tower - N45-59.0 W87-09.0.
- (3) Point C to D:
(a) Uncharted 200' AGL tower - N46-12.0 W85-51.0;
(b) Avoid Germfask- N46-14.8 W85-55.6 - by 2 NM or 1000' AGL.
- (4) Point D to E: Uncharted 100' AGL tower- N46-13.0 W84-57.0.

- (5) Point E to F:
(a) Uncharted 100' AGL tower - N46-13.0 W84-57.0;
(b) Uncharted 100' AGL, 1000' MSL, tower on NW side of hill, N46-09.5 W84-46.7.
- (6) Point F to G:
(a) Avoid Lindberg Airport- N46-02.5 W84-25.0 - by 3 NM;
(b) Flight within 1 NM of Saddlebag Island, N45-57.2 W84-04.6, below 1500' AGL prohibited;
(c) Flight is prohibited within 2 NM of the Lake Huron shoreline from Huron Point, N45-58.0 W84-04.0, east to St. Vital Point N45-58.0 W84-00.0, below 1500' AGL.
- (7) Point G to H: Uncharted 100' AGL lighthouse at south entrance of DeTour Channel- N45-57.0 W83-54.0.
- (8) Point H to I:
(a) Approaching Drummond Island turn over first landfall and proceed direct to Point I. Do not penetrate land in area of Point H by more than 1 NM. If over land fly 1000' AGL minimum;
(b) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb through 1 Aug: N45-16.5 W83-26.0.
- (9) Point I to J:
(a) Uncharted 100' AGL lighthouse on Middle Island - N45-11.8 W83-19.0;
(b) Avoid Bald Eagle nest area 1 NM and 1000' AGL 1 Feb through 1 Aug N45-01.5 W83-16.0.
- (10) All points are Alternate Entry and Exit.
- (11) VR-1636 and reciprocal VR-1666 share common legs from A through mid-point B to C. VR-604 and reciprocal VR-607 cross between SR-782 starts between Points I to J.
- (12) Route transits Huron MOA between Points H thru J.
- (13) This route is reciprocal route to VR-1628. This route shares common legs with VR-1647 and opposite legs with VR-1627 for which 127 TFW is scheduling agency. The 127 TFW will not schedule opposite and conflicting traffic at the same time.
- (14) (See and Avoid) concept applies. Route conflicts with several VR, SR and IR routes.

FSS's Within 100 NM Radius:

GRB, LAN

VR-1650

ORIGINATING ACTIVITY: ANG CRTG, Camp Douglas, WI 54618-5001 DSN 871-1445 C608-427-1445.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0730 local-Sunset Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | EAU 123/32 | N44°34.70' W90°53.50' |
| 03 AGL B 15 AGL to | B | EAU 100/34 | N44°45.30' W90°43.00' |
| 03 AGL B 15 AGL to | C | AUW 272/36 | N44°53.40' W90°26.00' |
| 03 AGL B 15 AGL to | D | AUW 275/22 | N44°53.30' W90°06.00' |
| 03 AGL B 15 AGL to | E | AUW 219/23 | N44°33.40' W89°56.50' |

| | | | |
|--------------------|---|------------|--------------------------|
| 03 AGL B 15 AGL to | F | VOK 015/32 | N44°27.00' W90°03.80' |
| 05 AGL B 15 AGL to | G | VOK 023/19 | N44°14.00' W90°05.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to G.

ROUTE WIDTH - 2 NM right and 4 NM left of centerline from A to D; 3 NM either side of centerline from D to G.

Special Operating Procedures:

- (1) Route normally will be flown in conjunction with range missions at R-6904 or as an entry into the Volk West MOA. On entering the route, contact Volk Mission Coordinator, callsign Phoenix, UHF 346.525. Clearance to fly VR-1650 does not constitute clearance to enter R-6904. Clearance to enter R-6904 is required from the Range Control Officer on UHF 358.2/297.1, VHF 132.025, FM 34.2. Aircraft not scheduled into R-6904 must exit at F.
- (2) Alternate Entry Point: F.
- (3) Alternate Exit Point: F.
- (4) All aircraft must avoid charted airfields by 1500' AGL or 3 NM.
- (5) Crop dusting operations are conducted up to 100' AGL over or near Cranberry Bogs.
- (6) Noise sensitive areas, avoid by 2000' AGL or 1.5 NM unless otherwise indicated:
 - (a) Points C-D; Mink ranch N45-09.0 W90-14.0, avoid by 2500' AGL or 1.5 NM;
 - (b) Numerous dairy and veal farms throughout route;
 - (c) Points E-F; George W. Mead Wildlife Area (N44-43.5 W89-53.0 to N44-43.5 W89-49.0 to N44-42.5 W89-49.0 to N44-42.3 W89-46.0 to N44-40.5 W89-46.0 to N44-40.5 W89-49.0 to N44-42.5 W89-53.0 back to starting point).
- (7) Possible route conflicts:
 - (a) Points F-H transit Volk West MOA;
 - (b) Points E-F crossing traffic on SR-785;
 - (c) Endpoint G coincides with VR-1616, endpoint H at Hardwood Range (R-6904).
- (8) Soaring raptors prevalent SFC to 2000' AGL for entire route from Feb-Nov during the mid-day time period.
- (9) Waterfowl feeding flights SFC to 2000' AGL between points B-D from Apr-May and Aug-Nov during the dawn/dusk time period.
- (10) Caution; High numbers of waterfowl feeding flights SFC to 2000' AGL between points B-C from Sep-Oct during the dawn/dusk time period

FSS's Within 100 NM Radius:
GRB, PNM

VR-1666

ORIGINATING ACTIVITY: Alpena CRTC/OTM (ANG), 5884 A. Street, Alpena, MI 49707-8125 DSN 741-3509/3226.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or below 15 AGL | A | | N46°35.00' W88°28.00' |
| 01 AGL B 15 AGL to | B | | N46°26.00' W88°20.00' |
| 01 AGL B 15 AGL to | C | ESC 333/16 | N45°58.00' W87°16.00' |
| 05 AGL B 15 AGL to | D | ESC 037/25 | N46°03.00' W86°44.00' |
| 05 AGL B 15 AGL to | E | ESC 081/31 | N45°48.00' W86°21.00' |
| 01 AGL B 15 AGL to | F | TVC 345/49 | N45°27.00' W85°53.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Avoid all watercraft, structures, vehicles and persons by 500' on terrain following segments.
- (2) This route is the reverse of VR-1636. The 180 TFG is scheduling agency for VR-1636. Additionally, route crosses VR-1629 at Point A, and VR-1628 C to D. The 127 TFW, SelfRidge ANGB, DSN 273-5055 schedules VR-1628 and VR-1629. The concept of See and Avoid applies for conflicting points.
- (3) Alternate Entry: B, C and D.
- (4) Alternate Exit: B, C and D.
- (5) Minimum altitude between A to E is 1000' AGL from 1 Mar-30 Jul.

FSS's Within 100 NM Radius:
GRB

VR-1667

ORIGINATING ACTIVITY: 180 TFG/DO, Toledo Express Airport, Swanton, OH 43558 DSN 580-4084.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise - 0200Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or below 15 AGL | A | SHB 205/26 | N39°15.00' W86°04.00' |
| 05 AGL B 15 AGL to | B | SHB 199/42 | N38°58.00' W86°08.00' |
| 05 AGL B 15 AGL to | C | SHB 137/28 | N39°17.00' W85°25.00' |
| 05 AGL B 15 AGL to | D | SHB 068/28 | N39°48.00' W85°15.00' |
| 05 AGL B 15 AGL to | E | ROD 274/42 | N40°16.00' W84°58.00' |

VR ROUTES

05 AGL B 15 AGL to F ROD 303/31 N40°32.00'
W84°39.00'
05 AGL B 15 AGL to G TOL 211/24 N41°14.00'
W84°02.00'

TERRAIN FOLLOWING OPERATIONS: Authorized from A to E.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Entry Point A is within confines of R-3401. Clearance to fly the route does not constitute clearance into R-3401. Alternate entry Point B will be used by aircraft not scheduled into R-3401.
- (2) All aircraft will maintain 1000' AGL from D to E.
- (3) Alternate Entry: B, C and D.
- (4) Alternate Exit: B, C, D, E and F.
- (5) This route is reverse of VR-1617 and is concurrent with VR-1638 and VR-1668 from Points C to G. The 180 TFG is scheduling agency for these routes. The concept of See and Avoid shall apply for conflicting segments.
- (6) Avoid direct overflight of Freetown, IN below 1000' AGL, Point B. Noise Sensitive Area.

FSS's Within 100 NM Radius:

CLE, DAY, HUF, IKK, LAN, LOU

VR-1668

ORIGINATING ACTIVITY: 180 TFG/DO, Toledo Express Airport, Swanton, OH 43558 DSN 580-4084.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-2100 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or below 15 AGL | A | ABB 022/27 | N39°00.00' W85°25.00' |
| 05 AGL B 15 AGL to | B | SHB 137/28 | N39°17.00' W85°25.00' |
| 05 AGL B 15 AGL to | C | SHB 068/28 | N39°48.00' W85°15.00' |
| 05 AGL B 15 AGL to | D | ROD 274/42 | N40°16.00' W84°58.00' |
| 05 AGL B 15 AGL to | E | ROD 303/31 | N40°32.00' W84°39.00' |
| 05 AGL B 15 AGL to | F | TOL 211/24 | N41°14.00' W84°02.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to D.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Entry Point A is within confines of R-3403. Clearance to fly the route does not constitute clearance into R-3403. Clearance into R-3403 must be obtained from RCC. Alternate entry Point B will be used by aircraft not scheduled into R-3403.
- (2) All aircraft will maintain 1000' AGL from C to D.
- (3) Alternate Entry: B and C.
- (4) Alternate Exit: B, C, D and E.
- (5) This route is reverse of VR-1638 and segments B to F are opposite direction to VR-1617 and congruent with VR-1667. The 180 TFG is scheduling agency for these routes and will deconflict these routes through scheduling.

FSS's Within 100 NM Radius:

CLE, DAY, HUF, IKK, LAN, LOU

VR-1679

ORIGINATING ACTIVITY:

Atterbury Range
JFAC-IN/DET1, Bldg 124, Edingburg, IN 46124 DSN 569-2114,
C812-526-1114.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset Tue-Sun, OT by NOTAM

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | TTH 228/25 | N39°13.00' W87°40.00' |
| 05 AGL B 15 AGL to | B | BIB 025/10 | N39°04.00' W88°23.00' |
| 05 AGL B 15 AGL to | C | BIB 206/21 | N38°37.00' W88°42.00' |
| 05 AGL B 15 AGL to | D | SAM 243/8 | N38°26.00' W88°14.00' |
| 05 AGL B 15 AGL to | E | SAM 085/26 | N38°30.00' W87°32.00' |
| 05 AGL B 15 AGL to | F | PXV 032/45 | N38°33.00' W87°13.00' |
| 05 AGL B 15 AGL to | G | PXV 078/35 | N38°01.00' W87°02.00' |
| 05 AGL B 15 AGL to | H | MYS 351/29 | N38°22.00' W86°21.00' |
| 05 AGL B 15 AGL to | I | OOM 127/24 | N38°54.00' W86°13.00' |
| 10 AGL B 15 AGL to | J | OOM 074/25 | N39°15.00' W86°06.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM right and 4 NM left of centerline from B to C; 5 NM either side of centerline from C to F; 5 NM left and 8 NM right of centerline from F to G; 3 NM left and 7 NM right of centerline from G to H; 5 NM either side of centerline from H to I; 10 NM left and 4 NM right of centerline from I to J.

Special Operating Procedures:

- (1) Clearance to fly the route does not constitute clearance to enter R-3401.
- (2) Route is MARSAs thru See and Avoid with IR-618, VR-619, IR-620 and VR-621.
- (3) Point I Alternate Exit for aircraft scheduled into R-3401.
- (4) Avoid overflight of cities, towns, and villages to extent possible.
- (5) If holding is required for entry into R-3401, accomplish between route segment I and J at holding airspeed.
- (6) Alternate Entry: F, G and I.
- (7) Alternate Exit: E, F and G.

FSS's Within 100 NM Radius:

BNA, DAY, HUF, IKK, LOU, STL

VR-1709

ORIGINATING ACTIVITY: 177th FW/Det 1 (ANG), Atlantic City ANGB, NJ 08234-9500 DSN 455-6707. E-mail wgrscheduler at njatla.ang.af.mil.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | OTT 108/29 | N38°38.00' W76°08.00' |
| 05 AGL B 15 AGL to | B | SBY 061/22 | N38°35.00' W75°10.00' |
| 05 AGL B 15 AGL to | C1 | SIE 227/23 | N38°47.80' W75°05.50' |
| 05 AGL B 15 AGL to | C | SIE 332/8 | N39°12.50' W74°54.50' |
| 05 AGL B 15 AGL to | D | ACY 320/12 | N39°35.00' W74°46.30' |
| 05 AGL B 15 AGL to | E | CYN 232/16 | N39°36.80' W74°40.00' |
| 05 AGL B 15 AGL to | F | CYN 204/10 | N39°39.20' W74°29.00' |
| Alternate Southern Entry Track as assigned to | C1 | SIE 227/23 | N38°47.80' W75°05.50' |
| 05 AGL B 15 AGL to | D1 | SIE 134/17 | N38°56.00' W74°30.00' |
| 01 AGL B 15 AGL to | E1 | CYN 124/22 | N39°40.00' W74°00.00' |
| 01 AGL B 15 AGL to | F1 | CYN 091/20 | N39°52.00' W74°00.00' |
| 13 AGL B 15 AGL to | G1 | CYN 060/6 | N39°52.90' W74°20.00' |
| 04 AGL B 15 AGL to | H1 | CYN 017/6 | N39°54.50' W74°25.00' |
| 04 AGL B 15 AGL to | I1 | CYN 273/11 | N39°47.60' W74°40.50' |

| | | | |
|---|----|------------|--------------------------|
| 04 AGL B 15 AGL to | J1 | CYN 224/13 | N39°38.30' W74°35.40' |
| Alternate Northern Entry Track as assigned to | A1 | COL 129/40 | N39°59.90' W73°23.80' |
| 01 AGL B 15 AGL to | B1 | COL 131/21 | N40°08.00' W73°46.00' |
| 01 AGL B 15 AGL to | F1 | CYN 091/20 | N39°52.00' W74°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to F.

ROUTE WIDTH - 3 NM either side of centerline from A to C1; 5 NM left and 3 NM right of centerline from C-1 to D; 3 NM either side of centerline from D to E; 9 NM left and 3 NM right of centerline from E to F; 2 NM left and 4 NM right of centerline from C-1 to D-1; 3 NM left and 4 NM right of centerline from D-1 to E-1; 3 NM either side of centerline from E-1 to F-1; 2 NM left and 1 NM right of centerline from F-1 to H-1; 2 NM either side of centerline from H-1 to I-1; 7 NM left and 2 NM right of centerline from I-1 to J-1; 4 NM either side of centerline from A-1 to F-1.

Special Operating Procedures:

- (1) Route must be scheduled 4 hours in advance with Warren Grove Gunnery Range. Schedulers available during duty hours Tue-Sat and occasionally Sun.
- (2) Bird hazard exists along route 15 Sep - 1 Dec and 1 Mar - 30 Apr.
- (3) Alternate Entry: B, C, D, E, A-1, B-1, C-1, D-1, E-1, F-1, G-1, H-1 and I-1.
- (4) Alternate Exit: B, C, D, E, A-1, B-1, C-1, D-1, E-1, F-1, G-1, H-1, I-1 and J-1.
- (5) Obtain range clearance prior to departing Point F or Point J-1 on 286.2.
- (6) Avoid towns and populated areas by 1 NM or overfly by 1500' AGL.
- (7) Avoid town of Oxford when maneuvering to enter Point A.
- (8) Avoid Washington TCA near Point A.
- (9) Maintain 1500' AGL from town of Woodland, DE (N38-36 W75-39) until reaching the Delaware Bay.
- (10) Avoid Rehobeth Beach.
- (11) Recommend contact Atlantic City Approach on 327.125 or 385.5 for traffic advisories and Atlantic City Class C avoidance. Class C dimensions are 1300-4100' MSL between C and F.
- (12) Avoid Noise Sensitive Area 1 NM SE of Sweetwater, NJ (N39-37.2 W74-37.5).
- (13) Avoid (320' AGL) 345' MSL tower (N38-34.8 W75-17.2).
- (14) Avoid Chatsworth between H-1 to J-1.
- (15) Avoid Robert J. Miller Airport (N39-56 W74-18) by 1500'AGL or 3 NM.
- (16) If IFR descent is anticipated, do not file to Point B-1 as planned Entry point. If entering at Point B-1, minimum of ATC flight following strongly recommended due to high air traffic volume descending/climbing in vicinity of point.
- (17) Caution of inflight banner towing crossing between F-1 and G-1.
- (18) Avoid nuclear power plant at (N39-48.9 W74-12.3) by 3 NM and 1500' AGL.

FSS's Within 100 NM Radius:

AOO, BDR, DCA, MIV, IPT, ISP

VR ROUTES

VR-1711

ORIGINATING ACTIVITY: 113 WG, Andrews AFB, MD
20331 DSN 857-3307/08, C240-857-3307/3308/4190.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0730 local-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | OTT 081/15 | N38°47.00' W76°27.00' |
| 05 AGL B 15 AGL to | B | OTT 176/16 | N38°27.00' W76°40.00' |
| 05 AGL B 15 AGL to | C | OTT 186/34 | N38°08.00' W76°42.00' |
| 05 AGL B 15 AGL to | D | HCM 354/23 | N37°49.00' W76°49.00' |
| 05 AGL B 15 AGL to | E | CCV 021/12 | N37°33.00' W75°57.00' |
| 05 AGL B 15 AGL to | F | SBY 237/14 | N38°11.00' W75°43.00' |
| 05 AGL B 15 AGL to | G | PXT 121/20 | N38°10.00' W76°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

- (1) Those wanting to schedule this route must call during normal duty hours (0730-1530 on Mon and 0630-1530 on Tue-Sat).
- (2) Bird hazard exists along route 15 Sep-1 Dec and 1 Mar-30 Apr.
- (3) Alternate Entry: B, C, D, E and F.
- (4) Alternate Exit: B, C, D, E and F.
- (5) Avoid hospital (N38-33 W76-35) 6 NM NNE of Point D.
- (6) CAUTION: Helicopter traffic in vicinity of PXT TACAN 270 deg-340 deg, 15-20 NM radius, altitude 500'-1500' daily.
- (7) Avoid towns and populated areas by 1 NM or overfly by 1000' AGL; Avoid airports by 3 NM or overfly by 1500' AGL.
- (8) CAUTION: Numerous light aircraft between D and E, 1 Jun-30 Oct.

FSS's Within 100 NM Radius:

AOO, DCA, IPT, MIV

VR-1712

ORIGINATING ACTIVITY: 113 WG, Andrews AFB, MD
20331 DSN 857-3307/08, C240-857-3307/3308/4190.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0730 local-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | OTT 081/15 | N38°47.00' W76°27.00' |
| 05 AGL B 15 AGL to | B | OTT 176/16 | N38°27.00' W76°40.00' |
| 05 AGL B 15 AGL to | C | OTT 186/34 | N38°08.00' W76°42.00' |
| 05 AGL B 15 AGL to | D | HCM 354/23 | N37°49.00' W76°49.00' |
| 05 AGL B 15 AGL to | E | CCV 089/22 | N37°25.00' W75°33.00' |
| 05 AGL B 15 AGL to | F | SBY 237/14 | N38°11.00' W75°43.00' |
| 05 AGL B 15 AGL to | G | PXT 121/20 | N38°10.00' W76°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:

- (1) Those wanting to schedule this route must call during normal duty hours (0730-1530 on Mon and 0630-1530 on Tue-Sat).
- (2) Bird hazard exists along route 15 Sep-1 Dec and 1 Mar-30 Apr.
- (3) Alternate Entry: B, C, D, E and F.
- (4) Alternate Exit: B, C, D, E and F.
- (5) Avoid hospital (N38-33 W76-35) 6 NM NNE of Point D.
- (6) CAUTION: Helicopter traffic in vicinity of PXT TACAN 270 deg-340 deg, 15-20 NM radius, altitude 500'-1500' daily.
- (7) Avoid towns and populated areas by 1 NM or overfly by 1000' AGL; Avoid airports and hospitals by 3 NM or overfly by 1500' AGL.
- (8) CAUTION: Numerous light aircraft between D and E, 1 Jun-30 Oct.

FSS's Within 100 NM Radius:

AOO, DCA, IPT, MIV

VR-1713

ORIGINATING ACTIVITY: 113 WG, Andrews AFB, MD
20331 DSN 857-3307/08, C240-857-3307/3308/4190.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0730 local-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | OTT 081/15 | N38°47.00' W76°27.00' |
| 05 AGL B 15 AGL to | B | OTT 176/16 | N38°27.00' W76°40.00' |
| 05 AGL B 15 AGL to | C | OTT 186/34 | N38°08.00' W76°42.00' |
| 05 AGL B 15 AGL to | D | RIC 139/19 | N37°18.00' W77°01.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 05 AGL B 15 AGL to | E | FKN 321/12 | N36°51.00' W77°12.00' |
| 05 AGL B 15 AGL to | F | CVI 337/10 | N36°31.00' W76°59.00' |
| 01 AGL B 15 AGL to | G | CVI 167/22 | N36°02.00' W76°42.00' |
| 01 AGL B 15 AGL to | H | CVI 159/40 | N35°48.00' W76°28.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 03 AGL B 15 AGL to | F | GSO 249/34 | N35°48.50' W80°36.70' |
| 03 AGL B 15 AGL to | G | GSO 231/27 | N35°44.80' W80°22.80' |
| 03 AGL B 15 AGL to | H | GSO 180/41 | N35°21.60' W79°56.00' |
| 03 AGL B 15 AGL to | I | SSC 024/43 | N34°39.00' W80°11.30' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

TERRAIN FOLLOWING OPERATIONS: Authorized from A to I.

ROUTE WIDTH - 3 NM either side of centerline from B to F; 7.5 NM either side of centerline from F to G; 3 NM either side of centerline from G to H.

ROUTE WIDTH - 5 NM either side of centerline from A to H; 1 NM left and 9 NM right of centerline from H to I.

Special Operating Procedures:

- (1) Those wanting to schedule this route must call during normal duty hours (0730-1530 on Mon and 0630-1530 on Tue-Sat).
- (2) Bird hazard exists along route 15 Sep-1 Dec and 1 Mar-30 Apr.
- (3) Alternate Entry: C, D, G.
- (4) Alternate Exit: C, G.
- (5) Avoid hospital (N38-33 W76-35) 6 NM NNE of Point B, by 1500' AGL and 2 NM.
- (6) CAUTION: Helicopter traffic in vicinity of PXT TACAN 270 deg-340 deg, 15-20 NM radius, altitude 500'-1500' daily.
- (7) Avoid towns and populated areas by 1 NM or overfly by 1000' AGL; avoid airports and hospital by 3 NM or overfly by 1500' AGL.
- (8) Avoid 300' AGL Tower located at 37-29N 76-57W. Avoid 500' AGL tower at 37-26N 76-57W.

Special Operating Procedures:

- (1) VR-1721 will not be flown unless the aircrew has filed for IR-721 and IFR procedural problems are encountered. If refused entry into IR-721 please call 20 OSS/OSTA with time and reason entry was refused.
- (2) See Special Operating Procedures for IR-721 for other route information.

FSS's Within 100 NM Radius:
AOO, DCA, IPT, RDU

FSS's Within 100 NM Radius:
AND, EKN, RDU

VR-1721

VR-1722

ORIGINATING ACTIVITY: 20 OSS/OSTA, Shaw AFB, SC 29152 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

ORIGINATING ACTIVITY: 192nd FG (ANG), Byrd Intl, Richmond, VA 23150 DSN 864-6411/6410.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152-5000 DSN 965-1118/1119, C803-895-1118, Fax DSN 965-4804. Non-duty hrs-DSN 965-5850/5851, C803-895-5850/5851.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| Cross at 15 AGL to | A | ROA 181/17 | N37°03.50' W80°03.00' |
| 03 AGL B 15 AGL to | B | ROA 195/27 | N36°53.80' W80°11.00' |
| 03 AGL B 15 AGL to | C | GSO 336/42 | N36°40.00' W80°22.00' |
| 03 AGL B 15 AGL to | D | GSO 326/34 | N36°30.00' W80°24.00' |
| 03 AGL B 15 AGL to | E | GSO 297/35 | N36°17.00' W80°38.50' |

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | LYH 352/44 | N37°58.00' W79°27.00' |
| 05 AGL B 15 AGL to | B | GVE 239/32 | N37°41.70' W78°41.50' |
| 05 AGL B 15 AGL to | C | LYH 079/30 | N37°23.30' W78°37.50' |
| 05 AGL B 15 AGL to | D | LYH 156/13 | N37°04.00' W79°06.40' |
| 05 AGL B 15 AGL to | E | SBV 253/4 | N36°38.80' W79°06.00' |
| 05 AGL B 15 AGL to | F | SBV 109/24 | N36°34.70' W78°32.40' |
| 05 AGL B 15 AGL to | G | LVL 316/7 | N36°53.20' W78°00.80' |
| 05 AGL B 15 AGL to | H | FAK 182/23 | N37°08.60' W77°47.70' |
| 05 AGL B 15 AGL to | I | FAK 269/24 | N37°28.70' W78°19.50' |
| 05 AGL B 15 AGL to | J | FAK 343/11 | N37°41.60' W77°55.00' |
| 05 AGL B 15 AGL to | K | BRV 209/22 | N37°59.20' W77°31.00' |
| 05 AGL B 15 AGL to | L | PXT 240/29 | N37°58.40' W76°52.60' |

VR ROUTES

TERRAIN FOLLOWING OPERATIONS: VFR terrain following is authorized in accordance with Command Directives within published altitude blocks (05 AGL B 15 AGL) along entire route except within 3 NM of F, where 1500' AGL must be maintained.

ROUTE WIDTH - 3 NM either side of centerline from A to E; 2 NM either side of centerline from E to F; 3 NM either side of centerline from F to G; 2 NM either side of centerline from G to H; 3 NM either side of centerline from H to L.

Special Operating Procedures:

- (1) Contact 192 FG/DO for route briefings of Noise Sensitive Areas. DSN 864-6411/6410. Normal duty hours 0645-1730 Tue-Sat.
- (2) Route users must deconflict Farmville MOA with 1 FW, if routes are used between the hours 0930-1430 and 1600-1700 (all times local) Mon-Fri DSN 574-2483/2559.
- (3) Alternate Entry: B and H.
- (4) Alternate Exit: D, G, I and F.
- (5) To fly VR between Points A-B and Points J-L: same direction: from Point A-B, and VR-1755 same direction from Point J-L. deconflict through FACSFAC VACAPES DSN 433-1228/1323.
- (6) Between Points A-B, avoid Roseland Heliport by 3 NM or 1500' AGL.
- (7) Between Points C-D, avoid town of Pamplin by 3 NM or 1500' AGL.
- (8) Between Points C-D, maintain 1500' AGL within 3 NM of Brockneal Airport (N37-09 W79-01).
- (9) Maintain 1500' AGL within 3 NM of Point F.
- (10) To fly VR between Points G-H, R-6602 must be scheduled for use. Final coordination will be accomplished within 24 hours prior to flight penetration of R-6602. Ft Pickett, VA Range Control: DSN 438-2116/2193.
- (11) CAUTION: Between Points H-I, tower 1053' AGL (1349' MSL) (N37-10 W77-57).

FSS's Within 100 NM Radius:

AOO, DCA, EKN, MIV, RDU

VR-1726

ORIGINATING ACTIVITY: 20 OSS/OSTA, Shaw AFB, SC 29152 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152-5000 DSN 965-1118/1119, C803-895-1118, Fax DSN 965-4804. Non-duty hrs-DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| Cross at 15 AGL to | A | PSK 263/23 | N37°00.00' W81°11.00' |
| 03 AGL B 15 AGL to | B | PSK VORTAC | N37°05.26' W80°42.77' |
| 03 AGL B 15 AGL to | C | PSK 187/19 | N36°46.00' W80°43.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 03 AGL B 15 AGL to | D | PSK 218/31 | N36°39.00' W81°03.00' |
| 01 AGL B 15 AGL to | E | PSK 229/44 | N36°33.00' W81°20.00' |
| 01 AGL B 15 AGL to | F | HMV 111/38 | N36°15.00' W81°23.00' |
| 01 AGL B 15 AGL to | G | HMV 125/36 | N36°08.00' W81°30.00' |
| 03 AGL B 15 AGL to | H | SPA 007/45 | N35°47.40' W81°51.00' |
| 03 AGL B 15 AGL to | I | SPA 347/46 | N35°47.00' W82°10.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to I.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 10 NM either side of centerline from B to C; 15 NM right and 6 NM left of centerline from C to D; 15 NM either side of centerline from D to E. On centerline to 10 NM right of centerline from E to F; 1 NM left and 10 NM right of centerline from F to G; 5 NM left and 10 NM right of centerline from G to H; 5 NM either side of centerline from H to I.

Special Operating Procedures:

- (1) VR-1726 will not be flown unless the aircrew has filed for IR-726 and procedural problems are encountered. If refused entry into IR-726, please call 20 OSS/OSTA with time and reason entry was refused.
- (2) See Special Operating Procedures for IR-726, for other route information.
- (3) Alternate Entry: B, C, D, and E.
- (4) Alternate Exit: E, G, and H.

FSS's Within 100 NM Radius:

AND, EKN, RDU

VR-1743

ORIGINATING ACTIVITY: 20 OSS/OSTA, Shaw AFB, SC 29152 DSN 965-1121/1122, C803-895-1121/1122, Fax DSN 965-4804.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152-5000 DSN 965-1118/1119, C803-895-1118, Fax DSN 965-4804. Non-duty hrs-DSN 965-5850/5851, C803-895-5850/5851.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| Cross at 15 AGL to | A | HMV 054/49 | N36°58.00' W81°21.00' |
| 01 AGL B 15 AGL to | B | HMV 023/26 | N36°51.00' W81°57.00' |
| 01 AGL B 15 AGL to | C | GZG 204/1 | N36°49.00' W82°05.00' |
| 01 AGL B 15 AGL to | D | HMV 302/34 | N36°42.00' W82°45.00' |
| 01 AGL B 15 AGL to | E | HMV 289/34 | N36°35.00' W82°49.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 03 AGL B 15 AGL to | F | VXV 071/44 | N36°11.00' W83°03.00' |
| 03 AGL B 15 AGL to | G | VXV 085/36 | N35°59.00' W83°10.00' |
| 03 AGL B 15 AGL to | H | VXV 097/32 | N35°52.00' W83°14.00' |
| 03 AGL B 15 AGL to | I | VXV 109/35 | N35°44.50' W83°12.00' |
| 03 AGL B 15 AGL to | J | VXV 124/41 | N35°33.00' W83°10.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from A to J.

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Special Operating Procedures:

- (1) VR-1743 will not be flown unless the aircrew has filed for IR-743 and procedural problems are encountered. If refused entry into IR-743, please call 20 OSS/OSTA with time and reason entry was refused.
- (2) See Special Operating Procedures for IR-743 for other route information.
- (3) Alternate Entry: C and D.
- (4) Alternate Exit: E and H.

FSS's Within 100 NM Radius:
AND, EKN, RDU

VR-1753

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, NAS Oceana, Virginia Beach, VA 23460-5200 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460 DSN 433-1228 C757-433-1228. Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| As assigned to | A | CCV 116/11 | N37°18.00' W75°47.00' |
| 10 AGL B 15 AGL to 10 AGL B 15 AGL to 19 NM NE of C then | B | HCM 081/15 | N37°31.00' W76°25.00' |
| 05 AGL B 15 AGL to | C | HPW 223/16 | N37°07.00' W77°19.00' |
| 05 AGL B 15 AGL to | D | FKN 225/8 | N36°36.00' W77°07.00' |
| 05 AGL B 15 AGL to | E | CVI 328/1 | N36°23.00' W76°53.00' |
| 05 AGL B 15 AGL to | F | CVI 166/21 | N36°03.00' W76°42.00' |
| 05 AGL B 15 AGL to | G | CVI 162/29 | N35°56.00' W76°36.00' |
| 05 AGL B 15 AGL to | H | CVI 159/40 | N35°48.00' W76°28.00' |

TERRAIN FOLLOWING OPERATIONS: Not authorized.

ROUTE WIDTH - 3 NM either side of centerline from A to C; 5 NM either side of centerline from C to F; 2 NM either side of centerline from F to G; 3 NM either side of centerline from G to H.

Special Operating Procedures:

- (1) Route reservation and brief required.
- (2) Alternate Entry: C, D, E. Alternate Exit: G.
- (3) Contact Leesburg FSS prior to entry on 255.4 with entry/exit times.
- (4) If exiting route at Point H, transit R-5314 below 1000' AGL unless scheduled and/or cleared by Navy Dare Range Control Officer on frequency 358.8. Do not enter R-5313 unless scheduled.
- (5) Conflicting routes:
 - (a) VR-1754/VR-1755 are coincident from Point A to B;
 - (b) VR-1713 crosses between Point B and C, and runs parallel from Point D to H.
 - (c) VR-042 crosses at Point D, and between Point E and F.
- (6) Hazards:
 - (a) Extensive civilian fish-spotter aircraft from SFC to 5000' AGL over Chesapeake Bay, between Point A and B, from Apr-Nov.
 - (b) Ultralight activity in the vicinity of Point B.
 - (c) N37-20.8 W76-50.5 - Chart depicted antenna tower is actually 700' AGL.
 - (d) N36-55.2 W77-16.9 - Uncharted 250' AGL antenna tower.
 - (e) N36-41.4 W77-10.0 - Uncharted 500' AGL antenna tower.
 - (f) N36-23.0 W76-53.0 - Two 250' AGL powerline towers cross Chowan River.
 - (g) Exercise caution in the vicinity R-5314. Numerous MTRs terminate in this area. Military aircraft may be holding VFR over Phelps Lake or at the Alligator River bridge awaiting for clearance into the Dare bombing range.
- (7) Do not fly over:
 - (a) N37-25.0 W76-32.0 - Remain 2 NM from hospital.
 - (b) N37-07.8 W77-13.5 - Remain 3 NM north of the town of Disputanta.
 - (c) N37-03.9 W77-19.9 - Remain 1 NM from historical house.
- (8) Avoid:
 - (a) N37-20.0 W76-45.0 - Williamsburg Pottery Factory and vicinity.
 - (b) N36-03.0 W76-42.0 - West bank of Chowan River in vicinity of Point F.
 - (c) N35-47.5 W76-24.8 - Phelps Lake boat ramp.

FSS's Within 100 NM Radius:
DCA, MIV, RDU

VR-1754

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, NAS Oceana, Virginia Beach, VA 23460-5200 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460 DSN 433-1228 C757-433-1228. Scheduling hours 0600-1900 local (EST).

VR ROUTES

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| 05 AGL B 15 AGL to | A | CCV VORTAC | N37°20.85' W75°59.86' |
| SFC B 15 AGL to | B | HCM 054/15 | N37°37.00' W76°29.00' |
| SFC B 15 AGL to | C | BRV 230/25 | N38°01.00' W77°42.00' |
| 15 AGL to 15 AGL to 3 NM N of D then descend to | D | GVE 330/20 | N38°19.00' W78°26.00' |
| 05 AGL B 15 AGL to | E | CSN 275/35 | N38°38.00' W78°37.00' |
| 05 AGL B 15 AGL to | E1 | LDN 273/22 | N38°50.00' W78°41.00' |
| 05 AGL B 15 AGL to 05 AGL B 15 AGL to 16 NM NW of E then | E2 | ESL 185/19 | N38°55.00' W78°59.00' |
| SFC B 15 AGL to | F | ESL 057/7 | N39°18.20' W78°52.00' |
| 05 AGL B 15 AGL to | G | ESL 261/25 | N39°07.00' W79°31.00' |
| SFC B 15 AGL to | H | EKN 165/47 | N38°11.00' W79°44.00' |
| SFC B 15 AGL to | I | ROA 031/50 | N38°05.00' W79°36.00' |
| SFC B 15 AGL to | J | LYH 352/44 | N37°58.00' W79°27.00' |
| SFC B 15 AGL to | K | GVE 236/31 | N37°41.00' W78°39.00' |
| 10 AGL B 15 AGL to | L | GVE 196/22 | N37°39.00' W78°14.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized 16 NM NW of Point E to J.

ROUTE WIDTH - 3 NM either side of centerline from Point A to L.

Special Operating Procedures:

- (1) Route reservation and brief required.
- (2) Alternate Entry: B, C, D, F and H. Alternate Exit: D, E, E1, E2, F, G, H and J.
- (3) Crossover to join Point G of VR-1756 is authorized from VR-1754 at Point E1 and E2 with approval of Scheduling Activity.
- (4) Contact Leesburg FSS prior to Point A or Elkins FSS prior to Point E2 on 255.4 with entry/exit times.
- (5) Maintain 1500' AGL from Point A until 10 NM past Point B then maintain 1000' AGL to Point C.
- (6) Maintain 1000' AGL from 3 NM north of Point D until 10 NM past Point E.
- (7) Conflicting routes:
 - (a) VR-1713 crosses between Point B and C;
 - (b) VR-1753/VR-1755 run parallel from Point A to B;
 - (c) VR-041 crosses at Point I, and between Point J and K;
 - (d) VR-1756 crosses between Point E1 and F, and crosses at Point I;
 - (e) VR-1722 is coincident from Point J to K, and crosses at Point C;

- (f) VR-043 begins between Point F and G, and crosses between Point G and H;
 - (g) VR-1755 crosses twice between Point B and D;
 - (h) VR-1759 begins at Point C;
 - (i) VR-1722 crosses at Point C. (Deconflict with Richmond 192FG DSN 864-6411/10.
- (8) Hazards:
- (a) Evers MOA is active with continuous daytime operations from 1000' AGL to FL 180. Contact 1FW Scheduling, 1 OSS/OSO, Langley AFB, VA, DSN 574-2559/2483 for MOA flight information/deconfliction prior to scheduling;
 - (b) Extensive civilian fish-spotter aircraft from SFC to 5000' AGL over the Chesapeake Bay, between Point A and B, from Apr-Nov;
 - (c) Ultralight activity in the vicinity of Point B;
 - (d) Extensive helicopter operations from Point D and J;
 - (e) Numerous civilian aircraft cross route midway between Point D and E transiting VFR between New Market and Luray Airports;
 - (f) N37-47.6 W77-03.7 - Uncharted 400' AGL antenna tower;
 - (g) N37-49.2 W77-02.9 - Uncharted 400' AGL antenna tower;
 - (h) N37-57.7 W77-30.5 - Uncharted 300' AGL antenna tower.
- (9) Do not fly over:
- (a) N37-48.2 W77-00.7 - Remain 2 NM from church;
 - (b) N37-50.0 W77-27.0 - Remain 1000' AGL and 2 NM from Kings Dominion;
 - (c) N38-05.0 W77-48.0 - Remain 2 NM from nuclear power plant;
 - (d) N39-19.9 W78-55.1 - Remain 2 NM from elementary school;
 - (e) N37-58.8 W79-30.6 - Remain 2 NM from horse farm;
 - (f) N37-07.0 W79-29.0 - Remain 2 NM from elementary school;
 - (g) N38-26.2 W79-50.1 - Remain 4 NM from National Radio Astronomy Observatory. Avoid UHF communication to maximum extent (not to interfere with safety) within 15 NM of Observatory;
 - (h) Do not fly over: N37-59.0 W77-31.0 - Remain at least 1 NM South of Lake Caroline.
- (10) AVOID:
- (a) N37-48.0 W77-06.0 - Uncharted airfield;
 - (b) N37-44.0 W78-58.0 - Uncharted airfield.
- (11) Due to several windmills under construction between Points F and G, this leg shall be flown between 500' and 1500' AGL until further notice.

FSS's Within 100 NM Radius:

AOO, DCA, EKN, IPT, MIV, RDU

VR-1755

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, NAS Oceana, Virginia Beach, VA 23460-5200 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460 DSN 433-1228 C757-433-1228, Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | CCV 113/11 | N37°18.00' W75°47.00' |
| 05 AGL B 15 AGL to | B | HCM 334/18 | N37°42.00' W76°55.00' |
| 05 AGL B 15 AGL to | C | BRV 265/17 | N38°16.00' W77°42.00' |
| 05 AGL B 15 AGL to | D | GVE 239/10 | N37°55.00' W78°19.00' |
| 05 AGL B 15 AGL to | E | FAK 344/11 | N37°42.00' W77°55.00' |
| 05 AGL B 15 AGL to | F | BRV 209/23 | N37°59.00' W77°31.00' |
| 05 AGL B 15 AGL to | G | PXT 240/30 | N37°58.00' W76°53.00' |

ROUTE WIDTH - 3 NM either side of centerline from A to C; 3 NM left and 2 NM right of centerline from C to D; 3 NM either side of centerline from D to G.

Special Operating Procedures:

- (1) Route reservation and brief required.
- (2) Alternate Entry: B. Alternate Exit: D and E.
- (3) Contact Leesburg FSS prior to entry on 255.4 with Entry/Exit times.
- (4) Maintain 1000' AGL from Point A to C.
- (5) Conflicting routes:
 - (a) VR-1753/VR-1754 run parallel from Point A to B.
 - (b) VR-1713 crosses between Point A and B.
 - (c) VR-1754 crosses between Point C and D, and at Point F.
 - (d) VR-1759 crosses between Point D and E. VR-1759 begins at Point F and runs in the opposite direction towards Point E.
 - (e) VR-1722 runs same direction from Point E to G. Deconflict with Richmond 192 FG, DSN 864-6411-6410.
- (6) Hazards:
 - (a) Extensive civilian fish-spotter aircraft from SFC to 5000' AGL over Chesapeake Bay, between Point A and B, from Apr-Nov.
 - (b) Ultralight activity midway between Point A and B.
 - (c) N37-47.6 W77-03.7 - Uncharted 400' AGL antenna tower.
 - (d) N37-49.2 W77-02.9 - Uncharted 300' AGL antenna tower.
 - (e) N37-57.7 W77-30.5 - Uncharted 300' AGL antenna tower.
 - (f) N38-05.0 W77-13.0 - Do not enter R-6601.
- (7) Do not fly over:
 - (a) N37-55.0 W78-19.0 - Remain 1 NM from Lake Monticello at Point D.
 - (b) N37-59.0 W77-31.0 - Remain at least 1 NM South of Lake Caroline.
- (8) Avoid-
 - (a) N37-47.0 W77-49.0 - Uncharted airfield.

FSS's Within 100 NM Radius:

AOO, DCA, EKN, MIV, RDU

VR-1756

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, NAS Oceana, Virginia Beach, VA 23460-5200 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460 DSN 433-1228 C757-433-1228, Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|--------------------------|
| As assigned to | A | LYH 048/20 | N37°30.00' W78°57.00' |
| 15 AGL to 15 NM NW of Amherst then | | | |
| SFC B 15 AGL to | B | LYH 342/46 | N37°58.00' W79°37.00' |
| SFC B 15 AGL to | C | EKN 229/21 | N38°39.00' W80°24.00' |
| SFC B 15 AGL to | D | MGW 214/16 | N39°19.00' W80°02.00' |
| SFC B 15 AGL to | E | MGW 118/11 | N39°29.00' W79°38.00' |
| SFC B 15 AGL to | F | ESL 079/22 | N39°20.00' W78°32.00' |
| SFC B 15 AGL to | G | ESL 185/19 | N38°55.00' W78°59.00' |
| 05 AGL B 15 AGL to | H | ROA 031/50 | N38°05.00' W79°36.00' |
| 05 AGL B 15 AGL to | I | ROA 031/30 | N37°47.00' W79°47.00' |
| 05 AGL B 15 AGL to | J | LYH 258/22 | N37°09.00' W79°40.00' |

ROUTE WIDTH - 2 NM either side of centerline from A to B; 2 NM left and 1 NM right of centerline from B to I; 1 NM left and 4 NM right of centerline from I to J.

Special Operating Procedures:

- (1) Route reservation and brief required.
- (2) Alternate Entry: C, D, E, G, I and J. Alternate Exit: C, G, I and J.
- (3) Entry to VR-1756 at Point G is authorized from VR-1754 Point E2 with approval of Scheduling Activity.
- (4) Contact Leesburg FSS prior to Point A or Elkins FSS prior to Point E on 255.4 with entry/exit times.
- (5) Conflicting routes:
 - (a) VR-096 crosses between Point A and B, and between Point I and J.
 - (b) VR-041 crosses between Point A and B, and between Point I and J.
 - (c) VR-1756 crosses at Point B.
 - (d) VR-043 crosses between Point B and C.
 - (e) VR-1754 crosses between Point F and G, and at Point H.
- (6) Hazards:
 - (a) Extensive helicopter operations in the vicinity of Point D.
 - (b) N39-18.4 W78-54.5 - Uncharted 300' AGL antenna tower.
 - (c) N38-49.0 W79-06.0 - Chart depicted powerline tower is actually 360' AGL.

VR ROUTES

- (d) N37-31.5 W79-41.5 - Springwood Gliderport. Glider activity on Sat, Sun, and Wed from 0900-sunset, SFC to 14,000' MSL. Remain right of centerline in the vicinity of Point I.
- (e) Extensive Army helicopter operations from Point A to F.
- (7) Do not fly over;
 - (a) N37-31.0 W78-57.0 - Remain 3 NM from papermill.
 - (b) N37-09.0 W79-40.0 - Climb to 1500' AGL at Point J and remain 1 NM from Smith Mountain Lake.
 - (c) N38-26.2 W79-50.1 - Remain 4 NM from National Radio Astronomy Observatory. Avoid UHF communications to maximum extent (not to interfere with safty) within 15 NM of observatory.

FSS's Within 100 NM Radius:

AOO, DCA, EKN, IPT, RDU

VR-1757

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, NAS Oceana, Virginia Beach, VA 23460-5200 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460 DSN 433-1228 C757-433-1228, Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | HAR 260/29 | N40°09.00' W77°40.00' |
| 05 AGL B 15 AGL to | B | HAR 292/32 | N40°26.00' W77°45.00' |
| 05 AGL B 15 AGL to | C | PSB 185/14 | N40°41.00' W77°58.00' |
| 05 AGL B 15 AGL to | D | PSB 246/14 | N40°47.00' W78°15.00' |
| 05 AGL B 15 AGL to | E | REC 057/12 | N40°41.00' W78°33.00' |
| 05 AGL B 15 AGL to | F | REC 121/13 | N40°28.00' W78°29.00' |
| 05 AGL B 15 AGL to | G | REC 159/18 | N40°17.00' W78°33.00' |
| 05 AGL B 15 AGL to | H | THS 288/31 | N40°02.00' W78°37.00' |
| 05 AGL B 15 AGL to | I | GRV 031/22 | N39°58.00' W78°51.00' |
| 05 AGL B 15 AGL to | J | GRV 072/19 | N39°46.00' W78°40.00' |
| 05 AGL B 15 AGL to | K | GRV 092/29 | N39°40.00' W78°25.00' |
| 05 AGL B 15 AGL to | L | ESL 081/17 | N39°18.00' W78°38.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from B to K.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:

- (1) Route reservation and brief required.
- (2) Contact Altoona FSS prior to entry on 255.4 with Entry/Exit times.
- (3) Conflicting routes:
 - (a) VR-704/VR-705 cross between Point A and B, and between Point E and F.
 - (b) VR-708 crosses at Point H and J, and between Point K and L.
- (4) From 15 Mar-15 May, overfly Point C at 1500' AGL and remain north of centerline.
- (5) Hazards:
 - (a) N40-00.0 W77-44.0 - R-5801/5803 Chambersburg Controlled Firing Area (Live Range) is 10 NM south of Point A.
- (6) Do not fly over:
 - (a) N40-45.0 W77-54.0 - Remain 1000' AGL and 2 NM from Shavers Creek Environmental Center.

FSS's Within 100 NM Radius:

AOO, BUF, DCA, EKN, IPT, MIV

VR-1759

ORIGINATING ACTIVITY: COMSTRKFIGHTWINGLANT, NAS Oceana, Virginia Beach, VA 23460-5200 DSN 433-9141, C757-433-9141.

SCHEDULING ACTIVITY: FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460 DSN 433-1228, C757-433-1228, Scheduling hours 0600-1900 local (EST).

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | BRV 209/23 | N37°59.00' W77°31.00' |
| 05 AGL B 15 AGL to | B | GVE 178/18 | N37°43.00' W78°06.00' |
| 20 AGL B 25 AGL to | C | GVE 185/28 | N37°32.52' W78°08.73' |
| 10 AGL B 15 AGL to | D | LVL 322/27 | N37°08.02' W78°19.00' |
| 05 AGL B 15 AGL to | E | LVL 242/24 | N36°35.00' W78°18.00' |
| 05 AGL B 15 AGL to | F | TYI 339/10 | N36°08.00' W77°48.00' |
| 05 AGL B 15 AGL to | G | TYI 122/21 | N35°49.00' W77°19.00' |
| 05 AGL B 15 AGL to climb to cross H 10 AGL. | H | NKT 010/41 | N35°35.00' W76°52.00' |

TERRAIN FOLLOWING OPERATIONS: None.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Route reservation and brief required.
- (2) Alternate Entry: C. Alternate Exit: E and F.

- (3) Contact Leesburg FSS prior to entry on 255.4 with entry/exit times.
- (4) Remain north of centerline between Point E and F.
- (5) Conflicting Routes:
 - (a) VR-1755 runs in the opposite direction between Point A and B;
 - (b) VR-1722 crosses twice between Point B and C;
 - (c) VR-096/VR-1061 cross between Point C and D;
 - (d) VR-1060/VR-042/VR-043 cross between Point C and D, and between Point D and E;
 - (e) VR-086 crosses between Point D and E, and between Point E and F;
 - (f) VR-1046 crosses at Point E;
 - (g) VR-085 crosses between Point E and F.
- (6) Hazards:
 - (a) Farmville MOA is active from 0800-1700 local, Mon-Fri, from 300' AGL to 5000' MSL. Monitor Washington ARTCC on 317.7, do not check in. Route users must deconflict the Farmville MOA with the 1st FW only if routes are used between the hours of 0800-1700 local, Mon-Fri, DSN 574-2559/2483;
 - (b) Exercise caution in the vicinity of R-5314. Numerous MTR's terminate in this area. Military aircraft may be holding VFR over Phelps Lake or the Alligator River bridge awaiting for clearance into the Dare Bombing Range;
 - (c) N36-23.6 W78-04.7 - Uncharted 500' AGL antenna tower;
 - (d) N35-49.4 W77-19.5 - Uncharted 450' AGL antenna tower;
 - (e) Tower at N37-38.5 W78-07.5 which is 1314' AGL and 1649' MSL on route centerline between Points A and C.
- (7) Avoid:
 - (a) N37-47.2 W77-49.5 - Uncharted airfield;
 - (b) N36-45.5 W78-21.4 - Uncharted airfield.
- (8) Avoid the Bald Eagle's nest located at N37-13.4 W78-18.3 by 1 NM and 1000' AGL between 15 Nov-15 Jul.
- (9) Do not fly over: N37-59.0 W77-31.0 - Remain at least 1 NM South of Lake Caroline.

FSS's Within 100 NM Radius:

AOO, DCA, EKN, MIV, RDU

VR-1800

ORIGINATING ACTIVITY: 174th FW, 6001 E. Molloy Rd, Syracuse, NY 13211-7099 DSN 489-9217.

SCHEDULING ACTIVITY: 174th FW, Det. 1, Ft. Drum, NY 13608 DSN 772-5990/2835 C315-772-5990.

HOURS OF OPERATION: 0800 local-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | PLB 105/42 | N44°41.00' W72°33.00' |
| 01 AGL B 15 AGL to | B | PLB 085/14 | N44°46.00' W73°12.50' |
| 01 AGL B 15 AGL to | C | PLB 343/13 | N44°52.00' W73°41.00' |

| | | | |
|--------------------|---|------------|--------------------------|
| 01 AGL B 15 AGL to | D | MSS 194/37 | N44°18.00' W74°43.00' |
| 01 AGL B 15 AGL to | E | ART 079/31 | N44°09.00' W75°24.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from entire route A to E.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 2 NM left to 8 NM right of centerline from B to C; 5 NM either side of centerline from C to E.

Special Operating Procedures:

- (1) IR-700, IR-800, and IR-801 crosses the route between C and D, 550' AGL to 6000' MSL; and D and E surface to 3500' MSL.
- (2) VR-724 and VR-725 crosses the route between D and E.
- (3) Alternate Entry: B.
- (4) Alternate Exit: D.
- (5) Extremely Noise Sensitive Area: Avoid overflight of the city of St. Albans (N44-48 W73-05).
- (6) Tie-in FSS: Burlington (BTV).

FSS's Within 100 NM Radius:

BGR, BTV

VR-1801

ORIGINATING ACTIVITY: 174th FW, 6001 E. Molloy Rd, Syracuse, NY 13211-7099 DSN 489-9217.

SCHEDULING ACTIVITY: 174th FW, Det. 1, Ft. Drum, NY 13608 DSN 772-5990/2835, C315-772-5990.

HOURS OF OPERATION: 0800 local-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | GFL 066/38 | N43°44.00' W72°55.00' |
| 01 AGL B 15 AGL to | B | GFL 026/23 | N43°43.00' W73°30.00' |
| 01 AGL B 15 AGL to | C | GFL 297/29 | N43°27.00' W74°16.00' |
| 01 AGL B 15 AGL to | D | ART 098/51 | N44°00.00' W74°53.00' |
| 01 AGL B 15 AGL to | E | ART 079/30 | N44°09.00' W75°25.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized from entire route A to E.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) IR-800 and IR-801 crosses the route between A and B, 7000' MSL-8000' MSL.
- (2) VR-724 and VR-725 cross the route between B and C.
- (3) IR-700 crosses the route between C and D, surface to 6000' MSL and between D and E at 7000' MSL.
- (4) IR-700, IR-800 and IR-801 crosses the route between D and E, surface to 3500' MSL.

VR ROUTES

- (5) Alternate Entry: B and C.
- (6) Extremely Noise Sensitive Areas; Avoid overflight of towns of Brandon (43-48N 73-05W) and Proctor (N43-40 W73-02).
- (7) Tie-in FSS: Burlington (BTV).

FSS's Within 100 NM Radius:

BDR, BGR, BTV

VR-1900

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430/0999.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 C907-377-3005 DSN 317-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------------------|----|--------------|---------------------------|
| at or below 15 AGL | A | TAL 149/56 | N64°16.00' W151°44.00' |
| 01 AGL B 15 AGL to | B | BIG 253/97 | N64°08.00' W149°23.00' |
| 01 AGL B 15 AGL to | C | BIG 255/86 | N64°10.00' W148°58.00' |
| 01 AGL B 15 AGL to | D | BIG 255/39 | N64°05.00' W147°10.00' |
| 01 AGL B 15 AGL to | E | BIG 274/26 | N64°12.00' W146°36.00' |
| Alternate Exit Track into R-2211: | | | |
| 01 AGL B 15 AGL to | D | BIG 255/39 | N64°05.00' W147°10.00' |
| 01 AGL B 15 AGL to | AE | EIL 200/22 | N64°23.00' W147°40.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route through Eielson MOA and R2202 to the southern border of Birch MOA. Alternate exits place you at either Point D within the Eielson MOA, or AE in R2211.
- (2) Restricted operations in and around active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known.

- Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R2202 and R2211 are required.
- (3) Contact Blair Lakes Range Control on primary 229.4, secondary 264.7 prior to entering R2211. They may not be open. Eielson Range Control provides area deconfliction.
 - (4) All route Points collocated with IR-900, IR-916 and VR-1916.
 - (5) VR-1905, VR-1915, IR-905 and IR-915 cross at Point A.
 - (6) VR-937, VR-938, IR-919 and IR-921 cross at Point D.
 - (7) Primary Entry: A. Alternate Entry: B, C and D.
 - (8) Primary Exit: E. Alternate Exit: B, C, D and AE.
 - (9) Remain clear of isolated cabins on segment B to C. Staying south of centerline will help ensure most cabins are avoided.
 - (10) Use CAUTION for VFR traffic entering/exiting the mouth of the Wood River, segment C to D, and in the vicinity of the Nenana River on segment B to C for light aircraft transiting to/from Windy Pass.
 - (11) Use CAUTION for uncharted Newman Airstrip (N63-58-41 W147-15-42) on segment C to D. See 11 AF Noise/Flight Sensitive Areas List (NFSL), item 6. Remain clear by 1 NM or 5000' AGL, 15 May - 15 Jun, 15 Nov - 15 Dec. <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
 - (12) Use CAUTION for hunting cabins and uncharted airstrips in vicinity of Gold King Creek (N64-11-47 W147-55-57) located on segment C to D. See NFSL, item 42. Remain clear by 3 NM or 1500' AGL, continuous.
 - (13) Use CAUTION for uncharted airstrips at (N64-07.1 W148-00), (N64-06.5 W 147-33.2) and lake with float planes at (N54-13 W150-53) (Mucho Lake).
 - (14) Use CAUTION upon route exit when within/below the confines of the Birch MOA for traffic in the VFR Corridor along Alaska Hwy. Remain above 3500' MSL from the south side of the Tanana River to 0.5 NM north of the Alaska Hwy. See Birch MOA description in the Alaska Airspace Handbook at the web page mentioned above.
 - (15) Route Entry: MPY1 (285.4/133.1), Exit: MPY2 (319.2/120.0).
 - (16) Weather briefing support agencies should request mission forecast from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
 - (17) Heavy migratory bird activity on route from 10 Apr-20 May and 1 Aug-1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, MCG, ORT, TKA

VR-1902

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430/0999.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406 C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or below 15 AGL | A | MCG 117/36 | N62°31.00' W154°43.00' |

| | | | |
|--------------------|---|------------|---------------------------|
| 01 AGL B 15 AGL to | B | MCG 211/20 | N62°44.00' W156°10.00' |
| 01 AGL B 15 AGL to | C | UNK 104/86 | N63°04.00' W158°04.00' |
| 01 AGL B 15 AGL to | D | UNK 080/45 | N63°45.00' W159°02.00' |
| 01 AGL B 15 AGL to | E | UNK 062/67 | N64°02.00' W158°11.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) All route Points collocated with IR-902, IR-912 and VR-1912.
- (2) IR-905, IR-915, VR-1905 and VR-1915 cross at Point A and B.
- (3) Primary Entry: A. Alternate Entry: B, C and D.
- (4) Primary Exit: E. Alternate Exit: B, C and D.
- (5) During odd numbered years, avoid overflight below 1500' AGL on segment B to C during the Iditarod Sled Dog Race. On segment S C through E, remain at least 1 NM east of the Yukon River shore during the race period, approximately first two weeks in Mar.
- (6) Remain clear of Peregrine Falcon nests on segment D to E. Remain 1 NM east of the Yukon River shore or 2000' AGL, (15 Apr-31 Aug)
- (7) Remain above 1500' AGL on segments C through E during moose hunting season, (27 Aug-30 Sep).
- (8) Segments B to E are flown over Innoko National Wildlife Refuge and Wilderness Areas. Remain clear of human activity if seen by at least 0.5 mile. (1 May-30 Sep).
- (9) Use CAUTION for McGrath Aprt Class E airspace, 5 NM outside the route, segment A to B.
- (10) Hunting camp located on Iditarod River at (N63-10.9 W158-18).
- (11) Route Entry: MCG (353.8/128.1), Exit: GAL (290.2/127.0)
- (12) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (13) Heavy migratory bird activity on route from 10 Apr-20 May and 1 Aug-Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

MCG, TKA

VR-1905

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430/0999.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------|----|--------------|---------------------------|
| at or below 15 AGL | A | TKA 192/80 | N61°15.00' W151°49.00' |
| 01 AGL B 15 AGL to | B | TKA 208/92 | N61°23.00' W152°41.00' |
| 01 AGL B 15 AGL to | C | TKA 218/89 | N61°37.00' W152°54.00' |
| 01 AGL B 15 AGL to | D | TKA 223/109 | N61°36.00' W153°40.00' |
| 01 AGL B 15 AGL to | E | TKA 224/133 | N61°29.00' W154°27.00' |
| 01 AGL B 15 AGL to | F | TKA 231/139 | N61°41.00' W154°51.00' |
| 01 AGL B 15 AGL to | G | MCG 161/42 | N62°15.00' W155°36.00' |
| 01 AGL B 15 AGL to | H | MCG 117/36 | N62°31.00' W154°43.00' |
| 01 AGL B 15 AGL to | I | MCG 069/49 | N62°58.00' W153°50.00' |
| 01 AGL B 15 AGL to | J | MCG 026/56 | N63°36.00' W154°07.00' |
| 01 AGL B 15 AGL to | K | MCG 013/66 | N63°53.00' W154°18.00' |
| 01 AGL B 15 AGL to | L | TAL 186/67 | N64°10.00' W153°15.00' |
| 01 AGL B 15 AGL to | M | TAL 149/56 | N64°16.00' W151°44.00' |
| Alternate Exit Track A: | | | |
| 01 AGL B 15 AGL to | G | MCG 161/42 | N62°15.00' W155°36.00' |
| 01 AGL B 15 AGL to | AH | MCG 211/20 | N62°44.00' W156°10.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline, except near Point C. From a point 10 NM southeast of Point C to a point 4 NM west of Point C the route will be 5 NM right and 3 NM left of centerline. This avoids a national park.

Special Operating Procedures:

- (1) Primary route through Stony A/B MOAs, and in/under Galena MOA. Alternate entry Points B thru L place you either in Stony A MOA, Galena MOA or between the two. Alternate Exit Points B thru L, and AH do the same. The routing; G to AH take you under Stony B MOA.
- (2) Restricted operations in and around active Special Use Airspace (SUA). Coordinated scheduling with the 3 WG for SUA deconfliction is required. If the affective SUA is active, you must remain clear or below until given approval.
- (3) All route points collocated with IR-905, VR-1915 and Point A thru K on IR-915.
- (4) IR-903, IR-913, VR-933 and VR-934 cross at Point E.
- (5) IR-902, IR-912, VR-1902 and VR-1912 cross at Point H and AH.
- (6) IR-900, IR-916, VR-1900 and VR-1916 cross at Point M.
- (7) Primary Entry: A. Alternate Entry: B thru L.
- (8) Primary Exit: M. Alternate Exit: B thru L and AH.
- (9) Segment B thru E, be aware of Lake Clark National Park immediately south of the route boundary.

VR ROUTES

- (10) Segment H to I, avoid overflight below 1500' AGL on the South Fork of the Kuskokwim River during the Iditarod Sled Dog Race, approximately the first two weeks of March. Check with SA for exact dates.
- (11) Segment K to L, remain clear of Nowitna National Wild and Scenic River by 2 NM or 2000' AGL from 15 May to 15 July. See 11 AF Noise/Flight Sensitive Areas List (NFSL), item No. 44.
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (12) Use CAUTION for 20' radio relay tower on top of mountain at Point G.
- (13) Use CAUTION for McGath Arpt Class E airspace, 9 NM outside the route, segment G to AH Anchorage International Airport - highly congested airspace immediately east of Point A. Departing traffic north bound traverses the Susitna River valley. Arrivals from the north follow the same routing. Also, low VFR traffic along power lines east/west bound along north shore of Cook Inlet from Pt. McKenzie to Mt. Spurr all summer long.
- (14) Route Entry: SVW (387.1), Exit: MPY1 (285.4/133.1).
- (15) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (16) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

ENA, PAQ, ILI, MCG, HOM, TKA, FAI

VR-1909

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 C907-377-3005 DSN 317-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or below 15 AGL | A | BIG 076/39 | N63°54.00' W144°16.00' |
| 01 AGL B 15 AGL to | B | BIG 050/52 | N64°15.00' W143°50.00' |
| 01 AGL B 15 AGL to | C | BIG 335/28 | N64°28.00' W145°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route under and through Buffalo, Yukon 3A Low and Yukon 1 MOAs. Alternate Entry/Exit B places you within Yukon 1 MOA.

- (2) Restricted operations in and around active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety.
- (3) All route points collocated with IR-909, IR-939 and VR-1939.
- (4) IR-926, IR-927, VR-1926 and VR-1927 cross at Point A.
- (5) IR-917, IR-918, VR-935 and VR-936, cross at Point A, B and C.
- (6) IR-928, IR-929, VR-1928 and VR-1929 cross at Point C.
- (7) Primary Entry: A. Alternate Entry: B.
- (8) Primary Exit: C. Alternate Exit B.
- (9) Seasonal Caribou calving sensitive area entire route (15 May-15 July); see local OGV FCIFs for details and locations. Also see Airspace Presentation link listed in No. 12.
- (10) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL)
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (11) Use CAUTION for Pogo Mine on segment B to C. Remain clear of mine by 5 NM or 4500' MSL centered on (N64-24.8 W144-48.2), and Goodpaster River by 2 NM or 4500' MSL from southern border of Yukon 1 MOA to airstrip located at (N64-28 W144-55) continuous. Mine has high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity year round. See 11 AF NFSL Item No. 43.
- (12) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. One known camp is located at (N64-17 W144-16) and uses a helicopter for re-supply.
- (13) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3500' MSL when within 2 NM of the highway (Buffalo) or within 0.5 NM north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the 11 AF NFSL.
- (14) Route Entry: BIG (322.5/135.3), Exit: MPY2 (319.2/120.9).
- (15) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (16) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS) See Alaska Supplement

VR-1912

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430/0999.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or below 15 AGL | A | UNK 062/67 | N64°02.00' W158°11.00' |
| 01 AGL B 15 AGL to | B | UNK 080/45 | N63°45.00' W159°02.00' |
| 01 AGL B 15 AGL to | C | UNK 104/86 | N63°04.00' W158°04.00' |
| 01 AGL B 15 AGL to | D | MCG 211/20 | N62°44.00' W156°10.00' |
| 01 AGL B 15 AGL to | E | MCG 117/36 | N62°31.00' W154°43.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) All route points collocated with IR-902, IR-912 and VR-1902.
- (2) IR-905, IR-915, VR-1905 and VR-1915 cross at Point D and E.
- (3) Primary Entry: A. Alternate Entry: B, C and D.
- (4) Primary Exit: E. Alternate Exit: B, C and D.
- (5) During odd numbered years, avoid overflight below 1500' AGL on segment C to D during the Iditarod Sled Dog Race. On segments A through C, remain at least 1 NM east of the Yukon River shore during the race period, approximately first two weeks in March.
- (6) Remain clear of Peregrine Falcon nests on segment A to B. Remain 1 NM east of the Yukon River shore or 2000' AGL, (15 Apr - 31 Aug).
- (7) Remain above 1500' AGL on segments A through C during moose hunting season, (27 Aug - 30 Sep).
- (8) Segments A to D are flown over Innoko National Wildlife Refuge and Wilderness Areas. Remain clear of human activity if seen by at least 0.5 NM, (1 May - 30 Sep).
- (9) Use CAUTION for McGrath Arpt Class E airspace, 5 NM outside the route, segment D to E.
- (10) Hunting camp located on Iditarod River at (N63-10.9 W158-18).
- (11) Route Entry: GAL (290.2/127.0), Exit: MCG (353.8/128.1).
- (12) Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (13) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

MCG, TKA

VR-1915

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430/0999.

SCHEDULING ACTIVITY: 3 OSS/OSOS, Elmendorf AFB, AK 99506 DSN 317-552-2406, C907-552-2406.

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------|----|--------------|---------------------------|
| at or below 15 AGL | A | TAL 149/56 | N64°16.00' W151°44.00' |
| 01 AGL B 15 AGL to | B | TAL 186/67 | N64°10.00' W153°15.00' |
| 01 AGL B 15 AGL to | C | MCG 013/66 | N63°53.00' W154°18.00' |
| 01 AGL B 15 AGL to | D | MCG 026/56 | N63°36.00' W154°07.00' |
| 01 AGL B 15 AGL to | E | MCG 069/49 | N62°58.00' W153°50.00' |
| 01 AGL B 15 AGL to | F | MCG 117/36 | N62°31.00' W154°43.00' |
| 01 AGL B 15 AGL to | G | MCG 161/42 | N62°15.00' W155°36.00' |
| 01 AGL B 15 AGL to | H | TKA 231/139 | N61°41.00' W154°51.00' |
| 01 AGL B 15 AGL to | I | TKA 224/133 | N61°29.00' W154°27.00' |
| 01 AGL B 15 AGL to | J | TKA 223/109 | N61°36.00' W153°40.00' |
| 01 AGL B 15 AGL to | K | TKA 218/89 | N61°37.00' W152°54.00' |
| 01 AGL B 15 AGL to | L | TKA 208/92 | N61°23.00' W152°41.00' |
| 01 AGL B 15 AGL to | M | TKA 192/80 | N61°15.00' W151°49.00' |
| Alternate Entry Track A: | | | |
| 01 AGL B 15 AGL to | AF | MCG 211/20 | N62°44.00' W156°10.00' |
| 01 AGL B 15 AGL to | G1 | MCG 161/42 | N62°15.00' W155°36.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline, except near Point K. From a point 4 NM west of Point K to a point 10 NM SE of Point K the route will be 5 NM left and 3 NM right of centerline. This avoids a national park.

Special Operating Procedures:

- (1) Primary route through Stony A/B MOAs, and in/under Galena MOA. Alternate Entry Points B thru G, I thru L, and AF place you either in Stony A MOA, Galena MOA, between the two or under Stony B MOA. Alternate Exit Points B thru

VR ROUTES

G, and I thru L are either just inside/outside MOA boundaries. The routing; AF to G will take you under Stony B MOA.

- (2) Restricted operations in and around active Special Use Airspace (SUA). Coordinated scheduling with the 3 WG for SUA deconfliction is required. If the affected SUA is active, you must remain clear or below until given approval.
- (3) All route points collocated with IR-905, VR-1905, and Points A thru K on IR-915.
- (4) IR-903, IR-913, VR-933 and VR-934 cross at Point I.
- (5) IR-902, IR-912, VR-1902 and VR-1912 cross at Points F and AF.
- (6) IR-900, IR-916, VR-1900 and VR-1916 cross at Point A.
- (7) Primary Entry Point - A. Alternate Entry Points - B thru G, and I thru L.
- (8) Primary Exit Point - M. Alternate Exit Points - B thru G, and I thru L.
- (9) Segment J thru L, be aware of Lake Clark National Park immediately south of the route boundary.
- (10) Segment E to F, avoid overflight below 1500' AGL on South Fork of the Kuskokwim River during the Iditarod Sled Dog Race, approximately the first two weeks of March. Check with SA for exact dates.
- (11) Segment B to C, remain clear of Nowitna National Wild and Scenic River by 2 NM or 2000' AGL from 15 May to 15 July. See 11 AF Noise/Flight Sensitive Areas List (NFSL), item No. 44.
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (12) Use CAUTION for 20' radio relay tower on top of mountain at Point G.
- (13) Use CAUTION for McGrath Arpt Class E airspace, 9 NM outside the route, segment AF to G. Anchorage International Airport - highly congested airspace immediately east of Point M. Departing traffic north bound traverses the Susitna River valley. Arrivals from the north follow same routing. Also, low VFR traffic along power lines east/west bound along north shore of Cook Inlet from Pt. McKenzie to Mt. Spurr all summer long.
- (14) Route Entry: MPY1 (285.4/133.1), Exit: SVW (387.1).
- (15) Weather briefing support agencies should request forecast support from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (16) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

ENA, PAQ, ILI, MCG, HOM, TKA, FAI

VR-1916

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430/0999.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------------|----|--------------|---------------------------|
| at or below 15 AGL | A | BIG 274/26 | N64°12.00' W146°36.00' |
| 01 AGL B 15 AGL to | B | BIG 255/39 | N64°05.00' W147°10.00' |
| 01 AGL B 15 AGL to | C | BIG 255/86 | N64°10.00' W148°58.00' |
| 01 AGL B 15 AGL to | D | BIG 253/97 | N64°08.00' W149°23.00' |
| 01 AGL B 15 AGL to | E | TAL 149/56 | N64°16.00' W151°44.00' |
| Alternate Entry Track from R-2211: | | | |
| 01 AGL B 15 AGL to | AA | EIL 200/22 | N64°23.00' W147°40.00' |
| 01 AGL B 15 AGL to | B1 | BIG 255/39 | N64°05.00' W147°10.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route beginning near Eielson MOA in R2202. Alternate exit B leaves you in Eielson MOA.
- (2) Restricted operations in and around active Special Use Airspace (SUA). See AFI 12-212, 11 AF Supplement. Coordinated scheduling with the 252 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R2202 and R2211 are required.
- (3) Contact Blair Lakes Range Control on primary 229.4, secondary 264.7 prior to entering R2211. They may not be open. Eielson Range Control provides area deconfliction.
- (4) All route points collocated with IR-900, IR-916, and VR-1900.
- (5) VR-1905, VR-1915, IR-905 and IR-915 cross at Point E.
- (6) VR-937, VR-938, IR-919 and IR-921 cross at Point B.
- (7) Primary Entry Point - A. Alternate Entry Point - AA, B, C and D.
- (8) Primary Exit Point - E. Alternate Exit Point - B, C and D.
- (9) Remain clear of isolated cabins on segment C to D. Staying south of centerline will help ensure most cabins are avoided. In IMC conditions maintain 1000' AGL minimum.
- (10) Use CAUTION for VFR traffic entering/exiting the mouth of the Wood River, segment B to C, and in the vicinity of the Nenana River on segment C to D for light aircraft transiting to/from Windy Pass.
- (11) Use CAUTION for uncharted Newman Airstrip (N63-58-41 W147-15-42) on segment B to C. See 11 AF Noise/Flight Sensitive Areas List (NFSL), item 6. Remain clear by 1 NM or

5000' AGL, 15 May - 15 Jun and 15 Nov - 15 Dec.
<http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.

- (12) Use CAUTION for hunting cabins and uncharted airstrips in vicinity of Gold King Creek (N64-11-47 W147-55-57) located on segment B to C. See NFSL, item 42. Remain clear by 3 NM or 1500' AGL, continuous.
- (13) Use CAUTION for uncharted for uncharted airstrips at (N64-07.1 W148-00), (N64-06.5 W147-33.2) and lake with float planes at (N64-13 W150-53) (Mucho Lake).
- (14) Use CAUTION near primary route entry when within/below the confines of the Birch MOA for traffic in the VFR Corridor along the Alaska Hwy. Remain above 3500' MSL from the south side of the Tanana River to 0.5 NM north of the Alaska Hwy. See Birch MOA description in the Alaska Airspace Handbook at the web page mentioned above.
- (15) Route Entry: MPY2 (319.2/120.9), Exit: MPY1 (285.4/133.1).
- (16) Weather briefing support agencies should request mission forecast from Alaska Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (17) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, MCG, ORT, TKA

VR-1926

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-----------------------|----|--------------|---------------------------|
| at or below 15 AGL | A | BIG 076/39 | N63°54.00' W144°16.00' |
| 01 AGL B 15 AGL to | B | BIG 100/28 | N63°45.00' W144°51.00' |
| 01 AGL B 15 AGL to | C | BIG 104/15 | N63°51.00' W145°15.00' |
| 01 AGL B 15 AGL to | D | BIG 202/13 | N63°51.20' W146°04.00' |
| Alternate Exit Track: | | | |
| 01 AGL B 15 AGL to | B | BIG 100/28 | N63°45.00' W144°51.00' |
| 01 AGL B 15 AGL to | AC | BIG 175/25 | N63°37.00' W146°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5NM either side of centerline from A to B; 2.5NM right and 3NM left of centerline from B to C; 3NM either side of centerline from C to a point 12NM East of D and 3NM right and 5NM left of centerline to D; Alternate Exit: 5NM either side of centerline to a point 8.5NM West of B and 1NM right and

5NM left of centerline to a point 12NM East of AC, then 5NM either side of centerline to AC.

Special Operating Procedures:

- (1) When the Buffalo MOA is active this route is unusable due to VFR corridor restrictions requiring you to fly above 1500' AGL.
- (2) Primary route within R2202 and Buffalo MOA.
- (3) Restricted operations within active Special Use Airspace (SUAS). See AFI 13-212, 11 AF Supplement.Coordinated scheduling with 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUAS deconfliction) is required. If any of the affected SUAS is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. The advisory service is provided formilitary and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R2202 is required.
- (4) Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a 'participant' in the SUAS. This means you have coordinated with the Scheduling Activity for use of the SUAS.
- (5) All route points collocated with IR-926, IR-927 and VR-1927.
- (6) IR-909, IR-939, VR-1909 and VR-1939 cross at Point A.
- (7) IR-919, IR-921, VR-937 and VR-938 cross at Point AC.
- (8) Primary Entry: Point A. Alternate Entry: Points B and C.
- (9) Primary Exit: Point D. Alternate Exit: Points B, C and AC.
- (10) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (11) Remain clear of Lake George, Segment A to B (N63-47.0 W144-32.0) by 1NM continuous. See NFSL item 28.
- (12) Use CAUTION Alaska Highway for high density VFR traffic at low altitude. Contact Eielson Range Control for updates. Segment B to C runs parallel to the hwy. Use CAUTION.
- (13) Use CAUTION for U.S. Army's Donnelly Assault Strip (N63-50.0 W145-43.0) segment C to D. Helicopter and C-130 traffic associated with Army and AF operations.
- (14) Use CAUTION Richardson Highway and the Alaska Pipeline for high density VFR traffic at low altitude on segment C to D and B to AC.
- (15) Remain clear of Donnelley Creek State Rec Site, Segment C to AC (N63-39.6 W145-53.0) 1NM, 15 May to 30 Sep. See NFSL item 24.
- (16) Use CAUTION for Black Rapids Airport, Segment B to AC (N63-32.1 W145-51.6). Remain clear by 3NM. See Buffalo MOA description in the Alaska Airspace Handbook on web site listed above.
- (17) Remain clear of Delta National Wild and Scenic River, segment B to AC by 5NM either side of river or 5000' MSL, 27 June-11 July. See NFSL item 19.
- (18) Use CAUTION for high density VFR traffic at the southern mouth of Isabel Pass, Point AC.
- (19) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.

VR ROUTES

- (20) Seasonal Caribou calving sensitive area, segment A to B primarily within Yukon 3A Low MOA but could go south into Buffalo MOA (15 May - 15 July); see local OGV FCIFs for details and locations.
- (21) Use CAUTION for Big Delta Arpt Class E airspace, 1NM within the route, segment C to D.
- (22) Route Entry/Exit: BIG (322.5/135.3).
- (23) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (24) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS), PAQ, TKA. See Alaska Supplement.

VR-1927

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------|----|--------------|---------------------------|
| at or below 15 AGL | A | BIG 202/13 | N63°51.00' W146°04.00' |
| 01 AGL B 15 AGL to | B | BIG 104/15 | N63°51.00' W145°15.00' |
| 01 AGL B 15 AGL to | C | BIG 100/28 | N63°45.00' W144°51.00' |
| 01 AGL B 15 AGL to | D | BIG 076/39 | N63°54.00' W144°16.00' |
| Alternate Entry Track: | | | |
| at or below 15 AGL | BB | BIG 175/25 | N63°37.00' W146°00.00' |
| 01 AGL B 15 AGL to | C1 | BIG 100/28 | N63°45.00' W144°51.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM left and 5 NM right of centerline from A to a point 12 NM east of A and 3 NM either side of centerline to B; 2.5 NM left and 3 NM right of centerline from B to C; 5 NM either side of centerline from C to D; Alternate Entry: 5 NM either side of centerline from BB to 12 NM east of BB and 1 NM left and 5 NM right of centerline from 12 NM east of BB to 8.5 NM west of C1 and 5 NM either side of centerline to C1.

Special Operating Procedures:

- (1) Primary route within R2202 and Buffalo MOA.
- (2) Restricted operations within active Special Use Airspace (SUAS). See AFI 12-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or

125.3 (for SUAS deconfliction) is required. If any of the affected SUAS is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R2202 is required.

- (3) Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a 'participant' in the SUAS. This means you have coordinated with the Scheduling Activity for the use of the SUAS.
- (4) All route points collocated with IR-926, IR-927 and VR-1926.
- (5) IR-909, IR-939, VR-1909 and VR-1939 cross at Point D.
- (6) IR-919, IR-921, VR-937 and VR-938 cross at Point BB.
- (7) Primary Entry: A. Alternate Entry: B, C and BB.
- (8) Primary Exit: D. Alternate Exit: B and C.
- (9) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (10) Use CAUTION Richardson Highway and the Alaska Pipeline for high density VFR traffic at low altitude on segments A to B and BB to C1.
- (11) Use CAUTION for U.S. Army's Donnelly Assault Strip (N63-50.0 W145-43.0) segment A to B. Helicopter and C-130 traffic associated with Army and AF exercise operations.
- (12) Remain clear of Donnelly Creek State Recreation Site, Segment BB to C1 (N63-39.6 W145-53.0) by 1NM, 15 May to 30 Sept. See NFSL item 24.
- (13) Use CAUTION for Black Rapids Airport, Segment BB to C1 (N63-32.1 W145-51.6). Remain clear by 3NM. See Buffalo MOA description in the Alaska Airspace Handbook on web site listed above.
- (14) Remain clear of Delta National Wild and Scenic River, segment BB to C1 by 5NM either side of river or 5000' MSL, 27 June - 11 July. See NFSL item 19.
- (15) Use CAUTION for high density VFR traffic at the southern mouth of Isabel Pass, Point BB.
- (16) Use CAUTION Alaska Highway for high density VFR traffic at low altitude. Contact Eielson Range Control for updates. Segment B to C runs parallel to the hwy. Use CAUTION.
- (17) Remain clear of Lake George, Segment C to D (N63-47.0 W144-32.0) by 1NM continuous. See NFSL item 28.
- (18) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (19) Seasonal Caribou calving sensitive area, segment C to D primarily within Yukon 3A MOA but could go south into Buffalo MOA (15 May - 15 July). See local OGV FCIFs for details and locations.
- (20) Use CAUTION for Big Delta Arpt Class E airspace, 1NM within the route, segment A to B.
- (21) Route Entry/Exit: BIG (322.5/135.3).
- (22) Weather briefing support agencies should request mission support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.

(23) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS), PAQ, TKA. See Alaska Supplement

VR-1928

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or below 15 AGL | A | BIG 335/28 | N64°28.00' W145°45.00' |
| 01 AGL B 15 AGL to | B | TKA 009/140 | N64°10.00' W147°00.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route between Yukon 1 and Eielson MOA's, through R2202 and Birch MOA.
- (2) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R2202 is required.
- (3) Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a 'participant' in the SUA. This means you have coordinated with the Scheduling Activity for the use of the SUA.
- (4) All route points collocated with IR-928, IR-929 and VR-1929.
- (5) IR-909, IR-917, IR-918, IR-939, VR-1909, VR-1939, VR-935 and VR-936 cross at Point A.
- (6) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (7) Remain clear of Clear Creek cabins (N64-13.1 W146-13) 1 NM continuous. See NFSL item 8.

- (8) Remain clear of Birch Lake State Recreational Area (N64-19 W146-39) 1 NM (15 May - 30 Sep). See NFSL item 10.
- (9) Use CAUTION for uncharted 50' tower not listed in CHUM (N64-22 W146-11).
- (10) Remain clear of Shaw Creek Youth Camp (N64-16 W146-06) by 1500' AGL or 1 NM continuous. See NFSL item 29.
- (11) Use CAUTION Alaska Highway for high density VFR traffic at low altitude. Contact Eielson Range Control for updates. Use Caution.
- (12) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (13) Seasonal Caribou calving sensitive area, primarily within Yukon 1 MOA (15 May - 15 July); see local OGV FCIFs for details and locations.
- (14) Route Entry/Exit: MPY2 (319.2/120.9).
- (15) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (16) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT, (1 Mar-30 Sep, other times contact FAI FSS),TKA. See Alaska Supplement.

VR-1929

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or below 15 AGL | A | TKA 009/140 | N64°10.00' W147°00.00' |
| 01 AGL B 15 AGL to | B | BIG 335/28 | N64°28.00' W145°45.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route between Yukon 1 and Eielson MOAs, through R2202 and Birch MOA.
- (2) Restricted operations within active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed,

VR ROUTES

and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety. Prior scheduling of R2202 is required.

- (3) Expect ATC to give route and MOA clearance prior to entry. Ask for clearance at least five minutes prior to route entry. ATC may ask if you are a 'participant' in the SUA. This means you have coordinated with the Scheduling Activity for the use of the SUA.
- (4) All route points collocated with IR-928, IR-929 and VR-1928.
- (5) IR-909, IR-939, IR-917, IR-918, VR-1909, VR-1939, VR-935 and VR-936 cross at Point B.
- (6) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (7) Remain clear of Clear Creek cabins (N64-13.1 W146-13.0) by 1NM continuous. See NFSL item 8.
- (8) Remain clear of Birch Lake State Recreational Area (N64-19 W146-39) by 1NM (15 May-30 Sept). See NFSL item 10.
- (9) Use CAUTION for uncharted 50' tower not listed in CHUM (N64-22 W146-11).
- (10) Remain clear of Shaw Creek Youth Camp (N64-16 W146-06) by 1NM continuous. See NFSL item 29.
- (11) Use CAUTION Alaska Highway for high density VFR traffic at low altitude. Contact Eielson Range Control for updates. Use CAUTION.
- (12) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. Helicopters frequently use 150'-500' cables strung below for carrying cargo.
- (13) Seasonal Caribou calving sensitive area, primarily within Yukon 1 MOA (15 May-15 Jul); see local OGV FCIFs for details and locations.
- (14) Route Entry/Exit: MPY2 (319.2/120.9)
- (15) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (16) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to Nov 1. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other time contact FAI FSS), TKA. See Alaska Supplement.

VR-1939

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.

SCHEDULING ACTIVITY: 353 CTS/JSO, Eielson AFB, AK 99702 DSN 317-377-3005, C907-377-3005.

HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or below 15 AGL | A | BIG 335/28 | N64°28.00' W145°45.00' |
| 01 AGL B 15 AGL to | B | BIG 050/52 | N64°15.00' W143°50.00' |
| 01 AGL B 15 AGL to | C | BIG 076/39 | N63°54.00' W144°16.00' |

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:

- (1) Primary route under and through Buffalo, Yukon 3A Low & Yukon 1 MOAs. Alternate entry/exit B places you within Yukon 1 MOA.
- (2) Restricted operations in and around active Special Use Airspace (SUA). See AFI 13-212, 11 AF Supplement. Coordinated scheduling with the 353 JSO, and radio contact with Eielson Range Control (ERC) on primary 229.4, secondary 246.2, or 125.3 (for SUA deconfliction) is required. If any of the affected SUA is active, you must remain clear until ERC approves entry. Radio contact with ERC may be difficult. If no contact can be made, call 'in the blind', then proceed, and continue periodic attempts. Radio contact with ERC constitutes use of the Special Use Airspace Information Service. This advisory service is provided for military and civilian VFR traffic in the Interior MOA complex. Advisories will be given when known. Though not an ATC facility, ERC provides this service to increase situational awareness and safety.
- (3) All route points collocated with IR-909, IR-939 and VR-1909.
- (4) IR-926, IR-927, VR-1926 and VR-1927 cross at Point C.
- (5) IR-917, IR-918, VR-935 and VR-936 cross at Points A, B and C.
- (6) IR-928, IR-929, VR-1928 and VR-1929 cross at Point A.
- (7) Primary Entry Point - A. Alternate Entry Point - B.
- (8) Primary Exit Point - C. Alternate Exit Point - B.
- (9) Seasonal Caribou calving sensitive area entire route (15 May - 15 July); see local OGV FCIFs for details and locations. Also see Airspace Presentation link listed in No.12.
- (10) Numerous sensitive areas near Alaska Hwy. See 11 AF Noise/Flight Sensitive Areas List (NFSL) <http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.htm>.
- (11) Use CAUTION for Pogo Mine on segment B to C. Remain clear of mine by 5NM or 4500' MSL centered on (N64-25.8 W144-48.2), and Goodpaster River by 2NM or 4500' MSL from southern border of Yukon 1 MOA to airstip located at (N64-28 W144-55) continuous. Mine has high density air activity with helicopters (150'-500' cable long-lines) and fixed wing activity year round. See 11 AF NFSL Item No.43.
- (12) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. One known camp is located at (N64-17 W144-16) and uses a helicopter for re-supply.
- (13) Use CAUTION Alaska Highway VFR corridor within confines of Buffalo and Birch MOAs. Remain above 3500' MSL when within 2NM of the highway (Buffalo) or 0.5NM north of the highway to the southern bank of the Tanana River (Birch), continuous. See Birch and Buffalo MOA descriptions in the 11 AF NFSL.
- (14) Route Entry: MPY2 (319.2/120.9), Exit: BIG (322.5/135.3).

- (15) Weather briefing support agencies should request mission forecast support from ALASKA Forecast Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.
- (16) Heavy migratory bird activity on route from 10 Apr to 20 May and 1 Aug to 1 Nov. Alaska Bird Avoidance Model data is available at <http://www.usahas.com/bam>.

FSS's Within 100 NM Radius:

FAI, ORT (1 Mar-30 Sep, other times contact FAI FSS) see Alaska Supplement.

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SLOW SPEED LOW ALTITUDE TRAINING ROUTES (SR)

I. General. Unlike IR and VR MTRs, SRs are not part of the MTR System and therefore have no directive guidance in the Aeronautical Information Manual (AIM) or the FAA Order 7610.4 (Special Military Operations). Pilots are expected to comply with FARs and applicable service guidance when flying SRs. Slow Routes are low-level routes at or below 1500 feet AGL, 250 knots IAS or less, and are published in AP/1B. Flight above 1500 feet AGL does not meet the prescribed criteria of the SR system. There is no overall mechanism to inform military or civilian aviators that a SR Route is active. Automated Flight Service Stations (AFSS) are not notified. Any VFR/IFR Pilot (planning flights at 1500 feet or below) must call each SR Originator/Scheduler to see if their planned route of flight conflicts with an active SR.

II. Route Development. Guidance for development and publication of SR routes is provided in applicable service directives. Since there is no widely available guidance to pilots on route development, great caution should be exercised when planning to fly SRs. For example, a USN user of an USAF developed/owned route would not normally have access to the route development information contained in USAF service directives. Additionally, SRs are not displayed on VFR Sectionals or on Jeppesen Enroute Charts. File SR Routes using the same procedures as VR Routes shown in AP/1B, page 2-1. Many SRs do not show the fix/radial/distance (FRD) of the published entry/alternate entry points or published exit/alternate exit points. Pilots are not authorized to file IFR to Lat/Long points unless aircraft equipment supports such navigation. Unlike IR/VR MTRs the number of characters (ex SR-XXX or SR-XXXX) in a SR has no bearing on route altitudes within the SR. Developers/Route Originators will ensure that all SRs are displayed on FLIP AP/1B Military Training Route Charts. Developers/Route Originators will review SR data published in AP/1B and will immediately inform the appropriate authorities when a disparity exists. Route Developers should specify route entry windows in the Remarks/Special Operating Procedures (for example, plus or minus five minutes) to ensure aircraft enter on time and provide maximum route deconfliction for other military and civilian pilots.

