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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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](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 component (USAF, USN, USMC, USA, and USCG) issues written guidance, procedures, regulations, or instructions (OPNAVINST 3710.5 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 LRDO040028

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: IR148E167X1705 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 MARSA/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 MARSA operations. These MARSA procedures will be contained in a letter of agreement and published in the narrative description of the route. ATC does not invoke or deny MARSA and ATC’s sole responsibility is to provide separation between participating MARSA military aircraft and the non-participating (usually civilian) IFR aircraft. If flying a MARSA 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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from A to H.

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

Special Operating Procedures:

1. Contact Atlanta ARTCC on 269.5 passing F. If no contact, try Asheville APP CON on 353.6 for further IFR clearance.

2. CAUTION: Heavy civil IFR traffic crossing on V-16, V-185, V-136 immediately above route altitude block D to H.

3. CAUTION: Knoxville Approach Control has very good radar coverage in this area (frequency 360.8/353.6).


5. CAUTION: Tower cluster 250' AGL (3779' MSL) N35-54.0 W83-18.2.

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:

FSS’s Within 100 NM Radius:
AND, BNA, HUA, LOU

IR-012


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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 G;
4 NM left of centerline from G to H;
3 NM left of centerline from H to I;
3 NM left of centerline from I to J.

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: VR-1074 same direction C to F. (Deconflict DSN 488-6565).
(13) CAUTION: IR-062 crosses left to right A to B and crosses right to left B to C. (Deconflict DSN 433-1228).
(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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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

IR ROUTES


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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 Withing 100 NM Radius:

GNV, MCN, PIE

IR-017


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 H DWG 058/18 N30°38.00' W86°14.00'
05 AGL B 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-019

ORIGINATING ACTIVITY: FACS FAC JAX, NAS

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2400 local daily

ROUTE DESCRIPTION:

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

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-020

ORIGINATING ACTIVITY: FACS FAC JAX, NAS

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°50.00' | 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'
60 MSL B 80 MSL to Alternate Exit: 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 - 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 1400Z++
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-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++ 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'
as assigned to 90 MSL-100 MSL 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'
| HMV 116/48 | N36°08.00' | W81°13.00'
90 MSL-100 MSL to D | HMV 186/6 | N36°20.00' | W82°08.00'
| HMV 166/6 | N36°20.00' | W82°08.00'
as assigned to 100 MSL to E | SOT 037/22 | N36°06.00' | W82°48.00'
100 MSL to F | SPA 291/41 | N35°15.00' | W82°43.00'
100 MSL to G | SPA 346/24 | N34°48.00' | W82°54.00'

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 1400Z++
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
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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: By NOTAM

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. (a) 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


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


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
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 - 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 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
IR ROUTES

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.


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'

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 MARSA 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.


HOURS OF OPERATION: Daylight hours

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
05 AGL B 40 MSL to F MCV 131/21 N31°13.00' W87°04.00'
05 AGL B 40 MSL to G MCV 212/20 N31°11.30' W87°34.80'
05 AGL B 40 MSL to H MCV 244/28 N31°16.80' W87°51.70'
05 AGL B 40 MSL to I MCV 248/27 N31°19.20' W87°51.50'
05 AGL B 40 MSL to J MCV 296/19 N31°37.00' W87°40.00'
05 AGL B 40 MSL to K MCV 022/32 N31°56.00' W87°05.00'
05 AGL B 40 MSL to L MCV 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'
05 AGL B 40 MSL to B CTY 300/32 N29°51.00' W83°36.00'
30 MSL B 50 MSL to B CTY 318/28 N29°56.00' W83°25.00'
30 MSL B 50 MSL to D CTY 357/20 N29°56.00' W83°05.00'
30 MSL B 50 MSL to E GNV 049/20 N29°56.00' W82°00.00'
30 MSL B 60 MSL to F CRG 154/21 N30°02.00' W81°19.00'
05 AGL B 60 MSL to G CRG 123/31 N30°05.00' W81°00.00'
IR ROUTES

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 MARSA 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.
13. CAUTION: Uncharted tower 210' MSL N26-02.5 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

HOURS OF OPERATION: 0600-2200 local, daily

ROUTE DESCRIPTION:

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

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 560-3200.

(10) CAUTION: IR-062 opposite direction at C, deconflict DSN 433-1228.


(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/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 1500' AGL/1 NM;
(b) Residence N33°-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 1500' 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 Gailivants Ferry) N33°-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°-12.5 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 W80°-09.5.

(27) Caution: due to ultralite activity, avoid Lake City N33°-52.5 W80°-09.5.

(1) Uncharted airport, N34°-17.7 W79°-03.3, Rwy 8-24 and 15-33;
(b) Uncharted grass strip, N34°-12.5 W79°-11.41;
(c) Residence N33°-50.0 W80°-22.0 by 1500' AGL/1 NM;
(d) Hog farm N34°-04.4 W79°-12.2 by 1500' AGL/1 NM;
(e) Hog farm N34°-07.1 W79°-09.6 by 1500' AGL/1 NM;
(f) Hog farm N34°-03.1 W79°-09.0 by 1500' AGL/1 NM.

(g) Uncharted tower, N33°-48.2 W80°-16.3 (Chapman Lake Area);
(h) Uncharted tower, N33°-58.6 W79°-39.4 (Tommie and Rick Rodgers);
(i) Hog farm N34°-07.1 W79°-09.6 by 1500' AGL/1 NM;
(j) Hog farm N34°-03.1 W79°-09.0 by 1500' AGL/1 NM.

(k) Uncharted airstrip, N33°-45 W80°-20, Rwy 10-28;
(l) Uncharted airstrip, (Matthew’s Airstrip) N33°-59.3 W79°-45.4;
(m) Uncharted airstrip, (Dannie Rodgers) N33°-58.6 W79°-39.4;
(n) Uncharted airstrip, (Bernie) N33°-57.7 W79°-56.2;
IR ROUTES

(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  
29152-5000 Duty hours DSN 965-1118/1119 C803-895-1118, Fax  
DSN 965-4804/5851.

HOURS OF OPERATION: 0600-2200 local, daily

ROUTE DESCRIPTION:

As assigned to

Pt Fac/Rad/Dist Lat/Long  
A CAE 184/15 N33°36.00’ W81°04.00’  
B CAE 212/17 N33°37.00’ W81°13.00’  
C CAE 194/38 N33°14.00’ W81°13.00’  
D VAN 192/26 N33°03.00’ W80°30.00’  
E VAN 081/26 N33°25.00’ W79°57.00’  
F VAN 036/25 N33°50.00’ W80°12.00’  
G VAN 332/9 N33°36.00’ W80°33.00’  
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.  
(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: FACS FAC, 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:

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

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).

FSS’s Within 100 NM Radius:
DRI, GNV, GWO

IR-040

ORIGINATING ACTIVITY: FACS FAC, 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:

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

ROUTE WIDTH - 5 NM either side of centerline.

IR-038

ORIGINATING ACTIVITY: FACS FAC, 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 |
---------------|-----|--------------|----------|
Cross at 60 MSL to or as assigned | A   | BFM 214/16 | N30°24.00' W89°04.61' |
60 MSL to or as assigned | B   | GPT VORTAC | N30°24.41' W89°26.00' |
60 MSL to or as assigned | C   | LEV 109/39 | N28°54.00' W90°38.00' |
60 MSL to or as assigned | D   | LEV 253/28 | N28°54.00' W90°26.00' |
60 MSL to or as assigned | E   | LEV 109/39 | N28°54.00' W90°26.00' |
60 MSL to or as assigned | F   | GPT VORTAC | N30°24.41' W89°04.61' |
60 MSL to or as assigned | 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 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

SCHEDULING ACTIVITY: Same as Originating Activity
HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:
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:

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

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 Origating 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 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 MARSA 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-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.

**HOURS OF OPERATION:** 0700-2400 local, daily

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 MSL B 60 MSL to</td>
<td>A</td>
<td>MCF 101/61</td>
<td>N27°38.50' W81°24.00'</td>
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<tr>
<td>40 MSL B 60 MSL to</td>
<td>B</td>
<td>MCF 104/49</td>
<td>N27°38.50' W81°38.00'</td>
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<td>50 MSL to</td>
<td>C</td>
<td>MCF 110/30</td>
<td>N27°40.80' W81°59.30'</td>
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</tbody>
</table>

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

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**IR ROUTES**

**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:**

<table>
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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tbody>
<tr>
<td>As assigned to 50 MSL - 90 MSL</td>
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<td>LAL 261/14</td>
<td>N27°57.20' W82°16.50'</td>
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<td>LAL VORTAC</td>
<td>N27°59.17' W82°00.83'</td>
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<td>LAL 082/36</td>
<td>N28°03.50' W81°21.00'</td>
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<td>D</td>
<td>ORL 181/32</td>
<td>N28°00.00' W81°21.00'</td>
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<td>as assigned to 50 MSL - 90 MSL</td>
<td>E</td>
<td>ORL 181/46</td>
<td>N27°46.00' W81°21.00'</td>
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</tbody>
</table>

**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

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**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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 MSL B 60 MSL to</td>
<td>A</td>
<td>MCF 101/61</td>
<td>N27°38.50' W81°24.00'</td>
</tr>
<tr>
<td>50 MSL to</td>
<td>C</td>
<td>MCF 110/30</td>
<td>N27°40.80' W81°59.30'</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 3.5 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 E PHK 325/28 N27°10.00’          W80°59.30’
Cross 81 deg W at or below 50 MSL
05 AGL B 50 MSL to F PHK 329/37 N27°18.80’          W81°03.00’
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.

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 G PHK 329/37 N27°18.80' W80°03.00'
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.

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:

(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 flying route.

(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 a specified range period. There are no Alternate Exit points.

(5) 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.

(6) Radar navigation and contour flying authorized A to G.

(7) 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.

(8) 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.

(9) 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.

(10) CAUTION: Be alert for light aircraft in vicinity of C and D. Avoid flight within 1500' or 3 NM of private airports enroute.

(11) Minimum IMC altitude 1700' MSL for entire route.

(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) Use Caution: Entry Point A is within 2 NM of Class B and C airspace.

(14) 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

ORIGIRATING 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 G PHK 329/37 N27°18.80' W80°03.00'
(Excluding R-2901) Enter Avon North MOA if clearance into R-2901 is not received prior to L.

(10) CAUTION: Be alert for light aircraft in vicinity of C and D. Avoid flight within 1500' or 3 NM of private airports enroute.

(11) Minimum IMC altitude 1700' MSL for entire route.

(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) Use Caution: Entry Point A is within 2 NM of Class B and C airspace.

(14) Use Caution: Alternate Entry Point B is within 20 NM of Class B and C airspace.

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. 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-054, 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 MARSA 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 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; twin towers 250’ 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°07.00'
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 347 Wright Patterson, 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.


(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.


(14) CAUTION: Uncharted 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.


(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 | PDZ 274/20 | N31°39.80’ W84°41.20’
02 AGL B 30 MSL to | I | PDZ 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 | P | CEW 197/12 | N30°37.90’ W86°45.70’
02 AGL B 10 MSL to | Q | CEW 061/15 | N30°56.20’ W86°24.80’
02 AGL B 10 MSL to | 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 Pino DZ, file (entry point). IR-057. CEWO61015. 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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
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<tr>
<td>Cross at 10 MSL to</td>
<td>A</td>
<td>CEW VORTAC</td>
<td>N30°49.57’ W86°40.75’</td>
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<tr>
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<td>B</td>
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<tr>
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<tr>
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<td>CEW 197/12</td>
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<td>Q</td>
<td>Pino DZ</td>
<td>N30°41.20’ W86°23.60’</td>
</tr>
</tbody>
</table>

**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 120.05 319.9 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**

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 EUF 092/22 N31°55.30’ W84°42.30’
02 AGL B 15 MSL to J EUF 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 P CEW 197/12 N30°47.50’ W86°45.70’
02 AGL B 10 MSL to (Alternate routing from N) BA CEW 116/17 N30°41.20’ W86°23.60’
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:

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 H-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).

FSS's Within 100 NM Radius:

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:

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 H-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).
IR ROUTES

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. MARSA applies 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) E, Memphis ARTCC 125.85/379.25 (compulsory only when filed as an alternate exit);
   (c) G, Memphis ARTCC 125.85/379.25;
   (d) H, Memphis ARTCC 125.85/379.25;
   (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.


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) IR-066 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) IR-0151 common route from Point A to D and from Point E to G (48 FTS, DSN 742-7840 C662-434-0588).
   (f) SR-075 crosses between Points H and I (48 FTS, DSN 742-7840 C662-434-0588).

13. Route Deconfliction:

(1) 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).

(2) 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.

(3) 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 15 AGL B 30-50 MSL 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 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. MARSA applies after aircraft have passed the entry/alternate entry point until ATC establishes standard separation after exiting 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);
IR ROUTES

(c) F, Memphis ARTCC 135.3/335.8;
(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 742-7734 C662-434-7734);
(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 recoordinate 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. MARSA applies after aircraft have passed the entry and alternate entry point until ATC establishes standard separation after exiting the route. MARSA also applies 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) VR-1014 Common route from near Point C to D (48 FTS, DSN 742-7840, C662-434-7840);
(e) VR-1050 between Points D and E (48 FTS, DSN 742-7734, C662-434-7734);
(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 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:

<table>
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<th>Pt</th>
<th>Fac/Rad/ Dist</th>
<th>Lat/Long</th>
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<tr>
<td>As assigned to</td>
<td>A</td>
<td>JAN 303/29</td>
<td>N32°48.00' W90°37.00'</td>
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<tr>
<td>05 AGL B 30 MSL to</td>
<td>B</td>
<td>SQS 245/49</td>
<td>N32°09.00' W91°11.00'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>C</td>
<td>ELD 130/30</td>
<td>N32°53.00' W92°20.00'</td>
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<td>05 AGL B 30 MSL to</td>
<td>D</td>
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<td>N33°27.00' W92°20.00'</td>
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<tr>
<td>05 AGL B 50 MSL to</td>
<td>E</td>
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<td>N33°44.00' W92°20.00'</td>
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<tr>
<td>05 AGL B 50 MSL to</td>
<td>F</td>
<td>MON 289/29</td>
<td>N33°45.20' W92°15.00'</td>
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<tr>
<td>05 AGL B 30 MSL to</td>
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<td>GLH 349/29</td>
<td>N34°00.00' W91°03.00'</td>
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<td>J</td>
<td>SQS 348/12</td>
<td>N33°40.00' W90°19.00'</td>
</tr>
</tbody>
</table>

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.

Compulsory Reporting Points:
(a) Point B, Memphis ARTCC 135.875 269.35; Point C, Monroe APP CON 126.9 307.9; Point E, Memphis ARTCC 135.875 269.35; Point H, Memphis ARTCC 135.875 269.35 (compulsory only when Point H is filed as Exit); Point I, Memphis ARTCC 132.5 259.1; Point J, Memphis ARTCC 132.5 259.1.

(3) Compulsory Reporting Points:
(a) Point B, Memphis ARTCC 135.875 269.35; Point C, Monroe APP CON 126.9 307.9; Point E, Memphis ARTCC 135.875 269.35; Point H, Memphis ARTCC 135.875 269.35 (compulsory only when Point H is filed as Exit); Point I, Memphis ARTCC 132.5 259.1; 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. MARSA 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: FACS FAC, 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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/ Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 50 MSL to</td>
<td>A</td>
<td>VUZ 073/22</td>
<td>N33°46.00' W86°28.00'</td>
</tr>
<tr>
<td>50 MSL to</td>
<td>B</td>
<td>GAD 341/14</td>
<td>N34°12.00' W86°10.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

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 321.2; I, contact Atlanta ARTCC 353.7; J, contact Birmingham ATC 231.1 338.2.

FSS’s Within 100 NM Radius: ANB, AND, BNA, GWO, JBR, MCN, MKL

IR-078

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 90 MSL-100 MSL as assigned 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°35.00’
70 MSL-90 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 as assigned to C  HMV 186/6  N36°20.00'  W82°08.00'
90 MSL-100 MSL as assigned to D  HMV 069/30  N36°39.00'  W81°34.00'
80 MSL-100 MSL as assigned to E  PSK 251/20  N36°57.00'  W81°05.00'
80 MSL-100 MSL as assigned to F  PSK 350/15  N37°20.00'  W80°48.00'
80 MSL-100 MSL as assigned to G  BKW 133/14  N37°38.00'  W80°53.00'
80 MSL-100 MSL as assigned to H  BKW 357/23  N38°10.00'  W81°12.00'
80 MSL-100 MSL as assigned to I  HNN 048/14  N38°55.00'  W81°49.00'

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 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-608 from Points D to E.
   (f) Opposite direction to IR-723 from Points E to I.

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 | HVM 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 90 MSL-100 MSL | 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 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-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
--- | --- | --- | ---
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°30.00' W85°19.00'

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 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


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°30.00' W85°19.00'
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 W83-44.0. 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 (200' 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.

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 J to K; 3 NM either side of centerline from K 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 (200' MSL).
(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 with 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:

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. MARSA applies after aircraft have passed the entry/alternate entry point until ATC establishes standard separation after exiting the route. MARSA 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.
IR ROUTES

HOURS OF OPERATION: Daylight hours by NOTAM

ROUTE DESCRIPTION:

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, Maravillas 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:

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 MARSA and MARSA 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:

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

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. MARSA 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 866-5313/6314 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 confictions:
(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, 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:**

<table>
<thead>
<tr>
<th>Terrain Following Operations:</th>
<th>Authorized entire route.</th>
</tr>
</thead>
</table>

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

**Special Operating Procedures:**

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:
   - (b) Ranch near Quay, NM N34-55-30 W103-43-42.
8. Avoid by 2000' AGL:
   - (a) Ranch N34-38-42 W103-54-12;
9. Avoid by 1000' AGL:

**Altitude Data**

<table>
<thead>
<tr>
<th>As assigned to descend to and maintain A1 TCC 023/25 A</th>
<th>N35°22.50' W103°17.00'</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 MSL to start descent to be at or below 80 MSL B C D</td>
<td>N35°31.50' W103°18.50'</td>
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<tr>
<td>01 AGL B 80 MSL to C DHT 237/43 C</td>
<td>N35°36.00' W103°20.00'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to D HHT 261/65 D</td>
<td>N36°08.00' W103°52.50'</td>
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<tr>
<td>01 AGL B 80 MSL to E HHT 274/66 E</td>
<td>N36°23.00' W103°51.00'</td>
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<td>01 AGL B 80 MSL to F HHT 286/58 F</td>
<td>N36°32.50' W103°35.50'</td>
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<tr>
<td>01 AGL B 80 MSL to G HHT 319/45 G</td>
<td>N36°45.00' W103°00.00'</td>
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<tr>
<td>01 AGL B 80 MSL to H IHT 323/52 H</td>
<td>N36°53.00' W103°00.00'</td>
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<td>01 AGL B 80 MSL to I JHT 367/44 I</td>
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<tr>
<td>01 AGL B 100 MSL to J KHT 188/26</td>
<td>N36°51.50' W103°47.00'</td>
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<tr>
<td>01 AGL B 100 MSL to K LHT 101/28 L</td>
<td>N36°18.00' W103°21.00'</td>
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<tr>
<td>01 AGL B 100 MSL to L MHT 131/43 M</td>
<td>N35°55.00' W104°00.00'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to M NHT 291/27</td>
<td>N35°26.00' W104°04.00'</td>
</tr>
<tr>
<td>01 AGL B 85 MSL to N OHT 278/24</td>
<td>N35°31.00' W104°03.00'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to O PHT 225/24</td>
<td>N34°58.00' W103°00.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to P QHT 196/23</td>
<td>N34°50.00' W103°49.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to Q RHT 184/33</td>
<td>N34°39.00' W103°47.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to M1 THT 285/39</td>
<td>N34°39.00' W104°02.00'</td>
</tr>
<tr>
<td>To Melrose Range Night/IMC PTN: 01 AGL B 70 MSL to M2 CVS 295/28</td>
<td>N34°39.00' W103°47.00'</td>
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<tr>
<td>01 AGL B 70 MSL to M3 CVS 232/27</td>
<td>N34°10.00' W103°48.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to M4 CVS 218/34</td>
<td>N34°00.00' W103°50.00'</td>
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<tr>
<td>01 AGL B 70 MSL to M5 CVS 229/43</td>
<td>N34°00.00' W104°04.00'</td>
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<tr>
<td>01 AGL B 70 MSL to CVS 295/28</td>
<td>N34°39.00' W103°47.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to CVS 232/27</td>
<td>N34°10.00' W103°48.00'</td>
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<tr>
<td>01 AGL B 70 MSL to CVS 218/34</td>
<td>N34°00.00' W103°50.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to CVS 229/43</td>
<td>N34°00.00' W104°04.00'</td>
</tr>
</tbody>
</table>
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; N35-02-48 W104-04-42.

(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.


(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 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 N34-46-56 W104-25-00.

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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 160 MSL to or as assigned</td>
<td>A</td>
<td>ABQ 332/65</td>
<td>N36°05.00' W107°10.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to B</td>
<td>ABQ 344/71</td>
<td>N36°14.00' W106°53.00'</td>
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<tr>
<td>01 AGL B 120 MSL to C</td>
<td>ABQ 346/76</td>
<td>N36°19.00' W106°50.00'</td>
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<tr>
<td>01 AGL B 120 MSL to D</td>
<td>ALS 190/41</td>
<td>N36°43.00' W106°09.00'</td>
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<tr>
<td>01 AGL B 120 MSL to E</td>
<td>ALS 150/22</td>
<td>N37°00.00' W105°41.00'</td>
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<tr>
<td>01 AGL B 120 MSL to F</td>
<td>ALS 134/21</td>
<td>N37°03.50' W105°35.00'</td>
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<tr>
<td>01 AGL B 120 MSL to AO</td>
<td>ALS 119/26</td>
<td>N37°03.50' W105°24.50'</td>
<td></td>
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<tr>
<td>01 AGL B 150 MSL to AP</td>
<td>ALS 119/37</td>
<td>N36°56.00' W105°15.00'</td>
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<tr>
<td>01 AGL B 150 MSL to G</td>
<td>CIM 295/17</td>
<td>N36°40.00' W105°09.00'</td>
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</tr>
<tr>
<td>01 AGL B 150 MSL to H</td>
<td>CIM 277/13</td>
<td>N36°34.00' W105°08.00'</td>
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</tr>
<tr>
<td>01 AGL B 150 MSL to I</td>
<td>CIM 221/18</td>
<td>N36°19.00' W105°10.00'</td>
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</tr>
<tr>
<td>01 AGL B 150 MSL to J</td>
<td>CIM 204/25</td>
<td>N36°09.00' W105°11.00'</td>
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<tr>
<td>01 AGL B 150 MSL to K</td>
<td>FTI 352/27</td>
<td>N36°06.00' W105°05.00'</td>
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<tr>
<td>01 AGL B 120 MSL to L</td>
<td>FTI 043/28</td>
<td>N35°55.00' W104°40.00'</td>
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<tr>
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<td>N35°50.00' W104°35.00'</td>
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<tr>
<td>01 AGL B 90 MSL to N</td>
<td>FTT 069/26</td>
<td>N35°43.00' W104°36.00'</td>
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<tr>
<td>01 AGL B 80 MSL to O</td>
<td>TCC 263/43</td>
<td>N35°15.00' W104°31.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 70 MSL to P</td>
<td>TCC 245/44</td>
<td>N35°01.00' W104°28.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 70 MSL to Q</td>
<td>CVS 283/32</td>
<td>N34°35.00' W103°55.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 70 MSL to IR-109 South</td>
<td>CVS 245/44</td>
<td>N34°35.00' W103°55.00'</td>
<td></td>
</tr>
<tr>
<td>as assigned to P</td>
<td>TCC 245/44</td>
<td>N35°01.00' W104°28.00'</td>
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</tr>
<tr>
<td>01 AGL B 70 MSL to AA</td>
<td>CME 341/53</td>
<td>N34°13.00' W104°45.00'</td>
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<tr>
<td>01 AGL B 70 MSL to AB</td>
<td>CME 343/47</td>
<td>N34°07.00' W104°42.00'</td>
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<tr>
<td>01 AGL B 70 MSL to AC</td>
<td>CME 008/44</td>
<td>N34°02.00' W104°19.00'</td>
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</tr>
<tr>
<td>01 AGL B 70 MSL to AD</td>
<td>CVS 221/42</td>
<td>N33°56.00' W103°59.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 70 MSL to AE</td>
<td>CVS 216/34</td>
<td>N34°00.00' W103°50.00'</td>
<td></td>
</tr>
</tbody>
</table>
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:
   - Guadalupita, NM N36-38.0 W105-14.0
   - Ocate and Naranjos, NM Area N36-10.0 W105-00.0
   - House, NM N34-39.0 W103-54.0
   - 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 N34-13 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.

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.


---

<table>
<thead>
<tr>
<th>IR ROUTES</th>
<th>70 MSL to</th>
<th>AM CVS 193/21</th>
<th>N34°04.00'</th>
<th>W103°30.00'</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-5104/R-5105</td>
<td>North Race Track: Exit</td>
<td>70 MSL to</td>
<td>AM CVS 193/21</td>
<td>N34°04.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to AF CVS 230/27</td>
<td>N34°10.00'</td>
<td>W103°48.00'</td>
<td>Contact Cannon RAP-CON 358.3 leaving 61 MSL. Alternate Exit: AQ at or below 70 MSL</td>
<td>P1 TCC 245/44</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to AE1 CVS 216/34</td>
<td>N34°00.00'</td>
<td>W103°50.00'</td>
<td>Climb to cross</td>
<td>70 MSL to AQ</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to AG CVS 227/44</td>
<td>N34°00.00'</td>
<td>W104°04.00'</td>
<td>or as assigned</td>
<td>(Contact ZAB ARTCC 319.2 for transition to VR-1195 or Pecos MOAS).</td>
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<tr>
<td>01 AGL B 70 MSL to AH CVS 285/39</td>
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<td>01 AGL B 70 MSL to AI TCC 184/33</td>
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<td>W105°17.00'</td>
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<td>01 AGL B 70 MSL to AJ TCC 184/33</td>
<td>N36°06.00'</td>
<td>W104°32.00'</td>
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<td>W105°10.00'</td>
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<td>01 AGL B 70 MSL to AO CVS 216/34</td>
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<tr>
<td>01 AGL B 70 MSL to AO1 ALS 119/26</td>
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<td>W105°24.50'</td>
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<td>W105°24.50'</td>
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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.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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 Q2.

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
Ysidro 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

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1-39
IR ROUTES

SFC B 80 MSL to L2 INW 215/21 N34°50.00' W111°07.00'
110 MSL to XM1 INW 190/19 N34°46.00' W110°57.00'
or as assigned
(Contact Albuquerque ARTCC 306.2 for higher 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


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 btm 1330-2230Z wkd req for wkend shall be coord btm 1330-2230Z Mon-Fri. DSN 681-2276 C575-784-2276.

HOURS OF OPERATION: Continuous
7.5 NM either side of centerline.

Alternate Entries and Exits. Melrose Range Night/IMC pattern centerline from D to M2; 5 NM either side of centerline for all

4 NM either side of centerline from C to D; 5 NM either side of

TIE-IN FSS: Albuquerque (ABQ).

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) LOWAT authorized in IR-113 corridor within Pecos MOA boundaries. MARSA See and Avoid applies between aircraft in IR-113 and interceptor aircraft. LOWAT authorized in VMC only.

(8) Avoid by 3NM: Gran Quivira National Monument N34-15.6 W106-05.5.

(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.

(10) Avoid Double V Ranch Airstrip N34-07.0 W104-25.6 by 1500’/2 NM.

(11) Avoid Canning Ranch Airstrip N33-42.0 W105-23.4 by 1500’/2 NM.

(12) Avoid Claunch, NM N34-08.6 W105-59.6 by 1500’/1 NM.

(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.

(14) Avoid by 1500’/2 NM ranch N34-20.5 W104-23.2.

(15) CAUTION: Increased bird activity Nov- Feb during dusk and night in areas from B to C, TF to L, and N to P. Recommend flight at 1000’ AGL or above during these periods to reduce birdstrike hazard.

(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.

(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.

(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.

(19) Aircraft not scheduled into R-5104/R-5105 Melrose Range Complex must exit prior to QX.


(21) Route is designed for MARSA operations established by coordinated scheduling between 27 SOW and Holloman AFB scheduling.

(22) 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.

(23) 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.

(24) 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

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:
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 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:

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

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.
**IR ROUTES**

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 MARSA through restrictive scheduling.

(4) See and Avoid/restrictive scheduling applies between IR-117 and IR-120, IR-121, IR-164, VR-1189, 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 D or E 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:**

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<td>N35°11.00’ W94°04.00’</td>
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</tr>
</tbody>
</table>

**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) MARSA (See and Avoid scheduling) applies after aircraft enter route until standard separation is provided after exiting route.

(3) MARSA applies between IR-120, IR-117, IR-121, IR-164, VR-1189, 1102, 1103, 1104, 1113, 1130 Hog North 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 C-E, multiple converging MTRs and military aircraft in Hog MOA.

(7) Point D is a compulsory reporting point, contact Razorback App Con 343.75.

(8) Be alert for hang gliders in vicinity of Magazine Mountain between B and C.

(9) Avoid direct overflight of Nuclear Facility N35-19 W93-14.

(10) Call in-the-blind on 305.4 before entering the Hog MOA. Clearance into R-2402 must be received on 339.05.


(12) 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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A TXK 072/50</td>
<td>N33°40.00’ W93°05.00’</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 20 MSL to</td>
<td>B TXK 037/43</td>
<td>N34°02.00’ W93°28.00’</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>C TXK 006/49</td>
<td>N34°19.00’ W93°51.00’</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 40 MSL to</td>
<td>D PGO 082/48</td>
<td>N34°44.00’ W93°38.00’</td>
<td></td>
</tr>
</tbody>
</table>
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 MARSA 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.
(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) Make entry time plus or minus five minutes or reschedule.

FSS’s Within 100 NM Radius:
MLC

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' W99°30.00'
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°00.00'
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 Alternate Exit: J LLO 307/22 N31°00.00' W99°05.00'
05 AGL B 60 MSL to Climb to H1 JCT 041/22 N30°50.00' W99°30.00'
110 MSL to HA LLO 265/17 N30°48.60' W99°06.90'
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. MARSA applies after aircraft have passed the Entry/Alternate Entry Point until ATC establishes standard separation after exiting the route.

(3) Route confictions:
(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 to 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.

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. MARSA applies after aircraft have passed the Entry/Alternate Entry point until ATC establishes standard separation after exiting the route.
(3) Route Confictions:
(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.
(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) 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.

(7) Exit procedures:
   (a) Aircraft exiting E will climb to be at 5000’ by E and contact Fort Worth 295.0;
   (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).

(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 procedures at the end of the route. Squawk Code 7600;
   (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;
   (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’.

(9) Alternate Entry: D.
(10) Alternate Exit: E.
(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.

FSS’s Within 100 NM Radius:
FTW, SJT

IR-126


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
100 MSL to B RSK 090/45 N36°34.00’ W107°11.00’
ad or below FL180
descend direct to cross
06 AGL B 100 MSL to C RSK 104/37 N36°27.50’ W107°26.00’
direct to
direct to
06 AGL B 100 MSL to D RSK 142/31 N36°16.50’ W107°50.00’
turn right and climb to
turn right and climb to
turn right and climb to
turn right and climb to
02 AGL B 100 MSL to E RSK 177/34 N36°11.00’ W108°14.00’
direct to
direct to
direct to
02 AGL B 110 MSL to F RSK 184/35 N36°15.50’ W108°19.50’
direct to
direct to
direct to
02 AGL B 100 MSL to G RSK 212/38 N36°18.50’ W108°39.00’
direct to
direct to
direct to
04 AGL B 110 MSL to H TBC 047/100 N36°53.00’ W109°26.00’
direct to
direct to
direct to
GB DVC 209/57 N37°06.50’ W109°45.00’
direct to
direct to
direct to
P OZN 106/38 N36°57.00’ W112°25.00’
direct to
direct to
direct to
OZN 139/34 N36°34.50’ W113°17.00’
direct to
direct to
direct to
OZN 143/34 N36°34.00’ W113°20.00’
direct to
02 AGL B 90 MSL to R OZN 109/27 N36°30.50’ W113°48.50’
direct to
02 AGL B 90 MSL to S MMM 109/11 N36°43.00’ W114°03.50’
direct to
direct to
direct to
direct to
06 AGL B 80 MSL to T MMM 091/11 N36°46.00’ W114°05.00’
turn right and climb to
turn right and climb to
turn right and climb to
turn right and climb to
02 AGL B 90 MSL to U MMM 009/11 N36°56.00’ W114°11.00’
direct to
direct to
direct to
02 AGL B 90 MSL to V MMM 001/19 N37°04.00’ W114°10.00’
turn left to
turn left to
turn left to
02 AGL B 90 MSL to W MMM 316/23 N37°25.50’ W113°49.50’
turn to
turn to
Re-Entry:
(Start Maneuver Area)
(End Maneuver Area)
(End Maneuver Area)
90 MSL to P1 OZN 106/38 N36°45.50' W112°55.50'
Turn left and climb to cross
100 MSL to direct to AA OZN 110/52 N36°35.00' W112°43.00'
100 MSL to (Start Maneuver Area) AC BCE 128/14 N37°30.00' W112°07.50'
turn right and descend to cross
90 MSL to Thence via published route N1 BCE 126/29 N37°19.00' W111°55.50'
Alternate Exit: AB
90 MSL to (End Maneuver Area) P2 OZN 106/38 N36°45.50' W112°55.50'
(Contact Los Angeles ARTCC 343.6 prior to AA)
Climb and turn left to cross
at or below 120 MSL AA1 OZN 110/52 N36°35.00' W112°43.00'
Climb direct to cross
140 MSL to or as assigned AB BCE 175/42 N37°00.00' W112°27.00'
Alternate Entry: AD
170 MSL to or as assigned AD TBC 041/52 N36°36.00' W110°22.00'
110 MSL or as assigned 110 MSL B 170 MSL descend direct to cross
110 MSL to AE DVC 225/93 N37°00.00' W110°36.00'
descend direct to cross
02 AGL B 90 MSL to AF DVC 237/93 N37°15.50' W110°45.50'
turn left and descend to
02 AGL B 90 MSL to K1 HVE 170/64 N37°21.00' W110°49.50'
Thence via published route

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 T; 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 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.

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:

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. MARSA 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.

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

IR-128


HOURS OF OPERATION: Continuous
ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
<th>IR ROUTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 100 MSL to or as assigned (TFR Initiation Point) descend direct to cross</td>
<td>A</td>
<td>BGS 033/12</td>
<td>N32°31.50' W101°19.50'</td>
<td>N31°48.50' W102°52.00'</td>
</tr>
<tr>
<td>06 AGL B 100 MSL to (TA Initiation Point) turn left to</td>
<td>B</td>
<td>LBB 142/48</td>
<td>N32°59.50' W101°29.00'</td>
<td>N31°45.00' W102°47.50'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>C</td>
<td>LBB 153/40</td>
<td>N33°04.00' W101°41.50'</td>
<td>N31°33.00' W102°17.50'</td>
</tr>
<tr>
<td>06 AGL B 70 MSL to turn right to</td>
<td>D</td>
<td>LBB 167/44</td>
<td>N32°58.50' W101°53.00'</td>
<td>N31°32.50' W102°14.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>DE</td>
<td>LBB 171/45</td>
<td>N32°57.50' W101°56.50'</td>
<td>N31°32.50' W102°06.00'</td>
</tr>
<tr>
<td>05 AGL B 70 MSL to direct to</td>
<td>E</td>
<td>LBB 187/49</td>
<td>N32°56.00' W102°13.00'</td>
<td>N31°31.50' W101°40.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>F</td>
<td>LBB 195/50</td>
<td>N32°57.50' W102°21.00'</td>
<td>N31°30.50' W101°11.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>G</td>
<td>LBB 224/50</td>
<td>N33°13.50' W102°44.00'</td>
<td>N31°16.00' W103°33.00'</td>
</tr>
<tr>
<td>06 AGL B 70 MSL to direct to</td>
<td>H</td>
<td>LBB 231/52</td>
<td>N33°18.00' W102°49.50'</td>
<td>N33°07.50' W103°17.50'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to turn right to</td>
<td>I</td>
<td>LBB 240/56</td>
<td>N33°23.50' W102°57.50'</td>
<td>N33°33.50' W103°00.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>J</td>
<td>LBB 250/55</td>
<td>N33°33.50' W103°00.00'</td>
<td>N33°47.00' W103°48.50'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to (Alternate Exit) turn left to</td>
<td>K</td>
<td>LBB 256/49</td>
<td>N33°39.50' W102°53.50'</td>
<td>N33°33.50' W103°00.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to turn left turn to</td>
<td>L</td>
<td>LBB 268/51</td>
<td>N33°50.00' W102°55.00'</td>
<td>N33°33.50' W103°00.00'</td>
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<tr>
<td>05 AGL B 70 MSL to direct to</td>
<td>M</td>
<td>LBB 264/62</td>
<td>N33°47.50' W103°09.00'</td>
<td>N33°30.50' W103°22.00'</td>
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<tr>
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<td>N</td>
<td>LBB 258/65</td>
<td>N33°40.50' W103°13.00'</td>
<td>N33°36.50' W103°33.00'</td>
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<tr>
<td>05 AGL B 70 MSL to direct to</td>
<td>O</td>
<td>HOB 328/40</td>
<td>N33°16.00' W103°33.00'</td>
<td>N33°43.00' W103°45.00'</td>
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<td>02 AGL B 70 MSL to turn left to</td>
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<td>HOB 319/36</td>
<td>N33°10.00' W103°37.50'</td>
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<td>Q</td>
<td>HOB 314/34</td>
<td>N33°06.00' W103°39.00'</td>
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<td>HOB 291/24</td>
<td>N32°51.00' W103°40.50'</td>
<td>N33°49.50' W103°49.00'</td>
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<td>S</td>
<td>HOB 264/21</td>
<td>N32°40.00' W103°41.00'</td>
<td>N33°54.50' W103°49.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to (Contact Fort Worth ARTCC 298.95) direct to</td>
<td>T</td>
<td>HOB 250/21</td>
<td>N32°35.00' W103°41.00'</td>
<td>N34°10.00' W103°48.00'</td>
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<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>U</td>
<td>HOB 230/25</td>
<td>N32°26.00' W103°42.00'</td>
<td>N34°10.00' W103°48.00'</td>
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<td>02 AGL B 70 MSL to turn left to</td>
<td>V</td>
<td>HOB 218/30</td>
<td>N32°18.50' W103°42.50'</td>
<td>N34°10.00' W103°48.00'</td>
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<td>09 AGL B 70 MSL to direct to</td>
<td>W</td>
<td>HOB 193/30</td>
<td>N32°11.00' W103°30.50'</td>
<td>N34°10.00' W103°48.00'</td>
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<tr>
<td>07 AGL B 70 MSL to turn right to</td>
<td>X</td>
<td>HOB 164/23</td>
<td>N32°15.50' W103°14.00'</td>
<td>N34°39.00' W104°02.00'</td>
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<tr>
<td>04 AGL B 70 MSL to direct to</td>
<td>Y</td>
<td>HOB 146/28</td>
<td>N32°12.00' W103°03.00'</td>
<td>N34°39.00' W104°04.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

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 01 to J1 on re-entry BA, and RA to RG1 on re-entry R-5104/R-5105. VMC terrain avoidance (TA/VC) operations are authorized within the published altitude blocks from B to AE and 01 to J1 on re-entry BA, and 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 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 MARSA 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 MARSA 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 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. MARSA 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.


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’
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. MARSA applies 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-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 points 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' W94°31'-30'; N33°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 Arpt;
(b) Point C-D: McCurtain Co. Arpt;
(c) Point D-E: Lonestar Arpt;
(d) Point F-G: Harrison Co Arpt and Shreveport Class C Airspace;
(e) Point G-H: Panola Co. Arpt;
(f) Point H: Center Arpt;
(g) Point I-J: Cherokee Co Arpt.

FSS's Within 100 NM Radii:
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 | N33°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/OSOA, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

**HOURS OF OPERATION:** Daylight hours by NOTAM

**ROUTE DESCRIPTION:**

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<tr>
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<td>05 AGL B 120 MSL to</td>
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**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:**

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<td>CME 256/39</td>
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<td>01 AGL B 120 MSL to</td>
<td>B</td>
<td>CME 282/31</td>
<td>N33°33.00’</td>
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<td>01 AGL B 80 MSL to</td>
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<td>CME 300/38</td>
<td>N33°46.00’</td>
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<td>CNX 111/27</td>
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<td>CNX 059/20</td>
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<td>CNX 353/12</td>
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<td>G</td>
<td>CNX 304/23</td>
<td>N34°39.00’</td>
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<td>CNX 234/17</td>
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<td>CNX 111/27</td>
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<td>A2</td>
<td>PIO 345/24</td>
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<tr>
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<td>A1</td>
<td>CME 230/43</td>
<td>N33°00.20’</td>
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<tr>
<td>120 MSL to</td>
<td>A</td>
<td>CME 256/39</td>
<td>N33°18.50’</td>
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**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 W105-14 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) MARSA applies at entries, along the route and exits. MARSA 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; N34-26.5 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 W105-17.8; 
   (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:**

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<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 120 MSL to or as assigned</td>
<td>A</td>
<td>PIO 317/11</td>
<td>N32°41.00'</td>
</tr>
<tr>
<td>10 AGL B 120 MSL to</td>
<td>B</td>
<td>PIO 329/6</td>
<td>N32°37.00'</td>
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<tr>
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<td>C</td>
<td>PIO 261/4</td>
<td>N32°32.00'</td>
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<td>D</td>
<td>PIO 202/24</td>
<td>N32°11.50'</td>
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<tr>
<td>01 AGL B 80 MSL to</td>
<td>E</td>
<td>PIO 183/23</td>
<td>N32°09.30'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>F</td>
<td>PIO 126/36</td>
<td>N32°05.00'</td>
</tr>
<tr>
<td>01 AGL B 98 MSL to</td>
<td>G</td>
<td>PIO 122/29</td>
<td>N32°11.10'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to</td>
<td>H</td>
<td>PIO 061/10</td>
<td>N32°34.50'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>I</td>
<td>PIO 004/14</td>
<td>N32°45.10'</td>
</tr>
<tr>
<td>10 AGL B 110 MSL to</td>
<td>J</td>
<td>PIO 344/24</td>
<td>N32°56.00'</td>
</tr>
<tr>
<td>10 AGL B 110 MSL to</td>
<td>K</td>
<td>PIO 274/14</td>
<td>N32°35.50'</td>
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<tr>
<td>01 AGL B 125 MSL to</td>
<td>L</td>
<td>PIO 256/32</td>
<td>N32°27.90'</td>
</tr>
<tr>
<td>01 AGL B 125 MSL to</td>
<td>M</td>
<td>PIO 256/32</td>
<td>N32°30.40'</td>
</tr>
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<td>03 AGL B 90 MSL to</td>
<td>H1</td>
<td>PIO 061/10</td>
<td>N32°34.50'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>F1</td>
<td>SFL 048/27</td>
<td>N31°58.50'</td>
</tr>
<tr>
<td>10 AGL B 98 MSL to</td>
<td>F</td>
<td>PIO 126/36</td>
<td>N32°05.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>F</td>
<td>PIO 004/14</td>
<td>N32°45.10'</td>
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<tr>
<td>10 AGL B 98 MSL to</td>
<td>F</td>
<td>PIO 126/36</td>
<td>N32°05.00'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to</td>
<td>H</td>
<td>PIO 061/10</td>
<td>N32°34.50'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>F1</td>
<td>SFL 048/27</td>
<td>N31°58.50'</td>
</tr>
<tr>
<td>10 AGL B 98 MSL to</td>
<td>F</td>
<td>PIO 126/36</td>
<td>N32°05.00'</td>
</tr>
</tbody>
</table>

**Alternate Exit:**
Ziper

| 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°44.10' | W105°28.00' |

**Alternate Exit:**
El Paso Gap

**FSS’s Within 100 NM Radius:**
ABQ
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'

(15) 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

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 N32-23 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) MARSA applies at entry, exit and along the route. MARSA 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

(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: 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
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'
IR ROUTES

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 MARSA 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. MARSA applies 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 391.6 or as assigned; B to G at 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).

<table>
<thead>
<tr>
<th>SCHEDULING ACTIVITY:</th>
<th>Same as Originating Activity</th>
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HOURS OF OPERATION: Sunrise-Sunset, daily

ROUTE DESCRIPTION:

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<th>Pt</th>
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<td>A</td>
<td>NGP 043/20</td>
<td>W97°01.00'</td>
</tr>
<tr>
<td>10 AGL B 20 AGL to B</td>
<td>NGP 044/23</td>
<td>W97°13.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 20 AGL to C</td>
<td>THX 140/20</td>
<td>W97°20.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 20 AGL to D</td>
<td>THX 255/33</td>
<td>W97°26.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 20 AGL to E</td>
<td>NQI 290/84</td>
<td>W99°15.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 20 AGL to F</td>
<td>NQI 303/60</td>
<td>W98°43.00'</td>
<td></td>
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</table>

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 MARSA 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. MARSA applies 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.

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).
IR ROUTES

FSS's Within 100 NM Radius:
SJT

IR-137


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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°49.0 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:

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 MARSA and MARSA 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:

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<th>Altitude Data</th>
<th>Pt</th>
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<th>Lat/Long</th>
</tr>
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<tbody>
<tr>
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<td>A</td>
<td>HMN 117/37</td>
<td>N32°29.50' W105°32.00'</td>
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<tr>
<td>05 AGL B 80 MSL to</td>
<td>B</td>
<td>HUP 339/25</td>
<td>N31°59.00' W105°27.00'</td>
</tr>
<tr>
<td>05 AGL B 70 MSL to</td>
<td>C</td>
<td>HUP 153/29</td>
<td>N31°06.50' W105°14.00'</td>
</tr>
<tr>
<td>05 AGL B 90 MSL to</td>
<td>D</td>
<td>HUP 133/60</td>
<td>N30°44.50' W104°43.00'</td>
</tr>
<tr>
<td>05 AGL B 90 MSL to</td>
<td>E</td>
<td>HUP 132/80</td>
<td>N30°29.00' W104°28.50'</td>
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<td>05 AGL B 90 MSL to</td>
<td>F</td>
<td>HUP 139/88</td>
<td>N30°17.00' W104°33.00'</td>
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<td>FST 226/95</td>
<td>N30°04.50' W104°29.50'</td>
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<td>N29°48.50' W103°05.00'</td>
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<td>N30°22.50' W102°51.00'</td>
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<td>05 AGL B 100 MSL to</td>
<td>J</td>
<td>FST 163/26</td>
<td>N30°31.50' W102°55.50'</td>
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<td>05 AGL B 80 MSL to</td>
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<td>SFL 125/64</td>
<td>N30°57.50' W104°14.50'</td>
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<td>L</td>
<td>SFL 086/17</td>
<td>N31°42.50' W104°45.00'</td>
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<tr>
<td>05 AGL B 70 MSL to</td>
<td>M</td>
<td>SFL 021/7</td>
<td>N31°51.00' W105°00.50'</td>
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<td>05 AGL B 70 MSL to</td>
<td>N</td>
<td>SFL 344/22</td>
<td>N32°06.60' W105°07.00'</td>
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<tr>
<td>05 AGL B 80 MSL to</td>
<td>O</td>
<td>CME 188/48</td>
<td>N32°35.00' W104°56.30'</td>
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</table>

| 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 obstruction 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:

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<th>Altitude Data</th>
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<th>Fac/Rad/Dist</th>
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<tbody>
<tr>
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<td>A</td>
<td>CNX 189/42</td>
<td>N33°43.00' W106°00.00'</td>
</tr>
<tr>
<td>Cross at 120 MSL to or as assigned</td>
<td>B</td>
<td>CNX 235/17</td>
<td>N34°15.50' W106°00.00'</td>
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<td>C</td>
<td>CNX 304/23</td>
<td>N34°39.00' W106°00.00'</td>
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<tr>
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<td>D</td>
<td>CNX 354/12</td>
<td>N34°34.00' W105°39.00'</td>
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**FSS's Within 100 NM Radius:**
SJT
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 I CME 256/39 N33°18.50' W105°24.00'
Alternate Exit: ELK to IR-192
10 AGL B 120 MSL to I CME 256/39 N33°18.50' W105°24.00'
120 MSL to I1 CME 230/43 N33°00.20' W105°22.10'
120 MSL to I2 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 N34-2 W106-14 to N34-16 W106-30 to N33-50 W105-30 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) MARSA applies at entry, along the route and at exit. MARSA is 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.
(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: CNX-15.6 W106-05.6; CNX-26.8 W106-23.8
(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 2NM, 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 N34-05.7 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; Tower 150' AGL N33-55.2 W105-19.6; Tower 150' AGL N34-08.6 W105-05.3; Tower 150' AGL N34-11.45 W106-01.85; Tower 150' AGL N34-20.46 W106-17.9; Tower 175' AGL N33-22.9 W105-17.36; Tower 175' AGL N34-39.48 W106-29.45; Tower 100' AGL N34-14.6 W105-59.55; Tower 215' AGL N33-53.45 W106-22.0; Tower 225' AGL N34-24.55 W106-27.0; Tower 235' AGL N34-30.45 W106-11.8; Tower 275' AGL N34-30.4 W105-06.6;
(b) Tower 300' AGL N34-40.83 W105-41.20;
(n) Tower 2 (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


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 30 MSL to | B | END 223/26 | N35°19.00' W98°44.00'
SFC B 37 MSL to | C | END 228/50 | N35°56.00' W98°56.00'
SFC B 40 MSL to | D | GAG 158/37 | N35°44.00' W98°43.00'
SFC B 60 MSL to | E | GAG 171/17 | N36°04.00' W99°53.00'
SFC B 40 MSL to | F | GAG 114/44 | N35°56.00' W98°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°33.00'

**ROUTE WIDTH** - 3 NM either side of centerline from A to D; 3 NM east and 5 NM west of centerline from 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-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 to | B | TXH 193/25 | N28°06.50' W98°19.50'
30 MSL to | C | COT 132/44 | N27°53.00' W98°36.00'
30 MSL to | D | LRD 095/41 | N27°18.50' W98°41.00'
30 MSL to | E | LRD 081/24 | N27°28.50' W98°58.50'
30 MSL to | F | LRD 049/28 | N27°43.50' W98°58.00'
30 MSL to | G | LRD 047/51 | N27°57.00' W98°37.00'

**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 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) MARSA applies after aircraft have passed the Entry point and
until standard ATC separation is provided after exiting the route.
(2) MARSA 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:
<table>
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<tr>
<th>Altitude Data</th>
<th>Pt</th>
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<th>Lat/Long</th>
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<tr>
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<td>THX 324/19</td>
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<tr>
<td>05 AGL B 20 MSL to</td>
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<td>THX 009/37</td>
<td>N29°06.00' W97°57.00'</td>
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<td>C</td>
<td>THX 015/54</td>
<td>N29°20.00' W97°45.00'</td>
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<tr>
<td>05 AGL B 20 MSL to</td>
<td>D</td>
<td>SAT 080/56</td>
<td>N29°40.00' W97°23.00'</td>
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<tr>
<td>05 AGL B 20 MSL to</td>
<td>E</td>
<td>CWK 136/40</td>
<td>N29°51.00' W97°03.00'</td>
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<td>05 AGL B 20 MSL to</td>
<td>F</td>
<td>CWK 141/59</td>
<td>N29°33.00' W96°55.00'</td>
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ROUTE WIDTH - 3 NM either side of centerline from A to H.

Special Operating Procedures:
(1) Maximum airspeed is 480 KIAS.
(2) MARSA applies after aircraft have passed the Entry point and
until standard ATC separation is provided after exiting the route.
(3) MARSA 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’ 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:
CJO, 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:
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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>N29°58.00' W99°35.00'</td>
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<tr>
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<td>C</td>
<td>RSG 074/31</td>
<td>N30°04.00' W99°42.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to</td>
<td>D</td>
<td>RSG 141/16</td>
<td>N29°47.00' W100°09.00'</td>
</tr>
</tbody>
</table>
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


HOURS OF OPERATION: Continuous
IR ROUTES

67 MSL to (TA/TFR Initiation Point)
turn right to
02 AGL B 67 MSL to direct to
02 AGL B 67 MSL to (Start Maneuver Area)
Thence via published route.

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 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 MARSA 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 50 MSL to O LBB 042/48 N34°11.00' W101°09.00'
(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).
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 MARSA. MARSA 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
PNH078029 (GOONI).
(5) Deconflict with: VR-1141, VR-1142 (Sheppard 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:

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<td>E</td>
<td>PNH 099/48</td>
<td>N34°59.50’ W100°46.00’</td>
</tr>
<tr>
<td>SFC B 50 MSL to</td>
<td>F</td>
<td>PNH 097/46</td>
<td>N35°01.50’ W100°47.50’</td>
</tr>
<tr>
<td>SFC B 50 MSL to</td>
<td>G</td>
<td>PNH 094/26</td>
<td>N35°08.50’ W101°11.30’</td>
</tr>
<tr>
<td>SFC B 50 MSL to</td>
<td>H</td>
<td>PNH 098/23</td>
<td>N35°07.60’ W101°14.50’</td>
</tr>
<tr>
<td>SFC B 50 MSL to</td>
<td>I</td>
<td>PNH 105/24</td>
<td>N35°04.50’ W101°15.00’</td>
</tr>
<tr>
<td>SFC B 50 MSL to</td>
<td>J</td>
<td>PNH 137/55</td>
<td>N34°29.00’ W101°03.30’</td>
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<tr>
<td>SFC B 50 MSL to</td>
<td>K</td>
<td>LBB 040/51</td>
<td>N34°14.50’ W101°07.00’</td>
</tr>
<tr>
<td>SFC B 70 MSL to</td>
<td>L</td>
<td>LBB 042/48</td>
<td>N34°11.00’ W101°09.00’</td>
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<tr>
<td>70 MSL to</td>
<td>M</td>
<td>LBB 042/38</td>
<td>N34°05.00’ W101°18.00’</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>N</td>
<td>LBB 043/27</td>
<td>N33°58.00’ W101°29.00’</td>
</tr>
</tbody>
</table>

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 MARSA. MARSA 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 351.7/127.85 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 (GOONI).
(5) Deconflict with: VR-1141, VR-1142 (Sheppard AFB); SR-234,
SR-250, SR-273 (Dyess 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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>PGO 188/29</td>
<td>N34°12.00’ W94°44.00’</td>
</tr>
<tr>
<td>01 AGL B 40 MSL</td>
<td>B</td>
<td>PGO 116/43</td>
<td>N34°19.00’ W93°51.00’</td>
</tr>
<tr>
<td>01 AGL B 40 MSL</td>
<td>C</td>
<td>PGO 082/48</td>
<td>N34°44.00’ W93°38.00’</td>
</tr>
<tr>
<td>01 AGL B 40 MSL</td>
<td>D</td>
<td>PGO 063/34</td>
<td>N34°54.00’ W93°58.40’</td>
</tr>
<tr>
<td>01 AGL B 40 MSL</td>
<td>E</td>
<td>FSM 131/15</td>
<td>N35°12.10’ W94°04.00’</td>
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</table>

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 MARSA 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.
(b) 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:

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

TERRAIN FOLLOWING OPERATIONS: Authorized 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 MARSA 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) MARSA 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:

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

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 MARSA 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) MARSA applies 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 732-5864, C830-298-5848. Scheduling hours 0730-1630 local Mon-Fri (excluding holidays)

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

<table>
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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
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<td>DLF 332/28</td>
<td>N29°48.00’/ W100°58.00’</td>
</tr>
<tr>
<td>45 MSL to</td>
<td>B</td>
<td>DLF 339/47</td>
<td>N30°07.00’/ W100°59.00’</td>
</tr>
<tr>
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<td>C</td>
<td>RSG 290/42</td>
<td>N30°22.00’/ W101°00.00’</td>
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<tr>
<td>SFC B 60 MSL to</td>
<td>D</td>
<td>DLF 305/71</td>
<td>N30°09.00’/ W101°47.00’</td>
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<td>E</td>
<td>FST 090/72</td>
<td>N30°43.00’/ W101°37.00’</td>
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<td>SJT 248/54</td>
<td>N31°11.00’/ W101°29.00’</td>
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<td>SFC B 50 MSL to</td>
<td>G</td>
<td>SJT 236/44</td>
<td>N31°04.50’/ W101°14.50’</td>
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<td>H</td>
<td>SJT 209/35</td>
<td>N30°55.00’/ W100°53.00’</td>
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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 MARSA shall be by scheduling.

(e) MARSA applies 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 OD-175; from the exit point to the JCT 281/39; direct SJT 165/29; direct SJT, and thence desired routing to destination. Plan the turn off the JCT 281 radial so as to intercept the SJT 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 2701.1 (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/18 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, TAELR TRANSITION at 7000’ MSL. Request clearance off the TAELR 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 TAELR fix at 7000’. Clearance for IR-169 is also clearance for this exit route 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 732-5864, C830-298-5484.

SCHEDULING ACTIVITY: 87 FTS/DOS, 570 2nd Street, Laughlin AFB, TX 78843 DSN 732-5864, C830-298-5864. 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’

1-66
### Conflicts:
- Low-level deconfliction purposes.

### Special Operating Procedures:

#### Route:
- Consult Laughlin NOTAMs (KDLF) for most current notices for this route.
- This route is covered by the following maps and charts:
  - San Antonio Sectional, Low IFR Enroute L-19, L-20, TPC H-238.
- Alternate Entry: D.
- Alternate Exit: H.

#### Scheduling:
- Request for use shall be with the Scheduling Activity.
- Request for weekend use shall be coordinated between 0730-1630 local Mon - Fri.
- Aircraft shall be scheduled with a minimum of 10 minutes separation, 35 minutes if a T-38 follows a T-1 on the route.

#### Restrictions:
- For environmental reasons, this route may only be flown by T-38 and T-1A aircraft.
- Aircraft unable to meet their assigned entry time within the window three minutes early to three minutes late must not enter the route.
- The primary means of invoking MARSA shall be by scheduling.
- MARSA applies after aircraft have passed the entry point and until standard ATC separation is established after exiting the route.
- The See and Avoid concept applies at route crossing points. Route use is VMC only. Prior to encountering ICM, aircrews will cancel IFR, discontinue the route, maintain VMC and recover VFR, or obtain a separate IFR clearance.
- IR-170 will be flown no higher than 3,000 MSL from Point F to H without 24 hour prior coordination with 47 OSS/OAS DSN 732-5052, C830-298-5052.
- Remain at or below 3500' MSL between Points B and C.

#### Conflicts:
- Low-level deconflictions, aircrew should fly this low-level at 500' AGL, unless complying with specific deconfliction procedures outlined in this section.
- 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.
- Crosses SR-283 / 284 between Points A and B.
- Crosses SR-281 / 282 at Point B.

#### Communications:
- 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.
- All Entry/Alternate Entry Points are compulsory reporting points.
- 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’.
- Monitor (UHF) 255.4 while on the route.
- Contact Houston Center (UHF) 307.2, (VHF) 127.8 prior to (l) for exit clearance unless previously coordinated.
- 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.
- Lost Communications:
  1. In the event of lost communication 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.

#### Uncharted Obstructions:
- Uncharted 200’ tower Loma Alta Area N 29-54 W 100-46
- Charted 200’ tower west of road (depicted on east) N 29-53.5 W 100-32.5

#### Laughlin Specific Instructions:
- When filed on a TALON 170H / 170I request to be cleared off the LAEKE TRANSITION prior to 25 DME.
- 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


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

ROUTE DESCRIPTION:

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

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. Do not descent out of 60 MSL until 4 NM past Point D.
3. Report Point F to Kansas City Center 378.8 no later than crossing the Exit Point.
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

IR-172


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:

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

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 378.2.
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

**ROUTE DESCRIPTION:**

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 60 MSL to</td>
<td>A</td>
<td>PNH 069/27</td>
<td>N35°20.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W101°10.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>B</td>
<td>PNH 073/51</td>
<td>N35°22.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W100°40.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>C</td>
<td>PNH 069/68</td>
<td>N35°29.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W100°21.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>D</td>
<td>PNH 061/79</td>
<td>N35°42.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W100°12.00'</td>
</tr>
<tr>
<td>40 MSL to 60 MSL to</td>
<td>E</td>
<td>GAG 189/31</td>
<td>N35°51.50'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W100°05.00'</td>
</tr>
<tr>
<td>05 AGL to 40 MSL to</td>
<td>F</td>
<td>SYO 325/37</td>
<td>N35°54.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W99°57.00'</td>
</tr>
<tr>
<td>05 AGL to 40 MSL to</td>
<td>G</td>
<td>GAG 164/21</td>
<td>N36°00.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W99°50.00'</td>
</tr>
<tr>
<td>05 AGL to 40 MSL to</td>
<td>H</td>
<td>GAG 124/26</td>
<td>N36°03.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W99°50.00'</td>
</tr>
<tr>
<td>05 AGL to 40 MSL to</td>
<td>I</td>
<td>GAG 094/27</td>
<td>N36°14.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W98°42.00'</td>
</tr>
<tr>
<td>05 AGL to 40 MSL to</td>
<td>J</td>
<td>END 269/38</td>
<td>N36°23.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W98°26.00'</td>
</tr>
<tr>
<td>05 AGL to 40 MSL to</td>
<td>K</td>
<td>END 286/27</td>
<td>N36°30.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W98°26.00'</td>
</tr>
<tr>
<td>60 MSL B FL230 to</td>
<td>30 MSL B FL60 MSL to cross</td>
<td>B</td>
<td>ARG 061/71</td>
</tr>
<tr>
<td>30 MSL to</td>
<td></td>
<td></td>
<td>N36°36.50'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W89°37.00'</td>
</tr>
<tr>
<td>Special Operating Procedures:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Aircrews may use 265.25 for interplane frequency.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Do not descent out of 60 MSL until 4 NM past Point D.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Report Point F to Kansas City Center 379.2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) On route departure, all 71 FTW aircraft fly heading 090°, or as directed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) IR-172 and IR-173 have same geographical Points A-F.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at FL230 to descend direct to</td>
<td>A</td>
<td>ARG 060/100</td>
<td>N36°49.50'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W89°05.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

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 U to Y; 3 NM either side of centerline from Y to G1.

Special Operating Procedures:

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

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.

FSS’s Within 100 NM Radius:
- BNA, COU, JBR, MKL, MLC, STL

IR-175


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

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at FL230 to</td>
<td>A</td>
<td>CIM 071/57</td>
<td>N36°35.50’ W103°42.50’</td>
</tr>
<tr>
<td>or as assigned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>170 MSL B FL230</td>
<td>B</td>
<td>DHT 285/52</td>
<td>N36°29.00’ W103°30.00’</td>
</tr>
<tr>
<td>descend direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150 MSL B FL230</td>
<td>C</td>
<td>DHT 284/43</td>
<td>N36°24.00’ W103°20.00’</td>
</tr>
<tr>
<td>descend to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 MSL B FL230</td>
<td>D</td>
<td>DHT 281/27</td>
<td>N36°16.00’ W103°04.00’</td>
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<tr>
<td>continue descent</td>
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<td>direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 MSL to</td>
<td>E</td>
<td>DHT 308/22</td>
<td>N36°22.00’ W102°50.00’</td>
</tr>
<tr>
<td>59 MSL B 70 MSL</td>
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<td>turn left and descend</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>59 MSL to</td>
<td>F</td>
<td>TBE 100/40</td>
<td>N37°00.00’ W102°49.50’</td>
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<td>(TA/TFR Initiation</td>
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<td>Point)</td>
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<tr>
<td>direct to</td>
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</tr>
<tr>
<td>02 AGL B 59 MSL</td>
<td>G</td>
<td>TBE 090/43</td>
<td>N37°06.50’ W102°43.50’</td>
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<td>to</td>
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</tr>
<tr>
<td>turn right to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 59 MSL</td>
<td>H</td>
<td>LBL 274/57</td>
<td>N37°17.50’ W102°07.50’</td>
</tr>
<tr>
<td>to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>turn left to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 57 MSL</td>
<td>I</td>
<td>LBL 286/55</td>
<td>N37°27.00’ W102°00.00’</td>
</tr>
<tr>
<td>to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 57 MSL</td>
<td>J</td>
<td>LAA 100/23</td>
<td>N38°03.00’ W102°14.00’</td>
</tr>
<tr>
<td>to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>climb direct to</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>05 AGL B 70 MSL</td>
<td>K</td>
<td>LAA 345/34</td>
<td>N38°46.00’ W102°43.50’</td>
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<tr>
<td>to</td>
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<td></td>
<td></td>
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<tr>
<td>turn left and continue</td>
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<td></td>
</tr>
<tr>
<td>climb to</td>
<td></td>
<td></td>
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<tr>
<td>04 AGL B 70 MSL</td>
<td>L</td>
<td>LAA 321/35</td>
<td>N38°44.00’ W103°01.50’</td>
</tr>
<tr>
<td>to direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 70 MSL</td>
<td>M</td>
<td>LAA 313/30</td>
<td>N38°36.50’ W103°03.00’</td>
</tr>
<tr>
<td>to descend direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>04.5 AGL B 70 MSL</td>
<td>N</td>
<td>LAA 296/21</td>
<td>N38°24.50’ W103°02.00’</td>
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<tr>
<td>to turn right to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>04.5 AGL B 60 MSL</td>
<td>O</td>
<td>LAA 284/19</td>
<td>N38°20.00’ W103°03.00’</td>
</tr>
<tr>
<td>to (Start Maneuver Area) direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 60 MSL</td>
<td>P</td>
<td>LAA 243/33</td>
<td>N38°03.00’ W103°21.00’</td>
</tr>
<tr>
<td>to turn left to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 60 MSL</td>
<td>Q</td>
<td>LAA 227/37</td>
<td>N37°53.00’ W103°21.00’</td>
</tr>
<tr>
<td>to direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 60 MSL</td>
<td>R</td>
<td>LAA 188/42</td>
<td>N37°32.00’ W102°59.00’</td>
</tr>
<tr>
<td>to (End Maneuver Area) (TA/TFR Termination Point) direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>110 MSL to</td>
<td>S</td>
<td>TBE 071/40</td>
<td>N37°20.00’ W102°46.00’</td>
</tr>
<tr>
<td>or as assigned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Contact Albuquerque ARTCC 351.7 passing 100 MSL) Re-Entry: Alpha</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 MSL to</td>
<td>R1</td>
<td>LAA 188/42</td>
<td>N37°32.00’ W102°59.00’</td>
</tr>
<tr>
<td>(End Maneuver Area) (TA/TFR Termination Point) turn left to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 MSL to</td>
<td>U</td>
<td>LAA 170/31</td>
<td>N37°40.50’ W102°42.50’</td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 MSL to</td>
<td>V</td>
<td>LAA 178/26</td>
<td>N37°46.50’ W102°47.00’</td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 MSL to</td>
<td>W</td>
<td>LAA 189/21</td>
<td>N37°52.00’ W102°51.00’</td>
</tr>
<tr>
<td>70 MSL B 70 MSL</td>
<td>X</td>
<td>LAA 291/37</td>
<td>N38°32.00’ W103°21.00’</td>
</tr>
<tr>
<td>continue climb to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 MSL to</td>
<td>Y</td>
<td>LAA 306/41</td>
<td>N38°42.50’ W103°16.00’</td>
</tr>
<tr>
<td>(TA/TFR Initiation Point) continue right turn to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 60 MSL</td>
<td>M1</td>
<td>LAA 313/30</td>
<td>N38°36.50’ W103°03.00’</td>
</tr>
<tr>
<td>Thence via published route.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternate Entry: Z</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FL190 to</td>
<td>Z</td>
<td>LBL 264/43</td>
<td>N37°06.00’ W101°52.00’</td>
</tr>
<tr>
<td>or as assigned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57 MSL B FL190</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>descend direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57 MSL to</td>
<td>A</td>
<td>LAA 128/46</td>
<td>N37°37.00’ W102°04.00’</td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57 MSL to</td>
<td>B</td>
<td>LAA 100/23</td>
<td>N38°03.00’ W102°14.00’</td>
</tr>
<tr>
<td>Thence via published route.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

J1 LAA 100/23

Z1 LAA 128/46

LAA 313/30

N38°36.50’ W103°03.00’

N38°24.50’ W103°02.00’

N38°20.00’ W103°03.00’

N38°03.00’ W103°21.00’

N37°53.00’ W103°21.00’

N37°32.00’ W102°59.00’

N37°20.00’ W102°46.00’

N37°15.30’ W102°42.00’

N37°00.00’ W102°26.00’

N37°32.00’ W102°59.00’

N37°40.50’ W102°42.50’

N37°46.50’ W102°47.00’

N37°52.00’ W102°51.00’

N38°32.00’ W103°21.00’

N38°42.50’ W103°16.00’

N38°36.50’ W103°03.00’

N37°06.00’ W101°52.00’
**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 R to T; 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 MARSA 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 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 in 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’;
   (d) Residence at N37°25.05’ W101°58.06’; N36°17.65’ W102°58.19’.

**FSS’s Within 100 NM Radius:**

**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:**

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

1-72
<table>
<thead>
<tr>
<th>Stage</th>
<th>Source/Destination</th>
<th>Bearing</th>
<th>Course</th>
<th>Distance</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>04 AGL B 90 MSL to E</td>
<td>HUP 140/97</td>
<td>N30°08.00'</td>
<td>W104°30.00'</td>
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<td>IR ROUTES</td>
</tr>
<tr>
<td>04 AGL B 90 MSL to F</td>
<td>MRF 235/30</td>
<td>N30°05.50'</td>
<td>W104°28.50'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td>03 AGL B 90 MSL to G</td>
<td>MRF 210/26</td>
<td>N29°58.00'</td>
<td>W104°17.00'</td>
<td></td>
</tr>
<tr>
<td>descend direct to</td>
<td>03 AGL B 90 MSL to H</td>
<td>MRF 174/26</td>
<td>N29°51.50'</td>
<td>W104°00.00'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td>03 AGL B 80 MSL to I</td>
<td>MRF 137/45</td>
<td>N29°40.00'</td>
<td>W103°30.00'</td>
<td></td>
</tr>
<tr>
<td>turn left and descend to</td>
<td>03 AGL B 80 MSL to J</td>
<td>MRF 126/48</td>
<td>N29°42.50'</td>
<td>W103°19.50'</td>
<td></td>
</tr>
<tr>
<td>descend direct to</td>
<td>03 AGL B 76 MSL to K</td>
<td>FST 167/37</td>
<td>N30°20.00'</td>
<td>W102°57.00'</td>
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</tr>
<tr>
<td>direct to</td>
<td>03 AGL B 72 MSL to L</td>
<td>FST 131/29</td>
<td>N30°34.50'</td>
<td>W102°38.00'</td>
<td></td>
</tr>
<tr>
<td>descend direct to</td>
<td>06 AGL B 72 MSL to M</td>
<td>FST 110/30</td>
<td>N30°42.00'</td>
<td>W102°29.00'</td>
<td></td>
</tr>
<tr>
<td>turn left to</td>
<td>06 AGL B 60 MSL to N</td>
<td>FST 101/30</td>
<td>N30°46.00'</td>
<td>W102°26.50'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td>04 AGL B 60 MSL to O</td>
<td>FST 067/28</td>
<td>N31°03.00'</td>
<td>W102°26.50'</td>
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</tr>
<tr>
<td>turn left and descend to</td>
<td>06 AGL B 50 MSL to P</td>
<td>FST 047/25</td>
<td>N31°10.00'</td>
<td>W102°34.00'</td>
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</tr>
<tr>
<td>direct to</td>
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<td>FST 347/22</td>
<td>N31°19.00'</td>
<td>W102°59.50'</td>
<td></td>
</tr>
<tr>
<td>turn left to</td>
<td>07 AGL B 50 MSL to R</td>
<td>PEQ 100/25</td>
<td>N31°19.00'</td>
<td>W103°07.50'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td>07 AGL B 50 MSL to S</td>
<td>PEQ 178/24</td>
<td>N31°04.00'</td>
<td>W103°39.00'</td>
<td></td>
</tr>
<tr>
<td>turn right direct to</td>
<td>04 AGL B 70 MSL to T</td>
<td>PEQ 203/25</td>
<td>N31°07.00'</td>
<td>W103°51.00'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td>05 AGL B 70 MSL to U</td>
<td>PEQ 281/34</td>
<td>N31°41.00'</td>
<td>W104°11.50'</td>
<td></td>
</tr>
<tr>
<td>turn right to</td>
<td>09 AGL B 70 MSL to V</td>
<td>PEQ 297/37</td>
<td>N31°51.00'</td>
<td>W104°09.00'</td>
<td></td>
</tr>
<tr>
<td>direct to</td>
<td>09 AGL B 70 MSL to W</td>
<td>PEQ 306/36</td>
<td>N31°54.00'</td>
<td>W104°03.20'</td>
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</tr>
<tr>
<td>climb direct to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.

3. Participating aircraft separation: Route is designated for MARSA 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. MARSA 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';
(c) Residence at N29°34.0' W103°27.6';
(d) Residence at N29°59.1' W103°07.8';
(e) Residence at N31°05.9' W103°35.6';
(f) Residence at N29°52.1' W104°07.2';
(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 (CALLSIGN, EAGLE PEAK). At Point E transmit in the blind on 255.4 (CALLSIGN, CHINATI). At Point I transmit in the blind on 255.4 (CALLSIGN, NINEPOINT).

(14) All VHF equipped aircraft use the following procedures:
Transmit in the blind on 122.8 at Imperial Reservoir (28 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' or 1/4 NM unless otherwise stated:
(a) Residence at N32°14.4' W103°03.9';
(b) Residence at N31°32.5' W102°52.0';
(c) Residence at N32°26.0' W103°41.0';
(d) Residence at N32°18.5' W103°42.0';
(e) Residence at N32°11.0' W103°42.5';
(f) Residence at N31°38.3' W103°14.0';
(g) Residence at N32°14.4' W103°41.0'.

(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).

(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.IR178B1.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 P.

(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, C325-696-3655, fax DSN 461-4158, C325-696-4158.

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 170 MSL to or as assigned (TFR Initiation Point)</td>
<td>A</td>
<td>MAF 109/60</td>
<td>N31°30.50' W101°11.00'</td>
</tr>
<tr>
<td>02 AGL B 170 MSL descend direct to cross</td>
<td>B</td>
<td>MAF 126/39</td>
<td>N31°31.50' W101°40.00'</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to (TA Initiation Point) (Contact Midland APP CON 372.1) direct to</td>
<td>C</td>
<td>MAF 160/28</td>
<td>N31°32.50' W102°06.00'</td>
</tr>
<tr>
<td>06 AGL B 60 MSL to turn right to</td>
<td>D</td>
<td>MAF 174/28</td>
<td>N31°32.50' W102°14.00'</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to direct to</td>
<td>E</td>
<td>MAF 180/28</td>
<td>N31°33.00' W102°17.50'</td>
</tr>
<tr>
<td>08 AGL B 60 MSL to (Contact Ft. Worth ARTCC 298.95 and report Point F, IR-180) turn right and climb to</td>
<td>F</td>
<td>MAF 232/34</td>
<td>N31°45.00' W102°47.50'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>G</td>
<td>MAF 240/37</td>
<td>N31°48.50' W102°52.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to (Alternate Entry Point) turn left to</td>
<td>H</td>
<td>HOB 146/28</td>
<td>N32°12.00' W103°03.00'</td>
</tr>
<tr>
<td>04 AGL B 70 MSL to direct to</td>
<td>I</td>
<td>HOB 164/23</td>
<td>N32°15.50' W103°14.00'</td>
</tr>
<tr>
<td>07 AGL B 70 MSL to turn right to</td>
<td>J</td>
<td>HOB 193/30</td>
<td>N32°11.00' W103°30.50'</td>
</tr>
<tr>
<td>09 AGL B 70 MSL to direct to</td>
<td>K</td>
<td>HOB 218/30</td>
<td>N32°18.50' W103°42.50'</td>
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<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>L</td>
<td>HOB 230/25</td>
<td>N32°26.00' W103°42.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>M</td>
<td>HOB 250/21</td>
<td>N32°35.00' W103°41.00'</td>
</tr>
</tbody>
</table>
02 AGL B 70 MSL to direct to RG
02 AGL B 70 MSL to direct to RG
12 AGL B 70 MSL to turn right to RG
02 AGL B 70 MSL to direct to RG
02 AGL B 70 MSL to direct to RG
05 AGL B 70 MSL to direct to RG
02 AGL B 70 MSL to direct to RG
02 AGL B 70 MSL to direct to RG
On Re-Entry RG:
- 02 AGL B 70 MSL to continue turn and climb to RG1 CVS 232/27 N34°39.00'
- 02 AGL B 70 MSL to climb direct to RG
- 05 AGL B 70 MSL to turn left to RG

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

TERAIN 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 and 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.
**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**

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<thead>
<tr>
<th>As assigned to</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>END 286/27</td>
<td>B</td>
<td>END 269/38</td>
</tr>
<tr>
<td>B</td>
<td>END 269/38</td>
<td>C</td>
<td>GAG 109/27</td>
</tr>
<tr>
<td>C</td>
<td>GAG 109/27</td>
<td>D</td>
<td>GAG 124/26</td>
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<tr>
<td>D</td>
<td>GAG 124/26</td>
<td>E</td>
<td>GAG 164/21</td>
</tr>
<tr>
<td>E</td>
<td>GAG 164/21</td>
<td>F</td>
<td>SYO 325/37</td>
</tr>
<tr>
<td>F</td>
<td>SYO 325/37</td>
<td>G</td>
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<td>I</td>
<td>IFI 266/36</td>
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<td>J</td>
<td>END 230/38</td>
</tr>
<tr>
<td>J</td>
<td>END 230/38</td>
<td>K</td>
<td>END 237/23</td>
</tr>
</tbody>
</table>

**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'
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-183


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 | 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'

1-78
IR ROUTES

1-79

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 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:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 120 MSL to or as assigned</td>
<td>A</td>
<td>PIO 344/24</td>
<td>N32°56.00'</td>
</tr>
<tr>
<td>10 AGL B 120 MSL to</td>
<td>B</td>
<td>PIO 357/16</td>
<td>N32°47.80'</td>
</tr>
<tr>
<td>10 AGL B 110 MSL to</td>
<td>C</td>
<td>PIO 007/16</td>
<td>N32°46.60'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>D</td>
<td>PIO 041/18</td>
<td>N32°42.50'</td>
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<tr>
<td>01 AGL B 90 MSL to</td>
<td>E</td>
<td>CNM 294/42</td>
<td>N32°40.00'</td>
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<td>01 AGL B 90 MSL to</td>
<td>F</td>
<td>CNM 307/33</td>
<td>N32°40.10'</td>
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<td>CNM 341/26</td>
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<td>CNM 021/24</td>
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<td>I</td>
<td>CNM 074/19</td>
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<td>SFL 058/41</td>
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<tr>
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<td>SFL 065/28</td>
<td>N31°51.00'</td>
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<td>SFL 111/43</td>
<td>N31°21.50'</td>
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<td>O</td>
<td>SFL 128/26</td>
<td>N31°25.00'</td>
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<td>P</td>
<td>SFL 123/17</td>
<td>N31°32.70'</td>
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<tr>
<td>01 AGL B 70 MSL to</td>
<td>Q</td>
<td>SFL 199/9</td>
<td>N31°37.20'</td>
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<tr>
<td>01 AGL B 65 MSL to</td>
<td>R</td>
<td>SFL 223/27</td>
<td>N31°29.30'</td>
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<td>SFL 278/35</td>
<td>N31°56.80'</td>
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<tr>
<td>01 AGL B 80 MSL to</td>
<td>T</td>
<td>PIO 202/24</td>
<td>N32°11.50'</td>
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<tr>
<td>01 AGL B 80 MSL to</td>
<td>U</td>
<td>PIO 225/17</td>
<td>N32°22.50'</td>
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<tr>
<td>01 AGL B 125 MSL to</td>
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<td>PIO 246/19</td>
<td>N32°27.90'</td>
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<td>01 AGL B 125 MSL to</td>
<td>W</td>
<td>PIO 256/32</td>
<td>N32°30.40'</td>
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<tr>
<td>Alternate Entry:</td>
<td></td>
<td>TALON LOW</td>
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<tr>
<td>03 AGL B 90 MSL to</td>
<td>F1</td>
<td>PIO 064/34</td>
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<td>ELK</td>
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<tr>
<td>120 MSL to</td>
<td>A2</td>
<td>CME 256/39</td>
<td>N33°18.50'</td>
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<td>120 MSL to</td>
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<td>CME 230/43</td>
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<td>PIO 344/24</td>
<td>N32°56.00'</td>
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<td>Alternate Exit:</td>
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<td>TALON LOW</td>
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</tr>
<tr>
<td>01 AGL B 125 MSL to</td>
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<td>PIO 041/18</td>
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<tr>
<td>Alternate Exit:</td>
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<td>EL PASO GAP</td>
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</tr>
<tr>
<td>01 AGL B 98 MSL to</td>
<td>L2</td>
<td>CNM 240/33</td>
<td>N32°05.00'</td>
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<tr>
<td>Alternate Exit:</td>
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<tr>
<td>01 AGL B 98 MSL to</td>
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<td>CNM 219/27</td>
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<tr>
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<td>TALON LOW</td>
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<tr>
<td>01 AGL B 80 MSL to</td>
<td>D</td>
<td>PIO 041/18</td>
<td>N32°42.50'</td>
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<tr>
<td>01 AGL B 70 MSL to</td>
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<td>N31°55.80'</td>
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<td>01 AGL B 70 MSL to</td>
<td>L1</td>
<td>SFL 047/27</td>
<td>N31°58.50'</td>
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10 AGL B 98 MSL to L2 SFL 021/24
Alternate Exit: ZIPER
01 AGL B 80 MSL to T PIO 202/24
10 AGL B 80 MSL to T1 PIO 329/6
10 AGL B 130 MSL to T2 PIO 315/15

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 R-5103B, do not enter restricted airspace until clearance is received from Centennial Range Control.
(5) Exiting at Point W, and not scheduled into Centennial Range or R-5103B or at ZIPER, contact Holloman Approach 325.3.
(6) At other exits, contact ABQ ARTCC 292.15.
(7) 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 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(t) town N32-20.88 W104-43.9, 1.5 NM radius or 1000’ AGL
d(t) 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 N31-45.45 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 N31-43.82 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:
IR ROUTES

(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 N32-35.05 W105-10.95 to N32-32.15 W105-10.62 to N32-30.00 W105-37.18 W105-36.22 W105-38.03 to N32-34.83 W105-37.50 W105-40.49 to N32-37.58 W105-40.58 W105-38.43 to N32-35.15 W105-27.50 to N33-01.95 W105-26.78 to N33-05.03 W105-30.00 to N32-33.05 W105-37.55 to N32-32.05 W105-34.83 to N103-59.30 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 N32-38.70 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 the 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:
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.
(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 575-3244, C575-572-3244.

SCHEDULING ACTIVITY: 49 OSS/OSOS, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 575-3536, C575-572-3536.

HOURS OF OPERATION: Sunrise-0600Z++

ROUTE DESCRIPTION:
Cross at 120 MSL to A PIO 317/11 or as assigned N32°41.00' W105°25.00'

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'

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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' W104°55.50' Alternate Exit: ZIPER
01 AGL B 65 MSL to F SFL 223/27 N31°29.30' W105°31.20' 01 AGL B 70 MSL to K1 SFL 048/27 N31°58.50' W104°38.00'
01 AGL B 65 MSL to G SFL 199/9 N31°37.20' W105°10.50' 01 AGL B 98 MSL to K2 PIO 126/36 N32°05.00' W104°50.00'
01 AGL B 70 MSL to H SFL 123/17 N31°32.70' W105°51.00' 01 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' Alternate Exit: TALON LOW
01 AGL B 70 MSL to Q CNM 341/26 N32°40.80' W104°17.00' Alternate Exit: EL PASO GAP
01 AGL B 48 MSL to R PIO 064/34 N32°40.10' W104°29.00' 10 AGL B 120 MSL to W PIO 344/24 N32°56.00' W105°20.10'
01 AGL B 90 MSL to S CNM 294/42 N32°40.00' W104°54.50' Alternate Exit: ZIPER
01 AGL B 90 MSL to T PIO 041/18 N32°42.50' W105°01.30' 10 AGL B 130 MSL to V1 PIO 315/15 N32°44.10' W105°28.00'
01 AGL B 80 MSL to U PIO 007/16 N32°46.60' W105°12.20' Alternate Exit: ELK
10 AGL B 110 MSL to V PIO 357/16 N32°47.80' W105°15.40' 10 AGL B 130 MSL to V1 PIO 315/15 N32°44.10' W105°28.00'
10 AGL B 110 MSL to W PIO 344/24 N32°56.00' W105°20.10' Alternate Exit: TALON LOW
10 AGL B 110 MSL to X PIO 274/14 N32°35.50' W105°34.20' Alternate Exit: ZIPER
01 AGL B 125 MSL to Y PIO 246/19 N32°27.90' W105°39.80' 10 AGL B 130 MSL to V1 PIO 315/15 N32°44.10' W105°28.00'
01 AGL B 125 MSL to Z PIO 256/32 N32°30.40' W105°56.00' Alternate Exit: EL PASO GAP
Alternate Entry: TALON LOW
01 AGL B 98 MSL to K2 PIO 126/36 N32°05.00' W104°50.00' Alternate Exit: ZIPER
10 AGL B 98 MSL to K1 SFL 048/27 N31°58.50' W104°38.00' If R-5103B is active, use alternate exit ZIPER. If R-5103B is not active, route can be flown to Point Z.
01 AGL B 70 MSL to L1 SFL 058/32 N31°55.80' W104°30.00' (5) To schedule Centennial Range or R-5103B, contact 49 OSS/OSOS. Comply with all range procedures listed in current HAFB Range Supplement.

Terrain Following Operations: Authorized from Point C to Q.

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.

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.

01 AGL B 70 MSL to Thence via flight plan route.
Alternate Exit: TALON LOW

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(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 entrance. 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) 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-192, IR-195 and VR-196.

(14) Avoid the following noise sensitive areas by distance/altitude specified:

(a) Ranch/house N33-10.9 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 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 W104-12.13, 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 N31-34.53 W103-00.53
(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 W104-46.63 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 W105-56.93 to N32-14.55 W103-56.90 to N32-01.55 W104-00.50 to N33-00.63 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/OSOA, 744 Delaware Ave., Holloman AFB, NM 88330-8014 DSN 572-3536, C575-572-3536.

**HOURS OF OPERATION:** Sunrise-0600Z++
IR ROUTES

ROUTE DESCRIPTION:

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 W105-42.9 to N32-06 W105-41 to N32-02 W104-41 to N32-12 W104-41 to N32-52.2 to point of beginning.

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) MARSA applies at entry, exit and along the route. MARSA 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 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 W105-25.70 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

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 80 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’
01 AGL B 70 MSL to E1 SFL 048/27 N31°58.50’ W104°38.00’

Alternate Exit:
Talon Low
01 AGL B 80 MSL to C PIO 061/10 N32°34.50’ W105°07.50’

Alternate Exit:
Ziper
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’
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 N32-21.17 W105-46.53
(f) Tower 125’ AGL N32-36.4 W105-38.03

The only aircraft authorized to operate below 500’ AGL are Tornados (100’ AGL minimum).

IR-200


HOURS OF OPERATION: Sunrise-Sunset by NOTAM

ROUTE DESCRIPTION:

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.
(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 MARSA 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' 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°23.00' W117°27.00'
110 MSL B 120 MSL to G CZQ 021/8 N38°41.00' W117°57.00'
110 MSL B 120 MSL to H NLC 068/47 N38°09.00' W118°46.50'

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


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:**

**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:

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-2501 and R-2502 restrictions.
(9) Cross a point 15 miles south of Pt. B at or below 7000’ MSL.
(10) Aircraft will transmit in the blind on 315.9 and continue to monitor while in the complex.
(11) Aircraft will be VFR. See and Avoid with other R-2508 complex users within the lateral confines of R-2508.
(12) Contact High Desert TRACON on 348.7 for return clearance to El Toro.
(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:

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 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.
(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'

TERAIN 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'

TERAIN 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, IR-1267 at Point C, VR-1268 between Points B and C, 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 C and F, IR-254 between Points D and F and at Point H, and IR-213 between Points H and G.
(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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

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.
(4) Aircraft shall remain VMC at all times.
(5) Contact Yuma Control on 294.0 for return clearance to El Toro after completing operations in R250.
(6) Mandatory reporting Point at E. Contact Los Angeles Center on 285.6.
(7) Separation Criteria - Scheduling coordinated by user for IR conflicts and See and Avoid for VR conflicts.
(8) Cross Point B at or above 7000’ MSL.

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.

1-90
(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.
(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.
(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 W115-23-22 between Points A and B approximately 20 NM past Point A 2 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     BKX 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 Range Control on 274.0 for clearance to El Toro if operating in R-2301.
(7) Contact Yuma Approach on 274.0 inside the R-2301 for return clearance to El Toro. Contact prior to exiting R-2301.
(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.
(12) CAUTION: 199' Radio Tower located at 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


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**

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<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>A</td>
<td>TPH 068/46</td>
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<tr>
<td>SFC B 105 MSL to</td>
<td>B</td>
<td>TPH 052/43</td>
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<td>C</td>
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<td>D</td>
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<td>SFC B 115 MSL to</td>
<td>E</td>
<td>BQU 137/51</td>
</tr>
<tr>
<td>SFC B 115 MSL to</td>
<td>F</td>
<td>BVL 199/50</td>
</tr>
</tbody>
</table>

**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 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 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 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 MARSA operations established by coordinated scheduling.
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

**Altitude Data**

<table>
<thead>
<tr>
<th>Pt</th>
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<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
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<td>B</td>
<td>BQU 137/51</td>
</tr>
<tr>
<td>SFC B 115 MSL to</td>
<td>C</td>
<td>TPH 025/78</td>
</tr>
<tr>
<td>SFC B 115 MSL to</td>
<td>D</td>
<td>TPH 052/43</td>
</tr>
</tbody>
</table>

**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 MARSA operations established by coordinated scheduling.
8. Special Coordination Instructions: Route conflicts with IR-234 from A to F, IR-293, VRs 1253-1260-1406 between B and C, IRs 237-238-238 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 93524-4110 DSN 527-4110, C661-277-4110.

HOURS OF OPERATION: 0600-2200 local, daily

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized for the 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) Route designated for MARSA operations established by coordinated scheduling.

(10) Points G and M are mandatory reporting points. Contact Joshua Approach on assigned mission frequency. Mission frequencies will be assigned by the scheduling activity.

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).
(3) Approaching the Reveille MOA, aircrew shall contact Nellis Control 343.0 for clearance into the MOA.
(4) Route is designated for MARSA operations established by coordinated scheduling.
(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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours on even numbered days

ROUTE DESCRIPTION:

<table>
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<tr>
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</tr>
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<tr>
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<td>A</td>
<td>TPH 068/46</td>
<td>N38°06.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W116°04.00'</td>
</tr>
<tr>
<td>05 AGL B 120 MSL to</td>
<td>B</td>
<td>TPH 015/69</td>
<td>N39°00.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W116°15.00'</td>
</tr>
<tr>
<td>05 AGL B 120 MSL to</td>
<td>C</td>
<td>TPH 008/53</td>
<td>N38°50.10'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W116°32.60'</td>
</tr>
<tr>
<td>05 AGL B 140 MSL to</td>
<td>D</td>
<td>TPH 016/19</td>
<td>N38°17.40'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W116°49.20'</td>
</tr>
<tr>
<td>05 AGL B 115 MSL to</td>
<td>E</td>
<td>TPH 111/13</td>
<td>N37°54.00'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W116°49.50'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized for the entire route.

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:**

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<tr>
<th>Altitude Data</th>
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<tr>
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<td>A</td>
<td>TNP 355/26</td>
<td>N34°32.00' W115°41.00'</td>
</tr>
<tr>
<td>SFC B 80 MSL to B</td>
<td>GFS 284/23</td>
<td>N35°19.00' W115°35.00'</td>
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</tr>
<tr>
<td>SFC B 80 MSL to C</td>
<td>GFS 256/5</td>
<td>N35°08.00' W115°17.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 80 MSL to D</td>
<td>GFS 166/19</td>
<td>N34°49.00' W115°11.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 70 MSL to E</td>
<td>GFS 181/31</td>
<td>N34°38.00' W115°21.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 70 MSL to F</td>
<td>PKE 069/8</td>
<td>N34°07.00' W114°31.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 70 MSL to G</td>
<td>PKE 107/12</td>
<td>N34°00.00' W114°29.00'</td>
<td></td>
</tr>
</tbody>
</table>

**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:**

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<tr>
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<tbody>
<tr>
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<td>A</td>
<td>BLH 286/21</td>
<td>N33°46.00' W115°07.00'</td>
</tr>
<tr>
<td>SFC B 70 MSL to B</td>
<td>BLH 286/28</td>
<td>N33°50.00' W115°15.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 70 MSL to C</td>
<td>PKE 248/27</td>
<td>N34°03.00' W115°13.00'</td>
<td></td>
</tr>
<tr>
<td>SFC B 70 MSL to D</td>
<td>PKE 063/19</td>
<td>N34°10.00' W114°18.00'</td>
<td></td>
</tr>
</tbody>
</table>

**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
A MVA 233/8 N38°31.00’ W118°12.00’
170 MSL B 130 MSL
descend direct to
B MVA 094/16 N38°28.00’ W117°42.50’
turn left and descend to
C TPH 021/25 N38°21.50’ W116°42.50’
SFC B 130 MSL
to
D TPH 027/35 N38°27.00’ W116°31.50’
turn left and descend to
SFC B 130 MSL
to (TA Initiation Point)
E TPH 009/76 N39°10.00’ W116°20.00’
direct to
F BAM 117/52 N39°57.00’ W116°08.00’
SFC B 120 MSL
to (End TA)
G BAM 121/39 N40°04.50’ W116°21.50’
direct to
SFC B 110 MSL
to (End TA)
H NFL 054/47 N39°41.00’ W117°44.50’
turn left to
SFC B 110 MSL
to (Start Maneuver Area)
I NFL 055/43 N39°38.50’ W117°50.00’
direct to
SFC B 110 MSL
to (Start Maneuver Area)
J NFL 103/23 N39°14.00’ W118°16.50’
(Start TA)
start climb and turn left to
SFC B 120 MSL
to (End Maneuver Area)
K NFL 120/29 N39°04.50’ W118°16.50’
continue climb to
SFC B 120 MSL
to (TA/TFR Termination Point)
L MVA 084/10 N38°32.00’ W117°49.50’
120 MSL to

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) Aircrews 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.

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 mountaneous.

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 left and 4 NM right 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.
(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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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 MARSA 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 N36°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:

<table>
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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tr>
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<td>B</td>
<td>BAM 288/28</td>
<td>N40°50.50' W117°25.00'</td>
</tr>
<tr>
<td>110 MSL B FL200 to turn right and descend to</td>
<td>C</td>
<td>BAM 358/34</td>
<td>N41°07.00' W116°43.00'</td>
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<tr>
<td>90 MSL B 110 MSL to (TA/TFR Initiation Point) direct to</td>
<td>D</td>
<td>BAM 018/34</td>
<td>N41°02.00' W116°28.50'</td>
</tr>
<tr>
<td>SFC B 90 MSL to direct to</td>
<td>E</td>
<td>BAM 080/29</td>
<td>N40°30.00' W116°17.50'</td>
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<td>SFC B 110 MSL to right to</td>
<td>F</td>
<td>BAM 096/35</td>
<td>N40°20.00' W116°14.00'</td>
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<tr>
<td>SFC B 110 MSL to direct to</td>
<td>G</td>
<td>BAM 121/56</td>
<td>N39°52.00' W116°08.00'</td>
</tr>
<tr>
<td>SFC B 110 MSL to direct to</td>
<td>H</td>
<td>BAM 124/59</td>
<td>N39°48.00' W116°08.00'</td>
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<td>TPH 009/76</td>
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<td>N38°41.00' W116°27.50'</td>
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<td>TPH 015/38</td>
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<td>N38°33.00' W117°12.00'</td>
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<tr>
<td>130 MSL to direct to</td>
<td>M</td>
<td>MVA 233/8</td>
<td>N38°31.00' W118°12.00'</td>
</tr>
<tr>
<td>130 MSL to (End Maneuver Area) left to</td>
<td>N</td>
<td>MVA 247/36</td>
<td>N38°30.00' W118°48.00'</td>
</tr>
<tr>
<td>130 MSL B 150 MSL to O MVA 236/44</td>
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<td>N38°21.00' W118°56.00'</td>
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<td>(Aircrews exiting IR-275 will contact Oakland ARTCC 319.8 after passing O) direct to</td>
<td>P</td>
<td>OAL 266/51</td>
<td>N38°11.00' W118°49.00'</td>
</tr>
<tr>
<td>150 MSL to direct to</td>
<td>Q</td>
<td>OAL 263/44</td>
<td>N38°08.00' W118°41.00'</td>
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<tr>
<td>150 MSL B 170 MSL to right to</td>
<td>R</td>
<td>OAL 276/23</td>
<td>N38°09.00' W118°13.00'</td>
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<tr>
<td>170 MSL to direct to</td>
<td>S</td>
<td>OAL 278/20</td>
<td>N38°08.50' W118°09.00'</td>
</tr>
<tr>
<td>170 MSL to T OAL VORTAC</td>
<td></td>
<td></td>
<td>N38°00.20' W117°46.23'</td>
</tr>
<tr>
<td>Re-Entry:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>130 MSL to (End Maneuver Area) left to</td>
<td>N1</td>
<td>MVA 247/36</td>
<td>N38°30.00' W118°48.00'</td>
</tr>
<tr>
<td>130 MSL B 150 MSL to left to O1 MVA 236/44</td>
<td></td>
<td></td>
<td>N38°21.00' W118°56.00'</td>
</tr>
<tr>
<td>150 MSL to left to</td>
<td>P1</td>
<td>OAL 266/51</td>
<td>N38°11.00' W118°49.00'</td>
</tr>
<tr>
<td>150 MSL to direct to</td>
<td>Q1</td>
<td>OAL 263/44</td>
<td>N38°08.00' W118°41.00'</td>
</tr>
<tr>
<td>140 MSL B 150 MSL to direct to</td>
<td>U</td>
<td>OAL 267/36</td>
<td>N38°08.50' W118°30.00'</td>
</tr>
<tr>
<td>140 MSL to direct to</td>
<td>R1</td>
<td>OAL 276/23</td>
<td>N38°09.00' W118°13.00'</td>
</tr>
<tr>
<td>140 MSL to left to</td>
<td>V</td>
<td>TPH 324/19</td>
<td>N38°33.00' W117°12.00'</td>
</tr>
<tr>
<td>130 MSL B 140 MSL to Thence via published route. Alternate Entry:</td>
<td>I1</td>
<td>TPH 009/76</td>
<td>N39°10.00' W116°20.00'</td>
</tr>
<tr>
<td>or as assigned direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>130 MSL B FL230 to Thence via published route. Alternate Entry:</td>
<td>J1</td>
<td>TPH 018/48</td>
<td>N38°41.00' W116°27.50'</td>
</tr>
<tr>
<td>130 MSL B FL230 to right to</td>
<td>K1</td>
<td>TPH 015/38</td>
<td>N38°34.50' W116°36.00'</td>
</tr>
<tr>
<td>Thence via published route. Alternate Exit:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFC B 120 MSL to Thence via IR-279 routing. Alternate Entry:</td>
<td>J</td>
<td>TPH 018/48</td>
<td>N38°41.00' W116°27.50'</td>
</tr>
<tr>
<td>SFC B 130 MSL to Thence via published route. Alternate Exit:</td>
<td>K</td>
<td>TPH 015/38</td>
<td>N38°34.50' W116°36.00'</td>
</tr>
</tbody>
</table>

PMSV CONTACTS: Primary Home Station. Alternates Mountain Home (MUO 342.5).
TERRAIN FOLLOWING OPERATIONS: IMC/VMC
T 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 centerline from N to L; 9 NM either side of centerline from M to N; 4 NM either side of centerline from B to C (Re-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 MARSA 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.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFC B 110 MSL to</td>
<td>A</td>
<td>TPH 018/48</td>
<td>N38°41.00' W116°27.50'</td>
</tr>
<tr>
<td>SFC B 120 MSL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>descend direct to cross</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFC B 110 MSL to</td>
<td>B</td>
<td>TPH 031/33</td>
<td>N38°24.00' W116°30.50'</td>
</tr>
<tr>
<td>direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFC B 110 MSL to</td>
<td>C</td>
<td>TPH 097/22</td>
<td>N37°53.00' W116°37.00'</td>
</tr>
<tr>
<td>(Enter R-4809 and/or R-4807)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-Entry:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IFR/VFR

TERRAIN FOLLOWING OPERATIONS: IFR/VFR
T 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 B to M; 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 MARSA 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 arc: 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-4809/R-4807.
(8) The method of MARSA 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  H1  TPH 291/46  N38°30.00’  W117°48.50’

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 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.


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.
ROUTE DESCRIPTION:

Altitude Data  
Pt  
Fac/Rad/Dist  
Lat/Long  

Cross at 170 MSL to or as assigned  
A  
BQU 074/29  
N40°45.00'  
W115°08.00'  

or as assigned descend to  
B  
BQU 108/35  
N40°25.00'  
W115°08.00'  

140 MSL to turn right and descend to  
C  
BQU 128/33  
N40°19.00'  
W115°21.00'  

120 MSL to  
D  
BAM 095/29  
N40°22.50'  
W116°20.00'  

01 AGL B 120 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  
J  
NFL 103/23  
N39°14.00'  
W118°16.50'  

Alternate Exit: T  
K  
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'  

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 (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.


(7) Alternate Entry: G. Contact Salt Lake City ARTCC on 363.15.

(8) Alternate Exit: G. Climbing in order to contact Salt Lake City ARTCC 363.15 no later than Pt G. T-R-4803 must be scheduled for 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.

(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 W115-35-00. 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/OSEO, 611 E St., Travis AFB, CA 94535 DSN 837-1073, C707-424-1073.

SCHEDULING ACTIVITY: 60 OSS/OSEO, 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 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. 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 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.


FSS’s Within 100 NM Radius:

- RNO

IR-286

ORIGINATING ACTIVITY: 57 OSS/OSM, Nellis AFB, NV 89191 DSN 682-7891, C702-652-7891.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Face/Rad/Dist</th>
<th>Lat/Long</th>
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<tr>
<td>Cross at 140 MSL to 100 MSL B 140 MSL to 05 AGL B 100 MSL to 05 AGL B 90 MSL to 01 AGL B 90 MSL to SFC B 98 MSL to SFC B 98 MSL to SFC B 90 MSL to SFC B 94 MSL to SFC B 95 MSL to SFC B 94 MSL to SFC B 94 MSL to SFC B 94 MSL to SFC B 94 MSL to SFC B 94 MSL to SFC B 94 MSL to SFC B 94 MSL to SFC B 94 MSL to</td>
<td>A</td>
<td>LSV 277/42</td>
<td>N36°30.00' W115°50.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>B</td>
<td>BTY 111/30</td>
<td>N36°30.00' W116°15.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>C</td>
<td>BTY 135/11</td>
<td>N36°38.00' W116°32.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>D</td>
<td>BTY 104/3</td>
<td>N36°46.50' W116°34.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>E</td>
<td>OAL 129/23</td>
<td>N37°41.00' W117°30.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>F</td>
<td>OAL 103/17</td>
<td>N37°52.00' W117°28.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>G</td>
<td>OAL 074/14</td>
<td>N38°00.00' W117°28.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>H</td>
<td>TPH 346/16</td>
<td>N38°18.00' W117°01.00'</td>
</tr>
<tr>
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<td>I</td>
<td>TPH 055/31</td>
<td>N38°11.00' W116°25.00'</td>
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<tr>
<td>or as assigned</td>
<td>J</td>
<td>TPH 084/73</td>
<td>N37°47.00' W115°32.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>K</td>
<td>TPH 090/82</td>
<td>N37°37.00' W115°23.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>L</td>
<td>TPH 097/87</td>
<td>N37°26.00' W115°22.00'</td>
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<td>M</td>
<td>TPH 115/99</td>
<td>N36°55.00' W115°30.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>AA</td>
<td>TPH 017/49</td>
<td>N38°42.00' W116°27.00'</td>
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<tr>
<td>or as assigned</td>
<td>BB</td>
<td>TPH 025/35</td>
<td>N38°28.00' W116°32.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>CC</td>
<td>TPH 035/28</td>
<td>N38°19.00' W116°34.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>I1</td>
<td>TPH 055/31</td>
<td>N38°11.00' W116°25.00'</td>
</tr>
<tr>
<td>or as assigned</td>
<td>G1</td>
<td>OAL 074/14</td>
<td>N38°00.00' W117°28.00'</td>
</tr>
<tr>
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<td>GX</td>
<td>OAL 091/33</td>
<td>N37°50.00' W117°06.00'</td>
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<tr>
<td>or as assigned</td>
<td>I2</td>
<td>TPH 055/31</td>
<td>N38°11.00' W116°25.00'</td>
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</table>
IR ROUTES

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, MARSA 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 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


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

Altimeter Data Pt Fac/Rad/Dist Lat/Long
Cross at 140 MSL to AB BQU 064/47 N40*53.00' W114*34.50'
or as assigned 140 MSL to BQU 051/58 N41*07.00' W114*34.50'
descend to cross 120 MSL to AB BQU 064/47 N40*53.00' W114*44.00'
start descent to cross 115 MSL to A BQU 083/41 N40*38.00' W114*53.00'
(TA/TFR Initiation Point) direct to 01 AGL B 115 MSL to BQU 122/43 N40*13.00' W115*09.00'
direct to 01 AGL B 115 MSL to C ELY 256/41 N39*19.50' W115*43.00'
turn left to 01 AGL B 115 MSL to D ELY 242/37 N39*10.50' W115*37.50'
direct to 01 AGL B 115 MSL to E ELY 162/26 N38*51.50' W114*50.00'
descend direct to 01 AGL B 115 MSL to F ELY 157/27 N38*51.00' W114*47.00'
direct to 01 AGL B 110 MSL to G ELY 144/30 N38*49.50' W114*38.50'
turn right to 01 AGL B 110 MSL to H ELY 139/33 N38*47.50' W114*33.50'
direct to 01 AGL B 110 MSL to I LCL 344//25 N38*40.50' W114*23.50'
(TA/TFR Termination Point) turn left and climb to 110 MSL B 130 MSL to J LCL 353/24 N38*39.00' W114*18.50'
110 MSL B 130 MSL to LMLF 275/35 N38*00.00' W114*12.00'
continue climb direct to 130 MSL to K LCL 006/25 N38*40.00' W114*33.50'
(Alternate Entry) turn left to 130 MSL to L MLF 275/35 N38*34.00' W113*42.50'
(Enter Sevier B MOA) turn left to 130 MSL to M MLF 279/31 N38*34.50' W113*36.50'
(TA/TFR Initiation Point) descend direct to 01 AGL B 130 MSL to N MLF 309/24 N38*41.50' W113*18.50'
turn left to
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) 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. 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. 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 MARSA 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.
(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.

IR-300


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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 150 MSL to 100 MSL B 150 MSL to 150 MSL B 100 MSL</td>
<td>A</td>
<td>LKV VORTAC</td>
<td>N42°29.57' W120°30.43'</td>
</tr>
<tr>
<td>or as assigned descend direct to continue descent to 100 MSL to (TA/FR Initiation Point) direct to</td>
<td>AA</td>
<td>LKV 120/13</td>
<td>N42°17.00' W120°15.50'</td>
</tr>
<tr>
<td>100 MSL to</td>
<td>B</td>
<td>LKV 120/17</td>
<td>N42°17.00' W120°15.50'</td>
</tr>
<tr>
<td>or as assigned descend direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 AGL B 100 MSL to direct to</td>
<td>C</td>
<td>LKV 121/31</td>
<td>N42°06.00' W120°03.30'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to turn left and climb to</td>
<td>D</td>
<td>SDO 224/58</td>
<td>N40°57.00' W119°09.00'</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to direct to</td>
<td>E</td>
<td>SDO 217/53</td>
<td>N40°54.00' W118°59.00'</td>
</tr>
</tbody>
</table>
1-105

01 AGL B 110 MSL to EE SDO 210/29 N41°05.20' W118°30.00'
01 AGL B 110 MSL to F SDO 092/10 N41°21.00' W117°49.00'
01 AGL B 110 MSL to G SDO 062/14 N41°27.00' W117°44.00'
01 AGL B 110 MSL to GA REO 148/43 N41°53.50' W117°39.00'
01 AGL B 110 MSL to GB REO 145/37 N41°59.50' W117°38.00'
01 AGL B 90 MSL to H REO 141/32 N42°05.00' W117°37.00'
01 AGL B 90 MSL to I REO 136/30 N42°08.50' W117°35.00'
01 AGL B 90 MSL to J REO 065/29 N42°38.50' W117°12.50'
01 AGL B 90 MSL to K REO 057/32 N42°43.00' W117°10.00'
01 AGL B 90 MSL to L REO 040/36 N42°54.00' W117°09.50'
01 AGL B 80 MSL to M BOI 272/44 N43°17.50' W117°09.50'
01 AGL B 80 MSL to N BOI 276/46 N43°51.00' W117°09.50'
01 AGL B 80 MSL to O BOI 280/48 N43°55.00' W117°11.00'
01 AGL B 80 MSL to P BOI 278/58 N43°57.00' W118°25.00'
01 AGL B 80 MSL to Q BOI 270/70 N43°53.00' W117°43.50'
01 AGL B 150 MSL to R BOI 260/93 N43°44.00' W118°19.00'
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 MARSA 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 MARSA. In IMC the method of MARSA 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. Aircrews should be aware of hang gliding activity from Pt. A thru C.
9. 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:**

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
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<tr>
<td>Cross at 120 MSL to</td>
<td>A</td>
<td>BOI 010/51</td>
<td>N44°18.00' W115°39.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to</td>
<td>B</td>
<td>BOI 027/73</td>
<td>N44°25.00' W115°00.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to</td>
<td>C</td>
<td>BOI 041/99</td>
<td>N44°25.00' W114°15.00'</td>
</tr>
<tr>
<td>01 AGL B 130 MSL to</td>
<td>D</td>
<td>DLN 183/53</td>
<td>N44°25.00' W112°59.00'</td>
</tr>
</tbody>
</table>

**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
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'
01 AGL B 110 MSL to L BOI 320/63 N44°33.00' W116°47.00'
110 MSL toAlternate Exit: Y BOI 206/59 N42°00.00' W115°33.50'

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 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.


(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°35.00' 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 toAlternate Exit: Y 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.
AIRSPACE MANAGEMENT information DSN 728-4722.
Home AFB, ID 83648 DSN 728-2172/4607 C208-828-2172.