III. Scheduling and Coordination.

A. Routes shall not be flown unless properly scheduled through the designated originating/scheduling activity listed for the SR. Unlike IR or VR MTRs, AFSSs are not notified of a scheduled SR. As a result, pilots should expect no pre-planned deconfliction from other IFR/VFR military or civilian traffic within the ATC System. SR users should be aware of other IR & VR MTR users and associated route times in the event delays occur affecting crossing of other active routes. SR Pilots will consult FLIP Area Planning and FLIP AP/1B Military Training Route Chart to ensure deconfliction. This chart is the single source document (IR, VR, SR routes) depicting potential route conflicts. Pilots may consult VFR Sectionals for additional planning information. Routes displayed on the MTR Chart are "route centerline" only and route widths are not to scale. Enroute low IFR charts do not show 4 digit MTRs or SRs, therefore, do not

use enroute IFR charts to deconflict SRs. Because AFSS is not notified of SR activation, the burden rests squarely on the pilot. IR/VR MTR users will not be aware of conflicts with SRs unless pilots make proper reference to the FLIP AB/1B MTR Chart and call the originating/scheduling authority listed for the route.

B. In the interest of safety within the SR environment, users should contact the Scheduling Activity within 24 hours preceding the route use for the purpose of receiving a current briefing on:

1. Recent noise complaints/sensitive areas.
2. New unpublished airports, obstructions, etc.
3. Recent bird migrations/nesting activity.
4. Route suspension due to air search and rescue activity.
5. Other unpublished safety considerations.

IV. Flight Plans.

A. Operations to and from SRs should be conducted on an IFR flight plan. Pilots must have an IFR or VFR flight plan filed to fly a SR.

1. Pilots operating on an IFR flight plan to a SR shall file to the fix/radial/distance (FRD) of the published entry/alternate entry point when available. Pilots transitioning to IFR upon exiting a SR shall file the FRD of the published exit/alternate exit point. In some cases, the originating/scheduling activity may require a specific Fix to file that may not be listed in AP/1B.

Example: SAT004052 SR286 CWK129020

2. The remarks portion (Field 11) of the flight plan shall contain the SR designator, the letter E and a four digit group indicating the Zulu entry time, the letter X and a four digit group indicating the Zulu exit time, and remarks (if applicable). Use no spaces on the first group.

Example: SR286E1330X1400 Exiting Echo

V. In Flight.

A. Entry/Exit.

1. All entries and exits shall be accomplished at published entry/exit points or alternate entry/exit points.
2. Pilots shall inform the ATC facility if any action on the part of the controller compromises entry procedures for the route. For example, if the pilot is unable to enter

SR ROUTES

the route within established time limits, it shall be the responsibility of the pilot to inform the ATC facility of potential impact to other aircraft and advise intentions.

B. Route Adherence.

1. Pilots shall remain within the lateral and vertical confines of the published route. SRs are one-way routes and course reversals are not authorized. Pilots will conform to the traffic flow indicated in the route description.
2. When practicable, avoid flight within 1500 feet AGL or 3 NM of airports. Always comply with Special Operating Procedures or Remarks.
3. Pilots flying a SR are responsible for maintaining obstacle clearance, terrain avoidance and compliance with applicable service directions regardless of the route's published altitudes.
4. Route users must obtain permission from the using or controlling agency before entering a restricted area. Filing a flight plan for a SR that terminates in a restricted area is not, by itself, a clearance.

C. Speed. High-speed aircraft must not use low speed routes (SR). Operations on SR routes are flown at airspeeds of 250 knots IAS or less.

D. Weather. Weather minima for flight on SR routes are specified in appropriate service directives. Some routes may list weather minimums in the Remarks/Special Operating Procedures.

E. Communications.

1. Pilots should monitor 255.4 MHz while on SRs, if practicable. Tactical or discrete frequencies may be used. The Remarks/Special Operating Procedures section of the MTR may direct mandatory radio calls on specific radio frequencies to warn other aircraft of possible traffic conflicts.
2. In the event of communications failure (unless otherwise agreed to in a letter of agreement) the pilot should remain VMC, continue the flight VFR, and land as soon as practicable at the most suitable airport.

F. Transponder. Squawk Code 1200 while operating on SRs unless otherwise assigned by ATC.

VI. Aircraft Separation. ATC traffic advisories on a SR are at the discretion of an ATC Controller. They are provided on a controller workload-permitting basis and depend on ATC radio/radar coverage. Since most SRs are flown on 255.4 MHz, expect radio contact on VHF, secondary UHF or Guard. IFR aircraft operating on IR MTRs that cross SRs should receive an ATC advisory provided both aircraft are in ATC radar coverage and are squawking appropriately. Separation from military aircraft operating on VR MTRs is completely discretionary. Many VR MTRs and SRs have minimum altitudes that are not in radar coverage, therefore do not expect to get traffic advisories from VR MTR users. Separation from civilian aircraft operating VFR is completely discretionary and subject to the same limitations. "See and avoid" is paramount and is the pilot's responsibility at all times.

SR-038

(COLUMBUS)

ORIGINATING ACTIVITY: Base Operations, Lawson AAF, Fort Benning, Ga. DSN 835-2857/3524 C706-545-3524/6540.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| at or above 03 AGL (Night-1000' AGL or above) | A | | N32°27.30' W85°11.60' |
| at or above 03 AGL (Night-1000' AGL or above) | B | | N32°36.90' W85°01.10' |
| at or above 03 AGL (Night-1000' AGL or above) | C | | N32°35.20' W84°21.90' |
| at or above 03 AGL (Night-1000' AGL or above) | D | | N31°57.50' W84°19.40' |
| at or above 03 AGL (Night-1000' AGL or above) | E | | N31°36.10' W84°50.90' |
| at or above 03 AGL (Night-1000' AGL or above) | F | | N32°01.20' W84°55.10' |
| at or above 03 AGL (Night-1000' AGL or above) | G | | N32°16.30' W84°57.50' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) This route will be flown no lower than 300' AGL day, 1000' AGL night.
- (2) Primary Entry Point: (A).
- (3) Primary Exit Point: (G).

SR-039

(COLUMBUS)

ORIGINATING ACTIVITY: Base Operations, Lawson AAF, Fort Benning, Ga. DSN 835-2857/3524 C706-545-3524/6540.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| at or above 03 AGL (Night-1000' AGL or above) | A | | N32°22.60' W85°22.10' |

| | | | |
|---|---|--|--------------------------|
| at or above 03 AGL (Night-1000' AGL or above) | B | | N32°04.40' W85°41.10' |
| at or above 03 AGL (Night-1000' AGL or above) | C | | N31°45.00' W85°03.00' |
| at or above 03 AGL (Night-1000' AGL or above) | D | | N32°01.50' W84°55.20' |
| at or above 03 AGL (Night-1000' AGL or above) | E | | N32°16.30' W84°57.50' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) This route will be flown no lower than 300' AGL day, 1000' AGL night.
- (2) Primary Entry Point: (A).
- (3) Primary Exit Point: (E).

SR-040

(ATLANTA)

ORIGINATING ACTIVITY: 94/OSS Dobbins AFB, GA 30069-5009 DSN 625-3498, C678-655-3498.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0300Z ++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| at or above 03 AGL (Night-1000' AGL or above) | A | | N33°57.00' W84°40.00' |
| at or above 03 AGL (Night-1000' AGL or above) | B | | N33°42.00' W85°00.00' |
| at or above 03 AGL (Night-1000' AGL or above) | C | | N33°03.00' W84°57.00' |
| at or above 03 AGL (Night-1000' AGL or above) | D | | N32°22.00' W85°21.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Point (D) is common with (A) on SR-39.
- (2) Minimum altitude is 300' AGL from (A) to (D) except 1500' AGL within 3 NM of Callaway Airport, LaGrange and Valley Airport, West Point.
- (3) Route flown no lower than 300' AGL during daylight hours and no lower than 1000' AGL at night.

SR ROUTES

SR-059

(NASHVILLE) BNA, BWG, PAH

ORIGINATING ACTIVITY: 118 AW, 240 Knapp Blvd,
Nashville, TN 37217, DSN 778-6362/6342, C615-399-5662/5642.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------|----|--------------|--------------------------|
| | A | | N36°53.00' W87°40.00' |
| | B | | N37°19.00' W87°49.00' |
| | C | | N37°14.00' W88°29.00' |
| | D | | N36°48.00' W88°26.00' |
| | E | | N36°38.00' W88°08.00' |
| | F | | N36°37.00' W87°54.00' |
| (Bastogne Drop Zone) | G | | N36°38.00' W87°34.00' |
| (Alternate Exit Point) | H | | N36°27.00' W87°29.00' |
| | I | | N36°27.00' W87°14.00' |
| | J | | N36°39.00' W87°12.00' |
| | K | | N36°44.00' W87°25.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

(1) Minimum altitude 300' AGL (A) to (C), 500' AGL (C) to (H).

SR-060

(NASHVILLE) BNA, BWG, PAH

ORIGINATING ACTIVITY: 118 AW, 240 Knapp Blvd,
Nashville, TN 37217, DSN 778-6362/6342, C615-399-5662/5642.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N36°53.00' W87°40.00' |
| | B | | N37°19.00' W87°49.00' |

| | | | |
|------------------------|---|--|--------------------------|
| | C | | N37°14.00' W88°29.00' |
| | D | | N36°48.00' W88°26.00' |
| | E | | N36°38.00' W88°08.00' |
| | F | | N36°37.00' W87°53.00' |
| (Suckchon Drop Zone) | G | | N36°33.00' W87°37.00' |
| (Alternate Exit Point) | H | | N36°27.00' W87°29.00' |
| | I | | N36°27.00' W87°14.00' |
| | J | | N36°39.00' W87°12.00' |
| | K | | N36°44.00' W87°25.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

(1) Minimum Altitude Data: 300' AGL (A) to (C); 500' AGL (C) to (H).

SR-061

(NASHVILLE) BNA, BWG, PAH

ORIGINATING ACTIVITY: 118 AW, 240 Knapp Blvd,
Nashville, TN 37217, DSN 778-6362/6342, C615-399-5662/5642.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| at or above 03 AGL | A | | N36°53.00' W87°40.00' |
| at or above 03 AGL | B | | N37°07.00' W87°29.00' |
| at or above 03 AGL | C | | N36°42.00' W86°52.00' |
| at or above 03 AGL | D | | N36°12.00' W87°23.00' |
| at or above 03 AGL | E | | N36°24.00' W87°38.00' |
| at or above 03 AGL (Corregidor Drop Zone). | F | | N36°38.00' W87°38.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

(1) Minimum altitude for entire route is 300' AGL.

SR-062

(NASHVILLE) BNA, BWG, PAH

ORIGINATING ACTIVITY: 118 AW, 240 Knapp Blvd, Nashville, TN 37217, DSN 778-6362/6342, C615-399-5662/5642.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| at or above 03 AGL | A | | N36°53.00' W87°40.00' |
| at or above 03 AGL | B | | N37°07.00' W87°29.00' |
| at or above 03 AGL | C | | N36°42.00' W86°52.00' |
| at or above 03 AGL | D | | N36°12.00' W87°23.00' |
| at or above 03 AGL | E | | N36°20.00' W87°36.00' |
| at or above 03 AGL (Los Banos Drop Zone). | F | | N36°35.00' W87°37.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude for entire route is 300' AGL.

SR-069

(MONTGOMERY)

ORIGINATING ACTIVITY: 908 OSF/DOO, 430 W Maxwell Blvd, Bldg 1050, Maxwell AFB, AL 36112-6591 DSN 493-7301/7325, C334-953-7301/7325.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1400-0400Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| at or above 05 AGL (Night-1000' AGL or above) (Entry Point) | A | | N32°32.50' W86°11.50' |
| at or above 05 AGL (Night-1000' AGL or above) | B | | N32°40.50' W85°54.00' |
| at or above 05 AGL (Night-1000' AGL or above) | C | | N33°06.30' W86°28.80' |
| at or above 05 AGL (Night-1000' AGL or above) | D | | N32°54.00' W86°54.50' |

| | | | |
|--|---|--|--------------------------|
| at or above 05 AGL (Night-1000' AGL or above) | E | | N32°38.10' W86°30.30' |
| at or above 05 AGL (Night-1000' AGL or above) (Drop Zone) | F | | N32°22.50' W86°21.90' |

ROUTE WIDTH - 5 NM either side of centerline, except (D) to (E) which is 3 NM left and 5 NM right of centerline and (E) to (F) which is 5 NM left and 1 NM right of centerline.

Remarks:

- (1) This route will be flown no lower than 500' AGL day, 1000' AGL night.
- (2) Entry Point: (A).
- (3) Exit Point: (F).

SR-070

(MONTGOMERY)

ORIGINATING ACTIVITY: 908 OSF/DOO, 430 W Maxwell Blvd, Bldg 1050, Maxwell AFB, AL 36112-6591 DSN 493-7301/7325, C334-953-7301/7325.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1400-0400Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| at or above 05 AGL (Night-1000' AGL or above) | A | | N32°32.20' W86°11.50' |
| at or above 05 AGL (Night-1000' AGL or above) | B | | N32°43.90' W85°35.00' |
| at or above 05 AGL (Night-1000' AGL or above) | C | | N33°01.30' W85°20.80' |
| at or above 05 AGL (Night-1000' AGL or above) | D | | N33°14.70' W85°37.90' |
| at or above 05 AGL (Night-1000' AGL or above) | E | | N33°05.10' W86°14.90' |
| at or above 05 AGL (Night-1000' AGL or above) | F | | N32°39.90' W86°32.30' |
| at or above 05 AGL (Night-1000' AGL or above) (Drop Zone) | G | | N32°22.50' W86°21.90' |

ROUTE WIDTH - 3 NM either side of centerline, except (B) to (C) which is 3 NM left and 2 NM right of centerline and (F) to (G) which is 3 NM left and 1 NM right of centerline.

Remarks:

- (1) This route will be flown no lower than 500' AGL day, 1000' AGL night.
- (2) Primary Entry Point: (A).
- (3) Alternate Entry Point: (C).

SR ROUTES

(4) Exit Point: (G).

SR-071

(MONTGOMERY)

ORIGINATING ACTIVITY: 908 OSF/DOO, 430 W Maxwell Blvd, Bldg 1050, Maxwell AFB, AL 36112-6591 DSN 493-7301/7325, C334-953-7301/7325.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0500Z++

ROUTE DESCRIPTION:

Table with columns: Altitude Data, Pt, Fac/Rad/Dist, Lat/Long. Rows A through G with coordinates and (Entry/Exit Point) labels.

ROUTE WIDTH - 5 NM either side of centerline except (B) to (C) which is 5 NM left and 3 NM right of centerline, (C) to (D) which is 3 NM left and 5 NM right of centerline, (E) to (F) which is 3 NM left and 5 NM right of centerline, and (F) to (G) which is 5 NM left and 1 NM right of centerline.

Remarks:

- (1) Altitude Data: 300'-1500' AGL (A) to (F); 500'-1500' AGL (F) to (G).
(2) Airspeed: 210 KIAS.

SR-072

(MONTGOMERY)

ORIGINATING ACTIVITY: 908 OSF/DOO, 430 W Maxwell Blvd, Bldg 1050, Maxwell AFB, AL 36112-6591 DSN 493-7301/7325, C334-953-7301/7325.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0500Z++

ROUTE DESCRIPTION:

Table with columns: Altitude Data, Pt, Fac/Rad/Dist, Lat/Long. Rows A and B with coordinates.

Table with columns: Altitude Data, Pt, Fac/Rad/Dist, Lat/Long. Rows C through H with coordinates.

ROUTE WIDTH - 5 NM either side of centerline except (A) to (B) which is 1 NM left and 5 NM right of centerline, (B) to (C) which is 4 NM left and 3 NM right of centerline, (D) to (E) which is 5 NM left and 3 NM right of centerline.

Remarks:

- (1) Altitude is 300'-1500' AGL.

SR-073

(MEMPHIS)

ORIGINATING ACTIVITY: 164 AW (ANG), Memphis Intl, TN 38118 DSN 726-7131.

SCHEDULING ACTIVITY: Columbus AFB, MS DSN 742-7840/7847 C662-434-7840/7847.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Table with columns: Altitude Data, Pt, Fac/Rad/Dist, Lat/Long. Rows A through G with coordinates.

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum Altitude Data: 2000' MSL (A) to N34-41 W90-20; 300' AGL (E) to (F); 500' AGL between all other points.
(2) Recommend: request frequency from Memphis APP to monitor for Entry and Exit.
(3) Route terminates at Coldwater Drop Zone.

- (4) Possible helicopter training penetrating from (C) to (F), operating from surface to 3000' AGL. See Air National Guard Global for MS ARNG, 185 Aviation Group, G Company.

SR-074**(MEMPHIS)**

ORIGINATING ACTIVITY: 164 AW (ANG), Memphis Intl, TN 38118 DSN 726-7131.

SCHEDULING ACTIVITY: Columbus AFB, MS DSN 742-7840/7847 C662-434-7840/7847.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N34°50.00' W90°24.00' |
| | B | | N34°32.00' W90°27.00' |
| | C | | N34°18.00' W90°04.00' |
| | D | | N34°12.00' W89°37.00' |
| | E | | N34°15.00' W89°12.00' |
| | F | | N34°25.00' W88°56.00' |
| | G | | N34°40.00' W89°01.00' |
| | H | | N34°44.00' W89°25.00' |
| | I | | N34°43.00' W89°56.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum Altitude Data: 300' AGL (C) to (E); 500' AGL between all other points.
- (2) Recommend: request frequency from Memphis APP to monitor for Entry and Exit.
- (3) Route terminates at Coldwater Drop Zone.
- (4) Possible helicopter training penetrating from (C) to (F), operating from surface to 3000' AGL. See Air National Guard Global MS ARNG, 185 Aviation Group, G Company.

SR-075**(MEMPHIS)**

ORIGINATING ACTIVITY: 164 AW (ANG), Memphis Intl, TN 38118 DSN 726-7131.

SCHEDULING ACTIVITY: Columbus AFB, MS DSN 742-7840/7847 C662-434-7840/7847.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N34°52.00' W89°42.00' |
| | B | | N34°57.00' W89°18.00' |
| | C | | N34°57.00' W88°54.00' |
| | D | | N34°39.00' W88°44.00' |
| | E | | N34°44.00' W89°25.00' |
| | F | | N34°43.00' W89°56.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum Altitude Data: 300' AGL (D) to (E); 500' AGL between all other points.
- (2) Recommend: request frequency from Memphis APP to monitor for Entry and Exit.
- (3) Route terminates at Coldwater Drop Zone.
- (4) Possible helicopter training penetrating from (C) to (F), operating from surface to 3000' AGL. See Air National Guard Global for MS ARNG, 185 Aviation Group, G Company.

SR-101**(CRESTVIEW)**

ORIGINATING ACTIVITY: 16 OSS/DOO, Hurlburt Field, FL 32544 DSN 579-6877/7812, C850-884-6877/7812.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | AA | | N30°49.57' W86°40.75' |
| | BD | | N31°07.90' W86°43.00' |
| (Entry Point) | BE | | N31°32.50' W86°43.00' |
| | BF | | N31°43.00' W87°03.10' |
| | BG | | N32°23.63' W86°46.80' |
| | BH | | N32°51.85' W86°22.43' |
| | BI | | N33°12.05' W86°29.28' |
| | BJ | | N33°30.22' W86°26.72' |

SR ROUTES

| | | |
|------------------------------|-----|--------------------------|
| | BK | N33°50.18' W86°32.80' |
| | BL | N34°26.18' W86°25.30' |
| | BM | N35°10.30' W85°47.48' |
| | BN | N35°18.87' W85°24.30' |
| | BO | N35°38.30' W85°07.90' |
| | BP | N35°47.50' W84°40.95' |
| | BQ | N35°32.85' W84°08.25' |
| | BR | N35°23.30' W83°34.00' |
| (Alternate Entry/Exit Point) | BS | N34°39.20' W83°52.33' |
| | BT | N34°46.25' W84°10.50' |
| | BU | N34°48.10' W84°37.00' |
| | BV | N34°52.15' W85°00.00' |
| | BW | N34°41.82' W85°34.23' |
| (Alternate Entry Point) | BL1 | N34°26.18' W86°25.30' |
| | BK1 | N33°50.18' W86°32.80' |
| | BJ1 | N33°30.22' W86°26.72' |
| | BI1 | N33°12.05' W86°29.28' |
| | BH1 | N32°51.85' W86°22.43' |
| | BG1 | N32°23.63' W86°46.80' |
| | BF1 | N31°43.00' W87°03.10' |
| | BE1 | N31°32.50' W86°43.00' |
| | BD1 | N31°07.90' W86°43.00' |
| (Alternate Exit Point) | AQ | N30°56.20' W86°24.80' |
| (Pino Drop Zone) | AR | N30°41.20' W86°23.65' |
| ALTERNATE ROUTING: | | |
| | BD1 | N31°07.90' W86°43.00' |
| (Alternate Exit Point) | AO | N30°51.72' W86°49.80' |
| (Sontay Drop Zone) | AP | N30°37.97' W86°45.68' |

ROUTE WIDTH - 2 NM either side of centerline.

Remarks:

- (1) Route is bi-directional and limited to C130 operations.
- (2) Coordination required with Scheduling Activity, two days prior.
- (3) Minimum Altitude Data: 250' AGL except (AA) to (BD) northbound 3000' MSL; (BD) to (BE) northbound 1700' MSL; (BE) to (BD) southbound 1200' MSL. 500' AGL (BU) to (BV), (BK) to (BL), a segment from 10 NM prior to (BI) thru (BJ), a 10 NM segment from 25 NM to 15 NM prior to (BS) and a 5 NM segment south of (BV).
- (4) A mission number is required for entry into R-2915/R-2914. Contact Eglin Range Control at (AO) for clearance into R-2915 and Alternate Exit Point (AQ) for clearance into R-2914.
- (5) Avoid the Hinch Mountain 106/22 (N35-41 W84-32) by 2 NM or 1500' AGL.

SR-102

(HARRIS)

ORIGINATING ACTIVITY: 16 OSS/DOO, Hurlburt Field, FL 32544 DSN 579-6877/7812, C850-884-6877/7812.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------|----|--------------|--------------------------|
| | BS | | N34°39.20' W83°52.32' |
| (Alternate Exit Point) | CH | | N34°21.12' W83°42.08' |
| | CG | | N34°04.40' W83°00.27' |
| | CF | | N33°48.50' W82°31.50' |
| | CE | | N33°20.05' W83°08.57' |
| (Alternate Entry/Exit Point) | CD | | N32°48.63' W82°45.47' |
| | CC | | N32°34.60' W83°14.22' |
| | CB | | N32°18.47' W83°45.95' |
| | CA | | N32°28.40' W84°10.65' |
| (Alternate Entry Point). | AG | | N31°55.25' W84°42.28' |

ROUTE WIDTH - 2 NM either side of centerline.

Remarks:

- (1) Route is bi-directional and limited to C130 operations.
- (2) Coordination required with Scheduling Activity, two days prior.
- (3) (BS) coincides with SR-101 (BS); (AG) coincides with SR-103 (AG).

- (4) When not flying SR-102 in conjunction with SR-101 or SR-103, aircraft will not be below 1500' AGL at (AG) or (BS).
- (5) Minimum Altitude Data: 250' AGL except 1000' AGL (CH) to (CG); 750' AGL 20 NM prior to (CD) on leg (CD) to (CE). Legs (CE) to (CD) and (CC) to (CD) are climb segments to IFR altitude for ECM activity with Statesboro RBS site.

| | |
|----|--------------------------|
| AO | N30°51.72' W86°49.80' |
| AP | N30°37.97' W86°45.68' |

(Sontay Drop Zone).

ROUTE WIDTH - 2 NM either side of centerline.

SR-103

(CRESTVIEW)

ORIGINATING ACTIVITY: 16 OSS/DOO, Hurlburt Field, FL 32544 DSN 579-6877/7812, C850-884-6877/7812.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------|----|--------------|--------------------------|
| | AA | | N30°49.57' W86°40.75' |
| (Entry Point) | AB | | N31°00.00' W86°38.00' |
| | AC | | N31°33.40' W86°36.60' |
| | AD | | N32°03.92' W86°24.43' |
| | AE | | N32°04.63' W85°41.18' |
| | AF | | N32°07.92' W85°03.63' |
| (Alternate Entry Point) | AG | | N31°55.25' W84°42.28' |
| | AH | | N31°39.82' W84°41.20' |
| | AI | | N31°10.22' W84°28.00' |
| | AJ | | N30°53.10' W84°28.10' |
| | AK | | N30°27.35' W84°29.22' |
| | AL | | N30°34.77' W84°57.70' |
| | AM | | N30°39.78' W85°34.62' |
| (Alternate Entry/Exit Point) | AN | | N30°49.27' W86°01.87' |
| | AQ | | N30°56.20' W86°24.80' |
| (Pino Drop Zone) | AR | | N30°41.20' W86°23.65' |
| ALTERNATE ROUTING: | AQ | | N30°56.20' W86°24.80' |

Remarks:

- (1) Route is bi-directional and limited to C130 operations.
- (2) Coordination required with Scheduling Activity, two days prior.
- (3) Contact Eglin Range Control at (AO) or (AQ) for clearance into R-2914/R-2915.
- (4) Minimum altitude: 250' AGL except (AA) to 10 NM past (AB) northbound 1700' MSL; 10 NM prior to (AB) southbound 1700' MSL or above; (AD) to (AE) at 750' AGL; (AI) to (AL) at 500' AGL; if flying two clockwise trips around SR-103, aircraft must be at 1700' MSL prior to (AB).

SR-104

(CRESTVIEW)

ORIGINATING ACTIVITY: 16 OSS/DOO, Hurlburt Field, FL 32544 DSN 579-6877/7812, C850-884-6877/7812.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------|----|--------------|--------------------------|
| | AA | | N30°49.57' W86°40.75' |
| (Entry/Exit Point) | AB | | N31°00.00' W86°38.00' |
| | AC | | N31°33.40' W86°36.60' |
| | DA | | N31°49.50' W86°51.30' |
| | DB | | N32°06.00' W86°30.93' |
| (Alternate Exit Point) | DC | | N32°23.38' W85°33.28' |
| | DD | | N32°41.25' W85°10.28' |
| | DE | | N32°49.38' W84°03.82' |
| | DF | | N33°17.00' W83°15.15' |
| | DG | | N33°43.27' W83°17.68' |
| | DH | | N33°59.00' W83°06.00' |
| | DI | | N34°22.50' W83°15.38' |
| | DJ | | N34°48.83' W83°07.77' |
| | DK | | N35°07.88' W82°56.67' |

SR ROUTES

| | | | | | |
|------------------------|-----|--------------------------|----------------------|----|--------------------------|
| (Exit Point) | EA | N35°32.13' W82°55.42' | at or above 02.5 AGL | EI | N35°22.30' W80°49.00' |
| (Alternate Exit Point) | AC1 | N31°33.40' W86°36.60' | at or above 02.5 AGL | EJ | N35°15.08' W80°30.18' |
| | AO | N30°51.72' W86°49.80' | at or above 02.5 AGL | EK | N34°52.09' W80°10.63' |
| (Sontay Drop Zone). | AP | N30°37.97' W86°45.68' | at or above 02.5 AGL | EL | N34°56.61' W79°52.17' |
| (Alternate Exit Point) | AB1 | N31°00.00' W86°38.00' | at or above 02.5 AGL | EM | N35°00.61' W79°28.19' |
| | AQ | N30°56.20' W86°24.80' | | | |
| (Pino Drop Zone). | AR | N30°41.20' W86°23.57' | | | |

ROUTE WIDTH - 2 NM either side of centerline.

Remarks:

- (1) Route is bi-directional and limited to C130 operations.
- (2) Coordination required with Scheduling Activity, two days prior.
- (3) Minimum Altitude Data: 250' AGL except (AA) to (AB) northbound 3000' MSL; (AB) to (AC) northbound 1700' MSL; (AC) to (DA) 1000' AGL; (AC) to (AB) southbound 1200' MSL. 5 NM either side of (DD) 500' AGL.
- (4) (EA) coincides with (EA) on SR-105.
- (5) When not flying SR-105 in conjunction with SR-104, aircraft will not be below 1500' AGL at (EA).
- (6) Mission number is required for entry into R-2915/ R-2914. Contact Eglin Range Control at (AO) or (AB) for clearance into R-2915/R-2914.
- (7) NOTE: SR-104 altitude restrictions for (AB) to (AC) are the same as SR-103 and provide 500' separation between northbound/southbound aircraft. SR-102 traffic between (DH) and (DI) is 1000' AGL or higher.

SR-105

(ASHEVILLE)

ORIGINATING ACTIVITY: 16 OSS/DOO, Hurlburt Field, FL 32544 DSN 579-6877/7812, C850-884-6877/7812.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------|----|--------------|--------------------------|
| at or above 02.5 AGL | BR | | N35°23.30' W83°34.00' |
| (Entry/Exit Point) | | | |
| at or above 02.5 AGL | EA | | N35°32.13' W82°55.41' |
| (Alternate Entry/Exit Point) | | | |
| at or above 02.5 AGL | EF | | N35°46.68' W82°39.10' |
| at or above 02.5 AGL | EG | | N35°34.30' W81°50.83' |
| at or above 02.5 AGL | EH | | N35°25.40' W81°18.10' |

ROUTE WIDTH - 2 NM either side of centerline.

Remarks:

- (1) Route is bi-directional and is limited to C130 operations.
- (2) Coordination required with Scheduling Activity, two days prior.
- (3) Minimum Altitude Data: 250' AGL.
- (4) When not flying SR-105 in conjunction with SR-101, aircraft will not be below 1500' AGL at (BR).
- (5) NOTE: (EA) is also (EA) on SR-104.
- (6) Prior coordination with Pope ALCE, DSN 486-4261 is required when operating on any drop zone in the Pope area and R-5311.
- (7) Eastbound aircraft contact and monitor Charlotte Approach Control on 134.75 or 307.8 at (EG). Westbound aircraft contact and monitor Charlotte Approach Control on 120.5 or 307.8 at (EL).
- (8) CAUTION: Be alert for extensive civilian airliner traffic between (EH) and (EL). Route crosses arrival/departure course for Charlotte Douglas International Airport.
- (9) Contact Concord Tower at (EI) and (EJ) for clearance through Class D airspace.
- (10) CAUTION: Intensive light civilian traffic between (EI) and (EJ) in the vicinity of oncord airport.
- (11) Avoid overflight of nuclear power plant between (EG) and (EI).

SR-106

(CRESTVIEW)

ORIGINATING ACTIVITY: 16 OSS/DOO, Hurlburt Field, FL 32544 DSN 579-6877/7812, C850-884-6877/7812.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | AA | | N30°49.57' W86°40.75' |
| | BD | | N31°07.90' W86°43.00' |
| (Entry Point) | | | |
| | BE | | N31°32.50' W86°43.00' |
| | FA | | N31°38.70' W87°14.00' |

SR ROUTES

| | | | | |
|------------------------|-----|--------------------------|------------------------------|--------------------------|
| | FB | N31°19.50' W87°54.70' | C | N31°59.10' W86°31.70' |
| | FC | N31°22.05' W88°15.00' | D | N32°24.30' W86°38.20' |
| | FD | N31°57.60' W88°35.00' | E | N33°00.00' W86°16.00' |
| | FE | N31°41.50' W88°52.90' | F | N33°32.90' W85°39.70' |
| | FF | N31°20.20' W88°41.98' | G | N34°12.00' W85°28.60' |
| | FB1 | N31°19.50' W87°54.70' | H | N34°22.10' W85°22.00' |
| | FA1 | N31°38.70' W87°14.00' | I | N34°40.10' W84°49.60' |
| | BE1 | N31°32.50' W86°43.00' | J | N35°12.80' W84°39.00' |
| | BD1 | N31°07.90' W86°43.00' | K | N35°31.00' W84°12.80' |
| | AO | N30°51.72' W86°49.80' | L | N35°23.30' W83°34.00' |
| | AP | N30°37.97' W86°45.68' | (Alternate Entry/Exit Point) | |
| (Sontay Drop Zone). | AO | N30°51.72' W86°49.80' | (Alternate Entry/Exit Point) | M |
| (Alternate Exit Point) | AQ | N30°56.20' W86°24.80' | N | N34°46.30' W84°10.50' |
| (Pino Drop Zone). | AR | N30°41.20' W86°23.57' | O | N34°46.00' W84°30.80' |

ROUTE WIDTH - 2 NM either side of centerline.

Remarks:

- (1) Route is bi-directional and limited to C130 operations.
- (2) Coordination required with Scheduling Activity, two days prior.
- (3) Minimum Altitude Data: 250' AGL except 3000' MSL between (AA) and (BD), (BD) to (BE) at 1700' MSL northbound, (BE) to (BD) 1200' MSL southbound, (FA) to (FB) 500' AGL, 5 NM either side of (FF) 500' AGL.
- (4) NOTE: SR-106 altitudes for (BE) to (BD) are the same as SR-101 and provide 500' AGL separation northbound/southbound aircraft.

SR-119

(CRESTVIEW)

ORIGINATING ACTIVITY: 16 OSS/DOO, Hurlburt Field, FL 32544 DSN 579-6877/7812, C850-884-6877/7812.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N30°49.60' W86°40.80' |
| | B | | N31°22.40' W86°31.60' |

| | | | | |
|--|--|------------------------|----|--------------------------|
| | | | P | N34°17.70' W84°49.80' |
| | | | Q | N34°03.90' W85°18.40' |
| | | | R | N33°34.50' W85°20.20' |
| | | | S | N33°02.80' W85°35.40' |
| | | | T | N32°26.00' W85°49.60' |
| | | | U | N31°56.00' W86°17.50' |
| | | | BA | N31°22.40' W86°31.60' |
| | | (Alternate Exit Point) | V | N30°51.70' W86°49.80' |
| | | (Sontay Drop Zone) | W | N30°38.00' W86°45.70' |
| | | ALTERNATE ROUTING: | | |
| | | | BA | N31°22.40' W86°31.60' |
| | | (Alternate Exit Point) | X | N30°56.20' W86°24.80' |
| | | (Pino Drop Zone). | Y | N30°41.20' W86°23.70' |

ROUTE WIDTH - 2 NM either side of centerline.

Remarks:

- (1) Route is limited to C130 operations.
- (2) Coordination required with Scheduling Activity, two days prior.

SR ROUTES

- (3) Minimum Altitude Data: 250' AGL except 1700' MSL (A) to (B); 500' AGL, 30-20 NM prior to (F), (O) to (P), (P) to (Q).
- (4) A mission number is required for entry into R-2915/R-2914. Contact Eglin Mission Control at (V) for entry into R-2915 or (X) for entry into R-2914.

SR-137

(COLUMBUS) GWO

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710-5000 DSN 742-7560/7633, C662-434-7560/7633.

SCHEDULING ACTIVITY: 37/41 FTS, Columbus AFB, MS 39710-5000 DSN 742-7666/7667, C662-434-7666/7667.

HOURS OF OPERATION: SR-SS, Daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | | N33°31.03' W88°56.13' |
| 05 AGL B 15 AGL to (Alternate Entry/Exit Point) | B | | N33°32.03' W89°50.00' |
| 05 AGL B 15 AGL to | C | | N33°06.10' W89°54.00' |
| 05 AGL B 15 AGL to (Alternate Entry/Exit Point) | D | | N32°53.09' W89°33.02' |
| 05 AGL B 15 AGL to (Alternate Exit Point) | E | | N33°01.00' W89°03.13' |
| 05 AGL B 15 AGL to | F | | N33°14.09' W88°40.00' |

ROUTE WIDTH - 3 NM either side of centerline (A) to (E), 2 NM left and 3 NM right of centerline (E) to (F).

Remarks:

- (1) As assigned to (A), 500' AGL-1500' AGL (A) to (F).
- (2) Mandatory Reporting Points: (A), (B), (C) to Greenwood FSS 255.4 (Alternate 122.55).
- (3) Aircrews calling to schedule SR-137 will ensure that they have checked all applicable Bird Hazard products (example: <http://www.usahas.com/> and <http://usahas.com/bam/>) and are applying appropriate Operational Risk Management (ORM) guidance in accordance with their respective instructions/regulations to reduce the risk of bird stikes.
- (4) CAUTION: SR-137 is the reciprocal of SR-138. Check with scheduling agency for deconfliction of route times.
- (5) CROSSING ROUTES: IR-68 - Between (A) and (B) (48 FTS, CBM, DSN 742-7840, C662-434-7840). IR-44 - Near (C), between (E) and (F) (NAS Meridian, DSN 637-2487, C601-679-2487). VR-1033 - Between (C) and (D), (D) and (E) (NAS Meridian, DSN 637-2487, C601-679-2487).
- (6) For route briefing, contact scheduling activity.
- (7) To schedule for weekend use, contact scheduling activity prior to 2200Z++ on Friday.
- (8) Aircrews desiring to enter SR-137 at points (B) or (D) must coordinate with 37/41 FTS route schedulers prior to entering DSN 742-7666/7667, C662-434-7666/7667.
- (9) Route Deconfliction:

- (a) SR-138 (opposite direction route) has the same scheduler and will be able advise if there is a conflict.
- (b) IR-044 is already deconflicted by altitude.
- (c) Contact the scheduling activities for IR-068 and VR-1033 to verify if they are being utilized. Aircraft should be climbing to exit IR-068 when it becomes a factor. As long as aircraft flying IR-068 are above 2000' AGL at the IR-068 exit point, there should be a 500' buffer. IR-068 is normally only flown on Tuesdays and Thursdays.

SR-138

(COLUMBUS) GWO

ORIGINATING ACTIVITY: 14 OSS/OSOP, Columbus AFB, MS 39710 DSN 742-7560/7633, C662-434-7560/7633.

SCHEDULING ACTIVITY: 37/41 FTS, Columbus AFB, MS 39710 DSN 742-7666/7667, C662-434-7666/7667.

HOURS OF OPERATION: SR-SS, Daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| As assigned to | A | | N33°14.09' W88°40.00' |
| 05 AGL B 15 AGL to | B | | N33°01.00' W89°03.13' |
| 05 AGL B 15 AGL to (Alternate Entry/Exit Point) | C | | N32°53.09' W89°33.02' |
| 05 AGL B 15 AGL to | D | | N33°06.10' W89°54.00' |
| 05 AGL B 15 AGL to (Alternate Entry/Exit Point) | E | | N33°32.03' W89°50.00' |
| 05 AGL B 15 AGL to | F | | N33°31.03' W88°56.13' |

ROUTE WIDTH - 2 NM right and 3 NM left of centerline (A) to (B), 3 NM either side of centerline (B) to (F).

Remarks:

- (1) Altitude as assigned to (A), 500'AGL-1500'AGL from (A) to (F).
- (2) Mandatory Report Meridian Approach 120.95/276.4 at (A).
- (3) Mandatory Report to Greenwood FSS 255.4 (Alternate 122.55) at (C), (D), (E) and (F).
- (4) CAUTION: SR-138 is the reciprocal of SR-137. Check with scheduling agency for deconfliction of route times.
- (5) Use caution when exiting at Alternate Exit Point (E) for low-level traffic exiting IR-44 in vicinity of Louisville, MS.
- (6) For route briefing, contact scheduling activity.
- (7) To schedule for weekend use, contact scheduling activity prior to 2200Z++ on Friday.
- (8) CROSSING ROUTES: IR-68 - Between (E) and (F) (48 FTS, CBM, DSN 742-7840, C662-434-7840). IR-44 - Near (D), between (A) and (B) (NAS Meridian, DSN 637-2487, C601-679-2487). VR-1033 - Between (C) and (D), (B) and (C) (NAS Meridian, DSN 67-2487, C601-679-2487).

- (9) Aircrews calling to schedule SR-138 will ensure that they have checked all applicable Bird Hazard products (examples: <http://www.usahas.com/> and <http://usahas.com.bam/>) and are applying appropriate Operational Risk Management (ORM) guidance in accordance with their respective instructions/regulations to reduce the risk of bird strikes.
- (10) Aircrews desiring to enter SR-138 at points (C) and (E) must coordinate with 37/41 FTS route schedulers at DSN 742-7666/7667 prior to entering.
- (11) Route Deconfliction:
- SR-137 (opposite direction route) has the same scheduler and will be able to advise if there is a conflict.
 - IR-044 is already deconflicted by altitude.
 - Contact the scheduling activities for IR-068 and VR-1033 to verify if they are being utilized. Aircraft should be climbing to exit IR-068 when it becomes a factor. As long as aircraft flying IR-068 are above 2000' AGL at the IR-068 exit point, there should be a 500' buffer. IR-068 is normally only flown on Tuesdays and Thursdays.

SR-166

(CHARLESTON) CHS, FLO, SAV

ORIGINATING ACTIVITY: 437 OSS/OSTA, Charleston AFB, SC 29404-5054 DSN 673-5613, C843-963-5613.

SCHEDULING ACTIVITY: 20 OSS/OSOS, Shaw AFB, SC 29152-5000 DSN 965-1118/1119, C803-895-1118/1119, FAX DSN 965-4804. After hours scheduling, 20 FW/Command Post DSN 965-2619, C803-895-2619/2620.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| at or above 03 AGL | A | | N33°23.00' W81°08.00' |
| at or above 03 AGL | B | | N33°17.00' W80°31.00' |
| at or above 03 AGL (Alternate Entry Point) | C | | N33°23.00' W80°07.00' |
| at or above 03 AGL | D | | N33°35.00' W79°57.00' |
| at or above 03 AGL | E | | N33°45.00' W80°12.00' |
| at or above 03 AGL | F | | N33°36.00' W80°33.00' |
| at or above 03 AGL | G | | N33°36.00' W80°59.00' |
| at or above 03 AGL | H | | N33°36.20' W81°10.20' |
| at or above 03 AGL | I | | N33°28.10' W81°16.90' |
| at or above 03 AGL | A1 | | N33°23.00' W81°08.00' |

ROUTE WIDTH - 2 NM either side of centerline. Excludes North AF Aux, SC Class E airspace.

Remarks:

- (1) Minimum altitude is 300' AGL.

- Users flying this or a point-to-point route on top of this route MUST contact the scheduling agency for route deconfliction and usage tracking.
- CAUTION; VR-087,097,1059,IR-035, and 036 deconflicted by scheduling agency when route is booked.
- Users MUST contact Shaw Approach 358.3 118.85 passing (D) for Poinsett MOA separation.
- CAUTION: Prior to (F) look for flights of fighter acft holding (VFR) over the Rimini Bridge awaiting entry into R-6002 (hours of operation 1200-0300Z++).
- Landings at North Field can be accomplished when in contact with North Field Combat Control Team (CCT) on 341.5 118.15. Prior coordination and approval with 437 OSS/OSO DSN 673-5554 is required prior to operations into North Field.
- Route is designated for MARSAs operations established by coordinated scheduling.
- Avoid overflight of Holly Hill airport, use caution for light aircraft in the vicinity, N33-18.06 W80-23.64.
- CAUTION: Near (B) look for aircraft on approach to St George airport from the Vance VORTAC.
- CAUTION: Vicinity of North Airfield, SC, C5, C27, C141, and C130 acft conducting tactical training operations into and out of the airfield.
- Avoid: Santee National Wildlife Refuge (Lake Marion) just prior to (F), avoid by 2200' AGL.
- Avoid four noise sensitive areas:
 - N33-39.1 W80-27.1 by 1,000' AGL/1NM;
 - N33-29.7 W81-16.8 by 1,000' AGL/1NM;
 - N33-40.8 W80-03.5 by 1,000' AGL/1NM;
 - N33-36.0 W81-06.5 town of North, SC by 1500'AGL/1 NM.
- CAUTION: three towers:
 - N33-26.0 W80-01.6 375' AGL (450' MSL);
 - N33-32.3 W79-59.3 1207' AGL (1281' MSL);
 - N33-39.5 W80-18.6 500' AGL (662' MSL).
- Avoid within Santee NWR five Eagle Nest locations (endangered species):
 - N33-36.9 W80-31.8 by 1500'AGL/1 NM;
 - N33-18.4 W80-10.6 by 2000'AGL;
 - N33-26.1 W80-07.4 by 2000'AGL;
 - N33-24.4 W80-11.6 by 2000'AGL;
 - N33-25.4 W80-16.9 by 2000'AGL.
- Contact Charleston AFB Base Operations 372.2 DSN 673-3026 or relay through Charleston Command Post 349.4 to report any unusual active bird conditions along the route. These frequencies/numbers can also be used to obtain the latest information about the route's bird hazards.
- Unpublished towers found by route surveys 200' AGL and above are listed in the remarks section. A quick reference to the latest Charlotte sectional chart (1-500 scale) will show charted towers on the route.
- Occasionally, aircraft flying point-to-point above this route IFR, may be requested by Columbia Approach Control to maintain route centerline or north of centerline from (F) to (G). If unable to comply, notify ATC and expect to be issued a climb to 3,000'MSL.

SR ROUTES

SR-200

(ALBUQUERQUE) ABQ

ORIGINATING ACTIVITY: 58 OSS/DOO, Kirtland AFB, NM 87117-5861 DSN 263-5979/5888/5701, C505-853-5979/5888/5701.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|----|--------------|---------------------------|
| at or above 02.5 AGL | A | | N34°49.30' W106°58.60' |
| at or above 02.5 AGL | B | | N34°55.00' W107°07.80' |
| at or above 02.5 AGL | C | | N34°15.30' W107°38.00' |
| at or above 02.5 AGL | D | | N34°08.00' W108°29.00' |
| at or above 02.5 AGL | E | | N34°27.00' W108°46.20' |
| at or above 02.5 AGL | F | | N35°09.50' W108°28.20' |
| at or above 02.5 AGL | G | | N35°26.80' W108°01.30' |
| at or above 02.5 AGL | H | | N35°36.00' W107°05.50' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude 250 AGL.
- (2) All points are Alternate Entry/Exit Points.
- (3) Avoid the following areas:
 - (a) Candy Kitchen Airfield (N34-55.6 W108-29.5) by 3 NM or 2000' AGL;
 - (b) El Moro National Monument (N35-02.5 W108-21.0) by 1 NM;
 - (c) Happy Mountain Airfield (N34-03.5 W108-05.6) by 2 NM;
 - (d) Town (N35-18.5 W108-06.0) by 1.5 NM.
- (4) 58 SOW is the scheduling authority and retains preemptive rights.
- (5) Contact 58 OSS/DOO for a fax or email of most current Avoid Areas.

SR-201

(ALBUQUERQUE) ABQ

ORIGINATING ACTIVITY: 58 OSS/DOO, Kirtland AFB, NM 87117-5861 DSN 263-5979/5888/5701, C505-853-5979/5888/5701.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|----|--------------|---------------------------|
| at or above 02.5 AGL | A | | N34°29.20' W106°36.10' |
| at or above 02.5 AGL | B | | N34°31.70' W107°11.40' |
| at or above 02.5 AGL | C | | N34°04.90' W107°48.50' |
| at or above 02.5 AGL | D | | N34°08.00' W108°29.20' |
| at or above 02.5 AGL | E | | N34°24.20' W109°24.20' |
| at or above 02.5 AGL | F | | N34°44.50' W110°02.30' |
| at or above 02.5 AGL | G | | N35°23.50' W109°54.00' |
| at or above 02.5 AGL | H | | N35°44.20' W109°31.20' |
| at or above 02.5 AGL | I | | N35°55.00' W109°02.50' |
| at or above 02.5 AGL | J | | N35°54.10' W108°38.90' |
| at or above 02.5 AGL | K | | N35°32.00' W108°14.50' |
| at or above 02.5 AGL | L | | N35°29.20' W107°18.00' |
| at or above 02.5 AGL | M | | N34°49.30' W106°58.60' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude 250' AGL.
- (2) All points are Alternate Entry/Exit Points.
- (3) Route terminates at AR-117V.
- (4) Avoid the following areas:
 - (a) Town of Guadalupe (N35-32.0 W107-09.0) by 1 NM or 1000' AGL;
 - (b) Petrified Forest National Monument (as outlined on TPC beginning at (N35-10.2 W109-54.2) by 2000' AGL;
 - (c) Happy Mountain Airfield (N34-03.5 W108-05.6) by 2 NM.
- (5) 58 SOW is the scheduling authority and retains preemptive rights.
- (6) Contact 58 OSS/DOO for a fax or email of most current Avoid Areas.

SR-205

(HOBART) HBR, CDS

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N. 6th Street, Altus AFB, OK 73521 DSN 866-6098, C580-481-6098.

SCHEDULING ACTIVITY: 97 OSS/OSK 400 N. 6th Street, Suite 12, Altus AFB, OK 73521 DSN 866-7110, C580-481-7110.

HOURS OF OPERATION: 0830-0230 Local Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| at or above 03 AGL | A | | N35°05.85' W99°15.60' |
| at or above 03 AGL | B | | N35°16.00' W99°38.70' |
| at or above 03 AGL | C | | N34°51.52' W99°41.82' |
| at or above 03 AGL (Alternate Entry/Exit Point) | D | | N34°31.00' W99°41.85' |
| at or above 03 AGL | E | | N34°36.80' W100°06.80' |

ROUTE WIDTH - 5 NM left and 2 NM right of centerline from (A) to (B), 5 NM either side of centerline from (B) to (E).

Remarks:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313 or C580-481-6313.
- (2) Minimum Altitude 300' AGL.
- (3) When practicable avoid flight over the town of Eldorado, OK.
- (4) Aircraft accomplishing airdrops at Sooner DZ will report passing the town of Reed, OK to Altus APP CON 257.725 using the phrase (callsign, Reed Southbound to Sooner DZ, intentions to follow). Aircraft not accomplishing airdrop at Sooner DZ, report passing (C).
- (5) Route designated MARSAs, MARSAs between IR-144, IR-184, IR-190, IR-191, VR-198, VR-199, SR-205, SR-206, SR-208, SR-216, and SR-217 is accomplished through restrictive scheduling.
- (6) Deconflict with: IR-105 (NAS Fort Worth) and VR-162 (Sheppard AFB) with appropriate route schedulers. SR-205 (B-C-D legs) is opposite direction VR-162 (C-D leg). VR-162 (E-F leg) also crosses SR-205 (D-E leg). SR-205 (B-C-D legs) is opposite direction to IR-105 (D-E leg). IR-105 (E-F leg) crosses SR-205 (Point A). VR-1141/1142 corridor overlaps SR-205 Point B. Deconflict with Sheppard AFB or fly south of SR-205 Point B to avoid the VR-1141/1142 corridor.
- (7) Monitor Altus APP CON 257.725 and 255.4 entire route. If unable to monitor both Altus Approach and 255.4, monitor 255.4, except when making mandatory report to Altus Approach at C or Reed southbound.
- (8) PMSV: Altus AFB 239.8.
- (9) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.

SR-206

(CHILDRESS) CDS, HBR

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N. 6th Street, Altus AFB, OK 73521 DSN 866-6098, C580-481-6098.

SCHEDULING ACTIVITY: 97 OSS/OSK 400 N. 6th Street, Suite 12, Altus AFB, OK 73521 DSN 866-7110, C580-481-7110.

HOURS OF OPERATION: 0830-0230 Local Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| at or above 03 AGL | A | | N35°13.60' W100°01.00' |
| at or above 03 AGL | B | | N34°55.50' W100°26.05' |
| at or above 03 AGL | C | | N34°32.17' W100°09.90' |
| at or above 03 AGL (Alternate Entry/Exit Point) | D | | N34°30.60' W99°41.83' |
| at or above 03 AGL | E | | N34°36.70' W100°06.83' |

ROUTE WIDTH - 5 NM right and 2 NM left of centerline from (A) to (B), 5 NM either side of centerline from (B) to (E).

Remarks:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313 or C580-481-6313.
- (2) Minimum Altitude 300' AGL.
- (3) Avoid ranch 3 NM east and 1/2 NM south of Lutie (N35-01.0 W100-10.1) by 3 NM .
- (4) When practicable avoid flight over the town of Eldorado, OK.
- (5) Immediate left turn at (D).
- (6) Aircraft accomplishing airdrops at Sooner DZ report commencement of airdrop run-in NLT 5 minutes prior to Altus APP CON 257.725 using the phrase (callsign inbound to Sooner DZ, position relative to Sooner DZ, intentions to follow).
- (7) Route designated MARSAs, MARSAs between IR-144, IR-184, IR-190, IR-191, VR-198, VR-199, SR-205, SR-206, SR-208, SR-216, and SR-217 is accomplished through restrictive scheduling.
- (8) Deconflict with: IR-105 (NAS Fort Worth) and VR-162 (Sheppard AFB) with appropriate route scheduling. IR-105 conflicts with SR-208 near SR-208 D. VR-162 conflicts with SR-206 (C-D-E legs). The corridor for VR-1141/1142 overlaps SR-206 Point A. Deconflict with Sheppard AFB or fly south of I-40 to avoid the corridor for VR-1141/1142. Do not fly west of Point B to avoid the corridor for VR-1141/1142.
- (9) Monitor Altus APP CON 257.725 and 255.4 entire route. If unable to monitor both Altus Approach and 255.4, monitor 255.4, except when making mandatory report to Altus Approach while inbound Sooner DZ.
- (10) PMSV: Altus AFB 239.8.
- (11) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.

SR-208

(HOBART) HBR, CDS

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N. 6th Street, Altus AFB, OK 73521 DSN 866-6098, C580-481-6098.

SCHEDULING ACTIVITY: 97 OSS/OSK, 400 N. 6th Street, Suite 12, Altus AFB, OK DSN 866-7110, C580-481-7110.

SR ROUTES

HOURS OF OPERATION: 0830-0230 Local Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| at or above 03 AGL | A | | N34°30.65' W99°41.83' |
| 10 AGL to (Alternate Entry Point) | B | | N34°54.20' W99°52.40' |
| 10 AGL to | C | | N34°53.70' W100°20.30' |
| at or above 03 AGL | D | | N34°32.22' W100°09.92' |
| at or above 03 AGL (Alternate Exit Point) | E | | N34°30.65' W99°41.83' |
| at or above 03 AGL | F | | N34°36.80' W100°06.80' |

ROUTE WIDTH - 5 NM either side of centerline except from (B) to (C) 1 NM either side of centerline.

Remarks:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.
- (2) Minimum altitude 300' AGL except from (B) to (C) maintain 1000' AGL.
- (3) Make turn at (C) 230 KIAS or less.
- (4) When practicable avoid flight over town of Eldorado, OK and avoid flight over the town of Quail, TX by 2 NM.
- (5) Immediate left turn at (A) and (E).
- (6) Aircraft accomplishing airdrops at Sooner DZ report commencement of airdrop run-in NLT 5 minutes prior to Altus APP CON 257.725 using the phrase (callsign inbound to Sooner DZ, position relative to Sooner DZ, intentions to follow).
- (7) Route designated MARSAs, MARSAs between IR-144, IR-184, IR-190, IR-191, VR-198, VR-199, SR-205, SR-206, SR-208, SR-216, and SR-217 is accomplished through restrictive scheduling.
- (8) Deconflict with: IR-105 (NAS Fort Worth), VR-162 (Sheppard AFB) with appropriate route scheduling. IR-105 conflicts with SR-208 (A-B leg). VR-162 conflicts with all legs of SR-208.
- (9) Monitor Altus APP CON 257.725 and 255.4 entire route. If unable to monitor both Altus Approach and 255.4, monitor 255.4, except when making mandatory report to Altus Approach if inbound Sooner DZ.
- (10) PMSV: Altus AFB 239.8.
- (11) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.

SR-210

(ALBUQUERQUE) ABQ

ORIGINATING ACTIVITY: 58 OSS/DOO, Kirtland AFB, NM 87117-5861 DSN 263-5979/5888/5701, C505-853-5979/5888/5701.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|----|--------------|---------------------------|
| at or above 02.5 AGL | A | | N32°52.00' W108°35.70' |
| at or above 02.5 AGL | AA | | N33°01.80' W108°09.10' |
| at or above 02.5 AGL | B | | N33°27.20' W107°48.50' |
| at or above 02.5 AGL | C | | N34°05.00' W107°29.00' |
| at or above 02.5 AGL | D | | N34°22.80' W107°13.20' |
| at or above 02.5 AGL | E | | N34°46.50' W107°02.50' |
| at or above 02.5 AGL | F | | N34°49.30' W106°58.60' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude 250' AGL.
- (2) Contact 'Coyote' (349.5) at (D) for helicopter traffic advisories.
- (3) Route terminates at AR-117V.
- (4) All points are Alternate Entry/Exit Points.
- (5) Avoid the following areas:
 - (a) Gila Center Heliport (N33-13.5 W108-14.0) by 3 NM.
- (6) 58 SOW is the scheduling authority and retains preemptive rights.
- (7) Contact 58 OSS/DOO for a fax or email of most current Avoid Areas.

SR-211

(ALBUQUERQUE) ABQ

ORIGINATING ACTIVITY: 58 OSS/DOO, Kirtland AFB, NM 871175861 DSN 263-5979/5888/5701, C505-853-5979/5888/5701.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|----|--------------|---------------------------|
| at or above 02.5 AGL | A | | N32°52.00' W108°35.70' |
| at or above 02.5 AGL | AA | | N33°01.80' W108°09.10' |
| at or above 02.5 AGL | B | | N33°27.20' W107°48.50' |
| at or above 02.5 AGL | C | | N34°05.00' W107°29.00' |
| at or above 02.5 AGL | D | | N34°22.80' W107°13.20' |
| at or above 02.5 AGL | E | | N34°46.50' W107°02.50' |

| | | |
|----------------------|---|---------------------------|
| at or above 02.5 AGL | F | N34°52.00' W106°35.50' |
| at or above 02.5 AGL | G | N34°41.90' W106°34.10' |
| at or above 02.5 AGL | H | N34°29.10' W106°36.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude 250' AGL.
- (2) Contact 'Coyote' (349.5) at (D) for helicopter traffic advisories.
- (3) Route terminates at Burris Drop Zone.
- (4) All points are Alternate Entry/Exit Points.
- (5) Avoid the following areas:
 - (a) House at 5 NM remaining on Burris DZ south run-in (N34-33.157 W106-36.085);
 - (b) Populated areas along the Rio Grande Valley by 1000' AGL;
 - (c) Gila Center Heliport (N33-13.5 W108-14.0) by 3 NM.
- (6) 58 SOW is the scheduling authority and retains pre-emptive rights.
- (7) Contact 58 OSS/DOO for a fax or email of most current Avoid Areas.

SR-212

(ALBUQUERQUE) ABQ

ORIGINATING ACTIVITY: 27 SOSS/OSTA, 110 E Sexton Ave., Suite 1081, Cannon AFB, NM 88103 DSN 681-2521, C575-784-2521.

SCHEDULING ACTIVITY: 27 SOSS/OSTA, 110 E Sexton Ave., Suite 1081, Cannon AFB, NM 88103 DSN 681-2276, C575-784-2276.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|----|--------------|---------------------------|
| at or above 02.5 AGL | A | | N35°36.00' W107°05.50' |
| at or above 02.5 AGL | B | | N35°53.50' W106°43.20' |
| at or above 02.5 AGL | C | | N36°12.80' W105°54.80' |
| at or above 02.5 AGL | D | | N36°00.50' W105°12.20' |
| at or above 02.5 AGL | E | | N35°13.00' W105°34.00' |
| at or above 02.5 AGL | F | | N35°05.00' W106°00.10' |
| at or above 02.5 AGL | G | | N34°52.00' W106°35.50' |
| at or above 02.5 AGL | H | | N34°49.30' W106°58.60' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude 250' AGL.
- (2) Route terminates at AR-117V.
- (3) All points are Alternate Entry/Exit Points.
- (4) This route is bi-directional.
- (5) Avoid the following areas:
 - (a) Town of Guadalupe (N35-32.0 W107-09.0) by 1 NM or 1000' AGL;
 - (b) The area west of Moriarty (from N35-06.0 W106-17.0 to N35-00.0 W106-02.0 to N34-52.0 W106-02.0 to N34-58.0 W106-17.0 to beginning);
 - (c) Maintain 1500' AGL between (C) and (D);
 - (d) Remain over or north of the highway through the canyon;
 - (e) Hermit Peak (N35-45.0 W105-25.0) by 2 NM;
 - (f) Town of Dixon (N36-11.8 W105-53.0) by 1 NM or 1000' AGL;
 - (g) Town of Rinconado (N36-13.2 W105-42.6) by 1 NM or 1000' AGL;
 - (h) Towns of Picuris Pueblo (N36-12.0 W105-42.6), Penasco (N36-10.1 W105-41.1), Vadito (N36-11.5 W105-40.0) and Rio Pueblo (N36-11.2 W105-38.2) by 2 NM or 2000' AGL;
 - (i) Between (B) and (C), within 3 NM of highway 84, climb to 1000' AGL.
- (6) 27 SOW is the scheduling authority and retains preemptive rights.

SR-213

(ALBUQUERQUE) ABQ

ORIGINATING ACTIVITY: 27 SOSS/OSTA, 110 E Sexton Ave., Suite 1081, Cannon AFB, NM 88103 DSN 681-2521, C575-784-2521.

SCHEDULING ACTIVITY: 27 SOSS/OSTA, 110 E Sexton Ave., Suite 1081, Cannon AFB, NM 88103 DSN 681-2276, C575-784-2276.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|----|--------------|---------------------------|
| at or above 02.5 AGL | A | | N34°41.00' W105°46.50' |
| at or above 02.5 AGL | B | | N34°16.50' W105°16.50' |
| at or above 02.5 AGL | C | | N34°34.50' W104°14.80' |
| at or above 02.5 AGL | D | | N34°53.70' W104°46.30' |
| at or above 02.5 AGL | E | | N35°05.00' W105°26.50' |
| at or above 02.5 AGL | F | | N35°05.00' W106°00.10' |
| at or above 02.5 AGL | G | | N34°52.00' W106°35.50' |
| at or above 02.5 AGL | H | | N34°49.30' W106°58.60' |

ROUTE WIDTH - 5 NM either side of centerline.

SR ROUTES

Remarks:

- (1) Minimum altitude 250' AGL.
- (2) Route terminates at AR-117V.
- (3) All points are Alternate Entry/Exit Points.
- (4) Avoid the following areas:
 - (a) Ainsworth Ranch (N34-36.0 W104-18.0) by 1 NM;
 - (b) Ft. Sumner Recreational Area (N34-37.0 W104-24.0) by 3 NM.
- (5) Flight below 1500' AGL not authorized in the area defined by N34-31.0 W104-28.5 to N34-31.0 W104-20.0 to N34-15.0 W104-20.0 to N34-15.0 W104-28.5 to beginning; maintain 1500 AGL in the area west of Moriarty (N35 06.0 W106-17.0 to N35-00.0 W106-02.0 to N34-52.0 W106-02.0 to N34-58.0 W106-17.0 to beginning); Ft. Sumner Airport (N34-29.0 W104-13.0) by 3 NM or 1500' AGL.
- (6) 27 SOW is the scheduling authority and retains preemptive rights.

- (b) Ft. Sumner Recreational Area (N34-37.0 W104-24.0) by 3 NM;
- (c) Flight below 1500' AGL not authorized in the area N34-31.0 W104-28.5 to N34-31.0 W104-20.0 to N34-15.0 W104-20.0 to N34-15.0 W104-28.5 to beginning; west of Moriarty N35-06.0 W106-17.0 to N35-00.0 W106-02.0 to N34-52.0 W106-02.0 to N34-58.0 W106-17.0 to beginning;
- (d) Town of Ft. Sumner N34-29.0 W104-13.0 by 3 NM or 1500' AGL;
- (e) House at 5 NM remaining on Burris DZ south run-in (N34-33.9 W105-35.8) by 1/2 NM;
- (f) Populated areas along the Rio Grande Valley by 1000' AGL minimum.
- (5) 27 SOW is the scheduling authority and retains preemptive rights.

SR-214

(ALBUQUERQUE) ABQ

ORIGINATING ACTIVITY: 27 SOSS/OSTA, 110 E Sexton Ave., Suite 1081, Cannon AFB, NM 88103 DSN 681-2521, C575-784-2521.

SCHEDULING ACTIVITY: 27 SOSS/OSTA, 110 E Sexton Ave., Suite 1081, Cannon AFB, NM 88103 DSN 681-2276, C575-784-2276.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|----------------------|----|--------------|---------------------------|
| at or above 02.5 AGL | A | | N35°04.80' W105°56.10' |
| at or above 02.5 AGL | B | | N35°05.00' W105°26.50' |
| at or above 02.5 AGL | C | | N34°53.70' W104°46.30' |
| at or above 02.5 AGL | D | | N34°34.50' W104°14.80' |
| at or above 02.5 AGL | E | | N34°16.50' W105°16.50' |
| at or above 02.5 AGL | F | | N34°52.00' W105°55.40' |
| at or above 02.5 AGL | G | | N34°52.00' W106°35.50' |
| at or above 02.5 AGL | H | | N34°41.90' W106°34.10' |
| at or above 02.5 AGL | I | | N34°29.10' W106°37.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude 250' AGL.
- (2) Route terminates at Burris Drop Zone.
- (3) All points are Alternate Entry/Exit Points.
- (4) Avoid the following:
 - (a) Ainsworth Ranch (N34-36.0 W104-18.0) by 1 NM;

SR-216

(CHILDRESS) CDS, HBR

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N. 6th Street, Altus AFB, OK 73521 DSN 866-6098, C580-481-6098.

SCHEDULING ACTIVITY: 97 OSS/OSK, 400 N. 6th Street, Suite 12, Altus AFB, OK 73521 DSN 866-7110, C580-481-7110.

HOURS OF OPERATION: 0830-0230 Local Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|---------------------------|
| at or above 03 AGL (Night-500' AGL or above) | A | | N34°59.60' W100°35.30' |
| at or above 03 AGL (Night-500' AGL or above) (Alternate Entry Point) | B | | N35°16.02' W100°14.80' |
| at or above 03 AGL (Night-500' AGL or above) | C | | N35°13.90' W99°47.20' |
| at or above 03 AGL (Night-500' AGL or above) | D | | N34°51.52' W99°41.82' |
| at or above 03 AGL (Night-500' AGL or above) (Alternate Exit Point) | E | | N34°31.02' W99°41.85' |
| at or above 03 AGL (Night-500' AGL or above) | F | | N34°36.80' W100°06.80' |

ROUTE WIDTH - 2 NM either side of centerline except from (B) to (C) 2 NM right of centerline.

Remarks:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.
- (2) Minimum altitude 300' AGL day, 500' AGL night.
- (3) Avoid flight over:
 - (a) Ranch 4 NM north and 3 NM east of Erick (N35-16.4 W99-49.8);

- (b) Ranch 2 NM north and 1 NM east of Erick (N35-15.0 W99-51.0).
- (4) 5 NM prior to (C) climb to 1500' AGL.
- (5) Descent to low-level enroute altitude may be initiated after passing (C).
- (6) When practicable avoid flight over the town of Eldorado, OK.
- (7) Aircraft accomplishing airdrops at Sooner DZ will report passing the town of Reed, OK to Altus APP CON 257.725 using the phrase (callsign, Reed Southbound to Sooner DZ, intentions to follow). Others report passing (D).
- (8) Route designated MARSA, MARSA between IR-144, IR-184, IR-190, IR-191, VR-198, VR-199, SR-205, SR-206, SR-208, SR-216, and SR-217 is accomplished through restrictive scheduling.
- (9) Deconflict with: IR-105 (NAS Fort Worth), VR-162, VR-1141, VR1142 (Sheppard AFB) with appropriate route scheduling. SR-216 Point A is inside VR-1141/1142 corridor. SR-216 (B-C leg) and corridor are completely enclosed by the VR-1141/1142 corridor. VR-162 is opposite direction SR-216 on (C-D-E legs), and crosses SR-216 (E-F leg). IR-105 is opposite direction to SR-216 (C-D-E legs).
- (10) Monitor Altus APP CON 257.725 and 255.4 entire route. If unable to monitor both Altus Approach and 255.4, monitor 255.4, except when making mandatory report to Altus Approach when Reed southbound.
- (11) PMSV: Altus AFB 239.8.
- (12) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.

SR-217

(HOBART) HBR, CDS

ORIGINATING ACTIVITY: 97 OSS/DOA, 400 N. 6th Street, Altus AFB, OK 73521 DSN 866-6098, C580-481-6098.

SCHEDULING ACTIVITY: 97 OSS/OSK, 400 N. 6th Street, Suite 12, Altus AFB, OK 73521 DSN 866-7110, C580-481-7110.

HOURS OF OPERATION: 0830-0230 Local Mon-Fri

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| at or above 03 AGL | A | | N34°31.00' W99°41.80' |
| at or above 03 AGL (Alternate Entry Point) | B | | N34°34.65' W99°57.45' |
| at or above 03 AGL | C | | N34°52.00' W100°06.50' |
| at or above 03 AGL | D | | N35°08.77' W99°51.23' |
| at or above 03 AGL | E | | N34°51.50' W99°41.80' |
| at or above 03 AGL (Alternate Entry/Exit Point) | F | | N34°31.00' W99°41.80' |
| at or above 03 AGL | G | | N34°36.80' W100°06.80' |

ROUTE WIDTH - 5 NM either side of centerline except from (C) to (D) 2 NM left and 5 NM right.

Remarks:

- (1) Aircraft desiring to use route, contact scheduling unit 24 hours in advance or contact Altus Command Post for same day scheduling at DSN 866-6313.
- (2) Minimum altitude 300' AGL day.
- (3) Do not extend past (C) for any reason.
- (4) Avoid ranch 3 NM east and 1/2 NM south of Lutie (N35-01.0 W100-10.6) by 3 NM.
- (5) When practicable avoid flight over the town of Eldorado, OK.
- (6) Aircraft accomplishing airdrops at Sooner DZ will report passing the town of Reed, OK to Altus APP CON 257.725 using the phrase (callsign, Reed Southbound to Sooner DZ, intentions to follow). Others report passing (E).
- (7) Route designated MARSA, MARSA between IR-144, IR-184, IR-190, IR-191, VR-198, VR-199, SR-205, SR-206, SR-208, SR-216, and SR-217 is accomplished through restrictive scheduling.
- (8) Deconflict with: IR-105 (NAS Fort Worth) and VR-162 (Sheppard AFB) with appropriate route scheduling. The corridor for VR-1141/1142 overlaps the corridor of SR-217 north of SR-217 Point D. Completely avoid the corridor for VR-1141/1142 while on SR-217.
- (9) Monitor Altus APP CON 257.725 and 255.4 entire route. If unable to monitor both Altus Approach and 255.4, monitor 244.4, except when making mandatory report to Altus Approach when Reed southbound/passing Point E.
- (10) PMSV: Altus AFB 239.8.
- (11) Alternate Entry: Point B.
- (12) Aircraft unable to meet their assigned entry time within the window of two minutes early to two minutes late must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.
- (13) Uncharted/Unpublished tower 309' AGL (1621' MSL) N34-36.34 W99-50.57.

SR-218

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N35°19.50' W92°20.40' |
| | B | | N35°48.50' W92°38.60' |
| | C | | N35°47.00' W93°05.50' |
| | D | | N35°17.30' W93°25.20' |

(a) ALL AMERICAN DROP ZONE:

SR ROUTES

| | | | |
|---|--------------------------|---|--------------------------|
| E | N34°51.60' W93°29.40' | E | N35°33.20' W92°42.20' |
| F | N34°52.30' W92°39.50' | F | N35°23.80' W92°27.70' |
| G | N34°54.90' W92°18.10' | G | N35°10.90' W92°16.20' |
| H | N34°57.70' W92°44.40' | H | N34°54.90' W92°18.10' |
| I | N35°11.70' W92°27.00' | I | N35°11.70' W92°27.00' |
| J | N35°12.50' W92°01.40' | J | N35°12.50' W92°01.40' |

b. BLACKJACK DROP
ZONE - from (D)

ROUTE WIDTH - 3 NM either side of centerline for entire route except (F) to (G) which is 5 NM left and 2 NM right.

Remarks:

- (1) A left turn to 350 degrees must be made no later than 1 NM past (G).
- (2) Do not exceed 1500' MSL within 16 NM of LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
- (3) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (4) Avoid over flight of the town of Wooster, AR N of (I).
- (5) Avoid over flight of Enola School complex 8 NM prior to (J).
- (6) Minimum altitude 300' AGL day, 500' AGL night except:
- (7) Maintain 2000' MSL 17 NM prior to (D) until (D).
- (8) 500' AGL from (D) until 8 NM from (E).
- (9) 500' AGL from (H) to (I).
- (10) 1000' AGL from (I) until 4 NM past (I).
- (11) Re-entry track from (G) to (A), at or below 1600' MSL .
- (12) Primary Entry Point is (A).
- (13) Primary Exit Point for SR-218A is (G).
- (14) Primary Exit Point for SR-218B is (J).
- (15) All other Points are Alternate Entry/Exit Points.

SR-219

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N35°19.50' W92°20.40' |
| | B | | N35°47.70' W92°45.10' |
| | C | | N35°58.20' W93°09.20' |
| | D | | N35°35.10' W93°18.30' |

(a) ALL AMERICAN
DROP ZONE - from
(D)

ROUTE WIDTH - 5 NM either side of centerline for entire route.

Remarks:

- (1) A right turn to 360 degrees must be made immediately, safety permitting, upon passing Point H on SR219A.
- (2) Do not exceed 1500' MSL within 16 NM of the LFR TACAN (CH 29) unless in contact with Little Rock Approach Control.
- (3) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (4) Do not overfly the Holla Bend Wildlife Refuge.
- (5) Avoid overflight of the town Wooster, AR north of Point I.
- (6) Avoid overflight of Enola School complex 8 NM prior to Point J.
- (7) Minimum altitude 300' AGL day and 500' AGL night, except:
- (8) 1000' AGL from Point I until 4 NM past Point I.
- (9) Re-entry track from Point H to A, at or below 1500' MSL.
- (10) Primary Entry Point is A.
- (11) Primary Exit Point for SR-219A is H.
- (12) Primary Exit Point for SR-219B is J.
- (13) All other Points are Alternate Entry/Exit Points.

SR-220

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N35°19.50' W92°20.40' |
| | B | | N35°22.50' W92°42.40' |
| | C | | N35°10.50' W93°09.30' |
| | D | | N34°52.40' W93°06.70' |
| | E | | N34°52.30' W92°39.50' |

(a) ALL AMERICAN
DROP ZONE:

| | | |
|-----------------------------|---|--------------------------|
| (b) BLACKJACK DROP ZONE: | F | N34°54.90' W92°18.10' |
| | G | N34°57.70' W92°44.40' |
| | H | N35°11.70' W92°27.00' |
| | I | N35°12.50' W92°01.40' |

| | |
|---|--------------------------|
| G | N36°19.30' W89°55.50' |
| H | N36°10.80' W89°21.50' |
| I | N36°33.40' W89°02.00' |
| J | N36°27.70' W88°29.50' |
| (a) SUCKCHON SPE- CIAL DROP ZONE - from (J) | |

ROUTE WIDTH - 5 NM either side of centerline for entire route except (E) to (F) which is 5 NM left and 2 NM right.

Remarks:

- (1) A left turn to 350 degrees must be made no later than 1 NM past (F).
- (2) Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in radio contact with Little Rock Approach Control.
- (3) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (4) Do not overfly the Holla Bend Wildlife Refuge.
- (5) Avoid overflight of the town of Wooster, AR north of (H).
- (6) Avoid overflight of Enola School complex 8 NM prior to (I).
- (7) Minimum altitude 300' AGL day and 500' AGL night except:
- (8) 500' AGL from (A) until 9 NM from (D).
- (9) 2000' MSL from 17 NM prior to (C) until (C).
- (10) 500' AGL from (G) to (H).
- (11) 1000' AGL from (H) until 4 NM past (H).
- (12) Re-entry track from (F) to (A) at or below 1600' MSL.
- (13) Primary Entry Point is (A).
- (14) Primary Exit Point for SR-220A is (F).
- (15) Primary Exit Point for SR-220B is (I).
- (16) All other Points are Alternate Entry/Exit Points.

| | |
|---|--------------------------|
| K | N36°36.30' W89°04.60' |
| L | N36°33.30' W87°36.40' |
| M | N36°26.50' W87°28.80' |
| N | N36°27.50' W87°14.30' |
| O | N36°38.80' W87°11.90' |
| P | N36°44.30' W87°24.80' |
| (b) BASTOGNE DROP ZONE - from (J) to (K) | |
| P | N36°44.30' W87°24.80' |
| Q | N36°37.70' W87°34.40' |
| (c) CORREGIDOR DROP ZONE - from (J) | |
| R | N36°13.80' W88°06.30' |
| S | N36°23.60' W87°38.00' |
| T | N36°37.80' W87°37.80' |
| U | N36°44.00' W87°34.00' |

SR-221

(LITTLE ROCK) LIT, BWG, MEM

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N35°19.50' W92°20.40' |
| | B | | N35°33.60' W92°22.60' |
| | C | | N35°57.60' W91°50.10' |
| | D | | N36°01.40' W91°20.00' |
| | E | | N36°25.20' W91°08.30' |
| | F | | N36°39.80' W90°31.30' |

| | |
|--|--------------------------|
| to (P) | |
| (d) LOS BANDOS DROP ZONE - from (J) to (R) | |
| V | N36°20.30' W87°36.60' |
| W | N36°35.20' W87°35.50' |
| to (U) to (P) | |
| (e) CARENTAN DROP ZONE - from (J) to (R) | |
| X | N36°18.20' W87°56.80' |
| Y | N36°36.40' W87°44.90' |
| to (U) to (P) | |
| (f) VEGHEL DROP ZONE - from (J) to (R) | |
| Z | N36°19.30' W87°50.40' |
| AA | N36°41.50' W87°47.50' |

ROUTE WIDTH - 5 NM either side of centerline from (A) to (J), (J) to (K), (J) to (S), (J) to (V), (J) to (X), (J) to (Z); 5 NM right and 2 NM left from (M) to (P); 5 NM left and 2 NM right from (U) to (P); 2 NM either side of centerline from (K) to (M), (S) to (U), (V) to (U), (X) to (U), (Z) to (P).

SR ROUTES

Remarks:

- (1) Maintain 2500' MSL (M) to (P).
- (2) 500' AGL (G) to (H).
- (3) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (4) To avoid bird flyways, the following restrictions apply from 1 Oct to 15 Apr.
- (5) Maintain 3000' MSL (F) to (J), (J) to (L), (J) to (Q), (J) to (S), (J) to (V), (J) to (X), (J) to (Z), 300' AGL on all other legs.
- (6) Avoid Bald Eagle Nesting Area at N36-34.3 W87-58.8 by 2 NM.
- (7) Extensive crop duster training in the vicinity of Continent Airport.
- (8) Minimum altitude 1600' AGL when IR-174 is active, at (F).
- (9) Primary Entry Point is (A).
- (10) Primary Exit Point is (P).
- (11) All other Points are Alternate Entry/Exit Points.

- (7) Primary Entry Point is (A).
- (8) Primary Exit Point is (G).
- (9) All other Points are Alternate Entry/Exit Points.

SR-222

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N35°19.50' W92°20.40' |
| | B | | N35°44.60' W92°20.40' |
| | C | | N35°48.60' W92°38.80' |
| | D | | N35°51.00' W93°11.70' |
| | E | | N35°33.20' W93°43.30' |
| | F | | N35°23.10' W93°48.80' |
| | G | | N35°16.80' W94°13.40' |

(Arrowhead Drop Zone)

ROUTE WIDTH - 5 NM either side of centerline, except 4 NM left and 3 NM right from (A) to (B).

Remarks:

- (1) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (2) Minimum altitude 300' AGL day and 1000' AGL night except:
- (3) 500' AGL from (B) to (C);
- (4) 1500' AGL from 3 NM prior to (E) until 5 NM past (E);
- (5) Re-entry track (G) to (A) at 4500' MSL.
- (6) Contact Razorback Approach Control on 120.9 or 343.75 prior to Point (F) for advisories.

SR-223

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N35°16.80' W94°13.40' |
| | B | | N35°15.00' W94°34.00' |
| | C | | N35°30.60' W94°41.40' |
| | D | | N35°37.50' W94°10.50' |
| | E | | N35°48.60' W93°47.70' |
| | F | | N35°33.00' W93°33.70' |
| | G | | N35°23.10' W93°48.80' |
| | H | | N35°16.80' W94°13.40' |

(Arrowhead Drop Zone)

ROUTE WIDTH - 3NM either side of centerline except 5 NM left (G) to (H).

Remarks:

- (1) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
 - (a) 2200' MSL between Points (A) and (B);
 - (b) 1500' AGL from (B) to (C);
 - (c) 500' AGL from (C) to (D);
 - (d) 1500' AGL from 3 NM prior to (F) until 5 NM past (F).
- (2) Minimum altitude 300' AGL day and 1000' AGL night except:
- (3) Contact Razorback Approach Control on 120.9 or 343.75 prior to Point (G) for advisories.
- (4) Primary Entry Point is (A).
- (5) Primary Exit Point is (H).
- (6) All other Points are Alternate Entry/Exit Points.

SR-224**(LITTLE ROCK) LIT**

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| | A | | N35°16.80' W94°13.40' |
| | B | | N35°15.00' W94°34.00' |
| | C | | N34°56.30' W94°02.80' |
| | D | | N34°38.00' W93°29.60' |
| (a) ALL AMERICAN DROP ZONE - from (D) | D | | N34°38.00' W93°29.60' |
| | E | | N34°52.30' W92°39.50' |
| (b) BLACKJACK DROP ZONE - from (D) | F | | N34°54.90' W92°18.10' |
| | F | | N34°54.90' W92°18.10' |
| | G | | N34°57.70' W92°44.40' |
| | H | | N35°11.70' W92°27.00' |
| | I | | N35°12.50' W92°01.40' |

ROUTE WIDTH - 5 NM either side of route except 5 NM left and 2 NM right of centerline from (E) to (F).

Remarks:

- (1) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (2) Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
- (3) A left turn to 350 degrees must be made no later than 1 NM past (F).
- (4) Minimum altitude 300' AGL day and 1000' AGL night except:
 - (a) 2200' MSL between Points (A) and (B);
 - (b) 500' AGL from (G) until (H);
 - (c) 1000' AGL from (H) until 4 NM past (H).
- (5) Primary Entry Point is (A).
- (6) Primary Exit Point for SR-224A is (F).
- (7) Primary Exit Point for SR-224B is (I).
- (8) All other Points are Alternate Entry/Exit Points.

SR-225**(LITTLE ROCK) LIT, BWG, MEM**

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N36°52.50' W87°44.60' |
| | B | | N36°46.30' W88°07.50' |
| | C | | N36°39.40' W88°49.80' |
| | D | | N36°45.60' W89°32.30' |
| | E | | N36°35.50' W90°14.70' |
| | F | | N36°04.20' W90°40.20' |
| | G | | N35°47.80' W90°56.50' |
| | H | | N35°15.20' W91°06.80' |
| | I | | N35°07.30' W91°35.70' |
| | J | | N35°58.80' W91°52.40' |
| | K | | N34°54.90' W92°18.10' |

(All American Drop Zone)

ROUTE WIDTH - 3 NM either side of centerline, except 5 NM left from (G) to (H).

Remarks:

- (1) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (2) A right turn to 360 degrees must be made no later than 1 NM past (K).
 - (a) 3000' MSL from (A) to (D);
 - (b) 2000' MSL (I) to (K).
- (3) Minimum altitude 300' AGL day and 1000' AGL night except:
- (4) During 1 Oct-15 Apr maintain 3000' MSL from (A) to (E) to avoid bird flyways.
- (5) Contact Little Rock Approach Control no later than 20 DME from LRF TACAN (CH 29), if no contact, hold VFR right turns until contact is made.
- (6) Do not exceed 1500' MSL within 16 NM of LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
- (7) Primary Entry Point is (A).
- (8) Primary Exit Point is (K).
- (9) All other Points are Alternate Entry/Exit Points.

SR ROUTES

SR-226

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: 314 OSS/OSK, 380 CMSGT Williams Street, Little Rock AFB, AR 72099-4976 DSN 731-3719, C501-987-3719.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N35°19.50' W92°20.40' |
| | B | | N35°19.50' W92°52.30' |
| | C | | N34°52.30' W92°39.50' |
| | D | | N34°54.90' W92°18.10' |

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:

- Do not exceed 1600' MSL within 16 NM of the LRF TACAN (CH 29).
- Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- Minimum altitude 300' AGL day and 1000' AGL night except; Day maintain 1500' AGL from (A) until 12 NM to (C), then 300' AGL to (D).
- Re-entry track from (D) to (A) at or below 1600' MSL.
- Primary Entry Point (A).
- Primary Exit Point (D).

SR-227

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N35°19.50' W92°20.40' |
| | B | | N35°44.60' W92°20.40' |
| | C | | N35°51.00' W93°11.70' |

| | | | |
|--|---|--|--------------------------|
| | D | | N35°17.30' W93°25.20' |
| (a) ALL AMERICAN DROP ZONE - from (F) | E | | N34°57.20' W93°09.60' |
| | F | | N34°52.30' W92°39.50' |
| (b) BLACKJACK DROP ZONE - from (F) | G | | N34°54.90' W92°18.10' |
| | H | | N34°57.70' W92°44.40' |
| | I | | N35°11.70' W92°27.00' |
| | J | | N35°12.50' W92°01.40' |
| | K | | N35°12.50' W92°01.40' |

ROUTE WIDTH - 5 NM either side of centerline for entire route except 4 NM left and 3 NM right from (A) to (B) and 5.0 NM left and 2.0 NM right from (F) to (G).

Remarks:

- A left turn to 350 degrees must be made no later than 1 NM past (H).
- Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
- Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- Avoid overflight of the town of Wooster AR north of (J).
- Avoid overflight of Enola School complex 8 NM prior to (K).
- Minimum altitude 300' AGL day and 500' AGL night except:
 - 2000' MSL from 17 NM prior to (E) until (E).
 - 500' AGL from (E) until 6 NM from (F);
 - 500' AGL from (I) until (J);
 - 1000' AGL from (J) until 4 NM past (J);
- Re-entry track from (H) to (A) at or below 1600' MSL.
- Primary Entry Point is (A).
- Primary Exit Point for SR-218A is (H).
- Primary Exit Point for SR-218B is (K).
- All other Points are Alternate Entry/Exit Points.

SR-228

(DALLAS-FT WORTH)

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB Fort Worth, TX DSN 739-6903/6904/6905, C817-782-6903/6904/6905.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N32°35.00' W96°11.00' |
| | B | | N33°08.00' W95°50.00' |

| | | | | |
|-------------------------|---|--------------------------|----|--------------------------|
| (Alternate Entry Point) | C | N33°18.00' W96°21.00' | J | N35°12.50' W92°01.40' |
| | D | N33°33.00' W97°09.00' | E1 | N35°28.90' W91°34.90' |
| | E | N33°26.00' W97°38.00' | I | N35°21.10' W91°47.70' |
| | F | N33°19.00' W98°03.00' | K | N35°08.00' W92°06.00' |
| | G | N33°07.00' W98°02.00' | H1 | N34°54.90' W92°28.10' |
| | H | N32°52.00' W98°03.00' | | |
| | I | N33°02.00' W98°07.00' | | |

ROUTE WIDTH - 5 NM either side of centerline for entire route except 4 NM left and 3 NM right from (A) to (B) and 3 NM right and 1 NM left from (K) to (H).

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) 72 hr prior coordination required.
- (2) Minimum altitudes: 500' AGL (A) to (C), (G) to (I). 300' AGL (C) to (G).

SR-229

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------------|----|--------------|--------------------------|
| | A | | N35°19.50' W92°20.40' |
| | B | | N35°33.60' W92°22.60' |
| | C | | N35°55.50' W92°09.70' |
| | D | | N35°56.20' W91°29.70' |
| (a) All American Drop Zone: from (E) | E | | N35°28.90' W91°34.90' |
| | E | | N35°28.90' W91°34.90' |
| | F | | N35°07.10' W91°35.10' |
| | G | | N35°01.80' W91°52.40' |
| (b) Blackjack Drop Zone: from (E) | H | | N34°54.90' W92°28.10' |
| | E | | N35°28.90' W91°34.90' |
| | I | | N35°21.10' W91°47.70' |

Remarks:

- (1) A right turn to 360 degrees must be made immediately, safety permitting, upon passing (H).
- (2) A right turn to 277 degrees must be made no later than 1 NM past (J).
- (3) Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
- (4) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (5) Minimum altitude 300' AGL day and 500' AGL night except:
 - (a) 500' AGL from (C) until 20 NM to (D).
 - (b) 500' AGL from (D) to (H) on SR-229A;
 - (c) 500' AGL from (D) to (K).
 - (d) 500' AGL from (D) to (J).
- (6) Avoid congested area 3 NM either side of Hwy 67 by 1000' AGL on SR-229A between (G) and (H).
- (7) On SR-229A, if no contact with Little Rock Approach Control by 20 DME LRF (CH 29) between (F) and (G), hold VFR right turns until contact established.
- (8) Re-entry track from Point H to A, at or below 1600' MSL.
- (9) Primary Entry is (A).
- (10) Primary Exit Point for SR-229A, SR-229C is (H).
- (11) Primary Exit Point for SR-229B is (J).
- (12) All other Points are Alternate Entry/Exit Points.

SR-230

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N35°19.50' W92°20.40' |
| | B | | N35°44.80' W92°20.50' |
| | C | | N35°44.00' W91°55.50' |

SR ROUTES

| | | |
|--------------------------------|----|--------------------------|
| (a) ALL AMERICAN DROP ZONE: | D | N35°28.90' W91°34.90' |
| | D | N35°28.90' W91°34.90' |
| | E | N35°07.30' W91°35.70' |
| | F | N35°01.80' W91°52.40' |
| (b) BLACKJACK DROP ZONE: | G | N34°54.90' W92°18.10' |
| | D | N35°28.90' W91°34.90' |
| | H | N35°21.10' W91°47.70' |
| (c) ALL AMERICAN DROP ZONE: | I | N35°12.50' W92°01.40' |
| | D1 | N35°28.90' W91°34.90' |
| | H | N35°21.10' W91°47.70' |
| (d) BLACKJACK DROP ZONE: | J | N35°08.00' W92°06.00' |
| | G1 | N34°54.90' W92°18.10' |
| | D1 | N35°28.90' W91°34.90' |
| | E | N35°07.30' W91°35.70' |
| | K | N35°05.90' W91°52.60' |
| | I1 | N35°12.50' W92°01.40' |

ROUTE WIDTH - 5 NM either side of centerline for entire route except 4 NM left and 3 NM right from (A) to (B) and 3 NM right and 1 NM left from (J) to (G).