SCHEDULING ACTIVITY:

ORIGINATING ACTIVITY:

BOI, MMV, RNO

FSS’s Within 100 NM Radius:

BOI, MMV, RNO

IR-303


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. | A | REO 237/27 | N42°29.00’ W118°27.00’
descend to 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 or as assigned. | M | BQU 344/34 | N41°20.00’ W115°45.00’
descend to 140 MSL to | J | BQU 343/57 | N41°42.50’ W115°45.00’
Thence via published route. | | | |
Alternate Exit: I | 01 AGL B 100 MSL to | H | BQU 309/50 | N41°27.00’ W116°23.00’
climb to cross 140 MSL to | I | BQU 323/50 | N41°33.00’ W116°08.50’
Contact Salt Lake City | | | |
ARTCC 363.15

IR ROUTES

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 X to Y.

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.

Noise Sensitive Areas:

(a) 10,000’ MSL minimum altitude from 5 NM prior to 5 NM past Galena Highway (located between A and B).

(b) Avoid the following Noise Sensitive Areas by 1500’ AGL or 3 NM:

(i) City of Rocks (N42-05-00 W115-15-00); (ii) Mountain City (N41-50-30 W115-57-30); (iii) Ranch (N41-43-50 W115-58-50); (iv) Ward Ranch/uncharted airport (N42-03-00 W113-29-07); (v) Craters of the Moon National Monument (N43-27-45 W116-33-00); (vi) Henry area (N41-42-10 W114-49-00).

(c) Due to bird strike potential, minimum altitude from 5 NM prior to 5 NM past point G is 1000’ AGL.

(d) 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.

(d) 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 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.

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. 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 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) 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 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 728-2172/4607 C208-828-2172) 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, descend to 140 MSL to turn left to 140 MSL to 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'.

(10) Uncharted airports; N41-57-21 W118-37-30 and N41-39-00 W118-30-00. Overfly at or about 1500' AGL or avoid by 3 NM.


(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.

IR-304


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/Altitude Lat/Long

Cross at 170 MSL to or as assigned. descend to
140 MSL to turn left to 140 MSL to 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 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'.
01 AGL B 90 MSL to descend to 01 AGL B 90 MSL to descend to 01 AGL B 85 MSL to I REO 229/12 N42°31.00' W117°45.50'.
01 AGL B 85 MSL to J REO 144/16 N42°20.00' W117°28.00'.
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'.
01 AGL B 95 MSL to M REO 108/49 N42°06.00' W117°00.00'.
01 AGL B 85 MSL to N REO 275/48 N42°55.00' W118°52.00'.
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'.

FSS’s Within 100 NM Radius:

BOI, MMV, RNO
**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. **MARS A 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 C208-422-5348.**

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 may be obtained from the scheduling agency. Aircrews 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.**


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 structure, 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 ROUTES**

**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:**

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<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tbody>
<tr>
<td>Cross at 120 MSL to</td>
<td>A</td>
<td>BOI 206/59</td>
<td>N42°50.00' W117°06.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to</td>
<td>B</td>
<td>BOI 196/75</td>
<td>N42°30.00' W117°06.00'</td>
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<tr>
<td>01 AGL B 120 MSL to</td>
<td>C</td>
<td>BOI 185/109</td>
<td>N41°52.00' W117°06.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to</td>
<td>D</td>
<td>BOI 163/117</td>
<td>N41°36.83' W116°12.00'</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to</td>
<td>E</td>
<td>BOI 150/130</td>
<td>N41°26.00' W115°33.50'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>F</td>
<td>BYI 200/67</td>
<td>N41°42.20' W114°47.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>G</td>
<td>BYI 153/32</td>
<td>N42°03.00' W113°45.00'</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to</td>
<td>H</td>
<td>BYI 120/37</td>
<td>N42°07.00' W113°18.50'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to</td>
<td>I</td>
<td>PIH 203/42</td>
<td>N42°19.80' W113°15.70'</td>
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</table>
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 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’

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) MARSA applies between successive participants by scheduling block of time at Point A. See and Avoid primary method of MARSA 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).
(b) 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).
(4) Due to bird strike potential, minimum altitude from 5 NM prior to 5 NM past Point J is 1000’ AGL.

FSS’s Within 100 NM Radius:
BOI

IR-307

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aerona St., Boise Air Terminal, ID 83705-8004 DSN 422-5310, C208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aerona St., Boise Air Terminal, ID 83705-8004 DSN 422-5348, C208-422-5348.

HOURS OF OPERATION: Continuous or by NOTAM

ROUTE DESCRIPTION:

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 110 MSL to</td>
<td>A</td>
<td>BOI 320/65</td>
<td>N44°33.00’ W116°47.00’</td>
</tr>
<tr>
<td>01 AGL B 110 MSL to B</td>
<td>DNJ 271/20</td>
<td>N44°53.00’ W116°39.00’</td>
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<tr>
<td>01 AGL B 110 MSL to C</td>
<td>DNJ 329/41</td>
<td>N45°26.50’ W116°25.00’</td>
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<tr>
<td>01 AGL B 110 MSL to D</td>
<td>DNJ 358/80</td>
<td>N46°02.00’ W115°39.00’</td>
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<tr>
<td>01 AGL B 110 MSL to E</td>
<td>CPN 231/74</td>
<td>N45°32.00’ W114°21.80’</td>
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<tr>
<td>01 AGL B 110 MSL to F</td>
<td>CPN 221/51</td>
<td>N45°34.00’ W113°45.00’</td>
<td></td>
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<tr>
<td>01 AGL B 120 MSL to G</td>
<td>DLN 290/34</td>
<td>N45°36.00’ W113°11.50’</td>
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<tr>
<td>01 AGL B 120 MSL to H</td>
<td>DLN 229/26</td>
<td>N45°05.00’ W113°06.00’</td>
<td></td>
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<tr>
<td>01 AGL B 120 MSL to I</td>
<td>DLN 183/53</td>
<td>N44°25.00’ W112°59.00’</td>
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<tr>
<td>01 AGL B 130 MSL to J</td>
<td>BOI 041/99</td>
<td>N44°25.00’ W114°15.00’</td>
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</tbody>
</table>
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) MARSA applies between successive participants and at all route crossings. Techniques for applying MARSA 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 (N44-24.0 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

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 N36°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 681-1750/71/72. 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, C505-853-5979/5888 to obtain a current and complete fax list of uncharted/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


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) | 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 direct 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°01.00' 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 direct to | L | SJN 284/20 | N34°34.00' W109°30.00'

01 AGL B 90 MSL to turn right to | M | SJN 269/20 | N34°29.00' W109°32.00'

01 AGL B 90 MSL to climb direct to cross | N | SJN 260/22 | N34°26.00' W109°35.00'

100 MSL to direct to | O | SJN 229/45 | N34°03.50' W109°55.50'

100 MSL to turn right to | P | SJN 230/51 | N34°01.00' W110°03.00'

01 AGL B 100 MSL to direct to | Q | SJN 237/63 | N34°02.50' W110°20.00'

01 AGL B 100 MSL to turn right to | R | SJN 246/67 | N34°11.50' W110°27.50'

01 AGL B 100 MSL to direct to | S | INW 051/35 | N35°18.50' W110°08.50'

06.5 AGL B 90 MSL to turn left to | T | INW 045/37 | N35°22.50' W110°09.00'

90 MSL to direct to | U | INW 030/43 | N35°34.50' W110°11.50'

90 MSL to (Contact Denver ARTCC on 256.87) climb to cross | 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'

160 MSL to Alternate Entry: F1 | F1 | TBC 053/77 | N36°36.00' W109°47.50'

120 MSL to or as assigned then descend direct to cross | | | |

01 AGL B 100 MSL to turn right to G | TBC 058/75 | N36°28.50' W109°32.00'

01 AGL B 100 MSL to Thence via published route. | H | 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'

PMVS 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, AD: 4 NM either side of centerline from F1 to H1. Alternate Entry, S: 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°57.76' 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 MARSA 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 N34-52.4 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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>EPH 105/21</td>
<td>N47<em>10.00' W119</em>02.00'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to</td>
<td>B</td>
<td>GEG 205/30</td>
<td>N47<em>13.00' W118</em>09.00'</td>
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<tr>
<td>03 AGL B 50 MSL to</td>
<td>C</td>
<td>GEG 258/26</td>
<td>N47<em>38.00' W118</em>15.70'</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to</td>
<td>D</td>
<td>GEG 278/32</td>
<td>N47<em>49.00' W118</em>19.00'</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to</td>
<td>E</td>
<td>GEG 270/42</td>
<td>N47<em>49.00' W118</em>36.00'</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to</td>
<td>F</td>
<td>EPH 359/28</td>
<td>N47<em>49.00' W119</em>11.00'</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to</td>
<td>G</td>
<td>EPH 334/23</td>
<td>N47<em>46.00' W119</em>28.50'</td>
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<tr>
<td>03 AGL B 60 MSL to</td>
<td>H</td>
<td>EPH 297/26</td>
<td>N47<em>42.00' W119</em>51.00'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to</td>
<td>I</td>
<td>EPH 218/15</td>
<td>N47<em>15.00' W119</em>44.00'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to</td>
<td>J</td>
<td>EPH 187/22</td>
<td>N47<em>03.40' W119</em>40.50'</td>
</tr>
</tbody>
</table>

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. MARSA 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-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...
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 Afld (Pvt) N47-08-30 W118-48-04;
(b) Pru Afld N47-07-30 W118-23-34;
(c) Kramer Afld N47-22-54 W118-17-48;
(d) Hanes Afld (Pvt) N47-29-30 W118-15-04;
(e) Davenport Afld N47-39-15 W118-10-04;
(f) 7 Bays Afld (Pvt) N47-51-04 W118-19-49;
(g) Gollehon Afld (Pvt) N47-49-13 W118-41-13;
(h) Wilbur Afld N47-45-12 W118-44-38;
(i) Sheffels Ranch Afld (Pvt) N47-49-02 W118-48-05;
(j) Mansfield Afld N47-39-15 W118-10-04;
(k) Quincy Afld N47-12-42 W118-23-34;

(9) Sensitive Areas:
(a) Avoid Spraque 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:
(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:

IR 325


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

ALTITUDE DATA:

Pt Fac/Rad/Dir Lat/Long
A EPH 218/15 N47°15.00' W119°44.00'
03 AGL B 60 MSL to B EPH 297/62 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 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. 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-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 Afld (Pvt) N47-10-24 W119-44-48;
   (b) Quincy Afld N47-12-42 W119-50-23;
   (c) Mansfield Afld N47-48-35 W119-38-14;
   (d) Sheffels Ranch Afld (Pvt) N47-49-02 W118-48-05;
   (e) Wilbur Afld N47-45-12 W118-44-38;
   (f) Gollehon Afld (Pvt) N47-49-13 W118-41-13;
   (g) 7 Bays Afld (Pvt) N47-51-04 W118-19-49;
(h) Davenport AFLD N47-39-15 W118-10-04;
(i) Hanes AFLD (Pvt) N47-29-30 W118-15-04;
(j) Kramer AFLD N47-22-54 W118-17-48;
(k) Pru AFLD N47-07-30 W118-23-34;
(l) Tree Heart Afd N47-08-30 W118-48-04.

(9) Sensitive Areas:
(a) Avoid Spraque Lake NE of Point G;
(b) Maintain 2000’ AGL or above over FDR Lake between Points D and E;
(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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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-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 AFLD N46-58-40 W118-35-09;
   (b) Tree Heart Afd (Pvt) N47-08-30 W118-48-04;
   (c) Pru AFLD N47-07-30 W118-23-34;
   (d) Little Goose AFLD N46-35-00 W118-00-04;
   (e) Slinkard AFLD (Pvt) N46-36-12 W119-03-46;
   (f) Christensen AFLD (Pvt) N46-55-14 W119-35-24;
   (g) Hanes AFLD (Pvt) N47-29-30 W118-15-04;
   (h) Kramer AFLD (Pvt) N47-22-54 W118-17-48.
(9) Sensitive Areas:
   (a) Avoid Spraque 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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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 contected 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 vigilent 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 AFLD (Pvt) N47°51.04' W118°19.49';
   (b) Mansfield AFLD N47°48.35' W119°38.14';
   (c) Quincy AFLD N47°12.42' W119°50.23';
   (d) Grigg AFLD (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


IR ROUTES

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. 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 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


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 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. 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 Chinoook 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.
   (e) Maintain 2000' AGL or above over Juniper Dunes Wilderness Area between Points B and C;
   (f) Maintain 3000' AGL or above over Kennewick Tank Farm at N46-09 W119-00 Northwest of Point D;
   (g) Maintain 1800' MSL or above over Hanford Nuclear Reservation between Points F and H;
   (h) 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:

IR-330


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
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<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>EPH 114/40</td>
<td>N46°54.50' W118°44.10'</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to B</td>
<td>EPH 091/32</td>
<td>N47°10.40' W118°41.40'</td>
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<tr>
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<td>EPH 056/37</td>
<td>N47°30.40' W118°32.20'</td>
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<tr>
<td>03 AGL B 50 MSL to D</td>
<td>EPH 357/17</td>
<td>N47°39.20' W119°17.30'</td>
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<tr>
<td>03 AGL B 50 MSL to E</td>
<td>EPH 331/11</td>
<td>N47°33.58' W119°27.95'</td>
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<tr>
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<td>EPH 267/11</td>
<td>N47°26.40' W119°41.40'</td>
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<tr>
<td>03 AGL B 50 MSL to G</td>
<td>EPH 235/11</td>
<td>N47°20.18' W119°41.15'</td>
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</tr>
<tr>
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<td>EPH 187/22</td>
<td>N47°03.40' W119°40.50'</td>
<td></td>
</tr>
</tbody>
</table>

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. MARSA 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 AFLD (Pvt) N47°08-30 W118°48-04;
   b. Odessa AFLD (Pvt) N47°21-30 W118°40-24;
   c. Coulee City AFLD (Pvt) N47°37-00 W119°14-34;
   d. Quincy AFLD N47°12-42 W119°50-23;
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:**

**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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tr>
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<td>A YKM VORTAC</td>
<td>N46°34.22' W120°26.68'</td>
</tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 MSL to</td>
<td>B</td>
<td>PDT 293/21</td>
<td>N45°56.00' W119°18.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>C</td>
<td>PDT 344/22</td>
<td>N46°03.70' W118°54.04'</td>
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<td>GEG 209/40</td>
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<tr>
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<td>G</td>
<td>EPH 030/38</td>
<td>N47°46.00' W118°42.00'</td>
</tr>
<tr>
<td>15 AGL B 50 MSL to</td>
<td>H</td>
<td>EPH 002/15</td>
<td>N47°36.30' W119°17.00'</td>
</tr>
<tr>
<td>15 AGL B 50 MSL to</td>
<td>I</td>
<td>EPH 323/23</td>
<td>N47°45.00' W119°35.00'</td>
</tr>
</tbody>
</table>

**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 MARSA. 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 with 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:

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.

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at FL230 to or as assigned descend on Kimberly VORTAC 160 deg radial to cross
at or above 130 MSL
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’

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:**

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/ Dist</th>
<th>Lat/Long</th>
</tr>
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<tbody>
<tr>
<td>Cross at FL230 to or as assigned descend on the Yakima VORTAC 108 deg radial to cross YKM 108/28 at 110 MSL then</td>
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<td>PDT 293/21</td>
<td>N45°56.00' W119°18.00'</td>
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<tr>
<td>70 MSL to</td>
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<td>PDT 344/22</td>
<td>N46°03.70' W118°54.00'</td>
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<td>IMB 008/7</td>
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<td>IMB 315/43</td>
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<td>LTJ 105/34</td>
<td>N45°23.00' W120°27.00'</td>
</tr>
<tr>
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<td>LTJ 183/9</td>
<td>N45°35.00' W121°11.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>K</td>
<td>LTJ 342/17</td>
<td>N45°59.30' W121°04.90'</td>
</tr>
<tr>
<td>110 MSL to</td>
<td>L</td>
<td>YKM 204/30</td>
<td>N46°13.00' W120°57.00'</td>
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<tr>
<td>110 MSL to</td>
<td>M</td>
<td>YKM 331/25</td>
<td>N46°59.00' W120°32.00'</td>
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<tr>
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<td>N</td>
<td>EPH 230/27</td>
<td>N47°13.30' W120°03.20'</td>
</tr>
<tr>
<td>70 MSL to</td>
<td>O</td>
<td>EPH 002/15</td>
<td>N47°36.30' W119°17.00'</td>
</tr>
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<td>70 MSL to</td>
<td>P</td>
<td>EPH 323/23</td>
<td>N47°45.00' W119°35.00'</td>
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<td>Q</td>
<td>IMB 008/7</td>
<td>N44°45.10' W119°38.20'</td>
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<tr>
<td>05 AGL to 90 MSL to</td>
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<td>IMB 315/43</td>
<td>N45°17.90' W120°08.20'</td>
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<td>LTJ 105/34</td>
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<td>LTJ 183/9</td>
<td>N45°35.00' W121°11.00'</td>
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<td>LTJ 342/17</td>
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<td>N46°13.00' W120°57.00'</td>
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<td>YKM 331/25</td>
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<td>EPH 230/27</td>
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<td>P</td>
<td>EPH 323/23</td>
<td>N47°45.00' W119°35.00'</td>
</tr>
</tbody>
</table>

**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 McMinnville Radio on 255.4 for relay to ARTCC. Report passing Point N 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:**

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
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<th>Lat/Long</th>
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<td>HQM 240/16</td>
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<td>at or below 50 MSL to cross</td>
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<td>HQM 240/36</td>
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<td>HQM 216/28</td>
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<td>OLM 116/42</td>
<td>N46°28.50' W122°11.50'</td>
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<td>I</td>
<td>LTJ 300/50</td>
<td>N46°21.50' W121°51.00'</td>
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IR ROUTES

05 AGL B 70 MSL to Q1 LTJ 277/25 N45°54.50' W121°38.00'
05 AGL B 60 MSL to H LTJ 267/22 N45°49.50' W121°35.50'
05 AGL B 50 MSL to I LTJ 250/16 N45°43.00' W121°29.50'
05 AGL B 50 MSL to J LTJ 158/32 N45°10.40' W120°50.00'
05 AGL B 60 MSL to K LTJ 118/39 N45°13.00' W120°30.00'
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 Woodruff 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.
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) Avoid airports along the entire route by 2000’ or 3 NM. Remain within route structure while avoiding airports.

(4) Alternate Entry: Point D.

(5) Avoid city of Reedsport, Oregon in vicinity of Point D by 1500’ or 2 NM.

(6) Alternate Exit: Points B, C, E, and H.

(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 helicopter 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 ROUTES

(8) Alternate Entry: Point D.

(9) Heavy VFR traffic between Point D and E.

(10) CAUTION: Forest fire suppression airactive/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, leftturns. 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.


HOURS OF OPERATION: 0800-1600 local, Tue-Sat

ROUTE DESCRIPTION:

Altitude Data     Pt     Fac/Rad/Dist     Lat/Long
Cross at 100 MSL to 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 or as assigned 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 MARSA 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 MARSA.

(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 be 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, C720-847-9471/9995.

SCHEDULING ACTIVITY: 140th Wing/Airspace Office Buckley AFB Aurora, CO 80011-9546. Duty Hrs 0700-1700 DSN 847-9470/9472, 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 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 MARSA 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 MARSA 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 MARSA. 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


SCHEDULING ACTIVITY: 140th OG/CC 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:

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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</thead>
<tbody>
<tr>
<td>Cross at 70 MSL to</td>
<td>A</td>
<td>BKF 091/27</td>
<td>N39°36.50' W104°11.00'</td>
</tr>
<tr>
<td>03 AGL B 70 MSL to</td>
<td>B</td>
<td>TXC 168/8</td>
<td>N39°34.00' W103°13.00'</td>
</tr>
<tr>
<td>03 AGL B 70 MSL to</td>
<td>C</td>
<td>HGO 057/17</td>
<td>N38°55.00' W103°17.00'</td>
</tr>
<tr>
<td>03 AGL B 80 MSL to</td>
<td>D</td>
<td>PUB 080/32</td>
<td>N38°16.00' W103°45.00'</td>
</tr>
<tr>
<td>03 AGL B 80 MSL to</td>
<td>E</td>
<td>PUB 189/23</td>
<td>N37°56.00' W104°37.00'</td>
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<th>Lat/Long</th>
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<td>LAR 138/38</td>
<td>N40°47.00' W105°20.00'</td>
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<td>03 AGL B 120 MSL to</td>
<td>B</td>
<td>LAR 238/20</td>
<td>N41°14.00' W106°08.00'</td>
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<tr>
<td>03 AGL B 120 MSL to</td>
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<td>LAR 292/27</td>
<td>N41°36.00' W106°12.00'</td>
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<td>03 AGL B 100 MSL to</td>
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<td>MBW 165/11</td>
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<td>N42°00.00' W105°03.00'</td>
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<tr>
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<td>N41°44.00' W104°03.00'</td>
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<tr>
<td>03 AGL B 100 MSL to</td>
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<td>AKO 295/29</td>
<td>N40°27.00' W103°41.00'</td>
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<tr>
<td>03 AGL B 70 MSL to</td>
<td>I</td>
<td>AKO 304/20</td>
<td>N40°24.00' W103°29.00'</td>
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<tr>
<td>03 AGL B 70 MSL to</td>
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<td>AKO 218/15</td>
<td>N40°00.00' W103°26.00'</td>
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<tr>
<td>03 AGL B 100 MSL to</td>
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<td>TXC 283/17</td>
<td>N39°49.00' W103°33.00'</td>
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<tr>
<td>100 MSL to</td>
<td>L</td>
<td>BKF 095/55</td>
<td>N39°26.00' W103°37.00'</td>
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TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 3 NM either side of centerline.

Special Operating Procedures:
(1) The 140th Wing shall ensure MARSA 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 MARSA through coordinated scheduling.
(2) Maintain 500’ AGL minimum from A to B. Route crosses IR-416 between A and B.
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 MARSA 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 MARSA 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


HOURS OF OPERATION: 0700-2400 local Mon-Thu, 0700-1800 local Fri, 0800-1700 local Sat

ROUTE DESCRIPTION:

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<th>Pt Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tr>
<td>Cross at 80 MSL to B TCH 300/38</td>
<td>A TCH 290/24</td>
<td>N41°05.00’ W112°24.00’</td>
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<tr>
<td>70 MSL B 80 MSL to C TCH 303/46</td>
<td>B TCH 271/32</td>
<td>N41°00.00’ W112°39.00’</td>
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<tr>
<td>01 AGL B 80 MSL to D TCH 292/64</td>
<td>C TCH 241/36</td>
<td>N40°43.00’ W112°45.00’</td>
</tr>
<tr>
<td>10 AGL B 80 MSL to</td>
<td>D TCH 229/41</td>
<td>N40°33.00’ W112°48.00’</td>
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</table>

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


HOURS OF OPERATION: 0700-2400 local Mon-Thu, 0700-1800 local Fri, 0800-1700 local Sat

ROUTE DESCRIPTION:

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<tr>
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<tr>
<td>Cross at 80 MSL to B TCH 300/38</td>
<td>A TCH 290/24</td>
<td>N41°05.00’ W112°24.00’</td>
</tr>
<tr>
<td>70 MSL B 80 MSL to C TCH 241/36</td>
<td>B TCH 217/32</td>
<td>N41°00.00’ W112°39.00’</td>
</tr>
<tr>
<td>10 AGL B 80 MSL to</td>
<td>D TCH 229/41</td>
<td>N40°33.00’ W112°48.00’</td>
</tr>
</tbody>
</table>

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:

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<tr>
<td>Cross at 110 MSL to B TCH 217/32</td>
<td>A GLD 176/18</td>
<td>N39°05.50’ W101°45.00’</td>
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</table>

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.
**IR ROUTES**

**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 MARSA 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 MARSA 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 MARSA. 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 W104-29.17 by 1500' AGL from 1 May through 31 July.

**FSS's Within 100 NM Radius:**

<table>
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<th>Location</th>
<th>Frequency</th>
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<tr>
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**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:**

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<td>DTA 262/44</td>
<td>N39°24.00' W113°27.00'</td>
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<td></td>
<td>B</td>
<td>DTA 250/53</td>
<td>N39°14.40' W113°38.00'</td>
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<td>ILC 024/55</td>
<td>N38°57.50' W113°38.00'</td>
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<td>ILC 027/32</td>
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<td>N38°19.00' W114°02.00'</td>
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<td>05 AGL B 75 MSL</td>
<td>Y</td>
<td>NID 010/38</td>
<td>N36°15.00' W117°21.00'</td>
</tr>
<tr>
<td>05 AGL B 95 MSL</td>
<td>Z</td>
<td>NID 022/30</td>
<td>N36°05.20' W117°18.50'</td>
</tr>
<tr>
<td>05 AGL B 85 MSL</td>
<td>AA</td>
<td>NID 010/12</td>
<td>N35°52.00' W117°35.00'</td>
</tr>
<tr>
<td>05 AGL B 85 MSL</td>
<td>AB</td>
<td>NID 101/9</td>
<td>N35°37.00' W117°31.00'</td>
</tr>
<tr>
<td>05 AGL B 85 MSL</td>
<td>AC</td>
<td>NID 166/17</td>
<td>N35°24.00' W117°42.00'</td>
</tr>
<tr>
<td>05 AGL B 85 MSL</td>
<td>AD</td>
<td>LHS 028/47</td>
<td>N35°15.00' W117°55.50'</td>
</tr>
<tr>
<td>05 AGL B 85 MSL</td>
<td>AE</td>
<td>LHS 016/29</td>
<td>N35°05.70' W118°16.50'</td>
</tr>
<tr>
<td>05 AGL B 85 MSL</td>
<td>AF</td>
<td>LHS 008/23</td>
<td>N35°02.50' W118°23.50'</td>
</tr>
<tr>
<td>05 AGL B 100 MSL</td>
<td>AG</td>
<td>LHS 011/9</td>
<td>N34°48.70' W118°30.00'</td>
</tr>
<tr>
<td>05 AGL B 90 MSL</td>
<td>AH</td>
<td>LHS 091/3</td>
<td>N34°40.10' W118°30.90'</td>
</tr>
</tbody>
</table>
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'

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 Special Operating 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.
(10) Route is designated for MARSA 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 and 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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at FL200 to or as assigned descend direct to 150 MSL B FL200 to (TFR/TA Initiation Point) descend direct to 01 AGL B 150 MSL to direct to 01 AGL B 70 MSL to direct to 01 AGL B 70 MSL to turn left to 01 AGL B 70 MSL to climb direct to 01 AGL B 80 MSL to turn right and continue climb to 01 AGL B 130 MSL to direct to
01 AGL B 130 MSL to K SHR 181/41
turn left to
01 AGL B 130 MSL to L SHR 189/39
direct to
01 AGL B 130 MSL to M BOY 358/52
turn right to
01 AGL B 130 MSL to N BOY 349/52
direct to
01 AGL B 130 MSL to O COD 101/32
descend direct to
01 AGL B 80 MSL to P BIL 176/43
turn left to
01 AGL B 80 MSL to Q BIL 180/41
direct to
01 AGL B 80 MSL to R BIL 226/42
turn right to
01 AGL B 80 MSL to S BIL 238/41
descend direct to
01 AGL B 70 MSL to T BIL 244/38
turn right to
01 AGL B 60 MSL to U BIL 311/36
turn right to
01 AGL B 60 MSL to V BIL 325/37
turn right to
05 AGL B 60 MSL to W BIL 355/36
(End TA/TFR)
turn left to
60 MSL to X BIL 001/37
direct to
60 MSL to Y BIL 015/53
(Begin TA/TFR)
direct to
01 AGL B 60 MSL to Z BIL 019/61
turn right and descend to
01 AGL B 50 MSL to AA MLS 267/68
direct to
01 AGL B 50 MSL to AB MLS 212/33
turn left and climb to
01 AGL B 60 MSL to B1 BIL 069/91
direct to
01 AGL B 60 MSL to B2 MLS 146/39
turn left to
01 AGL B 60 MSL to B3 MLS 140/40
turn to
do
t01 AGL B 60 MSL to B4 MLS 113/48
turn right to
01 AGL B 60 MSL to B5 MLS 114/59
direct to
do
01 AGL B 60 MSL to B6 MLS 136/82
direct to
01 AGL B 60 MSL to B7 GCC 015/46
turn left to
01 AGL B 60 MSL to AH GCC 031/45
direct to
01 AGL B 60 MSL to AI RAP 296/90
direct to
01 AGL B 60 MSL to IL RAP 313/71
climb direct to cross
60 MSL to AK RAP 321/67
turn right and climb to
100 MSL to EX RAP 324/56
continue right turn to
100 MSL to EL RAP 318/52
(Contact Denver ARTCC 338.2)
direct to
100 MSL to EM RAP 298/56
160 MSL to EN RAP 282/64
or as assigned.

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 Al; 4 NM either side of centerline from Al 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 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:

(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, Dills, 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.

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   A    LWT 077/98 N46°58.00’ W107°14.00’
or as assigned
(TFR Initiation Point) descend direct to
SFC B 160 MSL to   B LWT 066/68 N47°12.50’ W107°58.00’
(TA Initiation Point) direct to
SFC B 80 MSL to   C LWT 036/42 N47°30.00’ W108°48.00’
direct to
SFC B 80 MSL to   D GTF 042/67 N48°01.50’ W110°00.00’
turn left and descend to
SFC B 80 MSL to   E GTF 034/62 N48°06.50’ W110°14.50’
direct to
04 AGL B 60 MSL to (Contact Salt Lake City ARTCC 285.4) turn left to
SFC B 60 MSL to   G GTF 007/53 N48°15.50’ W110°53.50’
climb direct to
SFC B 70 MSL to   H GTF 359/46 N48°11.50’ W111°07.50’
(Start Maneuver Area) direct to
SFC B 70 MSL to   I GTF 326/37 N48°02.50’ W111°42.00’
direct to
SFC B 70 MSL to   J GTF 292/44 N47°54.00’ W112°16.00’
(End Maneuver Area) turn right and climb to
SFC B 90 MSL to   K CTB 173/36 N47°58.00’ W112°30.00’
direct to
SFC B 90 MSL to   L CTB 211/21 N48°20.00’ W112°44.00’
turn right to
SFC B 90 MSL to   M CTB 218/20 N48°22.50’ W112°45.00’
descend direct to
SFC B 90 MSL to   N CTB 260/18 N48°36.00’ W112°47.00’
turn right and continue descent to
SFC B 90 MSL to   O CTB 279/18 N48°41.50’ W112°44.00’
direct to
SFC B 60 MSL to   P CTB 313/19 N48°50.50’ W112°35.00’
turn right to
SFC B 60 MSL to   Q CTB 339/20 N48°52.50’ W112°22.50’
direct to
04 AGL B 60 MSL to climb direct to
SFC B 80 MSL to   R CTB 048/28 N48°45.50’ W111°42.50’
turn left to
SFC B 80 MSL to   S CTB 059/36 N48°42.50’ W111°27.50’
direct to
SFC B 80 MSL to   T GTF 347/76 N48°43.00’ W111°19.00’
turn right to
SFC B 80 MSL to   U GTF 357/85 N48°49.50’ W110°56.00’
direct to
SFC B 80 MSL to   V GTF 359/86 N48°50.00’ W110°52.00’
(Start Maneuver Area) direct to
SFC B 80 MSL to   W GTF 102/107 N48°53.00’ W109°49.50’
direct to
SFC B 80 MSL to   X GTF 024/113 N48°53.00’ W109°34.50’
(End Maneuver Area) descend direct to
SFC B 80 MSL to   Y GTF 025/116 N48°53.50’ W109°29.50’
turn left and continue descent and turn right to
SFC B 80 MSL to   Z GTF 027/119 N48°52.50’ W109°21.00’
direct to
SFC B 45 MSL to   AA GTF 028/119 N48°52.00’ W109°19.50’
direct to
IR ROUTES

HOURS OF OPERATION: By NOTAM

ROUTE DESCRIPTION:

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long

Cross at 80 MSL to (Start Maneuver Area) 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) 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) O  GTF 292/44  N47°54.00'  W112°16.00'

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.

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 IAW command directives 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/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.

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

FSS's Within 100 NM Radius:

IR ROUTES

(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.

GTF

IR-480

1-131
IR ROUTES

SFC B 60 MSL to
direct to
04 AGL B 60 MSL to
direct to
SFC B 80 MSL to
direct to
SFC B 80 MSL to
direct to
SFC B 160 MSL to
direct to

ROUTE DESCRIPTION:

Altitude Data       Pt           Fac/Rad/Dist       Lat/Long
Cross at 120 MSL to
or as assigned
(TFR Initiation Point)
descend direct to
01 AGL B 120 MSL to
descend direct to
01 AGL B 80 MSL to
descend direct to
01 AGL B 50 MSL to
Turn left to
01 AGL B 50 MSL to
direct to
01 AGL B 50 MSL to
turn right and climb to
01 AGL B 60 MSL to
turn right to
01 AGL B 60 MSL to
direct to
01 AGL B 60 MSL to
turn left to
01 AGL B 60 MSL to
direct to
01 AGL B 60 MSL to
turn right to
01 AGL B 60 MSL to
direct to
01 AGL B 60 MSL to
turn left to
01 AGL B 60 MSL to
direct to
01 AGL B 60 MSL to
turn right and climb to
01 AGL B 60 MSL to
turn left to
01 AGL B 60 MSL to
direct to

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

TerraF 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 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 T; Boundaries 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 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 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/OSX, 1956 Scott Dr.,
St. 201, Ellsworth AFB, SD 57706-4710 DSN 675-1230,
C605-385-1230.

SCHEDULING ACTIVITY: 28 OSS/OSXS, 1956 Scott Dr.,
St. 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

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 Settings Letter and provide 200’ vertical clearance of all known man-made obstructions.
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:

   (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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at FL220 to or as assigned descend direct to FL200 B</td>
<td>NH</td>
<td>ABR 280/35</td>
<td>N45°35.00'  W99°10.00'</td>
</tr>
<tr>
<td>Cross at FL200 B FL220 B FL200 turn left and continue descent to cross FL200 to FL200 B 50 MSL</td>
<td>NI</td>
<td>ABR 280/46</td>
<td>N45°38.50'  W99°25.00'</td>
</tr>
<tr>
<td>descend direct to 50 MSL to direct to</td>
<td>NK</td>
<td>DPR 062/69</td>
<td>N45°25.00'  W100°09.50'</td>
</tr>
<tr>
<td>50 MSL to (TA/TFR Initiation Point)</td>
<td>NL</td>
<td>DPR 063/53</td>
<td>N45°18.00'  W100°30.00'</td>
</tr>
<tr>
<td>descend direct to 01 AGL B 50 MSL to turn right and descend to 01 AGL B 40 MSL to direct to</td>
<td>NM</td>
<td>DPR 067/41</td>
<td>N45°14.00'  W100°46.50'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to direct to</td>
<td>NN</td>
<td>DPR 050/35</td>
<td>N45°22.00'  W101°00.50'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to direct to</td>
<td>NO</td>
<td>DPR 031/48</td>
<td>N45°41.00'  W100°58.00'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to turn left to</td>
<td>NP</td>
<td>DPR 024/57</td>
<td>N45°52.00'  W100°57.50'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to direct to</td>
<td>NQ</td>
<td>DPR 014/61</td>
<td>N46°00.00'  W101°08.00'</td>
</tr>
<tr>
<td>01 AGL B 40 MSL to turn right and descend to 01 AGL B 50 MSL to direct to</td>
<td>NR</td>
<td>DPR 351/56</td>
<td>N46°01.00'  W101°41.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to direct to</td>
<td>NS</td>
<td>DPR 348/57</td>
<td>N46°02.00'  W101°46.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to direct to</td>
<td>NT</td>
<td>DPR 341/63</td>
<td>N46°06.50'  W101°57.50'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to direct to</td>
<td>NU</td>
<td>DIK 132/51</td>
<td>N46°09.50'  W102°05.00'</td>
</tr>
<tr>
<td>05 AGL B 50 MSL to direct to</td>
<td>AU</td>
<td>DIK 199/23</td>
<td>N46°32.00'  W103°05.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to turn right to</td>
<td>AV</td>
<td>DIK 214/25</td>
<td>N46°35.00'  W103°13.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to direct to</td>
<td>AW</td>
<td>MLS 067/112</td>
<td>N46°36.50'  W103°16.50'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to turn left to</td>
<td>AX</td>
<td>MLS 050/96</td>
<td>N46°58.00'  W103°48.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to turn right to</td>
<td>AZ</td>
<td>MLS 049/82</td>
<td>N47°00.00'  W104°00.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to direct to</td>
<td>LA</td>
<td>MLS 037/35</td>
<td>N46°58.00'  W104°09.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to turn left to</td>
<td>PQ</td>
<td>MLS 060/27</td>
<td>N46°44.50'  W105°17.50'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to direct to</td>
<td>LB</td>
<td>MLS 082/74</td>
<td>N46°30.00'  W105°19.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to turn right and climb to</td>
<td>LA</td>
<td>MLS 092/79</td>
<td>N46°13.00'  W104°11.00'</td>
</tr>
</tbody>
</table>
**IR ROUTES**

01 AGL B 60 MSL to direct to
01 AGL B 60 MSL to turn right to
01 AGL B 60 MSL to direct to
01 AGL B 60 MSL to direct to
01 AGL B 60 MSL to turn left to
01 AGL B 60 MSL to direct to
01 AGL B 60 MSL to turn left to
60 MSL to direct to
100 MSL to continue right to
100 MSL to (Contact Denver ARTCC 338.2)
100 MSL to continue to cross
160 MSL to or as assigned.

**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 conducted in accordance with IAW Command Directives within published altitude blocks from NL to AK. When Command Directives preclude TA/VC operations, aircrews will maintain the IFR altitude for each route segment. Minimum altitudes are established by 28 OSS/OSXS, 1956 Scott Dr., Ste. 201, Ellsworth AFB, SD 57706-4710 DSN 675-1230, C605-385-1230.

**ROUTE WIDTH - 4 NM either side of centerline from NN 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 LA; 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. 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
(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, Beam, Booth Ranch, Lenling, Timber Lake, Cottonwood, McIntosh, Dietz, uncharted (N46-15 W102-18), Lemmon (Class E), Mott, Erickson, Fordahl, Regnent, Kirschman, Dovre, Swenson, Logging Camp (2), Bergquist, Beach, Holstein, uncharted (N45-61 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;

**FSS’s Within 100 NM Radius:**
CPR, HON

**IR-499**

**ORIGINATING ACTIVITY:** 28 OSS/OSX A, 1956 Scott Dr., Ste. 201, Ellsworth AFB, SD 57706-4710 DSN 675-1230, C605-385-1230.

**SCHEDULING ACTIVITY:** 28 OSS/OSX A, 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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at FL200 to or as assigned descend direct to 150 MSL B FL200</td>
<td>JA</td>
<td>DDY 075/71</td>
<td>N43°09.00' W104°40.00'</td>
</tr>
<tr>
<td>01 AGL B 150 MSL to descend direct to 01 AGL B 150 MSL to descend direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 AGL B 70 MSL to direct to 01 AGL B 70 MSL to direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 AGL B 70 MSL to turn left to 01 AGL B 70 MSL to turn left to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 AGL B 80 MSL to direct to 01 AGL B 80 MSL to direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 AGL B 130 MSL to direct to</td>
<td>J</td>
<td>CJI 211/26</td>
<td>N43°39.00' W106°42.00'</td>
</tr>
<tr>
<td>01 AGL B 130 MSL to direct to</td>
<td>K</td>
<td>SHJ 181/41</td>
<td>N44°11.00' W107°17.50'</td>
</tr>
<tr>
<td>01 AGL B 130 MSL to direct to</td>
<td>L</td>
<td>SHJ 189/39</td>
<td>N44°14.00' W107°24.00'</td>
</tr>
<tr>
<td>01 AGL B 130 MSL to turn left and descend direct to 01 AGL B 130 MSL to turn left and descend direct to</td>
<td>M1</td>
<td>BOY 354/52</td>
<td>N44°11.80' W108°17.60'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to direct to</td>
<td>SA</td>
<td>BOY 344/44</td>
<td>N44°07.50' W108°18.00'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to direct to</td>
<td>SB</td>
<td>BOY 344/40</td>
<td>N44°03.00' W108°21.00'</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to climb to 01 AGL B 80 MSL to climb to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 AGL B 90 MSL to direct to 01 AGL B 90 MSL to direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 AGL B 90 MSL to climb to 01 AGL B 90 MSL to climb to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 AGL B 110 MSL to climb to 01 AGL B 120 MSL to direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 AGL B 120 MSL to direct to 01 AGL B 120 MSL to direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 AGL B 120 MSL to direct to 01 AGL B 120 MSL to direct to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>130 MSL to turn right to 130 MSL to (TFR/TA Termination Point) direct to</td>
<td>SM</td>
<td>JAC 134/37</td>
<td>N43°04.50' W110°18.00'</td>
</tr>
</tbody>
</table>

IR ROUTES

- 130 MSL to 150 MSL to (Contact Salt Lake City ARTCC 381.6)
- 130 MSL B 150 MSL climb direct to 150 MSL to as assigned or as assigned

PMVS 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 SI; 1 NM left and 3 NM right of centerline from SI to SJ; 2 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. MARSA 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. Monitor Denver ARTCC 385.6 (F-J).
9. Monitor Denver ARTCC 385.6 (F-J).
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.
   (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;
   (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

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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</thead>
<tbody>
<tr>
<td>Cross at FL230 to or as assigned FL230 B 60 MSL descend direct to cross</td>
<td>AA</td>
<td>BFF 067/99</td>
<td>N42°10.00' W101°18.50'</td>
</tr>
<tr>
<td>at or above 60 MSL continue descent to cross</td>
<td>AB</td>
<td>LBF 307/36</td>
<td>N41°30.00' W101°17.00'</td>
</tr>
<tr>
<td>50 MSL to (TA/TFR Initiation Point) direct to</td>
<td>AC</td>
<td>LBF 298/31</td>
<td>N41°22.00' W101°16.50'</td>
</tr>
<tr>
<td>02 AGL B 50 MSL to direct to</td>
<td>AD</td>
<td>HCT 310/24</td>
<td>N40°45.50' W101°15.00'</td>
</tr>
<tr>
<td>02 AGL B 50 MSL to turn right and climb to</td>
<td>AE</td>
<td>HCT 233/19</td>
<td>N40°19.00' W101°17.50'</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to (TA/TFR Termination Point) direct to</td>
<td>AF</td>
<td>HCT 225/27</td>
<td>N40°12.00' W101°25.00'</td>
</tr>
<tr>
<td>60 MSL to (TA/TFR Initiation Point) direct to</td>
<td>AG</td>
<td>HCT 236/50</td>
<td>N40°07.50' W101°55.00'</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to (TA/TFR Termination Point) turn left to</td>
<td>AH</td>
<td>HCT 231/58</td>
<td>N40°00.00' W102°02.00'</td>
</tr>
<tr>
<td>55 MSL B 60 MSL to (Resume TA/TFR Point) direct to</td>
<td>AI</td>
<td>GLD 303/22</td>
<td>N39°39.00' W102°02.00'</td>
</tr>
<tr>
<td>02 AGL B 60 MSL to turn right and climb to</td>
<td>AJ</td>
<td>GLD 278/25</td>
<td>N39°31.50' W102°11.50'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>AK</td>
<td>HGO 030/57</td>
<td>N39°31.00' W102°47.50'</td>
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<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>AL</td>
<td>HGO 030/46</td>
<td>N39°23.50' W102°57.50'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to descend and turn left to</td>
<td>AM</td>
<td>HGO 049/33</td>
<td>N39°05.00' W103°00.00'</td>
</tr>
<tr>
<td>02 AGL B 70 MSL to direct to</td>
<td>AN</td>
<td>HGO 060/32</td>
<td>N38°59.00' W102°58.00'</td>
</tr>
<tr>
<td>03 AGL B 57 MSL to direct to</td>
<td>AO</td>
<td>HGO 082/43</td>
<td>N38°46.00' W102°43.00'</td>
</tr>
<tr>
<td>04.5 AGL B 57 MSL to direct to</td>
<td>AP</td>
<td>LAA 089/19</td>
<td>N38°08.00' W102°17.50'</td>
</tr>
<tr>
<td>02 AGL B 57 MSL to</td>
<td>AQ</td>
<td>LAA 099/23</td>
<td>N38°03.50' W102°14.00'</td>
</tr>
<tr>
<td>02 AGL B 57 MSL to turn right to</td>
<td>F</td>
<td>LAA 132/55</td>
<td>N37°27.00' W102°00.00'</td>
</tr>
<tr>
<td>02 AGL B 57 MSL to climb direct to</td>
<td>G</td>
<td>LAA 141/61</td>
<td>N37°17.50' W102°07.00'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to direct to</td>
<td>H</td>
<td>LAA 178/59</td>
<td>N37°14.00' W102°53.50'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to direct to</td>
<td>I</td>
<td>LAA 183/60</td>
<td>N37°14.00' W103°00.00'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to turn right to</td>
<td>J</td>
<td>LAA 191/63</td>
<td>N37°14.00' W103°11.50'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to</td>
<td>K</td>
<td>LAA 200/61</td>
<td>N37°20.50' W103°22.00'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to (Start Maneuver Area) direct to</td>
<td></td>
<td></td>
<td>N37°50.00' W103°22.50'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to turn right to</td>
<td>L</td>
<td>LAA 224/39</td>
<td>N37°56.50' W103°08.00'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to direct to</td>
<td>M</td>
<td>LAA 222/26</td>
<td>N37°46.00' W102°43.50'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to (End Maneuver Area) (TA/TFR Termination Point) turn right to</td>
<td>N</td>
<td>TBE 042/52</td>
<td>N37°25.00' W102°43.50'</td>
</tr>
<tr>
<td>67 MSL to direct to</td>
<td>O</td>
<td>TBE 054/48</td>
<td>N37°35.00' W102°40.50'</td>
</tr>
<tr>
<td>67 MSL B 100 MSL to turn left to</td>
<td>P</td>
<td>TBE 062/41</td>
<td>N37°27.00' W102°46.00'</td>
</tr>
<tr>
<td>80 MSL B 110 MSL to direct to</td>
<td>Q</td>
<td>TBE 073/41</td>
<td>N37°19.00' W102°45.00'</td>
</tr>
<tr>
<td>90 MSL B 110 MSL to (Contact Albuquerque ARTCC 351.7 passing 100 MSL) 90 MSL B 110 MSL direct to</td>
<td>R</td>
<td>TBE 078/43</td>
<td>N37°15.30' W102°42.00'</td>
</tr>
<tr>
<td>110 MSL to or as assigned Re-Entry ALPHA: Cross</td>
<td>SA</td>
<td>TBE 093/58</td>
<td>N37°00.00' W102°26.00'</td>
</tr>
<tr>
<td>67 MSL to turn right to</td>
<td>N1</td>
<td>TBE 042/52</td>
<td>N37°46.00' W102°43.50'</td>
</tr>
<tr>
<td>67 MSL to direct to</td>
<td>O1</td>
<td>TBE 054/48</td>
<td>N37°35.00' W102°40.50'</td>
</tr>
<tr>
<td>67 MSL to (TA/TFR Initiation Point) turn right to</td>
<td>S</td>
<td>TBE 074/36</td>
<td>N37°18.00' W102°51.50'</td>
</tr>
<tr>
<td>02 AGL B 67 MSL to direct to</td>
<td>I</td>
<td>LAA 183/60</td>
<td>N37°14.00' W103°00.00'</td>
</tr>
</tbody>
</table>
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'

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 MARSA 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 461-3665 or C325-696-3665, 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 in not intended to be used as a separation tool, only a (heads up call).

FSS's Within 100 NM Radius:
DEN, HON

IR-501


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at FL230 to or as assigned A BFF 067/99 N42°10.00' W101°18.50'
FL230 B 60 MSL descend direct to cross at or above 60 MSL B LBF 307/36 N41°30.00' W101°17.00'
50 MSL to continue descent to cross 60 MSL to direct to
(TA/TFR Initiation Point) A BFF 067/99 N42°10.00' W101°18.50'
02 AGL B 50 MSL to direct to 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) D HCT 225/27 N40°12.00' W101°25.00'
60 MSL to direct to 60 MSL to direct to
(TA/TFR Initiation Point) E HCT 236/58 N39°00.00' W102°02.00'
02 AGL B 60 MSL to direct to 02 AGL B 60 MSL to turn right and climb to E HCT 236/58 N39°00.00' W102°02.00'
55 MSL B 60 MSL to (TA/TFR Termination Point) turn left to 55 MSL B 60 MSL to direct to
F HCT 231/38 N39°50.00' W102°07.50'
02 AGL B 60 MSL to (Resume TA/TFR Point) N40°07.50' W101°55.00'
55 MSL B 60 MSL to direct to
60 MSL to direct to
(TA/TFR Termination Point) E HCT 236/58 N40°07.50' W101°55.00'
02 AGL B 60 MSL to direct to 02 AGL B 70 MSL to turn right and climb to H GLD 278/25 N39°31.50' W102°11.50'
02 AGL B 70 MSL to (TA/TFR Termination Point) turn left to I HGO 030/57 N39°31.00' W102°47.50'

877-9612, on estimated entry and exit times of the MOA's. In addition, provide estimated times to 120FS at Points AM and AP.
IR ROUTES

PMSV CONTACTS: Primary Home Station. Alternates Dyress (DYS 344.6), Ellsworth (RCA 375.775).

TERRAIN FOLLOWING OPERATIONS: IMC/VMC

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 T 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 Al 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 MARSA 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) N40-03.1 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 W103-00.7 Residence;
(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 is not intended to be used as a separation tool, only a (heads up call).

FSS’s Within 100 NM Radius:
DEN, HON

IR-504

IR ROUTES

01 AGL B 30 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’ W97°50.00’
01 AGL B 30 MSL to AF SLN 215/14 N38°45.00’ W97°49.50’
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 A1 SLN 247/25 N38°48.30’ W98°08.30’
32 MSL to B1 SLN 237/29 N38°42.50’ W98°11.00’
(Start Maneuver Area)
(Alternate Exit)
05 AGL B 30 MSL to S SLN 205/20 N38°38.50’ W97°50.50’
05 AGL B 30 MSL to T SLN 213/33 N38°30.00’ W98°04.00’
05 AGL B 30 MSL to AE1 SLN 228/12 N38°48.50’ W97°50.00’
05 AGL B 30 MSL to AF1 SLN 215/14 N38°45.00’ W97°49.50’
01 AGL B 30 MSL to AE2 SLN 228/12 N38°48.50’ W97°50.00’
30 MSL B 32 MSL to AH2 SLN 251/22 N38°51.00’ W98°04.50’

PMVS 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 MARSA operations established by coordinated scheduling between 509 BW and Det 1, 184 BW. MARSA 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 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 to G, 290.2 or 343.7 G to K, 388.8 K to M, 363.2 M to exit.
IR ROUTES

01 AGL B 60 MSL to C TKO 052/36 N40°00.00' 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'
01 AGL B 40 MSL to Alternate Entry: C Y A TKO 052/36 N40°00.00' W97°34.00'
80 MSL to C1 TKO 052/36 N40°05.00' W97°33.00'
01 AGL B 40 MSL to Remain within the lateral confines of R-3601 and climb to 170 MSL or as assigned. Alternate Entry Track: E - On centerline YA to E1.

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 center line 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) The 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) MARSA 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.
(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:

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<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>A</td>
<td>LNK 332/108</td>
<td>N42°37.00' W97°32.00'</td>
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<tr>
<td>or as assigned</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>at or below 50 MSL</td>
<td>B</td>
<td>ONL 070/40</td>
<td>N42°35.00' W97°48.00'</td>
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<tr>
<td>01 AGL B 45 MSL to</td>
<td>C</td>
<td>ONL 069/32</td>
<td>N42°34.00' W97°59.00'</td>
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<tr>
<td>01 AGL B 45 MSL to</td>
<td>D</td>
<td>ONL 352/32</td>
<td>N43°00.00' W98°40.00'</td>
</tr>
<tr>
<td>01 AGL B 50 MSL to</td>
<td>E</td>
<td>ONL 283/38</td>
<td>N42°43.00' W99°29.00'</td>
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<td>ONL 242/63</td>
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<td>I</td>
<td>OBH 310/24</td>
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</table>

(1) Altitude Data Pt Fa c/Rad/Dist Lat/Long

Cross at 100 MSL to or as assigned descend to cross at or below 50 MSL
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 from A to E, and VR-1520 from C to E.
12. Route conflicts with VR-510 at Point D, and IR-508, IR-518, VR-1520 and VR-1521 between L to M.
13. Route is surveyed to 500' AGL with sections to 100' AGL. These altitudes will not guarantee obstacle clearance throughout the route.
14. Migratory birds along the rivers and lakes during spring and fall.
15. 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.

**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 798-7745/7746, C605-988-5754/5746.

**HOURS OF OPERATION:** Daylight hours, Tue-Sat, OT by NOTAM

**ROUTE DESCRIPTION:**

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<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>ONL 330/90</td>
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<td>T</td>
<td>ONL 330/73</td>
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<td>ONL 330/73</td>
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<td>W</td>
<td>ONL 330/90</td>
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</tr>
</tbody>
</table>

**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-1520 from C to L. The 114 FW will not schedule opposite and conflicting traffic at the same time.

(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 100' 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 N43-23 W99-05; to 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.

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:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>LBL 049/42</td>
<td>N37°23.50' W100°13.00'</td>
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<td>DDC 216/17</td>
<td>N37°38.50' W100°15.50'</td>
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<td>N37°48.00' W100°16.00'</td>
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<td>GCK 037/61</td>
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<td>H</td>
<td>GCK 047/75</td>
<td>N38°34.25' W99°22.50'</td>
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<tr>
<td>05 AGL B 40 MSL to CONTACT KC Center 322.4</td>
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<td>HYS 148/19</td>
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<td>SLN 209/17</td>
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<td>SLN 251/22</td>
<td>N38°51.00' W98°04.50'</td>
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<td>AD</td>
<td>SLN 247/25</td>
<td>N38°48.30' W98°08.30'</td>
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<td>AE</td>
<td>SLN 237/29</td>
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<td>GCK 037/61</td>
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<td>05 AGL B 40 MSL to</td>
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<td>SLN 247/25</td>
<td>N38°48.30' W98°08.30'</td>
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<td>32 MSL to (Start TA/TFR)</td>
<td>AE1</td>
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<td>climb within</td>
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<td>SLN 228/12</td>
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<tr>
<td>30 MSL B 32 MSL to</td>
<td>AC1</td>
<td>SLN 251/22</td>
<td>N38°51.00' W98°04.50'</td>
</tr>
</tbody>
</table>
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 inroute 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 AA, 3NM right of centerline from AF to AA. Smoky MOA (A and B) from AD to AF, 3NM right of centerline from AF to AA.

Special Operating Procedures:

(1) Participating aircraft separation: Route is designated for MARSA operations established by coordinated scheduling.

(2) Centerline between turn points id 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 IOW 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 F; 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 J. 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+R25LN199041). (14) Re-Entry Racetrack Flight Procedures: Once established in the IR-513 Re-Entry Racetrack there is no inside corridor or manatory 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/filed 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 W98-13.9;
(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) Feed lot N38-48.0 W97-47.5;
(j) Refer to the Smoky Hill Range Guide for avoidance criteria.

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'
B | LBF 335/25 | N41°27.00' W100°53.00'
C | LBF 309/45 | N41°37.00' W101°23.00'
D | LBF 328/78 | N42°15.00' W101°23.00'
E | PHP 158/72 | N42°53.00' W101°23.00'
F | PHP 154/52 | N43°13.00' W101°23.00'
G | PHP 154/41 | N43°24.00' W101°26.50'
H | PHP 154/17 | N43°47.00' W101°34.00'
I | PIR 221/47 | N43°55.00' W101°01.00'
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-518 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 100 MSL to 100 MSL to 100 MSL to | A | OBH VORTAC | N41°22.54' W98°21.22'
| | OBH 310/24 | N41°40.00' W98°43.00'
| | OBH 318/45 | N41°59.00' W98°56.00'
| | ONL 217/29 | N42°08.00' W99°10.00'
| | ONL 242/63 | N42°08.00' W100°01.00'
| | ONL 283/38 | N42°43.00' W99°29.00'
| | ONL 352/32 | N43°00.00' W98°40.00'
| | ONL 069/32 | N42°34.00' W97°59.00'
| | ONL 070/40 | N42°35.00' W97°48.00'
| | 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 throughout 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).
(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 W98-40.0. (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 W98-42.0, farm N41-48.0 W98-45.0, farm N42-43.3 W99-35.2.
(11) Avoid flight within 1500' AGL or 3 NM of the Rock County Airport.
(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.
(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:
FOD, HON, OLU

IR ROUTES

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:

<table>
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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
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<tbody>
<tr>
<td>Cross at 150 MSL to or as assigned descend within</td>
<td>A</td>
<td>GCK 226/27</td>
<td>N37°40.50' W101°11.50'</td>
</tr>
<tr>
<td>05 AGL B 150 MSL to desend within</td>
<td>B</td>
<td>LBL 346/29</td>
<td>N37°32.00' W101°00.50'</td>
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<tr>
<td>05 AGL B 70 MSL to continue desent within</td>
<td>C</td>
<td>LBL 353/25</td>
<td>N37°28.00' W100°56.00'</td>
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<tr>
<td>05 AGL B 50 MSL to (T/A TFR Initiation Point)</td>
<td>D</td>
<td>LBL 022/18</td>
<td>N37°18.00' W100°46.00'</td>
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<tr>
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<td>E</td>
<td>LBL 051/18</td>
<td>N37°11.00' W100°39.00'</td>
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<td>LBL 072/20</td>
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<td>LBL 078/31</td>
<td>N37°03.00' W100°20.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>H</td>
<td>LBL 062/59</td>
<td>N37°19.50' W99°48.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>I</td>
<td>DDC 122/33</td>
<td>N37°29.50' W99°28.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to</td>
<td>J</td>
<td>DDC 117/35</td>
<td>N37°31.00' W99°24.00'</td>
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<tr>
<td>07 AGL B 40 MSL to</td>
<td>K</td>
<td>DDC 106/45</td>
<td>N37°33.00' W99°09.00'</td>
</tr>
<tr>
<td>06 AGL B 40 MSL to</td>
<td>L</td>
<td>SLN 205/97</td>
<td>N37°33.00' W98°42.50'</td>
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<tr>
<td>05 AGL B 40 MSL to</td>
<td>M</td>
<td>SLN 203/93</td>
<td>N37°35.00' W98°36.00'</td>
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<td>N</td>
<td>SLN 200/81</td>
<td>N37°43.30' W98°24.50'</td>
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<tr>
<td>05 AGL B 40 MSL to</td>
<td>O</td>
<td>SLN 204/72</td>
<td>N37°53.50' W98°23.50'</td>
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<td>05 AGL B 40 MSL to</td>
<td>P</td>
<td>SLN 205/71</td>
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<td>Q</td>
<td>HUT 266/23</td>
<td>N38°02.00' W98°25.60'</td>
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<tr>
<td>05 AGL B 40 MSL to</td>
<td>R</td>
<td>HUT 283/23</td>
<td>N38°08.50' W98°23.00'</td>
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<tr>
<td>05 AGL B 40 MSL to</td>
<td>S</td>
<td>HUT 300/28</td>
<td>N38°17.50' W98°23.67'</td>
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<tr>
<td>05 AGL B 40 MSL to</td>
<td>T</td>
<td>HUT 306/31</td>
<td>N38°21.80' W98°24.00'</td>
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<tr>
<td>05 AGL B 40 MSL to</td>
<td>U</td>
<td>SLN 213/37</td>
<td>N38°27.50' W97°07.60'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to (Alternate Racetrack Exit)</td>
<td>V</td>
<td>SLN 209/17</td>
<td>N38°42.00' W97°50.00'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to (Alternate Racetrack Maneuver Area)</td>
<td>W</td>
<td>SLN 200/28</td>
<td>N38°42.00' W97°50.00'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to (Alternate Racetrack Exit)</td>
<td>X</td>
<td>SLN 199/41</td>
<td>N38°48.30' W98°08.30'</td>
</tr>
<tr>
<td>05 AGL B 30 MSL to</td>
<td>Y</td>
<td>SLN 307/25</td>
<td>N38°42.50' W98°11.00'</td>
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<tr>
<td>05 AGL B 30 MSL to</td>
<td>Z</td>
<td>SLN 204/72</td>
<td>N38°42.50' W98°11.00'</td>
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<tr>
<td>05 AGL B 30 MSL to</td>
<td>AA</td>
<td>SLN 215/14</td>
<td>N38°45.00' W97°49.50'</td>
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<tr>
<td>10 AGL B 30 MSL to (End Maneuver Area)</td>
<td>AB</td>
<td>SLN 228/12</td>
<td>N38°48.50' W97°50.00'</td>
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<tr>
<td>10 AGL B 30 MSL to (TERMINATE TFR)</td>
<td>AC</td>
<td>SLN 251/22</td>
<td>N38°51.00' W98°04.50'</td>
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<tr>
<td>10 AGL B 30 MSL to (Alternate Entry: T)</td>
<td>AD</td>
<td>SLN 247/25</td>
<td>N38°48.30' W98°08.30'</td>
</tr>
<tr>
<td>10 AGL B 30 MSL to (Alternate Racetrack Exit)</td>
<td>AE</td>
<td>SLN 237/29</td>
<td>N38°42.50' W98°11.00'</td>
</tr>
<tr>
<td>32 MSL to climb within (Contact Kansas City Center 363.2)</td>
<td>AF</td>
<td>SLN 221/36</td>
<td>N38°31.00' W98°11.50'</td>
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<tr>
<td>32 MSL to 100 MSL to or as assigned Alternate Entry: G</td>
<td>AG</td>
<td>SLN 213/39</td>
<td>N38°25.50' W98°09.00'</td>
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<tr>
<td>32 MSL to</td>
<td>AH</td>
<td>SLN 199/41</td>
<td>N38°18.00' W98°00.00'</td>
</tr>
<tr>
<td>120 MSL to or as assigned Alternate Entry: G</td>
<td>AI</td>
<td>SLN 078/31</td>
<td>N37°03.00' W100°20.00'</td>
</tr>
<tr>
<td>150 MSL to descend within</td>
<td>I1</td>
<td>DDC 117/35</td>
<td>N37°31.00' W99°24.00'</td>
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<tr>
<td>05 AGL B 150 MSL to Thence via published route</td>
<td>J1</td>
<td>DDC 117/35</td>
<td>N37°31.00' W99°24.00'</td>
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<tr>
<td>05 AGL B 150 MSL to Re-Entry: AD</td>
<td>K1</td>
<td>DDC 117/35</td>
<td>N37°31.00' W99°24.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to Re-Entry: AD1 (Smoky Hill Racetrack Maneuver Area)</td>
<td>L1</td>
<td>SLN 247/25</td>
<td>N38°42.50' W98°11.00'</td>
</tr>
<tr>
<td>32 MSL to (Start TA/TFR)</td>
<td>AE1</td>
<td>SLN 237/29</td>
<td>N38°42.50' W98°11.00'</td>
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</tbody>
</table>
IR ROUTES

10 AGL B 32 MSL to 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 Z1 SLN 209/17 N38°42.00' W97°50.00'
SFC B 30 MSL to End Maneuver Area 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'

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 Bisons MOA, Smoky Hill Racetrack; 4NM left/3NM right of centerline from AA to AD, within the confines of Smoky MOA and R-3601A/B to AF, 3NM right of centerline from AA to AF.

Special Operating procedures:
(1) Participating aircraft separation: route designated for MARSA 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 MSL (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 Bisons 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 Bisons 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 SLN 199041.
(15) Aircrews will contact Wichita Approach on 306.2 when passing Pt L and again when passing Pt P.
(16) Re-entry Racetrack flying 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/filtered 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) Kanopolis (town) N38°42.6 W98°09.2; (e) Marquette (town) N38°33.3 W
IR ROUTES

1-149

(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:

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 Arpt (N39-13 W92-52) by 1500’ vertically or 3 NM laterally.

FSS’s Within 100 NM Radius:
COU, IKK, STL

IR-592


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
03 AGL B 23 MSL to B MCM 275/14 N39°42.00’ W92°47.00’ 05 AGL B 23 MSL to C MCM 238/31 N39°23.00’ 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.
IR ROUTES

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 left and 3 NM right 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, 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°53.01’;
   (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, ML, STL
IR ROUTES

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:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tr>
<td>Cross at 40 MSL to</td>
<td>A</td>
<td>BJI 069/32</td>
<td>N47°44.00' W94°16.00'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to</td>
<td>B</td>
<td>BJI 072/36</td>
<td>N47°43.30' W94°10.00'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to</td>
<td>C</td>
<td>BJI 080/55</td>
<td>N47°40.00' W93°41.00'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to</td>
<td>D</td>
<td>HIB 018/26</td>
<td>N47°43.00' W92°29.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>E</td>
<td>HIB 047/32</td>
<td>N47°39.00' W91°06.00'</td>
</tr>
<tr>
<td>60 MSL to</td>
<td>F</td>
<td>HIB 064/42</td>
<td>N47°35.00' W90°45.00'</td>
</tr>
<tr>
<td>40 MSL to</td>
<td>G</td>
<td>DLH 014/19</td>
<td>N47°06.00' W92°03.00'</td>
</tr>
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</table>

TERRAIN FOLLOWING OPERATIONS: Authorized from A to D.

ROUTE WIDTH - 5 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 MARSA 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-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 90 MSL to | 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

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 conflictions 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.,

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tbody>
<tr>
<td>Cross at 170 MSL to or assigned descend direct to cross</td>
<td>A</td>
<td>GRB 031/44</td>
<td>N45°10.80’/ W87°38.00’</td>
</tr>
<tr>
<td>140 MSL to direct to</td>
<td>B</td>
<td>GRB 010/37</td>
<td>N45°10.00’/ W88°02.00’</td>
</tr>
<tr>
<td>140 MSL to turn right and descend to</td>
<td>C</td>
<td>GRB 351/36</td>
<td>N45°09.00’/ W88°19.00’</td>
</tr>
<tr>
<td>90 MSL B 140 MSL to continue descent to cross</td>
<td>D</td>
<td>IMT 202/40</td>
<td>N45°11.00’/ W88°26.00’</td>
</tr>
<tr>
<td>90 MSL to continue descent to</td>
<td>E</td>
<td>IMT 210/38</td>
<td>N45°15.00’/ W88°32.00’</td>
</tr>
<tr>
<td>38 MSL B 90 MSL to turn right and continue descent to cross</td>
<td>F</td>
<td>IMT 230/37</td>
<td>N45°24.00’/ W88°46.00’</td>
</tr>
<tr>
<td>38 MSL to (TA/TFB Initiation Point) direct to</td>
<td>G</td>
<td>IMT 239/35</td>
<td>N45°30.00’/ W88°48.50’</td>
</tr>
<tr>
<td>04 AGL B 38 MSL to turn left to</td>
<td>H</td>
<td>IMT 292/27</td>
<td>N45°58.00’/ W88°43.50’</td>
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<tr>
<td>04 AGL B 38 MSL to direct to</td>
<td>I</td>
<td>IMT 296/27</td>
<td>N46°00.00’/ W88°42.50’</td>
</tr>
<tr>
<td>04.5 AGL B 38 MSL to (Point JULIETT) direct to</td>
<td>J</td>
<td>IMT 307/32</td>
<td>N46°07.00’/ W88°44.50’</td>
</tr>
<tr>
<td>04.5 AGL B 38 MSL to turn right to</td>
<td>K</td>
<td>CMX 194/55</td>
<td>N46°16.50’/ W88°46.00’</td>
</tr>
<tr>
<td>05 AGL B 38 MSL to direct to</td>
<td>L</td>
<td>CMX 180/33</td>
<td>N46°22.50’/ W88°43.50’</td>
</tr>
<tr>
<td>05 AGL B 38 MSL to turn right to</td>
<td>M</td>
<td>CMX 174/29</td>
<td>N46°27.50’/ W88°23.00’</td>
</tr>
<tr>
<td>07 AGL B 38 MSL to direct to</td>
<td>N</td>
<td>CMX 168/27</td>
<td>N46°44.50’/ W88°19.50’</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to direct to</td>
<td>O</td>
<td>CMX 098/47</td>
<td>N47°05.00’/ W87°20.00’</td>
</tr>
<tr>
<td>02 AGL B 38 MSL to turn right and descend to</td>
<td>P</td>
<td>CMX 096/51</td>
<td>N47°06.00’/ W87°14.00’</td>
</tr>
<tr>
<td>02 AGL B 23 MSL to turn right to</td>
<td>Q</td>
<td>CMX 098/67</td>
<td>N47°02.00’/ W86°52.00’</td>
</tr>
<tr>
<td>02 AGL B 23 MSL to direct to</td>
<td>R</td>
<td>CMX 105/74</td>
<td>N46°53.00’/ W86°44.00’</td>
</tr>
<tr>
<td>02 AGL B 23 MSL to climb and turn left to</td>
<td>S</td>
<td>ESC 012/55</td>
<td>N46°37.00’/ W86°49.00’</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to direct to</td>
<td>T</td>
<td>ESC 012/52</td>
<td>N46°34.00’/ W86°49.50’</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to turn left and descend to</td>
<td>U</td>
<td>ESC 028/26</td>
<td>N46°06.50’/ W86°48.00’</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to turn right to</td>
<td>V</td>
<td>ESC 039/23</td>
<td>N46°01.00’/ W86°45.00’</td>
</tr>
<tr>
<td>02 AGL B 23 MSL to turn right to</td>
<td>W</td>
<td>ESC 074/26</td>
<td>N45°50.50’/ W86°30.00’</td>
</tr>
<tr>
<td>02 AGL B 23 MSL to direct to</td>
<td>X</td>
<td>ESC 088/27</td>
<td>N45°44.00’/ W86°27.00’</td>
</tr>
<tr>
<td>02 AGL B 23 MSL to (Start Maneuver Area) direct to</td>
<td>Y</td>
<td>ESC 130/30</td>
<td>N45°24.00’/ W86°33.00’</td>
</tr>
<tr>
<td>02 AGL B 23 MSL to (End Maneuver Area) turn left to</td>
<td>Z</td>
<td>TVC 266/66</td>
<td>N44°32.00’/ W87°05.00’</td>
</tr>
<tr>
<td>02 AGL B 23 MSL to direct to</td>
<td>AA</td>
<td>TVC 258/54</td>
<td>N44°26.50’/ W86°45.50’</td>
</tr>
<tr>
<td>02 AGL B 23 MSL to (TA/TFB Termination) turn left and climb to 23 MSL B 170 MSL to direct to cross</td>
<td>AB</td>
<td>ESC 125/45</td>
<td>N45°17.50’/ W86°13.50’</td>
</tr>
<tr>
<td>02 AGL B 23 MSL to direct to</td>
<td>AC</td>
<td>ESC 121/44</td>
<td>N45°20.83’/ W86°12.00’</td>
</tr>
</tbody>
</table>
at or above 80 MSL  
80 MSL B 170 MSL  
continue climb and  
turn right to cross  

at or above 110 MSL  
110 MSL B 170 MSL  
continue climb to cross  

110 MSL B 170 MSL to  
110 MSL B 170 MSL to  
continue climb to  

170 MSL to  

Re-Entry:  
direct to  
02 AGL B 23 MSL to  
02 AGL B 23 MSL to  
02 AGL B 23 MSL to  
02 AGL B 23 MSL to  

Alternate Exit:  
thence via published route.  
Alternate Entry:  
direct to  

70 MSL to  
70 MSL B 130 MSL  

130 MSL to  

38 MSL to  

PMSV CONTACTS:  

ROUTE WIDTH  

Special Operating Procedures:  

(1) Participating aircraft separation: Route is designated for MARSA 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/TFR 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 IMO 307/32 delay ---- minutes, IR-609 to exit fix.  

(7) Aircrews should be aware of large goose 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


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 | B | N46°43.00' | W79°20.00'
FL210 B 100 MSL descend direct to cross | C | N47°07.00' | W79°14.00'
100 MSL to 100 MSL B 60 MSL turn left and descend to cross | D | N47°15.00' | W79°25.00'
60 MSL to direct to | E | N47°09.00' | W79°56.00'
60 MSL to turn right to | F | N47°09.00' | W80°03.00'
60 MSL to descend direct to | G | N47°22.00' | W80°35.00'
40 MSL to (TA/TFR Initiation Point) direct to | GG | N47°31.00' | W81°00.00'
02 AGL B 23 MSL to (Start Maneuver Area) direct to | Y | ESC 130/30 | N45°24.00'
02 AGL B 23 MSL to (End Maneuver Area) turn left to | Z | TVC 266/66 | N44°32.00'
02 AGL B 23 MSL to direct to | AA | TVC 258/54 | N45°26.50'
02 AGL B 23 MSL to (TA/TFR Termination Point) turn left and climb to | AB | ESC 125/45 | N45°17.50'
23 MSL B 170 MSL to direct to cross | AC | ESC 121/44 | N45°20.50'
at or above 80 MSL | AD | ESC 094/38 | N45°40.50'
80 MSL B 170 MSL continue climb and turn right to cross | AE | ESC 084/42 | N45°47.50'
at or above 110 MSL | AF | PLN 292/54 | N45°52.50'
110 MSL B 170 MSL to continue climb and turn right to | AG | PLN 294/47 | N45°54.50'
170 MSL to Re-Entry: | AH | PLN 294/37 | N45°49.00'
direct to | | | N85°30.00'
02 AGL B 23 MSL to turn left to | | | N85°33.00'
02 AGL B 23 MSL to direct to | | | N86°11.50'
02 AGL B 23 MSL to turn left to | | | N86°13.50'
02 AGL B 40 MSL to turn left to | | | N86°13.50'
02 AGL B 40 MSL to direct to | | | N86°13.50'
02 AGL B 40 MSL to turn right to | | | N86°13.50'
02 AGL B 40 MSL to direct to | | | N86°13.50'
02 AGL B 40 MSL to (End TA/TFR Point) direct to | | | N86°13.50'
40 MSL to (Start TA/TFR Point) turn left to | | | N86°13.50'
02 AGL B 40 MSL to direct to | | | N86°13.50'
02 AGL B 40 MSL to turn left and descend to | | | N86°13.50'
02 AGL B 40 MSL to direct to | | | N86°13.50'
02 AGL B 30 MSL to turn left and descend to | | | N86°13.50'
02 AGL B 30 MSL to direct to | | | N86°13.50'
02 AGL B 23 MSL to turn right to | | | N86°13.50'
02 AGL B 23 MSL to direct to | | | N86°13.50'

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...
IR ROUTES

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 MARSA 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, C605-988-5745/5746.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Daylight hours, Tue-Sat, OT by NOTAM

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 100 MSL to or a assigned descend to cross</td>
<td>A</td>
<td>PIR 221/47</td>
<td>N43°55.00' W101°01.00'</td>
</tr>
<tr>
<td>70 MSL to direct to</td>
<td>B</td>
<td>PHP 116/20</td>
<td>N43°51.00' W101°18.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to direct to</td>
<td>C</td>
<td>PHP 154/17</td>
<td>N43°47.00' W101°34.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to direct to</td>
<td>D</td>
<td>PHP 154/41</td>
<td>N43°24.00' W101°26.50'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to direct to</td>
<td>E</td>
<td>PHP 154/52</td>
<td>N43°13.00' W101°23.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to direct to</td>
<td>F</td>
<td>PHP 158/72</td>
<td>N42°53.00' W101°23.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to direct to</td>
<td>G</td>
<td>LBF 328/78</td>
<td>N42°15.00' W101°23.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to direct to</td>
<td>H</td>
<td>LBF 309/45</td>
<td>N41°37.50' W101°23.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to climb direct to cross</td>
<td>I</td>
<td>LBF 335/25</td>
<td>N41°27.00' W100°53.00'</td>
</tr>
<tr>
<td>110 MSL to or as assigned</td>
<td>J</td>
<td>LBF 016/25</td>
<td>N41°25.00' W100°30.00'</td>
</tr>
</tbody>
</table>

70 MSL to direct to

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from C to L.

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:

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 N38-18 W90-18 to N38-34 W90-07 to N38-08 W89-42 to point of begining. Then from D to E which is bounded by N38-18 W90-18 to N38-31 W90-39 to N38-47 W90-30 to N38-34 W90-07 to point of begining.

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
Cross at 30 MSL to A SPI 064/21 N40°00.00’ W89°16.00’
or as assigned        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 E UIN 108/35 N39°37.00’ W90°35.00’
Alternate Entry/Exit: D

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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
</table>
| Cross at 150 MSL to or as assigned direct to | A   | MLS 055/91   | N46°56.00'  
|              |     |              | W103°53.00' |
| 150 MSL to (TFR Initiation Point) | CA  | MLS 052/101  | N47°01.00'  
|              |     |              | W103°41.50' |
| 02 AGL B 150 MSL to | CB  | MLS 051/108  | N47°05.00'  
| continue descent direct to |     |              | W103°32.00' |
| 05 AGL B 120 MSL to | B   | MLS 050/126  | N47°14.00'  
| direct to |     |              | W103°09.50' |
| 06 AGL B 40 MSL to | C   | DIK 330/29   | N47°19.00'  
| climb direct to cross |     |              | W102°58.00' |
| 40 MSL to (End TFR Point) | CC  | DIK 340/31   | N47°22.50'  
| direct to |     |              | W102°51.00' |
| 02 AGL B 40 MSL to | D   | DIK 345/32   | N47°24.00'  
| turn right to |     |              | W102°47.00' |
| 04 AGL B 40 MSL to | E   | DIK 352/34   | N47°25.00'  
| (Start TA/TFR Point) |     |              | W102°41.00' |
| 08 AGL B 40 MSL to | F   | DIK 007/36   | N47°25.00'  
| (TA/TFR Termination Point) |     |              | W102°27.00' |
| 40 MSL to | G   | BIS 309/49   | N47°23.50'  
| turn right to |     |              | W101°25.00' |
| 40 MSL to | H   | BIS 318/43   | N47°23.00'  
| turn left to |     |              | W101°12.00' |
| 40 MSL to | I   | BIS 326/43   | N47°25.50'  
| direct to |     |              | W101°04.00' |
| 40 MSL to | J   | BIS 338/47   | N47°32.00'  
| (TA/TFR Initiation Point) |     |              | W100°52.50' |
| descend direct to | K   | BIS 342/50   | N47°35.00'  
| 07.5 AGL B 40 MSL to |     |              | W100°48.00' |
| direct to | L   | DVL 259/43   | N48°03.50'  
| 07.5 AGL B 30 MSL to |     |              | W99°59.00' |
| direct to | M   | DVL 250/32   | N47°59.50'  
| 07.5 AGL B 30 MSL to |     |              | W99°40.50' |
| direct to | N   | DVL 211/36   | N47°38.50'  
| 07.5 AGL B 30 MSL to |     |              | W99°27.50' |
| climb direct to | O   | JMS 301/43   | N47°24.00'  
| 07.5 AGL B 34 MSL to |     |              | W99°28.00' |
| direct to | P   | JMS 295/39   | N47°18.00'  
| 07.5 AGL B 34 MSL to |     |              | W99°27.00' |
| direct to | Q   | JMS 285/34   | N47°10.00'  
| 07.5 AGL B 34 MSL to |     |              | W99°26.00' |
| (Contact Bismark APP CON 346.6) | R   | JMS 269/38   | N47°02.00'  
| direct to |     |              | W99°37.00' |
| 07.5 AGL B 34 MSL to | S   | JMS 268/47   | N47°02.00'  
| (Start Maneuver Area) |     |              | W99°49.00' |
| 07.5 AGL B 34 MSL to | T   | BIS 316/19   | N47°02.00'  
| (End Maneuver Area) |     |              | W100°55.00' |
| Primary TA/TFR Termination Point |     |              | turn right to U |
| 34 MSL to | U   | BIS 308/25   | N47°05.50'  
| climb direct to |     |              | W101°03.00' |
| 34 MSL B 60 MSL to | V   | BIS 308/36   | N47°13.00'  
| climb direct to |     |              | W101°13.50' |
| 60 MSL B 130 MSL to | W   | BIS 308/45   | N47°20.00'  
| continue climb and turn left to |     |              | W101°22.00' |
| 60 MSL B 130 MSL to | X   | BIS 306/50   | N47°22.50'  
| continue direct to |     |              | W101°29.00' |
| 130 MSL to | Y   | BIS 303/52   | N47°22.50'  
| direct to |     |              | W101°34.00' |
| 130 MSL to | Z   | DIK 012/35   | N47°23.00'  
| climb and turn left to |     |              | W102°24.00' |
| 130 MSL B FL240 to | AA  | DIK 002/28   | N47°18.00'  
| continue direct to |     |              | W102°35.00' |
| 130 MSL B FL240 to (Contact Minneapolis ARTCC 380.3) | AB  | DIK 003/14   | N47°05.00'  
| FL 180 B FL 240 |     |              | W102°40.50' |
| continue climb direct to cross | | | |
| FL240 to | AC  | DIK 183/4   | N46°48.00'  
| or as assigned |     |              | W102°48.00' |
| Re-Entry Cross | | | |
| 34 MSL to | T1  | BIS 316/19   | N47°02.00'  
| (End Maneuver Area) |     |              | W100°55.00' |
| turn right to | | | |
| 34 MSL to | U1  | BIS 308/25   | N47°04.50'  
| direct to |     |              | W101°03.00' |
| 34 MSL B 50 MSL to | RA  | BIS 330/33   | N47°17.00'  
| direct to |     |              | W100°55.00' |
| 50 MSL to | RB  | JMS 289/44   | N47°17.00'  
| descend and turn right to |     |              | W99°37.00' |
| 34 MSL B 50 MSL to | Q1  | JMS 285/34   | N47°10.00'  
| continue right turn to |     |              | W99°26.00' |
| 07.5 AGL B 34 MSL to | R1  | JMS 269/38   | N47°02.00'  
| Alternate Exit: |     |              | W99°37.00' |
| Cross | | | |
| 34 MSL to  | U   | BIS 308/25   | N47°04.50'  
| (Contact Minneapolis ARTCC 279.6) |     |              | W101°03.00' |
| FL 240 to | V1  | BIS 308/36   | N47°13.00'  
| continue climb direct to |     |              | W101°13.50' |
| 60 MSL B 130 MSL to | W1  | BIS 308/45   | N47°20.00'  
| (Contact Minneapolis ARTCC 279.6) |     |              | W101°22.00' |
| continue climb to cross | | | |
| 130 MSL to | XX  | BIS 308/58   | N47°30.00'  
| or as assigned |     |              | W101°34.50' |

**IR ROUTES**
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, and E to G, J to T, and P 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 horizontal 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 G to E.

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Ellsworth (RCA 375.775).

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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 150 MSL to or as assigned direct to</td>
<td>A</td>
<td>MLS 053/91</td>
<td>N46°56.00’ W103°53.00’</td>
</tr>
<tr>
<td>150 MSL to (TFR Initiation Point)</td>
<td>CA</td>
<td>MLS 052/101</td>
<td>N47°01.00’ W103°41.50’</td>
</tr>
<tr>
<td>02 AGL B 150 MSL to continue descent direct to</td>
<td>CB</td>
<td>MLS 051/108</td>
<td>N47°05.00’ W103°32.00’</td>
</tr>
<tr>
<td>05 AGL B 120 MSL to direct to</td>
<td>B</td>
<td>MLS 050/126</td>
<td>N47°14.00’ W103°09.50’</td>
</tr>
<tr>
<td>06 AGL B 40 MSL to climb direct to cross</td>
<td>C</td>
<td>DIK 330/29</td>
<td>N47°19.00’ W102°58.00’</td>
</tr>
<tr>
<td>40 MSL to (End TFR Point)</td>
<td>CC</td>
<td>DIK 340/31</td>
<td>N47°22.50’ W102°51.00’</td>
</tr>
<tr>
<td>40 MSL to turn right to</td>
<td>D</td>
<td>DIK 345/32</td>
<td>N47°24.00’ W102°47.00’</td>
</tr>
<tr>
<td>40 MSL to (Start TA/TFR Point)</td>
<td>E</td>
<td>DIK 352/34</td>
<td>N47°25.00’ W102°41.00’</td>
</tr>
<tr>
<td>08 AGL B 40 MSL to (TA/TFR Termination Point)</td>
<td>F</td>
<td>DIK 007/36</td>
<td>N47°25.00’ W102°27.00’</td>
</tr>
<tr>
<td>40 MSL to turn left to</td>
<td>G</td>
<td>BIS 309/49</td>
<td>N47°23.50’ W101°25.00’</td>
</tr>
<tr>
<td>40 MSL to descend direct to</td>
<td>H</td>
<td>BIS 318/43</td>
<td>N47°23.00’ W101°12.00’</td>
</tr>
<tr>
<td>07.5 AGL B 40 MSL to direct to</td>
<td>I</td>
<td>BIS 326/43</td>
<td>N47°25.50’ W101°04.00’</td>
</tr>
<tr>
<td>07.5 AGL B 30 MSL to turn left to</td>
<td>J</td>
<td>BIS 338/47</td>
<td>N47°32.00’ W100°52.50’</td>
</tr>
<tr>
<td>30 MSL to (Contact Minot APP CON 363.8)</td>
<td>K</td>
<td>BIS 342/50</td>
<td>N47°35.00’ W100°48.00’</td>
</tr>
<tr>
<td>52 MSL to climb direct to cross</td>
<td>L</td>
<td>MOT 096/23</td>
<td>N48°08.00’ W100°45.00’</td>
</tr>
</tbody>
</table>

FSS’s Within 100 NM Radius:

IR-649

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.
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 (N47-11.2 W101-09.0);
(c) Tower 300’ AGL (N47-16.4 W101-17.4);
(d) Smokestack 200' AGL (N47-16.4 W101-09.0);
(e) Smokestack 300' AGL (N47-27.3 W100-57.1);
(f) Tower 265' AGL (N47-21.4 W101-37.7);
(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);

FSS's Within 100 NM Radius:
HON, GFK

IR ROUTES

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Fac/Rad/Dist Lat/Long
Cross at 170 MSL to or as assigned A N59°18.00' W120°00.00'
Cross 170 MSL B 40 MSL descend direct to cross B N59°07.00' W121°00.00'
40 MSL to (TA/TFR Initiation Point) direct to BB N59°15.00' W122°40.00'
40 MSL to (TA/TFR Initiation Point) direct to BC N58°54.00' W122°03.00'

IR ROUTES

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 W N51°56.00' W127°00.00'
Contact Comox Base Ops on 316.5 prior to entry into CYR 157 Alternate Entry: BA Cross 170 MSL to or as assigned BA N59°40.00' W123°20.00'
170 MSL to or as assigned 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'
40 MSL to (TA/TFR Initiation Point) direct to BC N58°54.00' W122°03.00'
IR ROUTES

SFC B 40 MSL to D1
(thence via published route)
Alternate Entry: BL
Cross
170 MSL to BL
or as assigned
170 MSL B 70 MSL
direct to
70 MSL B 170 MSL to N1
(TA/TFR Initiation Point)
(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 MARSA 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.
(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.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

SFC B 40 MSL to
(thence via published route)
Alternate Entry; BL
Cross
170 MSL to BL
or as assigned
170 MSL B 70 MSL
direct to
70 MSL B 170 MSL to N1
(TA/TFR Initiation Point)
(Thence via published route)
IR ROUTES

SFC B 40 MSL to Q
Contact Cold Lake
Terminal on 322.8
(230.6 Backup)
direct to

SFC B 40 MSL to R
turn right to

SFC B 40 MSL to S
direct to
turn right to

SFC B 40 MSL to T
turn right to
direct to

SFC B 40 MSL to U
turn left to
direct to

SFC B 40 MSL to W
Contact Jimmy Lake
RSO 255.4 (295.3)
Backup) direct to

SFC B 40 MSL to X
turn right to
direct to

SFC B 40 MSL to Y
turn right to
direct to

SFC B 40 MSL to Z
direct to

SFC B 40 MSL to AA
(TA/TFR Termination Point) climb direct to

40 MSL B 170 MSL to AB
Contact Cold Lake
Terminal for handover or further clearance. 40 MSL B 170 MSL continue climb to cross

170 MSL to AC
or as assigned
Alternate Entry: BA cross

170 MSL to BA
or as assigned
170 MSL B 40 MSL descend direct to cross

40 MSL to BB
(TA/TFR Initiation Point) turn left to

SFC B 40 MSL to BC
direct to

SFC B 40 MSL to E1 thence via published route. Alternate Entry: BJ Cross

SFC B 40 MSL to Q
Contact Cold Lake
Terminal on 322.8
(230.6 Backup) direct to

SFC B 40 MSL to R
turn right to

SFC B 40 MSL to S
direct to
turn right to

SFC B 40 MSL to T
turn right to
direct to

SFC B 40 MSL to U
turn left to
direct to

SFC B 40 MSL to W
Contact Jimmy Lake
RSO 255.4 (295.3)
Backup) direct to

SFC B 40 MSL to X
turn right to
direct to

SFC B 40 MSL to Y
turn right to
direct to

SFC B 40 MSL to Z
direct to

SFC B 40 MSL to AA
(TA/TFR Termination Point) climb direct to

40 MSL B 170 MSL to
Contact Cold Lake
Terminal for handover or further clearance. 40 MSL B 170 MSL continue climb to cross

170 MSL to AC
or as assigned
Alternate Entry: BA cross

170 MSL to BA
or as assigned
170 MSL B 40 MSL descend direct to cross

40 MSL to BB
(TA/TFR Initiation Point) turn left to

SFC B 40 MSL to BC
direct to

SFC B 40 MSL to E1 thence via published route. Alternate Entry: BJ Cross

170 MSL to BJ
or as assigned
170 MSL B 40 MSL descend direct to cross

40 MSL to J1
(TA/TFR Initiation Point) thence via published route.

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 MARSA 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.

SFC B 40 MSL to
Contact Cold Lake
Terminal on 322.8
(230.6 Backup)
direct to

SFC B 40 MSL to R
turn right to

SFC B 40 MSL to S
direct to
turn right to

SFC B 40 MSL to T
turn right to
direct to

SFC B 40 MSL to U
turn left to
direct to

SFC B 40 MSL to W
Contact Jimmy Lake
RSO 255.4 (295.3)
Backup) direct to

SFC B 40 MSL to X
turn right to
direct to

SFC B 40 MSL to Y
turn right to
direct to

SFC B 40 MSL to Z
direct to

SFC B 40 MSL to AA
(TA/TFR Termination Point) climb direct to

40 MSL B 170 MSL to
Contact Cold Lake
Terminal for handover or further clearance. 40 MSL B 170 MSL continue climb to cross

170 MSL to AC
or as assigned
Alternate Entry: BA cross

170 MSL to BA
or as assigned
170 MSL B 40 MSL descend direct to cross

40 MSL to BB
(TA/TFR Initiation Point) turn left to

SFC B 40 MSL to BC
direct to

SFC B 40 MSL to E1 thence via published route. Alternate Entry: BJ Cross

170 MSL to BJ
or as assigned
170 MSL B 40 MSL descend direct to cross

40 MSL to J1
(TA/TFR Initiation Point) thence via published route.

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 MARSA 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.
(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.


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 direct to C N51°40.00' W101°07.00'
FL 250 B 40 MSL descend direct to C D N52°35.00' W101°30.00'
70 MSL to 70 MSL B 40 MSL continue descent to cross E N53°00.00' W101°40.00'
40 MSL to direct to F N53°30.00' W103°00.00'
40 MSL to (Start TA/TFR) direct to G N54°10.00' 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'
SFC 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

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) Flights must be approved by NDHG/DAOT Ottawa, Canada via the CFLO at DET 1, HQ ACC/DOSR DSN 271-3450.

(3) Participating aircraft separation: the route is designated for MARSA operations established by coordinated scheduling.

(4) Additional info: Aircraft will operate between 300'AGL and 4000' MSL from Pt E to Pt L. Aircraft will meet Canadian points by times plus or minus 5 minutes. Aircraft commanders will file IFPFP 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.

(5) Lost communication (LC) procedures: Route LC altitude is FL290.

(6) 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.

(7) Aircraft will contact Cold Lake Terminal Control on 322.8 at Pt S (N34°46' W109°00').

(8) 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.


HOURS OF OPERATION: Continuous
ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 90 MSL to or as assigned descend direct to</td>
<td>A</td>
<td>ISN 006/31</td>
<td>N48°45.00' W103°30.00'</td>
</tr>
<tr>
<td>05 AGL B 90 MSL to turn right to</td>
<td>B</td>
<td>ISN 040/38</td>
<td>N48°38.00' W103°00.00'</td>
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<tr>
<td>07 AGL B 40 MSL to (TA Initiation Point) direct to</td>
<td>C</td>
<td>MOT 273/66</td>
<td>N48°33.50' W102°53.00'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to turn left to</td>
<td>D</td>
<td>MOT 254/56</td>
<td>N48°12.00' W102°41.00'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to direct to</td>
<td>E</td>
<td>MOT 248/51</td>
<td>N48°07.00' W102°33.00'</td>
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<tr>
<td>06 AGL B 40 MSL to direct to</td>
<td>F</td>
<td>MOT 221/30</td>
<td>N47°58.00' W101°53.00'</td>
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<tr>
<td>02 AGL B 40 MSL to turn left to</td>
<td>G</td>
<td>MOT 172/27</td>
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<tr>
<td>06 AGL B 40 MSL to direct to</td>
<td>H</td>
<td>MOT 164/26</td>
<td>N47°49.50' W101°15.00'</td>
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<tr>
<td>06 AGL B 40 MSL to descend direct to</td>
<td>I</td>
<td>MOT 129/28</td>
<td>N47°53.50' W100°52.00'</td>
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<tr>
<td>04.5 AGL B 40 MSL to turn right to</td>
<td>J</td>
<td>MOT 106/38</td>
<td>N47°57.00' W100°28.50'</td>
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<td>05 AGL B 30 MSL to direct to</td>
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<td>MOT 103/42</td>
<td>N47°57.00' W100°21.00'</td>
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<tr>
<td>04 AGL B 30 MSL to direct to</td>
<td>L</td>
<td>DVL 208/35</td>
<td>N47°38.50' W99°24.00'</td>
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<tr>
<td>07 AGL B 30 MSL to direct to</td>
<td>LA</td>
<td>DVL 179/37</td>
<td>N47°30.50' W99°00.00'</td>
</tr>
<tr>
<td>06 AGL B 30 MSL to turn left to</td>
<td>M</td>
<td>FAR 288/56</td>
<td>N47°10.50' W98°05.00'</td>
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<td>05 MSL B 30 MSL to direct to</td>
<td>N</td>
<td>FAR 302/53</td>
<td>N47°19.50' W97°49.50'</td>
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<tr>
<td>06 AGL B 30 MSL to turn right to</td>
<td>O</td>
<td>MOT 089/135</td>
<td>N47°45.50' W98°01.00'</td>
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<tr>
<td>07 AGL B 30 MSL to direct to</td>
<td>P</td>
<td>GFK 254/31</td>
<td>N47°53.50' W97°57.00'</td>
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<tr>
<td>10 AGL B 30 MSL to turn left to</td>
<td>Q</td>
<td>GFK 272/22</td>
<td>N48°01.50' W97°44.00'</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to direct to</td>
<td>R</td>
<td>GFK 293/24</td>
<td>N48°10.00' W97°41.50'</td>
</tr>
<tr>
<td>06 AGL B 30 MSL to turn left to</td>
<td>S</td>
<td>GFK 306/38</td>
<td>N48°24.00' W97°52.00'</td>
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<tr>
<td>06 AGL B 30 MSL to direct to</td>
<td>T</td>
<td>DVL 042/39</td>
<td>N48°32.50' W98°10.00'</td>
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<tr>
<td>06 AGL B 30 MSL to direct to</td>
<td>U</td>
<td>DVL 028/38</td>
<td>N48°38.00' W98°22.00'</td>
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<tr>
<td>02 AGL B 30 MSL to turn left to</td>
<td>V</td>
<td>DVL 019/39</td>
<td>N48°41.50' W98°29.00'</td>
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<tr>
<td>02 AGL B 30 MSL to direct to</td>
<td>W</td>
<td>DVL 012/38</td>
<td>N48°42.50' W98°36.00'</td>
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<tr>
<td>06 AGL B 30 MSL to climb direct to</td>
<td>X</td>
<td>DVL 328/32</td>
<td>N48°36.50' W99°15.00'</td>
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<tr>
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<td>Y</td>
<td>DVL 306/41</td>
<td>N48°35.00' W99°40.00'</td>
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<td>Z</td>
<td>MOT 058/57</td>
<td>N48°34.00' W99°56.00'</td>
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<tr>
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<td>AA</td>
<td>MOT 057/55</td>
<td>N48°33.50' W99°59.50'</td>
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</tbody>
</table>

02 AGL B 50 MSL to AB MOT 058/44 N48°30.00' W100°15.00' turn right to 02 AGL B 50 MSL to AC MOT 059/31 N48°25.00' W100°34.00' or as assigned (End TA Point) 02 AGL B 50 MSL to continue climb to 50 MSL B 100 MSL to AD MOT 046/24 N48°28.00' W100°46.50' 50 MSL B 100 MSL to AE MOT 360/32 N48°46.50' W101°06.00' turn left to 100 MSL to AF MOT 338/29 N48°45.00' W101°24.00' direct to cross 100 MSL to AG MOT 282/24 N48°25.50' W101°50.00' or as assigned

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; 4 NM left and 3 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 area of Lake Sakakawea.
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 W102-00.4);
   (h) Tower 300’ AGL (N48-27.5 W092-50.4);
   (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 W097-27.4);
   (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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 20 MSL to 30 MSL as assigned</td>
<td>A</td>
<td>CCV VORTAC</td>
<td>N37°20.85’ W75°59.86’</td>
</tr>
<tr>
<td>20 MSL to 30 MSL as assigned</td>
<td>B</td>
<td>HCM 060/17</td>
<td>N37°37.00’ W76°26.00’</td>
</tr>
<tr>
<td>20 MSL to 30 MSL as assigned</td>
<td>C</td>
<td>BRV 230/25</td>
<td>N38°01.00’ W77°42.00’</td>
</tr>
<tr>
<td>30 MSL to 40 MSL as assigned</td>
<td>D</td>
<td>GVE 013/14</td>
<td>N38°15.00’ W78°07.00’</td>
</tr>
</tbody>
</table>

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 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 of 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: COMSTRKFORWINGLANT,
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:

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/OSS 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: COMSTRKFORWINGLANT,
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:

ROUTE WIDTH - 5 NM either side of cenerline 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:

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<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 70 MSL to</td>
<td>A</td>
<td>HPW 263/7</td>
<td>N37°18.00' W77°16.00'</td>
</tr>
<tr>
<td>70 MSL to Maintain 70 MSL until 23 NM East of C then</td>
<td>B</td>
<td>FAK 246/27</td>
<td>N37°18.00' W78°19.00'</td>
</tr>
<tr>
<td>60 MSL to or 80 MSL as assigned</td>
<td>C</td>
<td>LYH 025/5</td>
<td>N37°20.00' W79°12.00'</td>
</tr>
<tr>
<td>60 MSL to or 80 MSL as assigned</td>
<td>D</td>
<td>ROA 181/34</td>
<td>N36°47.00' W80°02.00'</td>
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<tr>
<td>60 MSL to or 80 MSL as assigned</td>
<td>E</td>
<td>GSO 288/44</td>
<td>N36°14.00' W80°51.00'</td>
</tr>
<tr>
<td>60 MSL to or 80 MSL as assigned</td>
<td>F</td>
<td>GSO 062/2</td>
<td>N36°04.00' W79°56.00'</td>
</tr>
</tbody>
</table>

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:
- 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;
- 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;
- Avoid Ostrich Farm in vicinity of Point H on centerline at N36°39' W77°41' by 1 NM or 1000' AGL;
- Avoid uncharted tower in vicinity of Point D at N36°50.3' W79°55.1' height 310' AGL 1430' MSL;
- 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:

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 70 MSL to</td>
<td>A</td>
<td>RIC VORTAC</td>
<td>N37°30.14' W77°19.22'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>B</td>
<td>GVE 355/7</td>
<td>N38°08.00' W78°11.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>C</td>
<td>CSN 220/11</td>
<td>N38°29.00' W78°00.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>D</td>
<td>LDN 009/5</td>
<td>N38°56.00' W78°12.00'</td>
</tr>
<tr>
<td>70 MSL to or 80 MSL as assigned</td>
<td>E</td>
<td>EKN 091/12</td>
<td>N38°56.00' W79°51.00'</td>
</tr>
<tr>
<td>Descend to 50-60 MSL at F, then maintain</td>
<td>F</td>
<td>GVE 287/45</td>
<td>N38°09.00' W79°05.00'</td>
</tr>
</tbody>
</table>

FSS’s Within 100 NM Radius:
AND, DCA, EKN, RDU
IR ROUTES

1-167

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).
(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.

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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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<th>Lat/Long</th>
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<td>GSO 231/27</td>
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<td>GSO 180/41</td>
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<td>SSC 024/43</td>
<td>N34°39.00' W80°11.30'</td>
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<td>30 MSL to</td>
<td>K</td>
<td>SSC 024/33</td>
<td>N34°30.00' W80°15.00'</td>
</tr>
</tbody>
</table>

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 W80-25.2.
(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.
(9) Noise Sensitive Areas: Avoid each by 1000' AGL and 1 NM:
(a) N36-03 W80-43;
(b) N36-43 W80-18;
(c) N35-40.0 W80-20.5;
(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.

50 MSL to H HPW 254/15 N37°14.00' 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'

60 MSL to H HPW 254/15 N37°14.00' 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'
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.


(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:

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.
(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 W80-23.0); horse training stable (N36-34.6 W80-22.4); 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 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.
(16) CAUTION: Two Towers 200’ AGL located at 
(a) N36-29.2 W80-10.5; 
(b) N36-03.5 W80-46.8.
(17) 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.
(18) 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.
(19) Cross Point I level at 10,000’ MSL.

FSS’s Within 100 NM Radius:
AND, EKN, RDU

IR-743


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 W83-06.29.
(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 (N36-13.3 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:

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<th>Pt</th>
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<td>N38°38.00’ W78°37.00’</td>
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<td>N39°07.00’ W79°31.00’</td>
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<td>EKN 165/47</td>
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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:
(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 gobal 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 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: VHF or UHF radio reports are required when passing:
(a) Pt A to Norfolk Approach Control on 372.1;
(b) Pt B to Richmond Approach Control on 319.8;
(c) Pt D, Pt F and Pt K to Richmond Approach Control on 132.85 or 257.8.

(6) Return altitude 15,000’ MSL. Lost communications altitude 6000’ MSL.

(7) Hazards:
(a) Caution: IR-720, IR-761 and IR-762 cross at multiple points;
(b) Extensive civilian fish-spotter aircraft from SFC to 5000’ AGL over Chesapeake Bay, between Pt A and Pt B from Apr to Nov;
(c) Ultralight activity in the vicinity of Pt B;
(d) Extensive helicopter operations between Pt D and Pt J;
(e) 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;
(9) 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.
(10) 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:

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<td>N37°31.00’ W80°59.00’</td>
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</table>
IR ROUTES

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 263.1;
   (b) Pt C to Clarkburg Approach Control on 280.1;
   (c) Pt D to Washington ARTCC on 285.6;
   (d) Pt F to Washington ARTCC on 319.9;
   (e) Pt H to Washington ARTCC on 317.7.
(6) Return altitude 15,000' MSL. Lost communications altitude 9000' 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' W78°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 G ESL 185/19 N38°55.00' W78°59.00'
SFC B 60 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:**

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<th>Altitude Data</th>
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<tbody>
<tr>
<td>Cross at 170 MSL to or as assigned direct to</td>
<td>A</td>
<td>BGR 142/52</td>
<td>N44°22.00' W67°52.00'</td>
</tr>
<tr>
<td>170 MSL to turn right to</td>
<td>B</td>
<td>BGR 112/40</td>
<td>N44°48.00' W67°56.00'</td>
</tr>
<tr>
<td>170 MSL to Then descend direct to</td>
<td>C</td>
<td>BGR 104/45</td>
<td>N44°54.00' W67°49.00'</td>
</tr>
<tr>
<td>at or above 100 MSL then continue descent direct to cross</td>
<td>D</td>
<td>BGR 102/52</td>
<td>N44°56.00' W67°40.00'</td>
</tr>
<tr>
<td>30 MSL to (Primary TA/TFR Initiation Point) turn right to</td>
<td>E</td>
<td>BGR 103/57</td>
<td>N44°56.00' W67°32.00'</td>
</tr>
<tr>
<td>30 MSL to direct to</td>
<td>F</td>
<td>BGR 114/73</td>
<td>N44°44.00' W67°11.00'</td>
</tr>
<tr>
<td>30 MSL to turn right to</td>
<td>G</td>
<td>BGR 122/74</td>
<td>N44°33.00' W67°12.00'</td>
</tr>
<tr>
<td>30 MSL to direct to</td>
<td>H</td>
<td>BGR 132/60</td>
<td>N44°27.00' W67°35.00'</td>
</tr>
<tr>
<td>30 MSL to turn right to</td>
<td>I</td>
<td>BGR 129/49</td>
<td>N44°33.00' W67°48.00'</td>
</tr>
<tr>
<td>30 MSL to direct to</td>
<td>J</td>
<td>BGR 117/45</td>
<td>N44°44.00' W67°50.00'</td>
</tr>
<tr>
<td>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</td>
<td>K</td>
<td>BGR 091/44</td>
<td>N45°04.00' W67°54.00'</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to direct to</td>
<td>L</td>
<td>MLT 156/36</td>
<td>N45°09.00' W67°55.00'</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to turn left to</td>
<td>M</td>
<td>MLT 072/30</td>
<td>N45°53.50' W67°57.50'</td>
</tr>
<tr>
<td>02 AGL B 30 MSL to climb direct to</td>
<td>N</td>
<td>MLT 062/31</td>
<td>N45°58.50' W68°01.00'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to turn right to</td>
<td>O</td>
<td>MLT 048/32</td>
<td>N46°03.00' W68°09.50'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to direct to</td>
<td>P</td>
<td>MLT 042/33</td>
<td>N46°05.50' W68°13.00'</td>
</tr>
<tr>
<td>05 AGL B 40 MSL to (End Maneuver Area) turn left to</td>
<td>Q</td>
<td>PQI 288/20</td>
<td>N46°45.50' W68°35.00'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to direct to</td>
<td>R</td>
<td>PQI 294/22</td>
<td>N46°47.50' W68°37.50'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to turn left to</td>
<td>S</td>
<td>PQI 317/38</td>
<td>N47°03.00' W68°55.00'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to direct to</td>
<td>T</td>
<td>PQI 315/47</td>
<td>N47°05.00' W69°08.50'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to direct to</td>
<td>U</td>
<td>PQI 298/60</td>
<td>N46°53.00' W69°32.50'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to turn left and climb to</td>
<td>V</td>
<td>PQI 289/73</td>
<td>N46°42.50' W69°51.00'</td>
</tr>
<tr>
<td>02 AGL B 53 MSL to direct to</td>
<td>W</td>
<td>PQI 285/76</td>
<td>N46°38.00' W69°55.00'</td>
</tr>
<tr>
<td>02 AGL B 53 MSL to climb direct to cross</td>
<td>X</td>
<td>MLT 299/66</td>
<td>N45°45.00' W70°04.00'</td>
</tr>
<tr>
<td>02 AGL B 57 MSL to turn right to</td>
<td>Y</td>
<td>MLT 294/66</td>
<td>N45°39.00' W70°05.00'</td>
</tr>
<tr>
<td>02 AGL B 57 MSL to direct to</td>
<td>Z</td>
<td>MLT 290/68</td>
<td>N45°35.00' W70°08.00'</td>
</tr>
<tr>
<td>02 AGL B 57 MSL to (Reporting 70 deg 30' W to Boston ARTCC 346.4 primary or 290.5 secondary.) turn right to</td>
<td>AA</td>
<td>YSC 131/38</td>
<td>N45°03.00' W70°58.00'</td>
</tr>
<tr>
<td>02 AGL B 57 MSL to (End TA/TFR) turn left to</td>
<td>AB</td>
<td>YSC 137/36</td>
<td>N45°01.00' W71°03.00'</td>
</tr>
<tr>
<td>02 AGL B 80 MSL to (Primary TA/TFR Initiation Point) turn right to</td>
<td>AC</td>
<td>YSC 148/30</td>
<td>N44°59.00' W71°15.00'</td>
</tr>
<tr>
<td>02 AGL B 80 MSL continue climb and turn left to cross</td>
<td>AD</td>
<td>YSC 157/29</td>
<td>N44°57.00' W71°21.00'</td>
</tr>
<tr>
<td>80 MSL to (End TA/TFR) direct to</td>
<td>AE</td>
<td>YSC 172/30</td>
<td>N44°52.00' W71°30.00'</td>
</tr>
<tr>
<td>80 MSL to (Point Charlie) (Report passing Point Charlie to Boston ARTCC 282.2) direct to</td>
<td>AF</td>
<td>YSC 194/36</td>
<td>N44°43.60' W71°45.00'</td>
</tr>
<tr>
<td>80 MSL to or as assigned then within 80 MSL B 120 MSL climb direct to cross</td>
<td>AG</td>
<td>YSC 208/42</td>
<td>N44°38.00' W71°58.00'</td>
</tr>
<tr>
<td>120 MSL to or as assigned Re-Entry: Ashland Maneuver Area (End Maneuver Area) turn left to</td>
<td>R1</td>
<td>PQI 294/22</td>
<td>N46°47.50' W68°37.50'</td>
</tr>
<tr>
<td>02 AGL B 40 MSL to direct to</td>
<td>S1</td>
<td>PQI 317/38</td>
<td>N47°03.00' W68°55.00'</td>
</tr>
</tbody>
</table>

**Re-Entry:**

- **Ashland Maneuver Area (End Maneuver Area) turn left to**
- **02 AGL B 40 MSL to direct to**
- **02 AGL B 40 MSL to turn left and climb to**
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 W68-27.8;
(f) Residence at N45-45.0 W67-56.6;
(g) Residence at N46-24.4 W67-56.6.