Remarks:

- (1) A right turn to 360 degrees must be made immediately, safety permitting, upon passing (G).
- (2) A right turn to 277 degrees must be made no later than 1 NM past (I) on SR-230D.
- (3) Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
- (4) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (5) Minimum altitude is 300' AGL day and 500' AGL night except:
 - (a) 500' AGL from (D) to (G) on SR-230A.
 - (b) 500' AGL from (D) to (I) on SR-230B.
 - (c) 500' AGL from (D) to (J) on SR-230C.
 - (d) 500' AGL from (D) to (I) on SR-230D.
- (6) Avoid congested area 3 NM either side of Hwy 67 by 1000' AGL between (F) and (G) on SR-230A.
- (7) Must have contact with Little Rock Approach Control by 20 DME of LRF between (E) and (F), otherwise hold VFR right turns until contact established.
- (8) On SR-230D, prior to LRF 062/30, contact Little Rock Approach and do not over-fly the town of Romance.

- (9) Primary Entry Point is (A).
- (10) Primary Exit Point for SR-230A and SR-230C is (G).
- (11) Primary Exit Point for SR-230B and SR-230D is (I).
- (12) All other Points are Alternate Entry/Exit Points.

SR-231

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------|----|--------------|--------------------------|
| | A | | N35°19.50' W92°20.40' |
| | B | | N35°44.80' W92°20.50' |
| | C | | N35°50.20' W91°54.80' |
| | D | | N35°28.90' W91°34.90' |
| (a) ALL AMERICAN DROP ZONE: | D | | N35°28.90' W91°34.90' |
| | E | | N35°07.30' W91°35.70' |
| | F | | N35°01.80' W91°52.40' |
| (b) BLACKJACK DROP ZONE: | G | | N35°54.90' W92°18.10' |
| | D | | N35°28.90' W91°34.90' |
| | H | | N35°21.10' W91°47.70' |
| (c) ALL AMERICAN DROP ZONE: | I | | N35°12.50' W92°01.40' |
| | D1 | | N35°28.90' W91°34.90' |
| | H | | N35°21.10' W91°47.70' |
| | J | | N35°08.00' W92°06.00' |
| | G1 | | N34°54.90' W92°18.10' |

ROUTE WIDTH - 5 NM either side of centerline for entire route except 4 NM left and 3 NM right from (A) to (B) and 3 NM right and 1 NM left from (J) to (G).

Remarks:

- (1) A right turn to 360 degrees must be made as soon as practical upon passing (G).

- (2) A right turn to 277 degrees must be made no later than 1 NM past (I).
- (3) Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
- (4) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (5) Minimum altitude is 300' AGL day and 500' AGL night except:
 - (a) 500' AGL between (B) and (C), (D) and (G) on SR-231A;
 - (b) 500' AGL between (B) and (C), (D) and (I) on SR-231B;
 - (c) 500' AGL between (B) and (C), (D) and (I) on SR-231C.
- (6) Avoid congested area 3 NM either side of Hwy 67 by 1000' AGL between (F) and (G) on SR-231A.
- (7) On SR-231A between (E) to (F), contact must be made with Little Rock Approach Control by 20 DME of LRF, otherwise hold right turns until contact is established.
- (8) Re-entry track from (G) to (H), at or below 1600' MSL.
- (9) Primary Entry Point is (A).
- (10) Primary Exit Point for SR-231A and SR-231C is (G).
- (11) Primary Exit Point for SR-231B is (I).
- (12) All other Points are Alternate Entry/Exit Points.

SR-232

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------|----|--------------|--------------------------|
| | A | | N35°19.50' W92°20.40' |
| | B | | N35°30.20' W92°58.20' |
| | C | | N35°17.30' W93°25.20' |
| | D | | N34°54.90' W93°07.00' |
| (a) ALL AMERICAN DROP ZONE: | D | | N34°54.90' W93°07.00' |
| | E | | N34°52.30' W92°39.50' |
| | F | | N34°54.90' W92°18.10' |
| (b) BLACKJACK DROP ZONE: | D | | N34°54.90' W93°07.00' |
| | G | | N34°57.70' W92°44.40' |
| | H | | N35°11.70' W92°27.00' |
| | I | | N35°12.50' W92°01.40' |

ROUTE WIDTH - 5 NM either side of route except (E) to (F) which is 5 NM left and 2 NM right.

Remarks:

- (1) A left turn to 350 degrees must be made no later than 1 NM past (F).
- (2) Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
- (3) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (4) Avoid overflight of the town of Wooster, AR north of (H).
- (5) Avoid overflight of Enola School complex 8 NM prior to (I).
- (6) Minimum altitude is 300' AGL day and 500' AGL night except:
 - (a) 2000' MSL 17 NM prior to (C) until (C).
 - (b) 500' AGL from (C) until 9 NM to go until (D).
 - (c) 500' AGL from (G) to (H).
 - (d) 1000' AGL from (H) until 4 NM past (H).
- (7) Re-entry track from (F) to (A), at or below 1600' MSL.
- (8) Primary Entry Point is (A).
- (9) Primary Exit Point for SR-232A is (F).
- (10) Primary Exit Point for SR-232B is (I).
- (11) All other Points are Alternate Entry/Exit Points.

SR-233

(ABILENE) ABI

ORIGINATING ACTIVITY: 7 WG, Dyess AFB, TX 79607 DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°59.00' W100°24.00' |
| at or above 03 AGL | C | | N32°55.00' W101°03.00' |
| at or above 03 AGL | D | | N33°19.00' W101°16.00' |
| at or above 03 AGL | E | | N33°20.00' W100°14.00' |
| at or above 03 AGL | F | | N33°03.20' W100°03.40' |
| at or above 03 AGL | G | | N32°45.00' W100°01.00' |
| at or above 03 AGL | H | | N32°25.00' W99°52.00' |
| at or above 03 AGL | I | | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.

SR ROUTES

- (2) Entry Point: ABI VORTAC (CH 84) 296/13.
- (3) Exit Point: ABI VORTAC (CH 84) 221/07.
- (4) All aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to de-conflict with departing/arriving traffic. This call should be made at least 15 NM north or south of Dyess AFB. C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.
- (5) Traffic permitting, Dyess Tower may allow other transient aircraft to continue, providing the run-in direction is the same direction as the runway in use. If no such request is on file with Tower, transient aircraft must exit southwest at (F).
- (6) If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.
- (7) Tower will not approve run-ins opposite to the Dyess traffic flow for transient aircraft, other than C130.

SR-234

(ABILENE) ABI

ORIGINATING ACTIVITY: 7 WG, Dyess AFB, TX 79607 DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N33°05.00' W100°35.00' |
| at or above 03 AGL | C | | N33°15.00' W100°00.00' |
| at or above 03 AGL | D | | N32°45.00' W100°01.00' |
| at or above 03 AGL | E | | N32°25.00' W99°52.00' |
| at or above 03 AGL | F | | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Entry Point: ABI VORTAC (CH 84) 296/13.
- (3) Exit Point: ABI VORTAC (CH 84) 221/07.
- (4) All aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to de-conflict with departing/arriving traffic. This call should be made at least 15 NM north or south of Dyess AFB.
- (5) C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.
- (6) Dyess Tower may allow other transient aircraft to continue, traffic permitting.
- (7) Generally, aircraft will be able to continue if the run-in direction is the same direction as the runway in use.

- (8) If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.
- (9) Tower does not usually approve run-ins opposite to the Dyess traffic flow.

SR-235

(VANCE)

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850 C580-213-7850.

SCHEDULING ACTIVITY: 8 FTS/DOO, Vance AFB, OK 73705-5202 DSN 448-6037 C580-213-6037

HOURS OF OPERATION: Sunrise -Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N36°52.00' W98°24.00' |
| at or above 05 AGL | B | | N36°55.00' W98°29.00' |
| at or above 05 AGL | C | | N37°09.00' W99°14.00' |
| at or above 05 AGL | D | | N36°48.50' W99°15.50' |
| at or above 05 AGL | E | | N36°54.00' W99°02.00' |
| at or above 05 AGL | F | | N36°31.00' W98°46.00' |
| at or above 05 AGL | G | | N36°38.00' W98°18.00' |

ROUTE WIDTH - 3 NM left and 2 NM right of centerline from (A) to 37-00-30N 98-46-42W, 3 NM left and 4 NM right of centerline from 37-00-30N 98-46-42W to (C), 4 NM either side of centerline from (C) to (E), 4 NM left and 2 NM right of centerline from (E) to (F), and 2 NM left and 4 NM right of centerline from (F) to (G).

Remarks:

- (1) Avoid flight within 1500' AGL or 3 NM of airports when practicable.
- (2) Alternate Exit Point: (D).
- (3) Upon route exit, all 71 FTW aircraft maintain VFR. Comply with local procedures and contact Vance Approach Control or Kansas City Center, as applicable.
- (4) SR-235 and SR-253 are the same geographical points, routes flown in opposite directions.

SR-236

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AG, Dyess AFB, TX 79607 DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°44.02' W99°52.52' |
| at or above 03 AGL | C | | N32°56.23' W99°12.77' |
| at or above 03 AGL | D | | N33°32.15' W99°22.13' |
| at or above 03 AGL | E | | N33°33.23' W100°05.37' |
| at or above 03 AGL | F | | N33°05.63' W100°00.25' |
| at or above 03 AGL | G | | N32°45.00' W100°01.00' |
| at or above 03 AGL | H | | N32°25.00' W99°52.00' |
| at or above 03 AGL | I | | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.**Remarks:**

- (1) Maintain 300' AGL or higher for entire route.
- (2) Primary Entry Point: A.
- (3) Primary Exit Point: F.
- (4) All aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to deconflict with departing/arriving traffic. This call should be made at least 15 miles north or south of Dyess AFB.
- (5) C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.
- (6) Dyess Tower may allow other transient aircraft to continue, traffic permitting.
- (7) Generally, aircraft will be able to continue if the run-in direction is the same direction as the runway in use.
- (8) If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.
- (9) Tower does not usually approve run-ins opposite to the Dyess traffic flow.
- (10) All other Points are Alternate Entry/Exit Points.

SR-237**(LITTLE ROCK)** LIT, MEM

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity**HOURS OF OPERATION:** Continuous**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| at or above 05 AGL (Night-1000' AGL or above) | A | | N35°19.50' W92°20.40' |
| at or above 05 AGL (Night-1000' AGL or above) | B | | N35°26.40' W91°50.60' |
| at or above 05 AGL (Night-1000' AGL or above) | C | | N35°15.20' W91°01.70' |
| at or above 05 AGL (Night-1000' AGL or above) | D | | N35°04.20' W90°42.60' |
| at or above 05 AGL (Night-1000' AGL or above) | E | | N34°50.00' W90°24.00' |

ROUTE WIDTH - 5 NM either side of centerline for entire route.**Remarks:**

- (1) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (2) Minimum altitude is 500' AGL day and 1000' AGL night except:
 - (a) maintain a minimum of 3000' MSL entire route from 1 Oct to 15 Apr due to Mississippi bird flyway.
- (3) Point (E) is the Entry Point for SR-73 and SR-74 (Memphis Air National Guard).
- (4) Primary Entry Point is (A).
- (5) Primary Exit Point is (E).
- (6) All other Points are Alternate Entry/Exit Points.

SR-238**(LITTLE ROCK)** LIT, MEM

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity**HOURS OF OPERATION:** Continuous**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N34°45.00' W90°33.00' |
| | B | | N34°56.50' W90°59.60' |
| | C | | N35°11.80' W91°22.80' |
| | D | | N34°58.80' W91°52.40' |
| | E | | N34°54.90' W92°18.10' |

(All American Drop Zone).

SR ROUTES

ROUTE WIDTH - 5 NM either side of centerline for entire route except 3 NM either side of centerline from (D) to (E).

Remarks:

- (1) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (2) Minimum altitude is 500' AGL day and 1000' AGL night except:
 - (a) maintain 2000' MSL from (C) to (E);
 - (b) maintain a minimum of 3000' MSL entire route from 1 Oct to 15 Apr due to bird flyway.
- (3) A right turn of 360 degrees must be made no later than 1 NM past (E).
- (4) Contact Little Rock Approach no later than 20 DME from LRF TACAN (CH 29), if no contact, hold VFR right turns until contact is made.
- (5) Do not exceed 1500' MSL within 16 NM of LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
- (6) Primary Entry Point is (A).
- (7) Primary Exit Point is (E).
- (8) All other Points are Alternate Entry/Exit Points.

SR-239

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: 314 OSS/OSK, 380 CMSGT Williams Street, Little Rock AFB, AR 72099-4976 DSN 731-3719, C501-987-3719.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| at or above 05 AGL (Night-1000' AGL or above) | A | | N35°39.20' W93°17.80' |
| at or above 05 AGL (Night-1000' AGL or above) | B | | N35°52.10' W93°32.00' |
| at or above 05 AGL (Night-1000' AGL or above) | C | | N36°11.10' W93°24.20' |
| at or above 05 AGL (Night-1000' AGL or above) | D | | N36°25.90' W93°30.80' |
| at or above 05 AGL (Night-1000' AGL or above) | E | | N36°25.60' W93°46.80' |
| at or above 05 AGL (Night-1000' AGL or above) | F | | N36°11.20' W93°27.20' |
| at or above 05 AGL (Night-1000' AGL or above) | G | | N35°55.80' W93°40.90' |

| | | | |
|---|---|--|--------------------------|
| at or above 05 AGL (Night-1000' AGL or above) | H | | N35°40.50' W93°39.90' |
| at or above 05 AGL (Night-1000' AGL or above) | I | | N35°38.60' W93°18.00' |

ROUTE WIDTH - 5 NM either side of centerline entire route.

Remarks:

- (1) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (2) Minimum altitude: 500' AGL day, 1000' AGL night except; 1500' AGL from (I) to (D) of SR-227.
- (3) This route starts at (C) of SR-227 direct to (A) of SR-239.
- (4) The last route segment is from (I) of SR-239 to (D) of SR-227.

SR-240

(ABILENE) ABI

ORIGINATING ACTIVITY: 7 WG, Dyess AFB, TX 79607 DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°44.00' W99°53.00' |
| at or above 03 AGL | C | | N32°51.00' W99°16.00' |
| at or above 03 AGL | D | | N32°21.00' W99°18.00' |
| at or above 03 AGL | E | | N32°01.00' W99°39.00' |
| at or above 03 AGL | F | | N32°10.00' W99°49.00' |
| at or above 03 AGL | G | | N32°25.00' W99°52.00' |
| at or above 03 AGL | H | | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Entry Point: ABI VORTAC (CH 84) 296/13.
- (3) Exit Point: ABI VORTAC (CH 84) 221/07.
- (4) Aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to deconflict with departing/arriving traffic.
- (5) This call should be made at least 15 NM north or south of Dyess AFB.
- (6) C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.

- (7) Traffic permitting, Dyess Tower may allow other transient aircraft to continue, providing the run-in direction is the same direction as the runway in use.
- (8) If no such request is on file with Tower, transient aircraft must exit south bound at (F).
- (9) If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.
- (10) Tower will not approve Run-ins opposite to the Dyess traffic flow for transient aircraft, other than C130.

SR-241**(VANCE)**

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850 C580-213-7850.

SCHEDULING ACTIVITY: 8 FTS/DOO, Vance AFB, OK 73705-5202 DSN 448-6037 C580-213-6037.

HOURS OF OPERATION: Sunrise-Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| at or above 05 AGL | A | | N36°25.00' W97°02.50' |
| at or above 05 AGL | B | | N36°13.50' W96°47.00' |
| at or above 05 AGL | C | | N36°17.00' W96°34.50' |
| at or above 05 AGL (Alternate Exit Point) | D | | N36°41.00' W96°29.00' |
| at or above 05 AGL | E | | N36°59.50' W96°18.00' |
| at or above 05 AGL | F | | N37°05.00' W96°38.00' |
| at or above 05 AGL | G | | N36°50.00' W96°51.00' |
| at or above 05 AGL | H | | N36°33.00' W96°54.00' |
| at or above 05 AGL | I | | N36°33.00' W97°17.00' |

ROUTE WIDTH - 3 NM left and 2 NM right of centerline from (A) to (B), 3 NM either side of centerline from (B) to (I).

Remarks:

- (1) Avoid flight within 1500' or 3NM of airports when practicable. Use caution for several uncontrolled airports in the vicinity of exit/entry points.
- (2) Alternate Exit Point: (D).
- (3) Upon route exit, all 71 FTW aircraft maintain VFR. Comply with local procedures and contact Vance Approach Control or Kansas City Center, as applicable.
- (4) SR-241 and SR-247 are the same geographical points, routes flown in opposite directions.
- (5) Avoid (F) by 3/4 NM at all route altitudes.

SR-242**(ABILENE) ABI**

ORIGINATING ACTIVITY: 317 AG, Dyess AFB, TX 79607 DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°44.00' W99°52.52' |
| at or above 03 AGL | C | | N32°49.65' W99°15.78' |
| at or above 03 AGL | D | | N32°23.05' W99°15.12' |
| at or above 03 AGL | E | | N31°38.12' W99°21.33' |
| at or above 03 AGL | F | | N31°31.88' W99°41.43' |
| at or above 03 AGL | G | | N32°12.60' W99°50.50' |
| at or above 03 AGL | H | | N32°25.00' W99°52.00' |
| at or above 03 AGL | I | | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Primary Entry Point: A.
- (3) Primary Exit Point: F.
- (4) Aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to de-conflict with departing/arriving traffic. This call should be made at least 15 miles north or south of Dyess AFB.
- (5) C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.
- (6) Traffic permitting, Dyess Tower may allow other transient aircraft to continue, providing the run-in direction is the same direction as the runway in use.
- (7) If no such request is on file with Tower, transient aircraft must exit south bound at (F).
- (8) If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.
- (9) Tower will not approve run-ins opposite to the Dyess traffic flow for transient aircraft, other than C130.
- (10) All other Points are Alternate Entry/Exit Points.

SR ROUTES

SR-243

(ABILENE) ABI

ORIGINATING ACTIVITY: 7 WG, Dyess AFB, TX 79607 DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°34.00' W100°34.00' |
| at or above 03 AGL | C | | N32°09.00' W100°45.00' |
| at or above 03 AGL | D | | N31°42.00' W100°43.00' |
| at or above 03 AGL | E | | N31°51.00' W99°52.00' |
| at or above 03 AGL | F | | N32°12.60' W99°50.50' |
| at or above 03 AGL | G | | N32°25.00' W99°52.00' |
| at or above 03 AGL | H | | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Entry Point: ABI VORTAC (CH 84) 296/13.
- (3) Exit Point: ABI VORTAC (CH 84) 221/07.
- (4) Aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to de-conflict with departing/arriving traffic. This call should be made at least 15 miles north or south of Dyess AFB.
- (5) C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.
- (6) Traffic permitting, Dyess Tower may allow other transient aircraft to continue, providing the run-in direction is the same direction as the runway in use.
- (7) If no such request is on file with Tower, transient aircraft must exit south bound at (D).
- (8) If the route is to be continued to the end point, every effort should be made to fly a route that arrives in the landing direction.
- (9) Tower will not approve run-ins opposite to the Dyess traffic flow for transient aircraft, other than C130.

SR-244

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AG, Dyess AFB, TX 79607 DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°09.33' W100°22.72' |
| at or above 03 AGL | C | | N31°44.17' W100°25.87' |
| at or above 03 AGL | D | | N31°57.02' W99°55.18' |
| at or above 03 AGL | E | | N32°12.60' W99°50.50' |
| at or above 03 AGL | F | | N32°25.00' W99°52.00' |
| at or above 03 AGL | G | | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Primary Entry Point: A.
- (3) Primary Exit Point: D.
- (4) Aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to de-conflict with departing/arriving traffic. This call should be made at least 15 miles north or south of Dyess AFB.
- (5) C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.
- (6) Dyess Tower may allow other transient aircraft to continue, traffic permitting.
- (7) Generally, aircraft will be able to continue if the run-in direction is the same direction as the runway in use.
- (8) If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.
- (9) Tower does not usually approve run-ins opposite to the Dyess traffic flow.
- (10) All other Points are Alternate Entry/Exit Points.

SR-245

(ABILENE) ABI

ORIGINATING ACTIVITY: 7 WG, Dyess AFB, TX 79607 DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |

| | | |
|--------------------|---|---------------------------|
| at or above 03 AGL | B | N32°46.00' W99°35.00' |
| at or above 03 AGL | C | N33°11.00' W99°22.00' |
| at or above 03 AGL | D | N33°01.00' W99°59.00' |
| at or above 03 AGL | E | N32°45.00' W100°01.00' |
| at or above 03 AGL | F | N32°25.00' W99°52.00' |
| at or above 03 AGL | G | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Entry Point: ABI VORTAC (CH 84) 296/13.
- (3) Exit Point: ABI VORTAC (CH 84) 221/07.

SR-246

(LITTLE ROCK) LIT

ORIGINATING ACTIVITY: 19 OSS/OSK, Chief Williams Drive, Little Rock AFB, AR 72099-4976 DSN 731-7013, C501-987-7013.

SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------------------|----|--------------|--------------------------|
| | A | | N34°51.30' W92°29.30' |
| | B | | N34°39.00' W92°46.90' |
| | C | | N34°26.00' W92°39.20' |
| | D | | N34°07.60' W92°31.80' |
| | E | | N34°18.60' W92°54.30' |
| | F | | N34°44.60' W92°52.40' |
| (a) ALL AMERICAN DROP ZONE: | F | | N34°44.60' W92°52.40' |
| | G | | N34°52.30' W92°39.50' |
| (b) BLACKJACK DROP ZONE: | H | | N34°54.90' W92°28.10' |
| | F | | N34°44.60' W92°52.40' |
| | I | | N35°11.70' W92°27.00' |
| | J | | N35°12.50' W92°01.40' |

ROUTE WIDTH - 5 NM either side of centerline for entire route except 5 NM left and 2 NM right from (G) to (H).

Remarks:

- (1) A left turn to 350 degrees must be made no later than 1 NM past (H).
- (2) Do not exceed 1500' MSL within 16 NM of the LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
- (3) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
- (4) Minimum altitude is 300' AGL day and 500' AGL night except:
 - (a) maintain 2000' MSL from (A) to (B);
 - (b) 500' AGL between (E) and (F) on SR-246A;
 - (c) 1000' AGL from 10 NM to go to (F) until 3 NM to go to (F);
 - (d) 500' AGL between (E) and (I);
 - (e) 1000' AGL from (I) until 4 NM past (I) on SR-246B.
- (5) Re-entry track from (H) to (A), at or below 1600' MSL.
- (6) Primary Entry Point is (A).
- (7) Primary Exit Point for SR-246A is (H).
- (8) Primary Exit Point for SR-246B is (J).
- (9) All other Points are Alternate Entry/Exit Points.

SR-247

(VANCE)

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850 C580-213-7850.

SCHEDULING ACTIVITY: 8 FTS/DOO, Vance AFB, OK 73705-5202 DSN 448-6037 C580-213-6037.

HOURS OF OPERATION: Sunrise-Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| at or above 05 AGL | A | | N36°33.00' W97°17.00' |
| at or above 05 AGL | B | | N36°33.00' W96°54.00' |
| at or above 05 AGL | C | | N36°50.00' W96°51.00' |
| at or above 05 AGL | D | | N37°05.00' W96°38.00' |
| at or above 05 AGL | E | | N36°59.50' W96°18.00' |
| at or above 05 AGL (Alternate Exit Point) | F | | N36°41.00' W96°29.00' |
| at or above 05 AGL | G | | N36°17.00' W96°34.50' |
| at or above 05 AGL | H | | N36°13.50' W96°47.00' |
| at or above 05 AGL | I | | N36°25.00' W97°02.50' |

ROUTE WIDTH - 3 NM either side of centerline from (A) to (H); 2 NM left and 3 NM right of centerline from (H) to (I).

SR ROUTES

Remarks:

- (1) Avoid flight within 1500' or 3 NM of airports when practicable. Use caution for several uncontrolled airports in the vicinity of Exit/Entry Points.
- (2) Alternate Exit Point: (F).
- (3) Upon route exit, all 71 FTW aircraft maintain VFR. Comply with local procedures and contact Vance Approach Control or Kansas City Center, as applicable.
- (4) SR-241 and SR-247 are the same geographical points, routes flown in opposite directions.
- (5) Avoid (D) by 3/4 NM at all route altitudes.

SR-249

(ABILENE) ABI

ORIGINATING ACTIVITY: 7 WG, Dyess AFB, TX 79607
DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°44.00' W99°53.00' |
| at or above 03 AGL | C | | N32°51.00' W99°16.00' |
| at or above 03 AGL | D | | N33°32.00' W99°22.00' |
| at or above 03 AGL | E | | N33°33.00' W100°06.00' |
| at or above 03 AGL | F | | N33°06.00' W99°59.00' |
| at or above 03 AGL | G | | N32°45.00' W100°01.00' |
| at or above 03 AGL | H | | N32°25.00' W99°52.00' |
| at or above 03 AGL | I | | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Entry Point: ABI VORTAC (CH 84) 296/13.
- (3) Exit Point: ABI VORTAC (CH 84) 221/07.

SR-250

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 AG, Dyess AFB, TX 79607
DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°52.77' W100°21.10' |
| at or above 03 AGL | C | | N33°01.57' W100°06.87' |
| at or above 03 AGL | D | | N32°45.00' W100°01.00' |
| at or above 03 AGL | E | | N32°25.00' W99°52.00' |
| at or above 03 AGL | F | | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Primary Entry Point: A.
- (3) Primary Exit Point: C.
- (4) Aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to de-conflict with departing/arriving traffic.
- (5) This call should be made at least 15 miles north or south of Dyess AFB.
- (6) C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.
- (7) Dyess Tower may allow other transient aircraft to continue, traffic permitting.
- (8) Generally, aircraft will be able to continue if the run-in direction is the same direction as the runway in use.
- (9) If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.
- (10) Tower does not usually approve run-ins opposite to the Dyess traffic flow.
- (11) All other Points are Alternate Entry/Exit Points.

SR-251

(ABILENE) ABI

ORIGINATING ACTIVITY: 7 WG, Dyess AFB, TX 79607
DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°45.00' W99°43.00' |
| at or above 03 AGL | C | | N32°56.00' W99°55.00' |

| | | |
|--------------------|---|---------------------------|
| at or above 03 AGL | D | N32°45.00' W100°01.00' |
| at or above 03 AGL | E | N32°25.00' W99°52.00' |
| at or above 03 AGL | F | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Entry Point: ABI VORTAC (CH 84) 296/13.
- (3) Exit Point: ABI VORTAC (CH 84) 221/07.

SR-253

(VANCE)

ORIGINATING ACTIVITY: 71 FTS/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850 C580-213-7850.

SCHEDULING ACTIVITY: 8FTS/DOO, Vance AFB, OK 73705-5202 DSN 448-6037 C580-213-6037.

HOURS OF OPERATION: Sunrise-Sunset and active days per local directives

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N36°38.00' W98°18.00' |
| at or above 05 AGL | B | | N36°31.00' W98°46.00' |
| at or above 05 AGL | C | | N36°54.00' W99°02.00' |
| at or above 05 AGL | D | | N36°48.50' W99°15.50' |
| at or above 05 AGL | E | | N37°09.00' W99°14.00' |
| at or above 05 AGL | F | | N36°55.00' W98°29.00' |
| at or above 05 AGL | G | | N36°52.00' W98°24.00' |

ROUTE WIDTH - 2 NM right and 4 NM left of centerline from (A) to (B), 2 NM left and 4 NM right of centerline from (B) to (C), 4 NM either side of centerline from (C) to (E), 4 NM left and 3 NM right of centerline from (E) to N37-00-30 W98-46-42, 2 NM left and 3 NM right of centerline from N37-00-30 W98-46-42 to (G).

Remarks:

- (1) Avoid flight within 1500' or 3 NM of airports when practicable.
- (2) Alternate Exit Point: (D)
- (3) Route route exit, all 71 FTW aircraft maintain VFR. Comply with local procedures and contact Vance Approach Control or Kansas City Center, as applicable.
- (4) SR-235 and SR-253 are the same geographical points, routes flown in opposite direction.

SR-255

(ABILENE) ABI

ORIGINATING ACTIVITY: 7 WG, Dyess AFB, TX 79607 DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°19.00' W100°21.00' |
| at or above 03 AGL | C | | N31°59.00' W99°52.00' |
| at or above 03 AGL | D | | N32°10.00' W99°49.00' |
| at or above 03 AGL | E | | N32°25.00' W99°52.00' |
| at or above 03 AGL | F | | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Entry Point: ABI VORTAC (CH 84) 296/13.
- (3) Exit Point: ABI VORTAC (CH 84) 221/07.
- (4) Aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to de-conflict with departing/arriving traffic.
- (5) This call should be made at least 15 miles north or south of Dyess AFB.
- (6) C130 aircraft desiring to continue the route to the end-point at Dyess/Marrion Drop Zone will be handed off to Dyess Control Tower.
- (7) Dyess Tower may allow other transient aircraft to continue, traffic permitting.
- (8) Generally, aircraft will be able to continue if the run-in direction is the same direction as the runway in use.
- (9) If the route is to be continued to the end-point, every effort should be made to fly a route that arrives in the landing direction.
- (10) Tower does not usually approve run-ins opposite to the Dyess traffic flow.

SR-258

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 WG, Dyess AFB, TX 79607 DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

SR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°19.00' W100°21.00' |
| at or above 03 AGL | C | | N31°46.00' W99°29.00' |
| at or above 03 AGL | D | | N31°32.00' W99°06.00' |
| at or above 03 AGL | E | | N31°37.00' W98°43.00' |
| at or above 03 AGL | F | | N31°29.00' W98°09.00' |
| at or above 03 AGL | G | | N31°23.00' W97°47.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Entry Point: ABI VORTAC (CH 84) 296/13.
- (3) Exit Point: LZZ VORTAC (CH 72) 049/22.

SR-261

(ABILENE) ABI

ORIGINATING ACTIVITY: 317 WG, Dyess AFB, TX 79607 DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 03 AGL | A | | N31°23.00' W97°47.00' |
| at or above 03 AGL | B | | N31°33.00' W97°36.00' |
| at or above 03 AGL | C | | N31°49.00' W98°07.00' |
| at or above 03 AGL | D | | N31°48.00' W98°38.00' |
| at or above 03 AGL | E | | N31°37.00' W98°43.00' |
| at or above 03 AGL | F | | N31°29.00' W98°09.00' |
| at or above 03 AGL | G | | N31°23.00' W97°47.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Entry Point: LZZ VORTAC (CH 72) 049/22.
- (3) Exit Point: LZZ VORTAC (CH 72) 049/22.
- (4) Turn prior to Point B due to Prohibited Airspace 0.75 NM past Point B.

SR-267

(ABILENE)

ORIGINATING ACTIVITY: 7 WG, Dyess AFB, TX 79607 DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°10.00' W100°23.00' |
| at or above 03 AGL | C | | N31°44.00' W100°26.00' |
| at or above 03 AGL | D | | N31°42.00' W100°43.00' |
| at or above 03 AGL | E | | N32°09.00' W100°45.00' |
| at or above 03 AGL (Alternate Exit Point) | F | | N32°34.00' W100°34.00' |
| at or above 03 AGL | G | | N32°30.00' W100°10.00' |
| at or above 03 AGL | H | | N32°19.00' W99°52.00' |
| at or above 03 AGL | I | | N32°24.00' W99°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Entry Point: ABI VORTAC (CH 84) 296/13.
- (3) Exit Point: ABI VORTAC (CH 84) 221/07.
- (4) Alternate Exit Point: ABI VORTAC (CH 84) 267/36.

SR-270

(DALLAS-FT WORTH)

ORIGINATING ACTIVITY: 301 OG/SUA, NAS JRB Fort Worth, TX DSN 739-6903/6904/6905, C817-782-6903/6904/6905.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2200 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N32°06.00' W97°20.00' |
| | B | | N32°09.00' W97°55.00' |

| | | |
|-------------------------|---|--------------------------|
| | C | N32°22.00' W98°01.00' |
| (Alternate Entry Point) | D | N32°32.00' W98°19.00' |
| (Alternate Entry Point) | E | N32°59.00' W98°44.00' |
| | F | N33°18.00' W98°37.00' |
| | G | N33°19.00' W98°03.00' |
| | H | N33°07.00' W98°02.00' |
| | I | N32°52.00' W98°03.00' |
| | J | N33°02.00' W98°07.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) 72 hours prior coordination required.
- (2) Minimum altitudes: 500' AGL (A) to (B), 300' AGL (B) to (I), 500' AGL (I) to (J).

SR-273

(ABILENE) ABI

ORIGINATING ACTIVITY: 7 WG, Dyess AFB, TX 79607
DSN 461-2318.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|---------------------------|
| at or above 03 AGL | A | | N32°36.00' W100°04.00' |
| at or above 03 AGL | B | | N32°45.00' W99°43.00' |
| at or above 03 AGL | C | | N33°03.20' W100°03.40' |
| at or above 03 AGL | D | | N33°00.00' W100°41.00' |
| at or above 03 AGL | E | | N32°36.00' W100°42.00' |
| at or above 03 AGL | F | | N32°34.00' W100°23.00' |
| at or above 03 AGL | G | | N32°36.00' W100°11.00' |
| at or above 03 AGL | H | | N33°03.00' W100°23.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Entry Point: ABI VORTAC (CH 84) 296/13.
- (3) Exit Point: ABI VORTAC (CH 84) 313/43.

SR-274

(FT WORTH) FTW

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK
73705-5202 DSN 448-7850, C580-213-7850.

SCHEDULING ACTIVITY: 32 FTS/DOOT, Vance AFB, OK
73705-5202 DSN 448-6251, C580-213-6251.

HOURS OF OPERATION: Sunrise to Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------|----|--------------|---------------------------|
| | A | | N33°01.00' W101°24.00' |
| | B | | N33°18.30' W101°41.00' |
| (Alternate Entry Point) | C | | N33°29.70' W101°30.80' |
| | D | | N33°45.50' W101°27.00' |
| | E | | N33°58.00' W101°01.50' |
| | F | | N34°15.00' W101°18.50' |
| | G | | N34°33.00' W101°26.00' |
| (Alternate Exit Point) | H | | N34°29.00' W101°53.00' |
| | I | | N34°02.70' W102°04.20' |

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B); 3 NM left and 4 NM right from (B) to (C); 3 NM either side of centerline from (C) to (D); 4 NM either side of centerline from (D) to (E), (E) to (F), (F) to (G); 3 NM left and 2 NM right from (G) to (H), 4 NM either side of centerline from (H) to (I).

Remarks:

- (1) Tie-in FSS: Ft Worth (NOTAM-FTW).
- (2) Primary Entry Point: (A).
- (3) Alternate Entry Point: (B).
- (4) Primary Exit Point: (I).
- (5) Alternate Exit Point: (G).
- (6) Users must contact the scheduling agency to determine the daily status of the route and bird activity status along the route.
- (7) Aircraft separation controlled by scheduled entry times, like aircraft expect ten minutes minimum separation, route is VMC only 'See and Avoid' at route crossing points.
- (8) Users must cancel IFR upon route entry, monitor 255.4 when on route,
- (9) All Entry/Alternate Entry and Exit/Alternate Exit Points are compulsory reporting points.
- (10) Contact Lubbock Approach 279.9 exiting at (G) or (I).
- (11) Due to environmental considerations, route is limited to T37 and T1A (250 knots max) operations only.
- (12) Route is reverse of SR-275, both routes cannot be scheduled simultaneously.

SR ROUTES

- (13) Avoid over-flight of communities Grassland, Graham, and New Lynn between (A) and (B), Slayton, and Wilson between (B) and (C), Robertson between (C) and (D), Cone and Dougherty between (D) and (E), Cedar Hill, and South Plains between (E) and (F).

SR-275

(FT WORTH) FTW

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.

SCHEDULING ACTIVITY: 32 FTS/DOOT, Vance AFB, OK 73705-5202 DSN 448-6251, C580-213-6251.

HOURS OF OPERATION: Sunrise to Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------|----|--------------|---------------------------|
| | A | | N34°02.70' W102°04.20' |
| | B | | N34°29.00' W101°53.00' |
| | C | | N34°33.00' W101°26.00' |
| (Alternate Entry Point) | D | | N34°15.00' W101°18.50' |
| | E | | N33°58.00' W101°01.50' |
| | F | | N33°45.50' W101°27.00' |
| | G | | N33°29.70' W101°30.80' |
| (Alternate Exit Point) | H | | N33°18.30' W101°41.00' |
| | I | | N33°01.00' W101°24.00' |

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B); 2 NM left and 3 NM right from (B) to (C); 4 NM either side of centerline from (C) to (D), (D) to (E), (E) to (F); 3 NM either side of centerline from (F) to (G); 4 NM left and 3 NM right from (G) to (H); 4 NM either side of centerline from (H) to (I).

Remarks:

- (1) Tie-in FSS: Ft Worth (NOTAM-FTW).
- (2) Primary Entry Point (A).
- (3) Alternate Entry Point (C).
- (4) Primary Exit Point (I).
- (5) Alternate Exit Point (H).
- (6) Users must contact the scheduling agency to determine the daily status of the route and bird activity status along the route.
- (7) Aircraft separation controlled by scheduled entry times, like aircraft expect ten minutes minimum separation, route is VMC only, 'See and Avoid' at route crossings.
- (8) Users must cancel IFR upon route entry, monitor 255.4 when on route.
- (9) All Entry/Alternate Entry and Exit/Alternate Exit Points are compulsory reporting Points.
- (10) Contact Lubbock approach 351.8 exiting at (H) or (I).

- (11) Due to environmental considerations, route is limited to T37 and T1A (250 knots maximum) operations only.

- (12) Route is reverse of SR-274, both routes cannot be scheduled simultaneously.

- (13) Avoid over-flight of communities of Cedar Hill, South Plains between (D) and (E), Cone, Dougherty between (E) and (F), Robertson between (F) and (G), Slayton, Wilson between (G) and (H), Grassland, Graham, and New Lynn between (H) and (I).

SR-276

(FT WORTH) FTW

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd St., Ste 6, Laughlin AFB, TX 78843-5222 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 86 FTS/DOS, 80 Rio Lobo Ln, Laughlin AFB, TX 78843 DSN 732-5584, C830-298-5584. Scheduling hrs. 0730-1630 Mon-Fri (excl'd hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------|----|--------------|---------------------------|
| | A | | N32°22.00' W101°47.50' |
| | B | | N32°50.80' W102°17.30' |
| (Alternate Entry Point) | C | | N32°50.50' W102°38.30' |
| | D | | N33°24.80' W102°45.30' |
| | E | | N33°45.70' W102°32.20' |
| | F | | N34°06.00' W102°35.20' |
| (Alternate Exit Point) | G | | N34°09.80' W102°24.80' |
| (Alternate Exit Point) | H | | N34°27.50' W102°12.00' |
| | I | | N34°46.80' W102°06.00' |

ROUTE WIDTH - 4 NM either side of centerline from A to B, 4 NM left and 2.5 NM right from B to C, 4 NM left and 3 NM right from C to D, 4 NM either side of centerline from D to E, 4 NM left and 2 NM right from E to F, 2 NM either side of centerline from F to G, G to H, and H to I.

Remarks:

- (1) Route:
 - (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
 - (b) This route is covered by the following maps and charts: Albuquerque and Dallas-Fort Worth Sectionals, Low IFR Enroute L-6N, TPC G-19C, G-20D.
 - (c) Primary Entry Point: A.
 - (d) Alternate Entry Point: B.
 - (e) Primary Exit Point: I.
 - (f) Alternate Exit Points: G and H.
- (2) Scheduling:

- (a) Request for weekend use shall be coordinated with the Scheduling Activity between 0730-1630 local Mon-Fri.
- (b) Users must contact the Scheduling Activity to determine the daily status and bird activity.
- (c) When scheduling SR-276, block off entry times for SR-277 60 minutes plus and minus your entry time to prevent simultaneous usage.
- (d) Aircraft shall be scheduled with a minimum of 10 minutes separation.
- (3) Restrictions:
 - (a) Due to environmental considerations, route is limited to T-6, T-37, and T-1 operations only.
 - (b) Aircraft unable to enter the route plus or minus 3 minutes of their assigned entry time will not enter the route
 - (c) SR-276 is the reverse routing of SR-277. Both routes will not be active at the same time.
- (4) Conflicts:
 - (a) IR-128 crosses between C and D.
 - (b) IR-180 crosses between C and D.
Call 7 OSS/OSOR Dyess AFB to deconflict IR-128, IR-180; DSN 461-3665, C325-696-3665.
- (5) Communications:
 - (a) Users must monitor 255.4 when on route.
 - (b) Contact Lubbock Approach (UHF 351.8, VHF 119.2) when exiting at G or H.
 - (c) When turning south from G or H, file to LBB308030 for LBB Approach pick-up.
 - (d) Contact Amarillo Approach on (UHF 307.0, VHF 119.5) when exiting at I.
 - (e) All Entry / Alternate Entry and Exit / Alternate Exit Points are compulsory reporting points. Entry and exit calls are mandatory.
- (6) Noise Sensitive Areas:
AVOID OVERFLIGHT
 - (a) Patricia community between A and B.
 - (b) White Face community between D and E.
 - (c) Pep, Bula, Friendship, and Circle Back communities between E and F.
 - (d) Earth, Springlake, and Sunnyside communities between G and H.
 - (e) Nazareth community between H and I.

SR-277

(FT WORTH) FTW

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd St., Ste. 6, Laughlin AFB, TX 78843-5222 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 86 FTS/DOS, 80 Rio Lobo Ln, Laughlin AFB, TX 78843 DSN 732-5584, C830-298-5584. Scheduling hrs, 0730-1630 Mon-Fri (excl'd hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------|----|--------------|---------------------------|
| | A | | N34°46.80' W102°06.00' |
| (Alternate Entry Point) | B | | N34°27.50' W102°12.00' |

| | | |
|-------------------------|---|---------------------------|
| (Alternate Entry Point) | C | N34°09.80' W102°24.80' |
| | D | N34°06.00' W102°35.20' |
| | E | N33°45.70' W102°32.20' |
| | F | N33°24.80' W102°45.30' |
| | G | N32°52.50' W102°38.30' |
| (Alternate Exit Point) | H | N32°50.80' W102°17.30' |
| | I | N32°22.00' W101°47.50' |

ROUTE WIDTH - 4 NM either side of centerline from A to B, B to C, 2 NM either side of centerline from C to D, 2 NM left and 4 NM right from D to E, 4 NM either side of centerline from E to F, 3 NM left and 4 NM right from F to G, 2.5 NM left and 4 NM right from G to H, 4 NM either side of centerline from H to I.

Remarks:

- (1) Route:
 - (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
 - (b) This route is covered by the following maps and charts: Albuquerque and Dallas-Fort Worth Sectionals, Low IFR Enroute L-6N, TPC G-19C, G-20D.
 - (c) Primary Entry Point: A.
 - (d) Alternate Entry Point: B and C.
 - (e) Primary Exit Point: I.
 - (f) Alternate Exit Point: H.
- (2) Scheduling:
 - (a) Request for weekend use shall be coordinated with the Scheduling Activity between 0730-1630 local Mon-Fri.
 - (b) Users must contact the Scheduling Activity to determine the daily status and bird activity.
 - (c) When scheduling SR-277, block off entry times for SR-276 60 minutes plus and minus your entry time to prevent simultaneous usage.
 - (d) Aircraft shall be scheduled with minimum of 10 minutes separation
- (3) Restrictions:
 - (a) For environmental reasons, this route may only be flown by T-6, T-37, and T-1 aircraft.
 - (b) Aircraft unable to enter the route plus or minus 3 minutes of their assigned entry time will not enter the route.
 - (c) SR-277 is the reverse routing of SR-276. Both routes will not be active at the same time.
- (4) Conflicts:
 - (a) IR-128 crosses between F and G.
 - (b) IR-180 crosses between F and G.
Call 7 OSS/OSOR Dyess AFB to deconflict IR-128, IR-180; DSN 461-3665, C325-696-3665.
- (5) Communications:
 - (a) Users must monitor 255.4 when on route.
 - (b) Contact Lubbock Approach (UHF 351.8, VHF 119.2) when exiting at H or I.
 - (c) All Entry/Alternate Entry and Exit/Alternate Exit Points are compulsory reporting points. Entry and exit calls are mandatory.
- (6) Noise Sensitive Areas:
AVOID OVERFLIGHT

SR ROUTES

- (a) Nazareth community between A and B.
- (b) Earth, Springlake, and Sunnyside communities between B and C.
- (c) White Face, Pep, Bula, Friendship and Circle Back communities between E and F.
- (d) Patricia community between H and I.

| | |
|---|-------------|
| D | N28°37.30' |
| | W100°02.70' |
| E | N28°18.70' |
| | W99°57.70' |
| F | N28°32.00' |
| | W99°24.00' |
| G | N28°52.50' |
| | W99°36.00' |
| H | N29°05.80' |
| | W99°56.20' |

SR-280

(ABILENE) ABI

(Alternate Entry/Exit Point)

ORIGINATING ACTIVITY: 7 WG, Dyess AFB, TX 79607 DSN 461-2318.

(Alternate Entry/Exit Point)

SCHEDULING ACTIVITY: Same as Originating Activity

(Alternate Entry/Exit Point)

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|-------------|
| at or above 03 AGL | A | | N32°34.00' |
| | | | W100°34.00' |
| at or above 03 AGL | B | | N32°30.00' |
| | | | W100°10.00' |
| at or above 03 AGL | C | | N32°19.00' |
| | | | W99°52.00' |
| at or above 03 AGL | D | | N32°24.00' |
| | | | W99°58.00' |

| | |
|---|-------------|
| I | N29°14.70' |
| | W100°12.10' |
| J | N29°29.80' |
| | W100°12.00' |
| K | N29°48.70' |
| | W100°35.50' |
| L | N30°07.50' |
| | W100°41.70' |
| M | N30°24.30' |
| | W100°31.00' |
| N | N30°24.00' |
| | W100°56.50' |
| O | N30°10.70' |
| | W101°01.00' |
| P | N29°58.00' |
| | W101°09.00' |
| Q | N29°45.00' |
| | W101°08.20' |
| R | N29°35.70' |
| | W101°04.30' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Maintain 300' AGL or higher for entire route.
- (2) Entry Point: ABI VORTAC (CH 84) 267/40.
- (3) Exit Point: ABI VORTAC (CH 84) 221/07.

(a) LAREDO TRANSITION:

SR-281

(SAN ANGELO) SJT

(Alternate Exit Point)

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd St., Ste 6, Laughlin AFB, TX 78843-5222 DSN 732-5864/5337, C830-298-5864/5337.

(b) PLEASANTON TRANSITION:

SCHEDULING ACTIVITY: 85 FTS/DOS, 570 2nd St., Laughlin AFB, TX 78843-5220 DSN 732-5121/5429, C830-298-5121/5429. Scheduling hrs. 0730-1630 Mon-Fri (excl'd hol)

(Alternate Exit Point)

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------|----|--------------|-------------|
| | A | | N29°02.80' |
| | | | W100°36.30' |
| | B | | N28°57.50' |
| | | | W100°24.00' |
| | C | | N28°53.00' |
| (Alternate Entry Point) | | | W100°10.00' |

(c) LLANO TRANSITION:

| | |
|----|-------------|
| E | N28°18.70' |
| | W99°57.70' |
| E1 | N27°58.70' |
| | W99°40.50' |
| E2 | N27°55.90' |
| | W99°23.30' |
| E3 | N27°39.80' |
| | W99°08.00' |
| E4 | N27°28.50' |
| | W99°09.50' |
| F | N28°32.00' |
| | W99°24.00' |
| F1 | N28°49.20' |
| | W99°25.00' |
| F2 | N29°01.40' |
| | W99°08.50' |
| F3 | N28°59.00' |
| | W98°51.50' |
| F4 | N29°08.80' |
| | W98°35.50' |
| J | N29°29.80' |
| | W100°12.00' |
| J1 | N29°46.50' |
| | W100°04.70' |
| J2 | N30°02.50' |
| | W99°50.30' |

| | | |
|-------------------------------|----|---------------------------|
| | J3 | N30°18.20' W99°54.50' |
| | J4 | N30°21.70' W99°23.70' |
| | J5 | N30°38.50' W99°05.90' |
| | J6 | N30°33.00' W98°42.30' |
| | J7 | N30°40.90' W98°29.00' |
| (d) SAN ANGELO TRANSITION: | O | N30°10.70' W101°01.00' |
| | O1 | N30°14.10' W101°15.30' |

ROUTE WIDTH - HUGHES:3 NM either side of centerline from (A) to (C), 3 NM left and 4 NM right from (C) to (D), 4 NM either side of centerline from (D) to (E), 2 NM left and 5 NM right from (E) to (F), 4 NM left and 3 NM right from (F) to (G), 4 NM either side of centerline from (G) to (H), (H) to (I), 3 NM left and 4 NM right from (I) to (J). CLINE: 2 NM left and 4 NM right from (J) to (K), 4 NM either side of centerline from (K) to (O), 3 NM left and 4 NM right from (O) to (R).

- LAREDO TRANSITION - 4 NM either side of centerline from (E) to (E-1), 3 NM left and 4 NM right from (E-1) to (E-2), 4 NM either side of centerline from (E-2) to (E-4).
- PLEASANTON TRANSITION - 3 NM left and 4 NM right of centerline from (F) to (F-1), 4 NM either side from (F-1) to (F-2), 3 NM left and 4 NM right from (F-2) to (F-4).
- LLANO TRANSITION - 3 NM left and 4 NM right of centerline from (J) to (J-2), 4 NM either side of centerline from (J-2) to (J-4), 3 NM left and 4 NM right of centerline from (J-4) to (J-5), 4 NM left and 3 NM right from (J-5) to (J-6), 2 NM left and 3 NM right from (J-6) to (J-7).
- SAN ANGELO TRANSITION - 4 NM either side of centerline.

Remarks:

- Route:
 - Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
 - This route is covered by the following maps and charts: San Antonio and Brownsville Sectionals, Low IFR Enroute L-19, L-20, TPC H-23B, H-23C.
 - For deconfliction purposes, SR-281 is broken down into two separate routes: the northern route CLINE (J to R), and the southern route HUGHES A to I, utilizing the Alternate Entry/Exit Points. Transitions are allowed from DLF to destinations only (no reverse routing).
 - Primary Entry Point: A.
 - Alternate Entry Points: C, H, I and J.
 - Primary Exit Point: R.
 - Alternate Exit Points: E2, E3, E4, F2, F4, H, I, J, J7 and O1.
 - Scheduling:
 - Request for weekend use shall be coordinated with the Scheduling Activity between 0730-1630 local Mon-Fri.
 - Users must contact the Scheduling Activity to determine the daily status and bird activity status along the route.
 - Aircraft shall be scheduled with a minimum of 10 minutes separation.
- SR 281 is available utilizing the following schedule only:
 - Monday:
 - (A-H) HUGHES
 - (J-R) CLINE
 - Tuesday: Not available
 - Wednesday:
 - (A-H) HUGHES
 - (J-R) CLINE
 - Thursday: Not available
 - Friday:
 - (A-H) HUGHES
 - (J-R) CLINE
 - Active weekend routes shall be determined by the Scheduling Activity weekend Supervisor.
 - Use of SAN ANGELO TRANSITION requires simultaneous scheduling of SR-283.
- Restrictions:
 - Due to environmental considerations, route is limited to T-6, T-37, and T-1 operations only.
 - Aircraft unable to enter the route plus or minus three minute of their assigned entry time will not enter the route.
 - SR-281 is the reverse routing of SR-282. Both Routes will not be active at the same time.
 - Route is VMC only.
 - Conflicts:

Note: Pleasanton, Llano, and Laredo transitions are not included in the following deconfliction procedures.

 - CLINE conflicts with IR-170, IR-149, IR-123, VR-143 and SR-283/284.
 - IR-170 crosses between K and L, O and P.
 - IR-149 and IR-170 crosses at entry J.
 - Deconflict the entry of the route with IR-170/149 by remaining at 1500' AGL (approximately 3800' MSL) or 500' below the weather (whichever is lower) until passing the Whitehead Ranch (N29-55.0 W100-37.75).
 - At Hwy 189 between Points N and P (30-10.60 W101-02.50) climb and maintain 1500' AGL (approximately 3500' MSL) or 500' below the weather (whichever is lower). Maintain this altitude until route exit.
 - IR-123 is common with route segment from M to N.
 - VR-143 is common with route from M to N.
 - SR-283/284 is common with route segment from Q to R.
 - IR-169 crosses over top from N to O at 4000' MSL.
 - SR-283/284 share common scheduling activity. Call 301 OG/SUA, NAS JRB Fort Worth to deconflict IR-123 and VR-143; DSN 739-6903/6904/6905, C817-784-6903/6904/6905. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict. Call COMTRAWING TWO, NAS Kingsville to deconflict IR-149; DSN 876-6518/6108, C361-516-6518/6108. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict. Call 87 FTS/DOS, Laughlin AFB to deconflict IR-170/169; DSN 732-5484, C830-298-5484. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict.
 - SR-283/284 and SR-281/282 are to be deconflicted by scheduling for the route.
 - HUGHES conflicts with IR-170, IR-149, VR-1123, VR-156, and VR-168, the approach path for the RNAV (GPS) 31 at Carrizo Springs/Dimmit Co. (KCZT), and the CISKU

SR ROUTES

holding pattern for the RNAV (GPS) 13/31 at Cottulla/La Salle Co.

1. IR-149/IR-170 cross just beyond B and overlap from C to E.
 - a. On entry leg, deconflict IR-170/149 by maintaining 1500' AGL (approximately 2400' MSL) or 500' below the weather (whichever is lower) until Hwy 83 (N28-24.00 W099-40.5) between E and F.
 - b. On exit leg, deconflict IR-170/149 by initiating a climb to 4500' MSL at the mines between H and I. Be at or above 1500' AGL (approximately 3000' MSL) or 500' below the weather (whichever is lower) prior to passing.
2. VR-168 common and runs opposite from H to J.
3. VR-1123 overlaps midway from E and F to H.
4. VR-156 crosses at F.
5. VR-140 turns north abeam F and runs parallel to G.
6. Call 149th FW (TX ANG) Kelly AFB to deconflict VR-156 and VR-1123; DSN 945-5934, C210-925-5934. If F-16s are expected to be on either of these routes, alter entry times to deconflict.
7. Call COMTRAWING TWO, NAS Kingsville to deconflict VR-168 and determine arrival time of aircraft at the termination point of VR-168 abeam bridge (N29-04.0 W99-51.0) near Hughes Point H; DSN 876-6518/6283/6108, C361-516-6518/6283/6108.
8. Call 560 FTS Randolph AFB to deconflict VR-140; DSN 487-3518, C210-652-3518. 9. Make a position report to Carrizo Springs/Dimmit Co. CTAF (122.8) immediately passing E and NLT US Hwy 83 to deconflict the final approach for RNAV (GPS) 31, which crosses route centerline at 17 NM remaining to F. Make another position report to Cotulla/La Salle Co. CTAF (122.7) immediately passing F and NLT 21 NM remaining to G to deconflict the RNAV (GPS) 13/31 holding pattern at CISKU, which lies to the right of route centerline between 15 and 21 NM remaining to G.

(5) Communications:

- (a) Users must monitor 255.4 when on route.
- (b) All Entry/Alternate Entry and Exit/Alternate Exit Points are compulsory reporting points.
- (c) Contact San Antonio Approach (UHF) exiting at F2 or F4.
- (d) Contact Houston Center (UHF) exiting at E2, E3 or E4.
- (e) Contact Houston Center (UHF) exiting at J7.
- (f) Contact Del Rio Approach (UHF 263.125, Laughlin preset 10) exiting at H, I, J or R.

(6) Noise sensitive areas:

Avoid Overflight by 1300' AGL feet and 1 mile.

- (a) Batesville community between G and H.
- (b) Callaghan community between E2 and E3.
- (c) Moore community between F2 and F3.
- (d) Barksdale community between J and J1.
- (e) Vance community between J1 and J2.
- (f) Telegraph community between J3 and J4.
- (g) Hilda community between J4 and J5.
- (h) Loyal Valley community between J5 and J6.
- (i) Juno community between O and O1.

(7) Lost Communications:

- (a) In the event of lost communications use local procedures after established on filed Laughlin Radials.
- (b) The filing of lost communication altitude in the remarks section of the flight plan does not constitute ATC clearance to climb to that altitude. It is the altitude ATC will expect the pilot to climb to at the exit point if the

pilot exercises emergency authority after a radio failure has been confirmed.

SR-282

(SAN ANGELO) SJT

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd St., Ste. 6, Laughlin AFB, TX 78843-5222 DSN 732-5864/5337, C830-298-5864/5337.

SCHEDULING ACTIVITY: 85 FTS/DOS, 570 2nd St., Laughlin AFB, TX 78843-5220 DSN 732-5121/5429, C830-298-5121/5429. Scheduling hrs. 0730-1630 Mon-Fri (excl hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------|----|------------------------------|---------------------------|
| | A | | N29°35.70' W101°04.30' |
| | B | | N29°45.00' W101°08.20' |
| | C | | N29°58.00' W101°09.00' |
| | D | | N30°10.70' W101°01.00' |
| (Alternate Entry Point) | E | | N30°24.00' W100°56.50' |
| | F | | N30°24.30' W100°31.00' |
| | G | | N30°07.50' W100°41.70' |
| | H | | N29°48.70' W100°35.50' |
| | I | (Alternate Entry/Exit Point) | N29°29.80' W100°12.00' |
| | J | (Alternate Entry/Exit Point) | N29°14.70' W100°12.10' |
| | K | (Alternate Entry/Exit Point) | N29°05.80' W99°56.20' |
| | L | | N28°52.50' W99°36.00' |
| | M | | N28°32.00' W99°24.00' |
| | N | | N28°18.70' W99°57.70' |
| | O | | N28°37.30' W100°02.70' |
| | P | (Alternate Exit Point) | N28°53.00' W100°10.00' |
| | Q | | N28°57.50' W100°24.00' |
| | R | | N29°02.80' W100°36.30' |

(a) SAN ANGELO TRANSITION:

| | | |
|-------------------------------|----|---------------------------|
| (Alternate Entry Point) | D1 | N30°14.10' W101°15.30' |
| | D | N30°10.70' W101°01.00' |
| (b) LLANO TRANSITION: | | |
| (Alternate Entry Point) | I1 | N30°40.90' W98°29.00' |
| | I2 | N30°33.00' W98°42.30' |
| | I3 | N30°38.50' W99°05.90' |
| | I4 | N30°21.70' W99°23.70' |
| | I5 | N30°18.20' W99°54.50' |
| | I6 | N30°02.50' W99°50.30' |
| | I7 | N29°46.50' W100°04.70' |
| (Alternate Exit Point) | I | N29°29.80' W100°12.00' |
| (c) PLEASANTON TRANSITION: | | |
| (Alternate Entry Point) | M1 | N29°08.80' W98°35.50' |
| | M2 | N28°59.00' W98°51.50' |
| (Alternate Entry Point) | M3 | N29°01.40' W99°08.50' |
| | M4 | N28°49.20' W99°25.00' |
| | M | N28°32.00' W99°24.00' |
| (d) LAREDO TRANSITION: | | |
| (Alternate Entry Point) | N1 | N27°28.50' W99°09.50' |
| (Alternate Entry Point) | N2 | N27°39.80' W99°08.00' |
| (Alternate Entry Point) | N3 | N27°55.90' W99°23.30' |
| | N4 | N27°58.70' W99°40.50' |
| | N | N28°18.70' W99°57.70' |

ROUTE WIDTH - LOMA: 4 NM left and 3 NM right of centerline from (A) to (D), 4 NM either side of centerline from (D) to (H), 4 NM left and 2 NM right from (H) to (I), 4 NM left and 3 NM right from (I) to (J). DAVIS: 4 NM either side of centerline from (J) to (L), 3 NM left and 4 NM right from (L) to (M), 5 NM left and 2 NM right from (M) to (N), 4 NM either side of centerline from (N) to (O), 4 NM left and 3 NM right (O) to (P), 3 NM either side of centerline from (P) to (R).

- (a) SAN ANGELO TRANSITION - 4 NM either side of centerline from D-1 to D.
- (b) LLANO TRANSITION - 3 NM left and 2 NM right of centerline from I-1 to I-2, 3 NM left and 4 NM right from I-2 to I-3, 4 NM left and 3 NM right from I-3 to I-4, 4 NM either side of centerline from I-4 to I-6, 4 NM left and 3 NM right from I-6 to I.

- (c) PLEASANTON TRANSITION - 4 NM left and 3 NM right of centerline from M-1 to M-3, 4 NM either side of centerline from M-3 to M-4, 4 NM left and 3 NM right from M-4 to M.
- (d) LAREDO TRANSITION - 4 NM either side of centerline from N-1 to N-3, 4 NM left and 3 NM right from N-3 to N-4, 4 NM either side of N-4 to N.

Remarks:

- (1) Route:
 - (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
 - (b) This route is covered by the following maps and charts: San Antonio and Brownsville Sectionals, Low IFR Enroute L-19, L-20, TPC H-23B, H-23C.
 - (c) For deconfliction purposes, SR-282 is broken down into two separate routes: the northern route Loma A to I, and the southern route Davis J to R, utilizing the Alternate Entry/Exit Points. Transitions are allowed from DLF to destinations only (no reverse routing).
 - (d) Primary Entry Point: A.
 - (e) Alternate Entry Points: D1, E, I, I1, J, K, M1, M3, N1, N2 and N3.
 - (f) Primary Exit Point: R.
 - (g) Alternate Exit Points: I, J, K and P.
- (2) Scheduling:
 - (a) Request for weekend use shall be coordinated with the Scheduling Activity between 0730-1630 local Mon-Fri.
 - (b) Users must contact the Scheduling Activity to determine the daily status and bird activity status along the route.
 - (c) Aircraft shall be scheduled with minimum of 10 minutes separation.
 - (d) SR-282 is available utilizing the following schedule only:
 1. Monday: Not available
 2. Tuesday:
 - a. (A-I) LOMA
 - b. (J-R) DAVIS
 3. Wednesday: Not available
 4. Thursday :
 - a. (A-I) LOMA
 - b. (J-R) DAVIS
 5. Friday: Not available
 6. Active weekend routes shall be determined by the Scheduling Activity weekend Supervisor.
 - (e) Use of SAN ANGELO TRANSITION requires simultaneous scheduling of SR-284.
- (3) Restrictions:
 - (a) Due to environmental considerations, route is limited to T-6, T-37 and T-1 operations only.
 - (b) Aircraft unable to enter the route plus or minus three minute of their assigned entry time will not enter the route.
 - (c) SR-282 is the reverse routing of SR-281. Both routes will not be active at the same time.
 - (d) Route is VMC only.
- (4) Conflicts:

NOTE: Pleasanton, Llano, and Laredo transitions have not been included in these deconfliction procedures.

 - (a) LOMA conflicts with IR-170, IR-149, IR-123, VR143, and SR-283/284.
 1. IR-170 crosses at C and H.
 2. IR-149 crosses at I.
 - a. Deconflict by climbing and maintaining 1500' AGL (approximately 3500' MSL) or 500' below the

SR ROUTES

- weather (whichever is lower) from route entry until Hwy 189 (30-10.60 W101-02.50) between Points C and E.
- b. Aircraft will climb and maintain 1500' AGL (approximately 3800' MSL) or 500' below the weather (whichever is lower) at the Whitehead Ranch (N29-55.0 W100-37.75). Maintain this altitude until route exit.
3. IR-123 runs in opposite direction and is common with route segment from D to F.
 4. VR-143 runs opposite direction and is common with route segment from C to G.
 5. SR-283/284 is common with route segment from A to B.
 6. IR-169 crosses overhead at 4000 MSL from D to E.
 - Z. SR-283/284 share common Scheduling Activity. Call 301 OG/SUA, NAS JRB Fort Worth to deconflict IR-123 and VR-143; DSN 739-6903/6904/6905, C817-784-6903/6904/6905. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict. Call COMTRAWING TWO, NAS Kingsville to deconflict IR-149; DSN 876-6518/6283/6108, C361-516-6518/6283/6108. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict. Call 87 FTS/DOS, Laughlin AFB to deconflict IR-170/169; DSN 732-5484, C830-298-5484. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict.
- (b) SR-283/284. Aircrew are deconflicted with SR-281/282 when scheduled for the route.
 - (c) SR-283/284. Aircrew are deconflicted with SR281/282 when scheduling for the route. (C) DAVIS conflicts with IR-170, IR-149, VR-168, VR-156 and VR-1123, the CISKU holding pattern for the RNAV (GPS) 13/31 at Cotulla/La Salle Co., and the approach path for the RNAV (GPS) 31 at Carrizo Springs/Dimmit Co. (KCZT).
1. IR-149/IR-170 run opposite direction and cross just beyond P and common from N to Q.
 - a. On entry leg, deconflict IR-149/170 by maintaining 1500' AGL (approximately 3000' MSL) or 500' below the weather (whichever is lower) until passing the mines between J and K.
 - b. On exit leg, deconflict IR-149/IR-170 by climbing to and maintaining 1500' AGL (approximately 2400' MSL) or 500' below the weather (whichever is lower) at Hwy 83 (N28-24.00 W099-40.5) between M and N. Maintain this altitude until route exit.
 2. VR-168 is common from J to K.
 3. VR-1123 is common from K to midway between M and N.
 4. VR-156 crosses at M.
 5. VR-140 opposite and parallel from L to M.
 6. Call 149th FW (TX ANG) Kelly AFB to deconflict VR-156 and VR-1123; DSN 945-5934, C210-925-5934. If F-16s are expected to be on either of these routes, alter entry times to deconflict.
 - Z. Call COMTRAWING TWO, NAS Kingsville to deconflict VR-168 and determine arrival time of aircraft at the termination point of VR-168 abeam bridge (N29-04.0 W99-51.0) near Davis' Point K; DSN 876-6518/6283/6108, C361-516-6518/6283/6108.
 8. Call 560 FTS Randolph AFB to deconflict VR-140; DSN 487-3518, C210-652-3518. 9. Make a position report to Cotulla/La Salle Co. CTAF (122.7) after passing L and NLT 13 NM remaining to M to deconflict the RNAV (GPS) 13/31 holding pattern at CISKU, which lies to the left of route centerline between 8 and 2 NM remaining to M. Make another position report to Carrizo Springs/Dimmit Co. CTAF (122.8) after passing M between 26 and NLT 21 NM remaining to N to deconflict the RNAV (GPS) 31 final approach path, which crosses route centerline between 16 NM remaining to N.
- (5) Communications
 - (a) Users must monitor 255.4 when on route.
 - (b) All Entry/Alternate Entry and Exit/Alternate Exit Points are compulsory reporting Points.
 - (c) Contact Del Rio Approach (UHF 263.125, Laughlin Preset 10) exiting at I, J, K, P or R.
 - (6) Noise sensitive areas:

Avoid Overflight by 1300' AGL and 1 mile.

 - (a) Juno community between D1 and D.
 - (b) Loyal Valley community between I2 and I3.
 - (c) Hilda community between I3 and I4.
 - (d) Telegraph community between I4 and I5.
 - (e) Vance community between I6 and I7.
 - (f) Barksdale community between I7 and I.
 - (g) Moore community between M2 and M3.
 - (h) Callaghan community between N2 and N3.
 - (i) Batesville community between K and L.
 - (7) Lost Communications:
 - (a) In the event of lost communications use local procedures after established on filed Laughlin Radials.
 - (b) The filing of lost communication altitude in the remarks section of the flight plan does not constitute ATC clearance to climb to that altitude. It is the altitude ATC will expect the pilot to climb to at the exit point if the pilot exercises emergency authority after a radio failure has been confirmed.

SR-283

(SAN ANGELO) SJT

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd St., Ste 6, Laughlin AFB, TX 78843-5222 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 85 FTS/DOS, 570 2nd St., Laughlin AFB, TX 78843-5220 DSN 732-5121, C830-298-5121. Scheduling hrs. 0730-1630 Mon-Fri (excl'd hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------|----|--------------|---------------------------|
| | A | | N29°35.70' W101°04.30' |
| | B | | N29°45.00' W101°08.20' |
| | C | | N30°07.80' W101°34.30' |
| | D | | N30°14.10' W101°15.30' |
| (Alternate Entry Point) | E | | N30°24.00' W101°14.70' |
| | F | | N30°41.80' W101°28.70' |

| | |
|---|---------------------------|
| G | N30°52.50' W101°12.50' |
| H | N31°11.00' W100°53.90' |

SR-284**(SAN ANGELO) SJT**

ROUTE WIDTH - 4 NM left and 3 NM right of centerline from (A) to (B), 4 NM either side of centerline from (B) to (G), 3 NM left and 4 NM right from (G) to (H).

Remarks:

- (1) Route:
 - (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
 - (b) This route is covered by the following maps and charts: San Antonio Sectional, Low IFR Enroute L-19, TPC H-23B.
 - (c) Primary Entry Point: A.
 - (d) Primary Exit Point: D.
 - (e) Alternate Exit Point: H.
- (2) Scheduling
 - (a) Request for weekend use shall be coordinated with the Scheduling Activity between 0730-1630 local Mon-Fri.
 - (b) Users must contact the Scheduling Activity to determine the daily status and bird activity status along the route.
 - (c) Aircraft shall be scheduled with a minimum of 10 minutes separation.
- (3) Restrictions
 - (a) Due to environmental considerations, route is limited to T-6, T-37, and T-1 operations only.
 - (b) Aircraft unable to enter the route plus or minus 3 minute of their assigned entry time will not enter the route.
- (4) Conflicts:
 - (a) SR-281/282 are common from A to B.
 - (b) IR-123/ VR-143 cross between D to E, and between G to H.
 - (c) VR-186 crosses between G and H. Call 301 OG/SUA, NAS JRB Fort Worth to deconflict IR-123 and VR-143; DSN 739-6903/6904/6905, C817-784-6903/6904/6905. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict.
 - (d) IR-170 crosses between B and C. Call 87 FTS/DOS, Laughlin AFB to deconflict IR-170/169; DSN 732-5484, C830-298-5484.
 - (e) IR-169 overlaps from B to H. Call 87 FTS/DOS, Laughlin AFB to deconflict IR-169/170; DSN 732-5484, C830-298-5484. The following minimum deconfliction times will be used for entries on SR-283 and IR-169: (1) A T-6 may enter SR-283 NET 20 minutes after a T-38 enters IR-169 (2) A T-6 may enter SR-283 NET 30 minutes after a T-1 enters IR-169
- (5) Communications
 - (a) Users must monitor 255.4 when on route.
 - (b) All Entry/Alternate Entry and Exit/Alternate Exit Points are compulsory reporting points. Entry and exit calls are mandatory.
 - (c) Users will report on 255.4 C/S, approaching Pandale on SR-283 and C/S, approaching I-10 on SR-283 when two minutes out.
 - (d) Contact San Angelo Approach (UHF 354.1, VHF 125.35) upon exit at (H).
- (6) Noise sensitive areas: AVOID OVER-FLIGHT
 - (a) Pandale community between C and D.
 - (b) Comstock community between A and B.

ORIGINATING ACTIVITY: 47 OSS/OSOR, 570 2nd St., Ste. 6, Laughlin AFB, TX 78843-5222 DSN 732-5864, C830-298-5864.

SCHEDULING ACTIVITY: 85 FTS/DOS, 570 2nd St., Laughlin AFB, TX 78843-5220 DSN 732-5121, C830-298-5121. Scheduling hrs. 0730-1630 Mon-Fri (excl'd hol)

HOURS OF OPERATION: Close UFN

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------|----|--------------|---------------------------|
| | A | | N31°11.00' W100°53.90' |
| | B | | N30°52.50' W101°12.50' |
| | C | | N30°41.80' W101°28.70' |
| | D | | N30°24.00' W101°14.70' |
| (Alternate Exit Point) | E | | N30°14.10' W101°15.30' |
| | F | | N30°07.80' W101°34.30' |
| | G | | N29°45.00' W101°08.20' |
| | H | | N29°35.70' W101°04.30' |

ROUTE WIDTH - 4 NM left and 3 NM right of centerline from (A) to (B), 4 NM either side of centerline from (B) to (G), 3 NM left and 4 NM right from (G) to (H).

Remarks:

- (1) Route:
 - (a) Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
 - (b) This route is covered by the following maps and charts: San Antonio Sectional, Low IFR Enroute L-19, TPC
 - (c) Primary Entry Point: A.
 - (d) Primary Exit Point: H.
 - (e) Alternate Exit Point: E.
- (2) Scheduling
 - (a) Request for weekend use shall be coordinated with the Scheduling Activity between 0730-1630 local Mon-Fri.
 - (b) Users must contact the Scheduling Activity to determine the daily status and bird activity status along the route.
 - (c) Aircraft shall be scheduled with a minimum of 10 minutes separation.
- (3) Restrictions
 - (a) Due to environmental considerations, route is limited to T-6, T-37, and T-1 operations only.
 - (b) Aircraft unable to enter the route plus or minus 3 minute of their assigned entry time will not enter the route.
- (4) Conflicts:
 - (a) SR-281/282 are common from G to H.
 - (b) IR-123/ VR-143 cross between A to B, and between D to E.

SR ROUTES

- (c) VR-186 crosses between A and B, Call 301 OG/SUA, NAS JRB Fort Worth to deconflict IR-123, VR-186 and VR-143; DSN 739-6903/6904/6905, C817-782-6903/6904/6905. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict.
- (d) IR-170 crosses between F and G.
- (e) IR-169 overlaps between B and H. Call FTS/DOS, Laughin AFB to deconflict IR-169/170; DSN 732-5484, C830-289-5484. T-6 aircraft will not be on SR284 while a T-38 or T-1 is on IR-169.
- (5) Communications
 - (a) Users must monitor 255.4 when on route.
 - (b) All Entry/Alternate Entry and Exit/Alternate Exit Points are compulsory reporting points. Entry and exit calls are mandatory.
 - (c) Contact Del Rio Approach (UHF 263.125) upon exiting at H.
- (6) Noise sensitive areas:
 - AVOID OVER-FLIGHT
 - (a) Pandale community between E and F.
 - (b) Comstock community between G and H.

SR-286

(SAN ANGELO) SJT

ORIGINATING ACTIVITY: 12 OSS/OSOA, Randolph AFB, TX 78150-5000 DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 559 FTS, Randolph AFB, TX 78150 DSN 487-5661, C210-652-5661.

HOURS OF OPERATION: Sunrise-Sunset Daily, except holidays

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N30°30.00' W98°16.00' |
| at or above 05 AGL | B | | N30°51.00' W98°07.00' |
| at or above 05 AGL | C | | N30°57.00' W97°20.00' |
| at or above 05 AGL | D | | N30°36.00' W97°14.00' |
| at or above 05 AGL | E | | N30°15.00' W97°16.00' |
| at or above 05 AGL | F | | N30°06.00' W97°17.00' |

ROUTE WIDTH - 3 NM left and 5 NM right of centerline from (A) to (B), 2 NM left and 5 NM right of centerline from (B) to (C), 5 NM either side of centerline from (C) to (E), 2 NM left and 1 NM right of centerline from (E) to (F).

Remarks:

- (1) Call 559th FTS DSN 487-5661, C210-652-5661 Mon-Fri to schedule route.
- (2) Minimum altitude: 500' AGL.
- (3) Route Conflicts:

- (a) SR-286 and SR-290 overlay and are congruent from SR-286 Points D-F and SR-290 Points E-G. Additionally, SR-292 and SR-293 Exit Points are just south of SR286/290 Exit Points. To deconflict these routes call the 559 FTS, Randolph AFB, DSN 487-5661, C210-652-5661.
- (b) SR-286 between Points C-D cross VR-142 Points D-E (Exit Point). To deconflict, call the scheduler of VR-142 at 99 FTS, Randolph AFB, DSN 487-6746, C210-652-6746.
- (4) This route crosses VR-142 between point (C) and (D).
- (5) Use caution for aircraft exiting SR-292 and SR-293.
- (6) Aircrews will call turning south on 255.4 to de-conflict with traffic from SR-290.
- (7) Primary Exit Point: (F).
- (8) Alternate Exit Point: (E).
- (9) Point (A): SAT 004/52. Point (F): CWK 129/020.
- (10) CAUTION: Camp Swift parachute jumping area 1 NM west of (E).
- (11) Be alert for extensive VFR rotary wing activity south of the Fort Hood area.
- (12) CAUTION: be alert for extensive bird activity year-round.
- (13) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route. Pilots may schedule new entry time with GOAT ROPE OPS on 311.3 or TEXAN OPS on 148.42.
- (14) Be alert for extensive glider activity in the vicinity pf FLF Gliderport 9 NM east of (B), (2 NM southwest of Briggs, TX.).
- (15) CAUTION: Aviod Smithville airport parachute jumping area 7NM SE of Point F. Parachute activities occur within a 2NM radius of airport, surface to 10,500' MSL.

SR-287

(SAN ANGELO) SJT

ORIGINATING ACTIVITY: 12 OSS/OSOA, Randolph AFB, TX 78150-5000 DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 559 FTS, Randolph AFB, TX 78150 DSN 487-5661, C210-652-5661.

HOURS OF OPERATION: Sunrise-Sunset Daily, except holidays

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N29°07.50' W98°09.50' |
| at or above 05 AGL | B | | N28°53.50' W98°25.00' |
| at or above 05 AGL | C | | N28°35.50' W98°21.00' |
| at or above 05 AGL | D | | N28°45.50' W97°58.00' |
| at or above 05 AGL | E | | N28°48.00' W97°32.00' |
| at or above 05 AGL | F | | N29°00.00' W97°45.00' |
| at or above 05 AGL | G | | N29°14.00' W97°57.50' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Call 559th FTS DSN 487-5661, C210-652-5661 Mon-Fri to schedule Route.
- (2) Minimum altitude: 500' AGL.
- (3) T-37 and T-6 aircraft are the only authorized users of this route.
- (4) Comply with AFI 11-202 Vol 3 altitude minimums if overflying Floresville, Kenedy, and Stockdale.
- (5) Avoid flight within 1500' or 3 NM of chartered uncontrolled airports when practicable.
- (6) Route Conflicts:
 - (a) SR-287 between Points A-B is in very close proximity to the IR-148 Entry Point (A). And SR-287 between Points F-G crosses IR-148 between Points B-C. Additionally, SR-287 Point (C) is within VR-168 A-B corridor. To deconflict, call the scheduler of IR-148 and VR-168 at COMTRAWLING TWO, NAS Kingsville, DSN 876-6518, C361-516-6518.
 - (b) SR-287 between Points D-F twice crosses VR-1120 between Points B-C and VR-1121 between Points A-B. To deconflict, call scheduler of VR-1120 and VR-1121 at 149 FW, Kelly AFB, DSN 945-5934, C210-925-5934.
- (7) The overlying Randolph 1B MOA begins at 7000' MSL.
- (8) Point (A): RND 153/24, Point (G): RND 127/24.
- (9) CAUTION: Be alert for extensive bird activity year-round.
- (10) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route. Pilots may schedule new entry time with GOAT ROPE OPS on 311.3 or TEXAN OPS on 148.42.

SR-290

(SAN ANGELO) SJT

ORIGINATING ACTIVITY: 12 OSS/OSOA, Randolph AFB, TX 78150-5000 DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 559 FTS, Randolph AFB, TX 78150 DSN 487-5661, C210-652-5661.

HOURS OF OPERATION: Sunrise-Sunset Daily, except holidays

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N30°18.00' W96°57.00' |
| at or above 05 AGL | B | | N30°34.00' W96°45.00' |
| at or above 05 AGL | C | | N30°58.00' W96°45.00' |
| at or above 05 AGL | D | | N31°02.00' W97°09.00' |
| at or above 05 AGL | E | | N30°36.00' W97°14.00' |
| at or above 05 AGL | F | | N30°15.00' W97°16.00' |
| at or above 05 AGL | G | | N30°06.00' W97°17.00' |

ROUTE WIDTH - 5 NM left and 3 NM right of centerline from (A) to (B), 5 NM either side of centerline from (B) to (F), 2 NM left and 1 NM right of centerline from (F) to (G).

Remarks:

- (1) Call 559th FTS DSN 487-5661, C210-652-5661 Mon-Fri to schedule route.
- (2) Minimum altitude is 500' AGL.
- (3) Route Conflicts:
 - (a) SR-290 and SR-286 overlay and are cogruent from SR-290 Points E-G and SR-286 Points D-F. Additionally, SR-292 and SR-293 Exit Points are just south of SR-290/286 Exit Points. To deconflict these routes call the 559 FTS, Randolph AFB, DSN 487-5661, C210-652-5661.
 - (b) SR-286 between Points C-E twice cross VR-142 Points D-E (Exit Point). To deconflict, call the scheduler of VR-142 at 99 FTS, Randolph AFB, DSN 487-6746, C210-652-6746.
- (4) Aircrews will call turning south on 255.4 to de-conflict with traffic from SR-286.
- (5) Primary Exit Point: (G).
- (6) Alternate Exit Point: (F).
- (7) Point (A): IDU 308/29; Point (G): CWK 129/020.
- (8) CAUTION: Camp Swift parachute jumping area 1 NM West of (E).
- (9) CAUTION: Be alert for extensive VFR rotary wing activity south of the Fort Hood area.
- (10) CAUTION: Be alert for extensive bird activity year-round.
- (11) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route. Pilots may schedule new entry time with GOAT ROPE OPS on 311.3 or TEXAN OPS on 148.42.
- (12) CAUTION: Avoid Smithville airport parachute jumping area 7NM SE of Point G. Parachute activities occur within a 2NM radiud of airport, surface to 10,500' MSL.

SR-292

(SAN ANGELO) SJT

ORIGINATING ACTIVITY: 12 OSS/OSOA, Randolph AFB, TX 78150-5000 DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 559 FTS, Randolph AFB, TX 78150 DSN 487-5661, C210-652-5661.

HOURS OF OPERATION: Sunrise-Sunset daily except holidays

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N30°18.00' W96°57.00' |
| at or above 05 AGL | B | | N30°04.00' W96°42.00' |
| at or above 05 AGL | C | | N29°33.00' W96°55.00' |
| at or above 05 AGL | D | | N29°33.00' W97°18.00' |
| at or above 05 AGL | E | | N29°43.50' W97°16.70' |

SR ROUTES

| | | | | | |
|--------------------|---|--------------------------|--------------------|---|--------------------------|
| at or above 05 AGL | F | N30°00.80' W97°14.80' | at or above 05 AGL | E | N30°00.80' W97°14.80' |
| at or above 05 AGL | G | N30°15.00' W97°16.00' | at or above 05 AGL | F | N30°15.00' W97°16.00' |

ROUTE WIDTH - 5 NM left and 3 NM right of centerline from (A) to (B), 5 NM left and 2 NM right of centerline from (B) to (C), 5 NM either side of centerline for the remainder of the route.

Remarks:

- (1) Call 559th FTS DSN 487-5661, C210-652-5661 Mon-Fri to schedule route.
- (2) Minimum altitude: 500'AGL.
- (3) Route Conflicts:
 - (a) SR-292 and SR-293 overlay and are congruent from SR-292 Points E-F and SR-293 Points D-E. Additionally, SR-286 and SR-290 Exit Points are just north of SR-292/293 Exit Points. To deconflict these routes call the 559 FTS, Randolph AFB, DSN 487-5661, C210-652-5661.
 - (b) SR-292 between Points C-E twice crosses IR-148 Points D-F. To deconflict, call the scheduler of IR-148 at COMTRAWLING TWO, NAS Kingsville, DSN 876-6518, C361-516-6518.
- (4) Aircrews will call turning north on 255.4 to deconflict with traffic from SR-293.
- (5) Avoid flying over the Double D ranch between (E) and (F).
- (6) Point (A) IDU 308/029, Point (F) CWK 149/029.
- (7) CAUTION: Be alert for extensive bird activity year-round.
- (8) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route. Pilots may schedule new entry time with GOAT ROPE OPS on 311.3 or TEXAN OPS on 148.42.
- (9) CAUTION: Avoid Smithville airport parachute jumping area 4NM E of Point F. Parachute activities occur within a 2NM radius of airport, surface to 10,500' MSL.

SR-293

(SAN ANGELO) SJT

ORIGINATING ACTIVITY: 12 OSS/OSOA, Randolph AFB, TX 78150-5000 DSN 487-5580, C210-652-5580.

SCHEDULING ACTIVITY: 559 FTS, Randolph AFB, TX 78150 DSN 487-5661, C210-652-5661.

HOURS OF OPERATION: Sunrise- Sunset daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N29°58.50' W98°24.80' |
| at or above 05 AGL | B | | N29°57.00' W97°40.40' |
| at or above 05 AGL | C | | N29°34.00' W97°23.00' |
| at or above 05 AGL | D | | N29°43.50' W97°16.70' |

ROUTE WIDTH - 3 NM either side of centerline from (A) to (B), 5 NM either side of centerline for the remainder of the route.

Remarks:

- (1) Call 559th FTS DSN 487-5661, C210-652-5661 Mon-Fri to schedule route.
- (2) Minimum altitude: 500' AGL.
- (3) Route Conflicts:
 - (a) SR-293 and SR-292 overlay and are congruent from SR-293 Points D-E and SR-292 Points E-F. Additionally, SR-286 and SR-290 Exit Points. To deconflict these routes call the 559 FTS, Randolph AFB, DSN 487-5661, C210-652-5661.
 - (b) SR-293 between Points B-D twice crosses IR-148 Points C-E. To deconflict, call scheduler of IR-148 at COMTRAWLING TWO, NAS Kingsville, DSN 876-6518, C361-516-6518.
 - (c) SR-293 between Points A-B crosses Vr-1122 (Entry Point)/ VR-1123 (Exit Point). Additionally, SR-293 between Points B-C crosses VR1120 Points A-B and VR-1121 Points B-C. To deconflict, call the scheduler for VR-1121/1122/1123 at 149 FW, Kelly AFB, DSN 945-5934, C210-925-5934.
 - (d) SR-293 and SR-292 overlay and are congruent from SR-293 Points D-E and SR-292 Points E-F. Additionally, SR-286 and SR-290 Exit Points are just north of the SR-292/293 Exit Points. To deconflict these routes call the 559 FTS, Randolph AFB, DSN 487-5661, C210-652-5661.
- (4) Aircrews will call turning north on 255.4 to de-conflict with traffic from SR-292.
- (5) Use caution for aircraft exiting SR-286 and SR-290. The Exit Point for these routes is just North of the Exit Point for SR-293.
- (6) Due to environmental considerations SR-293 is limited to T37, T6A TEXAN II, T1A, and C130 operations only.
- (7) Avoid over-flight of the Double D ranch between (D) and (E).
- (8) Point (A): SAT 360/020, Point (E): CWX 149/029.
- (9) CAUTION: Be alert for extensive bird activity year-round.
- (10) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route. Pilots may schedule new entry time with GOAT ROPE OPS on 311.3 or TEXAN OPS on 148.42.
- (11) White Oak Airfield located at N30-12.5 W99-05.8 has turf runway. Do not cofuse with asphalt UAV airfield located at N30-13.1 W99-08.5 (approximately 3 NM prior to White Oak). These airfields are near course centerline between Points G and H.

SR-294

(OKLAHOMA CITY) OKC, GAG, HBR, SPS

ORIGINATING ACTIVITY: 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850 C580-213-7850.

SCHEDULING ACTIVITY: 8 FTS/DOO, Vance AFB, OK 73705-5202 DSN 448-6037 C580-213-6037.

HOURS OF OPERATION: Sunrise-Sunset**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| at or above 05 AGL | A | | N35°26.00' W98°07.00' |
| at or above 05 AGL | B | | N35°49.00' W98°25.00' |
| at or above 05 AGL (Alternate Entry Point) | C | | N36°03.00' W98°58.00' |
| at or above 05 AGL | D | | N35°33.00' W98°52.00' |
| at or above 05 AGL (Alternate Entry Point) | E | | N35°06.00' W98°44.00' |
| at or above 05 AGL (Alternate Entry Point) | F | | N34°58.00' W97°57.00' |
| at or above 05 AGL | G | | N34°51.00' W98°00.00' |
| at or above 05 AGL | H | | N34°39.00' W98°18.00' |
| at or above 05 AGL | I | | N34°36.00' W97°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.**Remarks:**

- Route conflicts with IR-145, IR-146, IR-171, IR-172, IR-181, IR-182 and VR-1140, VR-1128, VR-1137 along with SR-295 and SR-296. Aircrews are responsible for resolving conflicts. Reference Area Planning ap/1b Chart.
- Avoid flight within 1500' or 3 NM of airports when practicable.
- Alternate Entry Points: (C), (E) and (F).
- Contact Lawton-Ft Sill Approach on 120.55 or 322.4 at Point (H) for traffic advisories.

SR-295**(OKLAHOMA CITY)** OKC, GAG, HBR, SPS**ORIGINATING ACTIVITY:** 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850 C580-213-7850.**SCHEDULING ACTIVITY:** 8 FTS/DOO, Vance AFB, OK 73705-5202 DSN 448-6037 C580-213-6037.**HOURS OF OPERATION:** Sunrise-Sunset**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| at or above 05 AGL | A | | N35°26.00' W98°07.00' |
| at or above 05 AGL (Alternate Entry Point) | B | | N35°49.00' W98°25.00' |
| at or above 05 AGL | C | | N35°33.00' W98°52.00' |
| at or above 05 AGL (Alternate Entry Point) | D | | N35°06.00' W98°44.00' |
| at or above 05 AGL | E | | N35°08.00' W98°08.00' |

| | | | |
|--|---|--|--------------------------|
| at or above 05 AGL (Alternate Entry/Exit Point) | F | | N35°08.00' W97°40.00' |
| at or above 05 AGL | G | | N34°51.00' W98°00.00' |
| at or above 05 AGL | H | | N34°39.00' W98°18.00' |
| at or above 05 AGL | I | | N34°36.00' W97°58.00' |

ROUTE WIDTH - 5 NM either side of centerline.**Remarks:**

- Avoid flight within 1500' AGL or 3 NM of airports when practicable.
- Alternate Entry Points: (B), (D) and (F).
- Route conflicts with VR-1140, VR-163, VR-104 along with SR-295 and SR-296. Aircrews are responsible for resolving conflicts. Reference Area Planning AP/1B Chart.
- Monitor Chickasha CTAF 123.0 from points D to F. Announce position after crossing dam west of Chickasha. (Chickasha traffic, CALLSIGN, aircraft type and number, 5 miles west of Chickasha crossing at 1500' AGL eastbound SR-295.)
- Alternate Exit Point: (F).
- Contact Lawton-Ft Sill Approach on 120.55 or 322.4 at Point (H) for traffic advisories.

SR-296**(OKLAHOMA CITY)** OKC, GAG, HBR, SPS**ORIGINATING ACTIVITY:** 71 FTW/OSOP, Vance AFB, OK 73705-5202 DSN 448-7850 C580-213-7850.**SCHEDULING ACTIVITY:** 8 FTS/DOO, Vance AFB, OK 73705-5202 DSN 448-6037 C580-213-6037.**HOURS OF OPERATION:** Sunrise-Sunset**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| at or above 05 AGL | A | | N35°10.00' W97°36.00' |
| at or above 05 AGL (Alternate Entry Point) | AA | | N35°03.00' W97°22.70' |
| at or above 05 AGL | B | | N34°55.00' W97°03.00' |
| at or above 05 AGL (Alternate Entry Point) | C | | N34°31.00' W97°10.00' |
| at or above 05 AGL | D | | N34°27.00' W97°40.00' |
| at or above 05 AGL (Alternate Entry/Exit Point) | E | | N34°05.00' W98°11.00' |
| at or above 05 AGL | F | | N34°23.00' W98°20.00' |
| at or above 05 AGL | G | | N34°39.00' W98°18.00' |
| at or above 05 AGL | H | | N34°55.00' W97°49.00' |

SR ROUTES

ROUTE WIDTH - 5 NM either side of centerline

Remarks:

- (1) Avoid flight within 1500'AGL or 3 NM of airports when practicable.
- (2) Alternate Entry Points: (AA), (C) and (E).
- (3) Route conflicts with VR-1145, VR-1146, VR-1128, VR-1137, VR-1139, VR-163, VR-104, along with SR-295 and SR-296. Aircrews are responsible for resolving conflicts. Reference Area Planning AP/1B Chart.
- (4) Contact Lawton-Ft Sill Approach om 120.55 or 322.4 at Point (F) for traffic advisories.
- (5) Alternate Exit Point: (E).

| | |
|---|-------------|
| P | N41°02.00' |
| | W121°59.20' |
| Q | N41°01.00' |
| | W122°23.00' |
| R | N40°29.80' |
| | W122°56.90' |
| S | N39°53.20' |
| | W122°32.60' |
| T | N39°18.20' |
| | W122°29.50' |
| U | N39°04.10' |
| | W122°01.50' |

SR-300

(STOCKTON) SCK, RNO

ORIGINATING ACTIVITY: 60 OSS/OSO, 611 E. St., Travis AFB, CA 94535 DSN 837-1075, C707-424-1075.

SCHEDULING ACTIVITY: 60 OSS/OSO, 611 E. St., Travis AFB, CA 94535 DSN 837-5582, C707-424-5582.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------|----|--------------|-------------|
| | A | | N38°04.30' |
| | | | W121°00.20' |
| | B | | N38°32.00' |
| | | | W120°15.00' |
| | C | | N38°51.00' |
| | | | W119°44.00' |
| | D | | N38°51.00' |
| | | | W118°46.70' |
| | E | | N38°44.60' |
| (Alternate Entry/Exit Point) | | | W118°02.60' |
| | F | | N39°24.00' |
| | | | W117°18.20' |
| | G | | N40°01.00' |
| | | | W117°11.50' |
| | H | | N40°36.83' |
| | | | W117°20.00' |
| | I | | N40°26.67' |
| | | | W117°56.12' |
| | J | | N40°55.00' |
| (Alternate Entry/Exit Point) | | | W118°37.00' |
| | K | | N41°19.00' |
| | | | W118°48.00' |
| | L | | N42°12.00' |
| | | | W119°32.00' |
| | M | | N42°31.00' |
| | | | W120°15.00' |
| | N | | N41°50.30' |
| | | | W120°57.00' |
| | O | | N41°16.80' |
| | | | W121°13.80' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Points (A)-(Q) altitudes will be 05 AGL B for all C130 night operations and as published for Helicopter operations.
- (2) Overflight of all towns will be avoided to the extent possible. If unavoidable, the requirements of AFR 60-16 will apply.
- (3) Avoid flight within 1500' or 3 NM of charted/uncontrolled airports when practical.
- (4) See and avoid applies during all operations.
- (5) Aircrews are responsible for resolving route conflicts with the following routes and agencies: IR-203, 207, Lemoore NAS (DSN 949-3631), IR-264, 275, 280, 281, 282, 60 AMW Travis AFB (DSN 837-1075), IR-271, SM-ALC Ft Test, Mc Clellan AFB (DSN 633-6435), IR-300, HQ SAC/DONA, Offutt AFB (DSN 271-2334), VR-201, 202, 1250, 1251, 1252, 1254, 1255, 1259, 1260, 1261, Lemoore NAS (DSN 949-3631), VR-1352, 1353, Whidbey Island (DSN 271-2877), Austin 1, Gabbs South MOAs, Fallon NAS (DSN 830-2426).
- (6) Scheduling aircrew must provide conflict point crossing times to within 3 minutes to the agencies listed above.
- (7) Route is designed for MARSAs operations established by coordinated scheduling.
- (8) Schedule thru 60 AMW/AOT, seven days prior to date being requested.
- (9) Warning: Chart Update Manual (CHUM) data used to construct navigational charts does not address vertical construction data below 200' AGL. Aircrews flying this route will report their observations to Scheduling Activity if new developments or cultural changes are apparent which will affect safety of flight on this route.
- (10) Terrain Following Operations -
 - (a) Day/night VFR terrain following (TF)/contour operations are authorized IAW command directives within published block altitudes and authorized maneuvering areas.
 - (b) Segment altitude provides 1500' AGL clearance above the highest obstacle within 5 NM of centerline.
 - (c) The entire route will be designated mountainous terrain.
 - (d) The route has been flight checked by HC130 to a 5 NM lateral limit from course centerline.
- (11) Altitude Data: (A) to (B) 03 AGL B 76 MSL, (B) to (C) 03 AGL B 119 MSL, (C) to (D) 03 AGL B 107 MSL, (D) to (E) 03 AGL B 90 MSL, (E) to (F) 03 AGL B 119 MSL, (F) to (G) 03 AGL B 97 MSL, (G) to (H) 03 AGL B 101 MSL, (H) to (I) 03 AGL B 79 MSL, (I) to (J) 03 AGL B 77 MSL, (J) to (K) 03 AGL B 77 MSL, (K) to (L) 03 AGL B 104 MSL, (L) to (N) 03 AGL B 93 MSL, (N) to (O) 10 AGL B 77 MSL, (O) to (P) 03 AGL B 79 MSL, (P) to (Q) 03 AGL B 85 MSL, (Q) to (R) 05 AGL B 85 MSL, (R) to (S) 03 AGL B 83 MSL, (S) to (T) 03 AGL B 55 MSL, (T) to (U) 03 AGL B 40 MSL.
- (12) Points (L)-(M), stay 1 NM left of centerline for bird sanctuary.

SR-301**(MARYSVILLE)** ILS, RNO**ORIGINATING ACTIVITY:** 60 OSS/OSO, 611 E. St., Travis AFB, CA 94535 DSN 837-1075, C707-424-1075.**SCHEDULING ACTIVITY:** 60 OSS/OSO, 611 E. St., Travis AFB, CA 94535 DSN 837-5582, C707-424-5582.**HOURS OF OPERATION:** Continuous**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------|----|--------------|---------------------------|
| | A | | N39°04.10' W122°01.40' |
| | B | | N39°18.20' W122°29.50' |
| | C | | N39°53.20' W122°32.60' |
| | D | | N40°29.80' W122°56.90' |
| | E | | N41°01.00' W122°23.00' |
| | F | | N41°02.00' W121°59.20' |
| | G | | N41°16.80' W121°13.80' |
| | H | | N41°50.30' W120°57.00' |
| | I | | N42°31.00' W120°15.00' |
| | J | | N42°12.00' W119°32.00' |
| | K | | N41°19.00' W118°48.00' |
| (Alternate Entry/Exit Point) | L | | N40°55.00' W118°37.00' |
| | M | | N40°26.67' W117°56.12' |
| | N | | N40°36.83' W117°20.00' |
| | O | | N40°01.00' W117°11.50' |
| | P | | N39°24.00' W117°18.20' |
| (Alternate Entry/Exit Point) | Q | | N38°44.43' W118°02.60' |
| | R | | N38°51.00' W118°46.70' |
| | S | | N38°51.00' W119°44.00' |
| | T | | N38°32.00' W120°15.00' |
| | U | | N38°04.30' W121°00.20' |

TERRAIN FOLLOWING OPERATIONS: Day/night VFR terrain following (TF)/contour operations are authorized IAW command directives within published block altitudes and

authorized maneuvering areas. Segment altitude provides 1500' AGL clearance above the highest obstacle within 5 NM of centerline. The entire route will be designated mountainous terrain. The route has been flight checked by HC130 to a 5 NM lateral limit from course centerline.

ROUTE WIDTH - 5 NM either side of centerline.**Remarks:**

- (1) Points (F)-(U) altitudes will be 05 AGL B for all C130 night operations and as published for helicopter operations.
- (2) Over-flight of all towing will be avoided to the extent possible. If unavoidable the requirement of AFI 11-202 Vol 3 will apply.
- (3) Avoid flight within 1500' or 3 NM of charted/uncontrolled airports when practical.
- (4) See and avoid applies during all operations.
- (5) Aircrews are responsible for resolving route conflicts with the following routes and agencies: IR-203, 207, Lemoore NAS (DSN 949-3631), IR-264, 275, 280, 281, 282, 60 AMW Travis AFB (DSN 837-1075), IR-271, SM-ALC Flt Test, Mc Clellan AFB (DSN 633-6435), IR-300, HQ SAC/DONA, Offutt AFB (DSN 271-2334), VR-201, 202, 1250, 1251, 1252, 1254, 1255, 1259, 1260, 1261, Lemoore NAS (DSN 949-3631), VR-1352, 1353, Whidbey Island (DSN 271-2877), Austin 1, Gabbs South MOAs, Fallon NAS (DSN 830-2426).
- (6) Scheduling aircrew must provide conflict point crossing times to within 3 minutes to the agencies listed in (5) above.
- (7) Route is designed for MARSAs operations established by coordinated scheduling.
- (8) Schedule thru 60 AMW/AOT seven days prior date requested.
- (9) WARNING; Chart Update Manual (CHUM) data used to construct navigational charts does not address vertical construction data below 200' AGL. Aircrews flying this route will report their observations to Scheduling Activity if new developments or cultural changes are apparent which will affect safety of flight on this route.
- (10) Points (I)-(J) stay 1 NM right of centerline for bird sanctuary.
- (11) Altitude data: (A) to (B) 10 AGL B 40 MSL, (B) to (C) 10 AGL B 55 MSL, (C) to (D) 05 AGL B 83 MSL, (D) to (F) 03 AGL B 85 MSL, (F) to (G) 03 AGL B 79 MSL, (G) to (H) 03 AGL B 77 MSL, (H) to (J) 03 AGL B 93 MSL, (J) to (K) 10 AGL B 104 MSL, (K) to (L) 03 AGL B 77 MSL, (L) to (M) 03 AGL B 114 MSL, (M) to (N) 03 AGL B 104 MSL, (N) to (O) 03 AGL B 95 MSL, (O) to (P) 03 AGL B 97 MSL, (P) to (Q) 03 AGL B 119 MSL, (Q) to (R) 03 AGL B 90 MSL, (R) to (S) 03 AGL B 107 MSL, (S) to (T) 03 AGL B 119 MSL, (T) to (U) 03 AGL B 76 MSL.

SR-311**(SACRAMENTO)** SAC**ORIGINATING ACTIVITY:** 129 RQW/DOW, PO Box 103, Stop 14, Moffett Federal Afd, CA 94035-5000 DSN 359-9356/7, C650-603-9356/7.**SCHEDULING ACTIVITY:** Same as Originating Activity**HOURS OF OPERATION:** Continuous

SR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------|----|--------------|---------------------------|
| | A | | N39°45.50' W120°05.00' |
| (Alternate Entry/Exit Point) | | | |
| | B | | N39°36.00' W120°06.00' |
| (Alternate Entry/Exit Point) | | | |
| | C | | N39°29.00' W120°25.00' |
| (Alternate Entry/Exit Point) | | | |
| | D | | N39°06.50' W120°28.00' |
| (Alternate Entry/Exit Point) | | | |
| | E | | N38°54.00' W120°36.00' |
| (Alternate Entry/Exit Point) | | | |
| | F | | N38°39.00' W120°07.00' |
| (Alternate Entry/Exit Point) | | | |
| | G | | N38°32.00' W120°15.00' |
| (Alternate Entry/Exit Point) | | | |
| | H | | N38°33.50' W120°43.00' |
| (Alternate Entry/Exit Point) | | | |
| | I | | N38°25.00' W121°12.00' |
| (Alternate Entry/Exit Point) | | | |

TERRAIN FOLLOWING OPERATIONS: This route will be used to qualify C141/C5 crews in modified contour (300'-1000' AGL) flight operations. All operations will be conducted in VMC under Visual Flight Rules. Operations will be primarily conducted during daylight hours with a limited number of night flights. Aircraft will operate using random check point/navigation procedures, but will remain within 3 NM of route (as published) centerline. All routes will be flight checked by both C141/C5 aircraft prior to commencement of routine flight operations. This route and SR-359 share the same checkpoints. SR-311 begins at SR-359 end-points and ends at SR-359 start-point.

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:

- (1) Helicopter altitude data; (A) to (G) 100'-1500' AGL, (G) to (I) 1000'-1500' AGL (avoid N38-32-30 W121-22-30 by 2 NM).
- (2) Over-flight of all towns will be avoided to the maximum extent possible. If unavoidable, AFI 11-206 avoidance criteria will apply.
- (3) Avoid charted/uncontrolled airports by 3 NM or 1500' AGL.
- (4) Seven days advance notice required for use of this route.

SR-353

(MARYSVILLE) ILA

ORIGINATING ACTIVITY: 129 RQW/DOW, PO Box 103, Stop 14, Moffett Federal Afd, CA 94035-5000 DSN 359-9356/7, C650-603-9356/7.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------|----|--------------|---------------------------|
| | A | | N39°05.10' W122°09.30' |
| | AA | | N39°05.00' W122°24.50' |
| | B | | N39°04.90' W122°32.20' |
| (Alternate Entry/Exit Point) | | | |
| | C | | N39°08.90' W122°43.50' |
| (Alternate Entry/Exit Point) | | | |
| | D | | N39°28.50' W123°09.00' |
| (Alternate Entry/Exit Point) | | | |
| | E | | N39°32.80' W123°45.90' |
| (Alternate Entry/Exit Point) | | | |
| | F | | N39°27.20' W123°31.90' |
| | G | | N39°13.80' W123°27.80' |

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:

- (1) Avoid Lake Pillsbury by 3 NM due to hang gliding and bald eagle nesting area.
- (2) HC130 must execute right turn to fly to (F) to remain clear of Ft. Bragg.
- (3) Route is designated for MARSAs operations established by coordinated scheduling.
- (4) During hours of darkness only HH53 aircraft will be scheduled on route.
- (5) During daylight hours route will be used only by HC130, HH53, and CH/HH3's.
- (6) A 3 NM arc extends around (E).
- (7) Alternate Entry/Exit Points: (C), (D), and (E).
- (8) See and avoid applies during VMC operations.
- (9) Altitude data: (A) to (C) 500'-1500' AGL, (C) to (G) 50'-1500' AGL.

SR-359

(SACRAMENTO) SAC

ORIGINATING ACTIVITY: 129 RQW/DOW, PO Box 103, Stop 14, Moffett Federal Afd, CA 94035-5000 DSN 359-9356/7, C650-603-9356/7.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------|----|--------------|---------------------------|
| (Alternate Entry/Exit Point) | A | | N38°25.00' W121°12.00' |
| (Alternate Entry/Exit Point) | B | | N38°34.00' W120°43.00' |
| (Alternate Entry/Exit Point) | C | | N38°32.00' W120°15.00' |
| (Alternate Entry/Exit Point) | D | | N38°39.00' W120°07.00' |
| (Alternate Entry/Exit Point) | E | | N38°54.00' W120°36.00' |
| (Alternate Entry/Exit Point) | F | | N39°06.00' W120°28.00' |
| (Alternate Entry/Exit Point) | G | | N39°29.00' W120°25.00' |
| (Alternate Entry/Exit Point) | H | | N39°36.00' W120°06.00' |
| | I | | N39°45.00' W120°04.50' |

TERRAIN FOLLOWING OPERATIONS: This route will be used to qualify C141/C5 crews in modified contour (300'-1000' AGL) flight operations. All operations will be conducted in VMC under Visual Flight Rules. Operations will be primarily conducted during daylight hours with a limited number of night flights. Aircraft will operate using random check point/navigation procedures, but will remain within 3 NM of route (as published) centerline. All routes will be flight checked by both C141/C5 aircraft prior to commencement of routine flight operations. SR-359 begins at SR-311 end-point and ends at SR-311 start-point.

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:

- (1) Helicopter altitude data: (A) to (C) 1000'-1500' AGL, (C) to (I) 100'-1500' AGL (avoid N38-32-30 W122-22-30 by 2 NM).
- (2) Over-flight of all towns will be avoided to the maximum extent possible. If unavoidable, AFI 11-206 avoidance criteria will apply.
- (3) Avoid charted/uncontrolled airports by 3 NM or 1500' AGL.
- (4) Seven days advance notice required for use of this route.

SR-381

(RENO) RNO

ORIGINATING ACTIVITY: 129 RQW/DOW, PO Box 103, Stop 14, Moffett Federal Afd, CA 94035-5000 DSN 359-9356/7, C650-603-9356/7.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------|----|--------------|---------------------------|
| | A | | N38°39.00' W120°09.00' |
| | B | | N38°51.00' W119°44.00' |
| | C | | N38°54.00' W119°20.00' |
| (Alternate Entry/Exit Point) | D | | N39°03.00' W118°51.00' |
| | E | | N39°13.00' W118°50.00' |
| | F | | N39°18.00' W118°36.00' |
| | G | | N39°30.00' W118°23.00' |
| (Alternate Entry/Exit Point) | H | | N39°38.00' W118°21.00' |
| | I | | N39°42.00' W118°59.00' |

ROUTE WIDTH - 3 NM either side of centerline from (A) to (C), 3 NM left and 6 NM right of centerline from (C) to (D), 3 NM either side of centerline from (D) to (I).

Remarks:

- (1) Weather minimums: 1000' ceiling and 3 miles visibility.
- (2) Terrain masking/following authorized only on Sarex Ranges.
- (3) Maneuvering of flight and ground attack simulations on 100' routes authorized.
- (4) Schedule Ranges thru NSAWC Range Schedule Office DSN 890-2416/2418 C775-426-2416/2418 and prior to reserving SR-381.
- (5) Schedule Ranges thru Fallon NAS range control office DSN 830-2416/2418/2426 fourteen days prior to arrival at Fallon and prior to reserving SR-381.
- (6) Alternate Entry/Exit Points: (D) and (H) for Sarex Area only.
- (7) Altitude data: (A) to (B) 300'-1500' AGL, (B) to (C) 50'-1500' AGL, (C) to (D) 500'-1500' AGL, (D) to (I) 50'-1500' AGL, see notes 8 and 9.
- (8) Deviate 3 NM south of centerline between (C) and (D) to avoid Yerington Wildlife Refuge.
- (9) CAUTION: 80' AGL powerlines between (E) and (F), minimum altitude 300' AGL until passing powerlines.
- (10) Contact Fallon Approach Control 263.6 126.2 at Point Echo to de-conflict flight through the Fallon NAS Control Zone.

SR-390

(LANCASTER) WJF

ORIGINATING ACTIVITY: 146 AW/DOXT (ANG), 106 Mulcahey Dr., Port Hueneme, CA 93041-4003 DSN 893-7590/7577.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

SR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N34°57.00' W118°18.00' |
| | B | | N35°07.00' W118°12.00' |
| | C | | N35°24.00' W117°48.00' |
| | D | | N34°59.00' W117°29.00' |
| | E | | N34°49.00' W117°50.00' |
| | F | | N34°49.00' W118°03.00' |

Re-Entry: Aircraft scheduled for additional drops shall after passing (F) turn left and maintain 4000' MSL to N34-46 W117-53 then turn left and continue via published route.

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Units desiring to use this route are requested to contact the Originating Activity for deconfliction.

SR-397

(BLYTHE) BLH, YUM

ORIGINATING ACTIVITY: 146 AW/DOXT (ANG), 106 Mulcahey Dr., Port Hueneme, CA 93041-4003 DSN 893-7590/7577.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N34°06.00' W114°55.00' |
| | B | | N34°07.00' W114°31.00' |
| | C | | N33°59.00' W114°13.00' |
| | D | | N33°25.00' W114°39.00' |
| | E | | N33°01.00' W114°37.00' |
| | F | | N32°55.00' W114°23.00' |

Re-Entry: Aircraft scheduled for additional drops shall after passing (F) turn right and maintain 2200' MSL to N32-56 W114-30 then turn right and continue via published route.

ROUTE WIDTH - 5 NM either side of centerline from (A) to (D), 3 NM either side of centerline from (D) to (F).

Remarks:

- (1) Units desiring to use this route are requested to contact the Originating Activity for de-confliction.
- (2) High volume of rotary wing and fixed wing traffic SFC-1000' AGL between (D) and (F) throughout the entire year.

SR-398

(UKIAH)

ORIGINATING ACTIVITY: 129 RQW/DOW, PO Box 103, Stop 14, Moffett Federal Afd, CA 94035-5000 DSN 359-9356/7, C650-603-9356/7.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|------------------------------|----|--------------|---------------------------|
| | A | | N38°53.00' W122°58.00' |
| | B | | N38°59.00' W123°14.00' |
| (Alternate Entry/Exit Point) | C | | N38°46.00' W123°06.00' |
| | D | | N38°31.00' W123°07.00' |

TERRAIN FOLLOWING OPERATIONS: TA/TFR and Terrain masking authorized on segments that are 300' AGL and above (from Point B to D) IAW command directives.

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:

- (1) Deconfliction will be coordinated scheduling in the Military Airspace Management System (MASMS). Aircraft utilizing this MTR shall meet their scheduled entry, exit and each point on the route by +/-2.5 minutes to ensure the mandatory separation time of 10 minutes. If unable, the aircraft shall contact the scheduling authority to cancel their intended entry and reschedule.
- (2) Alternate Entry/Exit: (B)
- (3) Altitude Data: (A) to (B) 1000'-1500' AGL; (B) to (D) 300'-1500' AGL. All lower altitudes are raised up to 500' AGL for nighttime operations.
- (4) Manual route deconfliction: IR-207 from H to J conflicts with this route from C to D and at Point A. IR-207 is not a MASMS, subsequently you are not deconflicted. Contact the Strike Fighter Wing at Lemoore NAS DSN 949-1034 to deconflict.
- (5) CAUTION: Uncharted obstacles/obstructions: N38-53.0 W123-09.0, Power lines, left of centerline between (B) to (C).

SR-488**(SEATTLE)** SEA

ORIGINATING ACTIVITY: 62 OSS/OSO, McChord AFB, WA 98438-1109 DSN 382-9925, C253-982-9925. During non-duty hours, ctc McChord Command Post DSN 382-2635, C253-982-2635.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N46°31.00' W122°35.00' |
| | B | | N46°49.00' W122°29.00' |
| | C | | N47°01.00' W122°28.00' |

Re-Entry: Aircraft will, after passing the target area, turn right to N47-01 W122-22, then continue on to N46-49 W122-23, then turn right to Intercept (B), then via the published route.

ROUTE WIDTH - 5 NM either side of centerline.

Remarks: Units desiring use of this route will contact Originating Activity.

SR-489**(SEATTLE)** SEA

ORIGINATING ACTIVITY: 62 OSS/OSO, McChord AFB, WA 98438-1109 DSN 382-9925, C253-982-9925. During non-duty hours, ctc McChord Command Post DSN 382-2635, C253-982-2635.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N46°33.00' W122°50.00' |
| | B | | N46°55.00' W122°42.00' |

Re-Entry: Aircraft will, after passing the target area, turn left to N46-56 W122-48, then continue on to N46-35 W122-53, then turn left to intercept (A), then via the published route.

ROUTE WIDTH - 5 NM either side of centerline.

Remarks: Units desiring use of this route will contact Originating Activity.

SR-616**(KANSAS CITY)** MKC, DSM

ORIGINATING ACTIVITY: 139 Airlift Wg., 705 Memorial Drive, St. Joseph, MO 64503-9307 DSN 356-3225/3470.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0500Z++ daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 03 AGL B 15 AGL to | A | | N39°46.00' W94°34.00' |
| 03 AGL B 15 AGL to | B | | N39°34.00' W94°00.00' |
| 03 AGL B 15 AGL to | C | | N39°55.00' W93°57.00' |
| 03 AGL B 15 AGL to | D | | N40°27.00' W94°24.00' |
| 03 AGL B 15 AGL to | E | | N40°03.00' W94°50.00' |
| 03 AGL B 15 AGL to | F | | N39°46.00' W94°55.00' |
| 03 AGL B 15 AGL to | G | | N39°36.00' W95°03.00' |

ROUTE WIDTH - 3 NM either side of centerline.

Remarks: Altitude data: 300' AGL to 1500' AGL.

SR-617**(KANSAS CITY)** MKC, DSM

ORIGINATING ACTIVITY: 139 Airlift Wg., 705 Memorial Drive, St. Joseph, MO 64503-9307 DSN 356-3225/3470.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0500Z++ daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 03 AGL B 15 AGL to | A | | N39°46.00' W94°34.00' |
| 03 AGL B 15 AGL to | B | | N39°53.00' W94°06.00' |
| 03 AGL B 15 AGL to | C | | N40°14.00' W93°36.00' |
| 03 AGL B 15 AGL to | D | | N40°22.00' W94°00.00' |
| 03 AGL B 15 AGL to | E | | N40°08.00' W94°21.00' |

SR ROUTES

| | | |
|--------------------|---|--------------------------|
| 03 AGL B 15 AGL to | F | N40°03.00' W94°50.00' |
| 03 AGL B 15 AGL to | G | N39°46.00' W94°55.00' |
| 03 AGL B 15 AGL to | H | N39°36.00' W95°03.00' |

| | | |
|--------------------|---|--------------------------|
| 03 AGL B 15 AGL to | B | N39°50.00' W95°46.00' |
| 03 AGL B 15 AGL to | C | N39°44.00' W96°19.00' |
| 03 AGL B 15 AGL to | D | N39°33.00' W95°45.00' |
| 03 AGL B 15 AGL to | E | N39°20.00' W95°20.00' |
| 03 AGL B 15 AGL to | F | N39°30.00' W95°01.00' |
| 03 AGL B 15 AGL to | G | N39°46.00' W94°55.00' |

ROUTE WIDTH - 3 NM either side of centerline.

Remarks: Altitude data: 300' AGL to 1500' AGL.

SR-618

(KANSAS CITY) MKC, MHK

ORIGINATING ACTIVITY: 139 Airlift Wg., 705 Memorial Drive, St. Joseph, MO 64503-9307 DSN 356-3225/3470.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0500Z++ daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 03 AGL B 15 AGL to | A | | N39°46.00' W95°15.00' |
| 03 AGL B 15 AGL to | B | | N39°46.00' W96°02.00' |
| 03 AGL B 15 AGL to | C | | N39°30.00' W96°09.00' |
| 03 AGL B 15 AGL to | D | | N39°17.00' W95°27.00' |
| 03 AGL B 15 AGL to | E | | N39°30.00' W95°01.00' |
| 03 AGL B 15 AGL to | F | | N39°46.00' W94°55.00' |

ROUTE WIDTH - 3 NM either side of centerline from (A) to (D), 2 NM either side of centerline from (D) to (E), 3 NM either side of centerline from (E) to (F).

Remarks: Altitude data: 300' AGL to 1500' AGL.

SR-619

(KANSAS CITY) MKC, MHK

ORIGINATING ACTIVITY: 139 Airlift Wg., 705 Memorial Drive, St. Joseph, MO 64503-9307 DSN 356-3225/3470.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0500Z++ daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| 03 AGL B 15 AGL to | A | | N39°46.00' W95°15.00' |

ROUTE WIDTH - 2 NM either side of centerline from (A) to (C), 3 NM either side of centerline from (C) to (G).

Remarks: Altitude data: 300' AGL to 1500' AGL.

SR-701

(DETROIT) DET, MBS

ORIGINATING ACTIVITY: 191 AG, Selfridge ANGB, MI 48045 DSN 273-4498/4441, C810-463-3664.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1600-0400Z++ Tue-Sat, 1600-2200Z++ Sun

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N42°49.00' W83°09.00' |
| | B | | N43°25.00' W83°15.00' |
| | C | | N43°56.00' W83°11.00' |
| | D | | N43°49.00' W82°45.00' |
| | E | | N43°25.00' W82°58.00' |
| | F | | N43°08.00' W82°54.00' |
| | G | | N42°41.00' W82°31.00' |
| | H | | N42°36.00' W82°50.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude: 500' AGL (A) to (B); 300' AGL (B) to (F); 500' AGL (F) to (H).
- (2) Entry Point: MTC TACAN 317/19.
- (3) Exit Point: MTC TACAN 173/0.8.

SR-702

(DETROIT) DET, MBS

ORIGINATING ACTIVITY: 191 AG, Selfridge ANGB, MI 48045 DSN 273-4498/4441, C810-463-3664.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1600-0400Z++ Tue-Sat, 1600-2200Z++ Sun

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N42°53.00' W83°11.00' |
| | B | | N43°14.00' W83°13.00' |
| | C | | N43°36.00' W83°21.00' |
| | D | | N43°53.00' W83°16.00' |
| | E | | N43°54.00' W82°54.00' |
| | F | | N43°27.00' W83°04.00' |
| | G | | N43°02.00' W82°46.00' |
| | H | | N42°40.00' W82°38.00' |
| | I | | N42°36.00' W82°50.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude: 500' AGL (A) to (B); 300' AGL (B) to (G); 500' AGL (G) to (I).
- (2) Entry Point: MTC TACAN 324/23.
- (3) Exit Point: MTC TACAN 173/0.8.

SR-703

(DETROIT) DET, MBS

ORIGINATING ACTIVITY: 191 AG, Selfridge ANGB, MI 48045 DSN 273-4498/4441, C810-463-3664.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1600-0400Z++ Tue-Sat, 1600-2200Z++ Sun

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N42°49.00' W83°09.00' |
| at or above 05 AGL | B | | N43°06.00' W83°09.00' |

| | | | |
|--------------------|---|--|--------------------------|
| at or above 05 AGL | C | | N43°08.00' W82°54.00' |
| at or above 05 AGL | D | | N42°41.00' W82°31.00' |
| at or above 05 AGL | E | | N42°36.00' W82°50.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude: 500' AGL.
- (2) Entry Point: MTC TACAN 317/19
- (3) Exit Point: MTC TACAN 173/0.8.

SR-707

(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm Airport, OH 44903-0179 DSN 696-6165.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | | N40°28.00' W82°43.00' |
| 05 AGL B 15 AGL to | B | | N40°32.00' W82°18.00' |
| 05 AGL B 15 AGL to | C | | N40°21.00' W82°05.00' |
| 05 AGL B 15 AGL to | D | | N40°26.00' W81°12.00' |
| 05 AGL B 15 AGL to | E | | N40°35.00' W81°37.00' |
| 05 AGL B 15 AGL to | F | | N40°48.00' W82°01.00' |
| 05 AGL B 15 AGL to | G | | N40°51.00' W82°18.00' |
| 05 AGL B 15 AGL to | H | | N40°50.00' W82°32.00' |

ROUTE WIDTH - 3 NM either side of centerline.

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-708

(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm Airport, OH 44903-0179 DSN 696-6165.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

SR ROUTES

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | | N40°28.00' W82°43.00' |
| 05 AGL B 15 AGL to | B | | N40°29.00' W83°19.00' |
| 05 AGL B 15 AGL to | C | | N41°05.00' W82°52.00' |
| 05 AGL B 15 AGL to | D | | N41°25.00' W83°08.00' |
| 05 AGL B 15 AGL to | E | | N41°36.00' W82°50.00' |
| 05 AGL B 15 AGL to | F | | N41°23.00' W82°28.00' |
| 05 AGL B 15 AGL to | G | | N41°02.00' W82°33.00' |
| 05 AGL B 15 AGL to | H | | N40°50.00' W82°32.00' |

ROUTE WIDTH - 2 NM either side of centerline except the route width is reduced to 1 NM either side of centerline between (D) and (E).

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-709

(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm Airport, OH 44903-0179 DSN 696-6165.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | | N40°41.00' W83°01.00' |
| 05 AGL B 15 AGL to | B | | N40°42.00' W83°28.00' |
| 05 AGL B 15 AGL to | C | | N41°15.00' W83°30.00' |
| 05 AGL B 15 AGL to | D | | N40°58.00' W82°41.00' |
| 05 AGL B 15 AGL to | E | | N40°50.00' W82°32.00' |

ROUTE WIDTH - 2 NM either side of centerline.

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-710

(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm Airport, OH 44903-0179 DSN 696-6165.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | | N40°28.00' W82°43.00' |
| 05 AGL B 15 AGL to | B | | N40°32.00' W82°18.00' |
| 05 AGL B 15 AGL to | C | | N40°21.00' W82°05.00' |
| 05 AGL B 15 AGL to | D | | N40°33.00' W81°47.00' |
| 05 AGL B 15 AGL to | E | | N40°48.00' W82°01.00' |
| 05 AGL B 15 AGL to | F | | N41°02.00' W82°03.00' |
| 05 AGL B 15 AGL to | G | | N40°57.00' W82°22.00' |
| 05 AGL B 15 AGL to | H | | N40°50.00' W82°32.00' |

ROUTE WIDTH - 3 NM either side of centerline.

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-711

(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm Airport, OH 44903-0179 DSN 696-6165.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | | N40°28.00' W82°43.00' |
| 05 AGL B 15 AGL to | B | | N40°29.00' W83°19.00' |
| 05 AGL B 15 AGL to | C | | N40°02.00' W83°39.00' |
| 05 AGL B 15 AGL to | D | | N39°39.00' W83°32.00' |
| 05 AGL B 15 AGL to | E | | N39°37.00' W83°08.00' |
| 05 AGL B 15 AGL to | F | | N39°48.00' W82°56.00' |

ROUTE WIDTH - 2 NM either side of centerline.

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-712

(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm Airport, OH 44903-0179 DSN 696-6165.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | | N40°41.00' W83°01.00' |
| 05 AGL B 15 AGL to | B | | N40°43.00' W83°23.00' |
| 05 AGL B 15 AGL to | C | | N41°15.00' W83°30.00' |
| 05 AGL B 15 AGL to | D | | N41°36.00' W82°50.00' |
| 05 AGL B 15 AGL to | E | | N41°23.00' W82°28.00' |
| 05 AGL B 15 AGL to | F | | N41°02.00' W82°33.00' |
| 05 AGL B 15 AGL to | G | | N40°50.00' W82°32.00' |

ROUTE WIDTH - 2 NM either side of centerline except the route width is reduced to 1 NM either side of centerline between (C) and (D).

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-713

(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm Airport, OH 44903-0179 DSN 696-6165.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | | N40°28.00' W82°43.00' |
| 05 AGL B 15 AGL to | B | | N40°32.00' W82°18.00' |
| 05 AGL B 15 AGL to | C | | N40°21.00' W82°05.00' |
| 05 AGL B 15 AGL to | D | | N41°02.00' W82°03.00' |
| 05 AGL B 15 AGL to | E | | N41°11.00' W82°25.00' |

05 AGL B 15 AGL to F

N41°02.00'
W82°33.00'

05 AGL B 15 AGL to G

N40°50.00'
W82°32.00'

ROUTE WIDTH - 3 NM either side of centerline.

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-714

(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm Airport, OH 44903-0179 DSN 696-6165.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | | N40°28.00' W82°43.00' |
| 05 AGL B 15 AGL to | B | | N40°32.00' W82°18.00' |
| 05 AGL B 15 AGL to | C | | N40°21.00' W82°05.00' |
| 05 AGL B 15 AGL to | D | | N40°12.00' W82°15.00' |
| 05 AGL B 15 AGL to | E | | N40°09.00' W82°32.00' |
| 05 AGL B 15 AGL to | F | | N39°56.00' W82°41.00' |
| 05 AGL B 15 AGL to | G | | N39°48.00' W82°56.00' |

ROUTE WIDTH - 2 NM either side of centerline.

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-715

(COLUMBUS)

ORIGINATING ACTIVITY: 179 AW, Mansfield Lahm Airport, OH 44903-0179 DSN 696-6165.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| As assigned to | A | | N40°41.00' W83°01.00' |
| 05 AGL B 15 AGL to | B | | N40°42.00' W83°23.00' |

SR ROUTES

| | | |
|--------------------|---|--------------------------|
| 05 AGL B 15 AGL to | C | N40°42.00' W83°51.00' |
| 05 AGL B 15 AGL to | D | N41°02.00' W84°05.00' |
| 05 AGL B 15 AGL to | E | N41°18.00' W83°50.00' |
| 05 AGL B 15 AGL to | F | N41°18.00' W83°28.00' |
| 05 AGL B 15 AGL to | G | N40°58.00' W82°41.00' |
| 05 AGL B 15 AGL to | H | N40°50.00' W82°32.00' |

ROUTE WIDTH - 2 NM either side of centerline except the route width is reduced to 1 NM either side of centerline between (C) and (D).

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-727

(MINNEAPOLIS) MSP, RWF

ORIGINATING ACTIVITY: 133AW, Minneapolis-St. Paul Intl, MN 55111, DSN 783-2488, C612-713-2488.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: IAW 133AW lcl sched, ctc 109AS/DOK DSN 783-2488 or 109AS/DOS DSN 783-2459

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N44°58.00' W92°45.00' |
| | B | | N45°08.00' W92°17.00' |
| | C | | N45°23.00' W92°10.00' |
| | D | | N45°31.00' W93°14.00' |
| | E | | N45°24.00' W94°00.00' |
| | F | | N45°07.00' W94°11.00' |
| | G | | N44°53.00' W94°35.00' |
| | H | | N44°41.00' W94°14.00' |
| | I | | N44°40.00' W93°41.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks: Units desiring use of this route are requested to contact Originating Activity.

SR-728

(MINNEAPOLIS) MSP, RST, RWF

ORIGINATING ACTIVITY: 133AW, Minneapolis-St. Paul Intl, MN 55111, DSN 783-2488, C612-713-2488.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: IAW 133AW lcl sched, ctc 109AS/DOK DSN 783-2488 or 109AS/DOS DSN 783-2459

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N44°29.00' W93°26.00' |
| | B | | N44°03.00' W93°42.00' |
| | C | | N43°46.00' W93°56.00' |
| | D | | N43°59.00' W94°55.00' |
| | E | | N44°40.00' W94°43.00' |
| | F | | N44°41.00' W94°14.00' |
| | G | | N44°40.00' W93°41.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks: Units desiring use of this route are requested to contact Originating Activity.

SR-729

(MINNEAPOLIS) MSP, RST, RWF

ORIGINATING ACTIVITY: 133AW, Minneapolis-St. Paul Intl, MN 55111, DSN 783-2488, C612-713-2488.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: IAW 133AW lcl sched, ctc 109AS/DOK DSN 783-2488 or 109AS/DOS DSN 783-2459

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N44°29.00' W93°26.00' |
| | B | | N44°03.00' W93°42.00' |
| | C | | N44°14.00' W94°34.00' |
| | D | | N44°26.00' W94°48.00' |

| | |
|---|--------------------------|
| E | N44°40.00' W94°43.00' |
| F | N44°41.00' W94°14.00' |
| G | N44°40.00' W93°41.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks: Units desiring use of this route are requested to contact Originating Activity.

SR-730

(MINNEAPOLIS) MSP, RWF

ORIGINATING ACTIVITY: 133AW, Minneapolis-St. Paul Intl, MN 55111, DSN 783-2488, C612-713-2488.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: IAW 133AW lcl sched, ctc 109AS/DOK DSN 783-2488 or 109AS/DOS DSN 783-2459

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N44°54.00' W93°44.00' |
| | B | | N45°28.00' W93°35.00' |
| | C | | N45°24.00' W94°00.00' |
| | D | | N45°07.00' W94°11.00' |
| | E | | N44°53.00' W94°35.00' |
| | F | | N44°41.00' W94°14.00' |
| | G | | N44°40.00' W93°41.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks: Units desiring use of this route are requested to contact Originating Activity.

SR-731

(MINNEAPOLIS) MSP, RWF

ORIGINATING ACTIVITY: 133AW, Minneapolis-St. Paul Intl, MN 55111, DSN 783-2488, C612-713-2488.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: IAW 133AW lcl sched, ctc 109AS/DOK DSN 783-2488 or 109AS/DOS DSN 783-2459

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N44°54.00' W93°44.00' |
| | B | | N45°07.00' W94°11.00' |
| | C | | N44°53.00' W94°35.00' |
| | D | | N44°41.00' W94°14.00' |
| | E | | N44°40.00' W93°41.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks: Units desiring use of this route are requested to contact Originating Activity.

SR-771

(MILWAUKEE) MKE

ORIGINATING ACTIVITY: 440 AW/DOO, General Mitchell IAP, Milwaukee, WI 53207, DSN 741-5155/5157, FAX DSN 741-5161, (C414-482-XXXX).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 2200-0330Z++ Tue-Fri; 1500-2200Z++ Sat-Sun

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N43°04.00' W89°05.00' |
| | B | | N42°52.00' W89°34.00' |
| | C | | N43°09.00' W89°46.00' |
| | D | | N43°04.00' W90°23.00' |
| | E | | N43°28.00' W91°02.00' |
| | F | | N43°50.00' W90°58.00' |
| | G | | N43°58.00' W90°40.00' |
| | H | | N43°43.00' W90°09.00' |
| | I | | N43°37.00' W89°18.00' |
| | J | | N43°25.00' W89°00.00' |
| | K | | N43°01.00' W88°42.00' |

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B), 5 NM either side of centerline from (B) to (C), 4 NM right and 5 NM left of centerline from (C) to (D), 5 NM either side of centerline from (D) to (G), 4 NM left and 5 NM right of centerline from (G) to (H), 5 NM either side of centerline from (H) to (K).

SR ROUTES

Remarks:

- (1) Minimum altitude: 3000' MSL (A) thru (B), 500' AGL (B) thru (D), 300' AGL (D) thru (I), 3000' MSL (I) thru (K).
- (2) Entry Point: Dells VORTAC 130/042.
- (3) Alternate Entry Point: Nodine VORTAC 081/035.
- (4) Exit Point: Badger VORTAC 250/19.
- (5) Alternate Exit Points: Dells VORTAC 077/020; Nodine VORTAC 081/035.

SR-776

(LA CROSSE)

ORIGINATING ACTIVITY: 440 AW/DOO, General Mitchell IAP, Milwaukee, WI 53207, DSN 741-5155/5157, FAX DSN 741-5161, (C414-482-XXXX).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 2000-0400Z++ Tue-Fri;
1600-2200Z++ Sat-Sun

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---|----|--------------|--------------------------|
| at or above 05 AGL | A | | N43°58.00' W90°39.00' |
| at or above 05 AGL (Alternate Entry Point) | B | | N43°46.00' W90°16.00' |
| at or above 05 AGL | C | | N43°09.00' W89°52.00' |
| at or above 05 AGL | D | | N43°02.00' W90°23.00' |
| at or above 05 AGL | E | | N43°27.00' W90°57.00' |
| at or above 05 AGL | F | | N43°50.00' W90°58.00' |
| at or above 05 AGL | G | | N43°58.00' W90°39.00' |

ROUTE WIDTH - 4 NM left and 5 NM right of centerline from (A) to (B), 5 NM either side of centerline from (B) to (C), 2 NM right and 5 NM left of centerline from (C) to (D), 5 NM either side of centerline from (D) to (E), 1 NM left and 5 NM right of centerline from (E) to (F), 5 NM either side of centerline from (F) to (G).

Remarks:

- (1) Minimum altitude: 300' AGL (A) thru (C), 500' AGL (C) thru (D), 300' AGL (D) thru (G).
- (2) Entry/Exit Points: Nodine VORTAC 081/035.

SR-781

(LANSING) LAN

ORIGINATING ACTIVITY: Alpena CRTC/OTM (ANG), 5884 A Street, Alpena MI 49707-8125 DSN 741-3509/3226 C800-292-6583.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N45°01.00' W83°47.00' |
| at or above 05 AGL | B | | N45°04.00' W84°40.00' |
| at or above 05 AGL | C | | N45°31.00' W84°38.00' |
| at or above 05 AGL | D | | N45°24.00' W84°05.00' |
| at or above 05 AGL | E | | N45°12.00' W83°45.00' |
| at or above 05 AGL | F | | N45°05.00' W83°33.00' |

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:

- (1) Minimum altitude: 500' AGL.
- (2) For traffic de-confliction information with VR-1624, VR-1625, VR-1627 and VR-1628, contact 127 WG/OG Selfridge ANGB, MI.

SR-782

(LANSING) LAN

ORIGINATING ACTIVITY: Alpena CRTC/OTM (ANG), 5884 A Street, Alpena MI 49707-8125 DSN 741-3509/3226 C800-292-6583.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N45°03.00' W83°14.00' |
| at or above 05 AGL | B | | N44°42.00' W83°16.00' |
| at or above 05 AGL | C | | N44°49.00' W84°03.00' |
| at or above 05 AGL | D | | N45°08.00' W84°39.00' |
| at or above 05 AGL | E | | N45°29.00' W84°08.00' |
| at or above 05 AGL | F | | N45°12.00' W83°45.00' |
| at or above 05 AGL | G | | N45°05.00' W83°33.00' |

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:

- (1) Minimum altitude: 500' AGL.

(2) For traffic de-confliction information with VR-1624, VR-1625, VR-1627 and VR-1628, contact 127 WG/OG, Selfridge ANGB, MI.

SR-785

(LA CROSSE) LSE

ORIGINATING ACTIVITY: 440 AW/DOO, General Mitchell IAP, Milwaukee, WI 53207, DSN 741-5155/5157, FAX DSN 741-5161, (C414-482-XXXX).

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 2000-0400Z++ Tue-Fri;
1600-2200Z++ Sat-Sun

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N43°56.00' W90°15.00' |
| at or above 05 AGL | B | | N44°20.00' W90°35.00' |
| at or above 05 AGL | C | | N44°32.00' W89°59.00' |
| at or above 05 AGL | D | | N44°23.00' W89°24.00' |
| at or above 05 AGL | E | | N44°04.00' W89°25.00' |
| at or above 05 AGL | F | | N43°55.00' W89°45.00' |
| at or above 05 AGL | G | | N43°56.00' W90°15.00' |

ROUTE WIDTH - 5 NM either side of centerline from (A) to (C), 4 NM either side of centerline from (C) to (D), 5 NM either side of centerline from (D) to (E), 2 NM right and 5 NM left of centerline from (E) to (G).

Remarks:

- (1) Minimum altitude: 300' AGL.
- (2) Entry/Exit Point: Volk TACAN.

SR-800

(NORTH PHILADELPHIA) PNE, MIV

ORIGINATING ACTIVITY: 166 OSF/OSK, 2805 Spruance Drive, New Castle 19720-1615 DSN 445-7554 C302-323-3554.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-2300 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N39°49.00' W75°58.00' |
| at or above 05 AGL | B | | N39°27.00' W75°52.00' |

| | | | |
|-------------------------|---|--|--------------------------|
| at or above 05 AGL | C | | N39°12.00' W75°02.00' |
| (Alternate Entry Point) | D | | N39°38.00' W74°42.00' |
| at or above 05 AGL | E | | N39°30.00' W74°18.00' |
| at or above 05 AGL | F | | N39°42.00' W74°11.00' |
| at or above 05 AGL | G | | N39°49.00' W74°25.00' |
| at or above 05 AGL | H | | N39°45.00' W74°44.00' |

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B), 3 NM either side of centerline from (B) to (C), 2 NM either side of centerline from (C) to (D), 3 NM either side of centerline from (D) to (E), 0 NM left and 5 NM right of centerline from (E) to (F), 5 NM either side of centerline from (F) to (H).

Remarks:

- (1) Minimum altitude: 500' AGL.
- (2) Entry Point: Modena VORTAC 255/15.
- (3) Alternate Entry Points: (C) N39-12 W75-02, (D) N39-38 W74-42.
- (4) (D) to (E): Do not over-fly southern tip of Long Beach Island, bird nesting area.
- (5) (E) to (F): All aircraft will remain a minimum of 1 NM east of Long Beach Island.
- (6) (F) to (G): Minimum altitude 1200' MSL turboprop (2000' MSL turbojet). Aircraft will be established prior to crossing island. Maintain altitude until 5 NM prior to (G).
- (7) Overflying Surf City, NJ (N39-39.65 W74-10.20) prohibited (Congressional).

SR-801

(NORTH PHILADELPHIA) PNE, MIV

ORIGINATING ACTIVITY: 166 OSF/OSK, 2805 Spruance Drive, New Castle 19720-1615 DSN 445-7554 C302-323-3554.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-2300 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N39°49.00' W75°58.00' |
| at or above 05 AGL | B | | N39°27.00' W75°52.00' |
| at or above 05 AGL | C | | N38°57.00' W76°05.00' |
| at or above 05 AGL | D | | N38°50.00' W75°19.00' |
| at or above 05 AGL | E | | N39°12.00' W75°02.00' |
| at or above 05 AGL | F | | N39°38.00' W74°42.00' |
| (Alternate Entry Point) | G | | N39°30.00' W74°18.00' |
| at or above 05 AGL | G | | N39°30.00' W74°18.00' |

SR ROUTES

| | | |
|--------------------|---|--------------------------|
| at or above 05 AGL | H | N39°42.00' W74°11.00' |
| at or above 05 AGL | I | N39°49.00' W74°25.00' |
| at or above 05 AGL | J | N39°45.00' W74°44.00' |

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B), 5 NM either side of centerline from (B) to (E), 2 NM either side of centerline from (E) to (F), 3 NM either side of centerline from (F) to (G), 0 NM left and 5 NM right of centerline from (G) to (H), 5 NM either side of centerline from (H) to (J).

Remarks:

- (1) Minimum altitude: 500' AGL.
- (2) Entry Point: Modena VORTAC 255/15.
- (3) Alternate Entry Point: (F) N39-38 W74-42.
- (4) (F) to (G): Do not over-fly southern tip of Long Beach Island, bird nesting area.
- (5) (G) to (H): All aircraft will remain a minimum of 1 NM east of Long Beach Island.
- (6) (H) to (I): Minimum altitude 1200' MSL turboprop (2000' MSL turbojet). Aircraft will be established prior to crossing island. Maintain altitude until 5 NM prior to (I).
- (7) Overflying Surf City, NJ (N39-39.65 W74-10.20) prohibited (Congressional).
- (8) All aircraft must remain north of the road out of (C).

SR-802

(MARTINSBURG) MRB, EKN, DCA, CHO

ORIGINATING ACTIVITY: 167 AW, Eastern West Virginia Regional, Martinsburg, WV 25401 DSN 242-5250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N39°33.00' W78°08.00' |
| at or above 05 AGL | B | | N39°17.00' W78°33.00' |
| at or above 05 AGL | C | | N39°06.00' W78°35.00' |
| at or above 05 AGL | D | | N39°01.00' W78°19.00' |
| at or above 05 AGL | E | | N39°05.00' W78°05.00' |
| at or above 05 AGL | F | | N39°11.00' W78°04.00' |
| at or above 05 AGL | G | | N39°24.00' W78°00.00' |

ROUTE WIDTH - 3 NM either side of centerline from (A) to (D), 1 NM either side of centerline from (D) to (G).

Remarks:

- (1) Radio contact with Martinsburg tower is mandatory prior to entering the control zone.
- (2) Minimum altitude: 500' AGL.
- (3) Entry Point: Martinsburg VORTAC 313/16.
- (4) Exit Point: Martinsburg VORTAC 283/7.

SR-803

(MARTINSBURG) MRB, EKN, DCA, CHO

ORIGINATING ACTIVITY: 167 AW, Eastern West Virginia Regional, Martinsburg, WV 25401 DSN 242-5250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N39°33.00' W78°08.00' |
| at or above 05 AGL | B | | N39°32.00' W78°37.00' |
| at or above 05 AGL | C | | N39°01.00' W78°19.00' |
| at or above 05 AGL | D | | N39°05.00' W78°05.00' |
| at or above 05 AGL | E | | N39°11.00' W78°04.00' |
| at or above 05 AGL | F | | N39°24.00' W78°00.00' |

ROUTE WIDTH - 3 NM either side of centerline from (A) to (C), 1 NM either side of centerline from (C) to (F).

Remarks:

- (1) Radio contact with Martinsburg tower is mandatory prior to entering the control zone.
- (2) Minimum altitude: 500' AGL.
- (3) Entry Point: Martinsburg VORTAC 313/16.
- (4) Exit Point: Martinsburg VORTAC 283/7.

SR-804

(MARTINSBURG) MRB, EKN, DCA, CHO

ORIGINATING ACTIVITY: 167 AW, Eastern West Virginia Regional, Martinsburg, WV 25401 DSN 242-5250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N39°33.00' W78°08.00' |

| | | |
|--------------------|---|--------------------------|
| at or above 05 AGL | B | N39°33.00' W78°27.00' |
| at or above 05 AGL | C | N39°21.00' W78°46.00' |
| at or above 05 AGL | D | N39°06.00' W78°35.00' |
| at or above 05 AGL | E | N39°01.00' W78°19.00' |
| at or above 05 AGL | F | N39°05.00' W78°05.00' |
| at or above 05 AGL | G | N39°11.00' W78°04.00' |
| at or above 05 AGL | H | N39°24.00' W78°00.00' |

ROUTE WIDTH - 3 NM either side of centerline from (A) to (E), 1 NM either side of centerline from (E) to (H).

Remarks:

- (1) Radio contact with Martinsburg tower is mandatory prior to entering the control zone.
- (2) Minimum altitude: 500' AGL.
- (3) Entry Point: Martinsburg VORTAC 313/16.
- (4) Exit Point: Martinsburg VORTAC 283/7.

SR-805

(NORTH PHILADELPHIA) PNE, MIV

ORIGINATING ACTIVITY: 166 OSF/OSK, 2805 Spruance Drive, New Castle 19720-1615 DSN 445-7554 C302-323-3554.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-2300 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|-------------------------|----|--------------|--------------------------|
| | A | | N39°49.00' W75°58.00' |
| | B | | N39°27.00' W75°52.00' |
| (Alternate Entry Point) | C | | N39°21.00' W75°22.00' |
| | D | | N39°12.00' W75°02.00' |
| (Alternate Entry Point) | E | | N39°38.00' W74°42.00' |
| | F | | N39°30.00' W74°18.00' |
| | G | | N39°42.00' W74°11.00' |
| | H | | N39°49.00' W74°25.00' |
| | I | | N39°45.00' W74°44.00' |

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B), 3 NM either side of centerline from (B) to (D), 2 NM either side of centerline from (D) to (E), 3 NM either side of centerline

from (E) to (F), 0 NM left and 5 NM right of centerline from (F) to (G), 5 NM either side of centerline from (G) to (I).

Remarks:

- (1) Minimum altitude: 500' AGL (A) to (B); 300' AGL (B) to (E); 500' AGL (E) to (I).
- (2) Entry Point: Modine VORTAC 255/15.
- (3) Alternate Entry Points: (C) N39-21 W75-22; (D) N39-38 W74-42.
- (4) (E) to (F): Do not over-fly southern tip of Long Beach Island, bird nesting area.
- (5) (F) to (G): All aircraft will remain a minimum of 1 NM east of Long Beach Island.
- (6) (G) to (H): Minimum altitude 1200' MSL turboprop (2000' MSL turbojet). Aircraft will be established prior to crossing island. Maintain altitude until 5 NM prior to (H).
- (7) Overflying Surf City, NJ (N39-39.65 W74-10.20) prohibited (Congressional).

SR-806

(MARTINSBURG) MRB, AOO, HAR, MGW, EKN, DCA, CHO

ORIGINATING ACTIVITY: 167 AW, Eastern West Virginia Regional, Martinsburg, WV 25401 DSN 242-5250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N39°33.00' W78°08.00' |
| at or above 05 AGL | B | | N39°52.00' W77°58.00' |
| at or above 05 AGL | C | | N39°32.00' W78°37.00' |
| at or above 05 AGL | D | | N39°01.00' W78°19.00' |
| at or above 05 AGL | E | | N39°05.00' W78°05.00' |
| at or above 05 AGL | F | | N39°11.00' W78°04.00' |
| at or above 05 AGL | G | | N39°24.00' W78°00.00' |

ROUTE WIDTH - 1 NM either side of centerline from (A) to (B), 3 NM either side of centerline from (B) to (D), 1 NM either side of centerline from (D) to (G).

Remarks:

- (1) Radio contact with Martinsburg tower is mandatory prior to entering the control zone.
- (2) Minimum altitude: 500' AGL.
- (3) Entry Point: Martinsburg VORTAC 313/16.
- (4) Exit Point: Martinsburg VORTAC 283/7.

SR ROUTES

SR-807

(MARTINSBURG) MRB, AOO, HAR, MGW, EKN, DCA, CHO

ORIGINATING ACTIVITY: 167 AW, Eastern West Virginia Regional, Martinsburg, WV 25401 DSN 242-5250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N39°33.00' W78°06.00' |
| at or above 05 AGL | B | | N39°52.00' W77°58.00' |
| at or above 05 AGL | C | | N40°03.00' W78°22.00' |
| at or above 05 AGL | D | | N39°42.00' W78°39.00' |
| at or above 05 AGL | E | | N39°01.00' W78°19.00' |
| at or above 05 AGL | F | | N39°05.00' W78°05.00' |
| at or above 05 AGL | G | | N39°11.00' W78°04.00' |
| at or above 05 AGL | H | | N39°24.00' W78°00.00' |

ROUTE WIDTH - 1 NM either side of centerline from (A) to (B), 3 NM either side of centerline from (B) to (E), 1 NM either side of centerline from (E) to (H).

Remarks:

- (1) Radio contact with Martinsburg tower is mandatory prior to entering the control zone.
- (2) Minimum altitude: 500' AGL.
- (3) Entry Point: Martinsburg VORTAC 313/16.
- (4) Exit Point: Martinsburg VORTAC 283/7.

SR-808

(MARTINSBURG) MRB, AOO, HAR, MGW, EKN, DCA, CHO

ORIGINATING ACTIVITY: 167 AW, Eastern West Virginia Regional, Martinsburg, WV 25401 DSN 242-5250.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N39°33.00' W78°08.00' |
| at or above 05 AGL | B | | N39°52.00' W77°58.00' |

| | | |
|--------------------|---|--------------------------|
| at or above 05 AGL | C | N39°59.00' W78°15.00' |
| at or above 05 AGL | D | N39°41.00' W78°58.00' |
| at or above 05 AGL | E | N39°23.00' W79°11.00' |
| at or above 05 AGL | F | N39°01.00' W78°19.00' |
| at or above 05 AGL | G | N39°05.00' W78°05.00' |
| at or above 05 AGL | H | N39°11.00' W78°04.00' |
| at or above 05 AGL | I | N39°24.00' W78°00.00' |

ROUTE WIDTH - 1 NM either side of centerline from (A) to (B), 3 NM either side of centerline from (B) to (F), 1 NM either side of centerline from (F) to (I).

Remarks:

- (1) Radio contact with Martinsburg tower is mandatory prior to entering the control zone.
- (2) Minimum altitude: 500' AGL.
- (3) Entry Point: Martinsburg VORTAC 313/16.
- (4) Exit Point: Martinsburg VORTAC 283/7.

SR-820

(WASHINGTON) DCA, SBY, CHO

ORIGINATING ACTIVITY: 166 OSF/OSK, 2805 Spruance Drive, New Castle 19720-1615 DSN 445-7554 C302-323-3554.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0900-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N38°30.00' W77°02.00' |
| | B | | N38°08.00' W77°30.00' |
| | C | | N38°20.00' W77°47.00' |
| | D | | N38°04.00' W78°11.00' |
| | E | | N37°47.00' W77°53.00' |
| | F | | N37°50.00' W77°22.00' |
| | G | | N38°04.00' W77°20.00' |
| | H | | N38°10.00' W77°22.00' |

ROUTE WIDTH - 2 NM right side of centerline from (A) to (B), 1 NM either side of centerline from (B) to (H);

Remarks:

- (1) Entry Point: Andrews VORTAC 211/19.
- (2) Exit Point: Brooke VORTAC 193/11.
- (3) Minimum altitude: Day 300' AGL (A) to (C); 500' AGL (C) to (D); 300' AGL (D) to (H); night 1000' AGL.

SR-821

(WASHINGTON) DCA, SBY, CHO

ORIGINATING ACTIVITY: 166 OSF/OSK, 2805 Spruance Drive, New Castle 19720-1615 DSN 445-7554 C302-323-3554.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0900-2300 local daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N38°30.00' W77°02.00' |
| | B | | N38°08.00' W77°30.00' |
| | C | | N38°16.00' W77°58.00' |
| | D | | N37°47.00' W77°53.00' |
| | E | | N37°50.00' W77°22.00' |
| | F | | N38°04.00' W77°20.00' |
| | G | | N38°10.00' W77°22.00' |

ROUTE WIDTH - 2 NM right side of centerline from (A) to (B), 1 NM either side of centerline from (B) to (G).

Remarks:

- (1) Entry Point: Andrews VORTAC 211/19.
- (2) Exit Point: Brooke VORTAC 193/11.
- (3) Minimum altitude: Day 300' AGL (A) to (B); 500' AGL (B) to (C); 300' AGL (C) to (G); night 1000' AGL.

SR-822

(PITTSBURGH) AGC, HLG

ORIGINATING ACTIVITY: 911 AW, Pittsburgh Intl, PA DSN 277-8722/8761.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1000-0300Z Mon-Sat

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 03 AGL | A | | N40°26.00' W80°46.00' |

| | | | |
|--------------------|---|--|--------------------------|
| at or above 03 AGL | B | | N40°03.00' W81°05.00' |
| at or above 03 AGL | C | | N39°32.00' W80°53.00' |
| at or above 03 AGL | D | | N39°30.00' W80°37.00' |
| at or above 03 AGL | E | | N40°08.00' W80°29.00' |
| at or above 03 AGL | F | | N40°23.00' W80°27.00' |

ROUTE WIDTH - 2 NM either side of centerline.

Remarks:

- (1) Minimum altitude: 300' AGL.
- (2) Entry Point: MMJ VORTAC (CH 57) 270/26.
- (3) Exit Point: HLG VORTAC (CH 59) 036/10.
- (4) CAUTION: Minimum altitude between (C) and (D) from 1 Apr thru 30 Jun inclusive (Wild Turkey breeding and nesting season).

SR-823

(BUFFALO) BUF, BFD

ORIGINATING ACTIVITY: 914 AW/328 AS, 10460 Wagner Dr, Niagra Falls Intl Airport, NY 14304-5010, DSN 238-2135.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1500-0300Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N42°14.00' W79°03.00' |
| | B | | N41°54.00' W78°23.00' |
| | C | | N42°05.00' W77°42.00' |
| | D | | N42°25.00' W77°25.00' |
| | E | | N42°37.00' W77°24.00' |
| | F | | N42°45.00' W77°56.00' |
| | G | | N42°54.00' W78°15.00' |
| | H | | N43°05.00' W78°23.00' |
| | I | | N43°07.00' W78°42.00' |
| | J | | N43°07.00' W78°57.00' |

(Whirlpool Drop Zone)

ROUTE WIDTH - 5 NM either side of centerline, except 1 NM left and 5 NM right of centerline from (E) to (F), 2 NM left and 5 NM right of centerline from (F) to (G).

SR ROUTES

Remarks:

- (1) Minimum altitude: 300' AGL (A) to (H); 1500' AGL (E) to (F) and (H) to (J).
- (2) Entry Point: Jamestown VOR-DME 055/5.
- (3) Exit Point: Niagara Falls TACAN.
- (4) Commercial telephone number furnished IAW HQ AFRC message 28 Aug 91, FLIP AP/1A, AP/1B, C716-236-2135/2170/2150.
- (5) Avoid Clarkson Para-Tech airport parachute jumping area between (A) and (B) IAW FLIP AP/1A.
- (6) Avoid Java airport parachute jumping area between (C) and (D) IAW FLIP AP/1A.
- (7) Avoid by 1 NM the following noise sensitive areas:
 - (a) The area 1 NM wide from N42-45 W77-35 to N42-41 W77-35.
 - (b) Buildings at N42-27 W78-02.
 - (c) Letchworth State Park Area 1 NM wide from N42-44 W77-55 to N42-35 W78-02.
- (8) From 20 Mar through 15 May; 10 Sep through 15 Nov, either avoid area from N43-06 W78-30 to N43-10 W78-30 to N43-10 W78-12 to N43-06 W78-12 or maintain altitude no less than 2600' MSL and reduce airspeed to a maximum of 180 KIAS through the area.
- (9) Do not over-fly Albion Women's Correctional Facility located at N43-15 W78-12.
- (10) Route is assessed under AFR 19-2 for C130 operations only.

SR-825

(BUFFALO) BUF

ORIGINATING ACTIVITY: 914 AW/328 AS, 10460 Wagner Dr, Niagra Falls Intl Airport, NY 14304-5010, DSN 238-2135.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1500-0300Z++

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N43°20.00' W78°14.00' |
| | B | | N42°38.00' W77°23.00' |
| | C | | N42°11.00' W77°38.00' |
| | D | | N42°50.00' W78°26.00' |
| | E | | N43°06.00' W78°21.00' |
| | F | | N43°07.00' W78°42.00' |
| | G | | N43°07.00' W78°57.00' |

ROUTE WIDTH - 2 NM left and 3 NM right of centerline from (A) to (B), 5 NM either side of centerline from (B) to (D), 3 NM either side of centerline from (D) to (E), 5 NM either side of centerline from (E) to (G).

Remarks:

- (1) Minimum altitude: 300' AGL (B) to (E); 1500' AGL (E) to (G).

- (2) Entry Point: Rochester VORTAC 304/28.
- (3) Exit Point: Niagara Falls TACAN.
- (4) Commercial telephone number furnished IAW HQ AFRC message 28 Aug 91, FLIP AP/1A/1B, C716-236-2135/2170/2150.
- (5) Avoid Ceres Parachute Jumping area between (B) and (C) IAW FLIP AP/1A.
- (6) Avoid by 1 NM the following noise sensitive areas:
 - (a) The area 1 NM wide from N42-45 W77-35 to N42-41 W77-35.
 - (b) Buildings at N42-40 W77-40.
 - (c) Letchworth State Park area 1 NM wide from N42-44 W77-55 to N42-35 W78-02.
- (7) From 20 Mar through 15 May; 10 Sep through 15 Nov, either avoid area from N43-06 W78-30 to N43-10 W78-30 to N43-10 W78-12 to N43-06 W78-12 or maintain altitude no less than 2600' MSL and reduce airspeed to a maximum of 180 KIAS through the area.
- (8) Route is assessed under AFR 19-2 for C130 operations only.

SR-835

(WASHINGTON) DCA, SBY, CHO

ORIGINATING ACTIVITY: 166 OSF/OSK, 2805 Spruance Drive, New Castle 19720-1615 DSN 445-7554 C302-323-3554.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0900-2300 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N38°30.00' W77°02.00' |
| | B | | N38°08.00' W77°30.00' |
| | C | | N37°59.00' W77°31.00' |
| | D | | N37°59.00' W76°53.00' |
| | E | | N38°30.00' W76°32.00' |
| | F | | N38°25.00' W77°06.00' |

ROUTE WIDTH - 2 NM right side of centerline from (A) to (B), 1 NM either side of centerline from (B) to (F).

Remarks:

- (1) SR-835 shares common airspace with VR-1755 from (C) to (D), coordination must be performed with COMMAT WING ONE, Oceana NAS, VA through 459 TAW prior to use.
- (2) Minimum altitude: Days, 300' AGL (A) to (D), 500' AGL (D) to (F); 1000' AGL nights.
- (3) Entry Point: Andrews VORTAC 210/19.
- (4) Exit Point: Brooke VORTAC 076/13.

SR-844**(MILLVILLE)** MIV, SBY**ORIGINATING ACTIVITY:** 166 Airlift Gp, 166 OSF/DOW, 2600 Spruance Dr, Corporate Commons, New Castle, DE 19720 DSN 445-7554.**SCHEDULING ACTIVITY:** Same as Originating Activity**HOURS OF OPERATION:** 0800-2359 local**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N39°28.00' W75°25.00' |
| at or above 05 AGL | B | | N39°11.00' W75°08.00' |
| at or above 05 AGL | C | | N38°49.00' W75°13.00' |
| at or above 05 AGL | D | | N39°12.00' W75°02.00' |
| at or above 05 AGL | E | | N39°38.00' W74°42.00' |
| at or above 05 AGL | F | | N39°30.00' W74°18.00' |
| at or above 05 AGL | G | | N39°29.00' W74°14.00' |
| at or above 05 AGL | H | | N39°37.00' W74°05.00' |
| at or above 05 AGL | I | | N39°42.00' W74°11.00' |
| at or above 05 AGL | J | | N39°49.00' W74°27.00' |

ROUTE WIDTH - 4 NM either side of centerline from (A) to (F), 2 NM either side of centerline from (F) to (H), 0 NM left and 2 NM right of centerline from (H) to (I), 3 NM either side of centerline from (I) to (J).

Remarks:

- (1) Minimum altitude: 500' AGL.
- (2) Entry Point: DQO VORTAC (CH 87) 156/16 DME.
- (3) (F) to (G): Do not over-fly southern tip of Long Beach Island, bird nesting area.
- (4) (G) to (H): All aircraft will remain a minimum of 1 NM East of Long Beach Island.
- (5) (H) to (I): Minimum altitude 1200' MSL turboprops (2000' MSL turbojets). Aircraft will be established at altitude prior to crossing island. Maintain altitude until 5 NM prior to (J).
- (6) Over-flight of Surf City, NJ (N39-40 W74-10) prohibited (Congressional).
- (7) Avoid noise sensitive area at N39-36.8 W74-35.2 by 1 NM or 1000' AGL.
- (8) Contact Warren Grove Range to de-conflict with VR-1709.
- (9) Remain alert for VFR traffic along NJ coastline, particularly during summer months.

SR-845**(MILLVILLE)** MIV, SBY**ORIGINATING ACTIVITY:** 166 Airlift Gp, 166 OSF/DOW, 2600 Spruance Dr, Corporate Commons, New Castle, DE 19720 DSN 445-7554.**SCHEDULING ACTIVITY:** Same as Originating Activity**HOURS OF OPERATION:** 0800-2359 local**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N39°28.00' W75°25.00' |
| at or above 05 AGL | B | | N39°20.00' W75°36.00' |
| at or above 05 AGL | C | | N39°00.00' W76°10.00' |
| at or above 05 AGL | D | | N38°50.00' W75°51.00' |
| at or above 05 AGL | E | | N38°49.00' W75°18.00' |
| at or above 05 AGL | F | | N39°38.00' W74°42.00' |
| at or above 05 AGL | G | | N39°30.00' W74°18.00' |
| at or above 05 AGL | H | | N39°29.00' W74°14.00' |
| at or above 05 AGL | I | | N39°37.00' W74°05.00' |
| at or above 05 AGL | J | | N39°42.00' W74°11.00' |
| at or above 05 AGL | K | | N39°49.00' W74°27.00' |

(Coyle Drop Zone).

ROUTE WIDTH - 4 NM either side of centerline from (A) to (G), 2 NM either side of centerline from (G) to (H), 0 NM left and 2 NM right of centerline from (H) to (J), 3 NM either side of centerline from (J) to (K).

Remarks:

- (1) Minimum altitude: 500' AGL.
- (2) Entry Point: DQO VORTAC (CH 87) 156/16 DME.
- (3) (G) to (H): Do not over-fly southern tip of Long Beach Island, bird nesting area.
- (4) (H) to (I): All aircraft will remain a minimum of 1 NM East of Long Beach Island.
- (5) (I) to (J): Minimum altitude 1200' MSL turboprops (2000' MSL turbojets). Aircraft will be established at altitude prior to crossing island. Maintain altitude until 5 NM prior to (K).
- (6) Over-flight of Surf City, NJ (N39-40 W74-10) prohibited (Congressional).
- (7) Avoid noise sensitive area at N39-36.8 W74-35.2 by 1 NM or 1000' AGL.
- (8) Contact Warren Grove Range to de-conflict with VR-1709.
- (9) Remain alert for VFR traffic along NJ coastline, particularly during summer months.

SR ROUTES

SR-846

(MILLVILLE) MIV

ORIGINATING ACTIVITY: 166 Airlift Gp, 166 OSF/DOW, 2600 Spruance Dr, Corporate Commons, New Castle, DE 19720 DSN 445-7554.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-2359 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--|----|--------------|--------------------------|
| at or above 05 AGL | A | | N39°28.00' W75°25.00' |
| at or above 05 AGL | B | | N39°11.00' W75°08.00' |
| at or above 05 AGL | C | | N39°12.00' W75°02.00' |
| at or above 05 AGL | D | | N39°38.00' W74°42.00' |
| at or above 05 AGL | E | | N39°30.00' W74°18.00' |
| at or above 05 AGL | F | | N39°29.00' W74°14.00' |
| at or above 05 AGL | G | | N39°37.00' W74°05.00' |
| at or above 05 AGL | H | | N39°42.00' W74°11.00' |
| at or above 05 AGL (Coyle Drop Zone). | I | | N39°49.00' W74°27.00' |

ROUTE WIDTH - 4 NM either side of centerline from (A) to (D), 3 NM either side of centerline from (D) to (F), 0 NM left and 3 NM right of centerline from (F) to (H), 3 NM either side of centerline from (H) to (I).

Remarks:

- (1) Minimum altitude: 500' AGL.
- (2) Entry Point: DQO VORTAC (CH 87) 156/16 DME.
- (3) (E) to (F): Do not over-fly southern tip of Long Beach Island, bird nesting area.
- (4) (F) to (G): All aircraft will remain a minimum of 1 NM East of Long Beach Island.
- (5) (G) to (H): Minimum altitude 1200' MSL turboprops (2000' MSL turbojets). Aircraft will be established at altitude prior to crossing island. Maintain altitude until 5 NM prior to (I).
- (6) Over-flight of Surf City, NJ (N39-40 W74-10) prohibited (Congressional).
- (7) Avoid noise sensitive area at N39-36.8 W74-35.2 by 1 NM or 1000' AGL.
- (8) Contact Warren Grove Range to de-conflict with VR-1709.
- (9) Remain alert for VFR traffic along NJ coastline, particularly during summer months.

SR-847

(MILLVILLE) MIV

ORIGINATING ACTIVITY: 166 Airlift Gp, 166 OSF/DOW, 2600 Spruance Dr, Corporate Commons, New Castle, DE 19720 DSN 445-7554.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-2359 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N39°49.00' W74°25.00' |
| at or above 05 AGL | B | | N39°45.00' W74°44.00' |
| at or above 05 AGL | C | | N39°28.00' W75°25.00' |
| at or above 05 AGL | D | | N39°41.00' W75°36.00' |

ROUTE WIDTH - 5 NM either side of centerline from (A) to (B), 3 NM either side of centerline from (B) to (D).

Remarks:

- (1) Minimum altitude: 500' AGL.
- (2) Remain alert for VFR traffic.

SR-867

(NEWPORT NEWS) PHF

ORIGINATING ACTIVITY: Commander, Ft Pickett, VA 23824-5000 DSN 438-8506, C804-292-8506.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N37°23.00' W76°57.00' |
| | B | | N37°05.00' W77°23.00' |
| | C | | N36°36.00' W77°41.00' |
| | D | | N36°36.00' W78°05.00' |
| | E | | N36°55.00' W78°01.00' |
| | F | | N37°05.00' W77°58.00' |
| | G | | N37°37.00' W77°48.00' |

| | |
|---|------------|
| H | N37°56.00' |
| | W77°28.00' |
| I | N37°35.00' |
| | W77°01.00' |

ROUTE WIDTH - 1 NM either side of centerline.

Remarks:

- (1) Minimum altitude: 500' AGL day; 1000' AGL night.
- (2) Minimum altitude: 1500' AGL between (G) and (H).
- (3) All flights departing Langely AFB will be under IFR until reaching (A).

SR-871

(CHARLESTON) CRW, HTS, MGW, PKB

ORIGINATING ACTIVITY: 130 AG (ANG), Kanawha County, Charleston, WV 25311 DSN 366-6291.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-2300 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N38°13.00' W81°23.00' |
| | B | | N38°40.00' W80°45.00' |
| | C | | N38°58.00' W81°11.00' |
| | D | | N38°40.00' W81°39.00' |
| | E | | N38°48.00' W82°04.00' |
| | F | | N38°36.00' W82°16.00' |
| | G | | N38°28.00' W81°56.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude: 300' AGL day, except 500' AGL from 3 NM prior (B) to 3 NM beyond (B), from (D) to (E) and from 3 NM prior to (G) to (G). Night 1000' AGL.

SR-872

(CHARLESTON) CRW, HTS, MGW, PKB

ORIGINATING ACTIVITY: 130 AG (ANG), Kanawha County, Charleston, WV 25311 DSN 366-6291.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-2300 Local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N38°13.00' W81°23.00' |
| | B | | N38°24.00' W80°46.00' |
| | C | | N38°40.00' W80°45.00' |
| | D | | N38°58.00' W81°11.00' |
| | E | | N38°40.00' W81°39.00' |
| | F | | N38°48.00' W82°04.00' |
| | G | | N38°36.00' W82°16.00' |
| | H | | N38°28.00' W81°56.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude: 300' AGL day, except 500' AGL within 1 NM of Summersville, WV between (A) and (B) from 3 NM prior to (C), to 3 NM beyond (C); from (E) to (F) and from 3 NM prior to (H) to (H); night 1000' AGL.

SR-873

(CHARLESTON) CRW, HTS, MGW, PKB

ORIGINATING ACTIVITY: 130 AG (ANG), Kanawha County, Charleston, WV 25311 DSN 366-6291.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-2300 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N38°13.00' W81°23.00' |
| | B | | N38°07.00' W82°22.00' |
| | C | | N38°36.00' W81°38.00' |
| | D | | N38°48.00' W82°04.00' |
| | E | | N38°26.00' W82°16.00' |
| | F | | N38°28.00' W81°56.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum Altitude: Day 300' AGL except 500' AGL from 20 NM prior to (C) to (D), 3 NM prior to (F) to (F); night 1000' AGL.

SR ROUTES

SR-874

(CHARLESTON) CRW, HTS, MGW, PKB

ORIGINATING ACTIVITY: 130 AG (ANG), Kanawha County, Charleston, WV 25311 DSN 366-6291.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0800-2300 local

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N38°13.00' W81°23.00' |
| | B | | N38°24.00' W80°46.00' |
| | C | | N38°32.00' W81°20.00' |
| | D | | N38°39.00' W81°39.00' |
| | E | | N38°48.00' W82°04.00' |
| | F | | N38°36.00' W82°16.00' |
| | G | | N38°28.00' W81°56.00' |

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:

- (1) Minimum altitude: 300' AGL day, except 500' AGL within 1 NM of Summersville, WV between (A) and (B), from (D) to (E), from 3 NM prior to (G) to (G); night 1000' AGL.

SR-900

(BRIDGEPORT) BDR

ORIGINATING ACTIVITY: 143 AW/Operations, 7 Flightline Dr, North Kingstown, RI 02852-7548 DSN 476-3405, C800-851-7622 ext 3405.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N42°39.00' W72°45.00' |
| | B | | N42°40.00' W72°00.00' |
| | C | | N42°16.00' W71°34.00' |
| | D | | N41°45.00' W71°35.00' |
| | E | | N41°47.00' W72°05.00' |

| | |
|---|--------------------------|
| F | N42°03.00' W72°10.00' |
| G | N42°12.00' W72°32.00' |

ROUTE WIDTH - 5 NM either side of centerline from (A) to (C), 3 NM left and 5 NM right of centerline from (C) to (D), 5 NM either side of centerline from (D) to (G).

Remarks:

- (1) Minimum altitude: 500' AGL; except 1000' AGL until 5 NM past (A) and from 17 NM past (B) to 13 NM past (D).
- (2) Entry Point: Keene VORTAC 233/22.
- (3) Exit Point: Westover VOR.

SR-901

(BRIDGEPORT) BDR

ORIGINATING ACTIVITY: 143 AW/Operations, 7 Flightline Dr, North Kingstown, RI 02852-7548 DSN 476-3405, C800-851-7622 ext 3405.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Daily

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N41°56.00' W72°22.00' |
| | B | | N41°40.00' W71°36.00' |
| | C | | N41°39.00' W71°56.00' |
| | D | | N42°03.00' W72°10.00' |
| | E | | N42°12.00' W72°32.00' |

ROUTE WIDTH - 5 NM either side of centerline from (A) to (B), 3 NM left and 5 NM right of centerline from (B) to (C), 5 NM either side of centerline from (C) to (E).

Remarks:

- (1) Minimum altitude: 500' AGL; except 1000' AGL until 13 NM past (A).
- (2) Entry Point: Westover VOR 171/17.
- (3) Exit Point: Westover VOR.

SR-902

(BRIDGEPORT) BDR

ORIGINATING ACTIVITY: 143 AW/Operations, 7 Flightline Dr, North Kingstown, RI 02852-7548 DSN 476-3405, C800-851-7622 ext 3405.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0400Z++ Daily**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|--------------------------|
| | A | | N43°11.00' W71°04.00' |
| | B | | N43°29.00' W71°10.00' |
| | C | | N43°13.00' W72°10.00' |
| | D | | N42°47.00' W72°07.00' |
| | E | | N42°33.00' W71°53.00' |
| | F | | N42°03.00' W72°10.00' |
| | G | | N42°12.00' W72°32.00' |

ROUTE WIDTH - 5 NM either side of centerline from (A) to (E), 3 NM left and 5 NM right of centerline from (E) to (F), 5 NM either side of centerline from (F) to (G).

Remarks:

- (1) Minimum altitude: 500' AGL, except 1000' AGL from 23 NM past (E) to (F).
- (2) Avoid town of Gilmanton 12 NM past (B).
- (3) Entry Point: Pease VORTAC 316/11.
- (4) Exit Point: Westover VOR.
- (5) Avoid town of Fitzwilliam NH, 2NM west of (D).

SR-904**(BOSTON)** BOS

ORIGINATING ACTIVITY: 143 AW/Operations, 7 Flightline Dr, North Kingstown, RI 02852-7548 DSN 476-3405, C800-851-7622 ext 3405.

SCHEDULING ACTIVITY: Same as Originating Activity**HOURS OF OPERATION:** 1000-2200 local**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N41°30.00' W71°06.00' |
| at or above 05 AGL | B | | N41°22.00' W71°29.00' |
| at or above 05 AGL | C | | N41°30.00' W72°07.00' |
| at or above 05 AGL | D | | N42°02.00' W72°27.00' |
| at or above 05 AGL | E | | N42°28.00' W72°18.00' |
| at or above 05 AGL | F | | N42°30.00' W71°56.00' |
| at or above 05 AGL | G | | N42°30.00' W71°40.00' |

at or above 05 AGL H

N42°29.00'
W71°37.00'

at or above 05 AGL I

N42°14.00'
W71°35.00'

at or above 05 AGL J

N41°47.00'
W71°37.00'**ROUTE WIDTH** - 3 NM either side of centerline.**Remarks:**

- (1) Minimum altitude: 500' AGL.

SR-905**(BOSTON)** BOS

ORIGINATING ACTIVITY: 143 AW/Operations, 7 Flightline Dr, North Kingstown, RI 02852-7548 DSN 476-3405, C800-851-7622 ext 3405.

SCHEDULING ACTIVITY: Same as Originating Activity**HOURS OF OPERATION:** 1000-2200 local**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|--------------------|----|--------------|--------------------------|
| at or above 05 AGL | A | | N42°23.00' W71°46.00' |
| at or above 05 AGL | B | | N42°32.00' W72°48.00' |
| at or above 05 AGL | C | | N42°30.00' W71°55.00' |
| at or above 05 AGL | D | | N42°30.00' W71°40.00' |

ROUTE WIDTH - 3 NM either side of centerline.**Remarks:**

- (1) Minimum altitude: 500' AGL.

SR-1001**(ANCHORAGE)** ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous**ROUTE DESCRIPTION:**

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N61°18.80' W150°26.80' |
| | B | | N61°12.30' W151°10.20' |

SR ROUTES

| | |
|---|---------------------------|
| C | N61°23.90' W151°28.70' |
| D | N61°56.20' W151°28.50' |
| E | N62°12.80' W151°33.50' |
| F | N62°16.90' W151°10.00' |
| G | N61°50.20' W150°05.20' |
| H | N61°35.50' W149°37.00' |
| I | N61°21.30' W149°39.00' |

(Malemute Drop Zone).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (G), 2 NM either side of centerline from (G) to (I).

Remarks:

- (1) Day altitude: 300' AGL (A) to (G); 500' AGL (G) to 5 NM before (H) and no lower than 2000' MSL from 5 NM before (H) to 6 NM after (H).
- (2) Night altitude: 1000' AGL from (A) to 5 NM before (H).
- (3) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1002

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N61°18.80' W150°26.80' |
| | B | | N61°45.70' W150°35.50' |
| | C | | N61°50.20' W150°05.20' |
| | D | | N61°35.50' W149°37.00' |
| | E | | N61°21.30' W149°39.00' |

(Malemute Drop Zone).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (C), 2 NM either side of centerline from (C) to (E).

Remarks:

- (1) Day altitude: 300' AGL (A) to (C); 500' AGL (C) to 5 NM prior to (D) and no lower than 2000' MSL from 5 NM before (D) to 6 NM after (D).
- (2) Night altitude: 1000' AGL from (A) to 5 NM before (D).
- (3) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1003

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N61°18.80' W150°26.77' |
| | B | | N61°45.70' W150°35.50' |
| | C | | N62°05.60' W150°50.20' |
| | D | | N61°51.20' W150°05.20' |
| | E | | N61°35.50' W149°37.00' |
| | F | | N61°21.30' W149°39.00' |

(Malemute Drop Zone).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (D), 2 NM either side of centerline from (D) to (F).

Remarks:

- (1) Day altitude: 300' AGL (A) to (D); 500' AGL (D) to 5 NM prior to (E) and no lower than 2000' MSL from 5 NM before (E) to 6 NM after (E).
- (2) Night altitude: 1000' AGL from (A) to 5 NM before (E).
- (3) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1004

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

| | |
|----|-------------|
| B1 | N61°39.80' |
| | W150°25.00' |
| G | N61°35.00' |
| | W149°38.00' |
| H | N61°21.30' |
| | W149°39.00' |

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N61°21.30' W149°39.00' |
| | B | | N61°18.80' W150°26.80' |
| | C | | N61°34.00' W150°27.70' |
| | D | | N61°36.70' W149°40.30' |
| | A1 | | N61°21.30' W149°39.00' |

(Malemute Drop Zone).

ROUTE WIDTH - 3 NM either side of centerline from (A) to (B), 5 NM either side of centerline from (B) to 6 NM prior to (D) and 2 NM either side of centerline from 6 NM prior to (D) to (A).

Remarks:

- (1) Day altitude: 1500' AGL (A) to (B); 300' AGL (B) to (C) to 6 NM prior to (D); 2000' MSL from 6 NM prior (D) to 6 NM after (D); and 500' AGL from 6 NM after (D) to point of beginning.
- (2) Night altitude: 1000' AGL from (B) to 6 NM prior to (D).
- (3) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1005

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N61°28.30' W150°10.30' |
| | B | | N61°39.80' W150°25.00' |
| | C | | N61°55.60' W150°04.00' |
| | D | | N62°10.70' W150°10.40' |
| | E | | N61°55.80' W150°23.00' |
| | F | | N61°57.30' W150°55.50' |

(Malemute Drop Zone).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (B) second time, 3 NM either side of centerline from (B) to (H) second time.

Remarks:

- (1) From 1 May through 30 September, route is restricted to 1500' AGL due to increase of summer recreational activities.
- (2) From 1 October through 30 April, day altitudes will be no lower than 300' AGL from (A) to (B) second time, 1000' AGL from (B) second time to (G) and 2000' MSL from (G) to 6 NM after (G).
- (3) Night altitudes: 1000' AGL from (A) to (G).
- (4) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1006

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N61°18.80' W150°26.00' |
| | B | | N61°34.00' W150°27.70' |
| | C | | N61°37.00' W149°59.10' |
| | D | | N61°35.00' W149°38.00' |
| | E | | N61°21.30' W149°39.00' |

(Malemute Drop Zone).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (C), 2 NM either side of centerline from (C) to (E).

Remarks:

- (1) Day altitude: 300' AGL (A) to (B); 500' AGL (B) to (C); 1000' AGL (C) to (E); 2000' MSL (E) to 6 NM after (E).
- (2) Night altitude: 1000' AGL (A) to (D).

SR ROUTES

- (3) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1007

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N61°18.80' W150°26.80' |
| | B | | N61°34.00' W150°27.00' |
| | C | | N61°43.50' W150°39.70' |
| | D | | N61°37.00' W149°59.10' |
| | E | | N61°35.00' W149°38.00' |
| | F | | N61°21.30' W149°39.00' |

(Malemute Drop Zone).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (D), 2 NM either side of centerline from (D) to (F).

Remarks:

- (1) Day altitude: 300' AGL (A) to (C); 500' AGL (C) to (D); 1000' AGL (D) to (E); 2000' MSL (F) to 6 NM after (F).
- (2) Night altitude: 1000' AGL (A) to (E).
- (3) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1008

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N61°18.80' W150°26.80' |
| | B | | N61°34.00' W150°27.70' |
| | C | | N61°54.40' W150°54.40' |
| | D | | N61°58.50' W150°12.20' |
| | E | | N61°43.20' W150°16.80' |
| | F | | N61°37.00' W149°59.10' |
| | G | | N61°35.00' W149°38.00' |
| | H | | N61°21.30' W149°39.00' |

(Malemute Drop Zone).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (B), 4 NM either side of centerline from (B) to (C), 5 NM either side of centerline from (C) to (D), 3 NM either side of centerline from (D) to (F), and 2 NM either side of centerline from (F) to (H).