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
35 MSL to  R  ART 119/17  N43°52.00'  W75°41.00'
0 MSL to  S  ART 154/13  N43°47.00'  W75°53.00'
(Report passing Point Jerry to Wheeler Sack APP Primary 347.7 or Secondary 399.85)
60 MSL to  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  Z  ART 170/25  N43°34.00'  W75°51.00'
Re-Entry: A
Re-Entry B:
35 MSL to R1  ART 119/17  N43°52.00'  W75°41.00'
climb direct to cross
30 MSL to S1  ART 154/13  N43°47.00'  W75°53.00'
(Pont Jerry)
35 MSL B 60 MSL
AA  ART 197/1  N43°56.00'  W76°04.00'
turn right to
direct to
35 MSL to N1  ART 220/28  N43°27.00'  W74°42.00'
(Start Maneuver Area)
turn right and descend to
cross
35 MSL to N2  ART 154/13  N43°47.00'  W75°53.00'
then via published route.
Re-entry B: climb direct to cross
60 MSL to S2  ART 154/13  N43°47.00'  W75°53.00'
(Pont Jerry)
30 MSL to (Contact Wheeler Sack APP Primary
35 MSL to 347.7 or Secondary
20 MSL to 299.85 and report
35 MSL to 30 MSL to
turn right to
35 MSL to 30 MSL to
turn right to
cross
35 MSL to 30 MSL to
turn right to
cross
60 MSL to  BA  ART 197/1  N43°56.00'  W76°04.00'
(Pont Jerry)
60 MSL to BB  ART 036/26  N44°21.00'  W75°49.00'
turn right to
cross
60 MSL to BC  ART 045/33  N44°24.50'  W75°39.00'
turn right to
cross
30 MSL B 60 MSL to BF  ART 055/33  N44°21.50'  W75°32.50'
descend direct to
Aircrews should be especially vigilant for aircraft transiting Re-entry procedures: Aircraft scheduled for Maneuver Area ATC will advise aircrews flying IR-801 of traffic in the Route designated for SN missions.

Lost communications (LC) procedures: Route LC altitude is 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 designed for MARSA 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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at FL210 to SIDECAR</td>
<td>A</td>
<td>XBG TACAN</td>
<td>N48°19.77'</td>
</tr>
<tr>
<td>FL210 to (Primary TA/TFR Initiation Point)</td>
<td>B</td>
<td>XBG 020/45</td>
<td>N49°05.00'</td>
</tr>
<tr>
<td>50 MSL to turn right to</td>
<td>C</td>
<td>XBG 020/80</td>
<td>N49°40.00'</td>
</tr>
<tr>
<td>SFC B 50 MSL to direct to</td>
<td>CC</td>
<td>XBG 022/84</td>
<td>N49°44.00'</td>
</tr>
<tr>
<td>SFC B 50 MSL to turn left to</td>
<td>D</td>
<td>XBG 049/140</td>
<td>N50°21.00'</td>
</tr>
<tr>
<td>SFC B 50 MSL to direct to</td>
<td>DD</td>
<td>XBG 047/147</td>
<td>N50°29.00'</td>
</tr>
<tr>
<td>SFC B 50 MSL to turn left to</td>
<td>E</td>
<td>XBG 027/147</td>
<td>N50°45.00'</td>
</tr>
</tbody>
</table>
IR ROUTES

SFC B 50 MSL to
direct to
SFC B 50 MSL to
descent and turn right to
SFC B 50 MSL to
direct to
SFC B 40 MSL to
(See Special Operating Procedure 8) direct to
SFC B 60 MSL to
direct to
descend and turn left to
SFC B 60 MSL to
direct to
turn left to
04 AGL B 40 MSL to
direct to
03 AGL B 40 MSL to
turn left and descend to
SFC B 40 MSL to
direct to
SFC B 35 MSL to
climb direct to cross FL200 to
or as assigned.

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 MARSA 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.

IR-803

ORIGINATING ACTIVITY: 5 OSS/OSTC, 300 Summit Dr., Minot AFB, ND 58705-5044 DSN 453-2967, C701-723-2967.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at FL210 to A XBG TACAN N48°19.77' W70°59.72'
or as assigned (pass Pt G ETA to SIDECAR)
direct to
FL210 to B N49°05.00' W70°59.50'
(Primary TA/TFR Initiation Point) descend direct to cross
04 AGL B FL210 to C N49°40.00' W71°00.00'
direct to
04 AGL B 50 MSL to F1 N50°02.50' W71°00.00'
turn left and descend to
SFC B 50 MSL to direct to
SFC B 40 MSL to (See Special Operating Procedure 8) climb direct to
SFC B 60 MSL to direct to
SFC B 60 MSL to
descend and turn left to

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.

When handed to Bagotville Terminal Control Unit (TCU), aircrews will pass ETA's for I and L.

If high altitude intercept activity is planned, delay start descent until threat identification or Point C, whichever is sooner. Tactical descent is authorized.

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.

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.

Aircrews scheduled for IR-802 will file for 'BOZ 1 (IR-802)' on DD Form 175.

IR-802 (BOZ l) is cleared for CELL operations.

Aircrews should be cautious of a 200' AGL tower located at N48-58.3 W72-26.4 that runs North to South between Point KK and L. Caution must be used when approaching this area.

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.
SFC B 60 MSL to I  N50°03.00' W72°43.00'
04 AGL B 40 MSL to J  N48°58.00' W73°14.00'
04 AGL B 40 MSL to JJ XBG 312/96  N48°55.00' W73°14.50'
03 AGL B 40 MSL to K  N48°00.00' W73°00.00'
route left and descend to cross 35 MSL to KK  N47°57.00' W72°53.00' (TA/TFR Termination Point)
direct to 35 MSL to L  N48°00.00' W72°00.00' FL200 to M XBG TACAN  N48°19.77' W70°59.72'
or as assigned.

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 MARSA 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.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Cross at 170 MSL to or as assigned direct to 170 MSL to turn right to 170 MSL to descend direct to 170 MSL to turn right and continue descend to cross at or above 100 MSL continue descent direct to cross 30 MSL to (Primary TA/TFR Initiation Point) turn right to 02 AGL B 30 MSL to direct to 02 AGL B 30 MSL to turn right to 02 AGL B 30 MSL to (End TA/TFR Point) direct to 30 MSL to (Start TA/TFR Point) direct to 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 02 AGL B 30 MSL to direct to 02 AGL B 30 MSL to turn left to 02 AGL B 30 MSL to direct to 02 AGL B 30 MSL to turn right to 02 AGL B 30 MSL to direct to

<table>
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<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tbody>
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<td>BGR 142/52</td>
<td>N44°56.00' W67°32.00'</td>
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<tr>
<td>B</td>
<td>BGR 112/40</td>
<td>N44°48.00' W67°56.00'</td>
</tr>
<tr>
<td>C</td>
<td>BGR 104/45</td>
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</tr>
<tr>
<td>O</td>
<td>MLT 048/32</td>
<td>N46°03.00' W68°09.50'</td>
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</table>
IR ROUTES

02 AGL B 40 MSL to
(Start Maneuver Area) direct to
06 AGL B 40 MSL to
(TA/TFR Termination Point)
02 AGL B 40 MSL to
End Maneuver Area)
02 AGL B 40 MSL to
direct to
02 AGL B 40 MSL to
30 MSL B 90 MSL
turn right and climb to
cross
at or above 50 MSL continue 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
90 MSL to
turn right to
90 MSL to
direct to
90 MSL to
descend direct to
cross
10 AGL B 90 MSL to
direct to
10 AGL B 30 MSL to
direct to
02 AGL B 30 MSL to
direct to
02 AGL B 30 MSL to
turn right to
02 AGL B 30 MSL to
climb direct to
02 AGL B 40 MSL to
turn left to
02 AGL B 40 MSL to
direct to
02 AGL B 40 MSL to
turn left to
02 AGL B 40 MSL to
descend direct to
02 AGL B 40 MSL to
turn right to
02 AGL B 30 MSL to
direct to
06 AGL B 30 MSL to
turn left and descend to
cross
20 MSL to
direct to
20 MSL to
direct to
06 AGL B 20 MSL to
turn right to
P MLI 042/33
Q PQI 288/20
R PQI 294/22
S PQI 315/36
T PQI 328/41
U PQI 342/41
V PQI 004/51
W PQI 011/53
X PQI 032/57
Y PQI 041/60
Z
AA
AB
AC
AD
AE
AF
AG
AH
AI
AJ
AK
AL
AM

06 AGL B 20 MSL to
direct to
06 AGL B 20 MSL to
turn right to
02 AGL B 20 MSL to
turn right to
02 AGL B 20 MSL to
direct to
02 AGL B 20 MSL to
turn right to
02 AGL B 160 MSL
climb direct to
cross
at or above 60 MSL
turn right and continue
climb to
60 MSL B 160 MSL to
continue climb direct
cross
160 MSL to
(Exit Canada)
(Exit Moncton ARTCC 294.5 or as assigned on level off and again passing AT)
direct to
160 MSL to
Re-entry:
02 AGL B 40 MSL to
(End Maneuver Area)
direct to
02 AGL B 40 MSL to
turn left to
02 AGL B 40 MSL to
descend direct to
02 AGL B 40 MSL to
turn right to
02 AGL B 30 MSL to
direct to
06 AGL B 30 MSL to
turn left and descend to
cross
20 MSL to
direct to
20 MSL to
direct to
06 AGL B 20 MSL to
turn right to
N46°05.50' W68°13.00'
N46°45.50' W68°35.00'
N46°47.50' W68°37.50'
N47°01.00' W68°53.00'
N47°11.00' W68°53.00'
N47°18.00' W68°43.00'
N47°35.00' W68°27.00'
N47°38.50' W68°20.50'
N47°42.00' W67°50.00'
N47°43.00' W67°35.00'
N47°47.00' W65°30.00'
N46°35.00' W68°27.00'
N47°38.50' W68°20.50'
N47°42.00' W67°50.00'
N47°43.00' W67°35.00'
N47°47.00' W65°30.00'
N46°43.00' W67°35.00'
N47°43.00' W67°12.00'
N47°39.00' W66°35.00'
N47°39.00' W66°10.00'
N47°26.00' W66°02.00'
N47°10.00' W66°02.00'
N47°50.00' W66°50.00'
N46°59.00' W66°48.00'
N46°59.00' W66°48.00'
N46°44.00' W66°46.00'
N46°46.00' W66°26.00'
N47°06.50' W66°09.00'
N47°10.00' W66°03.00'
N47°18.50' W65°27.50'
N47°28.00' W65°20.50'
N47°41.50' W65°27.50'
N47°47.00' W65°30.00'
N47°50.00' W66°50.00'
N47°50.00' W66°50.00'
N47°50.00' W66°50.00'
N47°50.00' W66°50.00'
N47°50.00' W66°50.00'
N47°50.00' W66°50.00'
N47°50.00' W66°50.00'
N47°50.00' W66°50.00'
N46°43.50' W64°49.00'
N46°43.50' W64°49.00'
N46°40.00' W64°55.00'
N46°40.00' W64°55.00'
N46°40.00' W64°55.00'
N46°40.00' W64°55.00'
N45°35.00' W67°25.50'
N45°35.00' W67°25.50'
N45°19.75' W67°42.25'
N45°45.50' W68°35.00'
N46°47.50' W68°37.50'
N47°01.00' W68°53.00'
N46°56.00' W69°12.00'
N46°31.00' W68°53.00'
N46°03.00' W68°39.00'
N45°57.00' W68°36.00'
N45°53.00' W68°23.00'
N45°56.00' W68°16.50'
1-178
IR ROUTES

10 AGL B 40 MSL to P1 MLT 044/32 (Start Maneuver Area)
Thence via published route.
Alternate Exit: AQ Cross
20 MSL to AQ1 (TA/TFR Termination Point)
(Contact Moncton ARTCC on 294.5 or 346.9 for climb out instructions. If no contact maintain 40 MSL until Pt AR then squawk 7600 and continue route climb out profile)
20 MSL B 160 MSL turn left and climb to cross at or above 60 MSL AR1 N46°43.50' W64°49.00' continue climb to 160 MSL (Contact Moncton ARTCC on 294.5 while climbing and request clearance. Maintain 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 MARSA operations established by coordinated scheduling.
(2) Route lost communications altitude is 160 MSL.
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.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dist Lat/Long
Cross at FL230 to or as assigned to direct to

90 MSL to turn right to
90 MSL to direct to
90 MSL to (TA/TFR Initiation Point)
90 MSL B 10 AGL descend direct to cross

10 AGL B 90 MSL to
10 AGL B 30 MSL to

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'
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), Whitman (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 BW), type of aircraft, route nomenclature (IR-805), and Zulu date of flight. Units may prescribe closer timing and will be followed. 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.
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 AA 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.

**FSS’s Within 100 NM Radius:**

**IR-850**

**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 351-7545, C805-989-7545.

**HOURS OF OPERATION:** Sunrise-Sunset by NOTAM

**ROUTE DESCRIPTION:**

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<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>A</td>
<td>BGR 134/52</td>
<td>N44°28.50' W67°47.00'</td>
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<tr>
<td>40 MSL B 60 Msl to</td>
<td>B</td>
<td>PNN 233/28</td>
<td>N44°56.30' W68°03.00'</td>
</tr>
<tr>
<td>40 MSL B 60 Msl to</td>
<td>C</td>
<td>PNN 261/21</td>
<td>N45°09.30' W68°08.10'</td>
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TERRAIN FOLLOWING OPERATIONS: Authorized from Point T to W. ROUTE WIDTH - 5 NM either side of centerline from A to O; 5 NM left and 4 NM right of centerline from O to Q; 3 NM either side of centerline from Q to U; 5 NM left and 3 NM right of centerline from U to V; 5 NM either side of centerline from V to W. Special Operating Procedures:

(1) For use in VMC only.
(2) Route continuation from M to A1 authorized.
(3) Route continuation from A2 to D authorized.
(4) Route continuation from Z to W authorized.
(5) Points A, B, D, M, W, Alternate Entry/Exit.
(6) Remain east of centerline from Points I through L to avoid overflight of Baxter State Park.
(7) Maintain altitude B in W, X, Y, Z pattern until in receipt of IFR clearance.

FSS's Within 100 NM Radius:
BGR, BTV

IR-851

ORIGINATING ACTIVITY: Commander, Naval Air Warfare Center Weapons Division, Code 52E000, NAWS, Pt. Mugu, CA 93042-5008 DSN 351-7527, C805-989-7527.


HOURS OF OPERATION: Daily 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°15.50' W68°19.20'
15 AGL B 40 MSL to E MLT 236/28 N45°19.50' W68°54.50'
15 AGL B 40 MSL to F MLT 272/34 N45°24.50' W68°54.50'
15 AGL B 40 MSL to G MLT 305/21 N45°40.50' W68°00.00'
15 AGL B 50 MSL to H MLT 002/23 N45°57.00' W68°41.00'
15 AGL B 50 MSL to I MLT 360/36 N46°09.00' W68°49.00'
15 AGL B 50 MSL to J MLT 357/40 N46°12.00' W68°53.00'
15 AGL B 50 MSL to K MLT 003/49 N46°22.00' W68°51.00'
15 AGL B 50 MSL to L MLT 012/44 N46°18.50' W68°39.50'
20 AGL B 50 MSL to M MLT 014/39 N46°13.50' W68°37.00'
20 AGL B 50 MSL to N MLT 022/23 N45°58.00' W68°30.00'
15 AGL B 50 MSL to O MLT 160/21 N45°19.00' W68°12.00'
15 AGL B 40 MSL to D1 MLT 179/23 N45°13.50' W68°19.20'
15 AGL B 40 MSL to E1 MLT 236/28 N45°12.50' W68°54.50'
15 AGL B 50 MSL to F1 MLT 272/34 N45°24.50' W68°16.50'
15 AGL B 60 MSL to P BGR 338/37 N45°18.00' W68°27.00'
20 AGL B 60 MSL to Q BGR 326/37 N45°12.50' W69°34.00'
20 AGL B 60 MSL to R AUG 026/46 N45°05.00' W69°38.50'
20 AGL B 60 MSL to S AUG 024/39 N44°58.00' W69°42.00'
20 AGL B 60 MSL to T AUG 016/37 N44°56.50' W69°49.50'
20 AGL B 60 MSL to U AUG 010/35 N44°53.50' W69°54.50'
20 AGL B 60 MSL to V AUG 005/33 N44°51.50' W69°58.20'
20 AGL B 60 MSL to W AUG 352/34 N44°50.00' W70°09.00'
20 AGL B 60 MSL to X AUG 352/41 N44°56.00' W70°13.00'
20 AGL B 60 MSL to Y AUG 345/49 N45°00.00' W70°25.00'
20 AGL B 60 MSL to Z AUG 340/53 N45°01.00' W70°33.80'
15 AGL B 60 MSL to A1 AUG 332/46 N44°51.00' W70°35.00'
15 AGL B 60 MSL to A2 AUG 342/43 N44°53.50' W70°23.00'
15 AGL B 60 MSL to Y1 AUG 345/49 N45°00.00' W70°25.00'
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 52E00E, NAWS, Pt. Mugu, CA 93042-5008 DSN 351-7527, C805-989-7527.

SCHEDULING ACTIVITY:

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 N45°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°56.00’ 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.


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 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 MARSA 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.


(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

<table>
<thead>
<tr>
<th>Cross</th>
<th>A</th>
<th>BET 071/150 N60°55.00' W156°44.00'</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 AGL B 66 MSL to</td>
<td>B</td>
<td>SQA 190/24 N60°45.00' W156°01.00'</td>
</tr>
<tr>
<td>01 AGL B 72 MSL to</td>
<td>C</td>
<td>ILI 275/37 N60°01.00' W156°00.00'</td>
</tr>
</tbody>
</table>

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 MARSA 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) Primary Exit: Point A.
(9) Primary Exit: Point C.
(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 W154°43.00’
01 AGL B 40 MSL to B MCG 211/20 W156°10.00’
01 AGL B 70 MSL to C UNK 104/86 W158°04’
01 AGL B 40 MSL to D UNK 080/45 W159°02.00’
01 AGL B 40 MSL to E UNK 062/67 W159°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 MARSA 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 W154°27.00’
01 AGL B 70 MSL to B MCG 163/83 W155°42.00’
01 AGL B 60 MSL to C SQA 234/34 W156°44.00’
01 AGL B 60 MSL to D BET 084/111 W158°07.00’
01 AGL B 60 MSL to E AKN 318/76 W157°38.00’
01 AGL B 60 MSL to F AKN 306/70 W158°00.00’
01 AGL B 60 MSL to G AKN 302/53 W157°48.00’

1-185
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 MARSA 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-905 and VR-915 cross at Point C.
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.
13. Use CAUTION for rapidly rising terrain east of Point A.
15. Weather briefing support agencies should request mission forecast support from Alaska Forecast Unit at DSN 317-552-2719 at least 8 hours prior to mission briefing.

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:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
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<tbody>
<tr>
<td>at or below 170 MSL</td>
<td>A</td>
<td>TKA 192/80</td>
<td>N61°15.00' W151°49.00'</td>
</tr>
<tr>
<td>01 AGL B 170 MSL to B</td>
<td>TKA 208/92</td>
<td>N61°23.00' W152°41.00'</td>
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<tr>
<td>01 AGL B 170 MSL to C</td>
<td>TKA 218/89</td>
<td>N61°37.00' W152°54.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 135 MSL to D</td>
<td>TKA 223/109</td>
<td>N61°36.00' W153°40.00'</td>
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<tr>
<td>01 AGL B 145 MSL to E</td>
<td>TKA 224/133</td>
<td>N61°29.00' W154°27.00'</td>
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<td>N61°41.00' W154°51.00'</td>
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<tr>
<td>01 AGL B 83 MSL to G</td>
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<td>N62°15.00' W155°36.00'</td>
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<tr>
<td>01 AGL B 73 MSL to H</td>
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<td>N62°31.00' W154°43.00'</td>
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<td>01 AGL B 50 MSL to I</td>
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<td>N62°58.00' W153°50.00'</td>
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<tr>
<td>01 AGL B 70 MSL to J</td>
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<td>N63°36.00' W154°07.00'</td>
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<tr>
<td>01 AGL B 86 MSL to K</td>
<td>MCG 013/66</td>
<td>N63°53.00' W154°18.00'</td>
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<tr>
<td>01 AGL B 75 MSL to L</td>
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<td>N64°10.00' W153°15.00'</td>
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<td>N64°16.00' W151°44.00'</td>
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<tr>
<td>01 AGL B 83 MSL to G</td>
<td>MCG 161/42</td>
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<tr>
<td>01 AGL B 70 MSL to AH</td>
<td>MCG 211/20</td>
<td>N62°44.00' W156°10.00'</td>
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<tr>
<td>01 AGL B 50 MSL to I1</td>
<td>MCG 069/49</td>
<td>N62°58.00' W153°50.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 170 MSL to C1</td>
<td>TKA 218/89</td>
<td>N61°37.00' W152°54.00'</td>
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<tr>
<td>01 AGL B 135 MSL to D1</td>
<td>TKA 223/109</td>
<td>N61°36.00' W153°40.00'</td>
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<tr>
<td>01 AGL B 70 MSL to J</td>
<td>MCG 026/56</td>
<td>N63°36.00' W154°07.00'</td>
<td></td>
</tr>
<tr>
<td>01 AGL B 86 MSL to K1</td>
<td>MCG 013/66</td>
<td>N63°53.00' W154°18.00'</td>
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</tbody>
</table>

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 MARSA 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.


(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: MYP1 (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, ILJ, 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.


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
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<tr>
<td>at or below 106 MSL</td>
<td>A</td>
<td>BIG 076/39</td>
<td>N63°54.00'</td>
</tr>
<tr>
<td>01 AGL B 106 MSL to B</td>
<td>B</td>
<td>BIG 050/52</td>
<td>N64°15.00'</td>
</tr>
<tr>
<td>01 AGL B 106 MSL to C</td>
<td>C</td>
<td>BIG 335/28</td>
<td>N64°28.00'</td>
</tr>
</tbody>
</table>

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 MARSA 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 IR-915.

(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.

(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 MARSA 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 40 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.
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 MARSA 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 G. Alternate Exit: Point E.
7. Use CAUTION for rapidly rising terrain east of Point G.
8. 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.
9. Use CAUTION for Koliganek Airport Class E Airspace, 4 NM outside the route, segment B to C.
10. Use CAUTION for rapidly rising terrain east of Point G.

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'

FSS’s Within 100 NM Radius:
ENQ, 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 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 MARSA 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

TERAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE DESCRIPTION:

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<td>at or below 75 MSL</td>
<td>B</td>
<td>TAL 149/56</td>
<td>N64°16.00'</td>
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<tr>
<td>Alternate Entry Track: B</td>
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<tr>
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<td>B</td>
<td>TAL 186/67</td>
<td>N64°10.00'</td>
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<tr>
<td>01 AGL B 86 MSL to</td>
<td>D</td>
<td>MCG 026/56</td>
<td>N63°36.00'</td>
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<tr>
<td>01 AGL B 70 MSL to</td>
<td>E</td>
<td>MCG 069/49</td>
<td>N62°58.00'</td>
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<tr>
<td>01 AGL B 50 MSL to</td>
<td>F</td>
<td>MCG 117/36</td>
<td>N62°31.00'</td>
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<tr>
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<td>01 AGL B 83 MSL to</td>
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<td>TKA 231/139</td>
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<td>01 AGL B 90 MSL to</td>
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<td>TKA 224/133</td>
<td>N61°29.00'</td>
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<td>J</td>
<td>TKA 223/109</td>
<td>N61°36.00'</td>
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<td>01 AGL B 135 MSL to</td>
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<td>TKA 218/89</td>
<td>N61°37.00'</td>
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<td>01 AGL B 70 MSL to</td>
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<td>MCG 211/20</td>
<td>N62°44.00'</td>
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<td>MCG 069/49</td>
<td>N62°58.00'</td>
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<tr>
<td>01 AGL B 75 MSL to</td>
<td>B</td>
<td>TAL 186/67</td>
<td>N64°10.00'</td>
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**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:**

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td></td>
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<tr>
<td>at or below 83 AGL</td>
<td>A</td>
<td>BIG 274/26</td>
<td>N64°12.00', W146°36.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>B</td>
<td>BIG 255/39</td>
<td>N64°05.00', W147°10.00'</td>
</tr>
<tr>
<td>01 AGL B 90 MSL to</td>
<td>C</td>
<td>BIG 255/86</td>
<td>N64°10.00', W148°58.00'</td>
</tr>
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<td>01 AGL B 77 MSL to</td>
<td>D</td>
<td>BIG 253/97</td>
<td>N64°08.00', W149°23.00'</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to</td>
<td>E</td>
<td>TAL 149/56</td>
<td>N64°16.00', W151°44.00'</td>
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<td>01 AGL B 83 MSL to</td>
<td>AA</td>
<td>EIL 200/22</td>
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<td>BIG 255/39</td>
<td>N64°05.00', W147°10.00'</td>
</tr>
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**Route Description:**

- **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 246.7 prior to entering R-2211. They may not be open. Eielson Range Control provides area deconfliction.
5. Route designated for MARSA 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.
14. Use CAUTION for hunting cabins and uncharted airstrips in vicinity of Gold King Creek (N64°11.4714, W147°55.572) 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.

**FSS’s With In 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:

At the 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 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 MARSA 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, IR-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.
(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 to 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 997-552-2719/3043 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.


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

At the 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 D BIG 033/70 N64°38.00’
W143°27.00’
01 AGL B 106 MSL to AA BIG 050/52 N64°13.00’
W143°50.00’

(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.
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 MARSA 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.
(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 fo 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.


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

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<th>TKA 064/59</th>
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<td>TKA 041/88</td>
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<td>W147°09.00'</td>
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<td>BIG 162/62</td>
<td>N62°59.00'</td>
<td>W145°54.00'</td>
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<td>D</td>
<td>BIG 158/48</td>
<td>N63°12.00'</td>
<td>W145°45.00'</td>
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<tr>
<td>05 AGL B 129 MSL to</td>
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<td>BIG 175/25</td>
<td>N63°37.00'</td>
<td>W146°00.00'</td>
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<tr>
<td>01 AGL B 167 MSL to</td>
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<td>BIG 219/33</td>
<td>N63°45.00'</td>
<td>W146°48.00'</td>
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<td>BIG 219/33</td>
<td>N63°45.00'</td>
<td>W146°48.00'</td>
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<td>G</td>
<td>BIG 222/27</td>
<td>N63°49.00'</td>
<td>W146°38.00'</td>
</tr>
</tbody>
</table>

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 MARSA operations, established by coordinated scheduling within 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. IR-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 Exit: Point A. Alternate Exit: Points D and E.
11. Primary Exit: Point G. Alternate Exit: Points D, E, AF and BG.
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.
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.
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.


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>BIG 255/39</td>
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<td>01 AGL B 167 MSL to B</td>
<td>BIG 219/33</td>
<td>N63°45.00’ W146°48.00’</td>
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<td>BIG 175/25</td>
<td>N63°37.00’ W146°00.00’</td>
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<td>BIG 158/48</td>
<td>N63°12.00’ W145°45.00’</td>
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http://www.usahas.com/bam/
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' W146°00.00' Thence via published route.

**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 MARSA 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.
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.
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 CT5/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:**

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>BIG 158/48</td>
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**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 MARSA 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-939 and VR-943 cross at Point A.

(6) IR-919, IR-921, VR-937 and VR-938 cross at Point B.

(7) IR-917, IR-918, VR-935 and VR-936 cross at Point D.


(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 to 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 (325.2/135.3).

(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 2 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.


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

<table>
<thead>
<tr>
<th>Cross</th>
<th>A GL 055/70</th>
<th>N64°13.00’</th>
<th>W143°05.00’</th>
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<tr>
<td>01 AGL B 110 MSL to B</td>
<td>BIG 079/69</td>
<td>N63°45.00’</td>
<td>W143°10.00’</td>
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<td>N63°29.00’</td>
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<td>BIG 158/48</td>
<td>N63°12.00’</td>
<td>W145°45.00’</td>
</tr>
</tbody>
</table>

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 MARSA 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.
(9) Use CAUTION for aviation related gold mine activity along entire route. Most traffic is helicopters and small fixed wing aircraft. 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.
HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:
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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>W144°16.00'</td>
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<td>W144°51.00'</td>
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<td>C</td>
<td>BIG 104/15</td>
<td>N63°51.00'</td>
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<td>W145°15.00'</td>
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<td>N63°45.00'</td>
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<td></td>
<td></td>
<td></td>
<td>W144°51.00'</td>
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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.
(4) Route designated for MARSA 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 5 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.


(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 fo 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 Isaiah 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.


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or below 80 MSL</td>
<td>A</td>
<td>BIG 202/13</td>
<td>N63°51.00’</td>
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<tr>
<td>01 AGL B 80 MSL to</td>
<td>B</td>
<td>BIG 104/15</td>
<td>N63°51.00’</td>
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<td>01 AGL B 80 MSL to</td>
<td>C</td>
<td>BIG 100/28</td>
<td>N63°45.00’</td>
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<td>01 AGL B 80 MSL to</td>
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<td>BIG 076/39</td>
<td>N63°45.00’</td>
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<tr>
<td>at or below 150 MSL</td>
<td>BB</td>
<td>BIG 175/25</td>
<td>N63°37.00’</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
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<td>BIG 100/28</td>
<td>N63°45.00’</td>
</tr>
</tbody>
</table>

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
IR ROUTES

(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.


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 MARSA 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.

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 MARSA 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).
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.
(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 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-929

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste. 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.
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*110.00' 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 MARSA 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.
(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/.
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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.


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' 1-201

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 MARSA 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.
(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.


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' 1-201
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°09.00'
01 AGL B 110 MSL to R FYU 095/73 N65°57.00' W142°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'
01 AGL B 110 MSL to D1 FYU 099/101 N65°36.00' W141°56.00'
01 AGL B 90 MSL to Thence via published route E1 FYU 095/73 N65°57.00' W142°42.00'
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'

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 MARSA 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, MA and P.
(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.
(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.

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.
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.


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

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 AF 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 MARSA 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.
(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.
(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
Chapter 2

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 3710.5 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 (VR routes 1500 feet and above should be charted on Enroute Low IFR 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.

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/Originators 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 includes 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


HOURS OF OPERATION: 0700-2200 LCL, other times by NOTAM

ROUTE DESCRIPTION:

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: Intersttse 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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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 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: IR-715 left to right 51NM prior to D;
(h) CROSSING: IR-608 right to left 43NM prior to D;
(i) CROSSING: IR-043 right to left 26NM prior to D;
(j) CROSSING: IR-080 left to right at D;
(k) 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 parallel entire leg;

(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 left to right 19NM prior to K;
(h) CROSSING: IR-760/IR-762/VR-1754/VR-1756 left to right 11NM prior to K;
(i) CROSSING: IR-71 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: Penssacola 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 864-6411;
(m) 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


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’
A-B:
When conducting terrain following operations between F Route users deconflict Farmville MOA with 1 OSS/OSO, Avoid towns and populated areas by 1NM or overfly Users must make their schedules entry times plus or minus 5 Alternate Exit: B, C, D, E, F, G, H, I, J, K, L, M, N.

Special Operating Procedures:
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 A to B; 4 NM either side of centerline from B to C; 1 NM
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.

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.

Terrain Following Operations: Authorized entire route.

Special Operating Procedures:
(1) Users must visit HTTPS://WWW.MILSEYMOURJOHNSON.AF.MIL/AIRSPAC E/ROUTES for additional avoidance areas (Falconview.drw/mch files available) or contact 4OSS/OSOS (DSN 722-2129/2124).

(4) Users must make their schedules entry times plus or minus 5 min or reschedule.

(a) CAUTION: Landfill (potential bird hazard) at N36-07.3 W77-04.0;
(b) CROSSING: VR-1713/VR-1753 right to left 23NM prior to B;
(c) CROSSING: IR-062 left to right 9NM prior to B;
(d) CROSSING: IR-719/IR-720/VR-073 right to left at B.

B-C:
(a) TOWER: 325'AGL (530'MSL) at N36-16.7 W77-54.2;
(b) CROSSING: VR-1719/IR-720/VR-073 right to left at B;
(c) CROSSING: VR-086 parallel entire leg;
(d) CROSSING: VR-043 opposite direction entire leg;
(e) CROSSING: IR-718 right to left 49NM prior to C;
(f) CROSSING: VR-083/VR-096 left to right 19NM prior to C;
(g) CROSSING: VR-1759 right to left 14NM prior to C.

C-D:
(a) CROSSING: VR-1722 left to right 19NM prior to D;
(b) CROSSING: IR-062 left to right 18NM prior to D;
(c) CROSSING: IR-719 left to right 14NM prior to D;
(d) CROSSING: IR-715 left to right 3NM prior to D;
(e) CROSSING: VR-083/VR-1061 right to left at D.

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.

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.

F-G:
(a) CROSSING: IR-081/IR-719 right to left 22NM prior to G;
(b) CROSSING: IR-712/VR-1721 rftg to left 11NM prior to G.

G-H:
(a) CROSSING: VR-093 left to right 5NM to H.

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.

I-J:
(a) CROSSING: IR-068 opposite direction entire leg;
(b) CROSSING: IR-080/IR-081 parallel entire leg;
(c) CROSSING: VR-093 right to left 17NM prior to J.

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: VR-1759 right to left 14NM prior to K.

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;

2-5
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-086: Seymour Johnson AFB;
(p) IR-093: Shaw AFB, DSN 965-1118;
(q) VR-096: Seymour Johnson AFB;
(r) VR-1041: 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

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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>N39°12.00' W79°16.00'</td>
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<tr>
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<td>EKN 084/26</td>
<td>N39°00.50' W79°33.00'</td>
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<td>EKN 157/25</td>
<td>N38°33.00' W79°50.00'</td>
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<td>BKW 073/46</td>
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<tr>
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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 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, 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.
(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: IR-719 right to left 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 left to right 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 yo 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


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’
0.5 AGL B 04 MSL to B SAV 153/43 N31°32.50’ W80°44.80’
0.5 AGL B 04 MSL to C SAV 169/38 N31°32.70’ W81°10.00’
0.5 AGL B 04 MSL to D SAV 172/36 N31°32.90’ W81°17.50’
0.5 AGL B 04 MSL to E SAV 194/36 N31°32.90’ W81°17.50’
VR ROUTES

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.SEYMOUR.JOHNSON.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.
(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


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′
| B | SPA 262/85 | N34°46.00′ W83°37.00′
| C | GGO 081/54 | N35°05.00′ W84°04.00′
| D | GGO 054/45 | N35°23.00′ W84°24.00′
| E | GGO 325/51 | N35°40.00′ W85°44.00′
| F | GGO 260/30 | N35°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.
(a) 200' AGL (3490') N34-50.0 W083-31.0;
(b) 500' AGL (1640') N34-51.5 W083-03.5;
(c) 728' AGL (2368') N34-43.2 W083-43.0;
(d) 225' AGL (925') N35-00.0 W083-31.0;
(e) 225' AGL (1175') N35-25.5 W084-38.0;
(f) 225' AGL (925') N35-20.0 W084-46.5;
(g) 350' AGL (2300') N35-12.3 W085-48.5;
(h) 250' AGL (1350') N35-00.0 W085-49.5;
(i) 200' AGL (2500') N35-19.3 W084-27.2.
(6) Avoid 2 noise sensitive areas:
(a) N34-42.2 W083-38.1, avoid by 1500' AGL/1 NM.
(b) N34-45.9 W083-37.8, avoid by 1000' AGL/1 NM.
(c) AVOID Clayton, GA at N34-52.8 W083-24.0, by 1500' AGL/2 NM.
(7) Congressional noise sensitive area, N35-05 W084-04, avoid by 1500' AGL/5 NM.
(8) Congressional noise sensitive area, Cocker Creek, TN, N35-16 W084-17, avoid by 1000' AGL/1 NM.
(9) CAUTION; 3000' runway at Telico Plains, TN, N35-22.8 W084-18.0, intensive student training, avoid by 1500' AGL/3 NM.
(10) CAUTION: Cahilhowee Glider Port N35-13.8 W084-35.0, numerous glider activities, SFC-5000' within 5 NM.
(11) Avoid: Congressional noise sensitive area, Athens, TN, N35-26.5 W084-36.0, avoid by 1500' AGL/1 NM.
(12) Power Plant N35-36.1 W084-47.5, avoid by 1000' AGL/1 NM.
(13) Avoid: Chlorine Gas Plant N35-17.5 W084-45.0, avoid by 1000' AGL/1 NM.
(14) Avoid; Noise sensitive area, Dayton, TN, N35-28.0 W085-01.0, avoid by 1500' AGL/1 NM.
(15) CAUTION: Powerlines overhanging valley N35-33.0 W085-03.0.
(16) CAUTION: VR-1052 same direction E to F (de-conflict DSN 922-2735).
(17) CAUTION: VR-1055 crosses right to left between C to D (de-conflict DSN 922-2735).
(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 W084-16.3;
(b) 2500' Grass strip (Rwy 07-25) N35-45.0 W084-54.5;
(c) 3000' Hard surface (Rwy 12-30) N35-15.2 W085-23.0.
(21) CAUTION: Extensive seaplane activity, surface to 1400' at Rock Island, TN, N35-48.0 W085-37.0.
(22) Avoid; Steam Plant N34-53 W085-45, avoid by 1000' AGL/1 NM.
(23) Presidential noise sensitive area: Monteagle, TN, N35-16.0 W085-50.0, 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 W083-57.0, 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 W084-47.5), (N35-24.5 W085-00.8), (N35-32.8 W085-40.3), (N35-15.5 W085-52.3), (N35-54.9 W085-36.6).
(27) Avoid: Noise sensitive area N35-35.5 W085-12.0 (SE of Pikeville, TN) avoid by 1000' AGL/1 NM.
(28) Avoid: Congressional (Extremely) noise sensitive area: Ivy Log Mountain N34-55.0 W083-58.7. 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 W084-44.0.

FSS's Within 100 NM Radius:
ANB, AND, BNA, McN

VR-060


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: N31-25.0W 88-08.0W (400’ MSL).
(c) Antenna: N31-18.0 W88-03.0 (100’ AGL).
(d) Antenna: N31-18.0 W88-08.0 (135’ AGL).
(e) Antenna: N31-11.0 W88-06.0 (150’ AGL).

(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 CRTC, DSN 363-8207.


FSS’s Within 100 NM Radius:
ANGE, DRI, GWO

VR-071


HOURS OF OPERATION: 0700-2100 local Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:
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<tr>
<td>01 AGL B 95 MSL to A</td>
<td>ISO 084/81</td>
<td>N35°36.50’</td>
<td>W75°55.50’</td>
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<td>01 AGL B 95 MSL to B</td>
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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:
(1) Users must visit 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 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, or structure.
(6) A-B;
(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 4NM southwest of A;
(b) CROSSING: VR-54 opposite direction entire leg.
(7) B-C;
(a) CROSSING: VR-54 opposite direction until 8NM prior to C;
(b) CROSSING: VR-73 right to left at C.
(8) C-D;
(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 right to left at C.
(9) CROSSING ROUTE CONTACT INFORMATION:
(a) VR-54: Seymour Johnson AFB;
(b) VR-73: Seymour Johnson AFB.

FSS’s Within 100 NM Radius:
RDU

VR-073


HOURS OF OPERATION: Continuous

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<td>N36°34.00’</td>
<td>W78°10.00’</td>
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<td>LVL 197/16</td>
<td>N36°33.00’</td>
<td>W77°57.50’</td>
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</table>
VR ROUTES

2-11

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/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.


(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;
(f) CROSSING: IR-719 left to right 19NM prior to E;
(g) CROSSING: IR-062 right to left 7NM prior to E.

(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 N35-49.3 W76-30.8;
(c) CAUTION: Aircraft flying approached into Edenton Airport north of corridor at N36-01.5 W76-34.0;
(d) CROSSING: VR-043 parallel entire leg;
(e) 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-071 left to right at I.

(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) AVOID: Pea Island National Wildlife Refuge (N35-41.0 W75-29.2) by 2000’;
(c) TOWER: 350’AGL(353’MSL) at N35-41.0 W75-29.2.

(16) K-L:
(a) Do not enter R-5313 when active (By NOTAM) unedd cleared in;
(b) 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.

(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

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
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/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 W77-59.6;
(c) CROSSING: VR-1046 left to right 41NM prior to E;
(d) CROSSING: IR-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/VR-096 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;

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°04.00'
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'
(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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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<th>Pt</th>
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<td>ILM 011/29</td>
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<td>D</td>
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<td>N35°06.00’ W77°38.00’</td>
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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://WWW.MIL.SEYMOURJOHNSON.AF.MIL/AIRSPACE/E/ROUTES for additional avoidance areas (FALCONVIEW.DRW/MCH files available) or contact 4 OSS/OSOS (DSN 722-2129/2124).
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 1500’ AGL. Over sparsely populated areas, aircraft may not be operated closer than 500’ to any person, vessel, 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: IR-718 parallel entire leg;  
   - (e) CROSSING: IR-062 parallel entire leg.
8. B-C:  
   - (a) AVOID: Figure 8 island (N34-16.1 W77-44.8) by 1NM;  
   - (b) CROSSING: IR-718 parallel entire leg.
9. C-D:  
   - (a) CROSSING: IR-718 parallel entire leg;  
   - (b) CROSSING: IR-062 parallel entire leg;  
   - (c) CROSSING: IR-012 parallel entire leg.
10. D-E:  
    - (a) CROSSING: VR-1046 right to left at D;  
    - (b) CROSSING: IR-718 parallel entire leg.
11. E-F:  
    - (a) AVOID: Horse breeding ranch at N35-16.0 W77-9.1 by 1NM or 1000’;  
    - (b) TOWER: 200’ AGL (203’ MSL) at N35-25.7 W78-44.8;  
    - (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 N35-25.7 W76-48.6 by 1.5NM;  
    - (c) TOWER: 300’ AGL (303’ MSL) at N35-35.5 W76-29.0;  
    - (d) CROSSING: IR-062 left to right 5NM 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: 300’ AGL (303’ MSL) at N35-35.5 W76-29.0;  
    - (c) CROSSING: IR-012 parallel entire leg.
14. H-I:  
    - (a) AVOID: Town of Gumneck at N35-43.4 W76-9.2 by 1500’ or 1.5NM;  
    - (b) TOWER: 300’ AGL (303’ MSL) at N35-43.4 W76-9.2;  
    - (c) CROSSING: IR-012 parallel entire leg.
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: Setmour 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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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://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.
(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-1713 left to right at E1;
(d) CROSSING: VR-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

VR ROUTES


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.USA.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.
(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) CROSSING: VR-096 parallel entire leg.
(b) CROSSING: VR-083 parallel entire leg.
(c) CROSSING: IR-718 right to left 29NM prior to F.
(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


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/5 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 01/29) 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


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'
03 AGL B 80 MSL to E CAE 168/47 N33*06.00' W80*50.00'
03 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) N33-40.6 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 offtown 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


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°34.00'
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:
(1) Alternate Entry Points: B and D.
(2) Alternate Exit Points: C, D and E.
(3) CAUTION: Numerous power lines along route above 100’ AGL.
(5) Avoid by 1000’ AGL/1 NM Steam Plant, N34-53.0 W85-45.0.
(6) CAUTION: Extensive seaplane activity, SFC to 1400’ at Rock Island, TN N35-48.0 W85-37.0.
(7) Avoid by 1000’ AGL and 2 NM 3 uncharted private airfields:
   (a) N33-07.2 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.
(8) CAUTION: IR-077 same direction A to B (de-conflict with DSN 922-2735).
(9) Avoid by 1000’ AGL and 2 NM 3 uncharted private airfields:
   (a) N33-07.2 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.
(10) CAUTION: VR-1055 crosses left to right C to D (de-conflict with DSN 922-2735).
(11) CAUTION: VR-1056 same direction A to B (de-conflict with DSN 922-2735).
(12) CAUTION: Power lines overhanging valley N35-33.0 W85-03.0.
(13) Avoid noise sensitive area by 1500’ AGL/1 NM, Dayton, TN N35-28.0 W85-01.0.
(14) Avoid chlorine gas plant by 1000’ AGL/1 NM, N35-17.5 W84-45.0.
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(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') N35-19.3 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 W84-40.3), (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


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 W81-47.0.
(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 N37-14.0 W82-15.4.
(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.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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).
6. Avoid: Antenna complex N32-41.0 W81-08.1 700' AGL, Avoid by 2 NM.
7. Avoid four noise sensitive areas:
   - Adrian, GA, N32-32.0 W82-35.5, avoid by 1500' AGL/1 NM;
   - Dairy Farm N32-49.9 W81-52.5, avoid by 1500' AGL/1 NM;
   - 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:
   - Gorton N32-49.5 W81-21.5;
   - 2500' hard sfc rwy (Rwy 18-36) N31-40.8 W82-56.7;
   - 2000' (Rwy 09-27) N32-44.5 W81-14.0;
   - 2000' (Rwy 06-24) N31-30.0 W83-09.5;
   - 2000' (Rwy 04-22) N31-52.5 W83-04.0;
   - 2500' (Rwy 10-28) N32-30.0 W81-58.0.
10. CAUTION: 4 towers:
    - 405' AGL 1.5 NM north of Point B;
    - 400' AGL (645') N32-24.5 W82-03.0;
    - 420' AGL (685') N32-31.5 W82-20.0;
    - 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.

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

VR-095


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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.
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).
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:
   - Gorton N32-49.5 W81-21.5;
   - 2500' hard sfc rwy (Rwy 18-36) N31-40.8 W82-56.7;
   - 2000' (Rwy 09-27) N32-44.5 W81-14.0;
   - 2000' (Rwy 06-24) N31-30.0 W83-09.5;
   - 2000' (Rwy 04-22) N31-52.5 W83-04.0;
   - 2500' (Rwy 10-28) N32-30.0 W81-58.0.
10. CAUTION: 4 towers:
    - 405' AGL 1.5 NM north of Point B;
    - 400' AGL (645') N32-24.5 W82-03.0;
    - 420' AGL (685') N32-31.5 W82-20.0;
    - 500' AGL (800') N32-32.6 W82-18.2.
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.


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).


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’ grass strip N32-04.1 W83-52.8;
    (e) 3000’ strip N32-59.1 W84-05.4.

15. CAUTION: Four 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: 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;
    (e) Three 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.

FSS’s Within 100 NM Radius:
ANB, AND, MCN, QZR


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/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-062 right to left 53NM prior to B;
   (j) CROSSING: VR-086 right to left 53NM prior to B;
   (k) CROSSING: VR-042 right to left 33NM prior to B;
   (l) CROSSING: VR-1759 right to left 33NM at B;
   (m) CROSSING: VR-083 left to right 44NM prior to B;
   (n) CROSSING: VR-1722 left to right 40NM prior to B;
   (o) CROSSING: VR-042 left to right 33NM prior to B;
   (p) CROSSING: VR-1759 right to left 33NM at B;
   (q) 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) VR-041: Seymour Johnson AFB;
(g) VR-042: Seymour Johnson AFB;
(h) VR-073: Seymour Johnson AFB;
(i) VR-086: Seymour Johnson AFB;
(j) VR-1061: 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


HOURS OF OPERATION: 0600-2400 local daily

ROUTE DESCRIPTION:

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>SUG 217/31</td>
<td>N34°58.80' W82°37.80'</td>
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<td>SUG 229/43</td>
<td>N34°55.20' W82°54.50'</td>
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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, 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:
(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 betweenPts 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-O2 authorized only when scheduled to operate in
Bulldog D MOA and R-3004.
(19) AVOID: Stark 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 Pt S 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 W80-16.6.
(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’) N34-33.0 W83-46.5;
(b) 250’ AGL (1900’) N34-34.8 W83-46.5;
(c) 300’ AGL (900’) N33-29.4 W82-42.2;
(d) 400’ AGL (1000’) 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 Rwys 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


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

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
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) Clauch, 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 W105-29.7);
(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 (N35-05.8 104-04.7);
(q) San Jose (SOHAM), NM (N35-24.9 W105-29.7);
(r) Randall Ranch (N35-02.8 W104-04.7).
(12) Aircraft not scheduled into R-5104/R-5105 must exit at or prior to P.
(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 unchumed/uncharted 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:**

<table>
<thead>
<tr>
<th>Terrain Following Operations:</th>
<th>Authorized entire route in VMC only.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROUTE WIDTH -</strong></td>
<td>5 NM either side of centerline from A to B; 5 NM right and 8 NM left of centerline from B to D.</td>
</tr>
<tr>
<td><strong>Special Operating Procedures:</strong></td>
<td>(1) Route to be used only by aircraft scheduled into R-6302.</td>
</tr>
<tr>
<td></td>
<td>(2) Minimum speed: 300 Knots.</td>
</tr>
<tr>
<td></td>
<td>(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.</td>
</tr>
<tr>
<td></td>
<td>(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.</td>
</tr>
<tr>
<td></td>
<td>(5) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.</td>
</tr>
<tr>
<td></td>
<td>(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.</td>
</tr>
<tr>
<td></td>
<td>(7) Avoid the following areas by 1500' AGL or 3 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 N33-47.0 W97-28.5; (d) Ostrich Ranch at N34-31.8 W97-31.8; (e) Ostrich Ranch at N34-32.5 W97-48.7.</td>
</tr>
<tr>
<td></td>
<td>(8) Obstructions: None.</td>
</tr>
<tr>
<td><strong>FSS’s Within 100 NM Radius:</strong></td>
<td>CXO, FTW, SJT</td>
</tr>
</tbody>
</table>

**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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>UKW 150/7</td>
<td>N33°26.00' W97°46.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>B</td>
<td>ADM 205/28</td>
<td>N33°49.00' W97°27.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>C</td>
<td>ADM 322/11</td>
<td>N34°22.00' W97°17.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>D</td>
<td>IRW 196/43</td>
<td>N34°42.00' W97°57.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>E</td>
<td>IRW 235/29</td>
<td>N35°08.00' W98°08.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>F</td>
<td>IRW 281/35</td>
<td>N35°32.00' W98°17.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>G</td>
<td>IRW 278/40</td>
<td>N35°32.00' W98°24.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>H</td>
<td>HBR 026/31</td>
<td>N35°17.00' W98°42.00'</td>
</tr>
<tr>
<td>03 AGL B 35 MSL to</td>
<td>I</td>
<td>HBR 086/10</td>
<td>N34°51.00' W98°52.00'</td>
</tr>
<tr>
<td>24 MSL B 100 MSL to</td>
<td>J</td>
<td>HBR 135/17</td>
<td>N34°38.00' W98°52.00'</td>
</tr>
</tbody>
</table>

**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) Minimum altitude 1000’ AGL at B.

(4) Avoid the charted grass strip at N34-40 W97-50 by 1000’ AGL and 3 NM.

(5) 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 N33-47.0 W97-28.5;

(d) Ostrich Ranch at N34-31.8 W97-31.8;

(e) Ostrich Ranch at N34-32.5 W97-48.7.

(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) 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.

(8) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

(9) 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: 0830-2030 local Mon-Fri

ROUTE DESCRIPTION:

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<tr>
<th>Altitude Data</th>
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<th>Fac/Rad/Dist</th>
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<tbody>
<tr>
<td>03 AGL B 40 MSL to A</td>
<td>LTS 247/22</td>
<td>N34°34.20’</td>
<td>W99°42.00’</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to B</td>
<td>CDS 022/17</td>
<td>N34°36.70’</td>
<td>W100°06.50’</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to C</td>
<td>CDS 334/22</td>
<td>N34°43.70’</td>
<td>W100°25.00’</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to D</td>
<td>SYO 245/50</td>
<td>N35°07.50’</td>
<td>W100°36.60’</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to E</td>
<td>SYO 251/30</td>
<td>N35°16.10’</td>
<td>W100°14.80’</td>
</tr>
<tr>
<td>03 AGL B 50 MSL to F</td>
<td>SYO 180/17</td>
<td>N35°03.70’</td>
<td>W99°41.70’</td>
</tr>
<tr>
<td>03 AGL B 40 MSL to G</td>
<td>LTS 247/22</td>
<td>N34°34.20’</td>
<td>W99°42.00’</td>
</tr>
</tbody>
</table>

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 hours in advance or contact Altus Command Post for same.

2. 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.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
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<th>Lat/Long</th>
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<tr>
<td>As assigned to A</td>
<td>DHT 276/58</td>
<td>N36°23.00’</td>
<td>W103°41.00’</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to B</td>
<td>DHT 283/59</td>
<td>N36°30.00’</td>
<td>W103°39.00’</td>
</tr>
<tr>
<td>01 AGL B 120 MSL to C</td>
<td>DHT 292/56</td>
<td>N36°37.00’</td>
<td>W103°30.00’</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to D</td>
<td>DHT 318/44</td>
<td>N36°44.00’</td>
<td>W103°00.00’</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to E</td>
<td>TBE 116/37</td>
<td>N36°53.00’</td>
<td>W103°00.00’</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to F</td>
<td>TBE 156/19</td>
<td>N36°57.00’</td>
<td>W103°31.00’</td>
</tr>
<tr>
<td>01 AGL B 150 MSL to G</td>
<td>TBE 190/25</td>
<td>N36°52.00’</td>
<td>W103°48.00’</td>
</tr>
<tr>
<td>01 AGL B 150 MSL to H</td>
<td>TBE 196/28</td>
<td>N36°51.00’</td>
<td>W103°52.00’</td>
</tr>
<tr>
<td>01 AGL B 150 MSL to I</td>
<td>TBE 189/50</td>
<td>N36°29.00’</td>
<td>W103°58.00’</td>
</tr>
<tr>
<td>01 AGL B 130 MSL to J</td>
<td>TCC 330/62</td>
<td>N36°10.00’</td>
<td>W103°59.00’</td>
</tr>
<tr>
<td>01 AGL B 80 MSL to K</td>
<td>TCC 322/36</td>
<td>N35°46.00’</td>
<td>W103°48.00’</td>
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<tr>
<td>01 AGL B 80 MSL to L</td>
<td>TCC 330/33</td>
<td>N35°42.00’</td>
<td>W103°48.00’</td>
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<tr>
<td>01 AGL B 80 MSL to M</td>
<td>TCC 264/24</td>
<td>N35°13.50’</td>
<td>W104°05.00’</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to N</td>
<td>TCC 249/22</td>
<td>N35°07.50’</td>
<td>W104°02.00’</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to O</td>
<td>TCC 190/24</td>
<td>N34°48.50’</td>
<td>W103°47.00’</td>
</tr>
<tr>
<td>01 AGL B 70 MSL to M</td>
<td>TCC 184/33</td>
<td>N34°39.00’</td>
<td>W103°47.00’</td>
</tr>
</tbody>
</table>

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 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 requirements 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) House, NM (N34-38.7 W103-54.2).

(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 unchummed/uncharted obstructions.

(12) CAUTION: The following obstructions are not found in chum and are not printed on current cartographic materials:
(a) N34-02.7 W104-04.7.

FSS’s Within 100 NM Radius:
ABQ


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

As assigned to

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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</thead>
<tbody>
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<td>A</td>
<td>TCC 121/47</td>
<td>N34°38.50'</td>
<td>W102°54.00'</td>
</tr>
<tr>
<td>B</td>
<td>TCC 033/44</td>
<td>N35°42.00'</td>
<td>W102°58.00'</td>
</tr>
<tr>
<td>C</td>
<td>TCC 344/24</td>
<td>N35°35.00'</td>
<td>W103°38.00'</td>
</tr>
<tr>
<td>D</td>
<td>TCC 309/27</td>
<td>N35°32.00'</td>
<td>W103°56.50'</td>
</tr>
<tr>
<td>E</td>
<td>TCC 239/23</td>
<td>N35°03.50'</td>
<td>W104°02.50'</td>
</tr>
<tr>
<td>F</td>
<td>TCC 186/23</td>
<td>N34°49.50'</td>
<td>W103°44.50'</td>
</tr>
<tr>
<td>M1</td>
<td>TCC 184/33</td>
<td>N34°39.00'</td>
<td>W103°47.00'</td>
</tr>
</tbody>
</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 15 NM either side of centerline from A to I; 10 NM left and 20 NM right of centerline from I to J; 10 NM left and 20 NM right of centerline from J 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 Exit: B, C, D and E.