Remarks:

- (1) Day altitude: 300' AGL (A) to (E); 500' AGL (E) to (F); 1000' AGL (F) to (G); 2000' MSL (G) to 6 NM after (G); 500' AGL 6 NM after (G) to (H).
- (2) Night altitude: 1000' AGL (A) to (G).
- (3) Route is restricted to 1500' AGL (B) to (F) from 1 May to 30 September.
- (4) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1009

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|---------------------------|
| | A | | N61°18.80' W150°26.80' |
| | B | | N61°12.30' W151°10.20' |
| | C | | N61°23.90' W151°28.70' |
| | D | | N61°56.20' W151°28.50' |

| | |
|---|-------------|
| E | N62°12.80' |
| | W151°33.50' |
| F | N62°16.90' |
| | W151°10.00' |
| G | N61°55.80' |
| | W150°23.00' |
| H | N61°25.20' |
| | W150°27.00' |
| I | N61°21.20' |
| | W149°39.00' |

(Stinson Drop Zone).

Remarks:

- (1) Day altitude: 300' AGL (A) to (H); 500' AGL (H) to 5 NM prior to (I); 2000' MSL from 5 NM prior to (I) to 6 NM after (I).
- (2) Night altitude: 1000' AGL (A) to 5 NM prior to (I).
- (3) Route is restricted to 1500' AGL (B) to (F) from 1 May to 30 September.
- (4) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (H), 2 NM either side of centerline from (H) to (I).

Remarks:

- (1) Day altitude: 300' AGL (A) to (H); 500' AGL (H) to (I).
- (2) Night altitude: 1000' AGL (A) to (H).
- (3) Anchorage FSS will be notified three hours prior to route activation with route designator and time block route will be active. Notification may be accomplished via telephone (263-6565).

SR-1010

(ANCHORAGE) ANC

ORIGINATING ACTIVITY: 3 OSS/DOH, 10460 L Street, Elmendorf AFB, AK 99506-2670 DSN 317-552-4658, C907-552-4658.

SCHEDULING ACTIVITY: 3 OSS/DOTS, DSN 317-552-3457, C907-552-3457.

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

| Altitude Data | Pt | Fac/Rad/Dist | Lat/Long |
|---------------|----|--------------|-------------|
| | A | | N61°18.80' |
| | | | W150°26.80' |
| | B | | N61°34.60' |
| | | | W150°36.70' |
| | C | | N61°37.10' |
| | | | W151°11.50' |
| | D | | N61°52.00' |
| | | | W151°24.70' |
| | E | | N61°51.30' |
| | | | W150°46.70' |
| | F | | N62°07.60' |
| | | | W150°52.00' |
| | G | | N61°55.80' |
| | | | W150°23.00' |
| | H | | N61°52.00' |
| | | | W150°04.30' |
| | I | | N61°35.50' |
| | | | W149°37.00' |
| | J | | N61°21.30' |
| | | | W149°39.00' |

(Malemute Drop Zone).

ROUTE WIDTH - 5 NM either side of centerline from (A) to (H), 2 NM either side of centerline from (H) to (J).

INTENTIONALLY

LEFT

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REFUELING TRACKS/ANCHORS/ VFR HELICOPTER REFUELING TRACKS/ANCHORS

I. General.

- A. The conduct of aerial refueling is based on the strict requirement that participating aircraft remain within specifically designated airspace. Air refueling operations are normally conducted on tracks or in anchor areas published in this document. There are certain mission requirements and operational considerations which may necessitate enroute refueling operations or the establishment of special tracks/anchors not published in this document. Refer to FAA 7610.4J for information on those requirements.
- B. Aerial refueling operations will be conducted under instrument flight rules on the Aerial Refueling Tracks/Anchors described in this section. New refueling tracks/anchors or changes to existing refueling tracks/anchors will become effective on the date of this booklet or the Planning Change Notice unless indicated otherwise.
- C. The tanker aircraft is responsible for requesting altitude clearance and routing (if different than flight plan routing) for the receiver and tanker aircraft beyond the AR exit point. Throughout the refueling operation, controller initiated heading assignments may not be effected without the concurrence of the tanker. Each aircraft must receive a specific clearance prior to leaving the refueling track/anchor. In the event of no clearance, the tanker(s) and receiver(s) will continue on the tanker's filed route and assigned block altitudes until a clearance to separate the flight can be obtained, or the aircraft will request an extension of the aerial refueling track.

NOTE: Aerial refueling operations are terminated at the end of the refueling point unless an extension of the aerial refueling track is received.

II. EXPLANATION OF TERMS

A. REFUELING TRACKS

- 1. ARIP - Air Refueling Initial Point - A point located upstream from the ARCP at which the receiver aircraft initiates a rendezvous with the tanker. Descent to refueling altitude will be made between ARIP and ARCP.
- 2. ARCP - Air Refueling Control Point - The location where the tanker and receiver rendezvous is completed prior to refueling. Tankers orbit at this point.
- 3. NAVIGATION CHECKPOINTS - These are designated where required to provide a means for adequate navigation for refueling aircraft and for departure from the track subsequent to refueling.
- 4. EXIT - The point at which the refueling track terminates.

5. COMMUNICATION/RENDEZVOUS PLAN -

- a. Primary UHF
- b. Backup UHF
- c. APN 69/134/135 Settings
- d. APX 78/Encode/Decode
- e. TACAN Channels Receiver/Tanker
- f. N/R = Not required.

6. REFUELING ALTITUDES - The block of airspace within which refueling operations may be conducted.

7. SCHEDULING UNIT - The military unit responsible for scheduling refueling operations. It provides daily schedules covering requested altitudes/flight levels and times of use for proposed operations to the assigned ARTCC.

8. ASSIGNED ARTCC - The FAA Air Traffic Control Center that controls the airspace within which the track is located.

9. SODAR - Simultaneous Opposite Direction Air Refueling.

B. REFUELING ANCHORS

1. ENTRY POINTS - These are designated points where tanker aircraft may enter the anchor area without the assistance of radar. When either FAA Center Radar or Ground TAC Radar is operative, a tanker may proceed to the Anchor Point without crossing an Entry Point.

2. ANCHOR POINT - The geographical point upon which the anchor pattern is oriented.

3. ANCHOR PATTERN - A left-hand race track pattern with legs separated by a minimum of 20 NM and a minimum leg length of 50 NM.

4. EXIT POINTS - These are designated points where tanker and receiver aircraft may depart the anchor area after refueling is completed.

5. MILITARY RADAR - The call sign and frequencies of the military unit responsible for radar control of refueling operations within the anchor area. These are normally an ADCF (Air Defense Control Facility) or CRC/CRP (Control and Reporting Center/Post).

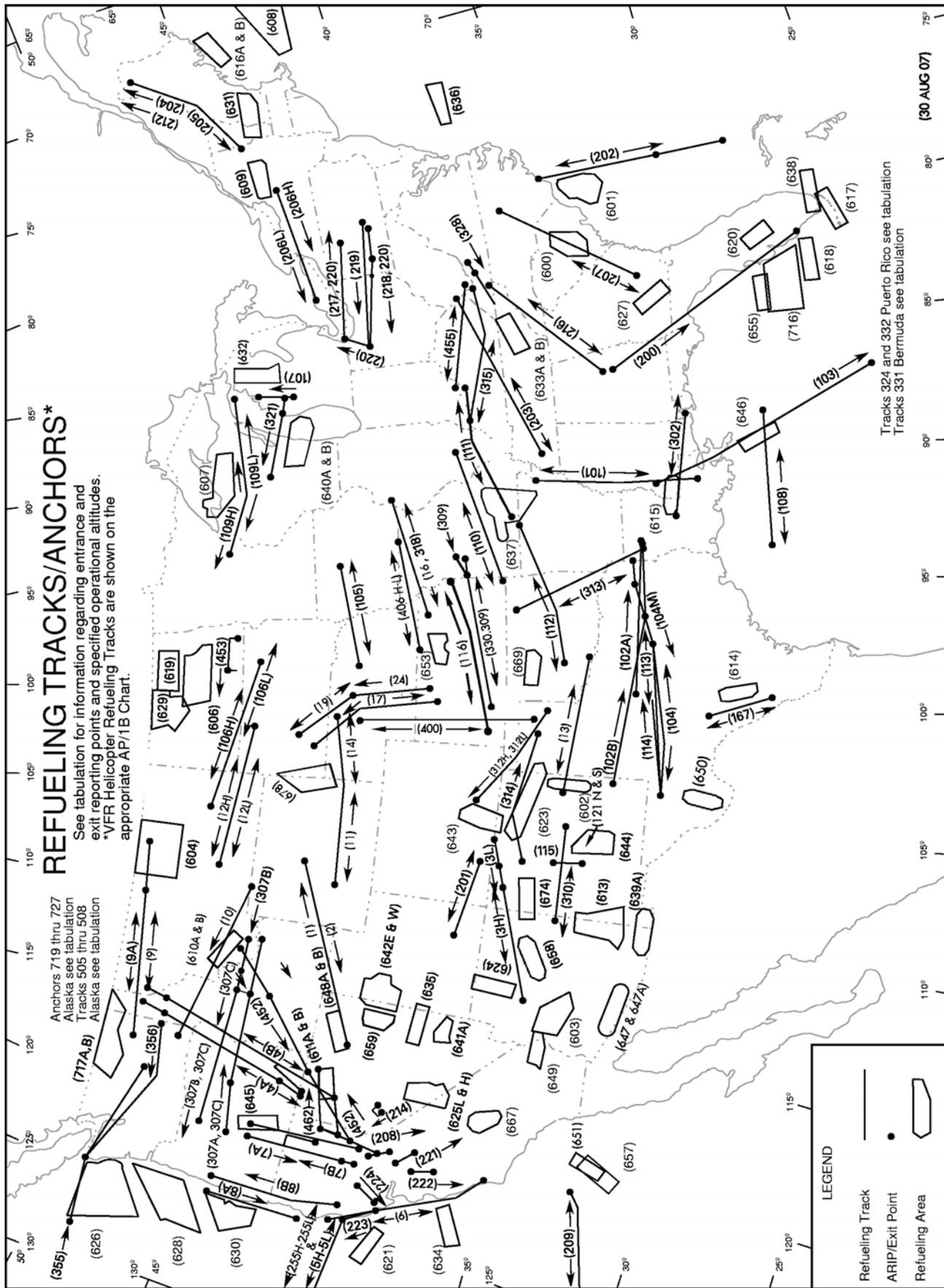
NOTES:

AR ROUTES

1. The general location of the refueling tracks/anchors are depicted on the graphic published on the following page.
2. See DD 175, item (9) under Flight Plans, Chapter 4 in General Planning for Special Instructions.
3. If there is no information for a particular field, it will be omitted.

C. ARTCC FREQUENCIES

The ARTCC frequencies to be used at the control and/or exit points are listed under the "Assigned ARTCC" column, e.g., ARCP 297.3 EXIT 295.4.



REFUELING TRACKS

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|----------------------|-------------|-------------|-------------------------|-------------|------------|---------------------|--------------------------|----------------|
| AR1 (East) | BAM VORTAC | MLD VOR-DME | MLD VOR-DME | OCS VORTAC | a. 343.500 | FL280/FL310 | 60 OSS/AO Travis AFB, CA | Salt Lake City |
| | 055/30 | 226/94 | 090/10 | 008/118 | b. 256.650 | | DSN 837-5582/1038 | ARCP-397.9E |
| | N40°43.00' | N41°27.00' | N42°09.00' | N43°25.00' | c. 1-1-1 | | C707-424-5582/1038 | EXIT-263.1E |
| | W116°17.00' | W114°18.00' | W112°14.00' | W108°04.00' | d. 2/1 | | | |
| | | | BOY VOR-DME | | e. 30/93 | | | |
| | | 230/92 | | | | | | |
| | | N42°45.27' | | | | | | |
| | | W110°09.37' | | | | | | |

REMARKS: Simultaneous Opposite Direction Air Refueling Test (SODART) operations are authorized with AR2 under the DoD/FAA Operational Test Agreement.

| | | | | | | | | |
|----------------------|-------------|-------------|-------------|-------------|------------|-------------|--------------------------|----------------|
| AR2 (West) | OCS VORTAC | OCS VORTAC | MLD VOR-DME | BAM VORTAC | a. 283.900 | FL240/FL260 | 60 OSS/AO Travis AFB, CA | Salt Lake City |
| | 008/118 | 312/89 | 090/10 | 055/30 | b. 256.650 | | DSN 837-5582/1038 | ARCP-323.0W |
| | N43°25.00' | N42°48.00' | N42°09.00' | N40°43.00' | c. 1-1-2 | | C707-424-5582/1038 | EXIT-363.15W |
| | W108°04.00' | W110°11.00' | W112°14.00' | W116°17.00' | d. 3/1 | | | |
| | | | MLD VOR-DME | | e. 31/94 | | | |
| | | 226/94 | | | | | | |
| | | N41°25.00' | | | | | | |
| | | W114°16.00' | | | | | | |

REMARKS: Simultaneous Opposite Direction Air Refueling Test (SODART) operations are authorized with AR1 under the DoD/FAA Operational Test Agreement.

| | | | | | | | | |
|-----------------------|-------------|-------------|-------------|-------------|------------|-------------|--------------------------|---------------------------|
| AR3H (East) | PGS VORTAC | PGS VORTAC | RSK VORTAC | RSK VORTAC | a. 265.050 | FL240/FL270 | 60 OSS/AO Travis AFB, CA | Denver |
| | 065/45 | 065/140 | 224/38 | 076/65 | b. 271.650 | | DSN 837-5582/1038 | ARCP-386.8E |
| | N35°45.00' | N36°02.00' | N36°25.00' | N36°44.00' | c. 1-1-1 | | C707-424-5582/1038 | EXIT-290.4E NAV |
| | W112°38.00' | W110°42.00' | W108°46.00' | W106°45.00' | d. 2/1 | | | CHK PT-386.8E Los Angeles |
| | | | | | e. 30/93 | | | ARIP-323.2E |
| AR3H (West) | RSK VORTAC | RSK VORTAC | PGS VORTAC | PGS VORTAC | | | | Denver |
| | 076/65 | 224/38 | 065/140 | 065/45 | | | | ARCP-386.8W |
| | N36°44.00' | N36°25.00' | N36°02.00' | N35°45.00' | | | | ARIP-290.4W NAV |
| | W106°45.00' | W108°46.00' | W110°42.00' | W112°38.00' | | | | CHK PT-386.8W Los Angeles |
| | | | | | | | | EXIT-323.2W |

REMARKS: Due to track proximity to ARTCC boundaries, aircrews should not request nor expect to receive amendments to flight plan routing after air refueling exit. This condition is accentuated during peak traffic periods 1600-1800Z++ and 0100-0300Z++.

| | | | | | | | | |
|-------------|-------------|-------------|-------------|-------------|------------|-------------|------------------------------|-------------|
| AR3L | ALS VORTAC | RSK VORTAC | RSK VORTAC | RSK VORTAC | a. 235.100 | FL190/FL230 | 151 AREFG Salt Lake City, UT | Denver |
| | 188/25 | 147/15 | 230/85 | 147/16 | b. 256.650 | | DSN 245-2274/2273 | ARCP-343.7W |
| | N36°57.00' | N36°31.00' | N36°07.00' | N36°30.00' | c. 1-1-2 | | C801-245-2274/2273 | EXIT-343.7W |
| | W106°00.00' | W108°00.00' | W109°41.00' | W107°59.00' | d. 3/1 | | | |
| | | | | | e. 31/94 | | | |

REMARKS: None

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|-------------|-------------|-------------------------|-------------|------------|---------------------|---|---------------------------------------|
| AR4A (North) | LKV VORTAC | BOI VORTAC | DNJ VORTAC | GEG VORTAC | a. 344.700 | FL280/FL310 | 366 OSS/OSOS Mt. Home AFB, ID DSN 728-2172 C208-828-2172 | Seattle ARCP-290.5E EXIT-251.1E |
| | 098/83 | 250/87 | 250/64 | 095/47 | b. 292.600 | | | |
| | N41°50.00' | N43°27.00' | N44°44.00' | N47°13.00' | c. 1-1-3 | | | |
| | W118°52.00' | W118°13.00' | W117°41.00' | W116°37.00' | d. 4/1 | | | |
| | | | PDT VORTAC | | e. 32/95 | | | |
| | | | 056/77 | | | | | |
| | | | N46°00.00' | | | | | |
| | | | W117°09.00' | | | | | |
| ----- | | | | | | | | |
| (South) | MLP VOR-DME | GEG VORTAC | DNJ VORTAC | LKV VORTAC | | | | Seattle |
| | 303/41 | 137/74 | 274/61 | 064/87 | | | | ARCP-251.1W |
| | N48°00.00' | N46°25.00' | N45°09.00' | N42°39.00' | | | | EXIT-290.5W |
| | W116°15.00' | W116°57.00' | W117°31.00' | W118°34.00' | | | | |
| | | | BOI VORTAC | | | | | |
| | | | 265/84 | | | | | |
| | | | N43°50.00' | | | | | |
| | | | W118°05.00' | | | | | |
| REMARKS: Portions of AR4A lie within SADDLE airspace. Receiver units scheduling this track must contact the 190 FS (Boise ANG) at DSN 422-5348 to ensure deconfliction of air refueling operations with SADDLE activity. | | | | | | | | |
| AR4B (North) | BAM VORTAC | BOI VORTAC | DNJ VORTAC | MLP VOR-DME | a. 235.100 | FL280/FL310 | 366 OSS/OSOS Mt. Home AFB, ID DSN 728-2172 C208-828-2172 | Seattle ARCP-290.5E EXIT-251.1E |
| | 307/92 | 247/55 | 247/30 | 184/16 | b. 292.600 | | | |
| | N41°50.00' | N43°27.00' | N44°44.00' | N47°13.00' | c. 1-1-4 | | | |
| | W118°05.00' | W117°27.00' | W116°55.00' | W115°48.00' | d. 5/1 | | | |
| | | | MLP VOR-DME | | e. 33/96 | | | |
| | | | 178/93 | | | | | |
| | | | N46°00.00' | | | | | |
| | | | W116°21.00' | | | | | |
| ----- | | | | | | | | |
| (South) | MLP VOR-DME | MLP VOR-DME | DNJ VORTAC | BOI VORTAC | | | | Seattle |
| | 356/34 | 179/66 | 296/31 | 216/89 | | | | ARCP-251.1W |
| | N48°00.00' | N46°25.00' | N45°08.00' | N42°39.00' | | | | EXIT-290.5W |
| | W115°25.00' | W116°10.00' | W116°44.00' | W117°47.00' | | | | |
| | | | BOI VORTAC | | | | | |
| | | | 273/48 | | | | | |
| | | | N43°50.00' | | | | | |
| | | | W117°17.00' | | | | | |
| REMARKS: AR4B (North) - To make an early exit from this track, air crews will file to NAV point DNJ 247/030 as an end point for refueling. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--|---|---------------------------|----------------------------|---|--|------------------------|--|---|
| AR5H (East) | N39°20.00' W131°00.00' | N39°23.00' W128°49.00' | N39°23.00' W126°11.00' | ENI VORTAC 279/38 N39°19.20' W124°00.80' | a. 283.900 b. 342.550 c. 1-1-1 d. 2/1 e. 30/93 | FL250/FL330 | 60 OSS/OSO Travis AFB, CA DSN 837-5582/1038 C707-424-5582/1038 | Oakland ARCP-306.2E EXIT-133.375E |
| (West) | ENI VORTAC 279/38 N39°19.20' W124°00.80' | N39°23.00' W126°11.00' | N39°23.00' W128°49.00' | N39°20.00' W131°00.00' | | | | Oakland ARCP-306.2W EXIT-133.375W |
| REMARKS: Tankers westbound on the track may routinely proceed to the exit point, execute a right turn and continue refueling eastbound, when annotated on the flight plan. Flight plan remarks will state: Continuous refueling through turn and eastbound to ARCP. Simultaneous opposite direction air refueling (SODAR) authorized with AR5L. | | | | | | | | |
| AR5L (East) | N39°20.00' W131°00.00' | N39°23.00' W128°49.00' | N39°23.00' W126°11.00' | ENI VORTAC 279/38 N39°19.20' W124°00.80' | a. 256.650 b. 278.750 c. 1-1-2 d. 3/1 e. 31/94 | 17000/FL230 | 60 OSS/OSO Travis AFB, CA DSN 837-5582/1038 C707-424-5582/1038 | Oakland ARCP-387.1E EXIT-134.15E |
| (West) | ENI VORTAC 279/38 N39°19.20' W124°00.80' | N39°23.00' W126°11.00' | N39°23.00' W128°49.00' | N39°20.00' W131°00.00' | | | | Oakland ARCP-387.1W EXIT-134.15W |
| REMARKS: Tankers westbound on the track may routinely proceed to the exit point, execute a right turn and continue refueling eastbound, when annotated on the flight plan. Flight plan remarks will state: Continuous refueling through turn and eastbound to ARCP. Simultaneous opposite direction air refueling (SODAR) authorized with AR5H. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|--|---|---|---|---|---------------------|--|---|
| AR6 (North) | SNS VORTAC 138/101 N35°08.00' W120°41.00' | SNS VORTAC 177/38 N36°03.00' W121°45.00' | SNS VORTAC 290/54 N37°12.00' W122°28.00' ENI VORTAC 156/49 N38°14.00' W123°07.00' ENI VORTAC 238/17 N38°59.00' W123°37.00' | ENI VORTAC 300/61 N39°48.00' W124°09.00' | a. 256.650 b. 274.450 c. 1-2-0 d. 4/1 e. 50/113 | FL250/FL330 | 60 OSS/OSO Travis AFB, CA DSN 837-5582/1038 C707-424-5582/1038 | Oakland ARCP-290.5W EXIT-290.3W |
| | (South) | ENI VORTAC 300/61 N39°48.00' W124°09.00' | ENI VORTAC 238/17 N38°59.00' W123°37.00' | ENI VORTAC 156/49 N38°14.00' W123°07.00' SNS VORTAC 290/54 N37°12.00' W122°28.00' SNS VORTAC 177/38 N36°03.00' W121°45.00' | SNS VORTAC 138/101 N35°08.00' W120°41.00' | | | Oakland ARCP-290.3E EXIT-290.5E |
| REMARKS: Hours of operation: 1630-2359Z++ and 0330-1400Z++ daily. All turns shall be made to the west. | | | | | | | | |
| AR7A | LKV VORTAC 300/67 N43°20.00' W121°30.00' | LKV VORTAC 203/66 N41°40.00' W121°28.00' | RBL VORTAC 024/52 N40°43.00' W121°28.00' | RBL VORTAC 117/50 N39°32.00' W121°26.00' | a. 276.500 b. 256.650 c. 1-1-2 d. 3/1 e. 51/114 | FL240/FL310 | 60 OSS/AO Travis AFB, CA DSN 837-5582/1038 C707-424-5582-1038 | Oakland EXIT-269.1E Seattle ARCP-327.1E |
| | REMARKS: Refueling southbound only. | | | | | | | |
| AR7B | RBL VORTAC 099/76 N39°32.00' W120°46.00' | RBL VORTAC 042/76 N40°44.00' W120°48.00' | LKV VORTAC 177/51 N41°40.00' W120°48.00' LKV VORTAC 260/13 N42°31.00' W120°48.00' | LKV VORTAC 326/52 N43°20.00' W120°50.00' | a. 236.650 b. 256.650 c. 1-1-0 d. 6/1 e. 52/115 | FL240/FL310 | 60 OSS/AO Travis AFB, CA DSN 837-5582/1038 C707-424-5582/1038 | Oakland ARCP-269.1W Seattle EXIT-327.1W |
| | REMARKS: Refuel northbound only. | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|---|---|---|--|--|------------------------|---|---------------------------------------|
| AR8A | EUG VORTAC 250/55 N44°07.00' W124°30.00' | OED VORTAC 272/76 N42°55.00' W124°30.00' | | RBL VORTAC 278/114 N40°54.00' W124°30.00' | a. 240.350 b. 256.650 c. 1-2-1 d. 5/1 e. 33/96 | FL240/FL330 | 60 OSS/AO Travis AFB, CA DSN 837-5582/1038 C707-424-5582/1038 | Seattle ARCP-360.7E EXIT-360.7E |
| REMARKS: Refuel southbound only. | | | | | | | | |
| AR8B | RBL VORTAC 227/59 N39°42.00' W123°23.00' | OED VORTAC 191/79 N41°20.00' W123°48.00' | OED VORTAC 247/40 N42°26.00' W123°48.00' | EUG VORTAC 250/25 N44°07.00' W123°48.00' | a. 305.500 b. 256.650 c. 1-2-2 d. 4/1 e. 32/95 | FL240/FL330 | 60 OSS/AO Travis AFB, CA DSN 837-5582/1038 C707-424-5582/1038 | Seattle ARCP-360.7W EXIT-279.6W |
| REMARKS: Refuel northbound only. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---------------|---------------------------|---------------------------|--|---------------------------|--------------------------------|----------------------------|---|--|
| AR9 (East) | GEG VORTAC 287/36 | MLP VOR-DME 326/55 | GTF VORTAC 298/94 | LWT VORTAC 017/116 | a. 238.900 b. 292.600 | FL240/FL270 FL310/FL330 | 120 FW Great Falls, IAP, MT DSN 791-0192 | Salt Lake City ARCP-251.1E EXIT-269.4E |
| | N47°55.00' W118°21.50' | N48°21.00' W116°00.00' | N48°33.00' W113°05.00' GTF VORTAC 330/73 N48°38.00' W111°49.00' LWT VORTAC 323/104 N48°40.00' W110°32.00' LWT VORTAC 352/98 N48°40.00' W109°15.00' | N48°40.00' W108°00.00' | c. 1-1-1 d. 2/1 e. 30/93 | | | |
| (West) | LWT VORTAC 017/116 | LWT VORTAC 323/104 | GTF VORTAC 292/106 | GEG VORTAC 287/36 | | | | Salt Lake City ARCP-317.6W EXIT-251.1W |
| | N48°40.00' W108°00.00' | N48°40.00' W110°32.00' | N48°32.00' W113°30.00' MLP VOR-DME 010/70 N48°28.00' W114°47.00' MLP VOR-DME 326/56 N48°21.00' W116°01.00' GEG VORTAC 002/42 N48°13.00' W117°15.00' | N47°55.00' W118°21.50' | | | | |

REMARKS: AR9 and AR9A simultaneous operations not authorized. See remarks section AR9A.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|---|--|---|---|---|----------------------------|--|--|
| AR9A (East) | GEG VORTAC 287/36 N47°55.00' W118°21.50' | MLP VOR-DME 326/55 N48°21.00' W116°00.00' | GTF VORTAC 298/94 N48°33.00' W113°05.00' GTF VORTAC 330/73 N48°38.00' W111°49.00' | GTF VORTAC 356/74 N48°39.00' W111°00.00' | a. 238.900 b. 292.600 c. 1-1-1 d. 2/1 e. 30/93 | FL240/FL270 FL310/FL330 | 120 FW Great Falls, IAP, MT DSN 791-0192 | Salt Lake City ARCP-251.1E EXIT-269.4E |
| (West) | GTF VORTAC 356/74 N48°39.00' W111°00.00' | GTF VORTAC 292/106 N48°32.00' W113°30.00' | MLP VOR-DME 010/70 N48°28.00' W114°47.00' MLP VOR-DME 326/56 N48°21.00' W116°01.00' GEG VORTAC 002/42 N48°13.00' W117°15.00' | GEG VORTAC 287/36 N47°55.00' W118°21.50' | | | | Salt Lake City ARCP-317.6W EXIT-251.1W |
| REMARKS: AR9 and AR9A simultaneous operations not authorized. To deconflict AR9 from AR604/Bearpaw ATCAA, scheduling unit will assign AR9A. Scheduling unit will inform users when abbreviated track is required; otherwise AR9 will be flown full length. End eastbound refueling operations no later than W111-00-00 (GTF 356/74). Complete turn for westbound (reverse course) operation no later than W110-32-00 (LWT 323/103). Bearpaw ATCAA N49-00-00 W110-00-00 to N49-00-00 W107-00-00 to N47-30-00 W107-00-00 to N47-30-00 W110-00-00 to beginning. | | | | | | | | |
| AR10 (Northwest) | BIL VORTAC 204/62 N45°00.00' W109°30.00' | HLN VORTAC 155/70 N45°28.00' W111°46.50' | MLP VOR-DME 146/84 N46°06.00' W115°10.00' | GEG VORTAC 156/65 N46°28.50' W117°30.00' | a. 278.750 b. 292.600 c. 1-2-0 d. 6/1 e. 51/114 | FL190/FL210 FL250/FL270 | 62 OSS/OSO McChord AFB, WA DSN 382-9925. Outside duty hr, call McChord Command Post - 382-2635. C253-982-9925. Outside duty hr, call McChord Command Post - 253-982-2635. (During non-duty hours, con- tact McChord Command Post DSN 382-2635, C253-982-2635) | Salt Lake City ARCP-338.3W Seattle EXIT-251.1W |
| (Southeast) | GEG VORTAC 156/65 N46°28.50' W117°30.00' | MLP VOR-DME 146/84 N46°06.00' W115°10.00' | HLN VORTAC 155/70 N45°28.00' W111°46.50' | BIL VORTAC 204/62 N45°00.00' W109°30.00' | | | | Salt Lake City EXIT-263.1E Seattle ARCP-251.1E |
| REMARKS: None | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|--|---|--|---|--------------------------------|---------------------|--|---|
| AR11 (East) | OCS VORTAC 357/33 | CZI VOR-DME 169/110 | BFF VORTAC 277/36 | RAP VORTAC 120/115 | a. 235.100 b. 320.900 | FL230/FL260 | 28 OSS/OSXS Ellsworth AFB, SD DSN 675-4246. After Hours relay through Raymond 33 675-3800. C605-385-4246 | Denver ARCP-385.6E EXIT-338.2E |
| | N42°08.00' W108°52.00' | N42°08.00' W106°36.00' | N42°05.00' W104°15.00' | N42°39.00' W101°09.00' | c. 1-1-4 d. 5/1 e. 33/96 | | | |
| | | | | | | | | |
| (West) | RAP VORTAC 120/115 N42°39.00' W101°09.00' | BFF VORTAC 007/24 N42°16.00' W103°19.00' | BFF VORTAC 277/36 N42°05.00' W104°15.00' | OCS VORTAC 357/33 N42°08.00' W108°52.00' | | | | Denver ARCP-338.2W Salt Lake City EXIT-353.5W |
| REMARKS: For AR11 (East) SODAR operations are authorized with AR14B (West). For AR11 (West) SODAR operations are authorized with AR14B (East). | | | | | | | | |
| AR12H (East) | BIL VORTAC 342/31 | MLS VORTAC 216/16 | MLS VORTAC 097/34 | DPR VORTAC 344/25 | a. 352.600 b. 320.900 | FL270/FL310 | 28 OSS/OSXS Ellsworth AFB, SD DSN 675-4246. (After hours: relay through Raymond 33 - 675-3800) C605-385-4246 | Minneapolis EXIT-317.5E Salt Lake City ARCP-272.75E |
| | N46°20.00' W108°40.00' | N46°13.00' W106°15.00' | N46°10.00' W105°12.00' | N45°30.00' W101°45.00' | c. 1-2-1 d. 3/1 e. 31/94 | | | |
| | | | | | | | | |
| (West) | DPR VORTAC 344/25 N45°30.00' W101°45.00' | DIK VORTAC 209/75 N45°56.00' W104°00.00' | MLS VORTAC 097/34 N46°10.00' W105°12.00' MLS VORTAC 216/16 N46°13.00' W106°15.00' | BIL VORTAC 342/31 N46°20.00' W108°40.00' | | | | Salt Lake City ARCP-272.75W EXIT-351.9W |
| REMARKS: Simultaneous opposite direction air refueling (SODAR) authorized with AR12L. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--|---|---|--|---|---|------------------------|---|--|
| AR12L (East) | BIL VORTAC 342/31 N46°20.00' W108°40.00' | MLS VORTAC 216/16 N46°13.00' W106°15.00' | MLS VORTAC 097/34 N46°10.00' W105°12.00' DIK VORTAC 209/75 N45°56.00' W104°00.00' | DPR VORTAC 344/25 N45°30.00' W101°45.00' | a. 344.700 b. 292.600 c. 2-2-1 d. 5/1 e. 55/118 | FL190/FL230 | 28 OSS/OSXS Ellsworth AFB, SD DSN 675-4246. (After hours: relay through Raymond 33 - 675-3800) C605-385-4246 | Minneapolis EXIT-263.0E Salt Lake City ARCP-272.75E |
| (West) | DPR VORTAC 344/25 N45°30.00' W101°45.00' | DIK VORTAC 209/75 N45°56.00' W104°00.00' | MLS VORTAC 097/34 N46°10.00' W105°12.00' MLS VORTAC 216/16 N46°13.00' W106°15.00' | BIL VORTAC 342/31 N46°20.00' W108°40.00' | | | | Salt Lake City ARCP-272.75W EXIT-351.9W |
| REMARKS: Simultaneous opposite direction air refueling (SODAR) authorized with AR12H. | | | | | | | | |
| AR13 (East) | TCC VORTAC 202/38 N34°40.00' W104°02.00' | PNH VORTAC 197/35 N34°42.00' W102°00.00' | SPS VORTAC 282/78 N34°29.00' W100°03.00' SPS VORTAC 303/30 N34°20.00' W99°01.50' | SPS VORTAC 054/31 N34°14.00' W98°03.00' | a. 238.900 b. 260.200 c. 1-1-3 d. 4/1 e. 32/95 | FL240/FL310 | 2 OSS/OSOS Barksdale AFB, LA DSN 781-4832/7182 C318-456-4832/7182 | Fort Worth ARCP-381.6E EXIT-285.6E |
| (West) | SPS VORTAC 054/31 N34°14.00' W98°03.00' | SPS VORTAC 282/78 N34°29.00' W100°03.00' | PNH VORTAC 197/35 N34°42.00' W102°00.00' TCC VORTAC 124/41 N34°41.50' W103°01.00' | TCC VORTAC 202/38 N34°40.00' W104°02.00' | | | | Fort Worth ARCP-285.6W EXIT-251.1W |
| REMARKS: Restricted to a refueling block altitude of FL 240/FL 260 between 1200-1700Z++, for operations after 1830Z++ refueling block restricted to either FL 240/FL 260 or FL 270/FL 290. A/R prohibited 1700-1930Z++ and 0000-0100Z++. The altitude block of FL 240/FL 310 shall be available between 0100-0400Z++. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|--|---|---|--|---|------------------------|---|--|
| AR14 (East) | OCS VORTAC 357/33 N42°08.00' W108°52.00' | CZI VOR-DME 169/110 N42°08.00' W106°36.00' | BFF VORTAC 277/36 N42°05.00' W104°15.00' | RAP VORTAC 120/115 N42°39.00' W101°09.00' | a. 336.100 b. 359.100 c. 1-3-1 d. 6/1 e. 52/115 | FL190/FL220 | 28 OSS/OSXS Ellsworth AFB, SD DSN 675-4246. (After hours: relay through Raymond 33 - 675-3800) C605-385-4246 | Denver ARCP-239.0E EXIT-269.6E |
| (West) | RAP VORTAC 120/115 N42°39.00' W101°09.00' | BFF VORTAC 007/24 N42°16.00' W103°19.00' | BFF VORTAC 277/36 N42°05.00' W104°15.00' | OCS VORTAC 357/33 N42°08.00' W108°52.00' | | | | Denver ARCP-338.2W Salt Lake City EXIT-291.6W |
| REMARKS: AR14 (East) SODAR operations are authorized with AR11 (West). AR14 (West) SODAR operations are authorized with AR11 (East). | | | | | | | | |
| AR16 (East) | PWE VORTAC 184/33 N39°40.00' W96°18.50' | LMN VORTAC 207/38 N40°03.80' W94°25.80' | IRK VORTAC 318/18 N40°22.50' W92°49.30' | IRK VORTAC 059/84 N40°43.50' W90°55.50' | a. 343.500 b. 319.700 c. 1-1-1 d. 2/1 e. 30/93 | FL240/FL260 | 1 ACCS Offutt AFB, NE DSN 271-5687 (STN 237) | Chicago EXIT-353.5E Kansas City ARCP-343.7E |
| (West) | IRK VORTAC 059/84 N40°43.50' W90°55.50' | IRK VORTAC 318/18 N40°22.50' W92°49.30' | LMN VORTAC 207/38 N40°03.80' W94°25.80' | PWE VORTAC 184/33 N39°40.00' W96°18.50' | | | | Kansas City ARCP-370.9W EXIT-343.7W |
| REMARKS: Aircrews File AR016 on DD 175 or DD 1801 to deconflict with other routing with same identifier. | | | | | | | | |
| AR17 (North) | HLC VORTAC N39°15.52' W100°13.55' | HCT VORTAC 025/33 N40°54.00' W100°31.00' | TDD VOR-DME N41°58.90' W100°43.14' | RAP VORTAC 140/22 N43°38.00' W102°46.00' | a. 276.500 b. 320.900 c. 1-2-2 d. 6/1 e. 50/113 | FL190/FL220 | 28 OSS/OSXS Ellsworth AFB, SD DSN 675-4246. (After hours: relay through Raymond 33 - 675-3800) C605-385-4246 | Denver ARCP-353.7W EXIT-338.2W |
| (South) | RAP VORTAC 140/22 N43°38.00' W102°46.00' | TDD VOR-DME 310/35 N42°25.00' W101°15.00' | TDD VOR-DME N41°58.90' W100°43.14' | HLC VORTAC N39°15.52' W100°13.55' | | | | Denver ARCP-338.2E EXIT-353.7E |
| REMARKS: None | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--|---|--|--|---|--|------------------------|---|---|
| AR19 (North) | HLC VORTAC 062/29 N39°26.00' W99°38.00' | HCT VORTAC 036/59 N41°07.00' W99°57.50' | TDD VOR-DME 052/28 N42°12.00' W100°11.00' | RAP VORTAC 087/40 N43°51.00' W102°07.00' | a. 295.400 b. 320.900 c. 1-2-3 d. 3/1 e. 30/93 | FL270/FL290 | 28 OSS/OSXS Ellsworth AFB, SD DSN 675-4246. (After hours: relay through Raymond 33 675-3800) C605-385-4246 | Denver ARCP-360.65W EXIT-322.5W |
| (South) | RAP VORTAC 087/40 N43°51.00' W102°07.00' | TDD VOR-DME 357/38 N42°36.00' W100°38.50' | TDD VOR-DME 052/28 N42°12.00' W100°11.00' | HLC VORTAC 062/29 N39°26.00' W99°38.00' | | | | Denver ARCP-322.5E EXIT-360.65E |
| REMARKS: FL 270/FL 290 to be used only between 0230-1630Z++ daily. | | | | | | | | |
| AR20 (Northeast) | YQI VOR-DME 250/82 N42°56.72' W67°30.48' | YQI VOR-DME N43°49.50' W66°04.95' | YHZ VOR-DME N44°55.39' W63°24.11' | YQY VORTAC N46°09.20' W60°03.35' | a. 341.750 b. 349.700 c. 2-1-1 d. 5/1 e. 62/125 ① | 15000/FL280 ② | NEADS/DOAS/Rome NY DSN 587-6247 C315-334-6247 | Boston ARCP-269.3E/133.45 E Moncton EXIT-368.5E/123.9E |
| (Southwest) | YQY VORTAC 086/100 N46°53.38' W57°53.45' | YQY VORTAC N46°09.20' W60°03.35' | YHZ VOR-DME N44°55.39' W63°24.11' | YQI VOR-DME N43°49.50' W66°04.95' | | | | Gander ARCP-247.0W/133.55 W ARCP-294.5W/133.9 W Moncton EXIT-266.3W/118.6W |
| REMARKS: Primary means of scheduling track reservation requests is email to: doas@neads.ang.af.mil. Transatlantic fighter crossings will still require altitude reservations. | | | | | | | | |
| ① Alternate Primary freq: 305.5. Alternate Backup freq: 265.65 | | | | | | | | |
| ② AR20 (SOUTHWEST) REFUELING ALTITUDES: BTN FL230 and FL250, or BTN FL260 and FL280. | | | | | | | | |
| AR24 (North) | HLC VORTAC 062/29 N39°26.00' W99°38.00' | HCT VORTAC 036/59 N41°07.00' W99°57.50' | TDD VOR-DME 052/28 N42°12.00' W100°11.00' | RAP VORTAC 087/40 N43°51.00' W102°07.00' | a. 295.400 b. 320.900 c. 1-2-3 d. 3/1 e. 30/93 | FL190/FL220 | 28 OSS/OSXS Ellsworth AFB, SD DSN 675-4246 (After hours: relay through Raymond 33 675-3800) C605-385-4246 | Denver ARCP-338.2W EXIT-353.7W |
| (South) | RAP VORTAC 087/40 N43°51.00' W102°07.00' | TDD VOR-DME 357/38 N42°36.00' W100°38.50' | TDD VOR-DME 052/28 N42°12.00' W100°11.00' | HLC VORTAC 062/29 N39°26.00' W99°38.00' | | | | Denver ARCP-338.2E EXIT-353.7E |
| REMARKS: None | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|-----------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------------|---------------------|------------------------------------|---|
| AR62 (East) | YKL VOR-DME 292/143 | YKL VOR-DME 304/68 | YKL VOR-DME 070/49 | YKR VOR-DME 017/152 | a. 242.050 b. 243.450 | FL210/FL280 | NEADS/DOAS/Rome NY DSN 587-6247 | Gander ACC EXIT-135.4E Mont- real ACC |
| CANADA | N54°40.00' W70°51.00' | N55°00.00' W68°41.00' | N55°23.00' W65°43.00' | N55°50.00' W60°51.00' | c. 5-1-0 d. 3/1 e. 51/114 | | C315-334-6247 ① | ARCP-132.9E |

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|--------|--------------------------|--------------------------|--------------------------|--------------------------|--|--|--|--|
| (West) | YKR VOR-DME 017/152 | YKL VOR-DME 091/133 | YKL VOR-DME 070/49 | YKL VOR-DME 292/143 | | | | Gander ACC ARCP-135.4W Mont- real ACC EXIT-132.9W |
| | N55°50.00' W60°51.00' | N55°38.00' W63°10.00' | N55°23.00' W65°43.00' | N54°40.00' W70°51.00' | | | | |

REMARKS: Track comes within 12 NM of CYA 732 (controlled by Goose Bay).

① Primary means of scheduling track reservation requests is email to: doas@neads.ang.af.mil

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|-------------------------|--------------------------|--------------------------|--|--------------------------|--------------------------------|------------------|--|---|
| AR101 (North) | HRV VORTAC 282/43 | MCB VORTAC 251/28 | | MEM VORTAC 337/64 | a. 324.600 b. 260.200 | FL260/FL290 ③ | 2 OSS/OSOS Barksdale AFB, LA DSN 781-4832/7182 | Memphis ARCP-263.1/133.65 EXIT-257.6/132.375 ④ |
| | N30°00.00' W90°50.00' | N31°10.00' W90°46.00' | | N36°00.00' W90°30.00' | c. 1-1-2 d. 3/1 e. 31/94 | | C318-456-4832/7182 | |

| | | | | | | | | |
|---------|--------------------------|--------------------------|--|--------------------------|--|--|--|--|
| (South) | MEM VORTAC 337/64 | SQS VORTAC 330/36 ① | | HRV VORTAC 282/43 ② | | | | Memphis ARCP-322.35/133.075 EXIT-263.1/133.65 ④ |
| | N36°00.00' W90°30.00' | N34°00.00' W90°36.00' | | N30°00.00' W90°50.00' | | | | |

REMARKS:

① SOUTH ARCP-Between 1500-1630Z++ limited to either buddy, on course or enroute cell rendezvous.

② SOUTH EXIT-When refueling on the southbound track, aircraft will exit the track with turns to the right unless otherwise authorized by ATC.

③ Refueling is prohibited between 1900Z++ and 2100Z++.

④ SOUTH ASSIGNED ARTCC-ARCP- 322.35/133.075; use ARIP 257.6/132.375 between 1500-1630Z++ or when buddy, on course or enroute cell is planned.

| | | | | | | | | |
|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------------|-------------|--|--|
| AR102A (East) | ABI VORTAC 045/16 | MQP VORTAC 106/20 | ACT VORTAC 035/76 | EIC VORTAC 120/35 | a. 276.500 b. 260.200 | FL240/FL310 | 2 OSS/OSOS Barksdale AFB, LA DSN 781-4832/7182 | Fort Worth ARCP-323.0E EXIT-327.8E |
| | N32°38.00' W99°37.00' | N32°35.00' W97°38.00' | N32°34.00' W96°13.70' | N32°25.00' W93°16.00' | c. 1-1-1 d. 2/1 e. 30/93 | | C318-456-4832/7182 | |
| | | | TXK VORTAC 199/70 | | | | | |
| | | | N32°27.70' W94°40.00' | | | | | |

REMARKS: Open for night-time use only: 0240-1200Z++.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---------------|-------------|-------------|----------------------------|------------|------------|------------------------|--|--|
| AR102B | LBB VORTAC | LBB VORTAC | ABI VORTAC | EIC VORTAC | a. 276.500 | FL240/FL310 | 2 OSS/OSOS Barksdale AFB, LA DSN 781-4832/7182 C318-456-4832/7182 | Fort Worth EXIT-327.8E ARCP-327.1E/133.35 E |
| | 232/70 | 148/48 | 045/16 | 120/35 | b. 260.200 | | | |
| | N33°11.00' | N32°57.00' | N32°38.00' | N32°25.00' | c. 1-1-1 | | | |
| | W103°09.00' | W101°35.00' | W99°37.00' | W93°16.00' | d. 2/1 | | | |
| | | | MQP VORTAC | | e. 30/93 | | | |
| | | | 106/20 | | | | | |
| | | | N32°35.00' | | | | | |
| | | | W97°38.00' | | | | | |
| | | | ACT VORTAC | | | | | |
| | | | 035/76 | | | | | |
| | | | N32°34.00' | | | | | |
| | | | W96°13.70' | | | | | |
| | | | TXK VORTAC | | | | | |
| | | | 199/70 | | | | | |

REMARKS: Open for night-time use only: 0240-1200Z++. Restricted to a refueling block altitude of FL 270/FL 290 between 0240-0500Z++. Restricted for use to B-52 FTU aircraft and support tankers only. No simultaneous refueling with AR102A.

| | | | | | | | | |
|--------------|------------|------------|------------|------------|------------|-------------|--|-----------------|
| AR103 | MCB VORTAC | HRV VORTAC | N29°09.00' | N24°20.00' | a. 327.600 | FL240/FL260 | 55WG Offutt AFB, NE DSN 271-3430 C402-294-3430 | Houston ARCP |
| | 302/38 | 318/13 | W89°41.00' | W87°05.00' | b. 260.200 | | | |
| | N31°42.00' | N30°01.80' | N27°30.00' | | c. 1-1-2 | | | |
| | W90°52.00' | W90°10.33' | W88°43.00' | | d. 4/1 | | | |
| | | | N25°32.00' | | e. 32/95 | | | |

REMARKS: To be used by Offutt based aircraft and support tankers only. Tanker Orbit Pattern: N29-48-00 W90-11-00 to N29-56-00 W89-43-00 to N30-54-00 W90-08-00 to N30-45-00 W90-35-00.

| | | | | | | | | |
|------------------------|-------------|-------------|------------|------------|------------|-------------|--|--|
| AR104 (East) | INK VORTAC | ABI VORTAC | ABI VORTAC | ACT VORTAC | a. 344.700 | FL260/FL310 | 2 OSS/OSOS Barksdale AFB, LA DSN 781-4832/7182 C318-456-4832/7182 | Fort Worth ARCP-269.0E EXIT-269.0E |
| | 189/28 | 225/100 | 150/46 | 322/23 | b. 260.200 | | | |
| | N31°26.00' | N31°31.00' | N31°46.00' | N32°00.00' | c. 1-1-2 | | | |
| | W103°26.00' | W101°26.00' | W99°32.00' | W97°30.00' | d. 3/1 | | | |
| | | | | | e. 31/94 | | | |

| | | | | | | | | |
|--------|------------|------------|-------------|-------------|--|--|--|--|
| (West) | ACT VORTAC | ABI VORTAC | ABI VORTAC | INK VORTAC | | | | Fort Worth ARCP-351.9W EXIT-351.9W |
| | 322/23 | 150/46 | 225/100 | 189/28 | | | | |
| | N32°00.00' | N31°46.00' | N31°31.00' | N31°26.00' | | | | |
| | W97°30.00' | W99°32.00' | W101°26.00' | W103°26.00' | | | | |

REMARKS: SODAR Operations authorized with AR113 and AR114. (West) Track closed from 1700-1800Z++. Coordinate with NAS Fort Worth Operations/Brownwood MOA scheduling for use, DSN 739-7689.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---------------|------------|-------------|-------------------------|-------------|------------|---------------------|--|----------------------------|
| AR104M | EIC VORTAC | TTT VOR-DME | ACT VORTAC | INK VORTAC | a. 344.700 | FL260/FL310 | 2 OSS/OSOS Barksdale AFB, LA DSN 781-4832/7182 C318-456-4832/7182 | Fort Worth ARCP-322.45W |
| | 270/31 | 092/62 | 322/23 | 189/28 | b. 260.200 | | | |
| | N32°50.00' | N32°43.10' | N32°00.00' | N31°26.00' | c. 1-1-2 | | | |
| | W94°25.00' | W95°50.00' | W97°30.00' | W103°26.00' | d. 3/1 | | | |
| | | | ABI VORTAC | | e. 31/94 | | | |
| | | | 150/46 | | | | | |
| | | | N31°46.00' | | | | | |
| | | W99°32.00' | | | | | | |
| | | ABI VORTAC | | | | | | |
| | | 225/100 | | | | | | |
| | | N31°31.00' | | | | | | |
| | | W101°26.00' | | | | | | |

REMARKS: Air refueling authorized during the following hours only: 1600-1900Z++ (1000-1300 Central Time). Restricted for use to B-52 FTU aircraft and support tankers only. SODAR operations authorized with AR113 and AR114. No simultaneous refueling with AR104.

| | | | | | | | | |
|------------------------|------------|------------|--|------------|------------|-------------|---|---|
| AR105 (East) | ONL VORTAC | FOD VORTAC | | FOD VORTAC | a. 238.900 | FL190/FL330 | 55 WG Offutt AFB, NE DSN 271-3430 C402-294-3430 | Minneapolis ARCP-269.0E EXIT-269.0E |
| | 176/29 | 254/91 | | 077/13 | b. 320.900 | | | |
| | N42°00.00' | N42°22.00' | | N42°38.00' | c. 1-2-0 | | | |
| | W98°45.00' | W96°19.00' | | W94°00.00' | d. 3/1 | | | |
| | | | | | e. 51/114 | | | |
| (West) | FOD VORTAC | FOD VORTAC | | ONL VORTAC | | | | Minneapolis ARCP-269.0W EXIT-269.0W |
| | 077/13 | 254/91 | | 176/29 | | | | |
| | N42°38.00' | N42°22.00' | | N42°00.00' | | | | |
| | W94°00.00' | W96°19.00' | | W98°45.00' | | | | |

REMARKS: When reversing track, right teardrop turns must be used. SODAR authorized. AR105 will be scheduled solely by the 55 SRW. 55 SRW aircraft will have priority for use of AR105.

| | | | | | | | | |
|-------------------------|-------------|-------------|-------------|-------------|------------|-------------|--|---|
| AR106H (East) | MLS VORTAC | DIK VORTAC | ABR VOR-DME | ABR VOR-DME | a. 295.800 | FL260/FL310 | 5 BMW Minot AFB, ND DSN 453-2002/3527 C701-723-2002/3527 | Minneapolis ARCP-269.4E EXIT-306.2E |
| | 341/21 | 217/46 | 279/100 | N45°25.04' | b. 320.900 | | | |
| | N46°44.00' | N46°22.00' | N45°52.00' | W98°22.12' | c. 1-3-0 | | | |
| | W106°00.00' | W103°38.00' | W100°39.00' | | d. 4/1 | | | |
| | | | | | e. 50/113 | | | |
| (West) | ABR VOR-DME | ABR VOR-DME | DIK VORTAC | MLS VORTAC | | | | Minneapolis ARCP-306.2W EXIT-269.4W |
| | N45°25.04' | 279/100 | 217/46 | 341/21 | | | | |
| | W98°22.12' | N45°52.00' | N46°22.00' | N46°44.00' | | | | |
| | | W100°39.00' | W103°38.00' | W106°00.00' | | | | |

REMARKS: Simultaneous opposite direction aerial refueling (SODAR) operations are authorized with AR106L.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|---|---|---|---|---|----------------------------|--|--|
| AR106L (East) | MLS VORTAC 341/21 N46°44.00' W106°00.00' | DIK VORTAC 217/46 N46°22.00' W103°38.00' | ABR VOR-DME 279/100 N45°52.00' W100°39.00' | ABR VOR-DME N45°25.04' W98°22.12' | a. 305.500 b. 320.900 c. 1-3-1 d. 5/1 e. 52/115 | 17000/FL230 | 55 WG Offutt AFB, NE DSN 271-3430/5480 C402-294-3430 | Minneapolis ARCP-269.4E EXIT-306.2E |
| (West) | ABR VOR-DME N45°25.04' W98°22.12' | ABR VOR-DME 279/100 N45°52.00' W100°39.00' | DIK VORTAC 217/46 N46°22.00' W103°38.00' | MLS VORTAC 341/21 N46°44.00' W106°00.00' | | | | Minneapolis ARCP-306.2W EXIT-269.4W |
| REMARKS: Simultaneous opposite direction aerial refueling (SODAR) operations are authorized with AR106H. | | | | | | | | |
| AR107 | TVC VORTAC 192/49 N43°52.00' W85°44.00' | TVC VORTAC 054/26 N44°56.00' W85°05.00' | TVC VORTAC 038/56 N45°24.00' W84°47.00' | TVC VORTAC N44°40.08' W85°33.00' | a. 324.600 b. 282.700 c. 1-1-2 d. 3/1 e. 31/94 | 14000/FL230 | 110 FG/DO MIANG Battle Creek, MI DSN 580-3288 | Minneapolis ARCP-353.6E EXIT-353.6E |
| REMARKS: Refueling aircraft at the TVC VORTAC 038/56, shall execute a left turn and continue refueling southbound to the exit point. | | | | | | | | |
| AR108 (East) | N27°30.00' W93°30.00' | N27°30.00' W91°37.00' | N27°30.00' W90°18.00' | N27°30.00' W88°25.00' | a. 348.900 b. 260.200 c. 1-1-3 d. 3/1 e. 33/96 | FL180/FL200 FL210/FL230 | 433 OSS/OSC Lackland AFB, TX DSN 945-4333 C210-925-4333 | Houston ARCP-132.65E ARCP-133.4E ARCP-306.3E EXIT-133.85E EXIT-269.5E |
| (West) | N27°30.00' W88°25.00' | N27°30.00' W90°18.00' | N27°30.00' W91°37.00' | N27°30.00' W93°30.00' | | | | Houston ARCP-132.65W ARCP-133.85W ARCP-269.5W EXIT-133.4W EXIT-306.3W |
| REMARKS: Aerial refueling permitted from 1130-1330L and 1730-2300L daily. Simultaneous opposite direction aerial refueling (SODAR) operations are authorized with AR 108 in specific blocks. Refueling aircraft will execute a southbound turn and remain within 30 miles of track course and return to centerline within 20 miles of exit point/turn point. 433 OSS/OSC scheduling agency will resolve conflicts with W92, W54 and AW101. Southbound turns to avoid flying north into W147, W59 and northern sections of W92, W54, and AW101. Track is designed specifically for single tanker/receiver operations and is prohibited to fighter type aircraft. EMA | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|----------------------|-----------------------|-------------------------|----------------------|--------------------------|---------------------|--|---|
| AR109H (East) | DLH VORTAC 239/53 | GEP VORTAC 061/100 | TVC VORTAC 308/110 | TVC VORTAC 013/66 | a. 343.500 b. 320.900 | FL250/FL310 | 55 OSS/OST, Offutt AFB, NE DSN (312) 271-5109/5009/2077 (1330-2230Z++ wkd) C402-294-xxxx (1330-2230Z++ wkd) | Minneapolis ARCP-327.1E EXIT-327.1E |
| | N46°25.00' | N45°48.00' | N45°45.00' | N45°45.00' | c. 1-1-1 | | | |
| | W93°22.00' | W91°11.00' | W87°39.00' | W85°15.00' | d. 2/1 e. 30/93 | | | |
| (West) | TVC VORTAC 013/66 | TVC VORTAC 308/110 | GEP VORTAC 061/100 | DLH VORTAC 239/53 | | | | Minneapolis ARCP-327.1W EXIT-327.1W |
| | N45°45.00' | N45°45.00' | N45°48.00' | N46°25.00' | | | | |
| | W85°15.00' | W87°39.00' | W91°11.00' | W93°22.00' | | | | |
| REMARKS: SODAR authorized with AR109L. | | | | | | | | |
| AR109L (East) | DLH VORTAC 239/53 | GEP VORTAC 061/100 | TVC VORTAC 308/110 | TVC VORTAC 013/66 | a. 327.600 b. 320.900 | FL190/FL230 | 55 OSS/OST, Offutt AFB, NE DSN (312) 271-5109/5009/2077 (1330-2230Z++ wkd) C402-294-xxxx (1330-2230Z++ wkd) | Minneapolis ARCP-327.1E EXIT-327.1E |
| | N46°25.00' | N45°48.00' | N45°45.00' | N45°45.00' | c. 1-1-3 | | | |
| | W93°22.00' | W91°11.00' | W87°39.00' | W85°15.00' | d. 4/1 e. 32/95 | | | |
| (West) | TVC VORTAC 013/66 | TVC VORTAC 308/110 | GEP VORTAC 061/100 | DLH VORTAC 239/53 | | | | Minneapolis ARCP-327.1W EXIT-327.1W |
| | N45°45.00' | N45°45.00' | N45°48.00' | N46°25.00' | | | | |
| | W85°15.00' | W87°39.00' | W91°11.00' | W93°22.00' | | | | |
| REMARKS: SODAR authorized with AR109H. | | | | | | | | |
| AR110 (East) | SGF VORTAC 256/70 | SGF VORTAC 039/23 | ENL VORTAC 255/109 | ENL VORTAC 075/8 | a. 327.600 b. 319.700 | FL240/FL270 | 509 OSS/OSOS Whiteman AFB, MO DSN 975-1711/1754 | Kansas City ARCP-277.1E EXIT-319.0E |
| | N37°08.00' | N37°38.50' | N38°04.00' | N38°27.00' | c. 1-1-4 | | | |
| | W94°47.00' | W93°00.00' | W91°25.00' | W89°00.00' | d. 4/1 e. 51/114 | | | |
| (West) | ENL VORTAC 075/8 | ENL VORTAC 255/83 | ENL VORTAC 255/109 | SGF VORTAC 256/70 | | | | Kansas City ARCP-319.0W EXIT-277.4W |
| | N38°27.00' | N38°09.30' | N38°04.00' | N37°08.00' | | | | |
| | W89°00.00' | W90°52.50' | W91°25.00' | W94°47.00' | | | | |
| | | | SGF VORTAC 056/61 | | | | | |
| | | | N37°52.00' | | | | | |
| | | | W92°13.00' | | | | | |
| | | | SGF VORTAC 308/13 | | | | | |
| | | | N37°30.00' | | | | | |
| | | | W93°32.00' | | | | | |
| REMARKS: AR110W rendezvous/rejoin maneuvers prohibited between 1515-1630Z++. | | | | | | | | |
| ① After duty hours contact C660-563-1035 or Cmd Post DSN 975-3778. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|------------------------|--|--|--|--|--|------------------------|---|--|
| AR111 (East) | ARG VORTAC 274/59 N36°15.00' W92°10.00' | ARG VORTAC 046/56 N36°42.00' W90°04.00' | PXV VORTAC 208/65 N37°00.00' W88°28.00' | BNA VORTAC 017/51 N36°56.00' W86°23.00' | a. 348.900 b. 319.700 c. 1-1-3 d. 2/1 e. 30/93 | FL250/FL290 | 552 OSS/OSOS Tinker AFB, OK DSN 884-1203/1204 C405-734-1203/1204 | Memphis ARCP-257.6E/132.37 E EXIT-288.35E/124.27 E |
| (West) | BNA VORTAC 017/51 N36°56.00' W86°23.00' | PXV VORTAC 208/65 N37°00.00' W88°28.00' | ARG VORTAC 046/56 N36°42.00' W90°04.00' | ARG VORTAC 274/59 N36°15.00' W92°10.00' | | | | Memphis ARCP-354.15W/122.2 75W EXIT-288.35W/124.2 7W |

REMARKS: Restricted for use by the 552 ACW aircraft and support tankers only. Tanker Orbit Pattern (NONRADAR): Holding point ARCP; Left Turns; 14 Mile Legs. Tankers shall remain clear of the Lindbergh 'D' ATCAA when active and is defined as follows: Beginning at 37 00 00N - 91 22 00W to 37 00 00N - 90 54 00W to 36 38 00N - 90 58 00W to 36 38 00N - 91 31 00W to beginning. FL180 to FL500.

| | | | | | | | | |
|-------------------------|--|--|--|--|--|-------------|---|---|
| AR112H (East) | IRW VORTAC 223/41 N34°55.00' W98°15.00' | TUL VORTAC 191/61 N35°13.00' W96°10.00' | TUL VORTAC 138/44 N35°35.37' W95°16.00' RZC VORTAC 201/25 N35°52.00' W94°20.00' RZC VORTAC 092/36 N36°11.00' W93°23.00' | ARG VORTAC 282/74 N36°28.00' W92°25.00' | a. 235.100 b. 260.200 c. 1-2-1 d. 6/1 e. 33/96 | FL240/FL310 | VQ3 Tinker AFB, OK DSN 339-3911 (After duty hours 884-9928) C405-739-3911 (After duty hours 405-734-9928) | Fort Worth ARCP-363.1E Mem- phis EXIT-353.8E |
| (West) | ARG VORTAC 282/74 N36°28.00' W92°25.00' | RZC VORTAC 201/25 N35°52.00' W94°20.00' | TUL VORTAC 138/44 N35°35.37' W95°16.00' TUL VORTAC 191/61 N35°13.00' W96°10.00' IRW VORTAC 124/24 N35°06.00' W97°15.00' | IRW VORTAC 223/41 N34°55.00' W98°15.00' | | | | Fort Worth EXIT-363.1W Mem- phis ARCP-353.8W |

REMARKS: All air refueling prohibited during the following hours: 1500-1630Z and 1900-2100Z++ Mon-Fri. While maneuvering/orbiting on AR112, aircrews are reminded to avoid R5601A and R5601C.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|-------------------------|------------|------------|-------------------------|------------|------------|---------------------|---------------------------|------------------|
| AR112L (East) | IRW VORTAC | TUL VORTAC | TUL VORTAC | ARG VORTAC | a. 295.800 | FL190/FL230 | 917OSF, Barksdale AFB, LA | Fort Worth |
| | 124/24 | 191/61 | 138/44 | 282/74 | b. 260.200 | ① | DSN 781-8078 | ARCP-363.1E Mem- |
| | N35°06.00' | N35°13.00' | N35°35.00' | N36°28.00' | c. 1-1-0 | | C318-456-8078 | phis |
| | W97°15.00' | W96°10.00' | W95°16.00' | W92°25.00' | d. 4/1 | | | EXIT-353.8E |
| | | | RZC VORTAC | | e. 50/113 | | | |
| | | | 201/25 | | | | | |
| | | | N35°52.00' | | | | | |
| | | | W94°20.00' | | | | | |
| (West) | ARG VORTAC | RZC VORTAC | TUL VORTAC | IRW VORTAC | | | | Fort Worth |
| | 282/74 | 201/25 | 138/44 | 124/24 | | | | EXIT-363.1W Mem- |
| | N36°28.00' | N35°52.00' | N35°35.00' | N35°06.00' | | | | phis |
| | W92°25.00' | W94°20.00' | W95°16.00' | W97°15.00' | | | | ARCP-353.8W |
| | | | TUL VORTAC | | | | | |
| | | | 191/61 | | | | | |
| | | | N35°13.00' | | | | | |
| | | | W96°10.00' | | | | | |

REMARKS: Restricted for use by the 917WG aircraft and supporting tankers only. All air refueling prohibited during the following hours: 1500-1630Z and 1900-2100Z++ Mon-Fri. While maneuvering/orbiting on AR112, aircrews are reminded to avoid R5601A and R5601C.

① Or as assigned by ATC.

| | | | | | | | | |
|------------------------|-------------|-------------|-------------|-------------|------------|-------------|--------------------------|------------------|
| AR113 (East) | INK VORTAC | ABI VORTAC | ABI VORTAC | ACT VORTAC | a. 283.900 | FL190/FL230 | 7 OSS/OSTA Dyess AFB, TX | Fort Worth |
| | 193/26 | 230/96 | 140/42 | 322/23 | b. 260.300 | | DSN 461-3665 | ARCP-360.8E |
| | N31°28.70' | N31°41.00' | N31°52.00' | N32°00.00' | c. 1-1-4 | | C325-696-3665 | EXIT-353.7E |
| | W103°27.00' | W101°30.00' | W99°27.00' | W97°30.00' | d. 6/1 | | | |
| | | | | e. 52/115 | | | | |
| (West) | ACT VORTAC | ABI VORTAC | ABI VORTAC | INK VORTAC | | | | Albuquerque |
| | 322/23 | 140/42 | 230/96 | 193/26 | | | | EXIT-343.6W Fort |
| | N32°00.00' | N31°52.00' | N31°41.00' | N31°28.70' | | | | Worth |
| | W97°30.00' | W99°27.00' | W101°30.00' | W103°27.00' | | | | ARCP-269.4W |

REMARKS: No simultaneous refueling with AR114. SODAR operations authorized with AR104. Intended for use by B-1 aircraft and support tankers. Other aircraft permitted on non-interference basis. The 7 OSS/OSTC retains preemption authority. Albuquerque ARTCC radar must be operational.

| | | | | | | | | |
|--------------|-------------|-------------|------------|-------------|------------|-------------|--------------------------|------------------|
| AR114 | INK VORTAC | ABI VORTAC | ABI VORTAC | INK VORTAC | a. 366.300 | FL190/FL230 | 7 OSS/OSTA Dyess AFB, TX | Albuquerque |
| | 193/26 | 230/98 | 162/35 ① | 193/27 | b. 260.200 | | DSN 461-3665 | EXIT-343.6E Fort |
| | N31°28.85' | N31°39.52' | N31°55.00' | N31°27.93' | c. 1-2-0 | | C325-696-3665 | Worth |
| | W103°27.45' | W101°31.52' | W99°46.00' | W103°27.93' | d. 5/1 | | | ARCP-360.8E |
| | | ABI VORTAC | | e. 33/96 | | | | |
| | | 230/98 | | | | | | |
| | | N31°39.52' | | | | | | |
| | | W101°31.52' | | | | | | |

REMARKS: AR114 is intended for use by 7 BW B-1 and support tankers for training requirements. All other units and aircraft are permitted use on a non-interference basis. The 7 BW retains preemption authority for these purposes. Simultaneous Opposite Direction Air Refueling (SODAR) is authorized IAW FAA 7610.4J with AR104. Neither simultaneous refueling nor SODAR is authorized with AR113. Albuquerque ARTCC radar must be operational for use.

① Aircraft when reversing the track at the Navigation Check Point 1 will make a 15 degrees bank left turn and roll out with approximately a 15 degrees intercept to course centerline.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|-------------|-------------|----------------------------|-----------------------------------|------------|------------------------|---------------------------------|---|
| AR115 | ONM VORTAC | ONM VORTAC | ONM VORTAC | ONM VORTAC | a. N/R | 08000/09000 | 58 OSS/DOO, Kirtland AFB, NM | Albuquerque ARCP-128.8E ARCP-307.2E EXIT-128.8E EXIT-307.2E |
| | 334/30 | 334/24 | N34°20.33' | 165/20 | b. N/R | | | |
| | N34°49.00' | N34°43.70' | W106°49.23' | N34°00.00' | c. N/R | | | |
| | W106°57.80' | W106°55.90' | | W106°48.00' | d. N/R | | | |
| | | | | | e. N/R | | | |
| | | | | 58 SOW assigned frequencies | | | | |
| REMARKS: Restricted to 58 SOW use only. Protected airspace is 4 NM either side of centerline. Air refueling may be conducted anywhere within the confines of the protected airspace and may include multiple tankers and/or receivers. | | | | | | | | |
| AR116 (East) | GCK VORTAC | GCK VORTAC | SLN VORTAC | MCI VORTAC | a. 366.300 | 12000/FL220 | 2 OSS/OSOS Barksdale AFB, LA | Kansas City ARCP-269.4E EXIT-343.7E |
| | 235/69 | 086/34 | 196/46 | 240/48 | b. 260.200 | | | |
| | N37°26.60' | N37°51.03' | N38°13.08' | N38°56.86' | c. 1-3-0 | | | |
| | W102°02.66' | W100°00.34' | W98°00.09' | W95°39.64' | d. 5/1 | | | |
| | | | | | e. 32/95 | | | |
| (West) | MCI VORTAC | SLN VORTAC | SLN VORTAC | GCK VORTAC | | | | Kansas City ARCP-363.2W EXIT-269.4W |
| | 240/48 | 174/35 | 196/46 | 235/69 | | | | |
| | N38°56.86' | N38°20.48' | N38°13.08' | N37°26.60' | | | | |
| | W95°39.64' | W97°38.06' | W98°00.09' | W102°02.66' | | | | |
| | | | GCK VORTAC | | | | | |
| | | | 086/34 | | | | | |
| | | | N37°51.03' | | | | | |
| | | | W100°00.34' | | | | | |
| REMARKS: None | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|------------------|-------------|-------------|-------------------------|-------------|------------|---------------------|--|-----------------------------|
| AR121 (North) | HMN TACAN | HMN TACAN | HMN TACAN | HMN TACAN | a. 229.500 | 15000/FL290 | 49 OSS/OSOS Holloman AFB, NM DSN 572-3536 C505-572-3536 | Albuquerque ARCP EXIT |
| | 335/87 | 334/75 | 334/75 | 336/87 | b. 258.200 | | | |
| | N34°16.00' | N34°04.00' | N34°04.00' | N34°16.00' | c. 3-1-1 | | | |
| | W106°32.00' | W106°31.50' | W106°31.50' | W106°32.00' | d. 4/1 | | | |
| | | | HMN TACAN | | e. 52/115 | | | |
| | | | 325/44 | | | | | |
| | | | N33°31.00' | | | | | |
| | | | W106°29.00' | | | | | |
| | | | HMN TACAN | | | | | |
| | | | 348/40 | | | | | |
| | | | N33°32.00' | | | | | |
| | | | W106°08.00' | | | | | |
| | | | HMN TACAN | | | | | |
| | | 348/73 | | | | | | |
| | | N34°05.00' | | | | | | |
| | | W106°10.00' | | | | | | |
| (South) | HMN TACAN | HMN TACAN | HMN TACAN | HMN TACAN | | | | Albuquerque ARCP EXIT |
| | 348/35 | 348/40 | 348/73 | 348/35 | | | | |
| | N33°27.00' | N33°32.00' | N34°05.00' | N33°27.00' | | | | |
| | W106°08.00' | W106°08.00' | W106°10.00' | W106°08.00' | | | | |
| | | | HMN TACAN | | | | | |
| | | | 334/75 | | | | | |
| | | | N34°04.00' | | | | | |
| | | | W106°31.50' | | | | | |
| | | | HMN TACAN | | | | | |
| | | | 325/44 | | | | | |
| | | | N33°31.00' | | | | | |
| | | | W106°29.00' | | | | | |
| | | | HMN TACAN | | | | | |
| | | 348/40 | | | | | | |
| | | N33°32.00' | | | | | | |
| | | W106°08.00' | | | | | | |

REMARKS: Cherokee Control must be operational. All aircraft must have contact with and clearance from Cherokee Control prior to entering restricted airspace. When exiting at or above FL180 or to resume IFR clearance, all aircraft must have contact with and clearance from Albuquerque ARTCC prior to exiting. Refueling airspace is limited to F-117 aircraft from 49 FW and can only be scheduled on a non-interference basis with White Sands Missile Range. Primary use if weather backup to AR644.

TIMES OF OPERATIONS: Continuous

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|-------------------------|--|--|----------------------------|--|--|------------------------|---|---------------------------------------|
| AR167 (North) | LRD VORTAC 340/30 N27°58.00' W99°31.00' | RSG VORTAC 152/70 N28°55.00' W99°54.00' | | RSG VORTAC N30°00.88' W100°17.99' | a. 235.100 b. 260.200 c. 1-2-1 d. 2/1 e. 32/95 | FL260/FL310 | 149 FG/DOOS Kelly AFB, TX DSN 969-5934 | Houston ARCP-323.1W EXIT-380.2W |
| (South) | RSG VORTAC N30°00.88' W100°17.99' | RSG VORTAC 152/70 N28°55.00' W99°54.00' | | LRD VORTAC 340/30 N27°58.00' W99°31.00' | | | | Houston ARCP-380.2E EXIT-323.1E |

REMARKS: All course reversal turns will be made to the east. Receivers may exit only at ARIP or EXIT points. When exiting at RSG, receivers should file to JCT or FST to pick up supplemental flight plans. Crystal MOA must be scheduled by users during same period of track operations. Hours of operation: Sun-Sat 1200-0400Z++.

| | | | | | | | | |
|--------------|--|--|--|--|--|-------------|--|-------------------------------------|
| AR200 | VUZ VORTAC 140/70 N32°44.00' W86°05.00' | SZW VORTAC 325/60 N31°23.00' W85°00.00' | SZW VORTAC N30°33.37' W84°22.44' PIE VORTAC 330/84 N29°09.00' W83°28.00' PIE VORTAC N27°54.47' W82°41.06' | RSW VORTAC 157/24 N26°10.00' W81°35.00' | a. 235.100 b. 319.700 c. 1-1-1 d. 2/1 e. 30/93 | FL240/FL260 | 6 OSS/OSO MacDill AFB, FL DSN 968-9629/9630 C813-828-9629/9630 | Miami ARCP-307.2E EXIT-290.5E |
|--------------|--|--|--|--|--|-------------|--|-------------------------------------|

REMARKS: AR200 is intended for use by 6 AMW aircraft. All other units and aircraft are permitted use on non-interference basis. The 6 AMW retains preemption authority for these purposes. The track is closed 1230-1630Z++ by request of Atlanta and Jacksonville ARTCCs due to heavy civilian traffic during this time.

| | | | | | | | | |
|------------------------|---|---|--|---|---|-------------|---|--|
| AR201 (East) | HVE VORTAC 222/38 N38°05.00' W111°23.00' | DVC VORTAC 257/28 N37°50.00' W109°30.00' | | ALS VORTAC 266/60 N37°28.00' W107°03.00' | a. 336.100 b. 319.500 c. 1-4-1 d. 4/1 e. 51/114 | FL190/FL230 | 7 OSS/OSTA Dyess AFB, TX DSN 461-3665 C325-696-3665 | Denver EXIT-343.7E Salt Lake City ARIP-271.2E |
| (West) | ALS VORTAC 266/60 N37°28.00' W107°03.00' | DVC VORTAC 155/4 N37°45.00' W108°55.00' | | HVE VORTAC 222/38 N38°05.00' W111°23.00' | | | | Denver ARIP-343.7W Salt Lake City EXIT-271.2W |

REMARKS: Intended for use by B-1 aircraft and support tankers. Other aircraft permitted on non-interference basis. The 7 OSS/OSTC retains preemption authority.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|----------------|------------|------------|----------------------------|------------|------------|------------------------|--------------------------|---------------------|
| AR202AN | ILM VORTAC | ILM VORTAC | N32°16.00' | ILM VORTAC | a. 327.600 | FL250/FL280 | 437 OSS/OSO Charleston | Jacksonville |
| | 187/242 | 187/172 | W77°51.00' | N34°21.10' | b. 343.250 | or as assigned | AFB, SC | ARCP-327.1E/134.85 |
| | N30°19.00' | N31°29.00' | OLDEY | W77°52.46' | c. 1-1-2 | | DSN 673-5554 (After duty | E |
| | W77°52.00' | W77°52.00' | | | d. 3/1 | | hours 437 OPG Comd Post | EXIT-317.4E/135.05E |
| | | | | e. 31/94 | | | 673-2531) | |
| | | | | | | | C843-963-5554 | |

REMARKS: AR202AN is the Alternate North track. End northbound refueling operations no later than N32-30-00. Scheduled reverse course from north to south, refueling operations turn point is N33-15-00. Anticipate intermittent UHF reception at southern half of track. When W497B is in use southern limit of track is N30-19-00 W77-52-00. If radio contact is lost with Jacksonville ARTCC, request tanker or receiver attempt to establish communication with Miami ARTCC when crossing N30-00-00 southbound on the following frequencies: 128.65/343.7, 133.65/348.7 or 132.15/307.8.

| | | | | | | | | |
|--------------------------|------------|------------|------------|------------|------------|----------------|--------------------------|---------------------|
| AR202N (North) | VRB VORTAC | VRB VORTAC | N32°16.00' | ILM VORTAC | a. 327.600 | FL250/FL280 | 437 OSS/OSO Charleston | Jacksonville |
| | 084/142 | 052/186 | W77°51.00' | N34°21.10' | b. 343.250 | or as assigned | AFB, SC | EXIT-317.4E/135.05E |
| | N28°05.00' | N29°45.00' | OLDEY | W77°52.46' | c. 1-1-2 | | DSN 673-5554 (After duty | Miami |
| | W77°52.00' | W77°52.00' | | | d. 3/1 | | hours 437 OPG Comd Post | ARCP-307.8E |
| | | | | e. 31/94 | | | 673-2531) | |
| | | | | | | | C843-963-5554 | |

REMARKS: AR202AN is the Alternate North track. End northbound refueling operations no later than N32-30-00. Scheduled reverse course from north to south, refueling operations turn point is N33-15-00. Anticipate intermittent UHF reception at southern half of track. When W497B is in use southern limit of track is N30-19-00 W77-52-00. If radio contact is lost with Jacksonville ARTCC, request tanker or receiver attempt to establish communication with Miami ARTCC when crossing N30-00-00 southbound on the following frequencies: 128.65/343.7, 133.65/348.7 or 132.15/307.8.

| | | | | | | | | |
|--------------------------|------------|------------|------------|------------|------------|----------------|--------------------------|------------------------|
| AR202S (South) | ILM VORTAC | ILM VORTAC | N32°16.00' | VRB VORTAC | a. 327.600 | FL250/FL280 | 437 OSS/OSO Charleston | Alternate Exit - Jack- |
| | N34°21.10' | 187/100 | W77°51.00' | 084/142 | b. 343.250 | or as assigned | AFB, SC | sonville |
| | W77°52.46' | N32°41.00' | OLDEY | N28°05.00' | c. 1-1-2 | | DSN 673-5554 (After duty | EXIT-327.1W/134.85 |
| | | W77°52.00' | | W77°52.00' | d. 3/1 | | hours 437 OPG Comd Post | W Jacksonville |
| | | | | ILM VORTAC | e. 31/94 | | 673-2531) | ARCP-317.4W/135. |
| | | | | 187/242 ① | | | C843-963-5554 | |
| | | | N30°19.00' | | | | | |
| | | | W77°52.00' | | | | | |

REMARKS: AR202AN is the Alternate North track. End northbound refueling operations no later than N32-30-00. Scheduled reverse course from north to south, refueling operations turn point is N33-15-00. Anticipate intermittent UHF reception at southern half of track. When W497B is in use southern limit of track is N30-19-00 W77-52-00. If radio contact is lost with Jacksonville ARTCC, request tanker or receiver attempt to establish communication with Miami ARTCC when crossing N30-00-00 southbound on the following frequencies: 128.65/343.7, 133.65/348.7 or 132.15/307.8.