(5) Alternate Exit: B, C, D and E.

(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/uncharted obstructions.

FSS’s Within 100 NM Radius:
   ABQ

VR-119

ORIGINATING ACTIVITY: 71 OSS/OSOP, 301 Gritz Street, Vance AFB, OK 73705-5202 DSN 448-7850, C580-213-7850.


HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

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-552 and IR-504. Conflicts will be avoided by MARSA 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:
   (a) All airports by 1500’/3 NM when practical.
   (b) Livestock feedlot 3 NM southwest of Manchester (N36-59.0 W98-04.0);
   (c) Farm 4 NM west of Penalosa (N37-43.0 W98-24.0);
   (d) Livestock feedlot (N37-32.5 W98-45.0);
   (e) Livestock feedlot 4 NM east of Saxman (N38-17.0 W98-02.0);
   (f) Gas refining plant 3 NM east of Cunningham by 1500’/5 NM (N37-38.5 W98-22.5);
   (g) 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


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’ W103°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’ W104°57.50’
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:
(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 constraints dictate otherwise.
(4) Alternate Entry Points: B through P.
(5) Alternate Exit Points: C through P.
(6) Segment A through D designated maneuver area.
(7) 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.
(8) Avoid Gran Quivira National Monument (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.
(9) Avoid Ranch (N34-54.1 W103-49.5) by 1000’ AGL and 1 NM.
(10) Avoid by 1500’ AGL and 1 NM:
   (a) Ranch (N34-54.9 W105-13.9);
   (b) Claunch, NM (N34-08.6 W105-59.6).
(11) Avoid by 1000’ AGL 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 Juan (SOHAM), NM (N34-24.9 W105-29.7);
   (p) Montoya, NM (N35-05.8 W105-29.7);
   (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) 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 wkd, 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:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
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<td>ANY 252/10</td>
<td>N37°07.50'</td>
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<tr>
<td>01 AGL B 33 MSL to</td>
<td>C</td>
<td>ANY 271/30</td>
<td>N37°13.50'</td>
</tr>
<tr>
<td>01 AGL B 36 MSL to</td>
<td>D</td>
<td>HUT 236/53</td>
<td>N37°37.00'</td>
</tr>
<tr>
<td>01 AGL B 36 MSL to</td>
<td>E</td>
<td>HUT 243/50</td>
<td>N37°44.00'</td>
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<tr>
<td>01 AGL B 36 MSL to</td>
<td>F</td>
<td>HUT 252/48</td>
<td>N37°52.00'</td>
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<tr>
<td>01 AGL B 36 MSL to</td>
<td>G</td>
<td>HUT 269/46</td>
<td>N38°06.00'</td>
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<tr>
<td>01 AGL B 35 MSL to</td>
<td>H</td>
<td>SLN 223/56</td>
<td>N38°19.00'</td>
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<tr>
<td>01 AGL B 30 MSL to</td>
<td>I</td>
<td>SLN 220/30</td>
<td>N38°35.00'</td>
</tr>
<tr>
<td>01 AGL B 10 AGL to (Unless cleared to operate within Bison MOA, then altitudes assigned by Kansas City ARTCC)</td>
<td>J</td>
<td>SLN 201/32</td>
<td>N38°27.30'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to within area.</td>
<td>K</td>
<td>SLN 227/18</td>
<td>N38°45.00'</td>
</tr>
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</table>

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 MARSA 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/OSSA, 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:

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<td>N29°05.00'</td>
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<tr>
<td>05 AGL B 25 MSL to</td>
<td>B</td>
<td>COT 051/20</td>
<td>N28°38.00'</td>
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<td>05 AGL B 25 MSL to</td>
<td>C</td>
<td>COT 302/17</td>
<td>N28°39.00'</td>
</tr>
<tr>
<td>05 AGL B 25 MSL to</td>
<td>D</td>
<td>RSG 129/42</td>
<td>N29°29.00'</td>
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<tr>
<td>05 AGL B 40 MSL to</td>
<td>E</td>
<td>RSG 095/52</td>
<td>N29°47.00'</td>
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<tr>
<td>05 AGL B 45 MSL to</td>
<td>F</td>
<td>RSG 074/31</td>
<td>N30°04.00'</td>
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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.
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:

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<th>Fac/Rad/Dist</th>
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<td>N30°26.00' W100°04.00'</td>
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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:

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<td>LLO 124/18</td>
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<tr>
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<tr>
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<td>N30°26.00' W100°04.00'</td>
</tr>
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</table>
Aircraft unable to meet their assigned entry time within the Units requesting VR-143 shall furnish 301 OG/SUA with Route Conflicts:

Minimum separation between scheduled entry times is 10 Certain portions of the route between points C and F are Minimum speed: 300 Knots.

Special Operating Procedures:

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.

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 Quanah 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).


(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: COMTRAWING TWO, NAS Kingsville, TX 78363 DSN 876-6518/6283, C361-516-6518/6108. 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’

PMSV CONTACTS: Primary Home Station. Alternates Minot (MIB 342.5), Whiteman (SZL 344.6).

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 past C at/above 1000’ AGL.

(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.
(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 charted 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 Cheny 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 30 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 ROUTES

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  G  SPS 214/32  N33°36.00' W99°02.00'
Cross G at 50 MSL

TERAIN 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-1114, 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-159

ORIGINATING ACTIVITY: 80th Flying Training Wing, 1911 J. Ave. STE 6, Sheppard AFB, TX 76311-2056 DSN 736-4970, 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
VR ROUTES

ROUTE DESCRIPTION:

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.
(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) 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, SJT
VR ROUTES

VR-168

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:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

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

Special Operating Procedures:

1. 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; MARSA procedures apply.

2. Alternate Entry Point: D.

3. Maintain 1500' AGL within 3 NM of Three Rivers Muni Airport located at (N28°30.00' W98°08.00') 2 NM NW of Three Rivers, TX.

4. 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'.

5. 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.

6. 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++, usage between 2400-1500Z++ is available

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized 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:

1. 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 N33-33-54 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;

(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 N33-14-10 W107-15-10;
   (b) Socorro Airport N34-01-15 W106-54-25;
   (c) Ranch N32-41.0 W107-13.8;
   (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.


(13) Alternate Exit Points: D, E, F, 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:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>FAC/RAD/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>GPT 232/22</td>
<td>N30°11.00' W89°25.50'</td>
</tr>
<tr>
<td>15 AGL B 50 MSL to</td>
<td>B</td>
<td>GPT 120/16</td>
<td>N30°16.00' W88°49.00'</td>
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<tr>
<td>15 AGL B 50 MSL to</td>
<td>C</td>
<td>GPT 107/23</td>
<td>N30°17.00' W88°40.00'</td>
</tr>
<tr>
<td>15 AGL B 50 MSL to</td>
<td>D</td>
<td>GPT 064/29</td>
<td>N30°36.00' W88°34.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>E</td>
<td>GPT 027/33</td>
<td>N30°53.00' W88°46.00'</td>
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<tr>
<td>01 AGL B 100 MSL to</td>
<td>F</td>
<td>GCV 057/19</td>
<td>N31°15.00' W88°09.40'</td>
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<tr>
<td>01 AGL B 100 MSL to</td>
<td>G</td>
<td>GCV 273/16</td>
<td>N31°08.00' W88°48.00'</td>
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<tr>
<td>01 AGL B 100 MSL to</td>
<td>FA</td>
<td>GCV 038/37</td>
<td>N31°33.00' W88°00.00'</td>
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</tbody>
</table>

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 N30-32.0 W88-41.0 (D-E).

(7) Minimum altitude from C to D is 1500’ AGL.

(8) 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 N30-32.0 W88-41.0 (D-E).

Minimum altitude from C to D is 1500’ AGL.

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 N30-32.0 W88-41.0 (D-E).

Minimum altitude from C to D is 1500’ AGL.

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.

Altitude Data Pt Fa c/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 CV 273/16 N31°08.00’ W88°48.00’
- 01 AGL B 100 MSL to FA GCV 038/37 N31°33.00’ W88°00.00’
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:
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 unchartered airfield southeast of D (N34-58.5 W99-29.0).


(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 nor 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:
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) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.

(8) 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.

(9) 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.

(10) Obstructions:
(a) 405' AGL tower at N30-55-10 W95-20-00
(b) 429' AGL tower at N30-44-30 W94-54-00
(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

(9) Obstructions:
(a) 295' AGL tower at N31-15-30 W100-47-00
(b) 301 OG/SUA with planned entry/exit points, times, and planned speeds.
(c) 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.
(d) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
(e) 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.
(f) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
(g) 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.
(h) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
(i) 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.
(j) Aircraft unable to meet their assigned entry time within the window two minutes early to five minutes late must not enter the route.
(k) 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.

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:

<table>
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<tr>
<th>Altitude Data Pt</th>
<th>Fac/Rad/Dist Lat/Long</th>
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<td>LOA 075/23 N31°10.00’ W95°32.00’</td>
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<td>09 AGL B 40 MSL to B</td>
<td>DAS 357/22 N30°33.00’ W94°38.00’</td>
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<td>07 AGL B 40 MSL to C</td>
<td>LFK 063/25 N31°19.00’ W94°16.00’</td>
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<td>07 AGL B 40 MSL to D</td>
<td>GGG 125/40 N31°58.00’ W94°10.00’</td>
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<td>07 AGL B 40 MSL to E</td>
<td>GGG 198/30 N31°58.00’ W95°00.00’</td>
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<tr>
<td>07 AGL B 40 MSL to F</td>
<td>LOA 054/44 N31°28.00’ W95°12.50’</td>
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<td>06 AGL B 40 MSL to G</td>
<td>LOA 041/25 N31°24.00’ W95°36.00’</td>
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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:

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<tr>
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<td>As assigned to A</td>
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<tr>
<td>07 AGL B 15 AGL to B</td>
<td>GGG 322/28 N32°49.00’ W95°02.00’</td>
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</table>
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


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:**

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<td>LTS 198/38</td>
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<tr>
<td>03 AGL B 40 MSL to C</td>
<td>CDS 120/19</td>
<td>N34°10.00' W100°00.00'</td>
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<td>03 AGL B 40 MSL to D</td>
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<td>N34°23.00' W100°01.70'</td>
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<tr>
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<tr>
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<td>SYO 180/17</td>
<td>N35°03.70' W99°41.70'</td>
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**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 widening to 7 NM right and 5 NM left 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 H; 5 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 Mclean 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.
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 with VR-190 Points A through D. For day low levels on legs F, G, H, and I, will remain east of the Mclean-Hedley line (near Point G) and south of I-40 (south of the town of Shamrock, near Point H) 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 W099-52.10.
12. PMSV: Altus AFB 239.8.
13. 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 exit 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.

**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 or 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 by 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.


(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 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 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 78843-5584, C830-298-5584. Scheduling hrs, 0730-1630 Mon-Fri (excluding hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

Altitude Data Pt Fac/Rad/Dir 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.

2. N30-16-00 W103-04-00

2-42
(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 732-298-5854. Scheduling hrs, 0730-1630 Mon-Fri (excluding hol).

**HOURS OF OPERATION:** Sunrise-Sunset daily

**ROUTE DESCRIPTION:**

**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-65, 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.

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/OSOR, 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.

7. The entire route is designated mountainous terrain.

**FSS’s Within 100 NM Radius:**
SJT

**VR-198**


**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 0600-0300 local, Mon-Fri, OT by NOTAM

**ROUTE DESCRIPTION:**

**Altitude Data**

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<td>N34°32.00'</td>
<td>W99°33.50'</td>
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<td>03 AGL B 40 MSL to C CDS 022/17</td>
<td>N34°36.70'</td>
<td>W100°06.50'</td>
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<td>03 AGL B 40 MSL to D CDS 334/22</td>
<td>N34°43.70'</td>
<td>W100°25.00'</td>
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<td>N35°22.90'</td>
<td>W100°42.00'</td>
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<td>N35°37.30'</td>
<td>W100°21.70'</td>
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<td>03 AGL B 50 MSL to G SYO 297/29</td>
<td>N35°38.00'</td>
<td>W100°06.60'</td>
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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.
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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0600-0300 local, Mon-Fri, OT by NOTAM

ROUTE DESCRIPTION:

<table>
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<th>Pt</th>
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<th>Lat/Long</th>
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<td>W99°24.10'</td>
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<td>SYO 180/17</td>
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<td>W99°41.70'</td>
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<tr>
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<td>SYO 294/7</td>
<td>N35°24.50'</td>
<td>W99°45.00'</td>
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<td>SYO 320/18</td>
<td>N35°36.50'</td>
<td>W99°49.50'</td>
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<tr>
<td>03 AGL B 50 MSL to E</td>
<td>SYO 297/29</td>
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<td>W100°06.60'</td>
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<td>LTS 186/14</td>
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<td>W99°20.30'</td>
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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°31.99.41 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 3 NM.
(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.


(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 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 coordinates (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:**

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<td>MVA 272/40</td>
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<td>D</td>
<td>HZN 176/14</td>
<td>N39°17.00’ W119°04.00’</td>
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<td>HZN 260/9</td>
<td>N39°32.00’ W119°11.00’</td>
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<tr>
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<td>LLC 110/19</td>
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**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 Murieta (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 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) 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.


(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.


**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:


As assigned to

Pt

Fac/Rad/Dist

Lat/Long

As assigned to

Pt

Fac/Rad/Dist

Lat/Long

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 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.
(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.

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 119/19 N39°56.00’ W118°14.50’

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 DESCRIPTION:

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:

ROUTE WIDTH - 10 NM either side of centerline.

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 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.
(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.
(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:

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 MARSA, 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, C702-652-4710 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 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.
(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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous
VR ROUTES

ROUTE DESCRIPTION:

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<th>Pt</th>
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<td></td>
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<td>W114°48.00'</td>
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<td>01 AGL B 15 AGL to B</td>
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<td>N34°50.00'</td>
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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 Ash Meadows National Wildlife Refuge by 2 NM or 2000' AGL.
4. Avoid ranch, N36-34.21 W116-35.0, by 1500' AGL and 1 NM.
6. Multiple power lines, 75' to 100' AGL throughout the MTR.
8. Multiple towers 200' on hill in draw N34-54.1 W115-03.6.
9. Radio tower 30' to 50' on small ranch and landing strip N34-42.0 W114-47.0.
10. Multiple towers 150' 35-01.3N 115-08.0W.
12. Multiple towers 200' N35-29.15 W115-33.58.
13. Tower N36-07.9 W116-03.4.

(16) Antenna on peak 30' to 50' N36-37.7 W116-19.6.
(18) Tower 210' N39-09.55 W115-54.09.
(20) Radio Tower 140' N35-14.8 W115-25.9.
(21) Tower 354' N34-56.09 W115-10.48.
(22) Tower 300' N35-14.8 W115-35.62.
(23) Microwave tower 150' N35-22.81 W115-08.71.
(24) Aircrews who suspect they have inadvertently dropped ordnance/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


HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wkend/hol when sked with Goldwater Rng/Sells MOA Msn.

ROUTE DESCRIPTION:

<table>
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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tr>
<td>As assigned to</td>
<td>A</td>
<td>PXR 211/35</td>
<td>N33°00.00'</td>
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<tr>
<td></td>
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<td>05 AGL B 60 MSL to B</td>
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<tr>
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<td>05 AGL B 80 MSL to D</td>
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<td>N32°00.00'</td>
<td>W112°08.00'</td>
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<tr>
<td>05 AGL B 90 MSL to E</td>
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<td>N32°20.00'</td>
<td>W112°23.00'</td>
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<td>TFD 211/36</td>
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<td>W112°23.50'</td>
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<tr>
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<td>TFD 238/35</td>
<td>N32°41.00'</td>
<td>W112°33.00'</td>
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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


HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wknd/hol when sked with Goldwater Rng/Sells MOA Msn

ROUTE DESCRIPTION:

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


HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wknd/hol when sked with Goldwater Rng/Sells MOA Msn
VR ROUTES

ROUTE DESCRIPTION:

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.


(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 A 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 airline 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.


(j) Point J crosses VR-241.

(k) Use caution for extensive glider and general aviation activity in vicinity of Lake Pleasant.

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 E; 8 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


Hours of Operation: 0600-2400 Mon-Fri local, Wknd/hol when sked with Goldwater Rng/Sells MOA Msn

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tr>
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<td>PXR 319/32</td>
<td>N33°54.00' W112°17.00'</td>
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<tr>
<td>40 MSL B 75 MSL to</td>
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<td>PXR 346/38</td>
<td>N34°04.00' W112°00.00'</td>
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<td>03 AGL B 95 MSL to</td>
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<td>PXR 022/46</td>
<td>N34°04.00' W111°27.00'</td>
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<td>03 AGL B 95 MSL to</td>
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<td>PXR 046/66</td>
<td>N34°00.30' W110°51.00'</td>
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<td>PXR 081/88</td>
<td>N33°21.00' W110°13.00'</td>
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<td>TUS 345/41</td>
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<td>N32°27.00' W112°23.50'</td>
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<td>05 AGL B 90 MSL to</td>
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<td>TFD 238/35</td>
<td>N32°41.00' W112°33.00'</td>
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<td>TFD 255/37</td>
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<td>TFD 272/35</td>
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<tr>
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<td>TFD 289/35</td>
<td>N32°50.00' W112°50.00'</td>
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VR ROUTES

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°27.00' 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'

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.
(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.

(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) 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.

FSS’s Within 100 NM Radius:
PRC

VR-242


HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wknd/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  BXX 332/63  N34°29.00'  W113°07.50'
03 AGL B 65 MSL to  D  BXX 319/47  N34°09.50'  W113°15.00'
03 AGL B 65 MSL to  E  BXX 278/54  N33°47.50'  W113°49.50'

2-51
VR ROUTES

03 AGL B 60 MSL to F GBN 312/24 N33°17.00' W112°56.00' (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.
(j) 26 NM past E: Crosses IR-218.
(k) 43 NM past E: Crosses IR-218.
(m) Point G to Point H: Coincident with VR-268.
(n) Uncharted airstrip located on McCloud Mt.(N34-25.71 W112°57.78).

03 AGL B 65 MSL to G GBN 063/14 N33°00.50' W112°24.50' (12) Route crosses numerous other MTR’s as depicted on Sectional Charts. See and avoid concept is paramount.

03 AGL B 55 MSL to H GBN 155/15 N32°43.00' W112°37.00' (a) CAUTION:
(b) 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;
(c) 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;
(d) Cooper Ranch Airport located 4 NM right of centerline 16 NM past A;
(e) Quarter Circle J/S Airport located 4 NM right of centerline 36 NM past A;
(f) Baghdad Airport located 7 NM right of C;
(g) Utting Siding Airport located 4 NM right of E;
(h) Gila Compressor Airport located 2 NM left of centerline 6 NM past F;
(i) From Point A to B avoid overflight of Peeples Valley by 2 NM horizontally or 1000' vertically;
(j) From Point A to B avoid overflight of Kirkland Junction by 1 NM horizontally or 1000' vertically;
(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.

03 AGL B 90 MSL to AA PXR 320/48 N34°08.00' W112°25.50' (11) Route 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:

(12) Route crosses numerous other MTR’s as depicted on Sectional Charts. See and avoid concept is paramount.

FSS’s Within 100 NM Radius:
PRC, RNO

VR-243


HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wknd/hol when sked with Goldwater Rng/Sell MOA Msn

ROUTE DESCRIPTION:

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 BKX 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.
VR ROUTES

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.
(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.
   (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 Peeples 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


HOURS OF OPERATION: 0600-2400 Mon-Fri local, Wknd/hol when sked with Goldwater Rng/Sell MOA Msn

ROUTE DESCRIPTION:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
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<td>N33°57.00' W112°28.80'</td>
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<td>IWA 359/33</td>
<td>N33°51.00' W111°30.80'</td>
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<td>TFD 199/54</td>
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</table>
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 K; 2 NM right and 3 NM left of centerline
from K 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) Primary Exit: M. Alternate Exit: J, K, L.
(5) Scheduling this route does not automatically grant
time clearance to enter R-2301E, R-2304, or R-2305. Obtain
at least 1500’ vertically and/or 3 NM horizontally.
(6) Points H-J: Coincident with VR-239.
(7) Route crosses numerous other MTR’s as depicted on
Sectional Charts. See and avoid concept is paramount.
(8) Reporting to Gila Bend Range Operations 272.1 when planning
use of the R-2301E, R-2304, or R-2305. Obtain
(9) Extremely Noise Sensitive Area from 15 NM past I to L.
Maintain a minimum altitude of 1500’ AGL. Extensive Helicopter
Operations between Picacho Field (N32-40.0 W111-29.09) and Silverbell.
(10) Avoid overflight of all charted/uncontrolled airports by at
least 1500’ vertically and/or 3 NM horizontally.
(11) 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;
(b) Points C-D: Right boundary is within 4 NM of Class B
(c) Points D-E: Right boundary is within 5 NM of Class B
(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.
(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 maintains 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

SCHEDULING ACTIVITY: 56 RMO/ASMS, 7224 N. 139th
Drive, Luke AFB, AZ 85309-1420 DSN 896-7654, C623-856-7654
(14302-23302 M-F).

HOURS OF OPERATION: 0600-2400 Mon-Fri local,
Wknd/hol when sked with Goldwater Rng/Sell MOA Msn

ROUTE DESCRIPTION:

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<td>B</td>
<td>DRK 191/22</td>
<td>03 AGL B 90 MSL to</td>
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<td>C</td>
<td>DRK 251/62</td>
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<td>D</td>
<td>BXK 276/52</td>
<td>03 AGL B 70 MSL to</td>
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<tr>
<td>E</td>
<td>GBN 294/57</td>
<td>03 AGL B 70 MSL to</td>
</tr>
<tr>
<td>F</td>
<td>GBN 263/37</td>
<td>03 AGL B 60 MSL to</td>
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<td>G</td>
<td>GBN 229/36</td>
<td>01 AGL B 50 MSL to</td>
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</tbody>
</table>

Lat/Long: W112°17.00’

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

FSS's Within 100 NM Radius:

VR-259


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  A  TUS 034/29  N32°26.00’  W110°30.00’
or as assigned  

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:

(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 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.
(4) Noise Sensitive Areas 11 NM NE B (city of Cochise). Cross at 1500’AGL.
(5) 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.
(6) 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.
(7) Noise Sensitive Area. 5NM N of D. Avoid N31-44-40 W109-50-00 by 1NM or 1200’AGL.
(8) 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).
(9) 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.
(11) From E to 15NM past E maintain 6500’MSL.
(12) At 15NM past E make advisory call on 264.8 for Fuzzy MOA.
(13) From Point F to Range Entry Monitor 397.4. Call each alpha point (example: call sign, VR-259 Golf). Extensive A-10 LATN traffic conducted throughout area weekdays.
(14) This route is characterized by mountainous terrain’s. Critical climb points exist between B-D, C-D.
(15) Route crosses general aviation corridor between IP, (H) and target (I). Watch for traffic entering and departing AJO airport.
(16) 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.
(17) Border patrol flies light aircraft at very low altitude in vicinity of F-G.
(18) This route crosses numerous other VR routes. The See and Avoid concept is paramount at all times.
(19) 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).
(20) Avoid all forest fires/smoke areas by at least 5NM/500’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.
(21) Minimum altitude on any MTR traversing the Tohono O’Odham Indian Reservation (West of Point F) is 500’AGL.
(22) 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.
(23) 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.
(24) 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


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  A  TUS 034/31  N32°27.00’  W110°29.00’
or as assigned  
03 AGL B 15 AGL to  B  CIE 354/33  N32°35.00’  W109°41.00’
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).
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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>CIE 354/33</td>
<td>N32°35.00' W109°41.00'</td>
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<td>01 AGL B 15 AGL to</td>
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2-57
VR ROUTES

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 4 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 4 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:

(1) All Points are Alternate Entry/Exit Points.

(2) All route reservations and briefings including night and weekend flights must be made during weekdays from 1200Z to 2200Z.

(3) B-C crosses Morenci MOA. Issue advisory call on 319.3 and remain on frequency until clear.

(4) B-C crosses Tombstone East MOA. Provide advisory call on 286.4 and remain on frequency until clear.

(5) E-G crosses Tombstone West MOA. Provide advisory call on 351.4.

(6) M-N crosses Fuzzy MOA. Provide advisory call on 264.8 and remain on frequency until clear.

(7) N-S crosses 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.

(8) 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.

(9) Route terminates near R-2301E/R-2304. Restricted area entry through prior scheduling only.

(10) Route segment A-B passes through the Jackal MOA, which is not routinely scheduled in conjunction with route use. Therefore, MARSA is in effect through scheduling. Flights will give an advisory call on 379.5 and remain on this frequency until clear.

(11) 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. MARSA will be with aircraft operating in the above MOA’s.

(12) Tie-in FSS: TUS, PRC.

(13) Avoid airports between the following points by 1500’ or 3 NM:

(a) A-B Lightning Ranch (N32-25.7 W110-04.5);
(b) B-C Lazy B Ranch (N32-33.0 W109-04.3);
(c) E-F Playas Ranch (N31-56.0 W108-32.0).

(14) Avoid the following Noise Sensitive Areas by 1500’ or 3 NM:

(a) B-C Town of Duncan;
(b) J-K Parker Canyon Lake;
(c) K-L Town of Patagonia and Patagonia Lake.

(15) 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).

(16) Segment H-I transits VFR TACAN penetration arc to Libby AAF. Contact Libby tower on 284.75 at Point H for advisories.

(17) Flight Hazard: R-2312, centered 4 NM north of Point I is a tethered balloon, from surface to 14,999’MSL.

(18) 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.

(19) Avoid the following by 2 NM and 2000’ AGL:

(a) Ranch between Points A and B (N32-28.0 W109-55.0)
(b) Buenos Aires Ranch near Point N (N31-34.0 W111-30.0)
(c) White Signal, NM Subdivision NE Point D (N32-31.6 W108-21.2)

FSS’s Within 100 NM Radius:

PRC

VR-267


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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 10 AGL or as assigned</td>
<td>A</td>
<td>TUS 034/29</td>
<td>N32°26.00’ W10°30.00’</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>B</td>
<td>TUS 018/55</td>
<td>N32°53.00’ W10°22.00’</td>
</tr>
<tr>
<td>03 AGL B 60 MSL to</td>
<td>C</td>
<td>TUS 354/62</td>
<td>N33°07.00’ W10°47.00’</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>D</td>
<td>TFD 036/16</td>
<td>N33°04.00’ W11°40.00’</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>E</td>
<td>GBN 064/13</td>
<td>N33°00.00’ W12°25.00’</td>
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<tr>
<td>03 AGL B 15 AGL to</td>
<td>F</td>
<td>GBN 278/18</td>
<td>N33°04.00’ W11°00.00’</td>
</tr>
</tbody>
</table>

2-58
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-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, CS20-228-4680.

**SCHEDULING ACTIVITY:** 355 OSS/OSOA, 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 | B | TUS 018/55 | N32°53.00' W110°22.00'
- 03 AGL B 60 MSL to C | C | TUS 354/62 | N33°07.00' W111°40.00'
- 10 AGL B 15 AGL to D | D | TFD 036/16 | N33°04.00' W111°25.00'
- 10 AGL B 15 AGL to E | E | GBN 064/13 | N33°00.00' W112°25.00'
- 03 AGL B 15 AGL to F | 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 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-268 crosses or shares portions of VR-223, VR-231, 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. 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).
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, Arizona (left side of course 3NM short of Point C). Fly around Christmas on the right side of 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:

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:

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 MARSA 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.

(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.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tr>
<td>As assigned to</td>
<td>A</td>
<td>GFS 142/14</td>
<td>N34°55.00' W115°04.00'</td>
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<tr>
<td>SFC B 40 MSL to B</td>
<td>GFS 206/22</td>
<td>N34°51.00' W115°28.00'</td>
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<tr>
<td>SFC B 45 MSL to C</td>
<td>GFS 190/40</td>
<td>N34°31.00' W115°31.00'</td>
<td></td>
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<tr>
<td>SFC B 35 MSL to D</td>
<td>TNP 062/10</td>
<td>N34°09.00' W115°34.00'</td>
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</tr>
<tr>
<td>SFC B 40 MSL to E</td>
<td>TNP 110/24</td>
<td>N33°53.00' W115°23.00'</td>
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<tr>
<td>SFC B 40 MSL to F</td>
<td>TNP 143/28</td>
<td>N33°41.00' W115°34.00'</td>
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</tr>
<tr>
<td>SFC B 35 MSL to G</td>
<td>TRM 099/23</td>
<td>N33°29.00' W115°44.00'</td>
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<td>SFC B 25 MSL to H</td>
<td>TRM 096/8</td>
<td>N33°35.00' W116°00.00'</td>
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<tr>
<td>SFC B 30 MSL to I</td>
<td>IPL 296/36</td>
<td>N33°08.00' W116°03.00'</td>
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<tr>
<td>SFC B 10 MSL to J</td>
<td>IPL 296/31</td>
<td>N33°05.00' W115°59.00'</td>
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</table>

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 MARS through (See and Avoid) from entry to exit point.

CAUTION: Route coincides with or crosses other VR and IR routes.
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.

Scheduling this route does not automatically grant permission to enter restricted areas. Contact the appropriate Scheduling Activity for entry clearance.

Contact VR-289 Scheduling Agency as far in advance as possible, but no later than one day in advance by 0200Z++.

CAUTION: Frequent VFR fixed wing and helicopter traffic along entire route.

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.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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<th>Pt</th>
<th>Fac/Rad/Dist</th>
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<td>A</td>
<td>GFS 142/14</td>
<td>N34°55.00' W115°04.00'</td>
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<tr>
<td>SFC B 40 MSL to B</td>
<td>PKE 279/22</td>
<td>N34°15.00' W115°05.00'</td>
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<tr>
<td>SFC B 35 MSL to C</td>
<td>PKE 338/1</td>
<td>N34°07.00' W114°41.00'</td>
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<tr>
<td>SFC B 32 MSL to D</td>
<td>PKE 090/24</td>
<td>N34°00.00' W114°13.00'</td>
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<td>SFC B 25 MSL to E</td>
<td>BLH 154/11</td>
<td>N33°25.00' W114°43.00'</td>
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<td>SFC B 25 MSL to F</td>
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<td>SFC B 40 MSL to G</td>
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<td>TRM 099/23</td>
<td>N33°29.00' W115°44.00'</td>
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<td>SFC B 20 MSL to I</td>
<td>TRM 113/28</td>
<td>N33°21.00' W115°42.00'</td>
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<td>SFC B 10 MSL to J</td>
<td>IPL 322/24</td>
<td>N33°07.00' W115°42.00'</td>
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<td>SFC B 10 MSL to K</td>
<td>IPL 309/18</td>
<td>N32°59.00' W115°43.00'</td>
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</table>
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 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 MARSA 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+. (See and Avoid) applies.
(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.


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 MARSA 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°03.00'
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 G; 5 NM right and 10 NM left of centerline from G to H; 5 NM either side 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. MARSA (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.
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, 208-422-5310.

SCHEDULING ACTIVITY: 124 WG/OSS (ANG), 3996 W. Aeronca St., Boise, ID 83705-8004 DSN 422-5348, 208-422-5348.

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 F; 5 NM either side of centerline from F to G; 5 NM right and 10 NM left of centerline from G to H; 5 NM either side 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.
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) MARSA (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 N118-09-30). Overfly at 1500' AGL or avoid by 3 NM.
(8) Uncharted tower 160' AGL (N43-49-15 W118-09-30). Overfly at or above 1000' AGL or avoid by 3 NM.
(9) Chase Noise Sensitive Area (N43-11 W120-01). Overfly at or above 1500' AGL or avoid by 3 NM.
(10) Balance Noise Sensitive Area (N43-14-30 W118-02-30). Overfly at or above 1000' AGL or avoid by 1 NM.
(11) Bird habitat (N43-55-00 W119-00-00). Avoid by 1500' AGL or 3 NM.
(12) Bird habitat (N43-44-00 W119-49-00). Avoid by 1500' AGL or 3 NM.
(13) 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


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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 60 MSL to</td>
<td>A</td>
<td>HQM VORTAC</td>
<td>N46°56.82' W124°08.96'</td>
</tr>
<tr>
<td>or as assigned.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 MSL to</td>
<td>B</td>
<td>HQM 240/16</td>
<td>N46°53.80' W124°32.00'</td>
</tr>
<tr>
<td>or as assigned.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 AGL B 46 MSL to</td>
<td>C</td>
<td>HQM 240/36</td>
<td>N46°50.00' W125°00.00'</td>
</tr>
<tr>
<td>02 AGL B 46 MSL to</td>
<td>X</td>
<td>HQM 216/28</td>
<td>N46°41.00' W124°42.00'</td>
</tr>
<tr>
<td>02 AGL B 46 MSL to</td>
<td>D</td>
<td>HQM 138/28</td>
<td>N46°31.20' W123°53.00'</td>
</tr>
<tr>
<td>05 AGL B 46 MSL to</td>
<td>E</td>
<td>OLM 195/29</td>
<td>N46°34.00' W123°18.00'</td>
</tr>
<tr>
<td>05 AGL B 46 MSL to</td>
<td>F</td>
<td>OLM 136/31</td>
<td>N46°30.20' W122°35.40'</td>
</tr>
<tr>
<td>03 AGL B 46 MSL to</td>
<td>G</td>
<td>OLM 099/20</td>
<td>N46°49.00' W122°29.00'</td>
</tr>
<tr>
<td>03 AGL B 15 AGL to</td>
<td>H</td>
<td>TCM 156/8</td>
<td>N47°01.00' W122°28.00'</td>
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<tr>
<td>03 AGL B 15 AGL to</td>
<td>I</td>
<td>TCM VORTAC</td>
<td>N47°08.86' W122°28.50'</td>
</tr>
</tbody>
</table>

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 126.5 or 391.9.
   (d) 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. MARSA 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 AFDL.
   (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 382-2600 or 382-2601.

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-413

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
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'

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
05 AGL B 85 MSL to A PUB 278/23 N38°12.00' W104°59.00'
05 AGL B 85 MSL to B PUB 245/27 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) 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-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

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. Contact 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: Points B, C, D, E, F, and G.
5. Alternate Exit: Points 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:**

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<th>Altitude Data</th>
<th>Pt</th>
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<th>Lat/Long</th>
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<td>Cross at 100 MSL to or as assigned. Then descend to</td>
<td>A</td>
<td>LNK 352/47</td>
<td>N41°42.00’ W96°43.00’</td>
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<tr>
<td>01 AGL B 50 MSL to B</td>
<td>ONL 100/83</td>
<td>N41°59.00’ W96°56.00’</td>
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<tr>
<td>01 AGL B 50 MSL to C</td>
<td>FSD 181/90</td>
<td>N42°10.00’ W97°08.00’</td>
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<tr>
<td>01 AGL B 50 MSL to D</td>
<td>FSD 179/46</td>
<td>N42°53.00’ W96°56.00’</td>
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<tr>
<td>01 AGL B 50 MSL to E</td>
<td>FSD 230/27</td>
<td>N43°25.00’ W97°19.00’</td>
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<td>01 AGL B 50 MSL to F</td>
<td>FSD 269/24</td>
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<td>01 AGL B 50 MSL to G</td>
<td>HON 167/20</td>
<td>N44°06.00’ W98°17.00’</td>
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<td>01 AGL B 50 MSL to H</td>
<td>HON 218/40</td>
<td>N43°59.02’ W99°00.00’</td>
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<td>PIR 119/42</td>
<td>N43°56.00’ W99°25.00’</td>
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<tr>
<td>SFC B 90 MSL to J</td>
<td>ONL 330/73</td>
<td>N43°37.00’ W99°16.00’</td>
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<tr>
<td>SFC B 90 MSL to K</td>
<td>ONL 344/41</td>
<td>N43°09.00’ W98°47.00’</td>
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<tr>
<td>55 MSL to B 90 MSL to Climb to L</td>
<td>ONL 360/36</td>
<td>N43°04.00’ W98°33.00’</td>
<td></td>
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</table>

**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.
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 W98-47, 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:**

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
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<tr>
<td>Cross at 100 MSL to or as assigned. Then descend to M</td>
<td>PWE 168/12</td>
<td>N40°00.00’ W96°10.50’</td>
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<tr>
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<td>PWE 168/20</td>
<td>N39°52.00’ W96°09.00’</td>
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<tr>
<td>01 AGL B 40 MSL to C</td>
<td>EMP 326/20</td>
<td>N38°35.50’ W96°19.50’</td>
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<tr>
<td>15 AGL B 40 MSL to D</td>
<td>EMP 248/23</td>
<td>N38°12.00’ W96°36.50’</td>
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<tr>
<td>15 AGL B 40 MSL to E</td>
<td>EMP 250/44</td>
<td>N38°08.50’ W97°02.50’</td>
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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 F to J: SR-618, SR-619 in the vicinity of J to K.
(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' W96°45.50'

VR-531

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.
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:

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<td>SLN 031/16</td>
<td>N39°08.00' W97°25.00'</td>
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<tr>
<td>06 AGL to</td>
<td>C</td>
<td>SLN 300/34</td>
<td>N39°16.00' W98°12.00'</td>
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<tr>
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<td>SLN 247/38</td>
<td>N38°45.00' W98°24.00'</td>
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<tr>
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<td>E</td>
<td>SLN 220/30</td>
<td>N38°35.00' W98°05.00'</td>
</tr>
<tr>
<td>01 AGL B 30 MSL to</td>
<td>F</td>
<td>SLN 201/32</td>
<td>N38°27.30' W97°56.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to</td>
<td>G</td>
<td>SLN 227/18</td>
<td>N38°45.00' W97°56.00'</td>
</tr>
<tr>
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<td>H</td>
<td>SLN 031/16</td>
<td>N39°08.00' W97°25.00'</td>
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<td>N39°13.00' W96°58.00'</td>
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<tr>
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<td>N37°34.00' W97°50.00'</td>
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<tr>
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<td>HUT 243/50</td>
<td>N37°44.00' W98°56.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
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<td>HUT 252/48</td>
<td>N37°52.00' W98°56.00'</td>
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<td>HYS 186/53</td>
<td>N38°00.00' W99°35.00'</td>
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<td>G</td>
<td>HYS 223/18</td>
<td>N38°40.00' W99°35.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>H</td>
<td>HYS 188/11</td>
<td>N38°40.00' W99°21.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
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<td>HYS 130/14</td>
<td>N38°40.00' W99°05.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
<td>J</td>
<td>SLN 220/30</td>
<td>N38°35.00' W98°05.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
<td>K</td>
<td>SLN 201/32</td>
<td>N38°27.30' W97°56.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>L</td>
<td>SLN 227/18</td>
<td>N38°45.00' W97°56.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>E1</td>
<td>HUT 252/48</td>
<td>N37°52.00' W98°56.00'</td>
</tr>
<tr>
<td>01 AGL B 06 AGL to</td>
<td>AF</td>
<td>HUT 243/9</td>
<td>N37°57.00' W98°07.00'</td>
</tr>
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</table>

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM tapering down to 3 NM left and 5 NM right of cedeliner 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 MARSA 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:

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<th>Lat/Long</th>
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<tr>
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<td>ICT 221/16</td>
<td>N37°34.00' W97°55.00'</td>
</tr>
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<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>HUT 219/46</td>
<td>N37°29.00' W98°39.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>HUT 236/53</td>
<td>N37°37.00' W98°56.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>D</td>
<td>HUT 243/50</td>
<td>N37°44.00' W98°56.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
<td>E</td>
<td>HYS 186/53</td>
<td>N38°00.00' W99°35.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
<td>F</td>
<td>HYS 223/18</td>
<td>N38°40.00' W99°35.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
<td>G</td>
<td>HYS 188/11</td>
<td>N38°40.00' W99°21.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
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<td>HYS 130/14</td>
<td>N38°40.00' W99°05.00'</td>
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<td>HYS 130/14</td>
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<td>01 AGL B 15 AGL to</td>
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<td>N38°35.00' W98°05.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
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<td>SLN 201/32</td>
<td>N38°27.30' W97°56.00'</td>
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<td>01 AGL B 15 AGL to</td>
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<td>SLN 227/18</td>
<td>N38°45.00' W97°56.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
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<td>HUT 252/48</td>
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<td>01 AGL B 06 AGL to</td>
<td>AF</td>
<td>HUT 243/9</td>
<td>N37°57.00' W98°07.00'</td>
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</table>
TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM left and 5 NM left of centerline from A to C; 5 NM right and 5 NM right of centerline out to 5 NM right side of centerline from C to F; 5 NM tapering down to 2 NM right from F to G; 5 NM tapering down to 2 NM right from G to H; 5 NM tapering out to 5 NM right of centerline from H to I; 8 NM left and 8 NM right of centerline from I to J; 6 NM left and 8 NM right of centerline from J to K.

Special Operating Procedures:
(1) Alternate Entry: B, C, and D.
(2) Alternate Exit: B, C, and E.
(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.
(5) Contact Smoky Hill range officer prior to J for entry into maneuver area, Smoky MOA, and R-3601.
(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.
(10) Avoid overflight of cattle farm by 3 NM/1000' coordinates N38-44.5 W99-25.4.

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline from A to B; 5 NM right and 5 NM left of centerline from B to C; 5 NM left and 2 NM tapering out to 5 NM right side of centerline 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 D.
(2) Alternate Exit: B, C, 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.

Altitude Data Pt Fac/Rad/Dist Lat/Long
As assigned to
01 AGL B 06 AGL to K1 HUT 351/27 N38'27.30' W97'56.00'
01 AGL B 06 AGL to ICT 084/40 N37'44.00' W96'45.00'
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 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 I SLN 227/18 N38'45.00' W97'56.00'

FSS's Within 100 NM Radius: ICT
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 MARSA 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 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: 0730-2000 local daily

ROUTE DESCRIPTION:

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 MARSA 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 W97-09;
   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 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: 0700-1900 local daily
**ROUTE DESCRIPTION:**

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<td>ICT 119/33</td>
<td>N37°25.00' W97°01.00'</td>
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<td>01 AGL B 15 AGL to 01 AGL to but not including 25 MSL to C</td>
<td>B</td>
<td>BVO 315/41</td>
<td>N37°23.00' W96°32.00'</td>
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<tr>
<td>01 AGL B 25 MSL to 01 AGL to but not including 25 MSL to D</td>
<td>C</td>
<td>EMP 179/32</td>
<td>N37°46.00' W96°13.00'</td>
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<td>01 AGL B 25 MSL to 01 AGL B 15 AGL to E</td>
<td>D</td>
<td>EMP 172/25</td>
<td>N37°52.00' W96°08.00'</td>
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<td>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</td>
<td>E</td>
<td>EMP 262/8</td>
<td>N38°17.50' W96°19.00'</td>
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<td>01 AGL B 15 AGL to 01 AGL B 100 MSL to Maneuver Area</td>
<td>F</td>
<td>EMP 268/25</td>
<td>N38°20.00' W96°40.00'</td>
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<td>01 AGL B 06 AGL to 01 AGL B 15 AGL to Maneuver Area</td>
<td>G</td>
<td>SLN 150/34</td>
<td>N38°24.00' W97°20.00'</td>
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<td>01 AGL B 15 AGL to 01 AGL B 06 AGL to 01 AGL B 15 AGL to H</td>
<td>H</td>
<td>SLN 193/30</td>
<td>N38°27.30' W97°50.00'</td>
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<tr>
<td>01 AGL B 15 AGL to Maneuver Area</td>
<td>I</td>
<td>SLN 201/32</td>
<td>N38°27.30' W97°56.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to within area to J</td>
<td>J</td>
<td>SLN 227/18</td>
<td>N38°45.00' W97°56.00'</td>
</tr>
</tbody>
</table>

(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 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:**

<table>
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<tr>
<th>Altitude Data</th>
<th>Pt</th>
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<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>HYS 188/11</td>
<td>N38°40.00' W99°21.01'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to 01 AGL B 40 MSL to 01 AGL B 06 AGL to 01 AGL B 32 MSL (if cleared by Hutchinson Apch Ctl 325.8 prior to D) to Maneuver Area</td>
<td>B</td>
<td>DDC 063/30</td>
<td>N38°01.00' W99°24.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to 01 AGL B 15 AGL to Maneuver Area</td>
<td>C</td>
<td>HUT 243/50</td>
<td>N37°44.00' W98°56.00'</td>
</tr>
<tr>
<td>01 AGL B 100 MSL to within area to J</td>
<td>D</td>
<td>HUT 243/9</td>
<td>N37°57.00' W98°07.00'</td>
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<tr>
<td>01 AGL B 06 AGL to 01 AGL B 100 MSL to 01 AGL B 100 MSL to within area to F</td>
<td>E</td>
<td>HUT 351/27</td>
<td>N38°30.30' W97°56.00'</td>
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<td>HUT 351/45</td>
<td>N38°45.00' W97°56.00'</td>
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**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 MARSA 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 ROUTES**
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 MARSA 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 N41-44.0 W94-32.0;
   (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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
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<td></td>
</tr>
<tr>
<td>15 AGL B 40 MSL to G</td>
<td>DSM 295/47</td>
<td>N41°51.00’</td>
<td>W94°32.40’</td>
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<tr>
<td>15 AGL B 40 MSL to H</td>
<td>LNM 315/42</td>
<td>N41°09.00’</td>
<td>W94°32.40’</td>
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<tr>
<td>15 AGL B 40 MSL to I</td>
<td>LNM 268/26</td>
<td>N40°38.00’</td>
<td>W94°32.40’</td>
</tr>
<tr>
<td>15 AGL B 40 MSL to J</td>
<td>PWE 060/45</td>
<td>N40°30.40’</td>
<td>W95°19.00’</td>
</tr>
<tr>
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<td>PWE 046/21</td>
<td>N40°25.10’</td>
<td>W95°51.00’</td>
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<td>LNK 120/25</td>
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<td>LNK 120/21</td>
<td>N40°42.20’</td>
<td>W96°23.30’</td>
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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.

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:

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<th>Lat/Long</th>
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<td>N40°30.40' W95°19.00'</td>
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<td>LMN 268/26</td>
<td>N40°38.00' W94°32.40'</td>
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<tr>
<td>15 AGL B 40 MSL to</td>
<td>D</td>
<td>LMN 315/42</td>
<td>N41°09.00' W94°32.40'</td>
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<tr>
<td>15 AGL B 40 MSL to</td>
<td>E</td>
<td>DSM 295/47</td>
<td>N41°51.00' W94°32.40'</td>
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<tr>
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<td>H</td>
<td>SUX 127/39</td>
<td>N41°53.00' W96°41.00'</td>
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<tr>
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<td>I</td>
<td>SUX 201/32</td>
<td>N41°53.00' W96°53.00'</td>
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<tr>
<td>15 AGL B 40 MSL to</td>
<td>J</td>
<td>LNK 343/43</td>
<td>N41°38.40' W96°53.00'</td>
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<tr>
<td>15 AGL B 40 MSL to</td>
<td>K</td>
<td>LNK 326/34</td>
<td>N41°26.00' W97°03.30'</td>
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</table>

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'.

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.


(12) Migratory bird flyway in the spring and fall.

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 (N39-04.0 W98-31.0).


(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:

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.

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'

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'
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.
(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 Cheney 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 W90-38.0).

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
**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:**

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<td>DLH 127/64</td>
<td>N46°05.00' W91°03.00'</td>
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<tr>
<td>02 AGL B 100 MSL to B</td>
<td>EAU 053/36</td>
<td>N45°13.00' W90°46.00'</td>
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<tr>
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<td>RHI 237/27</td>
<td>N45°24.00' W90°00.00'</td>
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<td>N45°20.00' W89°27.00'</td>
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<td>N45°24.00' W88°28.00'</td>
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<td>N45°59.00' W88°31.00'</td>
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<td>N46°51.00' W88°53.00'</td>
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<td>N46°40.00' W89°13.00'</td>
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<td>N46°42.00' W89°34.00'</td>
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<td>N46°13.00' W89°53.00'</td>
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<td>DLH 095/34</td>
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<td>DLH 203/26</td>
<td>N46°25.00' W92°30.00'</td>
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<td>05 AGL B 50 MSL to O</td>
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**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

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**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:**

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<td>05 AGL B 30 MSL to B</td>
<td>BIB 111/13</td>
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<tr>
<td>05 AGL B 30 MSL to C</td>
<td>RSV 131/7</td>
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<tr>
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<tr>
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<td>OOM 075/26</td>
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**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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset Tue-Sun, OT by NOTAM

ROUTE DESCRIPTION:

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:
(1) Clearance to fly the route does not constitute clearance to enter R-3403. This clearance must be obtained from the Range Control Officer.
(2) Point F Alternate Exit for aircraft not scheduled into R-3403.
(3) Point F Alternate Entry for aircraft scheduled into R-3403.
(4) Route is MARSA thru See and Avoid with IR-618, VR-621, VR-613, VR-1679, VR-1631.
(5) Avoid hard surface airports by 3000' vertically or 3 NM horizontally.
(6) Avoid hard surface airports within 3000' vertically or 3 NM horizontally.
(7) If holding required for entry into R-3403, this may be accomplished within route segment F to G.
(8) Alternate Entry: Points B, E and F.
(9) Alternate Exit: Points E and F.
(10) Request users consider a maximum airspeed of 420 KTAS on all route segments. 480 KTAS from IP to target.
(11) 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:

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 MARSA 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.
(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, exit at Alternate Exit D.
(4) Alternate Entry: C, D, and F.
(5) Alternate Exit: C, D, and F.
(6) Minimum altitude for entire route is 1000' AGL from 1 March-15 August.
(7) Minimum altitude from E to F is 1500' AGL.

FSS's Within 100 NM Radius:
GRB, LAN
**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:**

**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 MARSA 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, D, and F.
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 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**

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</tr>
<tr>
<td>D CIP 149/18</td>
<td>N40°54.00' W79°13.00'</td>
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<td>E CIP 083/10</td>
<td>N41°11.00' W79°15.00'</td>
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<td>F CIP 051/25</td>
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<td>N41°33.60' W78°35.40'</td>
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<td>H ETG 339/18</td>
<td>N41°28.00' W78°20.50'</td>
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<tr>
<td>I ETG 086/11</td>
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<td>M RAV VORTAC</td>
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<tr>
<td>N RAV 240/9</td>
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</table>

**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.
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; (zi) 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;
VR ROUTES

(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:

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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 H 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 in 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.
(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)
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 over flown no lower than 1500' AGL, except as noted in caution #10, #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: Kampel (N40-02-00 W76-59-00) 1500' AGL to 4000' MSL/3500 feet square, 0.7 NM of Kampel 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;
(c) Tower, (N40-45-30 W78-31-00) 100’ Points C-D;
(d) Microwave tower, (N41-10-07 W78-21-25) 80’ Points C-D;
(e) Ranger Tower #33, (N41-13-15 W78-07-10) 60’ Points C-D;
(f) Tower, (N41-13-10 W78-11-40) 60’ Points C-D;
(g) Power lines, (N41-16-00 W78-09-15) 460’ Points C-D;
(h) Microwave tower, (41-40-35 W78-33-01) 125’ Points C-D;
(i) Antenna, (N41-20-55 W78-07-09) 60’ Points C-D;
(j) Ranger Tower, (N41-28-00 W78-07-00) 60’ Points C-D;
(k) Towers (2), (N41-29-30 W78-15-00) 80’ Points C-D;
(l) Tower, (N41-30-00 W78-13-30) 60’ Points C-D;
(m) Tower, (N41-22-00 W78-06-50) 100’ Points C-D;
(n) POWER LINES from, (N41-21-30 W77-43-00 to N41-13-00 W78-12-30) Points C-D. 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:

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<td>N42°01.00'</td>
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<td>BFD 181/14</td>
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<td>RAV VORTAC</td>
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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.
(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 MOA will proceed from K to M call Balky 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.
NOTE: A 1500' AGL minimum restriction will be placed on Unpublished Route Obstructions: The following obstructions may exist in these areas outside of route airspace:

- Tower, (N41-36-02 W78-35-15) Unk AGL-2600' MSL Points E-F;
- Tower, (N41-43-05 W78-41-30) 370' Points E-F;
- Ranger Tower #14, (N41-50-00 W78-58-30) 60' Points E-F;
- Tower, (N41-03-00 W78-35-13) 150' Point F;
- Antenna, (N41-34-36 W78-36-48) 75' Point F;
- Ranger Tower #26, (N41-34-20 W78-28-10) 60' Points F-G;
- Keating VORTAC, (N41-12-54 W78-08-35) 50' Points G-H;
- Ranger Tower #33, (N41-13-15 W78-07-10) 60' Points G-H;
- Tower, (N41-13-10 W78-11-40) 60' Points G-H;
- Power lines, (N41-16-00 W78-09-15) 460' Points G-H;
- Antenna, (N41-20-00 W78-07-09) 60' Points G-H;
- Towers (2), (N41-23-50 W77-51-10) 100' Points G-H;
- Ranger tower #39 and 4 Antennas, (N41-23-50 W77-51-10) 60' Points G-H;
- Ranger Tower #29, (N41-20-10 W78-22-00) 60' Points G-H;
- Tower, (N41-25-00 W77-53-00) 60' Points G-H;
- Ranger Tower, (N41-28-00 W78-07-00) 60' Points G-H;
- Antenna tower, (N41-29-25 W78-15-20) 188' Points G-H;
- Towers (2), (N41-29-30 W78-15-00) 80' Points G-H;
- Tower, (N41-30-00 W78-13-30) 60' Points G-H;
- Tower, (N41-22-00 W78-06-50) 100' Points G-H;
- 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.

- Antenna, (N41-18-00 W77-51-28) 100' Point H;
- Towers (2), (N41-28-52 W78-15-33) 182' Points H-I;
- Tower, (N41-07-00 W77-43-36) 100' Points H-I;
- Tower, (N41-06-14 W77-42-00) 100' Points H-I;
- Towers (3), (N41-06-18 W77-42-24) 80' Points H-I;
- Tower, (N41-06-42 W77-45-42) 100' Points H-I;
- Ranger Tower, (N41-10-05 W77-53-20) 60' Points H-I;
- Tower, (N41-10-30 W77-50-30) 100' Points H-I;
- Tower, (N41-12-40 W78-05-20) 100' Points H-I;
- Tower, (N41-14-00 W77-45-00) 60' Points H-I;
- Ranger Tower #42, (N41-14-15 W77-45-10) 60' Points H-I.

FSS's With 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
**VR ROUTES**

**HOURS OF OPERATION:** Sunrise-Sunset

**ROUTE DESCRIPTION:**

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**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-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:**

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**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:**
- Aircraft not cleared into R-5201 exit at E.
- IR-700 crosses the route between B and C at surface to 6000’ MSL.
- IR-700, IR-800 and IR-801 cross the route between D and E at surface to 3500’ MSL.
- Alternate Entry: B and D.
- Alternate Exit: E.
- 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:**

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**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 centefline from F to H; 5 NM either side of centerline from H to I.

**Special Operating Procedures:**
- Users who wish to schedule these routes must call during normal duty hours (0800-1600, Mon-Fri).

**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

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**VR ROUTES**

**TERRAIN FOLLOWING OPERATIONS:** Authorized entire route 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 E; 5 NM either side of centerline from E to F.

**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 and 5500' MSL.
22. Alternate Exit: Point E.

**FSS’s Within 100 NM Radius:**
- BGR, BTV

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**VR-842**

**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:**

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**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.
VR ROUTES

FSS’s Within 100 NM Radius:
BGR, BTV

VR-931


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:

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-901, and VR-932.
(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: SWV (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 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


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°04.00'
1 AGL B 65 MSL to B SQA 190/24 N60°45.00' W156°01.00'
1 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-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: SWV (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. 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 Arpt Class E airspace, 4NM outside the route, segment E to F.