① Alternate Exit

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--|---|---|--|---|--|------------------------|--|---------------------------------------|
| AR203 (Northeast) | MEM VORTAC 046/46 N35°32.50' W89°18.00' | BNA VORTAC 271/42 N36°09.00' W87°33.00' | BNA VORTAC 013/21 N36°28.00' W86°36.00' BNA VORTAC 055/65 N36°47.00' W85°37.00' IIU VORTAC 123/85 N37°18.00' W84°06.00' | HVQ VORTAC 210/40 N37°44.00' W82°09.50' | a. 238.900 b. 319.700 c. 1-2-0 d. 6/1 e. 32/95 | FL270/FL310 | 2 OSS/OSOS Barksdale AFB, LA DSN 781-4832/7182 C318-456-4832/7182 | Memphis ARCP-354.0E EXIT-338.3E |
| (Southwest) | HVQ VORTAC 210/40 N37°44.00' W82°09.50' | IIU VORTAC 123/85 N37°18.00' W84°06.00' | BNA VORTAC 055/65 N36°47.00' W85°37.00' BNA VORTAC 013/21 N36°28.00' W86°36.00' BNA VORTAC 271/42 N36°09.00' W87°33.00' | MEM VORTAC 046/46 N35°32.50' W89°18.00' | | | | Memphis ARCP-338.3W EXIT-354.0W |
| REMARKS: Refueling restricted to three flight levels. All air refueling prohibited during the following hours: 1530-1730Z++ and 0030-0230Z++. | | | | | | | | |
| AR204 (Northeast) | ALB VORTAC 018/67 N43°52.00' W73°42.00' | YSC VORTAC 215/46 N44°35.00' W72°07.00' | YSC VORTAC 118/54 N45°08.00' W70°32.00' MLT VOR-DME 318/52 N46°00.00' W69°37.00' | PQI VOR-DME 339/24 N47°05.00' W68°28.00' | a. 324.600 b. 282.700 c. 1-1-1 d. 2/1 e. 30/93 | FL240/FL260 | 305 OSS/OSO McGuire AFB, NJ DSN 650-4394/5891 C609-754-4394/5891 | Boston ARCP-282.2E EXIT-319.1E |
| (Southwest) | PQI VOR-DME 339/24 N47°05.00' W68°28.00' | MLT VOR-DME 318/52 N44°35.00' W72°07.00' | YSC VORTAC 118/54 N45°08.00' W70°32.00' YSC VORTAC 215/46 N44°35.00' W72°07.00' | ALB VORTAC 018/67 N43°52.00' W73°42.00' | | | | Boston ARCP-319.1W EXIT-380.3W |
| REMARKS: AR204 (Northeast) - aircraft should plan right turns after end A/R. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--|-------------|-------------|-------------------------|------------|------------|---------------------|--------------------------|--------------------|
| AR205 | PQI VOR-DME | MLT VOR-DME | YSC VORTAC | ALB VORTAC | a. 327.600 | FL280/FL310 | 305 OSS/OSO McGuire AFB, | Boston |
| | 339/24 | 318/52 | 118/54 | 018/67 | b. 282.700 | | NJ | ARCP-319.1W |
| | N47°05.00' | N46°00.00' | N45°08.00' | N43°52.00' | c. 1-1-2 | | DSN 650-4394/5891 | EXIT-380.3W |
| | W68°28.00' | W69°37.00' | W70°32.00' | W73°42.00' | d. 3/1 | | C609-754-4394/5891 | |
| | | | YSC VORTAC | | e. 31/94 | | | |
| | | 215/46 | | | | | | |
| | | N44°35.00' | | | | | | |
| | | W72°07.00' | | | | | | |
| REMARKS: None | | | | | | | | |
| AR206H | SYR VORTAC | SYR VORTAC | DKK VORTAC | FNT VORTAC | a. 348.900 | FL250/FL270 | 305 OSS/OSO McGuire AFB, | Boston |
| | 094/35 | 273/64 | 295/33 | 108/105 | b. 282.700 | FL280/FL310 | NJ | ARCP-323.0W Cleve- |
| | N43°13.70' | N43°00.00' | N42°39.00' | N42°36.50' | c. 1-1-3 | | DSN 650-4394/5891 | land |
| | W75°24.60' | W77°39.00' | W79°59.00' | W81°25.17' | d. 6/1 | | C609-754-4394/5891 | EXIT-354.1W |
| | | | | | e. 32/95 | | | |
| REMARKS: Receiver aircraft contact Cleveland ARTCC for further clearance 3 minutes prior to planned exit point. Refueling prohibited between 1130-1500Z++ and between 1900-0000Z++. All tankers make left turn at exit. Require thirty (30) minutes spacing between simultaneous refueling between AR206H and AR206L at exit. | | | | | | | | |
| AR206L | SYR VORTAC | SYR VORTAC | DKK VORTAC | FNT VORTAC | a. 235.100 | FL190/FL230 | 305 OSS/OSO McGuire AFB, | Boston |
| | 094/35 | 273/64 | 295/33 | 108/105 | b. 282.700 | | NJ | ARCP-323.0W Cleve- |
| | N43°13.70' | N43°00.00' | N42°39.00' | N42°36.50' | c. 1-1-4 | | DSN 650-4394/5891 | land |
| | W75°24.60' | W77°39.00' | W79°59.00' | W81°25.17' | d. 4/1 | | C609-754-4394/5891 | EXIT-307.8W |
| | | | | | e. 33/96 | | | |
| REMARKS: Receiver aircraft contact Cleveland ARTCC for further clearance 3 minutes prior to planned exit point. Refueling prohibited between 1130-1500Z++ and between 1900-0000Z++. Require thirty (30) minutes spacing between simultaneous refueling between AR206H and AR206L at exit. All tankers make a left turn at exit. | | | | | | | | |
| AR207NE (Northeast) | AMG VORTAC | AMG VORTAC | SSC TACAN | RDU VORTAC | a. 324.600 | FL260/FL280 | 437 OSS/OSO Charleston | Jacksonville |
| | 036/30 | 036/130 | N33°58.67' | N35°52.35' | b. 343.250 | | AFB, SC | ARCP-319.2E |
| | N31°57.00' | N33°18.00' | W80°27.97' | W78°47.00' | c. 1-1-3 | | DSN 673-5554 (After duty | EXIT-352.0E |
| | W82°10.00' | W81°02.00' | | | d. 6/1 | | hours 437 OPG Comd Post | |
| | | | | | e. 32/95 | | 673-2531) | |
| | | | | | | C843-963-5554 | | |
| REMARKS: Track manager will resolve conflicts with R5311 and AR600. Simultaneous use of AR207 and AR600 is prohibited. Track cannot be used during ESMC launches that close Atlantic routes. Track is prohibited to fighter type aircraft. Track authorized for use at all times except 1530-1700Z++. User contact scheduling unit during normal duty hours 1300-2200Z++ Mon-Fri except holidays. Scheduled reverse course refueling operations must complete turn prior to end of track. | | | | | | | | |
| AR207SW (Southwest) | RDU VORTAC | RDU VORTAC | SSC TACAN | AMG VORTAC | a. 324.600 | FL260/FL280 | 437 OSS/OSO Charleston | Jacksonville |
| | N35°52.35' | 220/70 | N33°58.67' | 036/30 | b. 343.250 | | AFB, SC | ARCP-352.0W |
| | W78°47.00' | N34°55.75' | W80°27.97' | N31°57.00' | c. 1-1-3 | | DSN 673-5554 (After duty | EXIT-346.3W |
| | | W79°37.75' | | W82°10.00' | d. 6/1 | | hours 437 OPG Comd Post | |
| | | | | | e. 32/95 | | 673-2531) | |
| | | | | | | C843-963-5554 | | |
| REMARKS: Track manager will resolve conflicts with R5311 and AR600. Simultaneous use of AR207 and AR600 is prohibited. Track cannot be used during ESMC launches that close Atlantic routes. Track is prohibited to fighter type aircraft. Track authorized for use at all times except 1530-1700Z++. User contact scheduling unit during normal duty hours 1300-2200Z++ Mon-Fri except holidays. Scheduled reverse course refueling operations must complete turn prior to end of track. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--------------|-------------|-------------|----------------------------|-------------|---|------------------------|--|---|
| AR208 | SAC VORTAC | SAC VORTAC | HNW VOR-DME | SAC VORTAC | a. N/R | 06000/08000 | 129 RQW Moffett Federal Afld, CA DSN 359-9356/7 C650-603-9356/7 | Sacramento TRA-CON ARCP-119.1E/340.9E EXIT-119.1E/340.9E |
| | 019/38 | 027/35 | 181/14 | 083/38 | b. N/R | | | |
| | N38°57.00' | N38°51.20' | N38°30.10' | N38°20.00' | c. N/R | | | |
| | W121°05.00' | W121°01.80' | W120°50.50' | W120°45.10' | d. N/R | | | |
| | | | | | e. N/R | | | |
| | | | | | Use Squadron Tactical frequencies | | | |

REMARKS: Restricted to 129 RQW Helicopter/C-130 air refueling. Refueling is prohibited between 1400-0500Z+. Protected airspace is 5 NM either side of centerline. Air refueling may be conducted in either direction. All turns to the west of centerline.

| | | | | | | | | |
|------------------------|-------------|-------------|-------------|-------------|------------|--|--|-----------------------------|
| AR209 (East) | N30°15.60' | N30°42.00' | N31°07.90' | N31°56.50' | a. 238.900 | FL230 and below con- sisting of a 3000' block | 452 AMW OSS/DOOA March AFB, CA DSN 447-5614/2297 C951-655-5614/2297 | Los Angeles ARCP EXIT |
| | W127°17.50' | W125°26.00' | W123°32.80' | W120°16.10' | b. 256.650 | | | |
| | | | FOOTS | ROSIN | c. 2-1-1 | | | |
| | | | N31°33.50' | | d. 3/1 | | | |
| | | | W121°23.50' | | e. 30/93 | | | |
| | | FICKY | | | | | | |
| (West) | N31°56.50' | N31°33.50' | N31°07.90' | N30°15.60' | | | | Los Angeles ARCP EXIT |
| | W120°16.10' | W121°23.50' | W123°32.80' | W127°17.50' | | | | |
| | ROSIN | FICKY | FOOTS | | | | | |
| | | | N30°42.00' | | | | | |
| | | | W125°26.00' | | | | | |

REMARKS: (1)Aircraft will establish AF communications with San Francisco ARINC (frequency to be provided) prior to receiving clearance into AR209. Aircraft operating in AR209 will be VHF and HF equipped. (2)Aircraft will remain on their assigned Mode 3 transponder code, even after radar service termination, to assist in radar identification on the inbound route for AMIS purposes. (3)Aircraft will provide estimated times for the planned turn around point, inbound (FICKY), and exit (ROSIN) to the center prior to radar service termination and then normal oceanic reporting procedures apply. (4)When reversing course, maneuvering orbiting for rendezvous, all turns shall be made south of the published AR209 track.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|---------------------------|---------------------------|---------------------------|---------------------------|---|---------------------|--|--------------------------------------|
| AR212 (Northeast) | ALB VORTAC 018/67 | YSC VORTAC 215/46 | YSC VORTAC 118/54 | PQI VOR-DME 339/24 | a. 238.900 b. 282.700 | FL190/FL220 | 305 OSS/OSO McGuire AFB, NJ DSN 650-4394/5891 C609-754-4394/5891 | Boston ARCP-282.2E EXIT-346.4E |
| | N43°52.00' W73°42.00' | N44°35.00' W72°07.00' | N45°08.00' W70°32.00' | N47°05.00' W68°28.00' | c. 1-2-0 d. 5/1 e. 50/113 | | | |
| (Southwest) | PQI VOR-DME 339/24 | MLT VOR-DME 318/52 | YSC VORTAC 118/54 | ALB VORTAC 025/75 | | | | Boston ARCP-319.1W EXIT-380.3W |
| | N47°05.00' W68°28.00' | N46°00.00' W69°37.00' | N45°08.00' W70°32.00' | N43°58.00' W73°29.00' | | | | |
| REMARKS: Aircraft should plan right turn after end A/R. | | | | | | | | |
| AR214 | NFL TACAN 164/6 | NFL TACAN 179/5 | NFL TACAN 004/5 | NFL TACAN 018/6 | a. N/R b. N/R | 15000/17000 | NAS Fallon Range Scheduling, NV DSN 890-2416/2418 C775-426-2416/2418 | Oakland ARCP EXIT |
| | N39°19.00' W118°42.00' | N39°20.00' W118°44.00' | N39°30.00' W118°40.00' | N39°30.00' W118°38.00' | c. N/R d. N/R e. N/R | | | |
| | | | | | Use Squadron Tactical Frequencies | | | |
| REMARKS: Continuous refueling authorized throughout track. Restricted use for Navy tactical aircraft only. For entry and exit contact Navy Fallon 263.6. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--|---|--|--|---|---|------------------------|--|---|
| AR216 (Northeast) | VUZ VORTAC 111/47 N33°22.00' W86°02.00' | RMG VORTAC N34°09.75' W85°07.17' | VXV VORTAC 194/28 N35°27.00' W84°01.00' VXV VORTAC 110/20 N35°47.00' W83°30.00' | PSK VORTAC 244/55 N36°38.00' W81°42.00' | a. 276.500 b. 343.250 c. 1-2-1 d. 3/1 e. 31/94 | FL260/FL280 | 437 OSS/OSO Charleston AFB, SC DSN 673-5549/5554 C843-963-5549/5554 | Atlanta ARCP-363.1E EXIT-257.9E |
| (Southwest) | PSK VORTAC 244/55 N36°38.00' W81°42.00' | VXV VORTAC 110/20 N35°47.00' W83°30.00' | VXV VORTAC 194/28 N35°27.00' W84°01.00' RMG VORTAC N34°09.75' W85°07.17' | VUZ VORTAC 111/47 N33°22.00' W86°02.00' | | | | Atlanta ARCP-257.9W EXIT-316.1W |
| REMARKS: Refueling/Holding not permitted 1845-2115Z++; 2300-0200Z++; 1330-1630Z++. | | | | | | | | |
| AR217 | CXR VOR-DME 284/96 N41°44.90' W83°16.50' | CXR VOR-DME N41°31.01' W81°09.79' | ETG VORTAC 288/78 N41°23.00' W79°51.50' | ETG VORTAC 288/33 N41°17.40' W78°52.10' | a. 283.900 b. 282.700 c. 1-2-2 d. 5/1 e. 50/113 | 16000/FL220 | 171 ARW Pittsburgh Intl Arpt, PA DSN 294-7347 or 7374 C412-776-7379/7347/7374 | Cleveland ARCP-298.95E EXIT-294.65E |
| REMARKS: Hours of use are 1500-1630Z++ / 1645-1815Z++ / 2335-0105Z++ / 0200-0330Z++. No simultaneous refueling with AR217, AR218, AR220. Refueling block restricted to 3 thousand feet. In flight coordination necessary to use NAV Check Point as exit. Confirm track reservation the day of during Normal Duty Hours with 171st Base Ops (DSN 294-7347). After Normal Duty Hours contact 171st Command Post (DSN 294-7374). | | | | | | | | |
| AR218 | TON VORTAC 180/10 N40°34.00' W78°18.00' | EWC VORTAC 143/20 N40°36.00' W79°54.00' | BSV VOR-DME N40°44.44' W81°25.93' | BSV VOR-DME 283/95 N40°58.20' W83°29.80' | a. 274.450 b. 282.700 c. 1-3-0 d. 3/1 e. 52/115 | FL190/FL220 | 171 ARW Pittsburgh Intl Arpt, PA DSN 294-7347 or 7374 C412-776-7379/7347/7374 | Cleveland ARCP-299.2W EXIT-379.2W |
| REMARKS: Hours of use are 1500-1630Z++ / 1645-1815Z++ / 2335-0105Z++ / 0200-0330Z++. No simultaneous refueling with AR217, AR218, AR220. Refueling block restricted to 3 thousand feet. In flight coordination necessary to use NAV Check Point as exit. Confirm track reservation the day of during Normal Duty Hours with 171st Base Ops (DSN 294-7347). After Normal Duty Hours contact 171st Command Post (DSN 294-7374). | | | | | | | | |
| AR219 | EWC VORTAC 104/89 N40°39.50' W78°16.50' | EWC VORTAC 104/28 N40°46.50' W79°36.25' | EWC VORTAC N40°49.51' W80°12.69' | FWA VORTAC 091/65 N40°57.25' W83°45.33' | a. 305.500 b. 282.700 c. 1-2-3 d. 2/1 e. 31/94 | FL260/FL290 | 171 ARW Pittsburgh Intl Arpt, PA DSN 294-7347 or 7374 C412-776-7379/7347/7374 | Cleveland ARCP-363.1W EXIT-288.3W |
| REMARKS: Hours of use are 1500-1630Z++ / 1645-1815Z++ / 2335-0105Z++ / 0200-0330Z++. No simultaneous refueling with AR217, AR218, AR220. Refueling block restricted to 3 thousand feet. In flight coordination necessary to use NAV Check Point as exit. Confirm track reservation the day of during Normal Duty Hours with 171st Base Ops (DSN 294-7347). After Normal Duty Hours contact 171st Command Post (DSN 294-7374). | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--------|------------|------------|-------------------------|------------|------------|---------------------|--------------------------------|----------------|
| AR220 | TON VORTAC | EWC VORTAC | BSV VOR-DME | ETG VORTAC | a. 274.450 | FL190/FL220 | 171 ARW Pittsburgh Intl Arprt, | Cleveland |
| | 180/10 | 143/20 | N40°44.44' | 288/33 | b. 282.700 | | PA | ARCP-299.2W |
| | N40°34.00' | N40°36.00' | W81°25.93' | N41°17.40' | c. 1-3-0 | | DSN 294-7347 or 7374 | EXIT-291.65E |
| | W78°18.00' | W79°54.00' | BSV VOR-DME | W78°52.10' | d. 3/1 | | C412-776-7379/7347/7374 | |
| | | | 283/95 | | e. 52/115 | | | |
| | | | N40°58.20' | | | | | |
| | | | W83°29.80' | | | | | |
| | | | CXR VOR-DME | | | | | |
| | | | 284/96 | | | | | |
| | | | N41°44.90' | | | | | |
| | | | W83°16.50' | | | | | |
| | | | CXR VOR-DME | | | | | |
| | | | N41°31.01' | | | | | |

REMARKS: Hours of use are 1500-1630Z++ / 1645-1815Z++ / 2335-0105Z++ / 0200-0330Z++. No simultaneous refueling with AR217, AR218, AR220. Refueling block restricted to 3 thousand feet. In flight coordination necessary to use NAV Check Point as exit. Confirm track reservation the day of during Normal Duty Hours with 171st Base Ops (DSN 294-7347). After Normal Duty Hours contact 171st Command Post (DSN 294-7374).

| | | | | | | | | |
|-------|-------------|-------------|--|-------------|---|-------------|-------------------------|-------------|
| AR221 | MCC VOR-DME | MCC VOR-DME | | MCC VOR-DME | a. N/R | 06000/10000 | 129 RQW Moffett Federal | Oakland |
| | 120/42 | 120/52 | | 120/82 | b. N/R | | Afld, CA | ARCP-319.9E |
| | N38°09.00' | N38°02.00' | | N37°39.00' | c. N/R | | DSN 359-9356/7 | EXIT-319.9E |
| | W120°48.00' | W120°39.00' | | W120°13.00' | d. N/R | | C650-603-9356/7 | |
| | | | | | e. N/R | | | |
| | | | | | Use Squadron Tactical Frequencies | | | |

REMARKS: Restricted to 129 RQW Helicopter/C-130 air refueling. Protected airspace is 5 NM either side of centerline. Air refueling may be conducted in either direction. Hours of operation are continuous.

| | | | | | | | | |
|-------|-------------|--|--|-------------|---|-------------|-------------------------|-------------|
| AR222 | ECA VORTAC | | | PXN VORTAC | a. N/R | 05000/10000 | 129 RQW Moffett Federal | Oakland |
| | 147/14 | | | 328/5 | b. N/R | | Afld, CA | ARCP-263.1E |
| | N37°36.63' | | | N36°47.72' | c. N/R | | DSN 359-9356/7 | EXIT-357.6E |
| | W121°05.00' | | | W120°48.53' | d. N/R | | C650-603-9356/7 | |
| | | | | | e. N/R | | | |
| | | | | | Use Squadron Tactical Frequencies | | | |

REMARKS: Restricted to 129 RQW Helicopter/C-130 air refueling. Protected airspace is 4 NM east of centerline and 5 NM west of centerline. Air refueling may be conducted in either direction. Hours of operation are continuous. Aircraft shall contact Stockton Approach Control 120.95 or 294.5 at least 5 minutes prior to conducting refueling operations.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--------------|---|------|----------------------------|---|--|------------------------|--|---------------------------------------|
| AR223 | PYE VORTAC 305/20 N38°21.00' W123°08.00' | | | PYE VORTAC 305/90 N39°15.00' W124°03.00' | a. N/R b. N/R c. N/R d. N/R e. N/R | 05000/10000 | 129 RQW Moffett Federal Afld, CA DSN 359-9356/7 C650-603-9356/7 | Oakland ARCP-353.5W EXIT-281.4W |
| | | | | | Use Squadron Tactical Frequencies | | | |

REMARKS: Restricted to 129 RQW Helicopter/C-130 air refueling. Protected airspace is 5 NM either side of centerline. Air refueling may be conducted in either direction. Hours of operation are continuous.

| | | | | | | | | |
|--------------|---|--|--|---|--|-------------|--|---------------------------------------|
| AR224 | MXW VORTAC 190/10 N39°10.00' W122°19.00' | | | MXW VORTAC 190/60 N38°26.00' W122°49.00' | a. N/R b. N/R c. N/R d. N/R e. N/R | 07000/09000 | 129 RQW Moffett Federal Afld, CA DSN 359-9356/7 C650-603-9356/7 | Oakland ARCP-281.4W EXIT-353.5W |
| | | | | | Use Squadron Tactical Frequencies | | | |

REMARKS: Restricted to 129 RQW Helicopter/C-130 air refueling. Protected airspace is 5 NM either side of centerline. Air refueling may be conducted in either direction. Hours of operation are continuous.

| | | | | | | | | |
|------------------------|---|--|--|---|--|-------------|--|--|
| AR233 (East) | PGS VORTAC 065/45 N35°45.10' W112°38.22' | PGS VORTAC 065/140 N35°59.10' W110°42.22' | | RSK VORTAC 224/38 N36°24.63' W108°45.86' | a. 265.050 b. 271.650 c. 1-1-1 d. 2/1 e. 30/93 | FL240/FL260 | 60 OSS/OSO TRAVIS AFB, CA DSN 837-5582/1038 C707-424-5582/1038 | Denver EXIT-386.8E Los Angeles ARIP-323.3E |
| (West) | RSK VORTAC 224/38 N36°24.00' W108°45.00' | PGS VORTAC 065/140 N35°59.00' W110°42.00' | | PGS VORTAC 065/45 N35°45.00' W112°38.00' | | | | Denver ARCP-386.8W ARIP-290.4W Los Angeles EXIT-323.2W |

REMARKS: Track cannot be scheduled simultaneously with AR3H.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|---|---|--|---|---|---|--|---|
| AR255H (East) | N39°23.00' W128°49.00' | N39°23.00' W126°11.00' | | ENI VORTAC 279/38 N39°19.20' W124°00.80' | a. 283.900 b. 365.775 c. 1-1-1 d. 2/1 e. 30/93 | FL250/FL330 | 60 OSS/OSO Travis AFB, CA DSN 837-5582/1038 C707-424-5582/1038 | Oakland ARCP-306.2E EXIT-133.375E |
| (West) | ENI VORTAC 279/38 N39°19.20' W124°00.80' | N39°23.00' W126°11.00' | | N39°23.00' W128°49.00' | | | | Oakland ARCP-306.2W EXIT-133.375W |
| REMARKS: Tankers westbound on the track may routinely proceed to the EXIT point, execute a right turn and continue refueling eastbound, when annotated on the flight plan. Flight plan remarks will state: Continuous refueling through turn and eastbound to ARCP. Simultaneous opposite direction air refueling (SODAR) authorized with AR5L and AR255L. | | | | | | | | |
| AR255L (East) | N39°23.00' W128°49.00' | N39°23.00' W126°11.00' | | ENI VORTAC 279/38 N39°19.20' W124°00.80' | a. 327.600 b. 365.775 c. 1-1-2 d. 3/1 e. 31/94 | 17000/FL230 | 60 OSS/OSO Travis AFB, CA DSN 837-5582/1038 C707-424-5582/1038 | Oakland ARCP-387.1E EXIT-134.15E |
| (West) | ENI VORTAC 279/38 N39°19.20' W124°00.80' | N39°23.00' W126°11.00' | | N39°23.00' W128°49.00' | | | | Oakland ARCP-387.1W EXIT-134.15W |
| REMARKS: Tankers westbound on the track may routinely proceed to the EXIT point, execute a right turn and continue refueling eastbound, when annotated on the flight plan. Flight plan remarks will state: Continuous refueling through turn and eastbound to ARCP. Simultaneous opposite direction air refueling (SODAR) authorized with AR5H and AR255H. | | | | | | | | |
| AR302 (East) | AEX VORTAC N31°15.40' W92°30.04' | AEX VORTAC 095/100 N31°01.00' W90°35.00' | BIX TACAN 318/34 N30°50.00' W89°22.00' | SJI VORTAC N30°43.56' W88°21.56' | a. 278.750 b. 260.200 c. 1-2-3 d. 6/1 e. 52/115 | 08000/14000 FL190/FL230 FL250/FL310 ① ② | See Remarks DSN See Remarks Coml See Remarks | Houston ARCP-285.6/119.72 ARCP-343.95/133.5 EXIT-288.15/127.65 EXIT-322.4/125.77③ |
| (West) | SJI VORTAC N30°43.56' W88°21.56' | SJI VORTAC 274/100 N30°59.00' W90°16.00' | BTR VORTAC 336/42 N31°10.00' W91°33.00' | AEX VORTAC N31°15.40' W92°30.04' | | | | Houston ARCP-285.6/119.72 ARCP-343.95/133.5 EXIT-299.6/120.97 EXIT-348.75/132.7③ |
| REMARKS: 1. 8000'-14,000' scheduled by 16th SOW Hurlburt Field, FL DSN 579-7812/7813 C850-884-7812. 2. FL190-FL230 scheduled by 917OSF, Barksdale AFB, LA DSN 781-8078, C318-456-8078. 3. FL250-FL310 scheduled by 2 OSS/OSOS Barksdale AFB, LA DSN 781-4832/7182, COMM 318-456-4832/7182. 4. Refueling prohibited at or above FL240 between 1900-2100Z++. | | | | | | | | |
| ① 8000 through 14,000 restricted to C-130 receivers only, scheduled by 16th SOW Hurlburt Field, FL DSN 589-7812 or 7813. | | | | | | | | |
| ② FL 190/FL 230 scheduled by 917OSF, Barksdale AFB, LA DSN 781-8078, C318-456-8078. | | | | | | | | |
| ③ Refueling is prohibited at FL 240 or above between 1900 and 2100Z++. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|---|--|--|--|--|------------------------|--|---|
| AR307A (East) | DSD VORTAC N44°15.17' W121°18.21' | DSD VORTAC 070/80 N44°17.10' W119°26.50' | | DBS VORTAC 349/20 N44°25.20' W112°10.60' | a. 264.900 b. 238.900 c. 2-3-0 d. 6/1 e. 29/92 | FL190/FL220 | 62 OSS/OSO McChord AFB, WA DSN 382-9925 (During non-duty hours, contact McChord Command Post 382-2635) C253-982-9925 (During non-duty hours, contact McChord Command Post 253-982-2635) | Seattle ARCP-288.1E EXIT-338.3E |
| REMARKS: Refuel eastbound only. | | | | | | | | |
| AR307B (West) | DBS VORTAC 349/50 N44°55.20' W112°07.60' | DBS VORTAC 281/116 N44°54.60' W114°39.80' | | LTJ VOR-DME 173/37 N45°06.90' W121°18.70' | a. 264.900 b. 238.900 c. 2-3-0 d. 6/1 e. 29/92 | FL190/FL220 | 62 OSS/OSO McChord AFB, WA DSN 382-9925 (During non-duty hours, contact McChord Command Post 382-2635) C253-982-9925 (During non-duty hours, contact McChord Command Post 253-982-2635) | Seattle ARCP-338.3W EXIT-257.6W |
| REMARKS: Refuel westbound only. | | | | | | | | |
| AR307C | DSD VORTAC N44°15.17' W121°18.21' | DSD VORTAC 070/80 N44°17.10' W119°26.50' | DNJ VORTAC 140/25 N44°23.00' W116°00.00' DNJ VORTAC 017/15 N44°58.00' W116°00.00' | LTJ VOR-DME 173/37 N45°06.90' W121°18.70' | a. 264.900 b. 238.900 c. 2-3-0 d. 6/1 e. 29/92 | FL190/FL220 | 62 OSS/OSO McChord AFB, WA DSN 382-9925 C253-982-9925 | Seattle ARCP-288.1E EXIT-257.6E |
| REMARKS: None | | | | | | | | |
| AR309 (East) | LBL VORTAC 042/35 N37°23.67' W100°23.17' | ICT VORTAC 254/50 N37°36.62' W98°37.17' | ICT VORTAC N37°44.72' W97°35.03' | BUM VORTAC 072/25 N38°21.00' W93°58.00' | a. 283.900 b. 260.200 c. 1-3-1 d. 2/1 e. 33/96 | FL270/FL300 | 509 OSS/OSOS Whiteman AFB, MO DSN 975-1711/1754 | Kansas City ARCP-263.1E EXIT-279.6E |
| (West) | BUM VORTAC 072/25 N38°21.00' W93°58.00' | BUM VORTAC 252/55 N38°05.50' W95°38.00' | ICT VORTAC N37°44.72' W97°35.03' | LBL VORTAC 042/35 N37°23.67' W100°23.17' | | | | Kansas City ARCP-285.4W EXIT-263.1W |
| REMARKS: All turns to left in tanker orbit pattern. SODAR authorized with AR330. | | | | | | | | |
| ① After duty hours contact C660-563-1035 or Cmd Post DSN 975-3778. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--|-------------|-------------|----------------------------|-------------|------------|------------------------|--|---|
| AR310 (East) | SJN VORTAC | ONM VORTAC | ONM VORTAC | ONM VORTAC | a. 352.600 | FL210/FL260 | 49 OSS/OSOS Holloman AFB, NM DSN 572-3536 C505-572-3536 | Albuquerque ARCP-251.15E ARCP-307.2E EXIT-284.6E |
| | 346/12 | 295/27 | 045/32 | 065/78 | b. 319.500 | FL270/FL290 | | |
| | N34°37.00' | N34°37.00' | N34°37.00' | N34°37.00' | c. 1-2-1 | | | |
| | W109°09.00' | W107°14.00' | W106°16.00' | W105°18.00' | d. 6/1 | | | |
| | | | | | e. 52/115 | | | |
| (West) | ONM VORTAC | ONM VORTAC | ONM VORTAC | SJN VORTAC | | | | Albuquerque ARCP-284.6W EXIT-251.15W EXIT-307.2W |
| | 065/78 | 295/27 | 271/70 | 346/12 | | | | |
| | N34°37.00' | N34°37.00' | N34°37.00' | N34°37.00' | | | | |
| | W105°18.00' | W107°14.00' | W108°12.00' | W109°09.00' | | | | |
| REMARKS: Use of the High Altitude Block is not authorized between 1600-1900Z++. Use of Low Altitude Block is unrestricted. | | | | | | | | |
| AR312H | BGD VORTAC | BGD VORTAC | BGD VORTAC | PUB VORTAC | a. 284.075 | FL240/FL260 | 97 OSS/OSOS Altus AFB, OK DSN 866-7849/7848 | Albuquerque ARCP-351.7W EXIT-351.7W |
| | 085/40 | 315/28 | 300/57 | 178/22 | b. 312.225 | | | |
| | N35°43.85' | N36°12.00' | N36°25.25' | N37°56.10' | c. 1-1-1 | | | |
| | W100°34.00' | W101°42.83' | W102°15.50' | W104°31.10' | d. 2/1 | | | |
| | | | | | e. 53/116 | | | |
| REMARKS: Intended for exclusive use by 97 AMW aircraft and support tankers only. Other aircraft permitted on non-interference basis. The 97 OSS/OSOS retains preemption authority. If subsequent rendezvous are conducted all maneuvering must be completed without going East of the ARIP. Tanker and Receiver crews should file three (3) times up and down the track to ensure 3 hours of track time. Indicate three (3) hours of track time required in Remarks Section of DD Form 175. SODAR authorized with AR312L. | | | | | | | | |
| AR312L | BGD VORTAC | BGD VORTAC | BGD VORTAC | PUB VORTAC | a. 291.900 | FL200/FL220 | 97 OSS/OSOS Altus AFB, OK DSN 866-7849/7848 | Albuquerque ARCP-351.7W EXIT-351.7W |
| | 085/40 | 315/28 | 300/57 | 178/22 | b. 260.200 | | | |
| | N35°43.85' | N36°12.00' | N36°25.25' | N37°56.10' | c. 1-3-2 | | | |
| | W100°34.00' | W101°42.83' | W102°15.50' | W104°31.10' | d. 6/1 | | | |
| | | | | | e. 51/114 | | | |
| REMARKS: Intended for exclusive use by 97 AMW aircraft and support tankers only. Other aircraft permitted on non-interference basis. The 97 OSS/OSOS retains preemption authority. If subsequent rendezvous are conducted all maneuvering must be completed without going East of the ARIP. Tanker and Receiver crews should file three (3) times up and down the track to ensure 3 hours of track time. Indicate three (3) hours of track time required in Remarks Section of DD Form 175. SODAR authorized with AR312H. | | | | | | | | |
| AR313 (North) | EIC VORTAC | EIC VORTAC | TUL VORTAC | TUL VORTAC | a. 352.600 | FL180/FL220 | 97 OSS/OSOS Altus AFB, OK DSN 866-7849/7848 | Fort Worth ARCP-285.5W EXIT-291.7W |
| | 147/30 | 327/70 | 147/70 | 327/30 | b. 260.200 | | | |
| | N32°19.00' | N33°49.20' | N35°08.20' | N36°39.00' | c. 1-3-1 | | | |
| | W93°33.00' | W94°25.40' | W95°11.20' | W96°03.00' | d. 2/1 | | | |
| | | | | | e. 50/113 | | | |
| (South) | TUL VORTAC | TUL VORTAC | EIC VORTAC | EIC VORTAC | | | | Fort Worth ARCP-291.7E EXIT-285.5E |
| | 327/30 | 147/70 | 327/70 | 147/30 | | | | |
| | N36°39.00' | N35°08.20' | N33°49.20' | N32°19.00' | | | | |
| | W96°03.00' | W95°11.20' | W94°25.40' | W93°33.00' | | | | |
| REMARKS: Intended for exclusive use by 97 AMW aircraft conducting formation AR training and support tankers only. Other aircraft permitted on non-interference basis. The 97 OSS/OSOS retains preemption authority. No simultaneous refueling with AR313A. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--------------------------|---|--|--|---|---|------------------------|--|--|
| AR313A (North) | EIC VORTAC 147/105 N31°11.50' W92°54.90' | EIC VORTAC N32°46.28' W93°48.60' | EIC VORTAC 327/70 N33°49.20' W94°25.40' TUL VORTAC 147/70 N35°08.20' W95°11.20' | TUL VORTAC 327/30 N36°39.00' W96°03.00' | a. 352.600 b. 260.200 c. 1-3-1 d. 2/1 e. 50/113 | FL190/FL220 | 97 OSS/OSOS Altus AFB, OK DSN 866-7849/7848 | Fort Worth EXIT-291.7W Hous- ton ARCP-278.55W |
| (South) | TUL VORTAC 327/30 N36°39.00' W96°03.00' | TUL VORTAC 147/70 N35°08.20' W95°11.20' | EIC VORTAC 327/70 N33°49.20' W94°25.40' EIC VORTAC 147/30 N32°19.30' W93°33.00' | EIC VORTAC 147/105 N31°11.50' W92°54.90' | | | | Fort Worth ARCP-291.7E Hous- ton EXIT-278.55E |

REMARKS: Intended for exclusive use by 97 AMW aircraft conducting formation AR training and support tankers only. Other aircraft permitted on non-interference basis. The 97 OSS/OSOS retains preemption authority. No simultaneous refueling with AR313. The 97 OSS/OSOS will ensure that the following special use airspace is not active: a.-Lady ATCAA/R3801 - contact 917 OSF/OSTA DSN 781-9154. b.-Warrior/Lancer ATCAA's, R3803B and R3804C - contact Fort Polk LA Tower DSN 863-7982/7276.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|-----------------|---|---|--|--|---------------------------------|------------------------|---|--|
| AR314 (East) | CIM VORTAC 241/100 | CIM VORTAC N36°29.48' | CIM VORTAC 090/50 | BGD VORTAC N35°48.42' | a. 295.800 b. 319.500 | FL240/FL310 | 552 OSS/OSOS Tinker AFB, OK DSN 884-1203/1204 C405-734-1203/1204 | Albuquerque ARCP-239.25E ARCP-346.35E ARCP-351.7W ARCP-385.65W EXIT-239.25W EXI (East)-ARCP 346.35 FL 240/FL 260; 239.25 FL 270/FL 310 EXIT 351.7 FL 240/FL 260; 385.65 FL 270/FL 310 (West)-ARCP 351.7 FL 240/FL 260; 385.65 FL 270/FL 310 EXIT 346.35 FL 240/FL 260; 239.25 FL 270/FL 310 |
| | N36°00.00' W106°50.00' | W104°52.32' | N36°19.00' W103°52.00' CIM VORTAC 090/100 N36°07.00' W102°52.00' BGD VORTAC 273/25 N35°55.00' W101°52.00' | W101°22.93' | c. 1-2-2 d. 5/1 e. 50/113 | | | |
| (West) | BGD VORTAC N35°48.42' W101°22.93' | CIM VORTAC 090/75 N36°12.00' W103°22.00' | CIM VORTAC 090/25 N36°24.00' W104°22.00' CIM VORTAC N36°29.48' W104°52.32' CIM VORTAC 241/25 N36°22.00' W105°22.00' CIM VORTAC 241/75 N36°07.00' W106°20.00' | CIM VORTAC 241/100 N36°00.00' W106°50.00' | | | | Albuquerque ARCP-239.25E ARCP-346.35E ARCP-351.7W ARCP-385.65W EXIT-239.25W EXI (East)-ARCP 346.35 FL 240/FL 260; 239.25 FL 270/FL 310 EXIT 351.7 FL 240/FL 260; 385.65 FL 270/FL 310 (West)-ARCP 351.7 FL 240/FL 260; 385.65 FL 270/FL 310 EXIT 346.35 FL 240/FL 260; 239.25 FL 270/FL 310 |

REMARKS: Restricted to FL 260 and below, Mon-Fri, between 1600-1800Z++, other times restricted to a refueling altitude block FL 240/FL 260 or block FL 270/FL 310. Restricted for use by the 552 ACW acft and support tankers only.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|---|--|--|---|---|------------------------|--|--|
| AR315 (East) | PXV VORTAC N37°55.70' W87°45.74' | PXV VORTAC 104/80 N37°32.00' W86°09.00' | LOZ VORTAC N37°01.99' W84°06.60' | LOZ VORTAC 085/100 N37°15.50' W82°03.00' | a. 343.250 b. 236.650 c. 1-1-2 d. 5/1 e. 33/96 | FL190/FL220 | 121 ARW Rickenbacker IAP, OH DSN 696-4661/3246 | Indianapolis ARCP-353.65E EXIT-257.85E |
| (West) | LOZ VORTAC 085/100 N37°15.50' W82°03.00' | LOZ VORTAC N37°01.99' W84°06.60' | PXV VORTAC 104/80 N37°32.00' W86°09.00' | PXV VORTAC N37°55.70' W87°45.74' | | | | Indianapolis ARCP-317.67W EXIT-291.62W |
| REMARKS: Refueling not permitted 1500-1600Z++ and 1930-2030Z++ Mon-Fri. | | | | | | | | |
| AR318 (East) | PWE VORTAC 184/33 N39°40.00' W96°18.50' | LMN VORTAC 207/38 N40°03.75' W94°25.75' | IRK VORTAC 318/18 N40°22.50' W92°49.25' | IRK VORTAC 059/84 N40°43.50' W90°55.50' | a. 240.350 b. 260.200 c. 1-3-2 d. 4/1 e. 50/113 | FL190/FL220 | 126th ARW Illinois ANG DSN 760-4263/4255 | Chicago EXIT-353.5E Kansas City ARCP-343.7E |
| (West) | IRK VORTAC 059/84 N40°43.50' W90°55.50' | IRK VORTAC 318/18 N40°22.50' W92°49.25' | LMN VORTAC 207/38 N40°03.75' W94°25.75' | PWE VORTAC 184/33 N39°40.00' W96°18.50' | | | | Kansas City ARCP-370.9W EXIT-343.7W |
| REMARKS: None | | | | | | | | |
| AR321 | GRB VORTAC 105/110 N44°03.00' W85°45.00' | GRB VORTAC 105/15 N44°29.00' W87°51.00' | GRB VORTAC N44°33.31' W88°11.69' GRB VORTAC 295/60 N44°59.20' W89°27.70' GRB VORTAC 285/60 N44°51.00' W89°33.00' GRB VORTAC N44°33.31' W88°11.69' | GRB VORTAC 105/80 N44°12.00' W86°25.00' | a. 276.500 b. 282.700 c. 1-2-1 d. 5/1 e. 33/96 | FL250/FL280 | 128th ARW, WIANG, General Mitchell Intl, Milwaukee, WI DSN 580-8701 (After duty hr 128 ARW Comd Post 580-8475) | Chicago ARCP-263.0W EXIT-263.0W |
| REMARKS: Air refueling on J-38 to GRB, right turn to intercept GRB 295 radial outbound to 60 DME, 30 degrees bank left turn to intercept GRB 285 radial inbound to GRB, and fly GRB 105 radial outbound to the exit. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|---|---|---|---|---|------------------------|--|---|
| AR324 | BQN VORTAC 003/25 | BQN VORTAC 183/75 | BQN VORTAC 183/175 | BQN VORTAC 183/25 | a. 327.600 b. 343.250 | FL200/FL250 | 156 AW (PRANG) MUNIZ ANGB 200 JOSE A. (TONY) | San Juan ARCP |
| PUERTO RICO | N18°55.00' W67°09.00' | N17°15.00' W66°57.00' | N15°36.00' W66°40.00' | N18°05.00' W67°03.00' | c. 2-2-2 d. 3/1 e. 51/114 | | SANTANA AVE. CAROLINA PR 00979-1502 DSN 740-9629 C787-253-7629. | EXIT |
| REMARKS: Request pilots file distance-radials in lieu of coordinates even though distances filed may exceed the 130 NM limitation for navigational purposes. | | | | | | | | |
| AR328 | PSK VORTAC N37°05.26' W80°42.77' | PSK VORTAC 255/60 N36°43.00' W81°53.00' | PSK VORTAC 255/100 N36°29.00' W82°39.00' | PSK VORTAC 242/30 N36°48.00' W81°14.00' | a. 235.100 b. 343.250 c. 1-1-1 d. 4/1 e. 50/113 | FL180/FL230 | 134th ARW McGhee Tyson ANGB, Knoxville, TN DSN 266-4371/4390/4396 | Atlanta ARCP-319.9W EXIT-319.9W |
| REMARKS: Left turn at PSK VORTAC 255/100, inbound PSK VORTAC 242. | | | | | | | | |
| AR330 (East) | LBL VORTAC 042/35 N37°23.67' W100°23.17' | ICT VORTAC 254/50 N37°36.62' W98°37.17' | ICT VORTAC N37°44.71' W97°35.03' | BUM VORTAC N38°16.33' W94°29.29' | a. 305.500 b. 260.200 c. 1-1-2 d. 4/1 e. 52/115 | FL180/FL220 | 190 ARW Kansas ANG Forbes Fld, Topeka, KS DSN 720-4647 (1400-2100Z++ wk) | Kansas City ARCP-337.4E EXIT-327.0E |
| (West) | BUM VORTAC 072/25 N38°21.00' W93°58.00' | BUM VORTAC 252/55 N38°05.50' W95°38.00' | ICT VORTAC N37°44.71' W97°35.03' | LBL VORTAC 042/35 N37°23.67' W100°23.17' | | | | Kansas City ARCP-327.0W EXIT-269.4W |
| REMARKS: When using AR330 (West), plan to avoid Truman MOA/ATCAA airspace 13 NM east of the ARIP. This airspace is potentially active up to FL 230. Contact the 509 OSS/OSOS at DSN 975-1713/1754 to determine if scheduled MOA/ATCAA operations will restrict enroute access to the ARIP. | | | | | | | | |
| AR332 (Northwest) | SJU VORTAC 325/50 N19°00.00' W66°39.00' | SJU VORTAC 325/150 N20°09.00' W67°55.00' | | N21°38.00' W70°30.00' | a. 235.100 b. 343.250 c. 1-1-1 d. 2/1 e. 50/113 | FL200/FL250 | 156 AW (PRANG) MUNIZ ANGB 200 JOSE A. (TONY) SANTANA AVE. CAROLINA PR 00979-1502 DSN 740-9629 C787-253-7629 | San Juan ARCP EXIT |
| (Southeast) | N21°38.00' W70°30.00' | N20°50.00' W69°05.00' | | N19°36.00' W67°20.00' | | | | San Juan ARCP EXIT |
| REMARKS: None | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|-------------|-------------|----------------------------|-------------|------------|------------------------|----------------------------|---------------------|
| AR355 | N48°20.00' | TOU VORTAC | | MWH VOR-DME | a. 320.900 | FL260/FL280 | 55 OSS/OST, Offutt AFB, NE | Seattle |
| | W128°00.00' | N48°17.99' | | N47°12.65' | b. 238.900 | | DSN (312) | ARCP |
| | DOLFF | W124°37.62' | | W119°19.01' | c. 2-2-1 | | 271-5109/5009/2077 | EXIT |
| | | | | | d. 3/1 | | (1330-2230Z++ wkd) | |
| | | | | | e. 29/92 | | C402-294-5109/5009/2077 | (1330-2230Z++ wkd) |
| REMARKS: Used for operational requirements only and not approved for practice or training unless prior approval is obtained from Seattle ARTCC 72 hours in advance through the scheduling facility. No simultaneous refueling with AR356. | | | | | | | | |
| AR356 | GEG VORTAC | EPH VORTAC | | TOU VORTAC | a. 320.900 | FL260/FL280 | 55 OSS/OST, Offutt AFB, NE | Seattle |
| | 105/57 | 160/28 | | N48°17.99' | b. 238.900 | | DSN (312) | ARCP |
| | N47°00.00' | N46°55.00' | | W124°37.62' | c. 2-2-1 | | 271-5109/5009/2077 | EXIT |
| | W116°30.00' | W119°26.00' | | | d. 3/1 | | C402-294-5109/5009/2077 | |
| | | | | | e. 29/92 | | | |
| REMARKS: Used for operational requirements only and not approved for practice or training unless prior approval is obtained from Seattle ARTCC 72 hours in advance through the scheduling facility. No simultaneous refueling with AR355. SCHEDULING UNIT: (1330-2230z++ wkd) | | | | | | | | |
| AR400 (North) | GCK VORTAC | GCK VORTAC | HCT VORTAC | HCT VORTAC | a. 228.250 | FL240/FL260 | 97 OSS/OSOS Altus AFB, OK | Denver |
| | 165/100 | N37°55.14' | N40°27.24' | 345/100 | b. 364.325 | | DSN 866-7849/7848 | EXIT-397.85W Kan- |
| | N36°15.40' | W100°43.50' | W100°55.41' | N42°07.00' | c. 3-1-2 | | | sas City |
| | W100°34.90' | | | W101°04.80' | d. 6/1 | | | ARCP-281.4W |
| | | | | | e. 31/94 | | | |
| AR400 (South) | HCT VORTAC | HCT VORTAC | GCK VORTAC | GCK VORTAC | | | | Denver |
| | 345/100 | N40°27.24' | N37°55.14' | 165/100 | | | | ARCP-288.35E Kan- |
| | N42°07.00' | W100°55.41' | W100°43.50' | N36°15.40' | | | | sas City |
| | W101°04.80' | | | W100°34.90' | | | | EXIT-387.1E |
| | | | | | | | | |
| REMARKS: Intended for exclusive use by 97 AMW aircraft and support tankers only. Other aircraft permitted on non-interference basis. The 97 OSS/OSOS retains preemption authority. | | | | | | | | |
| AR406H (East) | PWE VORTAC | PWE VORTAC | | LMN VORTAC | a. 396.200 | FL260/FL280 | 55th OSS/OSOS Offutt AFB, | Minneapolis |
| | 254/100 | N40°12.02' | | N40°35.80' | b. 297.300 | | NE | ARCP-135.1/307.2 |
| | N39°51.80' | W96°12.38' | | W93°58.06' | c. 3-1-2 | | DSN 271-6010 | EXIT-132.725E/284.6 |
| | W98°19.90' | | | | d. 3/1 | | C402-294-6010 | 25E |
| | | | | | e. 59/122 | | | |
| AR406H (West) | LMN VORTAC | PWE VORTAC | | PWE VORTAC | | | | Minneapolis |
| | N40°35.80' | N40°12.02' | | 254/100 | | | | ARCP-135.1/307.2 |
| | W93°58.06' | W96°12.38' | | N39°51.80' | | | | EXIT-135.1W/307.2W |
| | | | | W98°19.90' | | | | |
| | | | | | | | | |
| REMARKS: SODAR authorized. All SODAR Course Reversal Turns to the North. AR406H will be scheduled solely by the 55th WG. 55th WG aircraft will have priority for use of AR406H. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--|--|---|--|---|---|------------------------|--|---|
| AR406L (East) | PWE VORTAC 254/100 N39°51.80' W98°19.90' | PWE VORTAC N40°12.02' W96°12.38' | | LMN VORTAC N40°35.80' W93°58.06' | a. 297.300 b. 396.200 c. 3-1-2 d. 3/1 e. 59/122 | FL200/FL220 | 55th OSS/OSOS Offutt AFB, NE DSN 271-6010 C402-294-6010 | Minneapolis ARCP-128.75/346.3 EXIT-119.6E/290.4E |
| (West) | LMN VORTAC N40°35.80' W93°58.06' | PWE VORTAC N40°12.02' W96°12.38' | | PWE VORTAC 254/100 N39°51.80' W98°19.90' | | | | Minneapolis ARCP-128.75/346.3 EXIT-128.75W/346.3 W |
| REMARKS: SODAR authorized. All SODAR Course Reversal Turns to the North. AR406L will be scheduled solely by the 55th WG. 55th WG aircraft will have priority for use of AR406L. | | | | | | | | |
| AR452 (Northeast) | FMG VORTAC 273/45 N39°49.00' W120°36.00' | REO VORTAC 160/49 N41°46.00' W117°50.00' | REO VORTAC 081/47 N42°27.00' W116°49.00' BOI VORTAC 158/38 N42°55.00' W116°07.00' | BOI VORTAC 061/65 N43°45.00' W114°46.00' | a. 361.700 b. 384.600 c. 1-2-3 d. 4/1 e. 29/92 | FL240/FL260 | 366 OSS/OSOS Mt Home AFB, ID DSN 728-2172 C208-828-2172 | Oakland / Salt Lake City ARCP-269.0E EXIT-290.5E |
| (Southwest) | DLN VOR-DME 171/14 N45°01.00' W112°36.00' | BOI VORTAC 061/65 N43°45.00' W114°46.00' | BOI VORTAC 158/38 N42°55.00' W116°07.00' REO VORTAC 081/47 N42°27.00' W116°49.00' | REO VORTAC 160/49 N41°46.00' W117°50.00' | | | | Oakland / Salt Lake City ARCP-290.5W EXIT-269.0W |
| REMARKS: None | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--|-------------|-------------|----------------------------|-------------|------------|------------------------|----------------------------|---------------------|
| AR453 | FAR VORTAC | ABR VOR-DME | FAR VORTAC | FAR VORTAC | a. 291.900 | FL210/FL230 | 55WG Offutt AFB, NE | Minneapolis |
| | 206/46 | 327/71 | 206/46 | 206/46 | b. 320.900 | FL260/FL280 | DSN 271-3430 | ARCP-270.3W |
| | N46°07.00' | N46°30.00' | N46°07.00' | N46°07.00' | c. 1-1-2 | FL310/FL330 | C402-294-3430 | EXIT-270.3W |
| | W97°28.00' | W99°04.00' | W97°28.00' | W97°28.00' | d. 6/1 | | | |
| | | | FAR VORTAC | ABR VOR-DME | e. 51/114 | | | |
| | | | 224/30 | 327/71 | | | | |
| | | | N46°27.00' | N46°30.00' | | | | |
| | | | W97°26.00' | W99°04.00' | | | | |
| | | | ABR VOR-DME | | | | | |
| | | | 327/71 | | | | | |
| | | N46°30.00' | | | | | | |
| | | W99°04.00' | | | | | | |
| | | ABR VOR-DME | | | | | | |
| | | 317/52 | | | | | | |
| | | N46°09.00' | | | | | | |
| | | W99°04.00' | | | | | | |
| REMARKS: None | | | | | | | | |
| AR455 (East) | PXV VORTAC | IJU VORTAC | HVQ VORTAC | BKW VORTAC | a. 336.100 | FL250/FL270 | 552 OSS/OSOS Tinker AFB, | Indianapolis |
| | 080/10 | 130/30 | 241/81 | 230/27 | b. 291.900 | | OK | ARCP-293.22E |
| | N37°56.92' | N37°46.50' | N37°38.00' | N37°28.50' | c. 1-3-1 | | DSN 884-1203/1204 | EXIT-290.55E |
| | W87°33.50' | W85°06.25' | W83°12.75' | W81°32.42' | d. 5/1 | | C405-734-1203/1204 | |
| | | | | | e. 29/92 | | | |
| (West) | BKW VORTAC | HVQ VORTAC | BWG VORTAC | PXV VORTAC | | | | Indianapolis |
| | 230/27 | 235/72 | 036/68 | 080/10 | | | | ARCP-290.55W |
| | N37°28.50' | N37°36.18' | N37°49.23' | N37°56.92' | | | | EXIT-377.12W |
| | W81°32.42' | W82°58.27' | W85°33.72' | W87°33.50' | | | | |
| REMARKS: Closed daily from 1400-1500Z++, 1800-1900Z++ and 2359-0059Z++. Normal scheduling will be accomplished through MASMS. Note: 552 OSS/OSOS retains exclusive bump privileges. | | | | | | | | |
| AR462 | SAC VORTAC | FMG VORTAC | FMG VORTAC | BAM VORTAC | a. 318.000 | FL240/FL260 | 60 OSS/OSOS Travis AFB, CA | Oakland |
| | 020/50 | 266/37 | 354/81 | 318/61 | b. 384.600 | | DSN 837-5582 | ARCP-134.97E/379.2 |
| | N39°07.00' | N39°40.00' | N40°52.00' | N41°30.00' | c. 1-2-2 | | C707-424-5582 | E |
| | W120°55.00' | W120°27.00' | W119°23.00' | W117°30.00' | d. 5/1 | | | EXIT-132.25E/352.0E |
| | | | | | e. 29/92 | | | |
| REMARKS: None | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|------------------------|---|---|--|---|---------------------------------|----------------------------|--|---|
| AR505 (East) | BET VORTAC 018/85 | MCG VORTAC 255/48 | MCG VORTAC 321/36 | FYU VORTAC 225/44 | a. 315.900 b. 263.900 | FL210/FL230 FL240/FL260 | 168 ARS/DOO Eielson AFB, AK | Anchorage ARCP-353.8E/128.1E |
| ALASKA | N61°54.00' W160°00.00' | N63°00.00' W157°22.00' | N63°31.00' W156°05.00' ENN VORTAC 299/58 N65°23.00' W150°23.00' | N66°19.00' W147°00.00' | c. 1-1-1 d. 2/1 e. 52/115 | | DSN 317-377-8812 (After duty hours 317-377-8800) C907-377-8812 | EXIT-285.4E/133.1E ARIP-372.0E/125.2E |
| (West) | FYU VORTAC 225/44 N66°19.00' W147°00.00' | ENN VORTAC 299/58 N65°23.00' W150°23.00' | MCG VORTAC 321/36 N63°31.00' W156°05.00' MCG VORTAC 255/48 N63°00.00' W157°22.00' | BET VORTAC 018/85 N61°54.00' W160°00.00' | | | | Anchorage ARCP-285.4W/133.1 W EXIT-353.8W/128.1W ARIP-284.7W/135.0W |

REMARKS: Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|--|--|---|--|--|------------------------|---|---|
| AR506 (North) ALASKA | ORT VORTAC 150/118 N61°00.00' W141°30.00' | ORT VORTAC 194/24 N62°38.00' W142°27.00' | ORT VORTAC 301/60 N63°46.00' W143°12.00' ORT VORTAC 287/67 N63°40.00' W143°49.00' ORT VORTAC 177/61 N62°00.00' W142°41.00' | ORT VORTAC 157/121 N60°56.00' W142°01.00' | a. 288.800 b. 263.900 c. 1-1-1 d. 2/1 e. 30/93 | FL240/FL310 | 168 ARS/DOO Eielson AFB, AK DSN 317-377-8812 (After hours 317-377-8800) C907-377-8812 | Anchorage ARCP-323.0W/127.1 W EXIT-323.0W/127.1W |
| (South) | ORT VORTAC 287/67 N63°40.00' W143°49.00' | ORT VORTAC 177/61 N62°00.00' W142°41.00' | ORT VORTAC 157/121 N60°56.00' W142°01.00' ORT VORTAC 150/118 N61°00.00' W141°30.00' ORT VORTAC 194/24 N62°38.00' W142°27.00' | ORT VORTAC 301/60 N63°46.00' W143°12.00' | | | | Anchorage ARCP-323.0E/127.1E EXIT-323.0E/263.1E/ 127.1E/119.0E |
| REMARKS: Refueling restricted to three flight levels. Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time. | | | | | | | | |
| AR507 (East) ALASKA | YAK VOR-DME 193/91 N58°16.00' W141°20.00' | BKA VORTAC 257/110 N57°16.47' W138°49.00' | BKA VORTAC 217/52 N56°29.00' W136°57.50' | BKA VORTAC 133/92 N55°25.00' W134°40.00' | a. 270.200 b. 263.900 c. 1-2-1 d. 3/1 e. 31/94 | FL240/FL270 | 168 ARS/DOO Eielson AFB, AK DSN 317-377-8812 (After hours 317-377-8800) C907-377-8812 | Anchorage ARCP-269.4E/133.6E EXIT-335.5E/126.6E |
| (West) | BKA VORTAC 133/92 N55°25.00' W134°40.00' | BKA VORTAC 217/52 N56°29.00' W136°57.50' | BKA VORTAC 257/110 N57°16.47' W138°49.00' | YAK VOR-DME 193/91 N58°16.00' W141°20.00' | | | | Anchorage ARCP-335.5W/126.6 W EXIT-269.4W/133.6W |
| REMARKS: Times as coordinated with ARTCC. Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---------------|---------------------------|---------------------------|----------------------------|---------------------------|--------------------------------|------------------------|---|---------------------------------|
| AR508E | SPY NDB-DME 077/78 | CDB VORTAC 319/130 | CDB VORTAC 004/117 | PDN NDB-DME N56°57.26' | a. 288.800 b. 263.900 | FL240/FL290 | 168 ARS/DOO Eielson AFB, AK | Anchorage ARCP-288.3E/132.9E |
| ALASKA | N57°12.00' W167°50.00' | N57°11.00' W164°34.00' | N57°07.00' W161°40.00' | W158°38.85' | c. 1-1-1 d. 2/1 e. 30/93 | | DSN 317-377-8812 (After hours 317-377-8800) C907-377-8812 | EXIT-288.3E/132.9E |

REMARKS: Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time. Simultaneous Opposite Direction Aerial Refueling (SODAR) authorized with AR508W when scheduled and coordinated with the 168 ARG and ATC.

| | | | | | | | | |
|---------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------------|-------------|---|---|
| AR508W | PDN NDB-DME N56°57.26' | CDB VORTAC 004/117 | CDB VORTAC 319/130 | SPY NDB-DME 077/78 | a. 288.800 b. 263.900 | FL240/FL290 | 168 ARS/DOO Eielson AFB, AK | Anchorage ARCP-288.3W/132.9 |
| ALASKA | W158°38.85' | N57°07.00' W161°40.00' | N57°11.00' W164°34.00' | N57°12.00' W167°50.00' | c. 1-1-1 d. 2/1 e. 30/93 | | DSN 317-377-8812 (After hours 317-377-8800) C907-377-8812 | W EXIT-338.3W/127.8W ARIP-288.3W/132.9W |

REMARKS: Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time. Simultaneous Opposite Direction Aerial Refueling (SODAR) authorized with AR508E when scheduled and coordinated with the 168 ARG and ATC.

REFUELING ANCHORS

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | | |
|--------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------|-----------------------------|--------------------------|-------------------------|---|--|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION | |
| AR600 | CAE VORTAC 151/53 | CAE VORTAC 151/53 | CAE VORTAC 075/59 | CAE VORTAC 075/59 | CAE VORTAC 059/14 | a. 348.900 | FL240/FL280 | 20 OSS/OSOS Shaw AFB, SC | Jacksonville ARCP-319.2 | Authorized all times except 1400-1600Z++. | |
| | N33°05.85' | N33°05.85' | N34°08.42' | N34°08.42' | N33°59.07' | b. 319.700 | | | EXIT-319.2 | | |
| | W80°30.75' | W80°30.75' | W79°55.27' | W79°55.27' | W80°49.12' | c. 1-1-4 | or as assigned by ATC 3000' | DSN 965-1118 | | | |
| | | | | CAE VORTAC 059/45 | | d. 5/1 | | | | | |
| | | | | N34°15.85' | | e. 30/93 | required. | | | | |
| | | | | W80°17.70' | | | | | | | |
| | | | | CAE VORTAC 140/29 | | | | | | | |
| | | | | N33°29.82' | | | | | | | |
| | | | | W80°40.03' | | | | | | | |
| | | | | CAE VORTAC 130/48 | | | | | | | |

ATC ASSIGNED AIRSPACE: N33°49.83' W80°58.58' to N34°25.00' W80°19.00' to N34°47.33' W79°50.00' to N34°26.00' W79°20.50' to N33°26.00' W79°58.00' to N33°05.00' W80°20.50' to N33°05.00' W81°00.00' to beginning.

REMARKS: Jacksonville ARTCC radar must be operational. The scheduling unit (20 OSS/OSOS) will resolve conflicts with AR207. Simultaneous use of AR600 and AR207 is prohibited. User contact scheduling unit during normal duty hours, 1230-2130Z++, Mon-Fri, except holidays.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--|--|---|--|--|---|--|---|--|--------------------|
| AR601 | ILM VORTAC 219/36 N33°50.00' W78°15.00' | ILM VORTAC 219/36 N33°50.00' W78°15.00' | ILM VORTAC 219/110 N32°46.00' W78°59.00' | ILM VORTAC 219/110 N32°46.00' W78°59.00' ILM VORTAC 209/108 N32°40.00' W78°38.00' ILM VORTAC 208/58 N33°26.00' W78°16.00' ILM VORTAC 226/61 N33°33.00' W78°37.00' | CHS VORTAC 096/34 ① N32°54.00' W79°22.00' | a. 283.900 b. 319.700 c. 1-2-2 d. 2/1 e. 33/96 Free Mason Primary 286.7 Sec- ondary 321.2 or as assigned. | 16000/FL260 as assigned by ATC 3000' required | 20 OSS/OSOS Shaw AFB, SC DSN 965-1118 | Jacksonville ARCP-381.4 EXIT-381.4 | Unlimited |

ATC ASSIGNED AIRSPACE: N32°51.00' W79°23.00' to N32°59.00' W79°18.00' to N33°11.00' W79°06.00' to N33°17.00' W79°04.00' to N33°20.00' W79°02.00' to N33°28.00' W78°55.00' to N33°40.00' W78°40.00' to N33°50.00' W78°24.00' to N33°50.00' W78°09.00' to N32°55.00' W78°04.00' to N32°31.00' W78°09.00' to N32°20.00' W78°36.00' to N32°34.00' W79°22.00' to beginning.

REMARKS: Jacksonville ARTCC radar must be operational. Expect FL 240 and above for normal operations. Operations FL 230 and below will be approved on an individual basis. User contact scheduling unit during normal duty hours, 1230-2130Z++ Mon-Fri, except holidays.

① Or as directed by ATC

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------|---------------------|---|--|---|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR602 | TXO VORTAC 214/52 | TXO VORTAC 214/52 | TXO VORTAC 302/49 | TXO VORTAC 302/49 | TXO VORTAC 314/60 | a. 295.400 | 9000/14000 | 27th SOSS/OSOS Cannon AFB, NM DSN 681-2521 / 2276 | CANNON AFB RAPCON ARCP-307.175 EXIT-307.175 | Limited to Cannon AFB RAPCON opr hrs. See US IFR-Supp for current published opr hrs. |
| | N33°52.50' | N33°52.50' | N35°03.00' | N35°03.00' | N35°18.10' | b. 319.500 | | | | |
| | W103°33.90' | W103°33.90' | W103°33.90' | W103°33.90' | W103°33.90' | e. 30/93 | | | | |
| | TXO VORTAC 332/55 | TXO VORTAC 332/55 | TXO VORTAC 214/24 | TXO VORTAC 322/37 | TXO VORTAC 196/35 | | | | | |
| | N35°23.10' | N35°23.10' | N34°13.00' | N35°03.00' | N33°59.10' | | | | | |
| | W103°10.00' | W103°10.00' | W103°10.00' | W103°10.00' | W103°10.00' | | | | | |
| | | | | TXO VORTAC 214/24 | | | | | | |
| | | | | N34°13.00' | | | | | | |
| | | | | W103°10.00' | | | | | | |
| | | | | TXO VORTAC 235/40 | | | | | | |
| | | | | N34°13.00' | | | | | | |
| | | | | W103°33.90' | | | | | | |

ATC ASSIGNED AIRSPACE: N35°18.00' W103°08.00' to N35°08.00' W103°05.00' to N34°09.00' W103°05.00' to N33°58.00' W103°10.00' to N33°58.00' W103°36.00' to N34°09.00' W103°40.00' to N35°08.00' W103°40.00' to N35°18.00' W103°36.00' to beginning.

REMARKS: Right hand patterns. Restricted to 27 SOW based aircraft only. Air refueling operations will be controlled by Cannon AFB RAPCON ATC services. Be alert for strong westerly winds.

| | | | | | | | | | | |
|-------|----------------------|----------------------|-----------------------|-----------------------|----------------------|-------------|-------------|--|---|-----------|
| AR603 | DRK VORTAC 244/27 | EED VORTAC 114/35 | PXR VORTAC 300/97 | PXR VORTAC 300/97 | DRK VORTAC 244/27 | a. 238.900 | FL240/FL280 | 56 RMO/AROS Luke AFB, AZ DSN 896-7654 C623-856-7654 | Albuquerque ARCP-285.4 EXIT-285.4 | Unlimited |
| | N34°35.75' | N34°24.00' | N34°31.05' | N34°31.05' | N34°35.75' | b. 319.500 | | | | |
| | W113°00.67' | W113°55.75' | W113°24.62' | W113°24.62' | W113°00.67' | e. 51/114 | | | | |
| | PXR VORTAC 308/15 | PXR VORTAC 305/20 | EED VORTAC 114/101 | EED VORTAC 114/51 | PXR VORTAC 267/33 | | | | | |
| | N33°36.83' | N33°41.25' | N33°41.68' | N34°13.65' | N33°31.00' | O'Grady | | | | |
| | W112°09.83' | W112°14.00' | W112°54.33' | W113°40.60' | W112°37.67' | Primary | | | | |
| | | | | EED VORTAC 114/101 | | 321.2 Sec- | | | | |
| | | | | N33°41.68' | | ondary | | | | |
| | | | | W112°54.33' | | 286.2 or as | | | | |
| | | | | PXR VORTAC 301/47 | | assigned | | | | |
| | | | | N33°58.93' | | | | | | |
| | | | | W112°38.65' | | | | | | |

ATC ASSIGNED AIRSPACE: N34°40.00' W114°00.00' to N34°39.42' W113°04.25' to N33°38.58' W112°09.17' to N33°31.00' W112°15.00' to N33°31.00' W112°48.25' to N33°56.67' W114°00.00' to beginning.

REMARKS: Military radar and/or Albuquerque ARTCC radar must be operational. Anticipate encountering strong northerly winds while refueling. 56 RMO/AROS (Sked unit) shall not schedule the use of AR603 when the Gladden/Bagdad MOA's are in use.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--------------|-------------|--------------|----------------|-------------|------------------------|---------------------|-------------------|----------------|--------------------|
| AR604 | LWT VORTAC | LWT VORTAC | LWT VORTAC | LWT VORTAC | LWT VORTAC | a. 276.500 | FL200/FL330 | 120FW Great Falls | Salt Lake City | Unlimited |
| | 333/88 | 333/88 | 022/111 | 022/111 | 027/122 | b. 292.600 | | IAP, MT | ARCP-285.4 | |
| | N48°30.00' | N48°30.00' | N48°30.00' | N48°30.00' | N48°30.00' | c. 1-2-2 | or as assigned | DSN 791-0186 | EXIT-285.4 | |
| | W110°00.00' | W110°00.00' | W107°52.00' | W107°52.00' | W107°29.00' | d. 6/1 | by ATC 3000' | C406-791-0186 | | |
| | LWT VORTAC | LWT VORTAC | LWT VORTAC | LWT VORTAC | LWT VORTAC | e. 51/114 | required | | | |
| | 027/150 | 027/150 | 355/109 | 017/128 | 345/107 | | | | | |
| | N48°50.00' | N48°50.00' | N48°50.00' | N48°50.00' | N48°50.00' | | | | | |
| | W107°00.00' | W107°00.00' | W109°08.00' | N48°50.00' | N48°50.00' | Big Foot | | | | |
| | | | | W107°52.00' | W109°35.00' | Primary | | | | |
| | | | | LWT VORTAC | | 238.4 Sec- | | | | |
| | | | 355/109 | | ondary | | | | | |
| | | | N48°50.00' | | 260.8 | | | | | |
| | | | W109°08.00' | | | | | | | |
| | | | LWT VORTAC | | | | | | | |
| | | | 357/89 | | | | | | | |
| | | | N48°30.00' | | | | | | | |
| | | | W109°08.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: Anchor is contained within the "Bearpaw" ATCAA N49°00.00' W110°00.00' to N49°00.00' W107°00.00' to N47°30.00' W107°00.00' to N47°30.00' W110°00.00' to beginning.

REMARKS: Military radar and/or Salt Lake City ARTCC must be operational to conduct air refueling.

| | | | | | | | | | | |
|-------|-------------|-------------|-------------|-------------|-------------|------------|----------------|-------------------|-------------|-----------|
| AR606 | RDR TACAN | RDR TACAN | MIB TACAN | MIB TACAN | RDR TACAN | a. 366.300 | FL240/FL270 | 119 WG, FARGO, ND | Minneapolis | Unlimited |
| | 232/30 | 238/37 | 124/64 | 124/64 | 188/36 | b. 320.900 | | DSN 362-8508 | ARCP-270.3 | |
| | N47°42.00' | N47°42.00' | N47°40.00' | N47°40.00' | N47°23.00' | c. 1-3-2 | or as assigned | C701-451-2508 | EXIT-270.3 | |
| | W98°03.00' | W98°15.00' | W100°13.00' | W100°13.00' | W97°40.00' | d. 2/1 | by ATC 3000' | | | |
| | MIB TACAN | MIB TACAN | RDR TACAN | MIB TACAN | MIB TACAN | e. 33/96 | required | | | |
| | 149/71 | 142/74 | 224/58 | 134/80 | 145/51 | | | | | |
| | N47°19.00' | N47°19.00' | N47°22.00' | N47°20.00' | N47°38.00' | | | | | |
| | W100°45.00' | W100°32.00' | W98°34.00' | W100°12.00' | W100°51.00' | Big Foot | | | | |
| | | | | RDR TACAN | | AICC 364.2 | | | | |
| | | | | 224/58 | | or as | | | | |
| | | | N47°22.00' | | assigned by | | | | | |
| | | | W98°34.00' | | ATC | | | | | |
| | | | RDR TACAN | | | | | | | |
| | | | 244/50 | | | | | | | |
| | | | N47°42.00' | | | | | | | |
| | | | W98°35.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: "Red River" N48°00.00' W101°00.00' to N48°00.00' W99°50.00' to N47°56.00' W98°11.00' to N47°38.00' W98°02.00' to N47°21.00' W97°38.00' to N47°00.00' W97°37.00' to N47°05.00' W99°39.00' to N47°05.00' W100°37.00' to beginning. ATCAA is divided into east and west subdivisions on a line N48°00.00' W99°50.00' (North) and N47°05.00' W99°39.00' (South).

REMARKS: Military radar and/or Minneapolis ARTCC radar must be operational to conduct air refueling.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|------------|--------------|------------|--------------|----------------|-------------|----------------|---------------------|--|---|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR607 | DLH VORTAC | IWD VORTAC | IWD VORTAC | IWD VORTAC | DLH VORTAC | a. 235.100 | FL180 and above | 148 FG/DOS Duluth, MN DSN 825-7268 | Minneapolis ARCP-269.0 EXIT-269.0 | Unlimited |
| | 106/35 | 222/22 | 112/60 | 112/60 | 106/35 | b. 320.900 | | | | |
| | N46°36.00' | N46°16.00' | N46°08.00' | N46°08.00' | N46°36.00' | c. 1-1-4 | | | | |
| | W91°25.00' | W90°29.00' | W88°48.00' | W88°48.00' | W91°25.00' | d. 6/1 | | | | |
| | DLH VORTAC | | | IWD VORTAC | DLH VORTAC | e. 52/115 | | | | |
| | 118/92 | | | 090/58 | 118/92 | | | | | |
| | N46°00.00' | | | N46°30.00' | N46°00.00' | Huntress | | | | |
| | W90°20.00' | | | W88°43.00' | W90°20.00' | Primary | | | | |
| | IWD VORTAC | | | IWD VORTAC | IWD VORTAC | 364.2 as | | | | |
| | 095/89 | | | 297/13 | 095/89 | directed by | | | | |
| | N46°21.00' | | | N46°38.00' | N46°21.00' | military | | | | |
| | W88°00.00' | | | W90°24.00' | W88°00.00' | radar | | | | |
| | IWD VORTAC | | | IWD VORTAC | IWD VORTAC | | | | | |
| | 108/94 | | | 222/22 | 108/94 | | | | | |
| N46°00.00' | | | N46°16.00' | N46°00.00' | | | | | | |
| W88°00.00' | | | W90°29.00' | W88°00.00' | | | | | | |

ATC ASSIGNED AIRSPACE: Rhinelander Bravo N46°00.00' W88°00.00' to N46°44.00' W88°00.00' to N46°55.00' W89°28.00' to N46°55.00' W90°05.00' to N47°05.00' W90°05.00' to N47°05.00' W90°45.00' to N47°00.00' W91°00.00' to N47°00.00' W91°25.00' to N46°36.00' W91°25.00' to N46°00.00' W90°20.00' to beginning.

REMARKS: Military radar or Minneapolis ARTCC radar must be operational to conduct air refueling.

| | | | | | | | | | | |
|-------|-------------|-------------|-------------|-------------|-------------|------------|-------------|--|------------------------------------|-----------|
| AR608 | LFV VOR-DME | a. 343.500 | FL180/FL230 | NE ADS/DOA Rome, NY DSN 587-6247 | Boston ARCP-307.3 EXIT-307.3 | Unlimited |
| | 151/51 | 151/51 | 115/107 | 115/107 | 125/43 | b. 282.700 | | | | |
| | N41°25.00' | N41°25.00' | N41°43.00' | N41°43.00' | N41°47.00' | c. 1-2-1 | | | | |
| | W69°14.00' | W69°14.00' | W67°42.00' | W67°42.00' | W69°08.00' | d. 2/1 | | | | |
| | | | | LFV VOR-DME | | e. 32/95 | | | | |
| | | | | 105/99 | | | | | | |
| | | | | N42°02.00' | | Huntress | | | | |
| | | | | W67°49.00' | | Primary | | | | |
| | | | | LFV VOR-DME | | 364.2 | | | | |
| | | | | 118/52 | | | | | | |
| | | | | N41°50.00' | | | | | | |
| | | | | W68°55.00' | | | | | | |
| | | | | LFV VOR-DME | | | | | | |
| | | | | 135/64 | | | | | | |
| | | | N41°30.00' | | | | | | | |
| | | | W68°48.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N41°25.00' W69°30.00' to N41°21.00' W68°27.50' to N41°52.00' W67°00.00' to N42°38.00' W67°00.00' to N42°20.00' W68°15.00' to N42°08.00' W68°30.00' to N41°48.00' W69°30.00' to beginning.

REMARKS: Boston ARTCC radar must be operational.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--|--|--|--|--|---|-----------------------------------|--|------------------------------------|--------------------|
| AR609 | SYR VORTAC 087/75 N43°27.00' W74°33.00' | SYR VORTAC 044/19 N43°25.00' W75°58.00' | SYR VORTAC 087/75 N43°27.00' W74°33.00' | SYR VORTAC 087/75 N43°27.00' W74°33.00' SYR VORTAC 073/81 N43°47.00' W74°33.00' SYR VORTAC 048/46 N43°46.00' W75°34.00' SYR VORTAC 070/32 N43°26.00' W75°34.00' | GFL VORTAC 299/22 N43°26.00' W74°06.00' | a. 276.500 b. 282.700 c. 1-3-1 d. 4/1 e. 52/115 Huntress Primary 364.2 | FL180/FL280 4000' required | NE ADS/DOA Rome, NY DSN 587-6247 | Boston ARCP-323.0 EXIT-323.0 | Unlimited |

ATC ASSIGNED AIRSPACE: N43°26.00' W74°06.00' to N43°24.00' W74°22.00' to N43°21.00' W76°04.00' to N43°45.00' W76°02.00' to N43°51.00' W75°58.00' to N43°54.00' W75°47.00' to N43°53.50' W74°09.35' to beginning.

REMARKS: Anchor area is located within the AKS 2 and 5 ATCAAs. Boston ARTCC radar must be operational.

| | | | | | | | | | | |
|--------|--|--|--|--|--|---|-------------|--|--|-----------|
| AR610A | DLN VOR-DME 280/70 N45°50.00' W113°55.50' | DLN VOR-DME 280/70 N45°50.00' W113°55.50' | DLN VOR-DME N45°14.91' W112°32.83' | DLN VOR-DME N45°14.91' W112°32.83' DLN VOR-DME 011/20 N45°32.00' W112°18.40' DLN VOR-DME 305/55 N45°59.90' W113°17.80' DLN VOR-DME 282/48 N45°40.50' W113°33.60' | DLN VOR-DME 104/17 N45°06.00' W112°12.00' DLN VOR-DME 297/71 N46°06.90' W113°41.00' | a. 295.400 b. 292.600 c. 1-2-3 d. 2/1 e. 52/115 | FL190/FL260 | 120 FW ANG Great Falls, MT DSN 791-0186/0192 C406-791-0186/0192 | Salt Lake City ARCP-338.3 EXIT-338.3 | Unlimited |
|--------|--|--|--|--|--|---|-------------|--|--|-----------|

ATC ASSIGNED AIRSPACE: N45°01.50' W112°15.70' to N45°26.00' W111°54.00' to N46°10.50' W113°37.50' to N45°46.90' W113°58.00' to beginning.

REMARKS: None

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|---|--|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR610B | DLN VOR-DME | DLN VOR-DME | DLN VOR-DME | DLN VOR-DME | DLN VOR-DME | a. 295.400 | FL190/FL260 | 120 FW ANG Great Falls, MT DSN 791-0186/0192 C406-791-0186/0192 | Salt Lake City ARCP-338.3 EXIT-338.3 | Unlimited |
| | 051/25 | 051/25 | 305/55 | 305/55 | 297/71 | b. 292.600 | | | | |
| | N45°24.00' | N45°24.00' | N45°59.90' | N45°59.90' | N46°06.90' | c. 1-2-3 | | | | |
| | W111°59.00' | W111°59.00' | W113°17.80' | W113°17.80' | W113°41.00' | d. 2/1 | | | | |
| | | | | DLN VOR-DME | DLN VOR-DME | e. 52/115 | | | | |
| | | | | 282/48 | 104/17 | | | | | |
| | | | | N45°40.50' | N45°06.00' | | | | | |
| | | | | W113°33.60' | W112°12.00' | | | | | |
| | | | | DLN VOR-DME | | | | | | |
| | | | | N45°14.91' | | | | | | |
| | | | | W112°32.83' | | | | | | |
| | | | | DLN VOR-DME | | | | | | |
| | | | | 011/20 | | | | | | |
| | | | | N45°32.00' | | | | | | |
| | | | W112°18.40' | | | | | | | |

ATC ASSIGNED AIRSPACE: N45°01.50' W112°15.70' to N45°26.00' W111°54.00' to N46°10.50' W113°37.50' to N45°46.90' W113°58.00' to beginning.

REMARKS: None

| | | | | | | | | | | |
|--------|-------------|-------------|-------------|-------------|-------------|------------|-------------|---|--|-----------|
| AR611A | BAM VORTAC | a. 255.750 | FL190/FL260 | 366 OSS/OSOS Mt Home AFB, ID DSN 728-2172 C208-828-2172 | Salt Lake City ARCP-380.05 EXIT-380.05 | Unlimited |
| | 284/100 | 284/100 | 284/35 | 284/35 | 297/103 | b. 275.950 | | | | |
| | N41°26.00' | N41°26.00' | N40°53.00' | N40°53.00' | N41°46.00' | c. 1-0-0 | | | | |
| | W118°48.00' | W118°48.00' | W117°35.00' | W117°35.00' | W118°33.00' | d. 3/1 | | | | |
| | | | | BAM VORTAC | BAM VORTAC | e. 55/118 | | | | |
| | | | | 316/42 | 284/20 | | | | | |
| | | | | N41°12.00' | N40°45.00' | | | | | |
| | | | | W117°20.00' | W117°18.00' | | | | | |
| | | | | BAM VORTAC | | | | | | |
| | | | | 299/88 | | | | | | |
| | | | | N41°38.00' | | | | | | |
| | | | | W118°16.00' | | | | | | |
| | | | | BAM VORTAC | | | | | | |
| | | | | 284/85 | | | | | | |
| | | | N41°19.00' | | | | | | | |
| | | | W118°31.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N40°41.00' W117°19.00' to N41°25.00' W118°54.00' to N41°50.00' W118°35.00' to N41°06.00' W116°58.00' to beginning.

REMARKS: None

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|-----------------|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR611B | BAM VORTAC | BAM VORTAC | BAM VORTAC | BAM VORTAC | BAM VORTAC | a. 255.750 | FL190/FL260 | 366 OSS/OSOS Mt | Salt Lake City | Unlimited |
| | 332/30 | 332/30 | 299/88 | 299/88 | 297/103 | b. 275.950 | | Home AFB, ID | ARCP-380.05 | |
| | N41°04.00' | N41°04.00' | N41°38.00' | N41°38.00' | N41°46.00' | c. 1-0-0 | | DSN 728-2172 | EXIT-380.05 | |
| | W117°02.00' | W117°02.00' | W118°16.00' | W118°16.00' | W118°33.00' | d. 3/1 | | C208-828-2172 | | |
| | | | | BAM VORTAC | BAM VORTAC | e. 55/118 | | | | |
| | | | | 284/85 | 284/20 | | | | | |
| | | | | N41°19.00' | N40°45.00' | | | | | |
| | | | | W118°31.00' | W117°18.00' | | | | | |
| | | | | BAM VORTAC | | | | | | |
| | | | | 284/35 | | | | | | |
| | | | | N40°53.00' | | | | | | |
| | | | | W117°35.00' | | | | | | |
| | | | | BAM VORTAC | | | | | | |
| | | | | 316/42 | | | | | | |

ATC ASSIGNED AIRSPACE: N40°41.00' W117°19.00' to N41°25.00' W118°54.00' to N41°50.00' W118°35.00' to N41°06.00' W116°58.00' to beginning.

REMARKS: None

| | | | | | | | | | | |
|-------|-------------|-------------|-------------|-------------|-------------|------------|-------------|--------------------|--------------|-----------|
| AR613 | CIE VORTAC | a. 282.550 | FL180/FL280 | 162 FW Arizona ANG | Albuquerque | Unlimited |
| | 023/52 | 023/41 | 023/102 | 023/102 | 023/119 | b. 319.500 | | Tucson IAP, AZ | ARCP-327.15 | |
| | N32°44.00' | N32°35.10' | N33°24.00' | N33°24.00' | N33°37.50' | c. 1-2-2 | | DSN 844-6366/6377 | EXIT-281.5 | |
| | W109°09.00' | W109°16.90' | W108°33.50' | W108°33.50' | W108°22.00' | d. 4/1 | | | EXIT-317.15 | |
| | CIE VORTAC | e. 32/95 | | | | |
| | 013/103 | 014/120 | 002/56 | 013/103 | 355/39 | | | | | |
| | N33°35.50' | N33°49.00' | N32°56.50' | N33°35.50' | N32°41.00' | | | | Exit below | |
| | W108°52.50' | W108°40.00' | W109°28.00' | W108°52.50' | W109°39.50' | | | | FL240 use | |
| | | | | CIE VORTAC | | | | | 317.15, Exit | |
| | | | | 002/56 | | | | | above FL240 | |
| | | | | N32°56.50' | | | | | use 281.5. | |
| | | | | W109°28.00' | | | | | | |
| | | | | CIE VORTAC | | | | | | |
| | | | | 023/52 | | | | | | |

ATC ASSIGNED AIRSPACE: N32°30.00' W109°44.00' to N32°54.50' W109°34.00' to N34°00.00' W109°34.00' to N34°00.00' W108°48.00' to N33°54.00' W108°48.00' to N33°29.00' W108°07.00' to N32°28.25' W109°19.00' to beginning.

REMARKS: Track lies within the Morenci and Reserve ATCAA. Receivers entering the airspace must maintain the last assigned altitude until radio contact is established with the tankers. Aircraft required to hold prior to refueling will do so on the CIE 023 radial between 52 and 62 DME, left turns (south entry), and on the CIE 013 radial between 103 and 93 DME, left turns (north entry). Tanker aircraft entering the anchor from the north shall enter via SJN direct to CIE 013/103 or TCS direct CIE 023/102, to avoid Cato MOA/ATCAA operations.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|------------|--------------|----------------|-------------|----------------|---------------------|-----------------------|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR614 | JCT VORTAC | JCT VORTAC | COT VORTAC | COT VORTAC | COT VORTAC | a. 352.600 | FL250/FL270 | 99 FTS Randolph AFB, | Houston | Unlimited |
| | 155/30 | 155/30 | 338/20 | 338/20 | N28°27.72' | b. 260.200 | | TX | ARCP-385.55 | |
| | N30°07.00' | N30°07.00' | N28°47.50' | N28°47.50' | W99°07.11' | c. 1-2-2 | or as assigned | DSN 487-6746 | EXIT-385.55 | |
| | W99°39.00' | W99°39.00' | W99°13.00' | W99°13.00' | JCT VORTAC | d. 4/1 | by ATC | Mon-Fri | | |
| | | | | COT VORTAC | 140/72 | e. 30/93 | | C210-652-6746 | | |
| | | | | 021/29 | N29°34.00' | | | Mon-Fri | | |
| | | | | N28°53.00' | W99°04.00' | | | | | |
| | | | | W98°51.00' | | | | | | |
| | | | | JCT VORTAC | | | | For Sat, Sun and hol | | |
| | | | | 140/72 | | | | 12 OSS/OSOA DSN | | |
| | | | | N29°34.00' | | | | 487-5580 | | |
| | | | | W99°04.00' | | | | (C210-652-5580) (Dur- | | |
| | | | | JCT VORTAC | | | | ing office hours | | |
| | | | | 155/71 | | | | 0800-1700 local | | |
| | | | N29°28.00' | | | | Mon-Fri) | | | |
| | | | W99°26.33' | | | | | | | |

ATC ASSIGNED AIRSPACE: N29°44.00' W99°32.00' to N29°30.00' W99°32.00' to N28°41.50' W99°16.00' to N28°31.50' W99°08.00' to N28°37.00' W98°45.50' to N28°48.50' W98°44.50' to N29°38.00' W99°00.50' to N29°50.00' W99°09.00' to beginning.

REMARKS: Houston ARTCC radar must be operational. T-1 flights may operate Monday thru Friday in AR614 at FL250B270.

| | | | | | | | | | | |
|-------|------------|------------|------------|------------|------------|------------|-------------|----------------------|---------|---------------------------|
| AR615 | AEX VORTAC | a. 295.400 | 12000/16000 | 16 SOW Hurlburt Fld, | Houston | As coordinated with ARTCC |
| | 097/13 | 097/13 | 097/73 | 097/73 | 065/38 | b. 260.200 | | FL | ARCP | |
| | N31°13.00' | N31°13.00' | N31°03.00' | N31°03.00' | N31°29.50' | c. 1-2-2 | | DSN 579-7812 | | |
| | W92°15.00' | W92°15.00' | W91°06.00' | W91°06.00' | W91°49.00' | d. 5/1 | | C904-884-7812 | | |
| | | | | AEX VORTAC | | e. 33/96 | | | | |
| | | | | 081/75 | | | | | | |
| | | | | N31°23.00' | | | | | | |
| | | | | W91°03.00' | | | | | | |
| | | | | AEX VORTAC | | | | | | |
| | | | | 065/38 | | | | | | |
| | | | | N31°29.50' | | | | | | |
| | | | | W91°49.00' | | | | | | |
| | | | | AEX VORTAC | | | | | | |
| | | | | 097/33 | | | | | | |
| | | | N31°10.00' | | | | | | | |
| | | | W91°52.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N31°14.00' W92°12.00' to N31°06.00' W91°53.00' to N30°59.00' W91°07.00' to N31°02.00' W90°47.00' to N31°19.00' W90°43.00' to N31°27.00' W91°02.00' to N31°34.00' W91°48.00' to N31°31.00' W92°09.00' to beginning.

REMARKS: Anchor and AR302 shall not be scheduled simultaneously.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|---------------|--|--|---|--|--|--|---------------------|--|------------------------------------|--------------------|
| AR616A | ENE VORTAC 111/61 N43°21.00' W69°12.75' | ENE VORTAC 111/61 N43°21.00' W69°12.75' | ENE VORTAC 096/128 N43°48.00' W67°43.00' | ENE VORTAC 096/128 N43°48.00' W67°43.00' ENE VORTAC 088/125 N44°04.00' W67°52.50' ENE VORTAC 090/75 N43°46.50' W68°58.00' ENE VORTAC 104/80 N43°28.67' W68°46.67' | ENE VORTAC 089/66 N43°45.00' W69°10.00' | a. 283.900 b. 282.700 c. 1-2-2 d. 6/1 e. 33/96 | FL180/FL230 | NE ADS/DOA Rome, NY DSN 587-6247 | Boston ARCP-269.6 EXIT-269.6 | Unlimited |

ATC ASSIGNED AIRSPACE: N43°44.50' W69°21.00' to N44°17.00' W67°35.00' to N43°50.00' W67°19.00' to N43°17.50' W69°06.00' to beginning.

REMARKS: W102 High must be released to Boston ARTCC (Controlling Agency) during scheduled times of operation. Boston ARTCC radar must be operational.

| | | | | | | | | | | |
|---------------|---|---|--|--|---|--|-------------|--|------------------------------------|-----------|
| AR616B | ENE VORTAC 086/141 N44°17.00' W67°35.00' | ENE VORTAC 086/144 N44°14.50' W67°29.00' | ENE VORTAC 090/75 N43°46.50' W68°58.00' | ENE VORTAC 090/75 N43°46.50' W68°58.00' ENE VORTAC 104/80 N43°28.67' W68°46.67' ENE VORTAC 096/128 N43°48.00' W67°43.00' ENE VORTAC 088/125 N44°04.00' W67°52.50' | ENE VORTAC 094/145 N43°55.00' W67°20.00' | a. 283.900 b. 282.700 c. 1-2-2 d. 6/1 e. 33/96 | FL180/FL230 | NE ADS/DOA Rome, NY DSN 587-6247 | Boston ARCP-269.6 EXIT-269.6 | Unlimited |
|---------------|---|---|--|--|---|--|-------------|--|------------------------------------|-----------|

ATC ASSIGNED AIRSPACE: N43°44.50' W69°21.00' to N44°17.00' W67°35.00' to N43°50.00' W67°19.00' to N43°17.50' W69°06.00' to beginning.

REMARKS: Right hand pattern. W102 High must be released to Boston ARTCC (Controlling Agency) during scheduled times of operation. Boston ARTCC radar must be operational.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--------------|------------|--------------|----------------|-------------|----------------|--------------------------------|-------------------------------------|----------------|------------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | | |
| AR617 | EYW VORTAC | EYW VORTAC | EYW VORTAC | EYW VORTAC | EYW VORTAC | a. 324.600 | FL260/FL290 | 347 Rescue Wing, MacDill AFB, FL | Miami | Restricted from use |
| | 084/20 ① | 166/5 | 073/70 | 073/70 | 084/20 ① | b. 343.250 | | | | |
| | N24°37.00' | N24°29.00' | N24°56.00' | N24°56.00' | N24°37.00' | c. 1-1-3 | or as assigned by ATC 4000' | DSN 968-4641 | EXIT-281.4 | 1700-2130Z++ daily. |
| | W81°26.00' | W81°46.00' | W80°35.00' | W80°35.00' | W81°26.00' | d. 4/1 | | | | |
| | EYW VORTAC | | | EYW VORTAC | EYW VORTAC | e. 32/95 | required | | | |
| | 057/71 ① | | | 057/71 | 057/71 ① | | | | | |
| | N25°12.00' | | | N25°12.00' | N25°12.00' | | | | | |
| | W80°43.00' | | | W80°43.00' | W80°43.00' | | | | | |
| | EYW VORTAC | | | EYW VORTAC | EYW VORTAC | | | | | |
| | 032/25 | | | 032/25 | 032/25 ① | | | | | |
| | N24°55.00' | | | N24°55.00' | N24°55.00' | | | | | |
| | W81°34.00' | | | W81°34.00' | W81°34.00' | | | | | |
| | EYW VORTAC | | | EYW VORTAC | EYW VORTAC | | | | | |
| | 166/5 ② | | | 084/20 | 057/71 ② | | | | | |
| | N24°29.00' | | | N24°37.00' | N25°12.00' | | | | | |
| | W81°46.00' | | | W81°26.00' | W80°43.00' | | | | | |
| | | | | | EYW VORTAC | | | | | |
| | | | | 032/25 ② | | | | | | |
| | | | | N24°55.00' | | | | | | |
| | | | | W81°34.00' | | | | | | |
| | | | | EYW VORTAC | | | | | | |
| | | | | 073/70 ② | | | | | | |
| | | | | N24°53.00' | | | | | | |
| | | | | W80°35.00' | | | | | | |

ATC ASSIGNED AIRSPACE: N24°55.00' W80°15.00' to N25°21.50' W80°25.50' to N24°54.00' W81°52.00' to N24°27.50' W81°42.00' to beginning.

REMARKS: Miami ARTCC radar must be operational. Anchor will not be used when AR638 is active.

① Tankers.

② Receivers.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--------------|------------|--------------|----------------|-------------|------------------------|---------------------|------------------|----------------|--------------------|
| AR618 | SRQ VORTAC | SRQ VORTAC | SRQ VORTAC | SRQ VORTAC | SRQ VORTAC | a. 348.900 | FL260/FL290 | 347 Rescue Wing, | Miami | Unlimited |
| | 161/83 | 161/83 | 209/87 | 209/87 | 176/95 | b. 343.250 | | MacDill AFB, FL | ARCP-363.1 | |
| | N26°06.00' | N26°06.00' | N26°06.00' | N26°06.00' | N25°49.00' | c. 1-1-4 | or as assigned | DSN 968-4641 | EXIT-363.1 | |
| | W82°00.00' | W82°00.00' | W83°17.00' | W83°17.00' | W82°22.00' | d. 5/1 | by ATC 4000' | C813-828-4641 | | |
| | | | | SRQ VORTAC | | e. 33/96 | required | | | |
| | | | | 204/104 | | | | | | |
| | | | | N25°47.00' | | | | | | |
| | | | | W83°17.00' | | | | | | |
| | | | | SRQ VORTAC | | | | | | |
| | | | | 176/95 | | | | | | |
| | | | N25°49.00' | | | | | | | |
| | | | W82°22.00' | | | | | | | |
| | | | SRQ VORTAC | | | | | | | |
| | | | 175/78 | | | | | | | |
| | | | N26°06.00' | | | | | | | |
| | | | W82°22.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N26°10.00' W82°00.00' to N26°10.00' W83°36.00' to N25°42.00' W83°36.00' to N25°46.00' W82°00.00' to beginning.

REMARKS: None

| | | | | | | | | | | |
|-------|-------------|-------------|-------------|------------|-------------|-------------|----------------|------------------|-------------|-----------|
| AR619 | HML VORTAC | HML VORTAC | HML VORTAC | HML VORTAC | HML VORTAC | a. 238.900 | FL240/FL260 | 119 WG, FARG, ND | Minneapolis | Unlimited |
| | 247/129 | 246/121 | 238/62 | 238/62 | 233/48 | b. 320.900 | | DSN 362-8508 | ARCP-270.3 | |
| | N48°21.00' | N48°22.00' | N48°27.10' | N48°27.10' | N48°29.00' | c. 1-2-0 | or as assigned | C701-451-2508 | EXIT-270.3 | |
| | W100°15.00' | W100°03.00' | W98°33.00' | W98°33.00' | W98°10.00' | d. 3/1 | by ATC | | | |
| | HML VORTAC | HML VORTAC | HML VORTAC | HML VORTAC | HML VORTAC | e. 31/94 | | | | |
| | 257/42 | 257/47 | 254/120 | 257/59 | 254/120 | | | | | |
| | N48°49.00' | N48°48.10' | N48°35.00' | N48°47.10' | N48°35.00' | | | | | |
| | W98°10.00' | W98°17.10' | W100°07.00' | W98°36.00' | W100°07.00' | Big Foot | | | | |
| | | | | HML VORTAC | | Primary | | | | |
| | | | | 256/109 | | 364.3 or as | | | | |
| | | | N48°42.10' | | directed by | | | | | |
| | | | W99°51.00' | | military | | | | | |
| | | | HML VORTAC | | radar | | | | | |
| | | | 245/111 | | | | | | | |
| | | | N48°22.10' | | | | | | | |
| | | | W99°48.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: "Tiger" N48°55.00' W100°15.00' to N48°55.00' W98°10.00' to N48°08.00' W98°10.00' to N48°17.00' W100°15.00' to beginning.

REMARKS: Military radar or Minneapolis ARTCC radar must be operational to conduct refueling.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|------------|--------------|----------------|-------------|----------------|--------------------------------|-------------------------------------|----------------|---|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR620 | LAL VORTAC | LAL VORTAC | LAL VORTAC | LAL VORTAC | LAL VORTAC | a. 238.900 | FL190/FL220 | 347 Rescue Wing, MacDill AFB, FL | Miami | Restrictions schedule use only 0000-0500Z++ daily |
| | 153/20 ① | 227/10 | 153/45 | 153/45 | 108/28 ① | b. 343.250 | | | | |
| | N27°41.00' | N27°52.00' | N27°18.00' | N27°18.00' | N27°51.00' | c. 1-2-0 | or as assigned by ATC 4000' | DSN 968-4641 | | |
| | W81°51.00' | W82°09.00' | W81°39.00' | W81°39.00' | W81°31.00' | d. 3/1 | | | | |
| | LAL VORTAC | | | LAL VORTAC | LAL VORTAC | e. 31/94 | required | C813-828-4641 | | |
| | 153/45 ① | | | 128/46 | 153/45 ① | | | | | |
| | N27°18.00' | | | N27°30.00' | N27°18.00' | | | | | |
| | W81°39.00' | | | W81°21.00' | W81°39.00' | | | | | |
| | LAL VORTAC | | | LAL VORTAC | LAL VORTAC | | | | | |
| | 227/10 ② | | | 108/28 | 108/28 ② | | | | | |
| | N27°52.00' | | | N27°51.00' | N27°51.00' | | | | | |
| | W82°09.00' | | | W81°31.00' | W81°31.00' | | | | | |
| | | | | LAL VORTAC | LAL VORTAC | | | | | |
| | | | | 153/20 | 153/45 ② | | | | | |
| | | | N27°41.00' | N27°18.00' | | | | | | |
| | | | W81°51.00' | W81°39.00' | | | | | | |

ATC ASSIGNED AIRSPACE: N27°54.50' W82°03.50' to N27°01.75' W81°35.00' to N27°14.00' W81°06.50' to N28°07.00' W81°35.00' to beginning.