(11) Route Entry: SVW (387.1), Exit: DLG (282.35/132.75).
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.


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

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<thead>
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<th>Altitude Data</th>
<th>Pt</th>
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<td>at or below 95 MSL</td>
<td>A</td>
<td>BIG 033/70</td>
<td>N64°38.00'W143°27.00'</td>
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<tr>
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<td>BIG 041/112</td>
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<tr>
<td>01 AGL B 95 MSL to</td>
<td>C</td>
<td>BIG 055/70</td>
<td>N64°13.00' W143°05.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
<td>D</td>
<td>BIG 076/39</td>
<td>N63°54.00' W144°16.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>E</td>
<td>BIG 037/18</td>
<td>N64°09.00' W145°08.00'</td>
</tr>
<tr>
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<td>F</td>
<td>BIG 335/28</td>
<td>N64°28.00' W145°45.00'</td>
</tr>
<tr>
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<td>BIG 313/48</td>
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</table>

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 FCIIFs for details and locations. Also see Airspace Presentation link in No.11.


(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 us 150’-500’ cables strung below for carrying cargo.

(14) Use CAUTION for Pogo Mine on segment E-F. Remain clear of mine by SNM 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

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

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<th>Altitude Data</th>
<th>Pt</th>
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<th>Lat/Long</th>
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<td>BIG 313/48</td>
<td>N64°44.00'</td>
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<td>W146°28.00'</td>
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<td>BIG 335/28</td>
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</table>

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.

(11) Numerous sensitive areas near Alaska Hwy. See 11 AF
Noise/Flight Sensitive Areas List (NFSL)
http://www.elmendorf.af.mil/Units/611osf/AirspaceHome.ht
m. 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 souther border of Yukon 1
MOA to airstrip located at (N64-28.0 W144-55.0),
continuous. Remain clear of mine by 3NM 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
wixed 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
brief from ALASKA Forcast Unit at DSN
317-552-2719/3043 at least 8 hours prior to mission brief
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

HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local
VR ROUTES

ROUTE DESCRIPTION:

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<th>Pt</th>
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|                |        |              |                |
|                |        |              |                |
|                |        |              |                |

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.


(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.


(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.


(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), AF Noise/Flight Sensitive Areas List (NFSL) item 26 on


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.


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  
--- | --- | --- | ---  
01 AGL B 167 MSL to | B | BIG 219/33 | N63°45.00'  
01 AGL B 167 MSL to | C | BIG 175/25 | N63°37.00'  
05 AGL B 129 MSL to | D | BIG 158/48 | N63°12.00'  
05 AGL B 85 MSL to | E | BIG 162/62 | N62°59.00'  
05 AGL B 110 MSL to | G | TKA 041/88 | N62°51.00'  
01 AGL B 167 MSL to | AA | BIG 222/27 | N63°49.00'  
01 AGL B 167 MSL to | B | BIG 219/33 | N63°45.00'  
01 AGL B 110 MSL to | BB | BIG 219/20 | N63°51.00'  

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 AF 13-12, 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.


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 Isaiah 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.


15. Remain clear of Delta National Wild and Scenic River, Segment C to E by SNM 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 - 39 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 Airspace Unit at DSN 317-552-2719/3043 at least 8 hours prior to mission brief time.


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.


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'  
05 AGL B 229 MSL to | B | BIG 273/35 | W146°10.00'  
05 AGL B 158 MSL to | C | BIG 161/62 | W145°09.00'  
01 AGL B 117 MSL to | D | BIG 219/33 | W145°10.00'  
01 AGL B 129 MSL to | E | BIG 162/62 | W146°54.00'  
01 AGL B 125 MSL to | F | TKA 041/88 | W147°09.00'  

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. Advisors 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-936 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) at or below 90 MSL A BIG 055/70 N64°13.00' W143°05.00'.
(10) Maintain 500’ AGL or 6000’ MSL whichever is higher 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, May - 30 Sep. See NFSL item 23.
(12) Ascend above 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, 26 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.

FSS’s Within 100 NM Radius:
FAI, ORT (1 Mar - 30 Sep, other times contact FAI FSS), PAQ, TKA. See Alaska Supplement.

ORIGINATING ACTIVITY: 611 AOG/CC, 9480 Pease Ave., Ste 102, Elmendorf AFB, AK 99506-2100 DSN 317-552-2430.


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. Advisors 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-936 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) at or below 90 MSL A BIG 055/70 N64°13.00' W143°05.00'.
(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, May - 30 Sep. See NFSL item 23.
(12) Ascend above 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, 26 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.
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 the 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 Exit Points: B and C.

(8) Primary Exit Point: D. Alternate Exit Points: B and C.


(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:

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>at or below 95 MSL</td>
<td>A</td>
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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) Retricted operations within active Special Usa 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.
(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 GtToodpaster 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.
(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.


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
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<td>A</td>
<td>FYU 168/79</td>
<td>N65°18.00' W146°00.00'</td>
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<td>FYU 171/80</td>
<td>N65°18.00' W146°09.00'</td>
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<td>01 AGL B 75 MSL to</td>
<td>C</td>
<td>EIL 013/17</td>
<td>N64°53.00' W146°42.00'</td>
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<tr>
<td>01 AGL B 60 MSL to</td>
<td>D</td>
<td>EIL 029/13</td>
<td>N64°47.00' W146°42.00'</td>
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<td>FYU 102/64</td>
<td>N65°55.00' W143°12.00'</td>
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</table>
VR ROUTES

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.
(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 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.
(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


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'  W83°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

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 N30-22.0 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: FACSFACJAX, NAS

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous
(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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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:
(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 W82-04.0; Noise Sensitive Area.
(8) Between Points F-G, do not overfly Cuylor 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 Statenville, 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

VR ROUTES

**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

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<td>SAV 277/30</td>
<td>N32°10.02’ W81°47.48’</td>
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**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.
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

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VR-1005


**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** Continuous

**ROUTE DESCRIPTION:**

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<td>N29°28.00’ W82°27.00’</td>
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<td>N29°07.00’ W81°43.00’</td>
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**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 W84-14.0; 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 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 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 N29-15.5 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.

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

VR-1006

ORIGINATING ACTIVITY: FACSFACJAX, NAS

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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.

Special Operating Procedures:
(1) Point A is useable for units departing from NAS Cecil only.
(2) Alternate Entry: Points B, E, F, G and K.
(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, do not overfly Cedar Key or Cedar Key National Wildlife Refuge.
(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 unit 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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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 B and D.

(3) Flights of more than 2 aircraft must be coordinated with FACSFACJAX.

(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-1008


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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 FACSFACJAX.

(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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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 FACSFACJAX.

(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 ROUTES**

**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:** 2 NM either side of centerline.

**Special Operating Procedures:**

1. Alternate Entry: Point B.
2. Vicinity of Point A, extensive military helicopter training.
3. Between Points B-D, minimum altitude is 300' AGL.
4. Point B, do not overfly town of Summer Haven, Noise Sensitive Area.
5. Do not overfly Marineland at N29-40.0 W81-13.0 south of Point B; Noise Sensitive Area.
6. Remain East of centerline at Point C.
7. Between Points C-D, civilian helicopter training area.
8. Between Points C-D, avoid overflight of horse ranch at N29-19.0 W81-22.0.
9. Between Points D-E, do not overfly the town of Barberville, FL at N29-11.0 W81-26.0; Noise Sensitive Area.
10. Avoid overflight of Lake Woodruff National Wildlife Refuge near Point E.
11. Route terminates at R-2910, check Pinecastle Target schedule prior to use.

**FSS's Within 100 NM Radius:**

GNV, PIE

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**VR-1013**


**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.

**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 319.87/120.7 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

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**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:

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 and 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).


(e) VR-1051 between E and F, G and H (48 FTS, CBM, DSN 742-7840, C662-434-7840).

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, re-coordinate a new entry time.
(b) VR-1014: plan to fly VR-1016 at 1500' AGL between Points 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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION:
0700-1730 local, OT by NOTAM

ROUTE DESCRIPTION:
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:
(1) 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).
(2) 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 left flight N31-13.4 W85-06.7 (Farley Nuclear Plant).
(3) Hazards D-E: Avoid N30-35.5 W85-04.2 by 1500' AGL or 3 NM (Airport/Altha F1).
(4) Hazards E-F: Avoid N30-36.1 W85-05.5, N30-36.1 W85-08.4 (crop dusting airstrips).
(6) Alternate Entry: Points B and D.
(7) Alternate Exit: Point D.
(8) Flight beyond D is not authorized unless scheduled into R-2914.
(9) Prior to flight call 325 Tyndall OPS DSN 523-4244 with estimate for E.
(10) Contact Eglin Mission Control on 262.3 prior to G for clearance into R-2914A.
(11) NOTE: Concentrated bird activity along the Chattahoochee River. Crop dusting activity is intense during summer and early fall.
(12) CAUTION: This route crosses, overlaps or runs parallel with IR-015 and VR-1065.
(13) 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: FACSFA, 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:
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) 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.

(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) Coffeeville (Town) N31-45.4 W88-05.1.

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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 15 AGL to and remain at 15 AGL until 7 NM NW of Pt A</td>
<td>A</td>
<td>SJI 169/22</td>
<td>N30°22.00' W88°19.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>SJI 263/12</td>
<td>N30°43.00' W88°36.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>MVC 247/35</td>
<td>N31°16.00' W88°00.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>MVC 275/35</td>
<td>N31°33.00' W88°02.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to E</td>
<td>MVC 022/14</td>
<td>N31°40.00' W87°14.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to F</td>
<td>MVC 058/30</td>
<td>N31°42.00' W86°50.00'</td>
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<tr>
<td>05 AGL B 15 AGL to G</td>
<td>MVC 043/36</td>
<td>N31°52.00' W86°50.00'</td>
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<tr>
<td>05 AGL B 15 AGL to H</td>
<td>MGM 288/16</td>
<td>N32°19.00' W86°37.00'</td>
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<tr>
<td>05 AGL B 15 AGL to I</td>
<td>MGM 320/33</td>
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<tr>
<td>05 AGL B 15 AGL to J</td>
<td>LDK 166/23</td>
<td>N32°53.00' W87°27.00'</td>
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<tr>
<td>05 AGL B 15 AGL to K</td>
<td>LDK 205/32</td>
<td>N32°47.00' W87°50.00'</td>
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<tr>
<td>05 AGL B 15 AGL to L</td>
<td>MEI 064/34</td>
<td>N32°35.00' W88°11.00'</td>
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<tr>
<td>05 AGL B 10 AGL to M</td>
<td>MEI 097/41</td>
<td>N32°14.00' W88°01.00'</td>
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<tr>
<td>05 AGL B 15 AGL to N</td>
<td>MEI 116/28</td>
<td>N32°08.00' W88°20.00'</td>
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<tr>
<td>05 AGL B 15 AGL to O</td>
<td>MEI 146/43</td>
<td>N31°45.00' W88°24.00'</td>
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<tr>
<td>05 AGL B 15 AGL to P</td>
<td>MEI 132/51</td>
<td>N31°45.00' W88°07.00'</td>
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</tr>
<tr>
<td>05 AGL B 15 AGL to Q</td>
<td>GCV 046/11</td>
<td>N31°13.00' W88°19.00'</td>
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<tr>
<td>05 AGL B 15 AGL to R</td>
<td>GCV 078/24</td>
<td>N31°09.00' W88°01.00'</td>
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</tr>
</tbody>
</table>

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) Coffeeville (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 Q, 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 W88-16-22, 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)

(a) Crosses VR-060, just East of Points D and at Q.
(b) Crosses VR-1020, between Points B-C and C-D.
(c) Parallels VR-1022 same direction approaching Point B. Crosses between Points B-C and at F and P.
(d) Same starting Point A with VR-1023, parallels same direction from Points A-B.
(e) Same direction as VR-1024 from Points A-B, crosses at Q.
(f) Crosses VR-1082 between Points D-E and E-F.
(g) Crosses VR-1083 between Points B-C, C-D, E-F, and Q-R.
(h) Crosses VR-1085 between Points D-E and E-F.
(i) Crosses IR-030/IR-031 between Points D-E and E-F.
(j) Crosses IR-037 between Points B-C.
(k) 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: 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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross at 15 AGL to</td>
<td>A GPT 113/22</td>
<td>N30°15.00’ W88°41.00’</td>
</tr>
<tr>
<td>15 AGL to</td>
<td>B SJI 230/13</td>
<td>N30°36.00’ W88°34.00’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>C SJI 288/24</td>
<td>N30°53.00’ W88°47.00’</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D GCV 348/20</td>
<td>N31°26.00’ W88°32.00’</td>
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<tr>
<td>05 AGL B 15 AGL to</td>
<td>E GCV 021/43</td>
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<tr>
<td>05 AGL B 15 AGL to</td>
<td>F MVC 001/22</td>
<td>N31°50.00’ W87°19.00’</td>
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<td>05 AGL B 15 AGL to</td>
<td>G MVC 058/30</td>
<td>N31°42.00’ W86°50.00’</td>
</tr>
<tr>
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<td>EA MVC 355/22</td>
<td>N31°49.50’ W87°21.50’</td>
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</tbody>
</table>

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:

(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) Daylight only, minimum altitude on route is 500' AGL.

(3) CAUTION: High density VFR traffic over water prior to Point A until Point B.

(4) Aircraft are required to transmit in the blind on 280.1 MHz their intention to transit Camden Ridge MOA after Point D.

(5) Alternate Exit: Points E and F.

(6) Maximum airspeed 420 KTAS Mon-Fri.

(7) Alternate Exit EA, (coincident with alternate entry CA, VR-1082) to be used only for transition to VR-1082.

(8) 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 Tombigee River.
(f) Coffeeville (Town) N31-45.4 W88-05.1.
(g) Salipta (Town) N31-38.0 W88-02.0.

(9) CAUTION: Between Point D and E, N31-38.2 W88-18.8, antenna tower 360' AGL/ 489' MSL.

(10) CONFLICTS: (Deconflict with the appropriate Scheduling Activity)

(a) Crosses VR-060, between Points C-D and E-F.
(b) Same direction as VR-179 between Points A-C. Crosses between C-D.
(c) Crosses VR-1020, between Points E-F and G-F.
(d) Parallels VR-1021 same direction after Point B. Crosses between Points A-B.
(e) Crosses VR-1023 at Point B.
(f) Crosses VR-1024, between Points B-C and C-D.
(g) Crosses VR-1030, between Points E-F and at Point G.
(h) Crosses VR-1083, between Points C-D and E-F and F-G.
(i) Crosses VR-1196 at Point C.
(j) Crosses IR-037/IR-040 between Points C-D.

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’
10 AGL B 15 AGL to EA MVC 355/22 N31°49.50’ W87°21.50’
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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tr>
<td>As assigned to</td>
<td>A</td>
<td>SJI 169/22</td>
<td>N30°22.00' W88°19.00'</td>
</tr>
<tr>
<td>Maintain 15 AGL until 7 NM NW of A</td>
<td></td>
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<tr>
<td>05 AGL B 15 AGL to B</td>
<td>SJI 230/13</td>
<td>N30°36.00' W88°34.00'</td>
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<tr>
<td>05 AGL B 15 AGL to C</td>
<td>GPT 354/28</td>
<td>N30°52.00' W89°07.00'</td>
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<tr>
<td>Climb to cross 5 NM SE of D at 10 AGL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 AGL to D</td>
<td>LBY 185/13</td>
<td>N31°12.00' W89°23.00'</td>
<td></td>
</tr>
<tr>
<td>Maintain 10 AGL until 5 NM WSW of D then 15 AGL to E</td>
<td>MCB 138/17</td>
<td>N31°05.00' W90°03.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to F</td>
<td>MCB 208/21</td>
<td>N31°00.00' W90°28.00'</td>
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<tr>
<td>05 AGL B 15 AGL to G</td>
<td>BTR 056/36</td>
<td>N30°46.00' W90°41.00'</td>
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<tr>
<td>05 AGL B 15 AGL to H</td>
<td>BTR 084/22</td>
<td>N30°29.00' W90°52.00'</td>
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<td>05 AGL B 15 AGL to I</td>
<td>MCB 203/45</td>
<td>N30°38.00' W90°38.00'</td>
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<td>05 AGL B 15 AGL to J</td>
<td>MCB 167/23</td>
<td>N30°56.00' W90°11.00'</td>
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<td>PCU 345/25</td>
<td>N30°58.00' W89°49.00'</td>
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<tr>
<td>05 AGL B 15 AGL to L</td>
<td>PCU 040/13</td>
<td>N30°43.00' W89°33.00'</td>
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<tr>
<td>05 AGL B 15 AGL to M</td>
<td>GPT 360/17</td>
<td>N30°41.00' W89°04.00'</td>
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<td>05 AGL B 15 AGL to N</td>
<td>GPT 067/21</td>
<td>N30°32.00' W88°42.00'</td>
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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:

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<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>SJI 169/22</td>
<td>N30°22.00' W88°19.00'</td>
</tr>
<tr>
<td>Maintain 15 AGL until 7 NM NW of A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to B</td>
<td>SJI 263/12</td>
<td>N30°43.00' W88°36.00'</td>
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<tr>
<td>05 AGL B 15 AGL to C</td>
<td>SJI 277/40</td>
<td>N30°52.00' W89°07.00'</td>
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<tr>
<td>Climb to cross and maintain 5 NM SE of D at 10 AGL</td>
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</tr>
<tr>
<td>10 AGL to D</td>
<td>LBY 185/13</td>
<td>N31°12.00' W89°23.00'</td>
<td></td>
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<tr>
<td>At 5 NM WSW of D then 15 AGL to E</td>
<td>MCB 138/17</td>
<td>N31°05.00' W90°03.00'</td>
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<tr>
<td>05 AGL B 15 AGL to F</td>
<td>MCB 076/20</td>
<td>N31°00.00' W90°28.00'</td>
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<td>05 AGL B 15 AGL to G</td>
<td>LBY 316/26</td>
<td>N31°45.00' W89°39.00'</td>
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<td>05 AGL B 15 AGL to H</td>
<td>MEI 225/32</td>
<td>N32°02.00' W89°17.00'</td>
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<tr>
<td>05 AGL B 15 AGL to I</td>
<td>MEI 165/25</td>
<td>N31°58.00' W88°43.00'</td>
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</table>
VR ROUTES

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/588' MSL.
(14) CAUTION: Between Points L-M, N30-53-29.84 W88-07-14, uncharted tower 340' AGL/652' 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 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:

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<td>N33°09.00' W88°27.00'</td>
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<td>05 AGL B 15 AGL to C</td>
<td>LDK 266/37</td>
<td>N33°15.00' W88°16.00'</td>
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<td>10 AGL B 15 AGL to D</td>
<td>LDK 195/13</td>
<td>N33°03.00' W87°37.00'</td>
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<td>10 AGL B 15 AGL to E</td>
<td>VUZ 168/43</td>
<td>N32°58.00' W86°45.00'</td>
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<tr>
<td>10 AGL B 15 AGL to F</td>
<td>VUZ 121/31</td>
<td>N33°23.00' W86°23.00'</td>
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<td>VUZ 119/58</td>
<td>N33°10.00' W85°55.00'</td>
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<td>05 AGL B 15 AGL to H</td>
<td>MGM 004/40</td>
<td>N32°53.00' W86°13.00'</td>
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<td>05 AGL B 15 AGL to I</td>
<td>MGM 320/33</td>
<td>N32°40.00' W86°43.00'</td>
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<td>05 AGL B 15 AGL to J</td>
<td>LDK 166/23</td>
<td>N32°53.00' W87°27.00'</td>
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<td>LDK 195/32</td>
<td>N32°45.00' W87°44.00'</td>
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<td>MGM 263/70</td>
<td>N32°08.00' W87°41.00'</td>
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<td>05 AGL B 15 AGL to M</td>
<td>MEI 123/34</td>
<td>N32°02.00' W88°17.00'</td>
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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 manatory 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

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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:

<table>
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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tr>
<td>05 AGL B 15 AGL to A</td>
<td>JAN 300/29</td>
<td>N32°47.00' W90°38.00'</td>
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<td>05 AGL B 15 AGL to B</td>
<td>JAN 269/51</td>
<td>N32°34.00' W91°10.00'</td>
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<td>N32°34.00' W91°10.00'</td>
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<tr>
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<td>MLU 033/27</td>
<td>N32°53.00' W91°43.00'</td>
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<tr>
<td>05 AGL B 15 AGL to E</td>
<td>MLU 340/29</td>
<td>N32°59.00' W92°12.00'</td>
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<td>ELD 107/21</td>
<td>N33°07.00' W92°22.00'</td>
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<td>05 AGL B 15 AGL to G</td>
<td>ELD 075/20</td>
<td>N33°18.00' W92°21.00'</td>
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<tr>
<td>05 AGL B 15 AGL to J</td>
<td>JAN 300/29</td>
<td>N32°47.00' W90°38.00'</td>
<td></td>
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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

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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:

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<td>N32°32.00' W88°48.00'</td>
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<tr>
<td>05 AGL B 15 AGL to B</td>
<td>MEI 308/37</td>
<td>N32°48.00' W89°21.00'</td>
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<tr>
<td>05 AGL B 15 AGL to C</td>
<td>MEI 326/56</td>
<td>N33°12.00' W89°21.00'</td>
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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 manatory 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.
VR ROUTES

2-109

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 mandatory 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, C904-434-7840.

FSS’s Within 100 NM Radius:
ANB, DRI, GWO, MKL

VR-1040

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/Dis 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 N33°31’.00’ W79°49’.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 N30°15’.00’ W81°04’.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’
2-110

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 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. Alternate Exit: Points H, L and M.
9. 1049' MSL tower located at N33°-07-51 W78°-12-16.
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 Radii:
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 A NBC 114/18 N32°'23.00' W80°'23.00'
(See Special Operating Procedures)
02 AGL B 15 AGL to 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. Penetration of FACSFAC JAX requires approval from Point I to Point L. DSN 942-2259, C904-542-2259.
6. Alternate Exit: Points E, F, H, I and M.
9. Minimum altitude 1000' AGL from N32°-46.0 W80°-25.0 to N32°-32.0 W80°-25.0 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 Radii:
AND, GNV, MCN, PIE

Altitude Data Pt Fac/Rad/Dist Lat/Long
02 AGL B 15 AGL to A NBC 114/18 N32°'23.00' W80°'23.00'
05 AGL B 15 AGL to B CHS 318/23 N33°'09.00' W80°'22.00'
05 AGL B 15 AGL to C NBC 068/15 N32°'36.00' W80°'26.00'
05 AGL B 15 AGL to D NBC 114/18 N32°'23.00' W80°'23.00'
05 AGL B 10 AGL to E SAV 143/20 N31°'54.00' W80°'56.00'
02 AGL B 15 AGL to F SSI 030/31 N31°'31.00' W81°'11.00'
02 AGL B 15 AGL to G CRG 106/24 N30°'15.00' W81°'04.00'
02 AGL B 15 AGL to H OMN 345/25 N29°'42.00' W81°'14.00'
02 AGL B 15 AGL to I OMN 288/19 N29°'24.00' W81°'27.00'
02 AGL B 15 AGL to L OMN 283/22 N29°'23.00' W81°'31.00'
VR ROUTES

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 | 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 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 centefline from K to N1.

Special Operating Procedures:
(1) Minimum altitude 1500' AGL from 20 NM past M (Noise Sensitive Area).
(2) Minimum altitude N to N1 750' AGL (Noise Sensitive Area N34-47-00 W76-34-00).
(3) Note: 1 June to 1 Sept: Minimum altitude 1500' AGL/5 NM prior to N until N1, Sat-Sun (Noise Sensitive Area).
(4) 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.

FSS's Within 100 NM Radius:

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 B | NKT 276/19 | N35°53.00' W77°15.00'
(See Special Operating Procedures) 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'

2-111
VR ROUTES

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:

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<th>Pt</th>
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<th>Lat/Long</th>
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<td>B</td>
<td>HAB 105/16</td>
<td>N34°07.00' W87°42.00'</td>
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<td>MSL 296/36</td>
<td>N34°59.00' W88°09.00'</td>
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<td>GHM 183/33</td>
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<td>VUZ 260/15</td>
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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 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, between Points B and D, 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, C662-434-7840/7840.

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).
(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 742-7734, 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 743-7840, 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) IR-068 near Point L (48 FTS, DSN 743-7840, C662-434-7840);
   (d) Contact the different scheduling activities for IR-061/062, SR-221 and IR-091 to verify if they are being scheduled to be flown. IR-068 is normally only flown on Tuesdays and Thursdays, a factor only if flying the K to L leg.
   (e) Contact the different scheduling activities for IR-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.

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:

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.


(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’A GL/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:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

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).


(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.

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) CONFLICTS: (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, MCN

VR-1055

ORIGINATING ACTIVITY: FACS FAC, 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.

FSS’s Within 100 NM Radius:
ANB, AND, BNA, MCN

VR-1056

ORIGINATING ACTIVITY: FACS FAC, 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 TG D 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 GQ O 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’
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'
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 N32°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.

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 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: VR-018 crosses left to right from Point E to F (deconflict DSN 944-2004).

(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’ AG (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:
(a) 590’ AGL (680’ MSL) N33-44.0 W79-42.0;
(b) 260’ AGL (738’ MSL) N33-47.1 W82-25.5;
(c) 420’ AGL (994’ MSL) N33-46.2 W82-36.2;
(d) 250’ AGL (320’ MSL) N33-40.3 W79-47.3;
(e) 415’ AGL (536’ MSL) N32-46.8 W81-07.7;
(f) 380’ AGL (405’ MSL) N32-55.5 W80-29.3;
(g) 300’ AGL (900’ MSL) N33-29.4 W82-40.2;
(h) 400’ AGL (1000’ MSL) N33-15.4 W82-35.6.

(16) CAUTION: Five towers:
(a) 400’ AGL (930’) N33-12.6 W82-42.5;
(b) 300’ AGL (500’) N33-02.9 W80-02.7;
(c) 1010’ AGL (1049’) N33-05.0 W78-44.0;
(d) 300’ AGL (480’) N32-44.8 W31-36.9;
(e) 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:
(a) N33-58.0 W81-38.0, avoid by 1000’ AGL/2 NM;
(b) Givhans, SC N33-00.8 W80-20.2, avoid by 1000’ AGL/1.5 NM;
(c) Lake City, SC N33-52.2 W79-45.5, avoid by 1000’ AGL/5 NM;
(d) Lakewood Plantation, SC N33-42.4 W79-34.4, avoid by 1500’ AGL/1 NM;
(e) Residential area N34-01.0 W81-43.5, avoid by 1500’ AGL/1 NM;
(f) 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:
(a) Vidette GA, N33-02.1 W82-14.9, avoid by 1000’ AGL/1 NM;
(b) Structure being used as a target at N33-00.5 W82-41.5, avoid by 1000’ AGL/1 NM;
(c) 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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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/AIRSPACES/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) A-B:
(a) CROSSING: IR-715 left to right at A;
(b) CROSSING: VR-083 parallel entire leg;
(c) CROSSING: VR-1722 left to right 27NM prior to B;
(d) CROSSING: VR-042 right to left 27NM prior to B;
(e) CROSSING: VR-096 left to right 29NM prior to B;
(f) CROSSING: VR-1759 right to left 19NM prior to B;
(g) CROSSING: VR-87 crosses right to left at Point K;
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: IR-715 left to right 36NM prior to E;
(b) CROSSING: VR-1722 parallel entire leg.
(c) CROSSING: VR-043 right to left 34NM prior to E;
(d) 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.

(8) C-D:
(a) CROSSING: VR-042/VR-083 parallel entire leg;
(b) CROSSING: VR-1722 right to left at C.

(9) D-E:
(a) CROSSING: IR-715 left to right 36NM prior to E;
(b) CROSSING: IR-062 left to right 22NM prior to E;
(c) CROSSING: IR-061 right to left 22NM prior to E;
(d) CROSSING: VR-1722 parallel until 34NM prior to E;
(e) CROSSING: IR-081 right to left 22NM prior to E;
(f) CROSSING: IR-062 left to right 6NM prior to B.

(10) E-F:
(a) CAUTION: Landfill (potential bird hazard) at N35-55.7
(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


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


**HOURS OF OPERATION:** 0700-0000 local daily

**ROUTE DESCRIPTION:**

**Altitude Data**

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<th>Fac/Rad/Dist</th>
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<tbody>
<tr>
<td>A</td>
<td>VAD 090/15</td>
<td>N30°59.00' W82°54.00'</td>
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<td>B</td>
<td>VAD 004/25</td>
<td>N31°23.00' W83°11.00'</td>
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<td>C</td>
<td>AMG 302/29</td>
<td>N31°47.50' W82°59.00'</td>
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<td>D</td>
<td>AMG 344/33</td>
<td>N32°03.50' W82°41.00'</td>
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<td>E</td>
<td>AMG 063/22</td>
<td>N31°42.00' W82°08.00'</td>
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<td>F</td>
<td>AMG 107/38</td>
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<td>G</td>
<td>AMG 148/38</td>
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<td>H</td>
<td>VAD 121/17</td>
<td>N30°50.00' W82°54.00'</td>
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**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-023 runs opposite direction between Point A and B. 23 OSOS will deconflict VR-1066 point A from IR-023 Point B 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 and D.
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.

(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**

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<td>A</td>
<td>MGM 150/12</td>
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<td>B</td>
<td>MVC 078/33</td>
<td>N31°32.00' W86°43.00'</td>
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<tr>
<td>C</td>
<td>CEW 059/19</td>
<td>N30°58.50' W86°21.00'</td>
</tr>
<tr>
<td>D</td>
<td>DWG 055/18</td>
<td>N30°39.00' W86°14.00'</td>
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</table>

**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. **CAUTION:** Low flying helicopter traffic below 1500' AGL.
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:**

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<tr>
<td>15 AGL to</td>
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</tr>
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<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>JAN 214/63</td>
<td>N31°41.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>JAN 214/96</td>
<td>N31°15.00'</td>
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<td>05 AGL B 15 AGL to</td>
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<td>JAN 204/99</td>
<td>N31°03.00'</td>
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<td>05 AGL B 15 AGL to</td>
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<td>JAN 165/55</td>
<td>N31°36.00'</td>
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<td>JAN 125/44</td>
<td>N32°02.00'</td>
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<tr>
<td>05 AGL B 15 AGL to</td>
<td>H</td>
<td>MEI 165/25</td>
<td>N31°58.00'</td>
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</table>

**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**


**SCHEDULING ACTIVITY:** Same as Originating Activity

**HOURS OF OPERATION:** 1100-0000Z++ (DAILY)

**ROUTE DESCRIPTION:**

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<td>B</td>
<td>SJU 233/35</td>
<td>N18°01.00'</td>
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<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>SJU 234/46</td>
<td>N17°53.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
<td>D</td>
<td>BQN 200/36</td>
<td>N17°54.00'</td>
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<tr>
<td>05 AGL B 15 AGL to</td>
<td>E</td>
<td>BQN 201/23</td>
<td>N18°07.20'</td>
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<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>BQN 130/31</td>
<td>N18°14.40'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>G</td>
<td>SJU 286/33</td>
<td>N18°29.50'</td>
</tr>
</tbody>
</table>

**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.

**FSS’s Within 100 NM Radius:**

SJU
VR ROUTES

VR-1077


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 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-1078


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-1079


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0000Z++(DAILY)
VR ROUTES

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.

FSS's Within 100 NM Radius:

SJU

VR-1080


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1100-0000Z++ (DAILY)

ROUTE DESCRIPTION:

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<td>N18°29.50' W66°33.80'</td>
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<tr>
<td>05 AGL B 15 AGL to B BQN 130/31</td>
<td>N18°14.40' W66°38.30'</td>
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<tr>
<td>05 AGL B 15 AGL to C BQN 201/23</td>
<td>N18°07.20' W67°11.30'</td>
<td></td>
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<tr>
<td>05 AGL B 15 AGL to D BQN 200/36</td>
<td>N17°54.50' W67°13.00'</td>
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<tr>
<td>01 AGL B 15 AGL to E SJU 234/46</td>
<td>N17°53.00' W66°32.00'</td>
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<td>05 AGL B 15 AGL to F SJU 233/35</td>
<td>N18°01.00' W66°23.50'</td>
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<tr>
<td>05 AGL B 15 AGL to G SJU 227/31</td>
<td>N18°01.30' W66°17.70'</td>
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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'

FSS’s Within 100 NM Radius:

SJU

VR-1081


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'
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


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:

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<td>CEW 013/12</td>
<td>N31°01.00' W86°37.00'</td>
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<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>MVC 131/21</td>
<td>N31°13.00' W87°04.00'</td>
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<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>MVC 214/12</td>
<td>N31°18.00' W87°30.00'</td>
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<td>05 AGL B 15 AGL to</td>
<td>D</td>
<td>MVC 341/29</td>
<td>N31°56.00' W87°30.00'</td>
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<td>CEW 339/42</td>
<td>N31°30.00' W86°56.00'</td>
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<td>F</td>
<td>CEW 030/18</td>
<td>N31°05.00' W86°29.00'</td>
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<td>15 AGL to</td>
<td>G</td>
<td>CEW 061/19</td>
<td>N30°58.00' W86°21.00'</td>
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<td>DWG 055/18</td>
<td>N30°39.00' W86°14.00'</td>
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<td>10 AGL B 15 AGL to</td>
<td>DA</td>
<td>MVC 355/22</td>
<td>N31°49.50' W87°21.50'</td>
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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
VR ROUTES

VR-1083


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:

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 Point E 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


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:

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:**

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<td>MVC 131/21</td>
<td>N31°13.00’ W87°04.00’</td>
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<tr>
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<td>MVC 217/22</td>
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<td>N31°37.00’ W87°40.00’</td>
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<td>N30°58.00’ W86°22.00’</td>
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<td>MVC 091/32</td>
<td>N31°25.00’ W86°44.00’</td>
</tr>
<tr>
<td>15 AGL to</td>
<td>F1</td>
<td>CEW 338/11</td>
<td>N31°00.00’ W86°45.00’</td>
</tr>
<tr>
<td>02 AGL B 10 AGL to</td>
<td>F2</td>
<td>CEW 198/10</td>
<td>N30°40.00’ W86°45.00’</td>
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</table>

**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 W87-03.0 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 Exit Track from Pt F
(13) User must have R2914A scheduled to fly alternate exit track from Point F to F1. Contact Elgin Mission on 315.0 prior to Point F1 for clearance into the Elgin MOA/R2915A.

**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 N31-17.2 W87-25.4;
(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 N31-11.8 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 N31-31.6 W87-16.3;
(r) Tower 450’ (150’) at N31-31.5 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:
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 N26-19.1 W81-16.1 by 1 NM or 1500’ AGL.
(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:
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.
VR ROUTES

2-127

2-127

(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 N26-32.1 W81-27.3; 200’ MSL oil rig 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:

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:
(1) Alternate Entry: B.
(2) Avoid Okeechobee and River Ranch Resort Airports 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.
(4) Contact 347 WG, Det 1/RO during normal duty hours for hazard briefing prior to flight planning.
(5) Route clearance is valid only plus or minus 30 minutes from scheduled time.
(6) Florida turnpike - avoid flight within 1/2 NM either side except when crossing perpendicular to road bed.
(7) CAUTION: Uncharted grass airstrip located at N27-41.0 W80-45.2.
(8) 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 W80-54.3.
(9) 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:

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:
(1) 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.
(2) Contact 347 WG, Det 1/ROA during normal duty hours for hazard briefing prior to flight planning.
(3) To fly VR-1005, coordinate with appropriate agencies according to FLIP.
(4) If Approval to fly VR-1005 is not approved, climb 5 NM prior to C to 1500’ AGL to exit the route.
(5) 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
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**

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<td>MCF 159/23</td>
<td>N27°30.00' W82°22.00'</td>
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<td>05 AGL 15 AGL to B</td>
<td>LBV 314/46</td>
<td>N27°21.70' W82°00.00'</td>
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<td>LBV 319/37</td>
<td>N27°18.00' W81°50.00'</td>
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<td>05 AGL 15 AGL to D</td>
<td>LBV 327/26</td>
<td>N27°11.50' W81°39.00'</td>
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<td>05 AGL 15 AGL to E</td>
<td>PHK 325/28</td>
<td>N27°10.00' W80°59.30'</td>
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<td>05 AGL 15 AGL to F</td>
<td>VRB 237/17</td>
<td>N27°30.00' W80°45.00'</td>
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<td>ORL 169/29</td>
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<td>05 AGL 15 AGL to I</td>
<td>ORL 181/32</td>
<td>N28°00.00' W81°21.00'</td>
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<td>05 AGL 15 AGL to J</td>
<td>ORL 181/46</td>
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**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**

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<td>FSM 086/45</td>
<td>N35°21.00' W93°21.00'</td>
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<td>01 AGL 15 AGL to C</td>
<td>FSM 102/44</td>
<td>N35°09.00' W93°26.00'</td>
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<td>01 AGL 15 AGL to D</td>
<td>PGO 063/34</td>
<td>N34°54.00' W93°58.00'</td>
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VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE WIDTH - 5 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.

Special Operating Procedures:
(1) Alternate Entry: N/A.
(2) Alternate Exit: D.
(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) Uncharted and not in chart route obstructions:
(a) Tower N35-28.705 W94-12.469 (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 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  COT 113/24  N28°15.00'  W98°44.00'
SFC B 15 AGL to B  COT 040/19  N28°16.00'  W98°23.00'
SFC B 15 AGL to C  COT 074/20  N28°38.00'  W98°33.00'
SFC B 15 AGL to D  THX 282/22  N28°40.00'  W98°45.00'
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 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) MARSA (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-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°40.00'  W98°45.00'
SFC B 15 AGL to E  COT 040/19  N28°40.00'  W98°51.00'
SFC B 15 AGL to F  COT 113/24  N28°15.00'  W98°44.00'

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 Points: D and E.
(2) Alternate Exit Points: D and E.

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

Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
As assigned to A  N29°05.00'  W98°41.00'
SFC B 15 AGL to B  N28°16.00'  W98°23.00'
SFC B 15 AGL to C  N28°38.00'  W98°33.00'
SFC B 15 AGL to D  N28°40.00'  W98°45.00'
SFC B 15 AGL to E  N28°51.00'  W98°44.00'

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°40.00'  W98°45.00'
SFC B 15 AGL to E  COT 040/19  N28°40.00'  W98°51.00'
SFC B 15 AGL to F  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. Only aircraft assigned to 149 TFG and/or originated out of Kelly AFB, TX to include exercise type operation will use this route.
(3) MARSA 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.

FSS’s Within 100 NM Radius:
SJT
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' | 10 AGL B 15 AGL to B | FST 172/88 | N29°29.00' W103°04.00'
01 AGL B 15 AGL to B | CNX 074/46 | N34°24.50' W104°45.50' | 10 AGL B 15 AGL to C | FST 155/67 | N29°52.00' W102°40.00'
01 AGL B 15 AGL to C | CVS 239/28 | N34°13.00' W103°50.50' | 05 AGL B 15 AGL to D | FST 155/52 | N30°07.00' W102°44.00'
01 AGL B 15 AGL to D | TCC 195/33 | N34°41.50' W103°54.00' | 05 AGL B 15 AGL to E | DLF 303/101 | N30°26.00' W102°16.00'
01 AGL B 15 AGL to E | TCC 239/23 | N35°03.50' W104°02.50' | 05 AGL B 15 AGL to F | DLF 294/82 | N30°03.00' W102°07.00'
01 AGL B 15 AGL to F | ABQ 074/48 | N35°05.00' W105°51.00' | 10 AGL B 15 AGL to G | ABQ 074/48 | N35°05.00' W105°51.00'

TERRAIN FOLLOWING OPERATIONS: Authorized for entire route.

ROUTE DESCRIPTION:

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 tapering to 4 NM either side of centerline from E to F.

Special Operating Procedures:

(1) Avoid Ft. Sumner Airport (Segment B-C N34-02-30 W104-17-00) by 1.5 NM.
(2) Avoid Double V Ranch private airport (Segment A-B N34-02-30 W104-17-55) by 2 NM.
(3) Avoid the following by 1 NM: Santa Rosa Lake (N35-02-30 W104-17-00), 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 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' | As assigned to B | FST 172/88 | N29°29.00' W103°04.00' | As assigned to C | FST 155/67 | N29°52.00' W102°40.00' | As assigned to D | FST 155/52 | N30°07.00' W102°44.00' | As assigned to E | DLF 303/101 | N30°26.00' W102°16.00' | As assigned to F | DLF 294/82 | N30°03.00' W102°07.00' | As assigned to G | ABQ 074/48 | N35°05.00' W105°51.00' | As assigned to H | ABQ 074/48 | N35°05.00' W105°51.00' |

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 Nevis Springs Cavalry Post (N29-22.3 W103-12.3) 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’, stay 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 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-65, 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 overnight 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 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’ 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’, stay 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

2-132
**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:**

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>MQP 198/4</td>
<td>N32°40.00' W98°02.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>JEN 191/11</td>
<td>N31°58.80' W97°56.50'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>LZZ 014/24</td>
<td>N31°33.80' W97°58.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>D</td>
<td>LZZ 047/21</td>
<td>N31°23.00' W97°48.90'</td>
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</table>

**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 N31-22.2 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 DESCRIPTION:**

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<th>Lat/Long</th>
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</thead>
<tbody>
<tr>
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<td>A</td>
<td>TIK 142/15</td>
<td>N35°13.00' W97°13.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>MLC 270/32</td>
<td>N34°55.00' W96°25.00'</td>
</tr>
<tr>
<td>SFC B 15 AGL to</td>
<td>C</td>
<td>MLC 160/32</td>
<td>N34°20.00' W95°39.00'</td>
</tr>
<tr>
<td>SFC B 15 AGL to</td>
<td>D</td>
<td>PGO 288/3</td>
<td>N34°42.00' W94°40.00'</td>
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<tr>
<td>SFC B 15 AGL to</td>
<td>E</td>
<td>PGO 022/10</td>
<td>N34°50.00' W94°31.00'</td>
</tr>
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<td>10 AGL B 15 AGL to</td>
<td>F</td>
<td>FSM 167/19</td>
<td>N35°04.00' W94°14.00'</td>
</tr>
<tr>
<td>10 AGL B 15 AGL to</td>
<td>G</td>
<td>FSM 141/14</td>
<td>N35°11.00' W94°07.00'</td>
</tr>
</tbody>
</table>

**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 centeline 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:

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 10 NM right of centerline from A to B; 4 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.

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: Authorized for entire route.

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: 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 10 NM right 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.

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 hol).

HOURS OF OPERATION: Sunrise-Sunset Sat-Sun
(4) Conflicts:
(a) VR-1117 is the reverse routing of VR-1109.
(b) VR-1108 is common from D-F.
(c) 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, CB30-298-5484 to determine whether routes VR-1108/1109 are in use. Call 7 OSS/OSOR Dyess AFB, TX; DSN 461-3665, CB35-696-3665 to deconflict exit routing with IR-178.

(5) Communications:
(a) All users must monitor 255.4 while on the route.
(b) If recovering to Laughlin, contact Del Rio APP Control UHF (270.1).
(c) Contact Albuquerque Center UHF (292.15) for IFR clearance to all other destinations.

(6) Noise sensitive Areas:
(a) Avoid all charted airfields (if practical) by 3 NM or 1500' AGL.
(b) Avoid the National Park Airfield (uncharted) at 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.

(7) Laughlin Specific Procedures:
(a) 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.
(b) If a problem is encountered on the western portion of the route and the route must be discontinued, climb to 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.
(c) 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 THX 227/33 N28°11.00' W97°40.00'
01 AGL B 15 AGL to C CKW 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:
(1) Alternate Entry: B.
(2) Alternate Exit: B.
(3) Tie-in FSS: San Angelo (SJT).
(4) Avoid Kennedy Airport by 3 NM and 1500' AGL.
(5) Approval to fly route does not include clearance into R-6312.

2-135
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:
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, 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 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-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°42.00'
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, 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 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 733-6903/04/05, 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  N34°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 (N33-45.8 W098-49.2).
(7) Avoid by 1500' or 3 NM all charted airfields.
(8) Do not overfly Refinery at Wyneood, 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 W098-52-03).
(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:**

**TERRAIN FOLLOWING OPERATIONS:** Authorized from Point B to F.

**ROUTE WIDTH**: 2 NM either side of centerline.

**Special Operating Procedures:**
1. Route designed to 420 knots.
2. All bank turns—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:**
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
VR ROUTES

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:

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 seperation.
(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, 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°39.00' W98°48.00'.
(10) Use caution when operating just past Point B for T-37 aircraft operating at 500' AGL.

FSS's Within 100 NM Radius:

FTW, ICT, MLC

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:

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.
(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-1128. 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°48.8'; ML NSA at N33°40.8' W97°43.4'.

FSS's Within 100 NM Radius:

FTW, SJT
(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' | W98°49.00'
02 AGL B 15 AGL to B IFI 221/25 | N35°32.00' W98°24.00' | W98°24.00'
02 AGL B 15 AGL to C IRW 236/29 | N35°08.00' W98°08.50' | W98°08.50'
02 AGL B 15 AGL to D IRW 196/43 | N34°42.00' W97°57.00' | W97°57.00'
02 AGL B 15 AGL to E ADM 310/13 | N34°22.00' W97°21.00' | W97°21.00'
02 AGL B 15 AGL to F ADM 205/28 | N33°49.00' W97°27.00' | W97°27.00'
02 AGL B 15 AGL to G UKW 150/7 | N33°26.00' W97°46.00' | W97°46.00'
02 AGL B 15 AGL to H SHP 153/27 | N33°33.00' W98°20.00' | 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.
(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.

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.

(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 at the following airports: Sayre; Haddock; Shamrock; Mclean/Gray Co; Clarendon; Memphis; Foard Co; Wheelan 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°56.50’ W99°16.60’.

(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 736-6275/4995, 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°35.00’
02 AGL B 15 AGL to B GTH 051/25 N33°58.50’ W98°54.00’
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 G PNH 070/53 N35°25.00’ W100°39.00’
Position report to Amarillo FSS at Pt G
02 AGL B 15 AGL to H SYO 078/8 N35°21.00’ W99°28.70’
02 AGL B 15 AGL to A SPS 169/36 N33°51.50’ W98°57.80’
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’

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.


(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; Wheelan 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°56.50’ W99°16.60’.

(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 ROUTES

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.
(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/flowed 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'

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'

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:**

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<td>W97°05.00'</td>
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<td>SHP 090/23</td>
<td>N33°55.00'</td>
<td>W98°01.50'</td>
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**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-1139 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, 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

**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

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<tr>
<td>02 AGL B 15 AGL to A</td>
<td>SHP 090/23</td>
<td>N33°55.00'</td>
<td>W98°01.50'</td>
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<tr>
<td>02 AGL B 15 AGL to B</td>
<td>ADM 273/28</td>
<td>N34°17.00'</td>
<td>W97°44.00'</td>
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<tr>
<td>02 AGL B 15 AGL to C</td>
<td>ADM 006/21</td>
<td>N34°33.00'</td>
<td>W97°05.00'</td>
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<tr>
<td>02 AGL B 15 AGL to D</td>
<td>ADM 046/37</td>
<td>N34°35.00'</td>
<td>W96°35.00'</td>
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<tr>
<td>02 AGL B 15 AGL to E</td>
<td>BYP 348/30</td>
<td>N34°02.50'</td>
<td>W96°18.00'</td>
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<tr>
<td>02 AGL B 15 AGL to F</td>
<td>BYP 307/33</td>
<td>N33°55.00'</td>
<td>W96°43.00'</td>
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<tr>
<td>02 AGL B 15 AGL to G</td>
<td>BYP 288/38</td>
<td>N33°48.00'</td>
<td>W96°56.00'</td>
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<td>02 AGL B 15 AGL to H</td>
<td>UKW 150/7</td>
<td>N33°33.00'</td>
<td>W97°05.00'</td>
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<tr>
<td>02 AGL B 15 AGL to I</td>
<td>SHP 140/25</td>
<td>N33°37.00'</td>
<td>W98°14.00'</td>
</tr>
</tbody>
</table>

**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.
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

**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:** 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

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**VR ROUTES**

**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'
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' |
02 AGL B 15 AGL to C | SAF 298/44 | N36°37.00' W102°28.00' |
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 031/14 | N36°39.80' W104°40.10' |
02 AGL B 15 AGL to H | 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' |

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' |
**VR ROUTES**

**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.
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. **CAUTION:** Multiple IR routes crossing 26 nm West of Pt B and 8 nm East of Pt B.
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:**

**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.
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 (N35-35-50 W105-28-30), Bernal (N35-33-15 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.

**ROUTE DESCRIPTION:**

**Altitude Data**

<table>
<thead>
<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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</thead>
<tbody>
<tr>
<td>ABQ 074/48</td>
<td>N35<em>05.00’ W105</em>51.00’</td>
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</tr>
<tr>
<td>B TCC 239/23</td>
<td>N35<em>03.50’ W104</em>02.50’</td>
<td></td>
</tr>
<tr>
<td>C TCC 195/33</td>
<td>N34<em>41.50’ W103</em>54.00’</td>
<td></td>
</tr>
<tr>
<td>D CVS 237/28</td>
<td>N34<em>13.00’ W103</em>50.50’</td>
<td></td>
</tr>
<tr>
<td>E CNX 074/46</td>
<td>N34<em>24.50’ W104</em>45.50’</td>
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</tr>
<tr>
<td>F CNX 291/12</td>
<td>N34<em>29.00’ W105</em>53.00’</td>
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</tbody>
</table>

**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 deconfliction. Additionally, See and Avoid.

FSS’s Within 100 NM Radius:
DRI

VR-1205


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.
(7) Uncharted obstructions: 100’ single short unlit tower N34°53.94 W117°16.00’

FSS’s Within 100 NM Radius:
HHR, RAL, RNO, SAN

VR-1206


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.
VR ROUTES

2-147

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, Fit 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 Conflictions: 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.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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<th>Pt</th>
<th>Fac/Rad/Dist</th>
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<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>IPL 308/25</td>
<td>N33°05.00'</td>
</tr>
<tr>
<td>03 AGL B 10 MSL to B</td>
<td>I PL 345/28</td>
<td>N33°13.00'</td>
<td>W115'31.00'</td>
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<tr>
<td>03 AGL B 10 MSL to C</td>
<td>IPL 069/34</td>
<td>N32°49.00'</td>
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<tr>
<td>03 AGL B 15 MSL to D</td>
<td>IPL 071/12</td>
<td>N32°46.00'</td>
<td>W115'16.00'</td>
</tr>
<tr>
<td>03 AGL B 15 MSL to E</td>
<td>IPL 348/10</td>
<td>N32°55.00'</td>
<td>W115'30.00'</td>
</tr>
<tr>
<td>03 AGL B 10 MSL to F</td>
<td>IPL 307/15</td>
<td>N32°57.00'</td>
<td>W115'42.00'</td>
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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 deconflication.
(7) This route MARSA 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/18 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


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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<tbody>
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<td>DAG 199/37</td>
<td>N34°27.00'</td>
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<tr>
<td>15 AGL to</td>
<td>B</td>
<td>DAG 198/31</td>
<td>N34°32.00'</td>
</tr>
<tr>
<td>05 AGL B 15 AGL to C</td>
<td>DAG 161/7</td>
<td>N34°51.00'</td>
<td>W116°34.00'</td>
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<tr>
<td>01 AGL B 15 AGL to D</td>
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<td>N35°22.00'</td>
<td>W116°09.00'</td>
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<td>N35°49.00'</td>
<td>W116°08.00'</td>
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<td>BTY 130/48</td>
<td>N36°08.00'</td>
<td>W116°11.00'</td>
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<td>01 AGL B 10 AGL to G</td>
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<td>N36°30.00'</td>
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<td>BTY 135/11</td>
<td>N36°38.00'</td>
<td>W116°38.00'</td>
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</table>

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, Ft 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 VR-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


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, Ft 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 Exit: B.
(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 VC Valley (Victoryville-Southern California International) 08 8022 located between Points A and B.
(14) Numerous Victor 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


HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

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, Ft 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 1500’ AGL and 2 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.
(10) Cross I-40 in vicinity of C and I-15 between D and E at or above 500’ AGL.
(11) Use caution in the Barstow MOA for helicopters at or below 300’ AGL crossing Coyote Drylake between Barstow and the National Training Center at Ft. Irwin.

Altitude Data

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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.
**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-1241/1215 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 57FWW/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.

**SFF’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:**

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<td>GFS 199/27</td>
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<td>H</td>
<td>DAG 279/19</td>
<td>N35°05.50’ W116°56.00’</td>
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**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:**

1. Alterate entry point: B
2. Maintain 1500’AGL until past Point B on leg B to C.
3. Cross I-40 between C and D to F and I-15 between G and H at or above 500’ AGL.
4. Avoid R-2501 between C and D.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.
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 3000’AGL crossing Coyote Drylake between Barstow and the National Training Center at Ft. Irwin.
12. 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.
13. 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 E 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 W115-39.16; 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
VR ROUTES

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


SCHEDULING ACTIVITY: 355 OSS/OSSOSO, 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, I and J.
(3) Alternate Exit: B, C, D, E, F, G, I and J.
(4) 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.
(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’

2-151
VR ROUTES

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.
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 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. 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 Dunsmuir.
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.

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
---|---|---|---
02 AGL B 15 AGL to I | FOT | 175/52 | N40°50.00’ W124°30.00’
02 AGL B 15 AGL to J | FOT | 175/26 | N40°15.00’ W124°22.00’
02 AGL B 15 AGL to C | OED | 114/27 | N42°10.00’ W122°28.00’
02 AGL B 15 AGL to D | OED | 051/37 | N42°41.00’ W122°08.00’
02 AGL B 15 AGL to E | LMT | 025/40 | N41°53.00’ W120°36.00’
10 AGL B 15 AGL to F | LKV | 129/58 | N41°40.00’ W119°49.00’
02 AGL B 15 AGL to G | LLC | 261/45 | N40°12.50’ W119°32.50’
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’

FSS's Within 100 NM Radius:
ACV, MCC, RNO, RIU

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 2 NM either side of centerline.

Special Operating Procedures:
1. Alternate Entry: D and H.
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.
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.


(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.


(11) Maintain 1500’ AGL from 25 NM south until 5 NM east of H over the Sky Lakes Wilderness Area.


(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

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 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.
(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:

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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 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.
(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:

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 and I.
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 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.
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 Olancha 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.
(18) Between E anf 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 Yerinton to the west by 1500’ or 3 NM.
(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.

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:

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

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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:

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, 801-777-4401 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 Nellis AFB 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.
(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 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) 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:

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, 801-777-4401 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 Nellis AFB 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.
(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 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) Between H and I, avoid ranch at N40-18-30 W116-35-00 by 1500’ or 3 NM.
**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 prior to flight for authorization.
(8) 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.