REMARKS: Miami ARTCC radar must be operational. Holding at ARIP for receivers not authorized, if holding necessary, proceed to LAL 153/45 for holding.

① Tankers. To be used only by MacDill based aircraft.

② Receivers. Placid MOA unusable refueling operations.

| | | | | | | | | | | |
|-------|-------------|-------------|-------------|-------------|-------------|------------|---|-----------------------------|---------|-----------|
| AR621 | PYE VORTAC | a. 344.700 | FL190/FL250 | FACSFAC, SD DSN 735-1757 | Oakland | Unlimited |
| | 273/34 | 273/34 | 273/104 | 273/104 | 244/42 | b. 319.500 | | | | |
| | N38°16.00' | N38°16.00' | N38°39.00' | N38°39.00' | N37°58.00' | c. 1-1-3 | C619-545-1757 | | | |
| | W123°32.00' | W123°32.00' | W124°56.00' | W124°56.00' | W123°44.50' | d. 2/1 | | | | |
| | PYE VORTAC | | | PYE VORTAC | PYE VORTAC | e. 29/92 | | | | |
| | 280/100 | | | 262/106 | 273/121 | | | | | |
| | N38°50.00' | | | N38°20.00' | N38°44.50' | | Big Foot Primary 364.2 or as advised | | | |
| | W124°45.00' | | | W125°04.00' | W125°17.00' | | | | | |
| | PYE VORTAC | | | PYE VORTAC | PYE VORTAC | | | | | |
| | 256/102 | | | 252/58 | 252/58 | | | | | |
| | N38°10.00' | | | N38°04.00' | N38°04.00' | | | | | |
| | W125°00.00' | | | W124°04.00' | W124°04.00' | | | | | |
| | | | | PYE VORTAC | | | | | | |
| | | | | 273/54 | | | | | | |
| | | | N38°23.00' | | | | | | | |
| | | | W123°56.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N38°21.50' W123°34.00' to N38°49.00' W125°15.00' to N38°22.00' W125°26.00' to N37°54.50' W123°46.00' to beginning.

REMARKS: (1)Do not file AR621 in route of flight on DD175. (Reference to AR621 should be noted in Remarks only). DD175 route of flight must reflect: a.-Last fix. b.-Direct OAK VORTAC 276/60 (COAVE INT). c.-Direct W260. d.-Delay time. e.-Direct OAK VORTAC 276/60 (COAVE INT). f.-Direct next fix. g.-Balance of route. (2)Random refueling in W260/W513 authorized when scheduled. (3)MRU service available when scheduled. Must be indicated in Remarks of DD175, Handoff to Big Foot, 364.2.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|-------------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|------------------|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | | | |
| AR623 | CIM VORTAC | CIM VORTAC | CIM VORTAC | CIM VORTAC | CIM VORTAC | a. 359.100 | FL190/FL220 | 7 OSS/OSTA Dyess | Albuquerque | Unlimited |
| | 094/115 ① | 094/115 ① | 094/35 ① | 274/27 | 274/27 | b. 319.500 | | AFB, TX | ARCP-346.36E | |
| | N35°56.00' | N35°56.00' | N36°20.00' | N36°37.00' | N36°37.00' | c. 1-2-2 | | DSN 461-3665 | ARCP-351.7W | |
| | W102°37.00' | W102°37.00' | W104°11.00' | W105°26.00' | W105°26.00' | d. 4/1 | | C325-696-3665 | EXIT-346.35W | |
| | CIM VORTAC | PNH VORTAC | PNH VORTAC | PNH VORTAC | PNH VORTAC | e. 29/92 | | | EXIT-351.7E | |
| | 094/35 ① | 281/210 ② | 282/130 ② | 281/199 | 284/68 | | | | ① | |
| | N36°20.00' | N36°19.00' | N35°57.00' | N36°16.00' | N35°39.00' | | | | ② | |
| | W104°11.00' | W105°48.00' | W104°12.00' | W105°34.00' | W102°59.00' | | | | | |
| | PNH VORTAC | | | PNH VORTAC | | | | | | |
| | 281/210 ② | | | 284/68 | | | | | | |
| | N36°19.00' | | | N35°39.00' | | | | | | |
| | W105°48.00' | | | W102°59.00' | | | | | | |
| | PNH VORTAC | | | CIM VORTAC | | | | | | |
| | 282/130 ② | | | 094/103 | | | | | | |
| N35°57.00' | | | N36°00.00' | | | | | | | |
| W104°12.00' | | | W102°51.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N35°52.00' W102°32.00' to N35°57.00' W102°36.00' to N36°01.00' W102°42.00' to N36°04.00' W102°49.00' to N36°41.00' W105°25.00' to N36°42.00' W105°33.00' to N36°42.00' W105°41.00' to N36°39.00' W105°48.00' to N36°23.00' W105°53.00' to N36°19.00' W105°48.00' to N36°15.00' W105°42.00' to N36°12.00' W105°35.00' to N35°35.00' W103°00.00' to N35°34.00' W102°53.00' to N35°35.00' W102°45.00' to N35°36.00' W102°38.00' to beginning.

REMARKS: Intended for use by B-1 aircraft and support tankers. Other aircraft permitted on non-interference basis. The 7 BW retains preemption authority. Anchor Pattern turns are planned at a 15 deg bank angle (11 NM radius). Pattern Length: 130 NM; Width: 22 NM. For the purpose of separation between participating and non-participating acft, ATC shall regard AR623 as a linear refueling track unless the pilot specifically requests AR623 as an anchor track prior to entering assigned airspace.

① Westbound (North) leg: Tanker holding point is CIM 094/35 (Anchor Point), inbound course 277 degrees, 20 NM legs, left turns. Receiver holding point is CIM 094/93, inbound course 277 degrees, 10 NM legs, left turns. All holding pattern turns are planned at a 30 degrees bank angle (5 NM radius).

② Eastbound (South) leg: Tanker holding point is PNH 282/130 (Anchor Point), inbound course 095 degrees, 20 NM legs, left turns. Receiver holding point is PNH 280/189, inbound course 095 degrees, 10 NM legs, left turns. All holding pattern turns are planned at a 30 degrees bank angle (5 NM radius).

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|--------------------|-----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR624 | DRK VORTAC | BCE VORTAC | DRK VORTAC | DRK VORTAC | BCE VORTAC | a. 366.300 | FL190/FL220 | 57 OSS/OSOS Nellis | Los Angeles | Unlimited |
| | 340/75 | 182/39 | 340/75 | 340/75 | 157/57 | b. 319.500 | | AFB, NV | ARCP | |
| | N35°56.00' | N37°05.00' | N35°56.00' | N35°56.00' | N36°45.00' | c. 1-2-3 | or as assigned | DSN 682-2040 | EXIT-124.2/343. | |
| | W112°37.00' | W112°33.00' | W112°37.00' | W112°37.00' | W112°09.00' | d. 6/1 | by ATC | C702-652-2040 | 6 | |
| | | | | DRK VORTAC | | e. 32/95 | | | EXIT-124.85/31 | |
| | | | | 355/75 | | | | | 9.2 | |
| | | | | N35°56.00' | | | | | EXIT-135.25/30 | |
| | | | | W112°12.00' | | | | | 6.3 | |
| | | | | BCE VORTAC | | | | | | |
| | | | | 157/57 | | | | | | |
| | | | | N36°45.00' | | | | | | |
| | | | | W112°09.00' | | | | | | |
| | | | | BCE VORTAC | | | | | | |
| | | | | 175/56 | | | | | | |
| | | | N36°46.00' | | | | | | | |
| | | | W112°34.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N37°03.00' W112°38.00' to N35°39.00' W112°42.00' to N35°38.00' W112°08.00' to N37°02.00' W112°03.00' to beginning.

REMARKS: All aircraft should contact Los Angeles Center prior to exit.

| | | | | | | | | | | |
|--------|-------------|-------------|-------------|-------------|-------------|------------|-------------|--------------------|------------|-----------------|
| AR625H | MVA VORTAC | a. 295.800 | FL230/FL250 | 57 OSS/OSOS Nellis | Oakland | 0600-2200 Local |
| | 164/85 | 164/85 | 164/15 | 164/15 | 151/84 | b. 319.500 | | AFB, NV | ARCP-319.8 | unless other- |
| | N37°09.00' | N37°09.00' | N38°19.00' | N38°19.00' | N37°12.00' | c. 1-2-1 | | DSN 682-2040 | EXIT-319.8 | wise |
| | W118°02.00' | W118°02.00' | W118°02.00' | W118°02.00' | W117°37.00' | d. 5/1 | | C702-652-2040 | | coordinated |
| | MVA VORTAC | MVA VORTAC | | MVA VORTAC | MVA VORTAC | e. 50/113 | | | | |
| | 190/17 | 164/77 | | 112/25 | 068/25 | | | | | |
| | N38°19.00' | N37°17.00' | | N38°19.00' | N38°36.00' | | | | | |
| | W118°11.00' | W118°02.00' | | W117°36.00' | W117°30.00' | | | | | |
| | MVA VORTAC | | | MVA VORTAC | MVA VORTAC | | | | | |
| | 102/31 | | | 147/68 | 342/2 | | | | | |
| | N38°19.00' | | | N37°29.00' | N38°36.00' | | | | | |
| | W117°29.00' | | | W117°36.00' | W118°02.00' | | | | | |
| | | | | MVA VORTAC | MVA VORTAC | | | | | |
| | | | | 164/65 | 143/58 | | | | | |
| | | | N37°29.00' | N37°39.00' | | | | | | |
| | | | W118°02.00' | W117°36.00' | | | | | | |

ATC ASSIGNED AIRSPACE: N37°12.00' W118°06.00' to N38°36.00' W118°06.00' to N38°36.00' W117°17.42' to N38°05.00' W117°16.00' to N37°53.00' W117°05.68' to N37°26.00' W117°04.55' to N37°22.00' W117°01.00' to N37°12.00' W117°20.00' to beginning.

REMARKS: Right hand pattern.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--------------|-------------|--------------|----------------|-------------|------------------------|---------------------|--------------------|----------------|--------------------|
| AR625L | MVA VORTAC | MVA VORTAC | MVA VORTAC | MVA VORTAC | MVA VORTAC | a. 291.900 | FL180/FL210 | 57 OSS/OSOS Nellis | Oakland | 0600-2200 Local |
| | 164/85 | 164/85 | 164/15 | 164/15 | 151/84 | b. 319.500 | | AFB, NV | ARCP-319.5 | unless other- |
| | N37°09.00' | N37°09.00' | N38°19.00' | N38°19.00' | N37°12.00' | c. 1-3-0 | | DSN 682-2040 | EXIT-319.8 | wise |
| | W118°02.00' | W118°02.00' | W118°02.00' | W118°02.00' | W117°37.00' | d. 4/1 | | C702-652-2040 | | coordinated |
| | MVA VORTAC | MVA VORTAC | | MVA VORTAC | MVA VORTAC | e. 33/96 | | | | |
| | 190/17 | 164/77 | | 112/25 | 068/25 | | | | | |
| | N38°19.00' | N37°17.00' | | N38°19.00' | N38°36.00' | | | | | |
| | W118°11.00' | W118°02.00' | | W117°36.00' | W117°30.00' | | | | | |
| | MVA VORTAC | | | MVA VORTAC | MVA VORTAC | | | | | |
| | 102/31 | | | 147/68 | 342/2 | | | | | |
| | N38°19.00' | | | N37°29.00' | N38°36.00' | | | | | |
| | W117°29.00' | | | W117°36.00' | W118°02.00' | | | | | |
| | | | | MVA VORTAC | MVA VORTAC | | | | | |
| | | | | 164/65 | 143/58 | | | | | |
| | | | N37°29.00' | N37°39.00' | | | | | | |
| | | | W118°02.00' | W117°36.00' | | | | | | |

ATC ASSIGNED AIRSPACE: N37°12.00' W118°06.00' to N38°36.00' W118°06.00' to N38°36.00' W117°17.42' to N38°05.00' W117°16.00' to N37°53.00' W117°05.68' to N37°26.00' W117°04.55' to N37°22.00' W117°01.00' to N37°12.00' W117°20.00' to beginning.

REMARKS: Right hand pattern.

| | | | | | | | | | | | |
|-------|-------------|-------------|-------------|-------------|-------------|------------|----------------|-----------------------|------------|-----------------|--|
| AR626 | HQM VORTAC | HQM VORTAC | TOU VORTAC | TOU VORTAC | HQM VORTAC | a. 235.100 | FL250/FL270 | NAS Whidbey Island, | Seattle | Unlimited as | |
| | 269/14 | 269/14 | 222/50 | 222/50 | 294/38 | b. 292.600 | | (N38) Oak Harbor, | ARCP-319.2 | coordinated | |
| | N47°01.50' | N47°01.50' | N47°56.50' | N47°56.50' | N47°24.00' | c. 1-1-3 | or as assigned | WA | EXIT-269.0 | with scheduling | |
| | W124°27.50' | W124°27.50' | W125°45.00' | W125°45.00' | W124°48.00' | d. 4/1 | by ATC. | DSN 820-2877 | | unit. | |
| | | | | TOU VORTAC | | e. 52/115 | | C360-257-2877 | | | |
| | | | | 215/70 | | | | | | | |
| | | | | N47°41.00' | | | Big Foot | | | | |
| | | | | W126°04.00' | | | Primary | Scheduling unit hours | | | |
| | | | | HQM VORTAC | | | AICC 364.2 | are 0700-1700 local | | | |
| | | | | 265/41 | | | or as | Mon-Fri except | | | |
| | | | | N47°09.00' | | | assigned by | holidays. | | | |
| | | | | W125°07.00' | | | ATC | | | | |
| | | | | HQM VORTAC | | | | | | | |
| | | | | 294/38 | | | | | | | |
| | | | N47°24.00' | | | | | | | | |
| | | | W124°48.00' | | | | | | | | |

ATC ASSIGNED AIRSPACE: "ALBACORE" begins N48°10.00' W127°55.50' to N48°09.00' W125°56.00' to N48°09.00' W124°48.00' thence southbound 3 miles parallel to the shoreline, to N47°06.00' W124°14.80' to N47°00.50' W124°30.00' to N46°59.50' W124°36.00' to N46°32.00' W125°18.00' to N46°25.00' W125°34.00' to N45°48.50' W126°51.50' to beginning. Albacore contains both W237A and W237B from surface to FL500.

REMARKS: Military radar or Seattle ARTCC radar must be operational to conduct refueling.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|------------|--------------|----------------|-------------|----------------|---------------------|--|--|------------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR627 | TAY VORTAC | TAY VORTAC | TAY VORTAC | TAY VORTAC | TAY VORTAC | a. 352.600 | FL200/FL230 | 23 OSS/OSOS Moody AFB, GA DSN 460-7831 C229-257-7831 | Jacksonville ARCP-379.2 EXIT-379.2 | Continuous by schedule |
| | 322/112 | 322/112 | 306/45 | 306/45 | 331/102 | b. 319.700 | | | | |
| | N31°54.33' | N31°54.33' | N30°55.00' | N30°55.00' | N31°56.75' | c. 1-3-0 | | | | |
| | W84°00.25' | W84°00.25' | W83°17.50' | W83°17.50' | W83°37.42' | d. 4/1 | | | | |
| | TAY VORTAC | TAY VORTAC | TAY VORTAC | TAY VORTAC | TAY VORTAC | e. 50/113 | | | | |
| | N30°30.28' | N30°30.28' | 331/85 | 331/40 | 292/31 | | | | | |
| | W82°33.17' | W82°33.17' | N31°41.75' | N31°04.00' | N30°40.00' | | | | | |
| | TAY VORTAC | | W83°26.00' | W82°57.92' | W83°07.00' | | | | | |
| | 331/102 | | | TAY VORTAC | | | | | | |
| | N31°56.75' | | | 331/85 | | | | | | |
| | W83°37.42' | | | N31°41.75' | | | | | | |
| | | | | W83°26.00' | | | | | | |
| | | | | TAY VORTAC | | | | | | |
| | | | | 319/88 | | | | | | |
| | | | N31°32.75' | | | | | | | |
| | | | W83°44.75' | | | | | | | |

ATC ASSIGNED AIRSPACE: N31°59.00' W83°33.00' to N30°52.00' W82°44.00' to N30°38.00' W83°11.00' to N31°45.00' W83°59.50' to beginning.

REMARKS: When Valdosta RAPCON is controlling AR627, frequencies will be 119.525 and 259.3. When Valdosta RAPCON's radar is out of service, AR627 is not available. To ensure Jacksonville Center/Valdosta APP CON computer interface, all tankers and non-347th Wg receivers must file flight plans to indicate delay at the TAY 306/45 regardless of direction of entry. Restricted Area R3008D is capped at FL 180 when AR627 is in use. AR627 not available for use by transient units during Moody AFB flying operations.

| | | | | | | | | | | |
|-------|-------------|-------------|-------------|-------------|-------------|------------|-------------|---|-------------------------------------|-----------|
| AR628 | HQM VORTAC | HQM VORTAC | ONP VORTAC | ONP VORTAC | ONP VORTAC | a. 343.500 | FL240/FL260 | W AD Sector McChord AFB, WA DSN 382-4604/4605 | Seattle ARCP-379.6 EXIT-379.6 | Unlimited |
| | 196/54 | 196/54 | 287/49 | 287/49 | 243/38 | b. 292.600 | | | | |
| | N46°14.67' | N46°14.67' | N45°04.67' | N45°04.67' | N44°30.00' | c. 1-2-3 | | | | |
| | W124°57.00' | W124°57.00' | W124°57.00' | W124°57.00' | W124°57.00' | d. 2/1 | | | | |
| | ONP VORTAC | | | ONP VORTAC | | e. 31/94 | | | | |
| | 277/20 | | | 308/35 | | | | | | |
| | N44°44.00' | | | N45°04.67' | | | | | | |
| | W124°28.00' | | | W124°28.67' | | Long Racks | | | | |
| | | | | HQM VORTAC | | Primary | | | | |
| | | | | 170/64 | | 337.4 Sec- | | | | |
| | | | | N45°54.67' | | ondary | | | | |
| | | | | W124°28.00' | | 253.4 | | | | |
| | | | | HQM VORTAC | | | | | | |
| | | | | 186/70 | | | | | | |
| | | | N45°54.67' | | | | | | | |
| | | | W124°57.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: Bass ATCAA, altitudes are FL180 and above. N45°11.00' W126°35.00' to N46°16.00' W125°00.00' to N46°39.00' W124°18.00' to N46°10.00' W124°20.00' to N44°53.00' W124°20.00' to N44°38.00' W124°28.00' to N44°11.00' W125°30.00' to N43°43.50' W126°28.00' to N43°55.00' W126°37.00' to N45°00.00' W126°30.00' to beginning.

REMARKS: Military radar or Seattle ARTCC radar must be operational to conduct refueling.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--|--|--|--|--|--|---------------------|--|---|---|
| AR629 | MIB TACAN 252/21 N48°22.00' W101°53.00' | MIB TACAN 252/21 N48°22.00' W101°53.00' | MIB TACAN 069/28 N48°30.00' W100°40.00' | MIB TACAN 069/28 N48°30.00' W100°40.00' MIB TACAN 038/36 N48°49.00' W100°42.00' MIB TACAN 304/25 N48°42.00' W101°49.00' MIB TACAN 252/21 N48°22.00' W101°53.00' | MIB TACAN 304/25 N48°42.00' W101°49.00' | a. 296.000 b. 360.900 c. 1-3-1 d. 2/1 e. 30/93 | 14000/FL230 | 23 BS Minot AFB, ND DSN 453-2002 C701-723-2002 | 5 OSS Minot RAPCON ARCP-119.6/36 3.8 EXIT-119.6/363. 8 | Minot AFB RAP- CON Operating Hours as listed in IFR Supple- ment. Other times contact Minneapolis ARTCC 127.6 or 279.6. |

ATC ASSIGNED AIRSPACE: (Minot Rapcon Airspace) N48°52.00' W102°16.00' to N48°19.00' W102°13.00' to N48°05.00' W102°24.00' to N47°38.00' W101°12.00' to N47°59.00' W100°22.00' to N48°19.00' W100°27.00' to N48°19.00' W100°13.00' to N48°57.00' W100°16.00' to beginning.

REMARKS: Air refueling will be conducted within the RAPCON airspace and RAPCON radar must be operational.

| | | | | | | | | | | |
|-------|---|---|---|--|---|--|-------------|--|-------------------------------------|-----------|
| AR630 | OTH VORTAC 186/76 N42°16.00' W124°54.00' | OTH VORTAC 186/76 N42°16.00' W124°54.00' | OTH VORTAC 255/32 N43°27.00' W124°54.00' | OTH VORTAC 255/32 N43°27.00' W124°54.00' OTH VORTAC 253/52 N43°27.00' W125°22.00' OTH VORTAC 207/72 N42°36.00' W125°22.00' OTH VORTAC 194/59 N42°36.00' W124°54.00' | OTH VORTAC 207/72 N42°36.00' W125°22.00' | a. 238.900 b. 292.600 c. 1-3-0 d. 3/1 e. 30/93 | FL250/FL280 | W AD Sector McChord AFB, WA DSN 382-4604 | Seattle ARCP-360.7 EXIT-360.7 | Unlimited |
|-------|---|---|---|--|---|--|-------------|--|-------------------------------------|-----------|

ATC ASSIGNED AIRSPACE: N44°06.50' W124°36.67' to N43°25.00' W124°38.50' to N43°23.00' W124°43.50' to N43°17.00' W124°39.00' to N43°00.00' W124°40.00' to N42°15.50' W124°38.50' then west to east edge of C1416 to N42°15.50' W125°27.50' to N43°14.83' W126°10.75' to N43°52.00' W125°07.00' to beginning.

REMARKS: None

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|------------|--------------|----------------|-------------|----------------|---------------------|------------------|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR631 | ENE VORTAC | GFL VORTAC | ENE VORTAC | ENE VORTAC | ENE VORTAC | a. 295.800 | FL200/FL260 | NE ADS/DOA Rome, | Boston | Unlimited |
| | 272/45 | 107/18 | 272/45 | 272/45 | 264/30 | b. 282.700 | | NY | ARCP-348.7 | |
| | N43°13.00' | N43°19.00' | N43°13.00' | N43°13.50' | N43°12.00' | c. 1-1-0 | | DSN 587-6247 | EXIT-348.7 | |
| | W71°37.00' | W73°12.00' | W71°37.00' | W71°37.00' | W71°14.00' | d. 3/1 | | | | |
| | | | | ENE VORTAC | | e. 51/114 | | | | |
| | | | | 298/43 | | | | | | |
| | | | | N43°33.00' | | | Footrope | | | |
| | | | | W71°35.00' | | | Primary | | | |
| | | | | ENE VORTAC | | | 301.6/314.2 | | | |
| | | | | 295/92 | | | | | | |
| | | | | N43°38.00' | | | | | | |
| | | | | W72°43.00' | | | | | | |
| | | | | ENE VORTAC | | | | | | |
| | | | 282/93 | | | | | | | |
| | | | N43°16.00' | | | | | | | |
| | | | W72°43.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N43°36.00' W70°56.00' to N43°38.00' W71°14.00' to N43°44.00' W72°00.00' to N43°50.00' W73°05.00' to N43°48.00' W73°08.00' to N43°25.00' W73°13.00' to N43°14.00' W73°14.00' to N43°04.00' W71°42.00' to N43°13.00' W71°02.00' to beginning.

REMARKS: Anchor area is located within the Laser South ATC assigned airspace area.

| | | | | | | | | | | |
|-------|------------|------------|------------|------------|------------|------------|-------------|----------------------|-------------|-----------|
| AR632 | TVC VORTAC | a. 238.900 | FL220/FL270 | Alpena Combat | Minneapolis | Unlimited |
| | 113/63 | 097/59 | 052/75 | 052/75 | 113/64 | b. 282.700 | | Readiness Training | ARCP | |
| | N44°18.00' | N44°34.90' | N45°28.12' | N45°28.12' | N44°16.60' | c. 1-2-0 | | Center Airspace | | |
| | W84°10.00' | W84°10.30' | W84°10.92' | W84°10.92' | W84°09.80' | d. 3/1 | | Scheduler Alpena, MI | | |
| | TVC VORTAC | | TVC VORTAC | TVC VORTAC | TVC VORTAC | e. 52/115 | | DSN 741-3284 | | |
| | 032/75 | | 040/61 | 032/76 | | | | C1-800-292-6583 | | |
| | N45°45.00' | | N45°27.93' | N45°45.70' | | | Huntress | | | |
| | W84°39.00' | | W84°39.27' | W84°38.70' | | | Primary | | | |
| | | | TVC VORTAC | | | | 364.2 Sec- | | | |
| | | | 099/39 | | | | ondary as | | | |
| | | | N44°35.32' | | | | assigned by | | | |
| | | | W84°38.22' | | | | Huntress | | | |
| | | | TVC VORTAC | | | | | | | |
| | | 097/59 | | | | | | | | |
| | | N44°34.90' | | | | | | | | |
| | | W84°10.30' | | | | | | | | |

ATC ASSIGNED AIRSPACE: N45°44.49' W84°48.09' to N45°45.00' W84°10.00' to N44°47.02' W84°06.23' to N44°41.00' W84°06.00' to N44°17.20' W83°43.00' to N44°18.26' W84°46.13' to N44°47.09' W84°46.52' to beginning. Garland North and South ATCAAs.

REMARKS: Contact Black Talon MOA Coordinator on 234.1 before entering SUA. Enter AR632 at or above FL 250, contact Steelgate on 385.7, 381.1, FM 40.45 or 40.65 prior to entering Garland North or South to confirm status of R4201A. AR632 must be de-conflicted with adjacent AR107. Contact Alpena CRTS Airspace Scheduler.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|---------------|---|---|--|--|--|---|---------------------|--|---|--------------------|
| AR633A | HCH VORTAC 073/5 N35°48.50' W84°52.50' HCH VORTAC 073/76 ① N36°11.50' W83°29.50' | HCH VORTAC 073/5 N35°48.50' W84°52.50' | HCH VORTAC 073/76 N36°11.50' W83°29.50' | HCH VORTAC 073/76 N36°11.50' W83°29.50' HCH VORTAC 058/79 N36°30.50' W83°37.00' HCH VORTAC 036/33 N36°14.00' W84°36.50' HCH VORTAC 073/26 N35°55.50' W84°28.00' | HCH VORTAC 073/26 N35°55.50' W84°28.00' HCH VORTAC 058/79 N36°30.50' W83°37.00' | a. 240.350 b. 343.250 c. 1-1-0 d. 2/1 e. 52/115 | FL180/FL230 | 134th ARW McGhee-Tyson ANGB Knoxville, TN DSN 266-4396/4390/4371 | Atlanta ARCP-254.3 EXIT-254.3W EXIT-272.7E | Unlimited |

ATC ASSIGNED AIRSPACE: N35°40.50' W84°44.00' to N36°07.00' W83°05.50' to N36°39.50' W83°18.50' to N36°12.50' W84°57.50' to beginning.

REMARKS: None

① Tanker.

| | | | | | | | | | | |
|---------------|---|--|---|---|---|---|-------------|--|---|-----------|
| AR633B | HMV VORTAC 295/42 N36°41.33' W82°56.00' HMV VORTAC 269/120 ① N36°14.00' W84°36.50' | HMV VORTAC 278/72 N36°30.50' W83°37.00' | HMV VORTAC 269/120 N36°14.00' W84°36.50' | HMV VORTAC 269/120 N36°14.00' W84°36.50' HMV VORTAC 260/117 N35°55.50' W84°28.00' HMV VORTAC 260/117 N35°55.50' W84°28.00' HMV VORTAC 262/68 N36°11.50' W83°29.50' HMV VORTAC 278/72 N36°30.50' W83°37.00' | HMV VORTAC 260/117 N35°55.50' W84°28.00' HMV VORTAC 262/68 N36°11.50' W83°29.50' | a. 240.350 b. 343.250 c. 1-1-0 d. 2/1 e. 52/115 | FL180/FL230 | 134th ARW McGhee-Tyson ANGB Knoxville, TN DSN 266-4396/4390/4371 | Atlanta ARCP-272.7 EXIT-254.3W EXIT-272.7E | Unlimited |
|---------------|---|--|---|---|---|---|-------------|--|---|-----------|

ATC ASSIGNED AIRSPACE: N35°40.50' W84°44.00' to N36°07.00' W83°05.50' to N36°39.50' W83°18.50' to N36°12.50' W84°57.50' to beginning.

REMARKS: None

① Tanker.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|--|---|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR634 | SNS VORTAC | SNS VORTAC | SNS VORTAC | SNS VORTAC | SNS VORTAC | a. 235.100 | FL180/FL310 | FACSFAC, SD DSN 735-1757 C619-545-1757 | Oakland ARCP-343.8 EXIT-290.5 EXIT-343.8 | Unlimited |
| | 267/52 | 259/76 | 246/115 | 246/115 | 267/52 | b. 319.500 | | | | |
| | N36°51.00' | N36°46.00' | N36°24.00' | N36°24.00' | N36°51.00' | c. 1-1-4 | | | | |
| | W122°40.00' | W123°12.00' | W123°59.00' | W123°59.00' | W122°40.00' | d. 5/1 | | | | |
| | BSR VORTAC | | | PXN VORTAC | BSR VORTAC | e. 33/96 | | | | |
| | 228/25 | | | 241/150 | 228/25 | | | | | |
| | N35°59.00' | | | N36°07.00' | N35°59.00' | | | | | |
| | W122°06.00' | | | W123°48.00' | W122°06.00' | Big Foot | | | | |
| | PXN VORTAC | | | SNS VORTAC | PXN VORTAC | Primary | | | | |
| | 187/83 | | | 245/69 | 187/83 | 364.2 or as | | | | |
| | N35°27.00' | | | N36°29.00' | N35°27.00' | advised | | | | |
| | W121°30.00' | | | W123°00.00' | W121°30.00' | | | | | |
| | | | | SNS VORTAC | | | | | | |
| | | | | 259/76 | | | | | | |
| | | | | N36°46.00' | | | | | | |
| | | | W123°12.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: WARNING AREA (W283 & W285A) N36°58.00' W122°55.00' to N36°33.00' W122°39.00' to N35°55.00' W124°02.00' to N36°20.00' W124°19.00' to beginning.

REMARKS: (1)Do not file AR634 in route of flight on DD175. (Reference to AR634 use will be noted in Remarks only). DD175 route of flight must reflect: a.-Last fix. b.-Direct entry point: BSR VORTAC 228/25 (KIGHT INT); SNS VORTAC 267/52 (TOPLI INT); or PXN VORTAC 187/83 (HONDO INT). c.-Direct W283/W285A. d.-Delay time. e.-Direct exit point (same as entry points). f.-Direct next fix. g.-Balance of route. (2)Random refueling in W283/W285A authorized when scheduled. (3)MRU service available when scheduled. Must be indicated in Remarks of DD175, Handoff to Big Foot, 364.2.

| | | | | | | | | | | |
|-------|-------------|-------------|-------------|-------------|-------------|------------|-------------|--|--|-----------|
| AR635 | MLF VORTAC | a. 352.600 | FL190/FL260 | 57 OSS/OSOS Nellis AFB, NV DSN 682-2040 C702-652-2040 | Salt Lake City ARCP-360.8 EXIT-360.8 | Unlimited |
| | 260/127 | 260/127 | 259/58 | 259/58 | 260/23 | b. 319.500 | | | | |
| | N38°31.00' | N38°31.00' | N38°27.00' | N38°27.00' | N38°24.00' | c. 1-2-2 | | | | |
| | W115°43.00' | W115°43.00' | W114°14.00' | W114°14.00' | W113°31.00' | d. 4/1 | | | | |
| | MLF VORTAC | MLF VORTAC | MLF VORTAC | MLF VORTAC | ILC VORTAC | e. 52/115 | | | | |
| | 290/42 | 290/42 | 270/109 | 280/61 | 282/76 | | | | | |
| | N38°46.00' | N38°46.00' | N38°50.00' | N38°47.00' | N38°51.00' | | | | | |
| | W113°45.00' | W113°45.00' | W115°16.00' | W114°11.00' | W115°50.00' | | | | | |
| | | | | MLF VORTAC | | | | | | |
| | | | | 270/109 | | | | | | |
| | | | | N38°50.00' | | | | | | |
| | | | | W115°16.00' | | | | | | |
| | | | | MLF VORTAC | | | | | | |
| | | | | 260/107 | | | | | | |
| | | | | N38°30.00' | | | | | | |
| | | | W115°18.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N38°54.00' W115°37.00' to N38°49.00' W113°50.00' to N38°21.00' W113°52.00' to N38°26.00' W115°39.00' to beginning.

REMARKS: None

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--------------|------------|--------------|----------------|-------------|------------------------|---------------------|-------------------|----------------|--------------------|
| AR636 | NTU TACAN | NTU TACAN | NTU TACAN | NTU TACAN | NTU TACAN | a. 238.900 | FL200/FL290 | 1 FW Langley AFB, | Giant Killer | Unlimited |
| | 095/78 | 095/78 | 100/146 | 100/146 | 095/78 | b. 319.700 | | VA | ARCP-238.1 | |
| | N36°56.00' | N36°56.00' | N36°47.00' | N36°47.00' | N36°56.00' | c. 1-2-1 | 3000' required | DSN 574-2483/2559 | EXIT-238.1 | |
| | W74°25.00' | W74°25.00' | W73°00.00' | W73°00.00' | W74°25.00' | d. 4/1 | as assigned by | | Washington | |
| | | | | NTU TACAN | | e. 50/113 | ATC | | ARCP-306.9 | |
| | | | | 092/147 | | | | | EXIT-306.9 | |
| | | | | N37°07.50' | | Pyramid | | | | |
| | | | | W73°00.00' | | Primary | | | | |
| | | | | NTU TACAN | | 381.1 Sec- | | | | |
| | | | | 090/107 | | ondary | | | | |
| | | | | N37°06.30' | | 390.0 Oak | | | | |
| | | | | W73°50.00' | | Grove Pri- | | | | |
| | | | | NTU TACAN | | mary as | | | | |
| | | | | 101/106 | | coordi- | | | | |
| | | | | N36°47.00' | | nated | | | | |
| | | | | W73°50.00' | | Secondary | | | | |
| | | | | | | 364.2 Giant | | | | |
| | | | | | | Killer Pri- | | | | |
| | | | | | | mary 238.1 | | | | |

ATC ASSIGNED AIRSPACE: N37°05.00' W74°36.00' to N37°13.00' W72°40.00' to N36°42.00' W72°40.00' to N36°47.00' W74°36.00' to beginning.

REMARKS: Pyramid/Giant Killer radar must be operational. Tanker must check in/out with Giant Killer FACAFAC VACAPES 238.1 or 118.125. Simultaneous tankers only with prior approval. Use may be restricted by other operations.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|------------|--------------|----------------|-------------|----------------|---------------------|-----------------|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR637 | FAM VORTAC | FAM VORTAC | FAM VORTAC | FAM VORTAC | FAM VORTAC | a. 291.900 | FL190/FL230 | 131 FG MO ANG | Kansas City | As scheduled |
| | 263/33 | 263/33 | 263/108 | 263/108 | 244/62 | b. 319.700 | | | | |
| | N37°36.30' | N37°36.30' | N37°26.40' | N37°26.40' | N37°13.50' | c. 1-2-2 | Louis, MO | EXIT-317.5 | | |
| | W90°56.00' | W90°56.00' | W92°29.90' | W92°29.90' | W91°24.40' | d. 5/1 | DSN 824-6310 | | | |
| | FAM VORTAC | FAM VORTAC | | FAM VORTAC | FAM VORTAC | e. 50/113 | | | | |
| | 253/45 | 253/45 | | 253/110 | 263/58 | | | | | |
| | N37°26.80' | N37°26.80' | | N37°07.00' | N37°33.20' | | | | | |
| | W91°08.90' | W91°08.90' | | W92°26.50' | W91°27.75' | | | | | |
| | | | | FAM VORTAC | | | | | | |
| | | | | 244/62 | | | | | | |
| | | | | N37°13.50' | | | | | | |
| | | | | W91°24.40' | | | | | | |
| | | | | FAM VORTAC | | | | | | |

ATC ASSIGNED AIRSPACE: N37°39.83' W91°53.03' to N37°51.60' W91°01.07' to N37°46.70' W90°46.10' to N37°10.38' W90°52.23' to N36°55.35' W90°54.83' to N36°38.00' W90°58.00' to N36°16.00' W91°03.00' to N36°16.00' W91°18.00' to N36°38.00' W91°50.00' to N36°45.00' W92°03.25' to N36°59.43' W92°03.25' to N37°05.47' W92°03.30' to N37°02.57' W92°26.23' to N37°02.53' W92°34.07' to N37°04.17' W92°41.75' to N37°07.55' W92°48.02' to N37°21.03' W92°50.37' to N37°25.98' W92°45.07' to N37°29.10' W92°38.27' to N37°30.38' W92°30.52' to N37°34.33' W91°56.03' to beginning.

REMARKS: Anchor is contained within West ATCAA and Lindbergh A ATCAA as described above, MARSAs is applicable between refueling operations in AR637 and other simultaneous activity in Lindbergh ATCAA. Kansas City ARTCC or military radar must be operational. Receiver aircraft transiting from Lindbergh ATCAA will utilize the ARIP at FAM 253/45. Navigation during refueling will adhere to the course line described by the anchor pattern, including turn radii, unless clearance is obtained for random navigation in West ATCAA or Lindbergh A,B, C MOA/ATCAA. Clearance for navigation is described as airspace released in the Lindbergh MOA and/or ATCAA for fighter operations. When airspace is released, AAR operations may be conducted as desired throughout the released Lindbergh Airspace Complex without further coordination from Kansas City Center (KCC) or Military Radar Unit (MRU).

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--------------|------------|--------------|----------------|-------------|----------------|---------------------|------------------|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | | |
| AR638 | HST TACAN | HST TACAN | HST TACAN | HST TACAN | HST TACAN | a. 324.600 | FL260/FL290 | 347 Rescue Wing, | Miami | Unlimited |
| | 343/12 ① | 262/43 | 114/28 | 114/28 | 343/12 ① | b. 343.250 | | MacDill AFB, FL | ARCP-323.0 | |
| | N25°40.00' | N25°21.00' | N25°20.00' | N25°20.00' | N25°40.00' | c. 1-1-3 | or as assigned | DSN 968-4641 | EXIT-323.0 | |
| | W80°28.00' | W81°09.00' | W79°55.00' | W79°55.00' | W80°28.00' | d. 4/1 | by ATC 4000' | C813-828-4641 | | |
| | HST TACAN | | | HST TACAN | HST TACAN | e. 51/114 | required | | | |
| | 252/26 ① | | | 072/29 | 297/37 ① | | | | | |
| | N25°20.00' | | | N25°41.00' | N25°44.00' | | | | | |
| | W80°50.00' | | | W79°53.00' | W81°00.00' | | | | | |
| | HST TACAN | | | HST TACAN | HST TACAN | | | | | |
| | 262/43 ② | | | 301/23 | 343/12 ② | | | | | |
| | N25°21.00' | | | N25°40.00' | N25°40.00' | | | | | |
| | W81°09.00' | | | W80°45.00' | W80°28.00' | | | | | |
| | | | | HST TACAN | HST TACAN | | | | | |
| | | | | 252/26 | 252/26 ② | | | | | |
| | | | | N25°20.00' | N25°20.00' | | | | | |
| | | | | W80°50.00' | W80°50.00' | | | | | |
| | | | | HST TACAN | | | | | | |
| | | | | 162/12 ② | | | | | | |
| | | | | N25°18.00' | | | | | | |
| | | | | W80°18.00' | | | | | | |

ATC ASSIGNED AIRSPACE: N25°15.00' W79°34.00' to N25°44.00' W79°34.00' to N25°44.00' W81°08.00' to N25°15.00' W81°08.00' to beginning.

REMARKS: Miami ARTCC radar must be operational. Anchor will not be used when AR617 is active.

① Tankers.

② Receivers.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|--------------------|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR639 | DUG VORTAC | DUG VORTAC | DUG VORTAC | DUG VORTAC | DUG VORTAC | a. 291.900 | 16000/FL280 | 355th Wing | Albuquerque | Unlimited |
| | 258/61 | 258/42 | 078/54 | 078/54 | 283/47 | b. 319.500 | | Davis-Monthan AFB, | ARCP-127.95 | |
| | N31°28.42' | N31°28.42' | N31°28.42' | N31°28.42' | N31°48.50' | c. 1-3-0 | | AZ | ARCP-133.0 | |
| | W110°47.92' | W110°24.83' | W108°32.67' | W108°32.67' | W110°25.00' | d. 2/1 | | DSN 228-4952/5777 | EXIT-281.5 | |
| | DUG VORTAC | | DUG VORTAC | DUG VORTAC | DUG VORTAC | e. 31/94 | | C520-228-4952/5777 | EXIT-327.15 | |
| | 058/58 | | 078/20 | 058/58 | 058/58 | | | | | |
| | N31°48.50' | | N31°28.50' | N31°48.50' | N31°48.50' | | | | | |
| | W108°32.50' | | W109°12.25' | W108°32.50' | W108°32.50' | | | | | |
| | | | | DUG VORTAC | | | | | | |
| | | | | 283/47 | | | | | | |
| | | | | N31°48.50' | | | | | | |
| | | | | W110°25.00' | | | | | | |
| | | | | DUG VORTAC | | | | | | |
| | | | | 258/42 | | | | | | |
| | | | N31°28.42' | | | | | | | |
| | | | W110°24.83' | | | | | | | |

ATC ASSIGNED AIRSPACE: None.

REMARKS: AR639 is located within Tombstone C MOA and ATCAA, R2303B/C and Libby ATCAA. Receiver holding point is DUG 258/30. Inbound course 078 degrees, left turns.

| | | | | | | | | | | |
|--------|-------------|-------------|-------------|-------------|-------------|------------|-------------|--------------------|-------------|-----------|
| AR639A | DUG VORTAC | a. 291.900 | 13000/FL280 | 355th Wing | Albuquerque | Unlimited |
| | 258/5 | 258/5 | 078/54 | 078/54 | 330/20 | b. 319.500 | | Davis-Monthan AFB, | ARCP | |
| | N31°28.00' | N31°28.00' | N31°28.42' | N31°28.42' | N31°48.00' | c. 1-3-0 | | AZ | EXIT | |
| | W109°43.50' | W109°43.50' | W108°32.67' | W108°32.67' | W109°43.00' | d. 2/1 | | DSN 228-4952/5777 | | |
| | DUG VORTAC | | DUG VORTAC | DUG VORTAC | DUG VORTAC | e. 31/94 | | C520-228-4952/5777 | | |
| | 058/58 | | 058/58 | 058/58 | 058/58 | | | | | |
| | N31°48.50' | | N31°48.50' | N31°48.50' | N31°48.50' | | | | | |
| | W108°32.50' | | W108°32.50' | W108°32.50' | W108°32.50' | | | | | |
| | | | | DUG VORTAC | | | | | | |
| | | | | 330/20 | | | | | | |
| | | | | N31°48.00' | | | | | | |
| | | | | W109°43.00' | | | | | | |
| | | | | DUG VORTAC | | | | | | |
| | | | | 258/5 | | | | | | |
| | | | N31°28.00' | | | | | | | |
| | | | W109°43.50' | | | | | | | |

ATC ASSIGNED AIRSPACE: N31°46.00' W108°12.50' to N31°30.00' W108°12.50' to N31°24.42' W108°32.67' to N31°24.00' W109°42.50' to N31°28.50' W110°00.00' to N31°47.00' W110°00.00' to N31°51.50' W109°43.00' to N31°52.50' W108°32.50' to beginning.

REMARKS: AR639A and AR639 will not be used simultaneously. Receiver holding point is DUG 078/10. Inbound course is 078 degrees, left turn.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|---------------|--------------|------------|--------------|----------------|-------------|------------------------|---------------------|---------------------|----------------|--------------------|
| AR640A | BAE VORTAC | BAE VORTAC | BAE VORTAC | BAE VORTAC | BAE VORTAC | a. 305.500 | FL180 | ANG CRTC Volk Field | Chicago ENTRY | As scheduled |
| | 356/70 | 055/69 | 345/52 | 345/52 | 356/70 | b. 320.900 | | ANGB, WI | | |
| | N44°17.00' | N43°44.00' | N43°58.00' | N43°58.00' | N44°17.00' | c. 1-3-1 | and above | DSN 871-1445 | | |
| | W88°21.00' | W86°57.00' | W88°33.00' | W88°33.00' | W88°21.00' | d. 5/1 | | | | |
| | BAE VORTAC | | | BAE VORTAC | BAE VORTAC | e. 51/114 | | | | |
| | 017/20 | | | 331/35 | 017/20 | | | | | |
| | N43°26.00' | | | N43°38.00' | N43°26.00' | Brochure | | | | |
| | W88°08.00' | | | W88°39.00' | W88°08.00' | Primary | | | | |
| | BAE VORTAC | | | BAE VORTAC | BAE VORTAC | 298.775 | | | | |
| | 062/80 | | | 064/48 | 076/70 | Secondary | | | | |
| | N43°41.00' | | | N43°26.00' | N43°21.00' | 283.775 | | | | |
| | W86°38.00' | | | W87°17.00' | W86°43.00' | | | | | |
| | BAE VORTAC | | | BAE VORTAC | BAE VORTAC | | | | | |
| | 325/57 | | | 048/62 | 329/64 | | | | | |
| | N43°55.00' | | | N43°46.00' | N44°03.00' | | | | | |
| W89°00.00' | | | W87°11.00' | W89°00.00' | | | | | | |

ATC ASSIGNED AIRSPACE: N44°24.00' W89°00.00' to N44°15.50' W88°13.50' to N44°05.50' W87°29.75' to N44°01.23' W86°56.63' to N43°41.00' W86°38.00' to N43°17.00' W86°44.00' to N43°15.50' W87°14.00' to N43°19.00' W87°41.00' to N43°26.50' W88°16.00' to N43°36.00' W89°00.00' to beginning.

REMARKS: The anchor area is located within WIANG A, B and C ATC Assigned Airspace. All users must check in and check out with Phoenix on 346.525. When the rendezvous is controlled by the military radar unit, 298.775 283.775 will be used after checking in with Phoenix. For tanker directed rendezvous, the C/R Plan will be used.

| | | | | | | | | | | |
|---------------|------------|------------|------------|------------|------------|------------|-----------|---------------------|---------------|--------------|
| AR640B | BAE VORTAC | a. 291.900 | FL180 | ANG CRTC Volk Field | Chicago ENTRY | As scheduled |
| | 356/70 | 331/35 | 070/57 | 070/57 | 356/70 | b. 320.900 | | ANGB, WI | | |
| | N44°17.00' | N43°38.00' | N43°24.00' | N43°24.00' | N44°17.00' | c. 1-1-0 | and above | DSN 871-1445 | | |
| | W88°21.00' | W88°39.00' | W87°03.00' | W87°03.00' | W88°21.00' | d. 6/1 | | | | |
| | BAE VORTAC | | | BAE VORTAC | BAE VORTAC | e. 50/113 | | | | |
| | 017/20 | | | 055/69 | 017/20 | | | | | |
| | N43°26.00' | | | N43°44.00' | N43°26.00' | Brochure | | | | |
| | W88°08.00' | | | W86°57.00' | W88°08.00' | Primary | | | | |
| | BAE VORTAC | | | BAE VORTAC | BAE VORTAC | 298.775 | | | | |
| | 070/73 | | | 356/49 | 076/70 | Secondary | | | | |
| | N43°29.00' | | | N43°56.00' | N43°21.00' | 283.775 | | | | |
| | W86°41.00' | | | W88°19.00' | W86°43.00' | | | | | |
| | BAE VORTAC | | | BAE VORTAC | BAE VORTAC | | | | | |
| | 316/46 | | | 347/30 | 329/64 | | | | | |
| | N43°41.00' | | | N43°36.00' | N44°03.00' | | | | | |
| W89°00.00' | | | W88°25.00' | W89°00.00' | | | | | | |

ATC ASSIGNED AIRSPACE: N44°24.00' W89°00.00' to N44°15.50' W88°13.50' to N44°05.50' W87°29.75' to N44°01.23' W86°56.63' to N43°41.00' W86°38.00' to N43°17.00' W86°44.00' to N43°15.50' W87°14.00' to N43°19.00' W87°41.00' to N43°26.50' W88°16.00' to N43°36.00' W89°00.00' to beginning.

REMARKS: The anchor area is located within WIANG A, B and C ATC Assigned Airspace. All users must check in and check out with Phoenix on 346.525. When the rendezvous is controlled by the military radar unit, 298.775 283.775 will be used after checking in with Phoenix. For tanker directed rendezvous, the C/R Plan will be used.

| ENTRY NUMBER | POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|-----------------|--------|-------------|----------------------|----------------------|----------------------|-------------------|------------------------|--|---|---------------------------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR641A | | | ILC VORTAC 193/36 | ILC VORTAC 193/36 | ILC VORTAC 142/42 | a. 295.400 | 12000/FL230 | 554 RS/RSOO Nellis AFB, NV DSN 348-4778/4110 C702-653-4778/4110 | Los Angeles ARCP-343.6 EXIT-343.6 | As coordinated with 554 RS/RSOO |
| | | N37°43.00' | N37°43.00' | N37°36.00' | c. 1-3-1 | | | | | |
| | | W114°45.00' | W114°45.00' | W114°03.00' | d. 2/1 | | | | | |
| | | | ILC VORTAC 180/49 | | e. 31/94 | | | | | |
| | | | N37°28.00' | | | | | | | |
| | | | W114°39.00' | | | | | | | |
| | | | ILC VORTAC 142/42 | | | | | | | |
| | | | N37°36.00' | | | | | | | |
| | | | W114°03.00' | | | | | | | |
| | | | ILC VORTAC 138/26 | | | | | | | |
| | | | N37°52.00' | | | | | | | |
| | | | W114°09.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: Caliente ATCAA N37°58.00' W115°00.00' to N37°17.00' W114°50.25' to N37°28.00' W114°34.50' to N37°28.00' W114°00.00' to N37°43.00' W113°48.00' to N38°00.00' W114°34.50' to beginning.

REMARKS: When Nellis Control (ATC) is not in operation, Los Angeles Center will provide ATC clearance for tanker and/or receivers into/out of the Caliente ATCAA only. Aircraft operating in this anchor are MARSAs with aircraft operating in adjacent Special Use Airspace IAW NAFB Sup 1, ARF 50-46. Radar monitoring required to conduct air refueling. 554 RS/RSOO Nellis AFB, NV, schedules and deconflicts the airspace only. Caliente ATCAA and the Desert MOA must be scheduled to use this anchor. Requirements for tanker support must be made through appropriate units. Pattern length: 30 NM; width 17 NM. Anchor area is located within the Caliente ATCAA/Desert MOA. Airspace to be protected will in no case extend beyond the lateral confines of the Caliente ATCAA/Desert MOA.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|-------------------------|--|--|---|--|---|---|---------------------|---|--------------------------------|---|
| AR642E (East) | BVL VORTAC 162/5 N40°39.00' W113°45.00' | BVL VORTAC 162/5 N40°39.00' W113°45.00' | BVL VORTAC 162/70 N39°33.00' W113°44.00' | BVL VORTAC 162/70 N39°33.00' W113°44.00' BVL VORTAC 149/75 N39°31.00' W113°22.00' BVL VORTAC 118/29 N40°23.00' W113°19.00' BVL VORTAC 162/20 N40°24.00' W113°45.00' | BVL VORTAC 118/29 N40°23.00' W113°19.00' | a. 291.650 b. 319.500 c. 1-3-2 d. 6/1 e. 50/113 Clover Control Primary 363.5 Secondary 134.1 | 17000/FL280 | 388 RANS/RST Hill AFB, UT DSN 777-4401 C801-777-4401 | Salt Lake City ARCP EXIT | Mon-Thu 1400-0700Z++, Fri 1400-0100Z++, Sat 1500-2400Z++; closed Sun. |

ATC ASSIGNED AIRSPACE: N40°36.00' W114°27.00' to N39°23.00' W114°27.00' to N39°23.00' W113°19.00' to N39°44.00' W113°08.00' to N39°49.00' W112°43.00' to N40°13.00' W112°43.00' to N40°29.00' W113°00.00' to N40°41.00' W113°00.00' to N40°39.00' W114°00.00' to N40°36.00' W114°00.00' to beginning.

REMARKS: Refueling operations must be scheduled in advance with 388 RANS/RST DSN 777-4401 during normal duty hours. Primary Boom frequency 305.5.

| | | | | | | | | | | |
|-------------------------|---|---|---|--|---|---|-------------|---|--------------------------------|---|
| AR642W (West) | BVL VORTAC 231/20 N40°36.00' W114°10.00' | BVL VORTAC 231/20 N40°36.00' W114°10.00' | BVL VORTAC 176/72 N39°33.00' W114°07.00' | BVL VORTAC 176/72 N39°33.00' W114°07.00' BVL VORTAC 162/70 N39°33.00' W113°44.00' BVL VORTAC 162/20 N40°24.00' W113°45.00' BVL VORTAC 204/27 N40°23.00' W114°09.00' | BVL VORTAC 162/20 N40°24.00' W113°45.00' | a. 291.650 b. 319.500 c. 1-3-2 d. 6/1 e. 50/113 Clover Control Primary 363.5 Secondary 134.1 | 17000/FL280 | 388 RANS/RST Hill AFB, UT DSN 777-4401 C801-777-4401 | Salt Lake City ARCP EXIT | Mon-Thu 1400-0700Z++, Fri 1400-0100Z++, Sat 1500-2400Z++; closed Sun. |
|-------------------------|---|---|---|--|---|---|-------------|---|--------------------------------|---|

ATC ASSIGNED AIRSPACE: N40°36.00' W114°27.00' to N39°23.00' W114°27.00' to N39°23.00' W113°19.00' to N39°44.00' W113°08.00' to N39°49.00' W112°43.00' to N40°13.00' W112°43.00' to N40°29.00' W113°00.00' to N40°41.00' W113°00.00' to N40°39.00' W114°00.00' to N40°36.00' W114°00.00' to beginning.

REMARKS: Refueling operations must be scheduled in advance with 388 RANS/RST DSN 777-4401 during normal duty hours. Primary Boom frequency 305.5.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|-------------------------|--------------------------------|------------------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | | |
| AR643 | PUB VORTAC | PUB VORTAC | ALS VORTAC | ALS VORTAC | PUB VORTAC | a. 279.800 | FL200/FL230 | 140 TFW DSN 877-9470 | Denver ARCP-335.5/31 7.5 | As coordinated with ARTCC |
| | 252/23 | 252/23 | 125/15 | 125/15 | 190/24 | b. 260.200 | | | | |
| | N38°15.50' | N38°15.50' | N37°09.00' | N37°09.00' | N37°55.00' | c. 1-1-0 | | | | |
| | W104°55.00' | W104°55.00' | W105°36.00' | W105°36.00' | W104°38.00' | d. 5/1 | | | | |
| | ALS VORTAC | | | ALS VORTAC | ALS VORTAC | e. 52/115 | | | | |
| | 125/15 ① | | | 102/35 | 125/15 | | | | | |
| | N37°09.00' | | | N37°05.00' | N37°09.00' | Primary | | | | |
| | W105°36.00' | | | W105°10.50' | W105°36.00' | 361.4 Sec- | | | | |
| | | | | PUB VORTAC | | ondary | | | | |
| | | | | 215/31 | | 395.1 or as | | | | |
| | | | | N37°57.00' | | assigned | | | | |
| | | | | W104°55.00' | | | | | | |
| | | | | PUB VORTAC | | | | | | |
| | | | 232/48 | | | | | | | |
| | | | N37°57.00' | | | | | | | |
| | | | W105°21.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N38°15.50' W104°55.00' to N38°04.00' W104°49.00' to N37°55.00' W104°38.00' to N37°24.00' W104°48.00' to N36°49.00' W105°00.00' to N36°49.00' W105°47.00' to N37°26.00' W105°36.00' to N38°17.00' W105°19.00' to beginning.

REMARKS: Military radar must be operational. Denver ARTCC radar must be operational. Pattern Length: 52 NM; Width: 20 NM.

① Or as directed by ATC

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|------------------|--|--|--|--|--|---|---------------------|--|---|--|
| AR644 (North) | HMN TACAN 358/74 N34°05.00' W105°54.80' | HMN TACAN 358/74 N34°05.00' W105°54.80' | HMN TACAN 043/30 N33°10.10' W105°37.80' | HMN TACAN 043/30 N33°10.10' W105°37.80' HMN TACAN 049/50 N33°17.90' W105°15.30' HMN TACAN 015/66 N33°51.50' W105°32.90' HMN TACAN 001/53 N33°43.50' W105°54.80' | CME VORTAC 278/20 N33°27.00' W105°00.00' | a. 324.400 b. 319.500 c. 1-2-0 d. 3/1 e. 51/114 | FL200/FL260 | 49 OSS/OSOS Hollo- man AFB, NM DSN 572-3536 C505-572-3536 | Albuquerque ARCP-257.6 EXIT-257.6 | Continuous. Ltd. use weekdays (See Rmks) |
| | (South) | HMN TACAN 066/51 N33°04.00' W105°07.00' | HMN TACAN 066/51 N33°04.00' W105°07.00' | HMN TACAN 015/66 N33°51.50' W105°32.90' | HMN TACAN 015/66 N33°51.50' W105°32.90' HMN TACAN 001/53 N33°43.50' W105°54.80' HMN TACAN 043/30 N33°10.10' W105°37.80' HMN TACAN 049/50 N33°17.90' W105°15.30' | CME VORTAC 278/20 N33°27.00' W105°00.00' | | | Albuquerque ARCP-284.0 EXIT-257.6 | Continuous. Ltd. use weekdays (See Rmks) |

ATC ASSIGNED AIRSPACE: N34°05.00' W106°04.00' to N34°05.00' W105°35.50' to N33°34.00' W105°00.00' to N33°10.00' W105°00.00' to N32°57.00' W105°19.50' to N32°56.00' W106°04.00' to beginning.

REMARKS: Track is normally closed to non-49 FW units SR-SS Mon-Fri. Anchor is scheduled on non-interference basis with 49 FW and White Sands Missile Range Operations. Cannot be scheduled if R5109A/B active or by other than 49 FW units if Beak or Cowboy ATCAA in use. Track use may be cancelled with little advance notice due to priority research and development operations. Specify North or South entry in request. All initial scheduling requests should be forwarded to 49 OSS/OSOS for coordination. Caution: ARIP to ARCP headings are not parallel to track orientation.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|--|---------------------|--|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR645 | LKV VORTAC | LKV VORTAC | LKV VORTAC | LKV VORTAC | LKV VORTAC | a. 324.400 | FL200/FL230 | 114 FS Kingsley Field - Klamath Falls, OR | Seattle | Mon-Fri |
| | 119/15 | 119/15 | 335/59 | 335/59 | 271/15 | b. 292.600 | | | | |
| | N42°18.00' | N42°18.00' | N43°28.00' | N43°28.00' | N42°34.00' | c. 1-3-1 | | | | |
| | W120°16.00' | W120°16.00' | W120°40.00' | W120°40.00' | W120°49.00' | d. 2/1 | | | | |
| | LKV VORTAC | LKV VORTAC | LKV VORTAC | LKV VORTAC | LKV VORTAC | e. 50/113 | | | | |
| | 319/81 | 319/81 | 271/15 | 315/60 | 335/59 | Big Foot Primary 252.0 Sec- ondary 364.2 | | | | |
| | N43°43.00' | N43°43.00' | N42°34.00' | N43°23.00' | N43°28.00' | | | | | |
| | W121°14.00' | W121°14.00' | W120°49.00' | W121°07.00' | W120°40.00' | | | | | |
| | | | | LKV VORTAC | | | | | | |
| | | | | 271/15 | | | | | | |
| | | | | N42°34.00' | | | | | | |
| | | | | W120°49.00' | | | | | | |
| | | | | LKV VORTAC | | | | | | |
| | | | | 010/11 | | | | | | |
| | | | N42°39.00' | | | | | | | |
| | | | W120°23.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N43°38.00' W121°17.00' to N43°45.00' W120°40.00' to N42°24.00' W120°13.00' to N42°18.37' W120°37.43' to N42°17.00' W120°49.00' to beginning.

REMARKS: Military or Seattle ARTCC radar must be operational to conduct refueling.

| | | | | | | | | | | |
|-------|------------|------------|------------|------------|------------|------------|-------------|--------------------------------|---------------|----------------------------|
| AR646 | LEV VORTAC | a. 238.900 | FL240/FL260 | 552 OSS/OSOS Tinker AFB, OK | Houston ENTRY | As coordinated with ATC |
| | 153/19 ① | 153/19 | 153/90 | 153/90 | N29°10.51' | b. 260.200 | | | | |
| | N28°53.00' | N28°53.00' | N27°49.00' | N27°49.00' | W90°06.24' | c. 1-1-4 | | | | |
| | W89°57.00' | W89°57.00' | W89°24.00' | W89°24.00' | | d. 5/1 | | | | |
| | LEV VORTAC | e. 30/93 | | | | |
| | 127/44 ② | 143/111 | 127/44 | 141/91 | | | | | | |
| | N28°43.00' | N27°39.50' | N28°43.00' | N27°57.50' | | | | | | |
| | W89°27.00' | W88°54.50' | W89°27.00' | W89°04.00' | | | | | | |
| | LEV VORTAC | | | LEV VORTAC | | | | | | |
| | 143/111 ③ | | | 127/44 | | | | | | |
| | N27°39.50' | | | N28°43.00' | | | | | | |
| | W88°54.50' | | | W89°27.00' | | | | | | |
| | | | | LEV VORTAC | | | | | | |
| | | | | 153/40 | | | | | | |
| | | | N28°35.00' | | | | | | | |
| | | | W89°47.50' | | | | | | | |

ATC ASSIGNED AIRSPACE: N28°48.00' W89°59.50' to N27°32.00' W89°20.00' to N27°44.00' W88°51.00' to N29°00.00' W89°31.00' to beginning.

REMARKS: Restricted to Turbo Jet aircraft from 552 ACW. Houston ARTCC Radar must be operational.

① Primary Tanker/Receiver.

② Tanker Alternate.

③ Receiver Alternate.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|-----------------|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR647 | TUS VORTAC | TUS VORTAC | TUS VORTAC | TUS VORTAC | TUS VORTAC | a. 283.900 | 10000/FL290 | 56 RMO/ARO Luke | Albuquerque | Unlimited |
| | 269/55 | 269/40 | 269/100 | 269/55 | 269/55 | b. 319.500 | | AFB, AZ | ARCP | |
| | N32°15.50' | N32°13.00' | N32°23.00' | N32°15.50' | N32°15.50' | c. 1-3-1 | (Low Block) | DSN 896-7654 | | |
| | W111°58.50' | W111°41.00' | W112°51.50' | W111°58.50' | W111°58.50' | d. 3/1 | 10,000/17,000 | C623-856-7654 | | |
| | BZA VORTAC | | BZA VORTAC | BZA VORTAC | BZA VORTAC | e. 30/93 | (Mid Block) FL | | | |
| | 090/137 | | 091/93 | 091/91 | 090/137 | | 180/FL 230 | | | |
| | N32°13.88' | | N32°23.00' | N32°23.00' | N32°13.88' | (MAIN | (High Block) FL | | | |
| | W111°58.70' | | W112°49.53' | W112°51.50' | W111°58.70' | RECORD IS | 240/FL 290 | | | |
| | TUS VORTAC | | | BZA VORTAC | TUS VORTAC | FOR LOW): | | | | |
| | 269/100 | | | 102/96 | 269/100 | (Mid) | | | | |
| | N32°23.00' | | | N32°03.70' | N32°23.00' | a.-295.4 | | | | |
| | W112°51.50' | | | W112°54.50' | W112°51.50' | b.-319.5 | | | | |
| | BZA VORTAC | | | TUS VORTAC | BZA VORTAC | c.-1-3-2 | | | | |
| | 091/93 | | | 249/58 | 091/93 | d.-6/1 | | | | |
| | N32°23.00' | | | N31°56.50' | N32°23.00' | e.-52/115 | | | | |
| | W112°49.53' | | | W112°03.00' | W112°49.53' | (High) | | | | |

ATC ASSIGNED AIRSPACE: N32°11.00' W111°39.00' to N32°19.50' W111°47.50' to N32°29.00' W113°05.00' to N32°24.50' W113°11.50' to N32°08.50' W113°15.00' to N32°01.50' W113°08.00' to N31°51.00' W111°55.00' to N31°52.00' W111°43.00' to beginning.

REMARKS: AR647 lies within the Sells MOA/ATCAA and Barry M. Goldwater Range (BMGR) airspace. All aircraft operating in the Sells MOA/ATCAA, the BMGR and AR647 will use the Gila Bend AFAP (Range Operations) current altimeter setting. Normally restricted to night time refueling only, due to heavy aerial activity within the Sells MOA/ATCAA and the BMGR, day-time refueling in AR647 will be scheduled only when authorized by the 56 RMO/ARO (Sked Unit). Contact Gila Bend Range Operations on 120.55/264.125 prior to entering and exiting AR647. The Low and High blocks will not be scheduled at the same time. The receiver unit must coordinate MRU operations with O'Grady MRU (DSN 896-3882/3880) and the scheduled tanker unit.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|--------------------------|------------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR647A | TUS VORTAC | TUS VORTAC | TUS VORTAC | TUS VORTAC | TUS VORTAC | a. 283.900 | 10000/14000 | 56 RMO/ASMS Luke AFB, AZ | Albuquerque ARCP | See Remarks |
| | 269/55 | 269/39 | 269/55 | 269/55 | 269/55 | b. 319.500 | | | | |
| | N32°15.50' | N32°13.00' | N32°15.50' | N32°15.50' | N32°15.50' | c. 1-3-1 | DSN 896-7654 | | | |
| | W111°58.50' | W111°40.00' | W111°58.50' | W111°58.50' | W111°58.50' | d. 3/1 | C623-856-7654 | | | |
| | TUS VORTAC | | | TUS VORTAC | TUS VORTAC | e. 30/93 | | | | |
| | 269/85 | | | 269/85 | 269/85 | | | | | |
| | N32°20.50' | | | N32°20.50' | N32°20.50' | MRU | | | | |
| | W112°34.00' | | | W112°33.50' | W112°34.00' | 264.7/120.5 | | | | |
| | | | | TUS VORTAC | | or as | | | | |
| | | | | 256/86 | | assigned | | | | |
| | | | | N32°01.50' | | | | | | |
| | | | | W112°36.50' | | | | | | |
| | | | | TUS VORTAC | | | | | | |
| | | | | 249/58 | | | | | | |
| | | | N31°56.50' | | | | | | | |
| | | | W112°03.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N32°11.00' W111°39.00' to N32°19.50' W111°47.50' to N32°29.00' W113°05.00' to N32°24.50' W113°11.50' to N32°08.50' W113°15.00' to N32°01.50' W113°08.00' to N31°51.00' W111°55.00' to N31°52.00' W111°43.00' to beginning.

REMARKS: AR647A lies entirely within the Sells MOA. All aircraft operating in the Sells MOA/ATCAA, and AR647A will use the Gila Bend AFAF (Range Operations) current altimeter setting. Unless specifically requested, approved, and scheduled by the 56 RMO/ASMS, AR647A is restricted for nighttime refueling by 355 WG A-10 aircraft only. It is restricted to two nights per week due to other training requirements in the Sells MOA. AR647A will not be scheduled when AR647 low or medium blocks are scheduled. Contact Gila Bend Range Operations on 120.55/264.125 prior to entering and exiting AR647A. Due to other training in the Sells MOA/ATCAA at 15,000' and above aircraft entering and exiting AR647A must be between 10,000' and 14,000' unless Range Operations confirms that there is no other aircraft activity in the Sells MOA/ATCAA. Tanker aircraft plan to enter/exit at the primary entry/exit point TUS 269/55. Refueling aircraft scheduled for operations on the Goldwater Range may exit at the alternate entry/exit point TUS 269/85.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION | |
|--------|--------------|-------------|--------------|----------------|-------------|------------------------|---------------------|---------------------|----------------|--------------------|--|
| AR648A | BAM VORTAC | BAM VORTAC | BAM VORTAC | BAM VORTAC | BAM VORTAC | a. 238.900 | FL190/FL230 | 151 AREFG Salt Lake | Salt Lake City | Unlimited | |
| | 045/20 | 045/20 | 045/90 | 045/90 | 359/31 | b. 256.650 | | City, UT | ARCP-269.0 | | |
| | N40°43.20' | N40°43.20' | N41°14.20' | N41°14.20' | N41°03.90' | c. 1-4-0 | | DSN 245-2274/2273 | EXIT-363.15 | | |
| | W116°31.80' | W116°31.80' | W115°08.70' | W115°08.70' | W116°43.30' | d. 4/1 | | C801-245-2274/2273 | | | |
| | | | | BAM VORTAC | BAM VORTAC | e. 51/114 | | | | | |
| | | | | 032/91 | 045/105 | | | | | | |
| | | | | N41°32.10' | N41°20.80' | | | | | | |
| | | | | W115°22.20' | W114°50.80' | | | | | | |
| | | | | BAM VORTAC | | | | | | | |
| | | | | 018/45 | | | | | | | |
| | | | | N41°10.60' | | | | | | | |
| | | | | W116°20.20' | | | | | | | |
| | | | | BAM VORTAC | | | | | | | |
| | | | | 045/40 | | | | | | | |

ATC ASSIGNED AIRSPACE: N40°41.30' W116°27.90' to N41°17.40' W114°48.70' to N41°42.90' W115°04.50' to N41°06.40' W116°45.40' to beginning.

REMARKS: None

| | | | | | | | | | | | |
|--------|-------------|-------------|-------------|-------------|-------------|------------|-------------|---------------------|----------------|-----------|--|
| AR648B | BAM VORTAC | a. 238.900 | FL190/FL230 | 151 AREFG Salt Lake | Salt Lake City | Unlimited | |
| | 035/110 | 035/110 | 018/45 | 018/45 | 359/31 | b. 256.650 | | City, UT | ARCP-269.0 | | |
| | N41°39.50' | N41°39.50' | N41°10.60' | N41°10.60' | N41°03.90' | c. 1-4-0 | | DSN 245-2274/2273 | EXIT-363.15 | | |
| | W114°57.80' | W114°57.80' | W116°20.20' | W116°20.20' | W116°43.30' | d. 4/1 | | C801-245-2274/2273 | | | |
| | | | | BAM VORTAC | BAM VORTAC | e. 51/114 | | | | | |
| | | | | 045/40 | 045/105 | | | | | | |
| | | | | N40°52.20' | N41°20.80' | | | | | | |
| | | | | W116°08.20' | W114°50.80' | | | | | | |
| | | | | BAM VORTAC | | | | | | | |
| | | | | 045/90 | | | | | | | |
| | | | | N41°14.20' | | | | | | | |
| | | | | W115°08.70' | | | | | | | |
| | | | | BAM VORTAC | | | | | | | |
| | | | | 032/91 | | | | | | | |

ATC ASSIGNED AIRSPACE: N40°41.30' W116°27.90' to N41°17.40' W114°48.70' to N41°42.90' W115°04.50' to N41°06.40' W116°45.40' to beginning.

REMARKS: None

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|--------------------|----------------------|--|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | | |
| AR649 | EED VORTAC | EED VORTAC | EED VORTAC | EED VORTAC | EED VORTAC | a. 286.300 | 08000/10000 | 755 OSS, | Los Angeles ARCPC | As coordinated with 755 OSS. 755 OSS will schedule and coordinate Tur- tle MOA/ATCAA with MCAS YUMA. |
| | 226/47 | 226/47 | 138/27 | 138/27 | 226/47 | b. 319.500 | 10000/FL220 | Davis-Monthan AFB, | | |
| | N34°22.00' | N34°22.00' | N34°22.00' | N34°22.00' | N34°22.00' | c. 1-1-0 | | AZ | | |
| | W115°17.00' | W115°17.00' | W114°13.00' | W114°13.00' | W115°17.00' | d. 5/1 | | DSN 228-5729 | | |
| | EED VORTAC | EED VORTAC | EED VORTAC | EED VORTAC | EED VORTAC | e. 50/113 | | C520-228-5729 | | |
| | 109/23 | 109/23 | 236/37 | 122/18 | 109/23 | | | | | |
| | N34°33.00' | N34°33.00' | N34°33.00' | N34°33.00' | N34°33.00' | | | | | |
| | W114°05.00' | W114°05.00' | W115°10.00' | W114°13.00' | W114°05.00' | | | | | |
| | | | | EED VORTAC | | | | | | |
| | | | | 236/37 | | | | | | |
| | | | N34°33.00' | | | | | | | |
| | | | W115°10.00' | | | | | | | |
| | | | EED VORTAC | | | | | | | |
| | | | 222/42 | | | | | | | |
| | | | N34°22.00' | | | | | | | |
| | | | W115°10.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: Turtle Military Operating Area N34°42.00' W115°16.00' to N34°40.00' W114°00.00' to N34°23.00' W114°00.00' to N34°14.00' W114°30.00' to N34°14.00' W115°30.00' to N34°19.00' W115°25.00' to beginning.

REMARKS: For simultaneous refueling within AR649, ZLA requires 3000' separation between altitude blocks. EC-130H aircraft will normally enter at EED 109/23. Turtle MOA/ATCAA must be active for track use.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--|---|---|--|---|---|---|--|-----------------------------|--------------------|
| AR650 | FST VORTAC 195/74 ① N29°50.37' W103°35.84' FST VORTAC 195/14 ② N30°44.51' W103°05.66' | FST VORTAC 195/32 ③ N30°28.28' W103°14.78' | FST VORTAC 195/74 N29°50.37' W103°35.84' | FST VORTAC 195/74 N29°50.37' W103°35.84' FST VORTAC 179/77 N29°41.52' W103°14.38' FST VORTAC 162/38 N30°19.55' W102°52.95' FST VORTAC 195/32 N30°28.28' W103°14.78' | FST VORTAC 162/38 N30°19.55' W102°52.95' | a. 295.800 b. 260.200 c. 1-1-0 d. 4/1 e. 50/113 | FL180/FL290 or as assigned by ATC | 47 FTW/86 FTS Laughlin AFB, TX. (SS-SR, 7 OSS/OSOS) DSN 732-5584 (SS-SR, 461-3665) C830-298-5584 (SS-SR, 325-696-3665) | Albuquerque ARCP EXIT | Unlimited |

ATC ASSIGNED AIRSPACE: N30°43.90' W103°00.50' to N30°38.60' W102°47.90' to N30°17.90' W102°48.80' to N29°39.30' W103°10.40' to N29°25.70' W103°28.50' to N29°30.90' W103°41.00' to N29°51.60' W103°40.20' to N30°30.40' W103°18.70' to beginning.

REMARKS: SODAR not authorized.

- ① Tankers.
- ② Receivers.
- ③ Receiver Holding (Non-RADAR)

| | | | | | | | | | | |
|-------|--|--|--|--|--|--|--|--|---|--|
| AR651 | NSD TACAN 225/25 N32°40.00' W118°53.00' | NSD TACAN 225/25 N32°40.00' W118°53.00' | NSD TACAN 192/94 N31°30.00' W119°15.00' | NSD TACAN 192/94 N31°30.00' W119°15.00' NSD TACAN 180/91 N31°25.00' W118°53.00' NSD TACAN 179/39 N32°15.00' W118°37.00' NSD TACAN 207/44 N32°20.00' W119°00.00' | NSD TACAN 179/39 N32°15.00' W118°37.00' | a. 276.500 b. 319.500 c. 1-2-1 d. 5/1 e. 33/96 | FL200/FL260 or as assigned by FACSFAC San Diego | FACSFAC San Diego DSN 735-1757 C619-545-1757 | Los Angeles ARCP-338.3 EXIT-338.3 | Unlimited as coordinated with FACSFAC San Diego |
|-------|--|--|--|--|--|--|--|--|---|--|

ATC ASSIGNED AIRSPACE: N32°20.00' W119°00.00' to N31°30.00' W119°15.00' to N31°25.00' W118°53.00' to N32°15.00' W118°37.00' to beginning.

REMARKS: AR651 is located within W291 ATC assigned airspace. Receiver Holding Point is NSD 207/44 N32-20-00 W119-00-00. Military radar (Beaver Control) must be operational to conduct air refueling, FACSFAC San Diego will provide advisory service when possible. BEAVER TACAN NSD CH 86 located 11 NM S of NUC TACAN CH 123.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | ASSIGNED ARTCC | TIMES OF OPERATION |
|------------------|---|---|---|---|--|--|---------------------|--|---|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | | |
| AR652 (North) | MRF VOR-DME 344/16 | MRF VOR-DME 344/16 | MRF VOR-DME 308/52 | MRF VOR-DME 308/52 | MRF VOR-DME 308/52 | a. 249.525 b. 255.775 c. 1-1-3 d. 6/1 e. 29/92 | 12000/18000 | 49 OSS/OSOS Hollo- man AFB, NM DSN 572-3536 C505-572-3536 | Albuquerque ARCP-343.6 EXIT-343.6 | Continuous |
| | N30°33.80' W103°59.10' | N30°33.80' W103°59.10' | N30°57.20' W104°36.80' | N30°57.20' W104°36.80' | N30°57.20' W104°36.80' | | | | | |
| | | | | HUP VORTAC 140/16 N31°20.50' W105°14.10' HUP VORTAC 177/30 N31°04.80' W105°28.20' MRF VOR-DME 286/52 N30°40.90' W104°50.10' | | | | | | |
| (South) | HUP VORTAC 219/23 N31°19.60' W105°43.20' | HUP VORTAC 219/23 N31°19.60' W105°43.20' | HUP VORTAC 177/30 N31°04.80' W105°28.20' | HUP VORTAC 177/30 N31°04.80' W105°28.20' | MRF VOR-DME 308/52 N30°57.20' W104°36.80' | | | | Albuquerque ARCP-343.6 EXIT-343.6 | Continuous |
| | | | | MRF VOR-DME 286/52 N30°40.90' W104°50.10' MRF VOR-DME 308/52 N30°57.20' W104°36.80' HUP VORTAC 140/16 N31°20.50' W105°14.10' | | | | | | |

ATC ASSIGNED AIRSPACE: None.

REMARKS: Anchor is scheduled on non-interference basis with Valentine MOA.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|--|---|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR652A | HUP VORTAC | HUP VORTAC | HUP VORTAC | HUP VORTAC | MRF VOR-DME | a. 249.525 | 15000/FL200 | 49 OSS/OSOS Holloman AFB, NM DSN 572-3536 | Albuquerque ARCP-343.6 EXIT-343.6 | Continuous |
| | 219/23 | 219/23 | 177/30 | 177/30 | 308/52 | b. 255.775 | | | | |
| | N31°19.60' | N31°19.60' | N31°04.80' | N31°04.80' | N30°57.20' | c. 1-1-3 | | | | |
| | W105°43.20' | W105°43.20' | W105°28.20' | W105°28.20' | W104°36.80' | d. 6/1 | | | | |
| | | | | MRF VOR-DME | | e. 29/92 | | | | |
| | | | | 280/32 | | | | | | |
| | | | | N30°29.50' | | | | | | |
| | | | | W104°31.70' | | | | | | |
| | | | | MRF VOR-DME | | | | | | |
| | | | | 317/33 | | | | | | |
| | | | | N30°45.50' | | | | | | |
| | | | | W104°17.60' | | | | | | |
| | | | | HUP VORTAC | | | | | | |
| | | | | 140/16 | | | | | | |
| | | | N31°20.50' | | | | | | | |
| | | | W105°14.10' | | | | | | | |

ATC ASSIGNED AIRSPACE: None.

REMARKS: For entry from the west-northwest. Track will not be used simultaneously with AR652 (North/South). Usage will be deconflicted with IR-178.

| | | | | | | | | | | |
|--------|-------------|-------------|-------------|-------------|-------------|------------|-------------|--|---|------------|
| AR652B | MRF VOR-DME | a. 249.525 | 15000/FL200 | 49 OSS/OSOS Holloman AFB, NM DSN 572-3536 | Albuquerque ARCP-343.6 EXIT-343.6 | Continuous |
| | 344/16 | 344/16 | 317/33 | 317/33 | 308/52 | b. 255.775 | | | | |
| | N30°33.80' | N30°33.80' | N30°45.50' | N30°45.50' | N30°57.20' | c. 1-1-3 | | | | |
| | W103°59.10' | W103°59.10' | W104°17.60' | W104°17.60' | W104°36.80' | d. 6/1 | | | | |
| | | | | HUP VORTAC | | e. 29/92 | | | | |
| | | | | 140/16 | | | | | | |
| | | | | N31°20.50' | | | | | | |
| | | | | W105°14.10' | | | | | | |
| | | | | HUP VORTAC | | | | | | |
| | | | | 177/30 | | | | | | |
| | | | | N31°04.80' | | | | | | |
| | | | | W105°28.20' | | | | | | |
| | | | | MRF VOR-DME | | | | | | |
| | | | | 280/32 | | | | | | |
| | | | N30°29.50' | | | | | | | |
| | | | W104°31.70' | | | | | | | |

ATC ASSIGNED AIRSPACE: None.

REMARKS: For entry from the east-southeast. Track will not be used simultaneously with AR652 (North/South). Usage will be deconflicted with IR-178.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|------------------------|----------------------|----------------------|----------------------|----------------------|----------------|---------------------|---------------------|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | | | |
| AR653 | SLN VORTAC 308/42 ① | SLN VORTAC 033/66 | SLN VORTAC 308/42 | SLN VORTAC 308/42 | SLN VORTAC 308/42 | a. 324.600 | FL180/FL220 | 190 ARW Kansas ANG | Kansas City | As scheduled |
| | N39°25.50' | N39°46.00' | N39°25.50' | N39°25.50' | N39°25.50' | b. 260.200 | | Forbes Fld, Topeka, | ARCP-363.2 | |
| | W98°15.50' | W96°42.00' | W98°15.50' | W98°15.50' | W98°15.50' | c. 1-4-0 | | KS | EXIT-363.2 | |
| | SLN VORTAC 033/30 ① | SLN VORTAC 265/53 | SLN VORTAC 033/30 | SLN VORTAC 287/26 | SLN VORTAC 287/26 | d. 3/1 | | DSN 720-4647 | | |
| | N39°19.00' | N38°58.00' | N39°19.00' | N39°06.50' | N39°06.50' | e. 29/92 | | (1400-2100Z++ wkd) | | |
| | W97°12.00' | W98°45.00' | W97°12.00' | W98°08.00' | W98°08.00' | Jayhawk | | | | |
| | SLN VORTAC 265/53 ② | | | SLN VORTAC 033/30 | SLN VORTAC 033/30 | Primary | | | | |
| | N38°58.00' | | | N39°19.00' | N39°19.00' | 228.95 Sec- | | | | |
| | W98°45.00' | | | W97°12.00' | W97°12.00' | ondary | | | | |
| | SLN VORTAC 033/66 ② | | | SLN VORTAC 011/44 | SLN VORTAC 011/44 | 303.0 | | | | |
| | N39°46.00' | | | N39°38.00' | N39°38.00' | | | | | |
| | W96°42.00' | | | W97°19.00' | W97°19.00' | | | | | |

ATC ASSIGNED AIRSPACE: ADA East and West ATCAA N39°01.97' W97°50.27' to N39°08.00' W98°30.00' to N39°26.00' W98°30.00' to N39°37.50' W97°39.00' to N39°46.50' W97°00.00' to N39°05.50' W97°00.00' to N39°01.43' W97°23.90' along 12NM arc SLN VORTAC to beginning.

REMARKS: MARSA is applicable between refueling operations in AR653 and other simultaneous activity in ADA East and West MOA/ATCAA. Kansas City ARTCC or Jayhawk military radar must be operational.

① Tanker.

② Receiver.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|--|-----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR654 | PDT VORTAC | PDT VORTAC | PDT VORTAC | PDT VORTAC | PDT VORTAC | a. 341.400 | 10000/16000 | W AD Sector McChord AFB, WA DSN 382-4604 | Seattle ARCP | Unlimited |
| | 223/41 | 223/41 | 043/10 | 043/10 | 043/10 | b. 260.200 | | | | |
| | N45°23.00' | N45°23.00' | N45°46.30' | N45°46.30' | N45°46.30' | c. 2-1-2 | | | | |
| | W119°48.30' | W119°48.30' | W118°44.00' | W118°44.00' | W118°44.00' | d. 5/1 | | | | |
| | PDT VORTAC | | | PDT VORTAC | | e. 55/118 | | | | |
| | 223/20 | | | 099/18 | | | | | | |
| | N45°32.60' | | | N45°33.00' | | | | | | |
| | W119°22.00' | | | W118°34.00' | | | | | | |
| | | | | PDT VORTAC | | | | | | |
| | | | | 186/25 | | | | | | |
| | | | N45°19.00' | | | | | | | |
| | | | W119°12.50' | | | | | | | |
| | | | PDT VORTAC | | | | | | | |
| | | | 223/20 | | | | | | | |
| | | | N45°32.60' | | | | | | | |
| | | | W119°22.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: None.

REMARKS: This AR is restricted to aircraft deployed to WADS, Det 1 Close Air Support (CAS) Unit by FAA Letter of Agreement. Aircraft other than A-10s are required to coordinate 7 days in advance to schedule the AR654. FAA Seattle ARTCC may approve use on a case-by-case basis, contact WADS/DORS, McChord AFB for information. Anchor has right-hand pattern to expedite flow and allow tanker and receiver to hold on PDT VORTAC 223/043 radial.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | TIMES OF OPERATION |
|--------|--------------|------------|--------------|----------------|-------------|-------------------|---------------------|--|-----------------------------------|---|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | |
| AR655 | SRQ VORTAC | SRQ VORTAC | SRQ VORTAC | SRQ VORTAC | SRQ VORTAC | a. 276.500 | FL200/FL280 | 347 Rescue Wing, MacDill AFB, FL DSN 968-4641 C813-828-4641 | Miami ARCP-307.3 EXIT-304.3 | Unlimited as coordinated with scheduling unit |
| | 286/88 ① | 273/25 | 273/85 | 273/85 | 297/50 ① | b. 343.250 | | | | |
| | N27°45.00' | N27°25.00' | N27°25.00' | N27°25.00' | N27°44.00' | c. 1-2-1 | | | | |
| | W84°09.00' | W83°01.00' | W84°09.00' | W84°09.00' | W83°24.00' | d. 6/1 | | | | |
| | SRQ VORTAC | | | SRQ VORTAC | SRQ VORTAC | e. 52/115 | | | | |
| | 273/45 ① | | | 286/88 | 273/85 ① | | | | | |
| | N27°24.00' | | | N27°45.00' | N27°25.00' | Alleycat 364.1 | | | | |
| | W83°24.00' | | | W84°09.00' | W84°09.00' | | | | | |
| | SRQ VORTAC | | | SRQ VORTAC | SRQ VORTAC | | | | | |
| | 273/25 ② | | | 297/50 | 273/45 ② | | | | | |
| | N27°25.00' | | | N27°44.00' | N27°24.00' | | | | | |
| | W83°01.00' | | | W83°24.00' | W83°24.00' | | | | | |
| | | | | SRQ VORTAC | SRQ VORTAC | | | | | |
| | | | | 273/45 | 286/88 ② | | | | | |
| | | | N27°24.00' | N27°45.00' | | | | | | |
| | | | W83°24.00' | W84°09.00' | | | | | | |
| | | | | SRQ VORTAC | | | | | | |
| | | | | 297/50 ② | | | | | | |
| | | | | N27°44.00' | | | | | | |
| | | | | W83°24.00' | | | | | | |

ATC ASSIGNED AIRSPACE: N27°21.50' W83°05.00' to N27°21.50' W84°28.00' to N27°48.50' W84°28.00' to N27°48.50' W83°05.00' to beginning.

REMARKS:

① Tankers.

② Receivers. a.-Receiver holdings shall be at anchor point right turns. b.-Miami ARTCC radar must be operational. c.-Operations by MRU must be individually coordinated. d.-ATC may assign altitudes below FL 240.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--------------|-------------|--------------|----------------|-------------|------------------------|---------------------|-------------------|----------------|---|
| AR657 | NSD TACAN | NSD TACAN | NSD TACAN | NSD TACAN | NSD TACAN | a. N/R | FL200/FL260 | FACSFAC San Diego | Beaver Control | Unlimited as coordinated with FACSFAC San Diego |
| | 175/55 | 175/55 | 187/128 | 187/128 | 175/55 | b. N/R | | DSN 735-1757 | FACSFAC San | |
| | N31°58.50' | N31°58.50' | N30°53.10' | N30°53.10' | N31°58.50' | c. N/R | or as assigned | C619-545-1757 | Diego | |
| | W118°36.00' | W118°36.00' | W119°19.80' | W119°19.80' | W118°36.00' | d. N/R | by FACSFAC | | ARCP | |
| | | | | NSD TACAN | | e. N/R | San Diego | | | |
| | | | | 195/128 | | | | | | |
| | | | | N31°00.50' | | | Beaver | | | |
| | | | | W119°38.80' | | | Control Pri- | | | |
| | | | | NSD TACAN | | | mary 289.9 | | | |
| | | | | 195/77 | | | Secondary | | | |
| | | | N31°45.30' | | | 118.65 | | | | |
| | | | W119°10.30' | | | | | | | |
| | | | NSD TACAN | | | | | | | |
| | | | 181/79 | | | | | | | |
| | | | N31°36.50' | | | | | | | |
| | | | W118°50.60' | | | | | | | |

ATC ASSIGNED AIRSPACE: Within W291 N32°01.00' W119°07.00' to N30°51.00' W119°52.00' to N30°37.00' W119°24.00' to N31°47.00' W118°38.00' to beginning.