**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:**

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<td>N39°43.00’</td>
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<td>RBL 270/43</td>
<td>W123°50.00’</td>
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**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:**

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2-158
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.
(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.
(12) Caution: 20 NM east of C, intensive hang glider activity during daylight hours from surface to 10,000 MSL along Temblor Mountain Range.
(14) At D, fly north of centerline to avoid the towns of Taft and Ford City.
(15) Caution: numerous towers located between D and I:
(a) 218' tower south of D-E centerline at N35-05-30 W119-15-00.
(b) 299' tower north of D-E centerline at N35-08 W119-06.
(c) 304' tower north of D-E centerline at N35-04-00 W118-59-30.
(d) 246' tower north of E-F centerline at N35-02 W118-19-01.
(e) 235' windmills east of G at N34-55-11 W118-19-19.
(f) 577' tower east of G at N34-55-11 W118-19-01.
(g) 292' tower southeast of H-I centerline at N35-07-30 W118-12-30.
(16) Caution: numerous airports located between D and I:
(a) Taft at N35-08-30 W119-26-00.
(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').
(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 Olancha 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:

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<td>OAL 208/21</td>
<td>N37°45.00' W118°05.00'</td>
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<td>OAL 336/19</td>
<td>N38°19.00' W117°49.00'</td>
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<tr>
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<td>MVA 040/19</td>
<td>N38°44.00' W117°42.00'</td>
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<td>MVA 009/49</td>
<td>N39°18.00' W117°34.00'</td>
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<td>N39°35.00' W117°43.00'</td>
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<td>LLC 107/34</td>
<td>N39°48.00' W117°58.00'</td>
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TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 6 NM either side of centerline.

Special Operating Procedures:

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).
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 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.
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:

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<td>N34°47.00' W118°36.00'</td>
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<tr>
<td>10 AGL B 15 AGL to D</td>
<td>PMD 245/16</td>
<td>N34°35.00' W118°23.00'</td>
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<tr>
<td>10 AGL B 15 AGL to E</td>
<td>PMD 150/9</td>
<td>N34°29.00' W118°01.00'</td>
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<tr>
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<td>N34°19.00' W117°19.00'</td>
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<td>N34°27.00' W117°00.00'</td>
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<td>N34°51.00' W116°34.00'</td>
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<td>GFS 238/52</td>
<td>N34°52.00' W116°11.00'</td>
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<td>N35°28.00' W115°28.00'</td>
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<td>02 AGL B 15 AGL to K</td>
<td>EED 288/20</td>
<td>N34°57.00' W114°49.00'</td>
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<td>BLH 167/17</td>
<td>N33°19.00' W114°46.00'</td>
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TERRAIN FOLLOWING OPERATIONS: Authorized 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 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).


(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:

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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:

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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’

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 Area 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
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’
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

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 W118-29.0
(c) 200' lit tower N35-07.84 W118-21.02

FSS's Within 100 NM Radius:
HHR, RAL, RNO, SAN

VR-1293

HOURS OF OPERATION: Continuous

ORIGINATING ACTIVITY: 124 WG/OGAM (ANG), 3996 W. Aerona St., Boise, ID 83705-8004 DSN 422-5310, C208-422-5310.
SCHEDULING ACTIVITY: 124 WG/OS (ANG), 3996 W. Aerona 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'  W113°54.00'
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  L  BOI 206/59  N42°50.00'  W117°06.00'
01 AGL B 15 AGL to  MM  BOI 094/78  N42°26.00'  W115°33.50'
01 AGL B 15 AGL to  N  BOI 150/130  N41°37.00'  W115°33.50'
01 AGL B 15 AGL to  O  BOI 149/119  N42°00.00'  W115°33.50'
01 AGL B 15 AGL to  Y  BOI 146/97  N41°54.50'  W113°54.00'

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:

(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 E is 1000' AGL.
(3) 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) 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-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:

(1) Route crossing at several points, be especially vigilant for crossing traffic.
(2) Noise Sensitive Areas: Overfly at 1500' or avoid by 3 NM. Buildings (N44°-08.0 W118°-59.0).
(3) Avoid all airports by over flight by 1500' AGL or 3 NM. Uncharted airport: (N42°-45.0 W118°-28.0).
(4) Uncharted obstructions: None above 100' AGL.
(5) Ultralight activity: (N44°-10.0 W118°-14.0).
(6) All turn points are entry and exit points.
(7) Exit at Point H does not constitute clearance into Owyhee MOA.
VR ROUTES

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:

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 5 NM either side of centerline.

Special Operating Procedures:
(1) Route crossing at several points, be especially vigilant for crossing traffic.
(2) Noise Sensitive Areas: Overfly at 1500’ AGL or avoid by 3 NM. Buildings (N42-46.0 W117-53.0).
(3) Avoid all airports by overflight by 1500’ AGL or 3 NM. Uncharted airports: (N42-47.0 W117-51.0).
(4) Uncharted obstructions: None above 100’ AGL.
(5) Ultralight activity: (N44-10.0 W118-14.0).
(6) All turn points are entry and exit points.
(7) Exit at Point E does not constitute clearance into Owyhee MOA.
(8) Min Alt (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.
VR ROUTES

(c) Mountain City (N41-50-30 W115-57-30);
(d) Ranch (N41-43-50 W115-58-50);
(e) Ward Ranch/uncharted airport (N43-07-00 W114-11-30);
(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).

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:
(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).

All turn points are considered Alternate Entry/Exit points.

FSS’s Within 100 NM Radius:

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:

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tr>
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<td>A</td>
<td>BOI 069/48</td>
<td>N43°35.50' W115°08.30'</td>
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<td>BOI 056/100</td>
<td>N43°59.20' W114°00.50'</td>
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<td>PIH 300/65</td>
<td>N43°29.00' W113°40.50'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
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<td>PIH 298/55</td>
<td>N43°31.00' W113°32.50'</td>
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<td>01 AGL B 15 AGL to</td>
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<td>PIH 295/40</td>
<td>N43°18.50' W113°19.50'</td>
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<td>PIH 257/26</td>
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<td>PIH 224/28</td>
<td>N42°38.50' W113°12.00'</td>
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<td>PIH 203/42</td>
<td>N42°19.80' W113°15.70'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
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<td>BYI 120/37</td>
<td>N42°07.00' W113°18.50'</td>
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<td>01 AGL B 15 AGL to</td>
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<td>BYI 153/32</td>
<td>N42°03.00' W113°45.00'</td>
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<td>BYI 182/43</td>
<td>N41°54.50' W114°12.00'</td>
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<td>BOI 147/132</td>
<td>N41°26.00' W115°33.50'</td>
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<td>N41°36.50' W116°12.00'</td>
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<td>BOI 196/75</td>
<td>N42°30.00' W117°06.00'</td>
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<td>BOI 206/59</td>
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<td>BOI 147/132</td>
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<td>BOI 146/121</td>
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<td>BOI 143/99</td>
<td>N42°00.00' W115°33.50'</td>
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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).

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.

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:
   (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).

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' W116°12.00'
01 AGL B 15 AGL to D BOI 163/117 N41°36.50' W115°33.50'
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 P BOI 070/46 N43°35.50' W115°08.30'
Alternate Exit: Y EPH 283/48 N47°43.00' W119°35.20'
01 AGL B 15 AGL to Q EPH 294/33 N47°14.10' W120°04.00'
15 AGL to EPH 321/21 N47°44.00' W119°35.20'
01 AGL B 15 AGL to X BOI 149/119 N41°26.00' W115°33.50'
01 AGL B 15 AGL to Y BOI 146/97 N41°37.00' W115°33.50'
01 AGL B 15 AGL to Alternate Exit: Y EPH 283/48 N47°43.00' W119°35.20'
01 AGL B 15 AGL to F YKM 043/29 N46°47.00' W119°48.00'
01 AGL B 15 AGL to G YKM 085/26 N46°26.80' W119°50.10'

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).
   (d) Ward Ranch/uncharted airport (N41°55-30 W114°07-00).
   (e) Craters of the Moon National Monument (N43°27-45 W113°33-00).
   (f) Henry area (N41°42-10 W114°49-00).

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'

(2) Due to bird strike potential, minimum altitude from 5 NM prior to 5 NM past Point G is 1000' AGL.
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 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°47.70‘ W120°01.00‘ 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.


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.

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 Knot. 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.
ROUTE DESCRIPTION:

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<th>Pt</th>
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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 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 (N41-31.2 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.

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
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:

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 MARSA. 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:

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) 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 E.
(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:**

**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) 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:**

**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) MARSA 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


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2400 lcl Mon-Thurs, 0700-1800 lcl Fri, 0800-1700 lcl Sat

ROUTE DESCRIPTION:

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.

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 F LCU 090/30 N41°13.00' W113°12.00'
01 AGL B 15 AGL to 01 AGL B 15 AGL to R-4604A

Cross at 15 AGL or as assigned.

Altitude Data Pt Fac/Rad/Dist Lat/Long
03 AGL B 15 AGL to 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.

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.

03 AGL B 15 AGL to 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 either side of centerline.
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


SCHEDULING ACTIVITY: Same as Originating Activity.

HOURS OF OPERATION: 0700-2400 lcl Mon-Thurs, 0700-1800 lcl Fri, 0800-1700 lcl Sat

ROUTE DESCRIPTION:
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°59.00'  W98°56.00'
01 AGL B 15 AGL to E  ONL 191/31  N42°08.00'  W99°10.00'
01 AGL B 15 AGL to F  ONL 217/29  N42°08.00'  W100°01.00'
01 AGL B 15 AGL to G  ONL 242/63  N42°43.00'  W99°29.00'
01 AGL B 15 AGL to H  ONL 283/38  N43°00.00'  W98°40.00'
01 AGL B 15 AGL to I  ONL 352/32  N42°34.00'  W97°59.00'
01 AGL B 15 AGL to J  ONL 069/32

TERRAIN FOLLOWING OPERATIONS: Authorized from B to J.

ROUTE WIDTH - 8 NM either side of centerline between A and J.
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:

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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 W98-58.0).
(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:
OLU, HON

VR-1525

**VR ROUTES**

**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’
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:** 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.

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

**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’

**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 MSL (150’ AGL);
   b. Tower-N36°-48.5 W93°-31.5 MSL (185’ AGL);
   c. Tower-N37°-09.0 W92°-53.0 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 CRTC, 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 | 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’
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 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, and F.
(5) All aircraft will maintain 1000' AGL from C to D.
(6) 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-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 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 C ASP 190/25 N44°02.00' W83°26.00'

FSS's Within 100 NM Radius:
FOD, GRB, PNW

2-176
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. Do not proceed beyond Point H (F3) unless cleared into R-4201.

3. 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.

FSS's Within 100 NM Radius:
CLE, LAN

V R OUT E S

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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tbody>
<tr>
<td>05 AGL B 15 AGL to A</td>
<td>ECK VORTAC</td>
<td>N43°15.35'</td>
<td>W82°43.07'</td>
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<tr>
<td>05 AGL B 15 AGL to B</td>
<td>ECK 357/49</td>
<td>N44°04.00'</td>
<td>W82°55.00'</td>
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<tr>
<td>05 AGL B 15 AGL to C</td>
<td>ASP 045/28</td>
<td>N44°49.00'</td>
<td>W83°00.00'</td>
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<tr>
<td>at or below 15 AGL (Below 05 AGL only over water) (Alternate Exit D to enter VR-1624 for northern range entry)</td>
<td>APN 245/19</td>
<td>N44°55.00'</td>
<td>W83°56.00'</td>
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<tr>
<td>05 AGL B 15 AGL to D</td>
<td>APN 246/43</td>
<td>N44°43.00'</td>
<td>W84°25.00'</td>
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<td>05 AGL B 15 AGL to E</td>
<td>APN 255/48</td>
<td>N44°47.00'</td>
<td>W84°36.00'</td>
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</table>

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:

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
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<td>ASP 045/28</td>
<td>N44°49.00'</td>
<td>W83°00.00'</td>
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<tr>
<td>01 AGL B 15 AGL to B</td>
<td>APN 041/13</td>
<td>N45°16.00'</td>
<td>W83°23.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to C</td>
<td>PLN 069/41</td>
<td>N45°56.00'</td>
<td>W83°48.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to D</td>
<td>PLN 061/34</td>
<td>N45°57.00'</td>
<td>W84°00.00'</td>
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<tr>
<td>01 AGL B 15 AGL to E</td>
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<td>N45°37.40'</td>
<td>W84°12.00'</td>
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<td>N45°14.70'</td>
<td>W84°02.90'</td>
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<td>N45°00.00'</td>
<td>W84°31.40'</td>
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<td>05 AGL B 15 AGL to H</td>
<td>APN 261/45</td>
<td>N45°37.40'</td>
<td>W84°12.00'</td>
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<tr>
<td>01 AGL B 15 AGL to E</td>
<td>PLN 097/20</td>
<td>N45°05.80'</td>
<td>W83°59.80'</td>
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</table>
VR ROUTES

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; 2 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). turned
(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); (N45-09 W83-58).
(7) Point E to F:
   (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 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.
(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 1 NM.
(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 A 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

ORIGGINATING 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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/ Dist</th>
<th>Lat/Long</th>
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<tbody>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>A</td>
<td>ASP 045/28</td>
<td>N44°49.00' W83°00.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>APN 041/13</td>
<td>N45°16.00' W83°23.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>PLN 069/41</td>
<td>N45°56.00' W83°48.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
<td>D</td>
<td>PLN 061/34</td>
<td>N45°57.00' W84°00.00'</td>
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<tr>
<td>05 AGL B 15 AGL to</td>
<td>E</td>
<td>PLN 021/21</td>
<td>N45°58.00' W84°32.00'</td>
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<tr>
<td>05 AGL B 15 AGL to</td>
<td>F</td>
<td>SSM 255/26</td>
<td>N46°16.00' W84°55.00'</td>
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<td>05 AGL B 15 AGL to</td>
<td>G</td>
<td>SSM 258/52</td>
<td>N46°10.00' W85°31.00'</td>
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<td>05 AGL B 15 AGL to</td>
<td>H</td>
<td>ESC 059/59</td>
<td>N46°13.00' W85°52.00'</td>
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</table>
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' 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-1631


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'

VR-1629

Originating Activity: 127th OG/CC, Selden ANGB, MI 48045 DSN 273-5055/5719.
VR ROUTES

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, 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) 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) 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.
(8) Use caution for light aircraft operating in the vicinity of an unmarked private airport at Point H.
(9) 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:
As assigned to
Altitude Data Pt Fac/Rad/Dist Lat/Long
03 AGL B 15 AGL 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'

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:

ROUTE WIDTH - 7 NM either side of centerline.

ROUTE DESCRIPTION:

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<th>Pt</th>
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<td>W89°16.00'</td>
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<tr>
<td>05 AGL B 15 AGL to B</td>
<td>VLA 029/11</td>
<td>N39°15.00'</td>
<td>W89°02.00'</td>
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<tr>
<td>05 AGL B 15 AGL to C</td>
<td>VLA 256/26</td>
<td>N39°01.00'</td>
<td>W89°42.00'</td>
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<tr>
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<td>STL 020/37</td>
<td>N39°26.00'</td>
<td>W90°12.00'</td>
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<tr>
<td>05 AGL B 15 AGL to E</td>
<td>UIN 108/35</td>
<td>N39°37.00'</td>
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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 MARSA 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-1636

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
VR ROUTES

TERRAIN FOLLOWING OPERATIONS: Authorized from C to F.

ROUTE WIDTH - 2 NM either side of centerline for 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:

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 J; 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) 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 | W40°52.00'/W85°53.00'
05 AGL B 15 AGL to B | FWA 264/44 | W40°54.00'/W86°09.00'
05 AGL B 15 AGL to C | FWA 269/77 | W40°57.00'/W86°53.00'
05 AGL B 15 AGL to D | FWA 255/108 | W40°30.00'/W87°28.00'
05 AGL B 15 AGL to E | FWA 243/110 | W40°07.00'/W87°19.00'
05 AGL B 15 AGL to F | FWA 229/110 | W39°45.00'/W86°59.00'
05 AGL B 15 AGL to G | FWA 224/119 | W39°32.00'/W86°58.50'
05 AGL B 15 AGL to H | FWA 220/130 | W39°18.00'/W86°58.00'
05 AGL B 15 AGL to I | FWA 217/136 | W39°09.50'/W86°57.70'
05 AGL B 15 AGL to J | FWA 211/142 | W38°56.00'/W86°45.00'
05 AGL B 15 AGL to K | FWA 201/129 | W38°58.00'/W86°12.00'
05 AGL B 15 AGL to L | FWA 203/114 | W39°13.00'/W86°08.00'

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

ROUTE WIDTH - 4 NM either side 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 J; 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 N39-00 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:

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<td>OKK 227/21</td>
<td>N40°17.00' W86°24.00'</td>
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<tr>
<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>TTH 036/20</td>
<td>N39°45.00' W86°59.00'</td>
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<tr>
<td>05 AGL B 15 AGL to</td>
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<td>TTH 076/13</td>
<td>N39°32.00' W86°58.50'</td>
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<td>TTH 129/17</td>
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<td>OOM 275/16</td>
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<td>H</td>
<td>OOM 081/23</td>
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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 I-J; 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:

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<tr>
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<td>N40°17.00' W86°24.00'</td>
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<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>TTH 036/20</td>
<td>N39°45.00' W86°59.00'</td>
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<tr>
<td>05 AGL B 15 AGL to</td>
<td>C</td>
<td>BVT 202/29</td>
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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:

As assigned to
Pt  Fac/Rad/Dist  Lat/Long
A  APN 261/45  N44°52.00' W84°34.80'
B  APN 270/41  N45°00.00' W84°31.40'
C  APN 302/23  N45°14.70' W84°02.90'
D  APN 245/19  N44°55.00' W83°56.00'
E  ASP 328/16  N44°39.00' W83°38.00'
F  ASP 231/21  N44°12.00' W83°44.00'
G  ASP 190/25  N44°02.00' W83°26.00'
H  ECK 357/49  N44°04.00' W82°55.00'
I  ECK VORTAC  N43°15.35' W82°43.07'
A1 APN 261/45  N44°52.00' W84°34.80'
B1 APN 270/41  N45°00.00' W84°31.40'
B2 APN 274/37  N45°02.70' W84°26.00'
C1 APN 280/19  N45°05.80' W83°59.80'
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°59.0 W84°27.3.
3. Point B to C:
   a. Avoid Johannesburg - N45°00.0 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 B 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).
(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 sod airstrip (N44-16.0 W83-47.0);
(f) 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: N44-22.0 W83-38.0; N44-34.0 W83-35.0).

(6) Point E to F:
(a) Avoid Johannesburg (N44-59.0 W84-27.3) by 1 NM.
(b) Avoid Heatherton (N45-01.0 W84-22.2) by 1 NM;
(c) Avoid Hillman Airport (N45-05.0 W83-55.0);
(d) 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 alternates 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:

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<th>Pt</th>
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<td>05 AGL B 15 AGL to F</td>
<td>ECK VORTAC</td>
<td>N43°15.35'</td>
<td>W82°43.07'</td>
</tr>
</tbody>
</table>

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 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 1000’ AGL.
(7) Points E to F: Maintain minimum altitude of 1000’ AGL over water.
(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 ROUTES

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:

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: (N45-15.0 W84-58.5);

(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: (N45-7.0 W84-58.5);

(c) Uncharted sod airstrip (N45-6.0 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 W84-26.2) is prohibited below 1500' AGL;

(c) Flight is prohibited within 2 NM of the Lake Huron shoreline from St. Vital Point (N45-57.0 W84-10.0) west to Huron Point (N45-38.0 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 W84-34.0);

(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:

(a) Uncharted lighthouse 100' AGL on Middle Island (N45-11.6 W84-03.0);

(b) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb through 1 Aug: (N45-16.5 W84-03.0).

(8) Point G to H:

(a) Avoid Bald Eagle nesting area by 1 NM and 1000' AGL from 1 Feb through 1 Aug: (N45-16.5 W84-03.0);

(b) Uncharted sod airstrip (N45-16.0 W84-03.7) and Ocqueoc (N45-24.6 W84-05.3) by 1 NM.

(10) Points B1 to B2:

(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);

(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) 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);

(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 W84-35.0) by 3 NM;

(c) Avoid Bald Eagle nesting areas by 1 NM and 1000' AGL from 1 Feb through 1 Aug: (N45-07.0 W84-15.0);

(d) Uncharted sod airstrip (N45-16.0 W84-03.0);

(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:

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


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
01 AGL B 15 AGL to A  N46°26.00’ W88°20.00’
01 AGL B 15 AGL to B  N45°58.00’ W87°16.00’
01 AGL B 15 AGL to C  N46°13.00’ W85°52.00’
05 AGL B 15 AGL to D  N46°10.00’ W85°31.00’
01 AGL B 15 AGL to E  N46°16.00’ W84°55.00’
05 AGL B 15 AGL to F  N45°58.00’ W84°32.00’
05 AGL B 15 AGL to G  N45°57.00’ W84°00.00’
01 AGL B 15 AGL to H  N45°56.00’ W83°48.00’
01 AGL B 15 AGL to I  N45°16.00’ W83°23.00’
01 AGL B 15 AGL to J  N44°49.00’ W83°00.00’

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’

2-188
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 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 W89-46.0 to N44-40.5 W89-49.0 to N44-42.5 W89-53.0 back to starting point).
(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 W89-46.0 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-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/Dir 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’

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
**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 and D.

4. Alternate Exit: B, C, D and F.

5. This route is reverse of VR-1617 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.

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

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**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 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 MARSA 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.
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:**

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
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<tbody>
<tr>
<td>As assigned to</td>
<td>A</td>
<td>OTT 108/29</td>
<td>N38°38.00’ W76°08.00’</td>
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<td>05 AGL B 15 AGL to</td>
<td>B</td>
<td>SBY 061/22</td>
<td>N38°35.00’ W75°10.00’</td>
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<td>SIE 227/23</td>
<td>N38°47.80’ W75°05.50’</td>
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<td>05 AGL B 15 AGL to</td>
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<td>SIE 332/8</td>
<td>N39°12.50’ W74°54.50’</td>
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<td>N39°35.00’ W74°46.30’</td>
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<td>CYN 232/16</td>
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<td>CYN 204/10</td>
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<td>CYN 060/6</td>
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<td>04 AGL B 15 AGL to</td>
<td>J1</td>
<td>CYN 224/13</td>
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**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, I-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.
13. Avoid (320’ AGL) 345’ MSL tower (N38-34.8 W75-17.2).
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/ascending 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 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 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:**
 AO0, 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 | RIC 139/19 | N37°18.00' W77°01.00'

**SPECIAL OPERATING PROCEDURES:**

**CAUTION:** Helicopter traffic in vicinity of PXT TACAN 270 deg-340 deg, 15-20 NM radius, altitude 500'-1500' daily.

**FSS’s Within 100 NM Radius:**
 AO0, 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
VR ROUTES

2-193

TERRAIN FOLLOWING OPERATIONS: Authorized entire route.

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.

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.

FSS’s Within 100 NM Radius:
AOO, DCA, IPT, RDU

VR-1721


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Sunrise-Sunset

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
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<tbody>
<tr>
<td>05 AGL B 15 AGL to A</td>
<td>LYH 352/44</td>
<td>N37°58.00' W79°27.00'</td>
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<tr>
<td>05 AGL B 15 AGL to B</td>
<td>GVE 239/32</td>
<td>N37°41.70' W78°41.50'</td>
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<td>05 AGL B 15 AGL to C</td>
<td>LYH 079/30</td>
<td>N37°23.30' W78°37.50'</td>
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<tr>
<td>05 AGL B 15 AGL to D</td>
<td>LYH 156/13</td>
<td>N37°04.00' W79°06.40'</td>
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<tr>
<td>05 AGL B 15 AGL to E</td>
<td>SBV 253/4</td>
<td>N36°38.80' W79°06.00'</td>
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<tr>
<td>05 AGL B 15 AGL to F</td>
<td>SBV 109/24</td>
<td>N36°34.70' W78°32.40'</td>
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<tr>
<td>05 AGL B 15 AGL to G</td>
<td>LVL 316/7</td>
<td>N36°53.20' W78°00.80'</td>
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<tr>
<td>05 AGL B 15 AGL to H</td>
<td>FAK 182/23</td>
<td>N37°08.60' W77°47.70'</td>
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<tr>
<td>05 AGL B 15 AGL to I</td>
<td>FAK 269/24</td>
<td>N37°28.70' W78°19.50'</td>
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<tr>
<td>05 AGL B 15 AGL to J</td>
<td>FAK 343/11</td>
<td>N37°41.60' W77°55.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to K</td>
<td>BRV 209/22</td>
<td>N37°59.20' W77°31.00'</td>
<td></td>
</tr>
<tr>
<td>05 AGL B 15 AGL to L</td>
<td>PXT 240/29</td>
<td>N37°58.40' W76°52.60'</td>
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</tr>
</tbody>
</table>
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.
(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


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’ W82°10.00’
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


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’
### VR ROUTES

**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:** COMSTRKFORWINGLANT, NAS Oceana, Virginia Beach, VA 23460-5200 DSN 433-9141, C757-433-9141.

**SCHEDULING ACTIVITY:** FACSFAC/VACAPES, NAS Oceana, Virginia Beach, VA 23460-1228 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 | Time
---|---|---|---|---
05 AGL B 15 AGL to | A | CCV VORTAC | N37°20.85' | W75°59.86'
| | | | W75°59.86'
SFC B 15 AGL to | B | HCM 054/15 | N37°37.00' | W76°29.00'
| | | | W76°29.00'
SFC B 15 AGL to | C | BRV 230/25 | N38°01.00' | W77°42.00'
| | | | W77°42.00'
15 AGL to | D | GVE 330/20 | N38°19.00' | W78°26.00'
15 AGL to 3 NM N of D then descend to | | | | |
05 AGL B 15 AGL to | E | CSN 275/35 | N38°38.00' | W78°59.00'
| | | | W78°59.00'
| | | | W78°59.00'
SFC B 15 AGL to | F | ESL 057/7 | N39°18.20' | W78°52.00'
| | | | W78°52.00'
05 AGL B 15 AGL to | G | ESL 261/25 | N39°07.00' | W79°31.00'
| | | | W79°31.00'
SFC B 15 AGL to | H | EKN 165/47 | N38°11.00' | W79°44.00'
| | | | W79°44.00'
SFC B 15 AGL to | I | ROA 031/50 | N38°05.00' | W79°36.00'
| | | | W79°36.00'
SFC B 15 AGL to | J | LYH 352/44 | N37°58.00' | W79°27.00'
| | | | W79°27.00'
SFC B 15 AGL to | K | GVE 236/31 | N37°41.00' | W78°39.00'
| | | | 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.
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:**

**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-041 crosses between Point A and B, and between Point I and J.
   c. VR-1756 crosses at Point B.
   d. VR-1759 begins at Point F and runs in the opposite direction towards Point E.
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 - Unchartered airfield.

**FSS's Within 100 NM Radius:**
AOO, DCA, EKN, MIV, RDU

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**Special Operating Procedures:**
1. Route reservation and brief required.
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-1759 crosses between Point B and C.
   c. VR-1759 crosses at Point B.
   d. VR-043 crosses between Point B and C.
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 safety) within 15 NM of observatory.

FSS's Within 100 NM Radius:
AOO, DCA, EKN, IPT, RDU

VR-1757


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:

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.

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.
Contact Leesburg FSS prior to entry on 255.4 with entry/exit times.

Remain north of centerline between Point E and F.

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.

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.

Avoid:

(a) N37-47.2 W77-49.5 - Uncharted airfield;
(b) N36-45.5 W78-21.4 - Uncharted airfield.

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.

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

ORIGINATING ACTIVITY: 174th FW, 6001 E. Molloy Rd, Syracuse, NY 13211-7099 DSN 489-9217.

SCHEDULING ACTIVITY:

HOURS OF OPERATION: 0800 local-Sunset daily

ROUTE DESCRIPTION:

TERRAIN FOLLOWING OPERATIONS: Authorized from entire route A to E.

ROUTE WIDTH - 5 NM either side of centerline.

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.
(6) Tie-in FSS: Burlington (BTW).

FSS's Within 100 NM Radius:
BGR, BTW

VR-1801

ORIGINATING ACTIVITY: 174th FW, 6001 E. Molloy Rd, Syracuse, NY 13211-7099 DSN 489-9217.


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


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tbody>
<tr>
<td>at or below 15 AGL</td>
<td>A</td>
<td>TAL 149/56</td>
<td>N64°16.00' W151°44.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>BIG 253/97</td>
<td>N64°08.00' W149°23.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>BIG 255/86</td>
<td>N64°10.00' W148°58.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>D</td>
<td>BIG 255/39</td>
<td>N64°05.00' W147°10.00'</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>E</td>
<td>BIG 274/26</td>
<td>N64°12.00' W146°36.00'</td>
</tr>
</tbody>
</table>

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 is required.

(3) Contact Blair Lakes Range Control on primary 229.4, secondary 264.7 prior to entering R2211. They may not open. Eielson Range Control provides area deconfliction.

(4) All route Points collocated with IR-900, IR-916 and VR-1916.

(5) Primary Entry: A. Alternate Entry: B, C and D.

(6) Primary Exit: E. Alternate Exit: B, C, D and AE.

(7) 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.


(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.


FSS's Within 100 NM Radius:
FAI, MCG, ORT, TKA

VR-1902


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:

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<tr>
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<th>Pt</th>
<th>Fac/Rad/Dist</th>
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<td>at or below 15 AGL</td>
<td>A</td>
<td>MCG 117/36</td>
<td>N62°31.00' W154°43.00'</td>
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</table>
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-1915 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 segments 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.

FSS's Within 100 NM Radius:
MCG, TKA

VR-1905


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:

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<td>TKA 192/80</td>
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<td>TKA 208/92</td>
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<td>TKA 218/89</td>
<td>N61°37.00' W152°54.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
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<td>TKA 223/109</td>
<td>N61°36.00' W153°40.00'</td>
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<tr>
<td>01 AGL B 15 AGL to</td>
<td>E</td>
<td>TKA 224/133</td>
<td>N61°29.00' W154°27.00'</td>
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<td>TKA 231/139</td>
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<td>01 AGL B 15 AGL to</td>
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<td>N63°36.00' W154°07.00'</td>
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<td>TAL 149/56</td>
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<tr>
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<td>AH</td>
<td>MCG 211/20</td>
<td>N62°44.00' W156°10.00'</td>
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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 AI 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-902, IR-912 and VR-1912. Alternate entry Points B thru L and AI do the same. The routing; G to AH take you under Stony B MOA.
(4) 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.
(5) All route Points collocated with IR-902, IR-912 and VR-934 cross at Point E.
(6) IR-902, IR-912, VR-1902 and VR-1912 cross at Point H and AH.
(7) IR-900, IR-916, VR-1900 and VR-1916 cross at Point M.
(8) Primary Entry: A. Alternate Entry: B thru L.
(9) Primary Exit: M. Alternate Exit: B thru L and AH.
(10) 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.


(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: 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:
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.


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

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<td>A</td>
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<tr>
<td>01 AGL B 15 AGL to 01 AGL B 15 AGL to</td>
<td>B</td>
<td>BIG 050/52</td>
<td>N64*15.00'</td>
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<tr>
<td>C</td>
<td>BIG 335/28</td>
<td>N64*28.00'</td>
<td>W145*45.00'</td>
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</table>

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-3936, 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.


(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

VR ROUTES

2-203

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


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.


(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


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 - B. Alternate Exit Point - AA, 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

(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 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) Use CAUTION for uncharted airstrips at (N63°45.00’). Use CAUTION for hunting cabins and uncharted airstrips in vicinity of Gold King Creek, Segment C to D. Reduce altitude to 3500’ AGL from the mouth of Isabel Pass, Point AC.

(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.


HOURS OF OPERATION: Normal use 0800-2000 local
Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or below 15 AGL</td>
<td>A</td>
<td>BIG 076/39</td>
<td>N63°54.00’ W144°16.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>BIG 100/28</td>
<td>N63°45.00’ W144°51.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>BIG 104/15</td>
<td>N63°51.00’ W145°15.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>D</td>
<td>BIG 202/13</td>
<td>N63°51.00’ W146°04.00’</td>
</tr>
<tr>
<td>Alternate Exit Track:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
<td>BIG 100/28</td>
<td>N63°45.00’ W144°51.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>AC</td>
<td>BIG 175/25</td>
<td>N63°37.00’ W146°00.00’</td>
</tr>
</tbody>
</table>

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 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 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) 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.


(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 highway. 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 Donnelly 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 FCIWs 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.


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.


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:
Altitude Data 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.


(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 C.

(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 FCIWs 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.

2-206
(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.


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

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.


(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.


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

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,
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.


(7) Remain clear of Clear Creek cabins (N64-13.1 W146-13.0) by 1NM continuous. See NFSL item 8.


(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.


HOURS OF OPERATION: Normal use 0800-2000 local Mon-Fri, Not available 2200-0700 local

ROUTE DESCRIPTION:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tr>
<td>at or below 15 AGL</td>
<td>A</td>
<td>BIG 335/28</td>
<td>N64°28.00’ W145°45.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>B</td>
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<td>N64°15.00’ W143°50.00’</td>
</tr>
<tr>
<td>01 AGL B 15 AGL to</td>
<td>C</td>
<td>BIG 076/39</td>
<td>N63°54.00’ W144°16.00’</td>
</tr>
</tbody>
</table>

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.


(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 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 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.
Chapter 3

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 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. 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 associate 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 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)


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>A</td>
<td>N32°27.30'</td>
<td>W85°11.60'</td>
</tr>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>B</td>
<td>N32°36.90'</td>
<td>W85°01.10'</td>
</tr>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>C</td>
<td>N32°35.20'</td>
<td>W84°21.90'</td>
</tr>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>D</td>
<td>N31°57.50'</td>
<td>W84°19.40'</td>
</tr>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>E</td>
<td>N31°36.10'</td>
<td>W84°50.90'</td>
</tr>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>F</td>
<td>N32°01.20'</td>
<td>W84°55.10'</td>
</tr>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>G</td>
<td>N32°16.30'</td>
<td>W84°57.50'</td>
</tr>
</tbody>
</table>

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)


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>A</td>
<td>N32°22.60'</td>
<td>W85°41.10'</td>
</tr>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>C</td>
<td>N31°45.00'</td>
<td>W85°03.00'</td>
</tr>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>D</td>
<td>N32°01.50'</td>
<td>W84°55.20'</td>
</tr>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>E</td>
<td>N32°16.30'</td>
<td>W84°57.50'</td>
</tr>
</tbody>
</table>

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)


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1200-0300Z ++

ROUTE DESCRIPTION:

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<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
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<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>A</td>
<td>N33°57.00'</td>
<td>W84°40.00'</td>
</tr>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>B</td>
<td>N33°42.00'</td>
<td>W85°00.00'</td>
</tr>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>C</td>
<td>N33°03.00'</td>
<td>W84°57.00'</td>
</tr>
<tr>
<td>at or above 03 AGL (Night-1000' AGL or above)</td>
<td>D</td>
<td>N32°22.00'</td>
<td>W85°21.00'</td>
</tr>
</tbody>
</table>

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


SCHEDULING ACTIVITY:  Same as Originating Activity

HOURS OF OPERATION:  Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td></td>
<td>N36°53.00' W87°40.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td>N37°19.00' W87°49.00'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td>N37°14.00' W88°29.00'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td></td>
<td>N36°48.00' W88°26.00'</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td></td>
<td>N36°38.00' W88°08.00'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>N36°37.00' W87°54.00'</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td></td>
<td>N36°38.00' W87°34.00'</td>
</tr>
<tr>
<td>(Bastogne Drop Zone)</td>
<td>H</td>
<td></td>
<td>N36°27.00' W87°29.00'</td>
</tr>
<tr>
<td>(Alternate Exit Point)</td>
<td>I</td>
<td></td>
<td>N36°27.00' W87°14.00'</td>
</tr>
<tr>
<td></td>
<td>J</td>
<td></td>
<td>N36°39.00' W87°12.00'</td>
</tr>
<tr>
<td></td>
<td>K</td>
<td></td>
<td>N36°44.00' W87°25.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Minimum Altitude Data: 300' AGL (A) to (C); 500' AGL (C) to (H).

SR-060

(NASHVILLE)  BNA, BWG, PAH


SCHEDULING ACTIVITY:  Same as Originating Activity

HOURS OF OPERATION:  Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td></td>
<td>N36°53.00' W87°40.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td>N37°19.00' W87°49.00'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td>N37°14.00' W88°29.00'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td></td>
<td>N36°48.00' W88°26.00'</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td></td>
<td>N36°38.00' W88°08.00'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>N36°37.00' W87°54.00'</td>
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<tr>
<td></td>
<td>G</td>
<td></td>
<td>N36°38.00' W87°34.00'</td>
</tr>
<tr>
<td>(Bastogne Drop Zone)</td>
<td>H</td>
<td></td>
<td>N36°27.00' W87°29.00'</td>
</tr>
<tr>
<td>(Alternate Exit Point)</td>
<td>I</td>
<td></td>
<td>N36°27.00' W87°14.00'</td>
</tr>
<tr>
<td></td>
<td>J</td>
<td></td>
<td>N36°39.00' W87°12.00'</td>
</tr>
<tr>
<td></td>
<td>K</td>
<td></td>
<td>N36°44.00' W87°25.00'</td>
</tr>
</tbody>
</table>

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


SCHEDULING ACTIVITY:  Same as Originating Activity

HOURS OF OPERATION:  Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td></td>
<td>N36°53.00' W87°40.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td>N37°07.00' W87°29.00'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td>N36°42.00' W87°29.00'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td></td>
<td>N36°12.00' W87°23.00'</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td></td>
<td>N36°24.00' W87°38.00'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
<td>N36°38.00' W87°38.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Minimum altitude for entire route is 300' AGL.
SR ROUTES

SR-062

(NASHVILLE) BNA, BWG, PAH


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 | 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)


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 | A | | N32°32.20' W86°11.50'
At or above 05 AGL | B | | N32°43.90' W85°35.00'
At or above 05 AGL | C | | N33°01.30' W85°20.80'
At or above 05 AGL | D | | N33°14.70' W85°37.90'
At or above 05 AGL | E | | N33°05.10' W86°14.90'
At or above 05 AGL | F | | N32°39.90' W86°32.30'
At or above 05 AGL | 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)


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1300-0500Z++

ROUTE DESCRIPTION:
Altitude Data   Pt   Fac/Rad/Dist   Lat/Long
A               03 AGL B 15 AGL to   N32°32.20'     W86°11.50'
B               03 AGL B 15 AGL to   N32°17.60'     W85°55.00'
C               03 AGL B 15 AGL to   N32°07.20'     W86°28.00'
D               03 AGL B 15 AGL to   N32°31.50'     W86°58.80'
E               03 AGL B 15 AGL to   N32°51.70'     W86°58.10'
F               03 AGL B 15 AGL to   N32°39.90'     W86°32.30'
G               03 AGL B 15 AGL to   N32°22.50'     W86°21.90'

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: 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               03 AGL B 15 AGL to   N34°50.00'     W90°24.00'
B               03 AGL B 15 AGL to   N34°30.00'     W90°12.00'
C               03 AGL B 15 AGL to   N34°33.00'     W89°30.00'
D               03 AGL B 15 AGL to   N34°25.00'     W88°36.00'
E               03 AGL B 15 AGL to   N34°40.00'     W89°01.00'
F               03 AGL B 15 AGL to   N34°44.00'     W89°25.00'
G               03 AGL B 15 AGL to   N34°43.00'     W89°56.00'

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:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
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<td>N34°32.00'</td>
<td>W90°27.00'</td>
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<tr>
<td></td>
<td>B</td>
<td>N34°18.00'</td>
<td>W90°04.00'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>N34°12.00'</td>
<td>W89°37.00'</td>
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<td></td>
<td>D</td>
<td>N34°15.00'</td>
<td>W89°12.00'</td>
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<tr>
<td></td>
<td>E</td>
<td>N34°25.00'</td>
<td>W89°56.00'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>N34°40.00'</td>
<td>W89°01.00'</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>N34°44.00'</td>
<td>W89°25.00'</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>N34°43.00'</td>
<td>W89°56.00'</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AA</td>
<td>N30°49.57'</td>
<td>W86°40.75'</td>
</tr>
<tr>
<td></td>
<td>BD</td>
<td>N31°07.90'</td>
<td>W86°43.00'</td>
</tr>
<tr>
<td></td>
<td>BE</td>
<td>N31°32.50'</td>
<td>W86°43.00'</td>
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<td>N31°43.00'</td>
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<td>BG</td>
<td>N32°23.63'</td>
<td>W86°46.80'</td>
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<td>BH</td>
<td>N32°51.85'</td>
<td>W86°22.43'</td>
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<tr>
<td></td>
<td>BI</td>
<td>N33°12.05'</td>
<td>W86°29.28'</td>
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<tr>
<td></td>
<td>BJ</td>
<td>N33°30.22'</td>
<td>W86°26.72'</td>
</tr>
</tbody>
</table>

(Entry Point)

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 ROUTES

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).

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

Route Description:

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.

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’
AB N31°00.00’ W86°38.00’
(Entry Point)
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’
AG N31°55.25’ W84°42.28’
(Alternate Entry Point)
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 Exit Point)
AN N30°49.27’ W86°01.87’
AQ N30°56.20’ W86°24.80’
AR N30°41.20’ W86°23.65’
(Pino Drop Zone)
ALTERNATE ROUTING:
AQ N30°56.20’ W86°24.80’

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’
AB N31°00.00’ W86°38.00’
(Entry Point)
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’
(Alternate Entry Exit Point)
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’
(Alternate Entry/Exit Point)
DI N34°22.50’ W83°15.38’
DJ N34°48.83’ W83°07.77’
DK N35°07.88’ W82°56.67’

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) 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 ROUTES

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  Remarks
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'
at or above 02.5 AGL  EM  N35°00.61'  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.
5. When not flying SR-105 in conjunction with SR-101, aircraft will not be below 1500' AGL at (BR).
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. CAUTION: Be alert for extensive civilian airliner traffic between (EH) and (EL). Route crosses arrival/departure course for Charlotte Douglas International Airport.
8. Contact Concord Tower at (EI) and (EJ) for clearance through Class D airspace.
9. Avoid overflight of nuclear power plant between (EG) and (EH).

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'  W80°40.75'
BD  N31°08.90'  W85°04.50'
BE  N31°32.50'  W86°43.00'
FA  N31°38.70'  W87°14.00'
SR ROUTES

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’

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 B N33°32.03' W89°50.00' (Alternate Entry/Exit Point)

05 AGL B 15 AGL to C N33°06.10' W89°54.00' 05 AGL B 15 AGL to D N32°53.09' W89°33.02' (Alternate Entry/Exit Point)

05 AGL B 15 AGL to E N33°01.00' W89°03.13' 05 AGL B 15 AGL to F N33°14.09' W88°40.00' (Alternate Exit Point)

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) Aircraft 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), (B) and (E) (NAS Meridian, DSN 67-2487, 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) 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 (E) (NAS Meridian, DSN 67-2487, C601-679-2487).

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 C N32°53.09' W89°33.02' (Alternate Entry/Exit Point)

05 AGL B 15 AGL to D N33°06.10' W89°54.00' 05 AGL B 15 AGL to E N33°32.03' W89°50.00' (Alternate Exit Point)

05 AGL B 15 AGL to F N33°31.03' W88°56.13' 05 AGL B 15 AGL to G N33°14.09' W88°40.00' 05 AGL B 15 AGL to H N33°01.00' W89°03.13' 05 AGL B 15 AGL to I N32°53.09' W89°33.02' (Alternate Exit Point)

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 (E) (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:
(a) SR-137 (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-166

(Charleston) CHS, FLO, SAV


Hours of Operation: Continuous

Route Description:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 03 AGL</td>
<td>A</td>
<td></td>
<td>N33°23.00' W81°08.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>B</td>
<td></td>
<td>N33°17.00' W80°31.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>C</td>
<td>(Alternate Entry Point)</td>
<td>N33°23.00' W80°07.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>D</td>
<td></td>
<td>N33°35.00' W79°57.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
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<td>N33°45.00' W80°12.00'</td>
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<tr>
<td>at or above 03 AGL</td>
<td>F</td>
<td></td>
<td>N33°36.00' W80°33.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>G</td>
<td></td>
<td>N33°36.00' W80°59.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>H</td>
<td></td>
<td>N33°36.20' W81°10.20'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>I</td>
<td></td>
<td>N33°28.10' W81°16.90'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>A1</td>
<td></td>
<td>N33°23.00' W81°08.00'</td>
</tr>
</tbody>
</table>

Route Width - 2 NM either side of centerline. Excludes North AF Aux, SC Class E airspace.

Remarks:
(1) Minimum altitude is 300’ AGL.

(2) 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.

(3) CAUTION: VR-087,097,1059,IR-035, and 036 deconflicted by scheduling agency when route is booked.

(4) Users MUST contact Shaw Approach 358.3 118.85 passing (D) for Poinsett MOA separation.

(5) 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++).

(6) 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.

(7) Route is designated for MARSA operations established by coordinated scheduling.

(8) Avoid overflight of Holly Hill airport, use caution for light aircraft in the vicinity, N33-18.06 W80-23.64.

(9) CAUTION: Near (B) look for aircraft on approach to ST George airport from the Vance VORTAC.

(10) CAUTION: Vicinity of North Airfield, SC, C5, C27, C141, and C130 acft conducting tactical training operations into and out of the airfield.

(11) Avoid: Santee National Wildlife Refuge (Lake Marion) just prior to (F), avoid by 2200’ AGL.

(12) Avoid four noise sensitive areas:
(a) N33-39.1 W80-27.1 by 1,000’ AGL/1NM;
(b) N33-29.7 W81-16.8 by 1,000’ AGL/1NM;
(c) N33-40.8 W80-03.5 by 1,000’ AGL/1NM;
(d) N33-36.0 W81-06.5 town of North, SC by 1500’ AGL/1NM.

(13) CAUTION: three towers:
(a) N33-26.0 W80-01.6 375’ AGL (450’ MSL);
(b) N33-32.3 W79-59.3 1207’ AGL (1281’ MSL);
(c) N33-39.5 W80-18.6 500’ AGL (662’ MSL).

(14) Avoid within Santee NWR five Eagle Nest locations (endangered species):
(a) N33-36.9 W80-31.8 by 1500’ AGL/1NM;
(b) N33-18.4 W80-10.6 by 2000’ AGL;
(c) N33-26.1 W80-07.4 by 2000’ AGL;
(d) N33-24.4 W80-11.6 by 2000’ AGL;
(e) N33-25.4 W80-16.9 by 2000’ AGL.

(15) 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.

(16) 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.

(17) 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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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<tr>
<th>Altitude Data</th>
<th>Pt Fac/Rad/Dist Lat/Long</th>
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<tbody>
<tr>
<td>at or above 02.5 AGL A</td>
<td>N34°49.30' W106°58.60'</td>
</tr>
<tr>
<td>at or above 02.5 AGL B</td>
<td>N34°55.00' W107°07.80'</td>
</tr>
<tr>
<td>at or above 02.5 AGL C</td>
<td>N34°15.30' W107°38.00'</td>
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<tr>
<td>at or above 02.5 AGL D</td>
<td>N34°08.00' W108°29.00'</td>
</tr>
<tr>
<td>at or above 02.5 AGL E</td>
<td>N34°27.00' W108°46.20'</td>
</tr>
<tr>
<td>at or above 02.5 AGL F</td>
<td>N35°09.50' W108°28.20'</td>
</tr>
<tr>
<td>at or above 02.5 AGL G</td>
<td>N35°26.80' W108°01.30'</td>
</tr>
<tr>
<td>at or above 02.5 AGL H</td>
<td>N35°36.00' W107°05.50'</td>
</tr>
</tbody>
</table>

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°30.5 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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

SR-205

(HOBART) HBR, CDS


HOURS OF OPERATION: 0830-0230 Local Mon-Fri
### SR ROUTES

**ROUTE DESCRIPTION:***

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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</thead>
<tbody>
<tr>
<td>at or above 03 AGL</td>
<td>A</td>
<td>N35°05.85’</td>
<td>W99°15.60’</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N35°25.00’</td>
<td>W99°26.05’</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>N34°51.52’</td>
<td>W99°41.82’</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>N34°31.00’</td>
<td>W99°41.85’</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>E</td>
<td>N34°36.80’</td>
<td>W100°06.80’</td>
</tr>
</tbody>
</table>

**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).
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 but must not enter the route. Aircraft must also exit the route within the window of two minutes early to two minutes late.

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### 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:** 0830-2030 Local Mon-Fri

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### 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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 03 AGL</td>
<td>A</td>
<td></td>
<td>N34°30.65' W99°41.83'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td>N34°54.20' W99°52.40'</td>
</tr>
<tr>
<td>(Alternate Entry Point)</td>
<td></td>
<td></td>
<td>N34°53.70' W100°20.30'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>C</td>
<td></td>
<td>N34°32.22' W100°09.92'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>D</td>
<td></td>
<td>N34°30.65' W99°41.83'</td>
</tr>
<tr>
<td>(Alternate Exit Point)</td>
<td></td>
<td></td>
<td>N34°36.80' W100°06.80'</td>
</tr>
</tbody>
</table>

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).
(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

(ABQ)


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
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<tbody>
<tr>
<td>at or above 02.5 AGL</td>
<td>A</td>
<td></td>
<td>N32°52.00' W108°35.70'</td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>AA</td>
<td></td>
<td>N33°01.80' W108°09.10'</td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>B</td>
<td></td>
<td>N33°27.20' W107°48.50'</td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>C</td>
<td></td>
<td>N34°05.00' W107°29.00'</td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>D</td>
<td></td>
<td>N34°22.80' W107°13.20'</td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>E</td>
<td></td>
<td>N34°46.50' W107°02.50'</td>
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<tr>
<td>at or above 02.5 AGL</td>
<td>F</td>
<td></td>
<td>N34°49.30' W106°58.60'</td>
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</tbody>
</table>

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

(ABQ)


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>N32°52.00' W108°35.70'</td>
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<td>AA</td>
<td></td>
<td>N33°01.80' W108°09.10'</td>
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<tr>
<td>at or above 02.5 AGL</td>
<td>B</td>
<td></td>
<td>N33°27.20' W107°48.50'</td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>C</td>
<td></td>
<td>N34°05.00' W107°29.00'</td>
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<tr>
<td>at or above 02.5 AGL</td>
<td>D</td>
<td></td>
<td>N34°22.80' W107°13.20'</td>
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<tr>
<td>at or above 02.5 AGL</td>
<td>E</td>
<td></td>
<td>N34°46.50' W107°02.50'</td>
</tr>
<tr>
<td>at or above 02.5 AGL</td>
<td>F</td>
<td></td>
<td>N34°49.30' W106°58.60'</td>
</tr>
</tbody>
</table>
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.
(7) Contact 58 OSS/DOO for a fax or email of most current Avoid Areas.

SR-213

(ALBUQUERQUE) ABQ


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
at or above 02.5 AGL A N34°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.
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; 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) ABO


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Minimum altitude 250' AGL.
(2) Route terminates at Fort Sumner Recreational Area.
(3) All points are Alternate Entry/Exit Points.
(4) Avoid the following:
   (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; 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-216

(CHILDRESS) CDS, HBR


HOURS OF OPERATION: 0830-0230 Local Mon-Fri

ROUTE DESCRIPTION:

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).
(9) Deconflict with: IR-105 (NAS Fort Worth), VR-162, VR-1141, VR-1142 (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 mandaotry 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


HOURS OF OPERATION: Continuous

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 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°31.50' W99°41.80'
at or above 03 AGL F N34°31.00' W99°41.80'
at or above 03 AGL G N34°36.80' W100°06.80'

(a) ALL AMERICAN DROP ZONE:

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'
SR ROUTES

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 (H) until 4 NM past (I).
(11) Re-entry track from (G) to (A), at or below 1600' MSL.
(12) Primary Exit 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:

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<th>Pt</th>
<th>Fac/Rad/Dist</th>
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<tr>
<td></td>
<td>A</td>
<td>N35°19.50'</td>
<td>W93°20.90'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N35°47.70'</td>
<td>W92°45.10'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>N35°58.20'</td>
<td>W93°09.20'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>N35°35.10'</td>
<td>W93°18.30'</td>
</tr>
</tbody>
</table>

(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:

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>N35°19.50'</td>
<td>W92°20.40'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N35°22.50'</td>
<td>W92°42.40'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>N35°10.50'</td>
<td>W93°09.30'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>N34°52.40'</td>
<td>W93°06.70'</td>
</tr>
</tbody>
</table>

(a) ALL AMERICAN DROP ZONE:

E  N34°52.30'
W92°39.50'

3-20
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.

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 |
--------------|----|--------------|----------|
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' |
J             | N36°36.30' |
K             | N36°26.50' |
L             | N36°27.50' |
M             | N36°28.80' |
N             | N36°27.50' |
O             | N36°38.80' |
P             | N36°13.80' |
Q             | N36°37.70' |
P             | N36°44.30' |
R             | N36°13.80' |
S             | N36°44.30' |
T             | N36°44.30' |
U             | N36°44.30' |
V             | N36°44.30' |
W             | N36°44.30' |
X             | N36°20.30' |
Y             | N36°44.30' |
Z             | N36°18.20' |
AA            | N36°19.30' |

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) Extensive crop duster training in the vicinity of Continent Airport.
(9) Minimum altitude 1600’ AGL when IR-174 is active, at (F).
(10) Primary Entry Point is (A).
(11) 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°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'

ROUTE WIDTH - 3NM either side of centerline except 5 NM left (G) to (H).

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.
(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-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'

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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N35°16.80'</td>
<td>W94°13.40'</td>
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</tr>
<tr>
<td>B</td>
<td>N35°15.00'</td>
<td>W94°34.00'</td>
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</tr>
<tr>
<td>C</td>
<td>N34°56.30'</td>
<td>W94°02.80'</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>N34°38.00'</td>
<td>W93°29.60'</td>
<td></td>
</tr>
<tr>
<td>(a) ALL AMERICAN DROP ZONE - from (D)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>N34°38.00'</td>
<td>W93°29.60'</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>N34°52.30'</td>
<td>W92°39.50'</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>N34°54.90'</td>
<td>W92°18.10'</td>
<td></td>
</tr>
<tr>
<td>(b) BLACKJACK DROP ZONE - from (D)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>N34°54.90'</td>
<td>W92°18.10'</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>N34°57.70'</td>
<td>W92°44.40'</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>N35°11.70'</td>
<td>W92°27.00'</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>N35°12.50'</td>
<td>W92°01.40'</td>
<td></td>
</tr>
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</table>

**ROUTE WIDTH -** 5 NM either side of route except 5 NM left and 2 NM right of centerline form (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:**

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<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<td>A</td>
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<td>B</td>
<td>N36°46.30'</td>
<td>W88°07.50'</td>
<td></td>
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<tr>
<td>C</td>
<td>N36°39.40'</td>
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<td></td>
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<tr>
<td>D</td>
<td>N36°45.60'</td>
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</tr>
<tr>
<td>(a) ALL AMERICAN DROP ZONE - from (D)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>N36°45.60'</td>
<td>W89°32.30'</td>
<td></td>
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<tr>
<td>E</td>
<td>N36°35.50'</td>
<td>W90°14.70'</td>
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<tr>
<td>F</td>
<td>N36°04.20'</td>
<td>W90°40.20'</td>
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<tr>
<td>G</td>
<td>N35°47.80'</td>
<td>W90°56.50'</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>N35°15.20'</td>
<td>W91°06.80'</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>N35°07.30'</td>
<td>W91°35.70'</td>
<td></td>
</tr>
<tr>
<td>(All American Drop Zone)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>N35°07.30'</td>
<td>W91°35.70'</td>
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<tr>
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<td>H</td>
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<td></td>
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<tr>
<td>I</td>
<td>N35°07.30'</td>
<td>W91°35.70'</td>
<td></td>
</tr>
<tr>
<td>(b) BLACKJACK DROP ZONE - from (D)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>N35°58.80'</td>
<td>W91°52.40'</td>
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<tr>
<td>G</td>
<td>N35°47.80'</td>
<td>W90°56.50'</td>
<td></td>
</tr>
<tr>
<td>H</td>
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<tr>
<td>I</td>
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<td>W91°35.70'</td>
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</tr>
<tr>
<td>(All American