REMARKS: This is right-hand race track pattern. FACSFAC San Diego will provide exclusive use airspace to aircraft participating in air refueling operations, if required. FACSFAC San Diego radar must be operational and area must be VFR.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|------------------|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR658 | FLG VOR-DME | FLG VOR-DME | FLG VOR-DME | FLG VOR-DME | FLG VOR-DME | a. N/R | FL180/FL290 | 56 OSS/OSRS Luke | Albuquerque | Unlimited |
| | 083/29 | 125/21 | 054/75 | 054/75 | 083/29 | b. N/R | | AFB, AZ | ARCP | |
| | N35°05.50' | N34°53.00' | N35°37.00' | N35°37.00' | N35°05.50' | c. N/R | (High Block) FL | DSN 896-7654 | | |
| | W111°05.00' | W111°24.00' | W110°16.00' | W110°16.00' | W111°05.00' | d. N/R | 240/FL 290 | C623-856-7654 | | |
| | | DRK VORTAC | FLG VOR-DME | FLG VOR-DME | FLG VOR-DME | e. N/R | (Low Block) FL | | | |
| | | 064/55 | 038/22 | 038/73 | 038/73 | | 180/FL 230 | | | |
| | | N34°53.00' | N35°22.00' | N35°53.50' | N35°53.50' | (High Block) | | | | |
| | | W111°24.00' | W111°20.00' | W110°30.50' | W110°30.50' | a.-Primary | | | | |
| | | | | FLG VOR-DME | | 286.2 | | | | |
| | | | | 038/22 | | Back-up | | | | |
| | | | | N35°22.00' | | 347.2 | | | | |
| | | | | W111°20.00' | | b.-384.6 | | | | |
| | | | | FLG VOR-DME | | c.-1-1-4 | | | | |
| | | | 083/29 | | d.-5/1 | | | | | |
| | | | N35°05.50' | | e.-33/96 | | | | | |
| | | | W111°05.00' | | (Low Block) | | | | | |
| | | | | | a.-391.8 | | | | | |
| | | | | | b.-318.0 | | | | | |
| | | | | | c.-1-4-0 | | | | | |
| | | | | | d.-3/1 | | | | | |
| | | | | | e.-29/92 | | | | | |

ATC ASSIGNED AIRSPACE: N35°08.50' W111°34.00' to N35°22.00' W111°28.00' to N36°00.50' W110°29.00' to N36°03.00' W110°13.00' to N35°51.00' W110°01.00' to N35°38.00' W110°06.00' to N34°59.00' W111°07.00' to N34°58.00' W111°23.00' to beginning.

REMARKS: Receivers will hold at the ARIP (FL 240 High Block, FL 180 Low Block or as assigned by ATC) until cleared to the entry point by the tanker aircraft.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|---|---|---|--|---|--|---------------------|---|------------------------|---|
| AR659 | BVL VORTAC 238/28 N40°36.00' W114°21.00' | BVL VORTAC 236/58 N40°22.80' W114°56.90' | BVL VORTAC 209/82 N39°42.60' W114°56.90' | BVL VORTAC 209/82 N39°42.60' W114°56.90' BVL VORTAC 196/71 N39°42.60' W114°30.40' BVL VORTAC 225/40 N40°22.80' W114°30.40' BVL VORTAC 236/58 N40°22.80' W114°56.90' | BVL VORTAC 237/27 N40°36.00' W114°20.00' | a. 305.500 b. 319.500 c. 1-3-2 d. 6/1 e. 50/113 Rendezvous 291.65. Clover Control Primary 363.5, Secondary 134.1. | FL180/FL280 | 388 RANS/RST Hill AFB, UT DSN 777-4401 C801-777-4401 | Salt Lake City ARCP | Mon-Thu 1400-0700Z++, Fri 1400-0000Z++, Sat 1st & 3rd 1500-2300Z++; closed Sun. |

ATC ASSIGNED AIRSPACE: N40°36.00' W114°27.00' to N40°36.00' W114°51.00' to N40°24.30' W115°06.00' to N39°42.35' W115°06.00' to N39°23.00' W114°49.10' to N39°23.00' W114°27.03' to beginning.

REMARKS: Refueling operations must be scheduled in advance with 388 RANS/RST DSN 777-4401 during normal duty hours. Primary Boom frequency 305.5.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|--|--|--|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | | | |
| AR667 | NLC TACAN | NLC TACAN | NLC TACAN | NLC TACAN | NLC TACAN | a. 318.000 | 8000/FL190 | CSFWP Lemoore NAS, CA DSN 949-1034 | Lemoore RATCF Lemoore NAS, CA ARCP-286.0 | 1600-0800Z++ Mon-Thu; 1600-0200Z++ Fri; 1800-0200Z++ Sat; 2100-0500Z++ Sun. (Hol hr)③ |
| | 134/48 | 134/48 | 314/12 | 314/12 | 314/22 | b. 264.900 | | | | |
| | N35°39.00' | N35°39.00' | N36°31.10' | N36°31.10' | N36°40.00' | c. 1-4-0 | | | | |
| | W119°29.00' | W119°29.00' | W120°05.40' | W120°05.40' | W120°11.30' | d. 2/1 | | | | |
| | NLC TACAN | | | NLC TACAN | NLC TACAN | e. 55/118 | | | | |
| | 267/17 ① | | | 267/17 | 156/32 ① | | | | | |
| | N36°24.50' | | | N36°24.50' | N35°48.90' | | | | | |
| | W120°18.40' | | | W120°18.40' | W119°52.50' | | | | | |
| | NLC TACAN | | | NLC TACAN | NLC TACAN | | | | | |
| | 156/32 ② | | | 156/32 | 267/17 ② | | | | | |
| | N35°48.90' | | | N35°48.90' | N36°24.50' | | | | | |
| | W119°52.50' | | | W119°52.50' | W120°18.40' | | | | | |
| | | | | NLC TACAN | | | | | | |
| | | | | 134/30 | | | | | | |
| | | | N35°54.60' | | | | | | | |
| | | | W119°39.50' | | | | | | | |

ATC ASSIGNED AIRSPACE: N36°42.00' W119°59.00' to N36°41.00' W120°09.00' to N36°32.00' W120°30.00' to N36°29.50' W120°30.00' to N35°42.50' W119°55.00' to N35°38.00' W119°30.00' to N35°49.70' W119°22.30' to N36°35.00' W119°45.00' to beginning.

REMARKS: Radar monitoring required to conduct air refueling. RATCF radar must be operational. Pattern length: 44 NM; width: 12 NM. To be used only by CSFWP Squadrons.

① Entry/Exit Point(s) for Rwy 32 departures/arrivals.

② Entry/Exit Point(s) for Rwy 14 departures/arrivals.

③ Non-operational on all federal holidays as follows: a.-Closed 0200Z++ Thursday until 1600Z++ Monday if holiday is observed on Friday; b.-Closed 0200Z++ Friday until 1600Z++ Tuesday if holiday is observed on Monday; c.-Closed 0200Z++ day prior until 1600Z++ day following if holiday is observed on other days.

| | | | | | | | | | | |
|-------|------------|------------|------------|------------|------------|------------|-------------|---|---|-----------|
| AR669 | GAG VORTAC | a. 394.900 | FL250/FL270 | 71 OSS/OSOP, Vance AFB, OK, Liberty Ops DSN 448-6251 C580-213-6251 | Kansas City ARCP-133.2/26 3.1 ARIP-133.2/263. 1 | Unlimited |
| | 080/100 | 080/100 | 080/40 | 080/40 | 094/83 | b. 384.600 | | | | |
| | N36°19.60' | N36°19.60' | N36°20.50' | N36°20.50' | N35°59.90' | c. 1-4-1 | | | | |
| | W97°48.70' | W97°48.70' | W99°03.10' | W99°03.10' | W98°13.30' | d. 5/1 | | | | |
| | GAG VORTAC | e. 55/118 | | | | |
| | 125/28 | 125/28 | 094/83 | 107/45 | 080/40 | | | | | |
| | N36°00.80' | N36°00.80' | N35°59.90' | N36°00.50' | N36°20.50' | | | | | |
| | W99°28.30' | W99°28.30' | W98°13.30' | W99°03.20' | W99°03.10' | | | | | |
| | | | | GAG VORTAC | | | | | | |
| | | | | 094/83 | | | | | | |
| | | | | N35°59.90' | | | | | | |
| | | | | W98°13.30' | | | | | | |
| | | | | GAG VORTAC | | | | | | |
| | | | | 080/80 | | | | | | |
| | | | N36°19.90' | | | | | | | |
| | | | W98°13.50' | | | | | | | |

ATC ASSIGNED AIRSPACE: N36°25.00' W99°24.00' to N36°24.00' W97°51.00' to N35°58.00' W97°51.00' to N35°55.00' W98°00.00' to N35°56.00' W99°24.00' to beginning.

REMARKS: Restricted for use by Vance AFB assigned aircraft and other AETC aircraft on non-interference basis. Kansas City ARTCC radar must be operational.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|---------------------|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR672 | CIM VORTAC | CIM VORTAC | CIM VORTAC | CIM VORTAC | CIM VORTAC | a. 249.500 | 9000/14000 | 27 SOSS/OSOS Can- | Albuquerque | Intermittent by |
| | 164/42 | 121/43 | 087/80 | 087/80 | 101/29 | b. 310.425 | | non AFB, NM | ARCP-127.85/3 | NOTAM |
| | N35°47.20' | N35°59.50' | N36°15.20' | N36°15.20' | N36°17.80' | c. 1-3-1 | | DSN 681-2521 / 2276 | 51.7 | |
| | W104°49.60' | W104°13.60' | W103°14.70' | W103°14.70' | W104°19.80' | d. 6/1 | | | | |
| | | CIM VORTAC | CIM VORTAC | CIM VORTAC | CIM VORTAC | e. 15/78 | | | | |
| | | 073/71 | 101/29 | 073/71 | 073/71 | | | | | |
| | | N36°34.00' | N36°17.80' | N36°34.00' | N36°34.00' | | | | | |
| | | W103°24.10' | W104°19.80' | W103°24.10' | W103°24.10' | | | | | |
| | | | | CIM VORTAC | CIM VORTAC | | | | | |
| | | | | 101/29 | 101/29 | | | | | |
| | | | N36°17.80' | N36°17.80' | | | | | | |
| | | | W104°19.80' | W104°19.80' | | | | | | |
| | | | CIM VORTAC | CIM VORTAC | | | | | | |
| | | | 121/43 | 121/43 | | | | | | |
| | | | N35°59.50' | N35°59.50' | | | | | | |
| | | | W104°13.60' | W104°13.60' | | | | | | |

ATC ASSIGNED AIRSPACE: AR672 lies entirely within the areas of Mt. Dora North High and Low MOA, Mt. Dora East High and Low MOA, and Mt. Dora West High and low MOA.

| | | | | | | | | | | |
|-------|-------------|-------------|-------------|-------------|-------------|------------|-------------|---------------------|---------------|-----------------|
| AR674 | GUP VORTAC | a. 341.400 | 12000/16000 | 58 OSS/DOO Kirt- | Albuquerque | Intermittent by |
| | 046/61 | 043/47 | 263/28 | 263/28 | 255/40 | b. 260.200 | | land AFB, NM | ARCP-128.8/30 | NOTAM |
| | N35°58.20' | N35°54.00' | N35°32.00' | N35°32.00' | N35°28.00' | c. 2-1-1 | | DSN | 7.2 | |
| | W107°48.00' | W108°04.00' | W109°26.50' | W109°26.50' | W109°41.00' | d. 5/1 | | 263-5979/5888/5701 | | |
| | GUP VORTAC | e. 55/118 | | C505-853-5979/5888/ | | |
| | 226/39 | 220/26 | 068/47 | 220/26 | 065/60 | | | 5701 | | |
| | N35°08.50' | N35°13.00' | N35°35.00' | N35°13.00' | N35°39.30' | | | | | |
| | W109°34.00' | W109°18.50' | W107°56.30' | W109°18.50' | W107°40.00' | | | | | |
| | | | | GUP VORTAC | GUP VORTAC | | | | | |
| | | | | 068/47 | 068/47 | | | | | |
| | | | N35°35.00' | N35°35.00' | | | | | | |
| | | | W107°56.30' | W107°56.30' | | | | | | |
| | | | GUP VORTAC | GUP VORTAC | | | | | | |
| | | | 043/47 | 043/47 | | | | | | |
| | | | N35°54.00' | N35°54.00' | | | | | | |
| | | | W108°04.00' | W108°04.00' | | | | | | |

ATC ASSIGNED AIRSPACE: N35°23.70' W109°44.50' to N35°28.00' W109°41.00' to N35°33.00' W109°35.00' to N35°36.00' W109°28.00' to N35°58.00' W108°05.50' to N35°59.00' W107°56.00' to N35°58.30' W107°48.00' to N35°57.00' W107°43.00' to N35°43.00' W107°37.50' to N35°39.30' W107°40.00' to N35°33.50' W107°47.00' to N35°31.00' W107°54.50' to N35°09.00' W109°17.00' to N35°08.00' W109°25.00' to N35°08.50' W109°34.00' to N35°10.00' W109°39.00' to beginning.

REMARKS: For the purpose of separation between participating and non-participating aircraft, ATC shall regard AR674 as a linear refueling track unless the tanker or receiver pilot specifically requests AR674 as an anchor track prior to entering assigned airspace. When ATC assigns AR674 as a linear track, participating aircraft will not deviate more than 3 NM from depicted track nor reverse course without ATC clearance. Due to mountainous terrain KC-135 aircraft are restricted to a minimum base A/R altitude of 14,000'. Receiver toboggan training will be restricted to the northern leg between the GUP 043/47 and the GUP 263/28 Navigation Points. KC-135s will not descend below 13,000' during the toboggan.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|--------|--------------|-------------|--------------|----------------|-------------|----------------|---------------------|---------------------|----------------|--------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR678 | RAP VORTAC | RAP VORTAC | RAP VORTAC | RAP VORTAC | RAP VORTAC | a. 280.400 | FL190/FL260 | 28 OSS/OSXS | Denver | Unlimited |
| | 285/81 | 273/70 | 212/70 | 212/70 | 199/82 | b. 377.700 | | Ellsworth AFB, SD | ARCP-338.2 | |
| | N44°36.50' | N44°17.50' | N43°09.00' | N43°09.00' | N42°49.00' | c. 1-1-2 | | DSN 675-4246 (After | | |
| | W104°41.50' | W104°34.00' | W104°08.00' | W104°08.00' | W104°00.50' | d. 2/1 | | hours Raymond 33, | | |
| | RAP VORTAC | | | RAP VORTAC | | e. 54/117 | | 675-3800) | | |
| | 188/70 | | | 201/53 | | | | C605-385-4246 | | |
| | N42°53.50' | | | N43°14.50' | | | | | | |
| | W103°35.00' | | | W103°42.00' | | | | | | |
| | | | | RAP VORTAC | | | | | | |
| | | | | 284/54 | | | | | | |
| | | | | N44°23.00' | | | | | | |
| | | | | W104°07.50' | | | | | | |
| | | | | RAP VORTAC | | | | | | |
| | | | 273/70 | | | | | | | |
| | | | N44°17.50' | | | | | | | |
| | | | W104°34.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: None.

REMARKS: Must specify altitude block necessary to perform mission. Recommend tankers use South entry point. Maneuvering within orbit authorized. If the Powder River Training complex is active (including the Gateway ATCAA), tankers must stay South of the N44 latitude.

| | | | | | | | | | | |
|-------|------------|------------|------------|------------|------------|------------|-------------|------------------|------------|---|
| AR716 | RSW VORTAC | RSW VORTAC | RSW VORTAC | RSW VORTAC | SRQ VORTAC | a. 283.900 | FL220/FL280 | 347 Rescue Wing, | Miami | Unlimited as coordinated with the scheduling unit |
| | 290/44 | 290/44 | 290/119 | 290/119 | 197/20 | b. 342.550 | | MacDill AFB, FL | ARCP-363.1 | |
| | N26°46.00' | N26°46.00' | N27°08.00' | N27°08.00' | N27°05.00' | c. 1-2-2 | | DSN 968-4641 | EXIT-363.1 | |
| | W82°34.00' | W82°34.00' | W83°54.00' | W83°54.00' | W82°39.00' | d. 4/1 | | C813-828-4641 | | |
| | | | | RSW VORTAC | | e. 50/113 | | | | |
| | | | | 280/121 | | | | | | |
| | | | | N26°49.00' | | | | | | |
| | | | | W84°00.00' | | | Barrie | | | |
| | | | | RSW VORTAC | | | 325.8 Alley | | | |
| | | | | 272/72 | | | Cat 364.1 | | | |
| | | | | N26°32.00' | | | | | | |
| | | | | W83°07.00' | | | | | | |
| | | | | RSW VORTAC | | | | | | |
| | | | 290/69 | | | | | | | |
| | | | N26°53.00' | | | | | | | |
| | | | W83°00.00' | | | | | | | |

ATC ASSIGNED AIRSPACE: N26°10.00' W82°17.00' to N26°10.00' W84°40.00' to N27°19.00' W84°40.00' to N27°19.00' W82°47.00' to beginning.

REMARKS: W168 is a joint use warning area, therefore the anchor area may only be used when W168 is released to the Using Agency, except as specified by Miami ARTCC/9th AIR FORCE Letter Of Agreement.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--|--|---|--|---|--|---|---|-------------------------------------|--|
| AR717A | SEA VORTAC 042/134 N48°30.00' W119°23.00' | SEA VORTAC 033/106 N48°30.00' W120°14.00' | GEG VORTAC 342/56 N48°30.00' W117°33.00' | GEG VORTAC 342/56 N48°30.00' W117°33.00' GEG VORTAC 342/76 N48°50.00' W117°31.50' EPH VORTAC 343/88 N48°50.00' W119°16.00' EPH VORTAC 344/68 N48°30.00' W119°16.50' | GEG VORTAC 018/69 N48°27.00' W116°32.00' | a. 283.900 b. 292.600 c. 1-1-2 d. 3/1 e. 50/113 Big Foot (WADS) 271.0 | FL250/FL280 or as assigned by ATC | NAS Whidbey Island, (N38) Oak Harbor, WA DSN 820-2877 C360-257-2877 Scheduling unit hours are 0700-1700 local Mon-Fri except holidays | Seattle ARCP-291.6 EXIT-291.6 | Unlimited as coordinated with scheduling unit |

ATC ASSIGNED AIRSPACE: N49°00.00' W120°00.00' to N49°00.00' W116°48.00' to N48°22.00' W117°28.00' to N48°22.00' W118°06.00' to N48°03.50' W119°00.00' to N48°08.50' W120°27.50' to beginning.

REMARKS: Pattern length - 70 NM; width - 20 NM; inbound course to Anchor Point 068. Anchor area is located within ATC Assigned Airspace. Military radar or Seattle ARTCC radar must be operational to conduct refueling.

| | | | | | | | | | | |
|--------|---|---|---|--|--|--|---|--|-------------------------------------|--|
| AR717B | GEG VORTAC 010/86 N48°47.00' W116°30.50' | GEG VORTAC 010/86 N48°47.00' W116°30.50' | EPH VORTAC 343/88 N48°50.00' W119°16.00' | EPH VORTAC 343/88 N48°50.00' W119°16.00' EPH VORTAC 344/68 N48°30.00' W119°16.50' GEG VORTAC 342/56 N48°30.00' W117°33.00' GEG VORTAC 342/76 N48°50.00' W117°31.50' | SEA VORTAC 028/122 N48°48.00' W120°04.00' | a. 283.900 b. 292.600 c. 1-1-2 d. 3/1 e. 50/113 Big Foot (WADS) 271.0 | FL250/FL280 or as assigned by ATC | NAS Whidbey Island, (N38) Oak Harbor, WA DSN 820-2877 C360-257-2877 Scheduling unit hours are 0700-1700 local Mon-Fri except holidays. | Seattle ARCP-291.6 EXIT-291.6 | Unlimited as coordinated with scheduling unit |
|--------|---|---|---|--|--|--|---|--|-------------------------------------|--|

ATC ASSIGNED AIRSPACE: N49°00.00' W120°00.00' to N49°00.00' W116°48.00' to N48°22.00' W117°28.00' to N48°22.00' W118°06.00' to N48°03.50' W119°00.00' to N48°08.50' W120°27.50' to beginning.

REMARKS: Pattern length - 70 NM; width - 20 NM; inbound course to Anchor Point 068. Anchor area is located within ATC Assigned Airspace. Military radar or Seattle ARTCC radar must be operational to conduct refueling.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | ASSIGNED ARTCC | TIMES OF OPERATION |
|---------------|--|---------------------------|---------------------------|--|--|--|----------------------------|---|---------------------------------------|------------------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | | |
| AR719 | FAI VORTAC 041/55 | EIL TACAN 031/52 | EIL TACAN 042/121 | EIL TACAN 042/121 | FAI VORTAC 041/55 | a. 270.200 b. 263.900 | 14000/17000 FL240/FL290 | 354 OSS/OSCR Eiel- son AFB, AK DSN | Anchorage ARCP-284.7 EXIT-284.7 | As coordinated with ARTCC |
| ALASKA | N65°07.00' W146°00.00' YUKAN BIG VORTAC 046/29 N64°10.00' W144°41.00' BUFLO | N65°09.00' W145°25.00' | N65°26.00' W142°43.00' | N65°26.00' W142°43.00' EIL TACAN 033/125 N65°46.00' W142°55.00' EIL TACAN 022/79 N65°34.00' W144°53.00' EIL TACAN 036/71 N65°14.00' W144°40.00' | W146°00.00' YUKAN BIG VORTAC 046/29 ① N64°10.00' W144°41.00' BUFLO | c. 1-2-1 d. 3/1 e. 31/94 Top Rocc Primary 269.9 Sec- ondary 364.2/126.2 | or as assigned by ATC | 317-377-9327/2749/2 718 C907-377-9327/2749/ 2718 | | |

ATC ASSIGNED AIRSPACE: N66°10.00' W145°05.00' to N66°10.00' W141°00.00' to N64°00.00' W141°00.00' to N64°00.00' W144°00.00' to N64°30.00' W146°00.00' to N65°23.00' W146°00.00' to beginning.

REMARKS: Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

① Or as assigned by ATC

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|-----------------------------|-------------------------------|---------------------------|---------------------------|---------------------------|-------------------------------|--|---------------------------|--|---------------------------------------|----------------------------|
| AR720 (Northeast) | FAI VORTAC 144/50 | BIG VORTAC 181/115 | BIG VORTAC 191/44 | BIG VORTAC 191/44 | FAI VORTAC 144/50 | a. 276.700 b. 263.900 | FL240/FL290 | 354 OSS/OSCR Eielson AFB, AK | Anchorage ARCP-360.8 | As coordinated with ARTCC. |
| ALASKA | N63°58.00' W147°45.00' | N62°15.00' W147°21.00' | N63°24.00' W146°37.00' | N63°24.00' W146°37.00' | N63°58.00' W147°45.00' | c. 1-3-1 d. 4/1 e. 32/95 | or as assigned by ATC. | DSN 317-377-9327/2749/2 718 C907-377-9327/2749/ 2718 | | |
| | BEYAR FAI VORTAC 157/75 | | | BIG VORTAC 213/51 | BEYAR FAI VORTAC 157/75 | Top Rocc Primary 269.9 Sec- ondary 364.2/126.2 | | | | |
| | N63°33.00' W148°15.00' | | | BIG VORTAC 194/98 | N63°33.00' W148°15.00' | | | | | |
| | WELLE BGQ VORTAC 026/42 | | | N62°41.00' W147°50.00' | BGQ VORTAC 026/42 | | | | | |
| | N62°00.00' W148°49.00' | | | BIG VORTAC 182/93 | N62°00.00' W148°49.00' | | | | | |
| | GKN VOR-DME 266/18 | | | N62°36.00' W147°07.00' | GKN VOR-DME 266/18 | | | | | |
| | N62°15.00' W146°04.00' | | | | N62°15.00' W146°04.00' | | | | | |
| (Southwest) | FAI VORTAC 144/50 | BIG VORTAC 228/39 | BIG VORTAC 194/98 | BIG VORTAC 194/98 | FAI VORTAC 144/50 | | | | Anchorage ARCP-360.8 EXIT-269.0 | As coordinated with ARTCC |
| | N63°58.00' W147°45.00' | N63°47.00' W147°07.00' | N62°41.00' W147°50.00' | N62°41.00' W147°50.00' | N63°58.00' W147°45.00' | | | | | |
| | BEYAR FAI VORTAC 157/75 | | | BIG VORTAC 182/93 | BEYAR FAI VORTAC 157/75 | | | | | |
| | N63°33.00' W148°15.00' | | | BIG VORTAC 191/44 | N63°33.00' W148°15.00' | | | | | |
| | WELLE BGQ VORTAC 026/42 | | | N63°24.00' W146°37.00' | BGQ VORTAC 026/42 | | | | | |
| | N62°00.00' W148°49.00' | | | BIG VORTAC 213/51 | N62°00.00' W148°49.00' | | | | | |
| | GKN VOR-DME 266/18 | | | N63°31.00' W147°17.00' | GKN VOR-DME 263/18 | | | | | |
| | N62°15.00' W146°04.00' | | | | N62°15.00' W146°04.00' | | | | | |

ATC ASSIGNED AIRSPACE: N63°58.00' W148°00.00' to N63°56.00' W147°02.00' to N63°44.00' W146°30.00' to N63°42.00' W146°13.00' to N63°43.00' W145°54.00' to N62°17.00' W145°54.00' to N61°55.00' W148°50.00' to N62°27.00' W148°54.00' to N62°33.00' W148°48.00' to beginning.

REMARKS: Weather briefing agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | ASSIGNED ARTCC | TIMES OF OPERATION | |
|--|------------------------|----------------------|-----------------------|------------------------|------------------------|--------------------------|--------------------------|-----------------------------------|-------------------------|------------------------------|------------------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | | | |
| AR721 (Northeast) ALASKA | AKN VORTAC 327/60 | AKN VORTAC 312/99 | AKN VORTAC 355/98 | AKN VORTAC 355/98 | AKN VORTAC 327/60 | a. 270.200 b. 263.900 | FL240/FL290 | 3 OSS/DOTS Elmen- dorf AFB, AK | Anchorage ARCP-354.0 | As coordinated with ARTCC | |
| | N59°40.64' | N60°06.00' | N60°19.00' | N60°19.00' | N59°41.00' | c. 1-2-1 | or as assigned by ATC | DSN | EXIT-354.0 | | |
| | W157°19.74' | W158°30.00' | W156°06.00' | W156°06.00' | W157°20.00' | d. 3/1 | | 317-552-2406/5470 | C907-552-2406/5470 | | |
| | NAKNE | | | AKN VORTAC 352/117 | AKN VORTAC 342/121 | e. 31/94 | | | | | |
| | ANC VOR-DME 233/125 | | | N60°39.00' | N60°44.00' | | Top Rocc Primary | | | | |
| | N60°37.00' | | | W156°13.00' | W156°54.00' | | | 269.9 Sec- ondary | | | |
| | W154°21.00' | | | AKN VORTAC 326/113 | ANC VOR-DME 232/125 | | 364.2/126.2 | | | | |
| | SPAIR | | | N60°30.00' | N60°37.00' | | | | | | |
| | AKN VORTAC 352/127 | | | W157°57.00' | W154°20.00' | | | | | | |
| | N60°49.00' | | | AKN VORTAC 324/92 | | | | | | | |
| | W156°11.00' | | | N60°10.00' | | | | | | | |
| | ETHAN | | | W157°48.00' | | | | | | | |
| | (Southwest) | AKN VORTAC 327/60 | AKN VORTAC 001/124 | AKN VORTAC 326/113 | AKN VORTAC 326/113 | AKN VORTAC 327/60 | | | Anchorage ARCP-354.0 | | As coordinated with ARTCC |
| | | N59°41.00' | N60°42.00' | N60°30.00' | N60°30.00' | N59°41.00' | | | EXIT-354.0 | | |
| | W157°20.00' | W155°32.00' | W157°57.00' | W157°57.00' | W157°20.00' | | | | | | |
| | NAKNE | | AKN VORTAC 324/92 | AKN VORTAC 342/121 | | | | | | | |
| | ANC VOR-DME 233/125 | | N60°10.00' | N60°44.00' | | | | | | | |
| | N60°37.00' | | W157°48.00' | W156°54.00' | | | | | | | |
| | W154°21.00' | | AKN VORTAC 355/98 | ANC VOR-DME 232/125 | | | | | | | |
| | SPAIR | | N60°19.00' | N60°37.00' | | | | | | | |
| | AKN VORTAC 352/127 | | W156°06.00' | W154°20.00' | | | | | | | |
| | N60°49.00' | | AKN VORTAC 352/117 | | | | | | | | |
| | W156°11.00' | | N60°39.00' | | | | | | | | |
| | ETHAN | | W156°13.00' | | | | | | | | |

ATC ASSIGNED AIRSPACE: N60°30.00' W159°00.00' to N60°50.00' W156°00.00' to N60°53.00' W154°28.00' to N60°26.00' W154°13.00' to N59°30.00' W158°00.00' to N59°55.00' W159°00.00' to beginning.

REMARKS: Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|-----------------------------|---|--|---|---|---|--|--------------------------|--|---|------------------------------|
| AR722 (Northeast) | CDB VORTAC 072/64 | CDB VORTAC 073/67 | CDB VORTAC 050/131 | CDB VORTAC 050/131 | AKN VORTAC 198/142 ① | a. 276.700 b. 263.900 | FL240/FL290 | 3 OSS/DOTS Elmen- dorf AFB, AK | Anchorage ARCP-317.5E | As coordinated with ARTCC |
| ALASKA | N55°20.00' W160°55.00' | N55°19.00' W160°50.00' | N56°11.00' W159°17.00' | N56°11.00' W159°17.00' | N56°45.00' W159°09.00' | c. 1-3-1 d. 4/1 e. 32/95 | or as assigned by ATC | DSN 317-552-2406/5470 C907-552-2406/5470 | EXIT-354.0E | |
| | | | | CDB VORTAC 040/125 N56°27.00' W159°43.00' CDB VORTAC 047/75 N55°51.00' W160°49.00' CDB VORTAC 062/84 N55°35.00' W160°23.00' | | Top Rocc Primary 269.9 Sec- ondary 364.2/126.2 | | | | |
| (Southwest) | AKN VORTAC 198/142 N56°45.00' W159°09.00' KAYEF | CDB VORTAC 039/146 N56°41.00' W159°15.00' | CDB VORTAC 047/75 N55°51.00' W160°49.00' | CDB VORTAC 047/75 N55°51.00' W160°49.00' | CDB VORTAC 072/64 ① N55°20.00' W160°55.00' | | | | Anchorage ARCP-317.5W EXIT-317.5W | As coordinated with ARTCC |
| | | | | CDB VORTAC 062/84 N55°35.00' W160°23.00' CDB VORTAC 050/131 N56°11.00' W159°17.00' CDB VORTAC 040/125 N56°27.00' W159°43.00' | | | | | | |

ATC ASSIGNED AIRSPACE: N55°43.00' W161°33.00' to N56°56.00' W159°28.00' to N56°05.00' W158°10.00' to N55°05.00' W160°34.00' to beginning.

REMARKS: Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

① Or as assigned by ATC

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | | |
|---------------|--|---------------------------|---------------------------|---|---|--------------------------------|--------------------------|--|-------------------------|------------------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
| AR723 | EDF TACAN 264/85 | MCG VORTAC 128/84 | MCG VORTAC 186/56 | MCG VORTAC 186/56 | ANC VOR-DME 265/99 | a. 278.400 b. 263.900 | FL240/FL290 | 3 OSS/DOTS Elmen- dorf AFB, AK | Anchorage ARCP-317.5 | As coordinated with ARTCC |
| ALASKA | N61°35.00' W152°38.00' STOON MCG VORTAC 172/96 N61°23.00' W156°15.00' SLETE MCG VORTAC 134/44 N62°18.00' W154°54.00' CAROU | N61°46.00' W154°00.00' | N62°06.00' W156°28.00' | N62°06.00' MCG VORTAC 183/78 N61°45.00' W156°39.00' MCG VORTAC 148/88 N61°31.00' W154°55.00' MCG VORTAC 140/71 N61°51.00' W154°43.00' | N61°40.00' W153°29.00' MCG VORTAC 172/96 N61°23.00' W156°15.00' SLETE MCG VORTAC 134/44 ① N62°18.00' W154°54.00' CAROU | c. 1-4-1 d. 5/1 e. 33/96 | or as assigned by ATC | DSN 317-552-2406/5470 C907-552-2406/5470 | EXIT-379.1 | |

ATC ASSIGNED AIRSPACE: N62°35.00' W156°00.00' to N61°53.00' W153°21.00' to N61°25.00' W153°38.00' to N61°23.00' W156°24.00' to N61°37.00' W158°15.00' to N61°52.00' W158°06.00' to beginning.

REMARKS: Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

① Or as assigned by ATC

| | | | | | | | | | | |
|---------------|--|----------------------|-----------------------|---|---|--------------------------------|--------------------------|--|-------------------------|------------------------------|
| AR724 | SQA VOR-DME N61°05.91' | MCG VORTAC 162/98 | MCG VORTAC 194/126 | MCG VORTAC 194/126 | SQA VOR-DME N61°05.91' | a. 278.400 b. 263.900 | FL200/FL250 | 3 OSS/DOTS Elmen- dorf AFB, AK | Anchorage ARCP-317.5 | As coordinated with ARTCC |
| ALASKA | W155°38.07' MCG VORTAC 162/98 N61°19.00' W155°39.00' MCG VORTAC 172/96 N61°23.00' W156°15.00' SLETE | W155°39.00' | W157°57.00' | W157°57.00' MCG VORTAC 188/142 N60°50.00' W157°51.00' MCG VORTAC 171/123 N60°56.00' W156°19.00' MCG VORTAC 173/103 N61°16.00' W156°20.00' | W155°38.07' MCG VORTAC 172/96 N61°23.00' W156°15.00' SLETE | c. 1-4-1 d. 5/1 e. 33/96 | or as assigned by ATC | DSN 317-552-2406/5470 C907-552-2406/5470 | EXIT-379.1 | |

ATC ASSIGNED AIRSPACE: N61°16.00' W159°00.00' to N61°37.00' W158°15.00' to N61°23.00' W156°24.00' to N61°24.00' W155°10.00' to N60°52.00' W155°10.00' to N60°50.00' W156°00.00' to N60°30.00' W159°00.00' to beginning.

REMARKS: Due to frequency conflicts, AR724 will not be scheduled for use when AR723 is being utilized. Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|-----------------------------|--------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|--------------------------|-----------------------------------|--------------------------|------------------------------|
| AR725 (Northwest) | FAI VORTAC 275/60 | BTT VOR-DME 169/97 | BTT VOR-DME 209/109 | BTT VOR-DME 209/109 | GAL VOR-DME 030/40 ① | a. 283.800 b. 263.900 | FL240/FL290 | 3 OSS/DOTS Elmen- dorf AFB, AK | Anchorage ARCP-284.7W | As coordinated with ARTCC |
| ALASKA | N65°20.00' W150°01.00' | N65°19.00' W152°10.00' | N65°41.00' W154°52.00' | N65°41.00' W154°52.00' | N65°08.00' W155°31.00' | c. 1-1-2 d. 6/1 | or as assigned by ATC | DSN 317-552-2406/5470 | EXIT-317.5W | |
| | ROJAM FAI VORTAC 285/89 | | | BTT VOR-DME 205/127 | RUBBY | e. 50/113 | | C907-552-2406/5470 | | |
| | N65°47.00' W150°39.00' | | | N65°22.00' W155°07.00' | | Top Rocc Primary | | | | |
| | LAREE BTT VOR-DME 225/38 | | | BTT VOR-DME 182/115 | | 269.9 Sec- ondary | | | | |
| | N66°38.00' W153°00.00' | | | N65°07.00' W153°13.00' | | 364.2/126.2 | | | | |
| | | | | BTT VOR-DME 182/95 | | | | | | |
| | | | | N65°26.00' W152°56.00' | | | | | | |
| (Southeast) | GAL VOR-DME 030/40 | BTT VOR-DME 213/137 | BTT VOR-DME 182/115 | BTT VOR-DME 182/115 | FAI VORTAC 275/60 | | | | Anchorage ARCP-317.5E | As coordinated with ARTCC |
| | N65°08.00' W155°31.00' | N65°29.00' W155°55.00' | N65°07.00' W153°13.00' | N65°07.00' W153°13.00' | N65°20.00' W150°01.00' | | | | EXIT-284.7E | |
| | RUBBY | | | BTT VOR-DME 182/95 | ROJAM FAI VORTAC | | | | | |
| | | | | N65°26.00' W152°56.00' | 285/89 | | | | | |
| | | | | BTT VOR-DME 209/109 | N65°47.00' W150°39.00' | | | | | |
| | | | | N65°41.00' W154°52.00' | LAREE | | | | | |
| | | | | BTT VOR-DME 205/127 | BTT VOR-DME 225/38 ① | | | | | |
| | | | | N65°22.00' W155°07.00' | N66°38.00' W153°00.00' | | | | | |

ATC ASSIGNED AIRSPACE: N66°53.00' W156°00.00' to N66°32.00' W151°45.00' to N65°20.00' W150°00.00' to N65°00.00' W150°05.00' to N64°58.00' W155°19.00' along 40NM arc GAL VOR-DMR to N65°19.00' W156°00.00' to beginning.

REMARKS: Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

① Or as assigned by ATC

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | ASSIGNED ARTCC | TIMES OF OPERATION |
|-----------------------------|--|---------------------------|---------------------------|---|---|--------------------------------|--------------------------|--|--------------------------|------------------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | | |
| AR727 (Northwest) | MCG VORTAC 066/79 | GAL VOR-DME 110/138 | GAL VOR-DME 088/76 | GAL VOR-DME 088/76 | MCG VORTAC 066/79 | a. 270.200 b. 263.900 | FL240/FL290 | 3 OSS/DOTS Elmen- dorf AFB, AK | Anchorage ARCP-317.5W | As coordinated with ARTCC |
| ALASKA | N63°02.00' W152°44.00' | N63°07.00' W153°04.00' | N64°15.00' W154°04.00' | N64°15.00' W154°04.00' | N63°02.00' W152°44.00' | c. 1-2-1 d. 3/1 e. 31/94 | or as assigned by ATC | DSN 317-552-2406/5470 C907-552-2406/5470 | EXIT-317.5W | |
| | BEVAN GAL VOR-DME 091/40 N64°28.00' W155°22.00' | | | GAL VOR-DME 102/64 N64°07.00' W154°46.00' | BEVAN GAL VOR-DME 091/40 N64°28.00' | | | Top Rocc Primary 269.9 Sec- ondary 364.2/126.2 | | |
| | LATNA GAL VOR-DME 090/108 N63°59.00' W153°01.00' | | | GAL VOR-DME 116/111 N63°20.00' W154°04.00' | LATNA GAL VOR-DME 090/108 N63°59.00' | | | | | |
| | MINNA MCG VORTAC 058/33 N63°04.00' W154°26.00' | | | GAL VOR-DME 106/119 N63°28.00' W153°20.00' | MINNA MCG VORTAC 058/33 N63°04.00' | | | | | |
| | VEDDA GAL VOR-DME 073/85 N64°33.00' W153°31.00' | | | | VEDDA GAL VOR-DME 073/85 N64°33.00' | | | | | |
| | AMTEE | | | | W153°31.00' AMTEE | | | | | |

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN | | | ASSIGNED ARTCC | TIMES OF OPERATION |
|-------------|--|--|---|---|--|----------------|---------------------|-----------------|---|------------------------------|
| | | | | | | MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | | |
| (Southeast) | MCG VORTAC 066/79 N63°02.00' W152°44.00' | GAL VOR-DME 089/47 N64°26.00' W155°05.00' | GAL VOR-DME 116/111 N63°20.00' W154°04.00' | GAL VOR-DME 116/111 N63°20.00' W154°04.00' | MCG VORTAC 066/79 N63°02.00' W152°44.00' | | | | Anchorage ARCP-317.5E EXIT-317.5E | As coordinated with ARTCC |
| | BEVAN GAL VOR-DME 091/40 N64°28.00' W155°22.00' | | | GAL VOR-DME 106/119 N63°28.00' W153°20.00' | BEVAN GAL VOR-DME 091/40 N64°28.00' W155°22.00' | | | | | |
| | LATNA GAL VOR-DME 090/108 N63°59.00' W153°01.00' | | | GAL VOR-DME 088/76 N64°15.00' W154°04.00' | LATNA GAL VOR-DME 090/108 N63°59.00' W153°01.00' | | | | | |
| | MINNA MCG VORTAC 058/33 N63°04.00' W154°26.00' | | | GAL VOR-DME 102/64 N64°07.00' W154°46.00' | MINNA MCG VORTAC 058/33 N63°04.00' W154°26.00' | | | | | |
| | VEDDA GAL VOR-DME 073/85 N64°33.00' W153°31.00' | | | | VEDDA GAL VOR-DME 073/85 N64°33.00' W153°31.00' | | | | | |
| | AMTEE | | | | AMTEE | | | | | |

ATC ASSIGNED AIRSPACE: N64°34.00' W155°16.00' to N64°33.00' W153°00.00' to N64°00.00' W153°00.00' to N63°12.00' W151°31.00' to N63°00.00' W153°00.00' to N63°00.00' W154°20.00' to N64°10.00' W156°00.00' along 40NM arc GAL VOR-DMR to beginning.

REMARKS: Weather briefing support agencies should request mission forecast support from 17OWS at DSN 315-449-7924 at least 8 hours prior to mission brief time.

VFR HELICOPTER REFUELING TRACKS

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|---|---|---|---|--|---------------------------------------|---|---------------------------------|
| AR15V (North) | COF TACAN 159/18 N27°58.10' W80°28.00' | COF TACAN 133/15 N28°04.70' W80°24.30' | | COF TACAN 037/39 N28°46.50' W80°12.60' | a. 363.900 b. 252.800 c. N/R d. N/R e. 29/92 | 01000/04000 | 920 ROQ, CO, Patrick AFB, FL DSN 854-2297 C321-494-2297 | PATRICK RAPCON ARCP ① |
| | (South) | COF TACAN 037/39 N28°46.50' W80°12.60' | COF TACAN 041/33 N28°40.30' W80°14.20' | COF TACAN 159/18 N27°58.10' W80°28.00' | | | | PATRICK RAPCON ARCP ① |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. ① Airspace delegated to Patrick AFB RAPCON. Restricted to 1 FW and 301 RQS assigned units only. Protected airspace is 4 NM either side of centerline. Air refueling aircraft may include multiple tankers and receivers. | | | | | | | | |
| AR18V (North) | NKT TACAN 147/24 N34°36.00' W76°33.00' | NKT TACAN 110/30 N34°48.00' W76°18.00' | NKT TACAN 105/28 N34°49.50' W76°19.00' | NKT TACAN 086/39 N35°00.00' W76°06.00' | a. 311.575 b. 303.125 c. N/R d. 2/1 e. 29/92 | 04000/10000 | C.G. MCAS Cherry Point, NC DSN 582-4040/4041 | CHERRY POINT RATCF ARIP ① |
| | (South) | NKT TACAN 086/39 N35°00.00' W76°06.00' | NKT TACAN 105/28 N34°49.50' W76°19.00' | NKT TACAN 110/30 N34°48.00' W76°18.00' | NKT TACAN 147/24 N34°36.00' W76°33.00' | | | CHERRY POINT RATCF ARIP ① |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. ① Airspace delegated to Cherry Point MCAS RATCF. | | | | | | | | |
| AR40V (East) | N31°38.00' W82°40.80' | N31°38.00' W82°36.17' | | N31°38.00' W82°11.40' | a. 273.750 b. 374.225 c. N/R d. N/R e. N/R | 1000/4000 1000 AGL/4000 MSL | 23 OSS/OSOS Moody AFB, GA DSN 460-7831 C229-257-7831 | Jacksonville ARCP |
| | (West) | N31°38.00' W82°11.40' | N31°38.00' W82°16.08' | N31°38.00' W82°40.80' | | | | Jacksonville ARCP |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 347 Wg use only. Protected airspace is 4 NM either side of centerline. Air refueling aircraft may include multiple tankers and receivers. Hours of operation: Intermittent 1400-0700Z++ daily. Other times by NOTAM. For VFR use only. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|--------------------------|--------------------------|----------------------------|--------------------------|--|---------------------------------------|---|----------------------|
| AR41V (North) | N28°26.50' W82°55.00' | N28°31.00' W82°57.00' | | N29°02.00' W83°09.50' | a. 230.050 b. 260.200 c. N/R d. N/R e. N/R | 1000/4000 1000 AGL/4000 MSL | 347 Wg Det 1 RO MacDill AFB, FL DSN 968-4643 C813-828-4643 | Jacksonville ARCP |
| (South) | N29°02.00' W83°09.50' | N28°57.00' W83°09.50' | | N28°26.50' W82°55.00' | | | | Jacksonville ARCP |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 347 Wg use only. Protected airspace is 4 NM either side of centerline. Air refueling aircraft may include multiple tankers and receivers. Hours of operation: Intermittent 1400-0700Z++ daily. Other times by NOTAM. For VFR use only. | | | | | | | | |
| AR42V (East) | N30°15.00' W83°50.00' | N30°15.00' W83°44.00' | | N30°15.00' W83°10.00' | a. 239.725 b. 309.950 c. N/R d. N/R e. N/R | 1000/4000 1000 AGL/4000 MSL | 23 OSS/OSOS Moody AFB, GA DSN 460-7831 C229-257-7831 | Jacksonville ARIP |
| (West) | N30°15.00' W83°10.00' | N30°15.00' W83°16.00' | | N30°15.00' W83°50.00' | | | | Jacksonville ARIP |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 347 Wg use only. Protected airspace is 4 NM either side of centerline. Air refueling aircraft may include multiple tankers and receivers. Hours of operation: Intermittent 1400-0700Z++ daily. Other times by NOTAM. For VFR use only. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--|------------------------|----------------------|----------------------------|----------------------|---|------------------------|---|--------------------------------------|
| AR44V (Northeast) | BWG VORTAC 254/33 | BWG VORTAC 258/30 | | BWG VORTAC 019/36 | a. N/R b. N/R | 2500/5000 | 160th SOAR(A), Campbell AAF, KY | Indianapolis EXIT Memphis |
| DARK | N36°47.00' | N36°49.62' | | N37°29.60' | c. N/R | | DSN 635-1980/1757 | ARCP |
| HORSE EAST | W87°06.00' | W87°02.64' | | W86°11.80' | d. N/R e. N/R | | C270-798-1980/1757 | |
| | | | | | 160th SOAR(A) assigned frequencies. | | For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERA- TIONS - Intermittent by NOTAM, 24 hours in advance. | |
| (Southwest) | BWG VORTAC 021/41 ① | BWG VORTAC 019/36 | | BWG VORTAC 258/30 | | | | Indianapolis ARCP Memphis EXIT |
| | N37°33.79' | N37°29.60' | | N36°49.62' | | | | |
| | W86°06.39' | W86°11.80' | | W87°02.64' | | | | |
| | 6NMPT | | | | | | | |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR44V is designed to be used in either direction on a magnetic course of 046 degrees/226 degrees. The total length of the track is 60.7 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only. | | | | | | | | |
| ① FOR SW DIRECTION ONLY: If the track is to be flown from the NE to the SW, then the ARIP will be established during the tanker and receiver coordination but it is usually 6NM from the ARCP (6NMpt). | | | | | | | | |
| AR45V (Northeast) | BWG VORTAC 271/35 | BWG VORTAC 279/32 | | BWG VORTAC 008/40 | a. N/R b. N/R | 2500/5000 | 160th SOAR(A), Campbell AAF, KY | Indianapolis EXIT Memphis |
| DARK | N36°56.00' | N36°58.95' | | N37°35.20' | c. N/R | | DSN 635-1980/1757 | ARCP |
| HORSE WEST | W87°11.50' | W87°07.13' | | W86°19.70' | d. N/R e. N/R | | C270-798-1980/1757 | |
| | | | | | 160th SOAR(A) assigned frequencies. | | For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERA- TIONS - Intermittent by NOTAM, 24 hours in advance. | |
| (Southwest) | BWG VORTAC 011/45 ① | BWG VORTAC 008/40 | | BWG VORTAC 279/32 | | | | Indianapolis ARCP Memphis EXIT |
| | N37°39.31' | N37°35.20' | | N36°58.95' | | | | |
| | W86°14.19' | W86°19.70' | | W87°07.13' | | | | |
| | 6NMPT | | | | | | | |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR45V is designed to be used in either direction on a magnetic course of 047 degrees/227 degrees. The total length of the track is 57 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only. | | | | | | | | |
| ① FOR SW DIRECTION ONLY: If the track is to be flown from the NE to the SW, then the ARIP will be established during the tanker and receiver coordination but it is usually 6NM from the ARCP (6NMpt). | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---------------------------|--|--|-------------------------|--|---|---------------------|---|-------------------------|
| AR46V (North) | GHM VORTAC 171/32 ① | GHM VORTAC 172/26 | | GHM VORTAC 019/28 | a. N/R b. N/R | 2500/4500 | 160th SOAR(A), Campbell AAF, KY | Memphis ARCP |
| NIGHT-STALKER EAST | N35°18.02' W87°22.73' 6NMPT | N35°24.00' W87°22.00' | | N36°16.42' W87°15.57' | c. N/R d. N/R e. N/R | | DSN 635-1980/1757 C270-798-1980/1757 | EXIT |
| | | | | | 160th SOAR(A) assigned frequencies. | | For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERA- TIONS - Intermittent by NOTAM, 24 hours in advance. | |
| (South) | GHM VORTAC 017/32 N36°20.80' W87°15.00' | GHM VORTAC 019/28 N36°16.42' W87°15.57' | | GHM VORTAC 172/26 N35°24.00' W87°22.00' | | | | Memphis ARCP EXIT |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR46V is designed to be used in either direction on a magnetic course of 007 degrees/187 degrees. The total length of the track is 57 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.

① FOR NORTH DIRECTION ONLY: If the track is to be flown from the S to the N, then the ARIP will be established during the tanker and receiver coordination but it is usually 6NM from the ARCP (6NMpt).

| | | | | | | | | |
|---------------------------|--|--|--|--|---|-----------|---|-------------------------|
| AR47V (North) | GHM VORTAC 194/37 ① | GHM VORTAC 199/32 | | GHM VORTAC 350/27 | a. N/R b. N/R | 2500/4500 | 160th SOAR(A), Campbell AAF, KY | Memphis ARCP |
| NIGHT-STALKER WEST | N35°14.52' W87°40.23' 6NMPT | N35°20.50' W87°39.50' | | N36°16.85' W87°32.49' | c. N/R d. N/R e. N/R | | DSN 635-1980/1757 C270-798-1980/1757 | EXIT |
| | | | | | 160th SOAR(A) assigned frequencies. | | For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERA- TIONS - Intermittent by NOTAM, 24 hours in advance. | |
| (South) | GHM VORTAC 352/31 N36°20.80' W87°32.00' | GHM VORTAC 350/27 N36°16.85' W87°32.49' | | GHM VORTAC 199/32 N35°20.50' W87°39.50' | | | | Memphis ARCP EXIT |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR47V is designed to be used in either direction on a magnetic course of 186 degrees/006 degrees. The total length of the track is 60.5 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.

① FOR NORTH DIRECTION ONLY: If the track is to be flown from the S to the N, then the ARIP will be established during the tanker and receiver coordination but it is usually 6NM from the ARCP (6NMpt).

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--|-----------------------------------|--------------------------|----------------------------|--------------------------|---|------------------------|---|-------------------------|
| AR48V (Northwest) | CCT VORTAC 224/37 | CCT VORTAC 230/37 | | CCT VORTAC 286/60 | a. N/R b. N/R | 3000/5000 | 160th SOAR(A), Campbell AAF, KY | Memphis ARCP |
| GREEN EAST | N36°56.00' W87°48.50' | N36°59.08' W87°50.95' | | N37°39.50' W88°28.40' | c. N/R d. N/R e. N/R | | DSN 635-1980/1757 C270-798-1980/1757 | EXIT |
| | | | | | 160th SOAR(A) assigned frequencies. | | For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERA- TIONS - Intermittent by NOTAM, 24 hours in advance. | |
| (Southeast) | CCT VORTAC 291/65 ① | CCT VORTAC 286/60 | | CCT VORTAC 230/37 | | | | Memphis ARCP EXIT |
| | N37°44.32' W88°32.92' 6NMPT | N37°39.50' W88°28.40' | | N36°59.08' W87°50.95' | | | | |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR48V is designed to be used in either direction on a magnetic course of 144 degrees/324 degrees. The total length of the track is 54 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only. | | | | | | | | |
| ① FOR SE DIRECTION ONLY: If the track is to be flown from the NW to the SE, then the ARIP will be established during the tanker and receiver coordination but it is usually 6NM from the ARCP (6NMpt). | | | | | | | | |
| AR49V (Northwest) | CCT VORTAC 226/42 | CCT VORTAC 232/42 | | CCT VORTAC 283/69 | a. N/R b. N/R | 3000/5000 | 160th SOAR(A), Campbell AAF, KY | Memphis ARCP |
| GREEN WEST | N36°54.00' W87°54.00' | N36°57.17' W87°57.40' | | N37°38.00' W88°40.50' | c. N/R d. N/R e. N/R | | DSN 635-1980/1757 C270-798-1980/1757 | EXIT |
| | | | | | 160th SOAR(A) assigned frequencies. | | For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERA- TIONS - Intermittent by NOTAM, 24 hours in advance. | |
| (Southeast) | CCT VORTAC 287/74 ① | CCT VORTAC 283/69 | | CCT VORTAC 232/42 | | | | Memphis ARCP EXIT |
| | N37°42.58' W88°45.40' 6NMPT | N37°38.00' W88°40.50' | | N36°57.17' W87°57.40' | | | | |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR49V is designed to be used in either direction on a magnetic course of 140 degrees/320 degrees. The total length of the track is 57.3 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only. | | | | | | | | |
| ① FOR SE DIRECTION ONLY: If the track is to be flown from the NW to the SE, then the ARIP will be established during the tanker and receiver coordination but it is usually 6NM from the ARCP (6NMpt). | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--|-----------------------------------|--------------------------|----------------------------|--------------------------|---|------------------------|---|------------------------------|
| AR53V (North) | SSI VORTAC 128/16 ① | SSI VORTAC 104/19 | | SAV VORTAC 175/30 | a. N/R b. N/R | 1500/4000 | 160th SOAR(A), SAVANAH, GA | Jacksonville ARCP |
| WARDOG SOUTH | N30°54.12' W81°11.46' 6NMPT | N31°00.00' W81°10.00' | | N31°40.00' W81°00.00' | c. N/R d. N/R e. N/R | | DSN 635-1980/1757 C270-798-1980/1757 | EXIT |
| | | | | | 160th SOAR(A) assigned frequencies. | | For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERA- TIONS - Intermittent by NOTAM, 24 hours in advance. | |
| (South) | SAV VORTAC 171/24 | SAV VORTAC 175/30 | | SSI VORTAC 104/19 | | | | Jacksonville ARCP EXIT |
| | N31°45.98' W80°59.26' | N31°40.00' W81°00.00' | | N31°00.00' W81°10.00' | | | | |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR53V is designed to be used in either direction on a magnetic course of 192 degrees/012 degrees. The total length of the track is 46 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only. | | | | | | | | |
| ① FOR N DIRECTION ONLY: If the track is to be flown from the S to the N, then the ARIP will be established during the tanker and receiver coordination but it is usually 6NM from the ARCP (6NMpt). | | | | | | | | |
| AR54V (Northwest) | SAV VORTAC 350/13 | SAV VORTAC 347/19 | | SAV VORTAC 343/62 | a. N/R b. N/R | 2500/4500 | 160th SOAR(A), SAVANAH, GA | Jacksonville ARCP |
| WARDOG NORTH | N32°22.00' W81°11.00' | N32°27.40' W81°14.00' | | N33°07.00' W81°36.00' | c. N/R d. N/R e. N/R | | DSN 635-1980/1757 C270-798-1980/1757 | EXIT |
| | | | | | 160th SOAR(A) assigned frequencies. | | For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERA- TIONS - Intermittent by NOTAM, 24 hours in advance. | |
| (Southeast) | SAV VORTAC 346/68 ① | SAV VORTAC 343/62 | | SAV VORTAC 347/19 | | | | Jacksonville ARCP EXIT |
| | N33°12.44' W81°39.05' 6NMPT | N33°07.00' W81°36.00' | | N32°27.40' W81°14.00' | | | | |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR54V is designed to be used in either direction on a magnetic course of 161 degrees/341 degrees. The total length of the track is 49.6 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only. | | | | | | | | |
| ① FOR SE DIRECTION ONLY: If the track is to be flown from the NW to the SE, then the ARIP will be established during the tanker and receiver coordination but it is usually 6NM from the ARCP (6NMpt). | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|-----------------------------|------------------------|----------------------|----------------------------|----------------------|---|------------------------|---|------------------------------|
| AR55V (Northeast) | TAY VORTAC 259/26 ① | TAY VORTAC 264/20 | | SSI VORTAC 259/24 | a. N/R b. N/R | 2000/4000 | 160th SOAR(A), SAVANAH, GA | Jacksonville ARCP |
| WARDOG | N30°23.77' | N30°26.70' | | N30°56.40' | c. N/R | | DSN 635-1980/1757 | EXIT |
| WEST | W83°02.06' 6NMPT | W82°56.00' | | W81°53.60' | d. N/R e. N/R | | C270-798-1980/1757 | |
| | | | | | 160th SOAR(A) assigned frequencies. | | For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERA- TIONS - Intermittent by NOTAM, 24 hours in advance. | |
| (Southwest) | SSI VORTAC 264/18 | SSI VORTAC 259/24 | | TAY VORTAC 264/20 | | | | Jacksonville ARCP EXIT |
| | N30°59.40' | N30°56.40' | | N30°26.70' | | | | |
| | W81°47.40' | W81°53.60' | | W82°56.00' | | | | |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. This AR55V is designed to be used in either direction on a magnetic course of 066 degrees/246 degrees. The total length of the track is 67.5 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the assigned airspace and may include multiple tankers and/or receivers. VFR use only.

① FOR NE DIRECTION ONLY: If the track is to be flown from the SW to the NE, then the ARIP will be established during the tanker and receiver coordination but it is usually 6NM from the ARCP (6NMpt).

| | | | | | | | | |
|------------------------|---------------------|---------------------|--|-----------------------|-------------------------------------|------------|---|--|
| AR68V (East) | HTO VORTAC 121/6 | HTO VORTAC 187/4 | | DPK VOR-DME 142/16 | a. N/R b. N/R | 00500/5500 | 106 OSF/Tactics, NY ANG, Francis S Gabreski Arpt, NY | |
| | N40°53.32' | N40°50.86' | | N40°37.00' | c. N/R | | DSN 456-7320 | |
| | W72°11.39' | W72°18.47' | | W73°02.00' | d. N/R e. N/R | | C631-723-7320 | |
| | | | | | 106 RQW assigned frequencies. | | Use by all other Non 106 RQW units requires prior approval by and coordination with 106 OSF/Tactics. | |
| (West) | HTO VORTAC 228/9 | HTO VORTAC 187/4 | | SEY VOR-DME 253/12 | | | | |
| | N40°48.07' | N40°50.86' | | N41°03.50' | | | | |
| | W72°25.45' | W72°18.47' | | W71°48.40' | | | | |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Air refueling airspace is 1 NM North of centerline and 4 NM South of centerline. The edge of Gabreski Airport (KFOK) class D airspace lies just North of the track. Do not enter KFOK class D without permission from Gabreski Tower on 125.3 VHF/236.6 UHF. During the summer months heavy VFR traffic transits the beach areas that run just North of the entire track. Within 4 NM North of the track are KHTO (East Hampton airport) and KMTP (Montauk airport), which are non towered airports on the eastern part of Long Island. The track is for use by the 106 RQW, all others PPR. Times of Operation are Continuous.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---------------|-------------|-------------|----------------------------|-----------------------------------|---------|------------------------|--|---|
| AR117V | ONM VORTAC | ONM VORTAC | ONM VORTAC | ONM VORTAC | a. N/R | 07000/09000 | 58 OSS/DOO, Kirtland AFB, NM DSN 263-5979/5888/5701 C505-853-5979/5888/5701 | Albuquerque ARCP-128.8E/307.2E EXIT-128.8E/307.2E |
| | 334/30 | 334/24 | N34°20.33' | 165/20 | b. N/R | | | |
| | N34°49.00' | N34°43.70' | W106°49.23' | N34°00.00' | c. N/R | | | |
| | W106°57.80' | W106°55.90' | | W106°48.00' | d. N/R | | | |
| | | | | | e. N/R | | | |
| | | | | 58 SOW assigned frequencies | | | | |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 58 SOW use only. Protected airspace is 4 NM either side of centerline. Air refueling may be conducted anywhere within the confines of the protected airspace and may include multiple tankers and/or receivers. For VFR use only.

| | | | | | | | | |
|--------------------------|-------------|-------------|-------------|-----------------------------------|--------|-------------|--|---------------------|
| AR125V (North) | ABQ VORTAC | ABQ VORTAC | ONM VORTAC | ONM VORTAC | a. N/R | 00500/03000 | 58 OSS/DOO, Kirtland AFB, NM DSN 263-5979/5888/5701 C505-853-5979/5888/5701 | Albuquerque ARCP |
| | 257/37 | 248/35 | 275/26 | 234/16 | b. N/R | | | |
| | N35°00.70' | N34°55.00' | N34°27.30' | N34°13.45' | c. N/R | | | |
| | W107°33.50' | W107°31.17' | W107°20.20' | W107°06.17' | d. N/R | | | |
| | | | | | e. N/R | | | |
| | | | | 58 SOW assigned frequencies | | | | |

| | | | | | | | | |
|---------|-------------|-------------|-------------|-------------|--|--|--|---------------------|
| (South) | ONM VORTAC | ONM VORTAC | ONM VORTAC | ABQ VORTAC | | | | Albuquerque ARCP |
| | 234/16 | 253/18 | 275/26 | 257/37 | | | | |
| | N34°13.45' | N34°18.12' | N34°27.30' | N35°00.70' | | | | |
| | W107°06.17' | W107°10.80' | W107°20.20' | W107°33.50' | | | | |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 58 SOW use only. Air refueling airspace is 4 NM either side of centerline and around both entry and exit points. Air refueling may include multiple tankers and/or receivers.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---|--|--|----------------------------|--|--|---|--|---|
| AR126V (North) | CNX VORTAC 303/22 N34°38.00' W105°59.00' | CNX VORTAC 293/19 N34°33.00' W105°59.00' | | CNX VORTAC 193/35 N33°49.00' W105°59.00' | a. N/R b. N/R c. N/R d. N/R e. N/R | 01000/08500 1000 AGL /8500 MSL | 49 OSS/OSOS Holloman AFB, NM DSN 572-3536 C505-572-3536 | Albuquerque EXIT-257.6 ARIP-257.6 |
| | | | | | Use 49 FW assigned frequencies | | | |
| (South) | CNX VORTAC 193/35 N33°49.00' W105°59.00' | CNX VORTAC 197/31 N33°54.00' W105°59.00' | | CNX VORTAC 303/22 N34°38.00' W105°59.00' | | | | Albuquerque EXIT-257.6 ARIP-257.6 |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Air refueling airspace is 4 NM west and 3 NM east of centerline from entry to exit. Monitor 243.0. Notify Albuquerque (ABQ) ARTCC Sector 23 prior to commencement and after termination of operations. If no contact with ABQ ARTCC on 257.6, request Holloman RAPCON to notify ABQ. | | | | | | | | |
| AR127V (North) | PIO VOR-DME 119/36 N32°08.00' W104°46.00' | PIO VOR-DME 116/32 N32°12.50' W104°48.50' | | PIO VOR-DME 345/25 N32°56.00' W105°20.00' | a. N/R b. N/R c. N/R d. N/R e. N/R | 01000/10000 1000 AGL/10,000 MSL | 49 OSS/OSOS Holloman AFB, NM DSN 572-3536 C505-572-3536 | Albuquerque EXIT-257.6 ARIP-257.6 |
| | | | | | Use 49 FW assigned frequencies | | | |
| (South) | PIO VOR-DME 345/25 N32°56.00' W105°20.00' | PIO VOR-DME 352/20 N32°51.90' W105°17.20' | | PIO VOR-DME 119/36 N32°08.00' W104°46.00' | | | | Albuquerque EXIT-257.6 ARIP-257.6 |
| REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Air refueling airspace is 5 NM left and 3 NM right of centerline. Monitor 243.0. Notify Albuquerque (ABQ) ARTCC Sector 23 prior to commencement and after termination of operations. If no contact with ABQ ARTCC on 257.6, request Holloman RAPCON to notify ABQ. | | | | | | | | |

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|-----------------------------|-------------|-------------|----------------------------|-------------|--|------------------------|--|-------------------|
| AR135V (North) | N31°54.20' | N31°59.67' | ① | N32°22.03' | a. 238.500 | 05000 | 563 OSS/OSOS | Albuquerque |
| | W111°23.42' | W111°26.34' | ② | W111°38.17' | b. 233.725 c. N/R d. N/R e. 31/94 | ③ | Davis-Monthan AFB, AZ DSN 228-4938 C520-228-4938 | ARCP |
| 79 RQS assigned frequencies | | | | | | | | |
| (South) | N32°22.03' | N32°16.51' | ① | N31°54.20' | | | | Albuquerque |
| | W111°38.17' | W111°35.24' | ② | W111°23.42' | | | | ARCP |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise Prescott Radio (on 122.2), 5 minutes prior to entering and upon exiting.

- ① AR135V is designed to be used in either direction on a magnetic course of 324.4° or 144.4°. The total length of the track is 30.5 NM, the width is 2 NM either side of centerline. VFR use only.
- ② CAUTION: AR 135V penetrates normal route width of VR239/244. Monitor 379.4. See and Avoid concept is paramount.
- ③ Refueling altitudes are normally below Albuquerque Center and beyond Tucson TRACON radar advisory service capabilities.
- ④ Continuous times of operation.

| | | | | | | | | |
|-----------------------------|-------------|-------------|--------|-------------|--|------|--|-------------|
| AR136V (North) | N32°08.17' | N32°13.35' | ① | N33°00.21' | a. 233.725 | 6500 | 563 OSS/OSOS | Albuquerque |
| | W110°13.88' | W110°17.38' | ② ③ | W110°48.76' | b. 238.500 c. N/R d. N/R e. 30/93 | ④ | Davis-Monthan AFB, AZ DSN 228-4938 C520-228-4938 | ARCP ⑥ |
| 79 RQS assigned frequencies | | | | | | | | |

| | | | | | | | | |
|---------|-------------|-------------|--------|-------------|--|--|--|-------------|
| (South) | N33°00.21' | N32°54.98' | ① | N32°08.17' | | | | Albuquerque |
| | W110°48.76' | W110°45.24' | ② ③ | W110°13.88' | | | | ARCP ⑥ |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise Prescott Radio (on 122.4 or 122.3), 5 minutes prior to entering and upon exiting.

- ① AR136V is designed to be used in either direction on a magnetic course of 319.5° or 139.5°. The total length of the track is 59.7 NM, the width is 2 NM either side of centerline. VFR use only.
- ② CAUTION: Rapidly rising terrain.
- ③ San Manuel airport (E77) may be used by fire fighting aircraft during fire season (Apr-Sep). Call Arizona State Fire Dispatch at C800-309-7081.
- ④ Refueling altitudes are normally below Albuquerque Center radar advisory service capabilities.
- ⑤ Continuous times of operation.
- ⑥ CAUTION: AR136V crosses numerous MTR's. See and Avoid concept is paramount. Monitor 379.4 for VR239 deconfliction calls.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--------------------------|-----------------------------|---------------------------|----------------------------|---------------------------|--|------------------------|---|-------------------|
| AR137V (North) | ① N34°12.27' W113°58.28' | N34°18.23' W113°59.20' | ② ③ | N34°52.65' W114°03.47' | a. 233.725 b. 238.500 c. N/R d. N/R e. 30/93 | 4500/6500 ④ | 563 OSS/OSOS Davis-Monthan AFB, AZ DSN 228-4059 C520-228-4059 ⑤ | Albuquerque ARIP |
| (South) | ① N34°52.65' W114°03.47' | N34°46.68' W114°02.75' | ② ③ | N34°12.27' W113°58.28' | | | | Albuquerque ARIP |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise Prescott Radio (122.1R), 5 minutes prior to entering and upon exiting.

① AR137V is designed to be used in either direction on a magnetic course of 341° or 161°. The total length of the track is 40.5 NM, the width is 4 NM either side of centerline. Air Refueling may be conducted anywhere within the confines of the protected airspace and may include multiple tankers and/or receivers. VFR use only.

② CAUTION: AR137V crosses numerous MTR's. See and Avoid concept is paramount.

③ CAUTION: Rapidly rising terrain.

④ Refueling altitudes are normally below Albuquerque Center radar advisory service capabilities.

⑤ Continuous times of operations.

| | | | | | | | | |
|--------------------------|---------------------------|---|---|---------------------------|--|------------------|---|----------------------|
| AR225V (North) | N37°11.00' W122°23.00' | ① | ② | N36°47.00' W122°20.00' | a. N/R b. N/R c. N/R d. N/R e. N/R Use 129 RQW assigned frequencies | 01000/02000 ③ | 129 RQW Moffett Federal Afld, CA DSN 359-9356/7 C650-603-9356/7 ④ | Oakland ARCP ⑤ |
| (South) | N36°47.00' W122°20.00' | ① | ② | N37°11.00' W122°23.00' | | | | Oakland ARCP ⑤ |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting.

① Normally 6 NM downtrack of the ARIP.

② AR225V is designed to be used in either direction on a magnetic course of 155 degree or 335 degree. The northern end of the track is overhead Pigeon Point Lighthouse. The southern end of the track is a geographical coordinate totally over water. The length of the route is 26 miles. The width is 2 NM either side of the centerline. WARNING: During night operations, make all turns to the west of the track centerline. This requirement assures positive terrain avoidance.

③ Air traffic and VFR weather conditons permitting air refueling pilots are requested to maintain a minimum of 2000' AWL while conducting refueling training over the Monterey Bay National Marine Sanctuary.

④ Restricted to H-60 and C-130 refueling operations. May include multiple tankers/or receivers. Continuous times of operations.

⑤ Refueling altitudes are normally below Oakland Center radar advisory service capabilities. Traffic permitting, Monterey Approach Control 127.15/302.0 may provide radar advisory service.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|--------|-------------|-------------|----------------------------|-------------|---------------------------------------|------------------------|----------------------------|-------------------|
| AR230V | LAS VORTAC | LAS VORTAC | | LAS VORTAC | a. N/R | 06000/08000 | 57 OSS/OSOS Nellis AFB, NV | Los Angeles |
| | 025/46 | 025/52 | | 025/81 | b. N/R | | DSN 682-2040 | ARIP-124.2/343.6 |
| | N36°40.00' | N36°44.75' | | N37°07.00' | c. N/R | | C702-652-2040 | ① |
| | W114°31.50' | W114°26.50' | | W114°02.00' | d. N/R | | | |
| | | | | | e. N/R | | | |
| | | | | | Use 66 ARS assigned frequencies | | | |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 66 ARS use only. Protected airspace is 4 NM either side of centerline. Air refueling may be conducted anywhere within the confines of the protected airspace and may include multiple tankers and/or receivers. For VFR use only.

① Advise Los Angeles ARTCC on 124.2/343.6 prior to entry.

| | | | | | | | | |
|--------|-------------|-------------|--|-------------|---------------------------------------|-------------|----------------------------|-------------|
| AR231V | BTY VORTAC | BTY VORTAC | | BTY VORTAC | a. N/R | 06000/08000 | 57 OSS/OSOS Nellis AFB, NV | Los Angeles |
| | 124/42 | 124/36 | | 124/5 | b. N/R | | DSN 682-2040 | ARCP |
| | N36°15.00' | N36°20.00' | | N36°44.00' | c. N/R | | C702-652-2040 | |
| | W116°09.50' | W116°14.75' | | W116°40.75' | d. N/R | | | |
| | | | | | e. N/R | | | |
| | | | | | Use 66 ARS assigned frequencies | | | |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Restricted to 66 ARS use only. Protected airspace is 4 NM either side of centerline. Air refueling may be conducted anywhere within the confines of the protected airspace and may include multiple tankers and/or receivers. For VFR use only.

| | | | | | | | | |
|-------------------|-------------|-------------|---|-------------|--|--------------|-------------------------|-------------------|
| AR242V (North) | N36°56.00' | N36°51.00' | ① | N36°28.00' | a. N/R | 00500/04500 | 129 RQW Moffett Federal | Stockton APP CON |
| | W120°56.00' | W120°53.00' | | W120°41.00' | b. N/R | ② | Afld, CA | ARIP-120.95/294.5 |
| | | | | | c. N/R | | DSN 359-9356/7 | ③ |
| | | | | | d. N/R | 500 AGL/4500 | C650-603-9356/7 | |
| | | | | | e. N/R | MSL | | |
| | | | | | Use 129 RQW assigned frequencies | | | |

| | | | | | | | | |
|---------|-------------|-------------|---|-------------|--|--|--|-------------------|
| (South) | N36°56.00' | N36°33.00' | ① | N36°56.00' | | | | Stockton APP CON |
| | W120°56.00' | W120°44.00' | | W120°56.00' | | | | ARIP-120.95/294.5 |
| | | | | | | | | ③ |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting.

① AR242V is designed to be used in either direction on a magnetic course of 141 degree or 321 degree. The northern end of the track is 9 NM south-southwest of Los Banos, CA and about 3 NM west of Interstate 5. The southern end of the track is 28 NM west of Five Pointes, CA. The total length of the route is 32 NM. The width is 2 NM either side of the centerline.

② Restricted to H-60 helicopter and C-130 refueling operations. May include multiple tankers and/or receivers. Continuous times of operations.

③ Refueling altitudes are normally below Stockton Approach Control radar advisory service capabilities.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---------------|-------------|-------------|----------------------------|-------------|----------------------------------|------------------------|-------------------------|-------------------|
| AR243V | N36°23.00' | N36°18.00' | ① | N35°40.00' | a. N/R | 00500/05500 | 129 RQW Moffett Federal | Oakland |
| (North) | W121°00.00' | W120°56.00' | | W120°22.00' | b. N/R | ② | Afld, CA | ARCP |
| | | | | | c. N/R | | DSN 359-9356/7 | ③ |
| | | | | | d. N/R | 500 AGL/5500 | C650-603-9356/7 | |
| | | | | | e. N/R | MSL | | |
| | | | | | Use 129 RQW assigned frequencies | | | |
| (South) | N35°40.00' | N35°45.00' | ① | N36°23.00' | | | | Oakland |
| | W120°22.00' | W120°26.00' | | W121°00.00' | | | | ARCP |
| | | | | | | | | ③ |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting.

① AR243V is designed to be used in either direction on a magnetic course of 128 degree or 308 degree. The northern end of the track is 12 NM northeast of King City, CA. The southern end of the track is 1 NM northeast of Shandon, CA. The total length of the route is 54 NM, the width is 2 NM either side of centerline.

② Restricted to H-60G and C-130 refueling operations. May include multiple tankers and/or receivers. Continuous time of operations.

③ Refueling altitudes are normally below Oakland Center radar advisory service capabilities.

| | | | | | | | | |
|----------------|-------------|-------------|--|-------------|--|-------------|-------------------------|---------|
| AR304AV | BTG VORTAC | BTG VORTAC | | BTG VORTAC | a. N/R | 03100/05000 | 129 RQW Moffett Federal | Seattle |
| | 170/30 | 169/36 | | 164/75 | b. N/R | | Afld, CA | ARCP |
| | N45°15.00' | N45°09.00' | | N44°30.00' | c. N/R | | DSN 359-9356/7 | |
| | W122°44.00' | W122°44.00' | | W122°44.00' | d. N/R | | C650-603-9356/7 | |
| | | | | | e. N/R | | | |
| | | | | | a. Prim Freq 125.8; b. Backup Freq 291.7 | | | |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Flight direction North to South. Protected airspace is 4 NM either side of centerline. Track length is 45 NM. Restricted to H-60 and C-130 refueling operations. Air refueling may include multiple tankers and/or receivers. Continuous times of operations. Contact Seattle ARTCC for radar advisories and flight following. Participants will communicate with ATC during refueling operations.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|---------|-------------|-------------|-------------------------|-------------|---------|---------------------|-------------------------|----------------|
| AR304BV | BTG VORTAC | BTG VORTAC | | BTG VORTAC | a. N/R | 03100/05000 | 129 RQW Moffett Federal | Seattle |
| | 164/75 | 164/69 | | 170/30 | b. N/R | | Afld, CA | ARCP |
| | N44°30.00' | N44°36.00' | | N45°15.00' | c. N/R | | DSN 359-9356/7 | |
| | W122°44.00' | W122°44.00' | | W122°44.00' | d. N/R | | C650-603-9356/7 | |
| | | | | | e. N/R | | | |

a. Prim Freq
125.8; b. Backup
Freq 291.7

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Flight direction South to North. Protected airspace is 4 NM either side of centerline. Track length is 45 NM. Restricted to H-60 and C-130 refueling operations. Air refueling may include multiple tankers and/or receivers. Continuous times of operations. Contact Seattle ARTCC for radar advisories and flight following. Participants will communicate with ATC during refueling operations.

| | | | | | | | | |
|---------|-------------|-------------|--|-------------|--------|---------------|-------------------------|--------------|
| AR305AV | DSD VORTAC | DSD VORTAC | | DSD VORTAC | a. N/R | 01500/06000 | 129 RQW Moffett Federal | Seattle ARIP |
| | 342/14 | 342/20 | | 342/76 | b. N/R | | Afld, CA | |
| | N44°29.18' | N44°35.17' | | N45°31.13' | c. N/R | 1500 AGL/6000 | DSN 359-9356/7 | |
| | W121°18.15' | W121°18.15' | | W121°18.15' | d. N/R | MSL | C650-603-9356/7 | |
| | | | | | e. N/R | | | |

a. Prim Freq
128.15; b.
Backup Freq
288.1

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Flight direction South to North. Protected airspace is 4 NM either side of centerline. Track length is 62 NM. Restricted to H-60 and C-130 refueling operations. Air refueling may include multiple tankers and/or receivers. Continuous times of operations. South of lat. N45-00-00 remain at or above 4500'. Participants will contact Seattle ARTCC prior to entering Class E airspace.

| | | | | | | | | |
|---------|-------------|-------------|--|-------------|--------|---------------|-------------------------|---------|
| AR305BV | DSD VORTAC | DSD VORTAC | | DSD VORTAC | a. N/R | 01500/06000 | 129 RQW Moffett Federal | Seattle |
| | 342/76 | 342/70 | | 342/14 | b. N/R | | Afld, CA | |
| | N45°31.13' | N45°25.13' | | N44°29.18' | c. N/R | 1500 AGL/6000 | DSN 359-9356/7 | |
| | W121°18.15' | W121°18.15' | | W121°18.15' | d. N/R | MSL | C650-603-9356/7 | |
| | | | | | e. N/R | | | |

a. Prim Freq
128.15; b.
Backup Freq
288.1

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Flight direction North to South. Protected airspace is 4 NM either side of centerline. Track length is 62 NM. Restricted to H-60 and C-130 refueling operations. Air refueling may include multiple tankers and/or receivers. Continuous times of operations. South of lat. N45-00-00 remain at or above 4500'. Participants will contact Seattle ARTCC prior to entering Class E airspace.

| NUMBER | ARIP | ARCP | NAVIGATION CHECK POINTS | EXIT | CR PLAN | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC |
|----------------|-------------|-------------|----------------------------|-------------|--|------------------------|-------------------------|-------------------|
| AR306AV | LTJ VOR-DME | LTJ VOR-DME | | LTJ VOR-DME | a. N/R | 01000/05000 | 129 RQW Moffett Federal | Seattle ARIP |
| | 145/10 | 145/16 | | 145/47 | b. N/R | | Afld, CA | |
| | N45°33.12' | N45°27.28' | | N44°57.20' | c. N/R | 1000 AGL /5000 | DSN 359-9356/7 | |
| | W121°02.53' | W121°00.47' | | W120°49.92' | d. N/R | MSL | C650-603-9356/7 | |
| | | | | | e. N/R | | | |
| | | | | | a. Prim Freq 128.15; Backup Freq 288.1 | | | |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Flight direction North to South. Protected airspace is 4 NM either side of centerline. Track length is 37 NM. Restricted to H-60 and C-130 refueling operations. Air refueling may include multiple tankers and/or receivers. Continuous times of operations. Participants will contact Seattle ARTCC prior to entering Class E airspace.

| | | | | | | | | |
|----------------|-------------|-------------|--|-------------|--|----------------|-------------------------|---------|
| AR306BV | LTJ VOR-DME | LTJ VOR-DME | | LTJ VOR-DME | a. N/R | 01000/05000 | 129 RQW Moffett Federal | Seattle |
| | 145/47 | 145/41 | | 145/10 | b. N/R | | Afld, CA | ARCP |
| | N44°57.20' | N45°03.02' | | N45°33.12' | c. N/R | 1000 AGL /5000 | DSN 359-9356/7 | |
| | W120°49.92' | W120°51.93' | | W121°02.53' | d. N/R | MSL | C650-603-9356/7 | |
| | | | | | e. N/R | | | |
| | | | | | a. Prim Freq 128.15; b. Backup Freq 288.1 | | | |

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting. Flight direction South to North. Protected airspace is 4 NM either side of centerline. Track length is 37 NM. Restricted to H-60 and C-130 refueling operations. Air refueling may include multiple tankers and/or receivers. Continuous times of operations. Participants will contact Seattle ARTCC prior to entering Class E airspace.

VFR HELICOPTER REFUELING ANCHOR

| NUMBER | ENTRY POINTS | ARIP | ANCHOR POINT | ANCHOR PATTERN | EXIT POINTS | CR PLAN MILITARY RADAR | REFUELING ALTITUDES | SCHEDULING UNIT | ASSIGNED ARTCC | TIMES OF OPERATION |
|--------|--------------|-------------|--------------|----------------|---|---------------------------|---------------------|------------------|----------------------|--------------------|
| AR662V | N36°35.00' | PXN VORTAC | PXN VORTAC | ① | N36°40.00' | a. N/R | 01200/03700 | 129 RQW Moffett | NAS Lemoore | Continuous |
| | W120°31.00' | 107/15 | 110/23 | ② | W120°25.00' | b. N/R | | Federal Afld, CA | RATCF | |
| | | N36°35.00' | N36°29.00' | | | c. N/R | | DSN 359-9356/7 | ARCP-124.1/31 | |
| | | W120°31.00' | W120°24.00' | | | d. N/R | | C650-603-9356/7 | 8.8 | |
| | | | | | | e. N/R | | ③ | EXIT-124.1/318. 8 | |
| | | | | | Use 129 RQW assigned frequencies | | | ④ | | |

ATC ASSIGNED AIRSPACE: None.

REMARKS: Tanker aircraft pilots scheduled to operate within VFR Helicopter Refueling Tracks/Anchors shall advise the FSS nearest the entry point, 5 minutes prior to entering and the FSS nearest the exit point, upon exiting.

① AR662V is designed to be used in a left-hand racetrack with a pattern length of 8 NM on an inbound magnetic course of 118 degree. The northwest end of the anchor (ARIP) is 15 NM on the 107 degree radial from the Panoche VORTAC, 12 NM southwest of Firebaugh, CA and about 1 NM east of Interstate Highway 5. The southeastern end (Anchor Point) of the track is 23 NM on the 110 degree radial from the Panoche VORTAC. The total length of the straight line part of the anchor is 8 NM.

② The northwest leg parallels the southeast leg and is offset to the east about 7 NM. While operating on the anchor, every attempt should be made to fly over the defined centerline of the parallel tracks.

③ Restricted to H-60 helicopter and C-130 refueling operations. May include multiple tankers and/or receivers.

④ Aircraft shall contact Lemoore Approach Control on 318.8/124.1 prior to commencing/terminating refueling operations. Lemoore Approach Control shall provide radar advisory service upon request to aircraft operating in AR662V.

INTENTIONALLY

LEFT

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Chapter 5

AVOIDANCE LOCATIONS

I. NUCLEAR POWER PLANTS

| PLANTS | COORDINATES |
|-----------------------------|------------------------|
| CANADA | |
| Bruce | N44°22' W81°36' |
| Douglas Point | N44°20' W81°36' |
| Gentilly | N46°25' W72°22' |
| Nuclear Power Demonstration | N46°11' W77°39' |
| Pickering | N43°49' W79°04' |
| UNITED STATES | |
| Arkansas 1, 2-AR | N35°18'36" W93°13'51" |
| Beaver Valley 1, 2-PA | N40°37'19" W80°26'02" |
| Bellefonte-AL | N34°42'32" W85°55'36" |
| Big Rock Point-MI | N45°21'33" W85°11'41" |
| Braidwood 1, 2-IL | N41°14'37" W88°13'44" |
| Browns Ferry 1, 2-AL | N34°42'15" W87°07'07" |
| Brunswick 1, 2-NC | N33°57'30" W78°00'38" |
| Byron 1, 2-IL | N42°04'30" W89°16'55" |
| Callaway-MO | N38°45'40" W91°46'54" |
| Calvert Cliffs 1, 2-MD | N38°26'05" W76°26'31" |
| Catawba 1, 2-SC | N35°03'05" W81°04'10" |
| Clinton-IL | N40°10'19" W88°50'03" |
| Comanche Peak-TX | N32°17'52" W97°47'06" |
| Cook 1, 2-MI | N41°58'34" W86°33'59" |
| Cooper Station-NE | N40°21'43" W95°38'28" |
| Crystal River-FL | N28°57'26" W82°41'56" |
| Davis Besse-OH | N41°35'50" W83°05'11" |
| Diablo Canyon 1, 2-CA | N35°12'42" W120°51'16" |
| Dresden 1, 2, 3-IL | N41°23'23" W88°16'16" |
| Duane Arnold-IA | N42°06'02" W91°46'38" |
| Farley 1, 2-AL | N31°13'22" W85°06'45" |
| Fermi 1, 2-MI | N41°57'48" W83°15'31" |
| Fitzpatrick-NY | N43°31'26" W76°23'54" |
| Ft. Calhoun-NE | N41°31'15" W96°04'36" |
| GE Vallecitos-CA | N37°31'00" W121°48'30" |
| Ginna-NY | N43°16'40" W77°18'32" |
| Grand Gulf-MS | N32°00'27" W91°02'53" |
| Haddam Neck-CT | N41°28'55" W72°29'57" |
| Harris-NC | N35°38'00" W78°57'22" |
| Hatch 1,2-GA | N31°56'03" W82°20'40" |
| Hope Creek-NJ | N39°28'04" W75°32'17" |
| Humboldt Bay-CA | N40°44'31" W124°12'29" |
| Indian Point 1, 2, 3-NY | N41°16'17" W73°57'09" |
| Kewaunee-WI | N44°20'35" W87°32'10" |
| La Crosse-WI | N43°33'36" W91°13'42" |
| Lasalle County 1, 2-IL | N41°14'38" W88°40'15" |
| Limerick 1, 2-PA | N40°13'12" W75°35'24" |
| Maine Yankee-ME | N43°57'02" W69°41'46" |
| McGuire 1, 2-NC | N35°25'56" W80°56'54" |
| Millstone 1, 2, 3-CT | N41°18'31" W72°10'05" |
| Monticello-MN | N45°20'00" W93°50'54" |
| Nine Mile Point 1, 2-NY | N43°31'20" W76°24'36" |
| North Anna 1, 2-VA | N38°03'39" W77°47'26" |
| Oconee 1, 2, 3-SC | N34°47'30" W82°53'55" |

| | |
|---------------------------|------------------------|
| Oyster Creek-NJ | N39°48'51" W74°12'23" |
| Palisades-MI | N42°19'20" W86°18'55" |
| Palo Verde 1, 2-AZ | N33°23'23" W112°51'43" |
| Peach Bottom 1, 2, 3-PA | N39°45'32" W76°16'09" |
| Perry-OH | N41°48'04" W81°08'36" |
| Pilgrim Station-MA | N41°56'40" W70°34'46" |
| Point Beach 1, 2-WI | N44°16'51" W87°32'10" |
| Prairie Island 1, 2-MN | N44°37'10" W92°37'59" |
| Quad Cities 1, 2-IL | N41°43'34" W90°18'36" |
| Rancho Seco-CA | N38°20'46" W121°07'08" |
| River Bend-LA | N30°45'26" W91°19'54" |
| Robinson-SC | N34°24'19" W80°09'31" |
| Salem 1, 2-NJ | N39°27'46" W75°32'09" |
| San Onofre 1, 2, 3-CA | N33°22'13" W117°33'25" |
| Seabrook-NH | N42°53'53" W70°51'05" |
| Sequoyah 1, 2-TN | N35°13'24" W85°05'16" |
| South Texas-TX | N28°47'42" W96°02'53" |
| St. Lucie 1, 2-FL | N27°20'55" W80°14'47" |
| Summer-SC | N34°17'45" W81°19'13" |
| Surry 1,2-VA | N37°09'56" W76°41'54" |
| Susquehanna 1, 2-PA | N41°05'30" W76°08'55" |
| Three Mile Island 1, 2-PA | N40°09'11" W76°43'30" |
| Trojan-OR | N46°02'27" W122°53'04" |
| Turkey Point 3, 4-FL | N25°26'06" W80°19'53" |
| Vermont Yankee-VT | N42°46'49" W72°30'57" |
| Vogtle 1, 2-GA | N33°08'31" W81°45'53" |
| Waterford 3-LA | N29°59'42" W90°28'16" |
| Watts Bar-TN | N35°36'10" W84°47'25" |
| WNP 2-WA | N46°28'17" W119°19'59" |
| Wolf Creek-KS | N38°14'20" W95°41'20" |
| Yankee Rowe-MA | N42°43'41" W72°55'29" |
| Zion 1, 2-IL | N42°26'44" W87°48'08" |

II. RADIOACTIVE WASTE SITES

- West Valley, NY; 1.5 NM radius circle centered on N42°27'00" W78°38'45".
- Morris Operation, IL; N41°22'53" W88°16'32".
- Humboldt Bay, CA; N40°42'28" W124°12'33".
- LaCrosse, WI; N43°33'30" W91°13'50".

III. SUPERSONIC FLIGHT

In accordance with AFI 13-201, paragraph 3e(2), the following are designated HQ USAF Specified Critical areas and shall be avoided by one-half (1/2) NM FOR EACH 1,000 feet of flight altitude up to a maximum of 30 NM.

- Fort Jefferson National Monument, Florida.
- Chaco Canyon National Monument; Aztec Ruin National Monument; and Gran Quivira National Monument, New Mexico.
- Canyon DeChelly National Monument; Wupatki National Monument; and Navajo National Monument, Arizona.

- D. Rainbow Bridge National Monument and Natural Bridges National Monument, Utah.
- E. Death Valley National Monument, California.

BOUNDARIES OF DOD FLIGHT INFORMATION PUBLICATION-PLANNING

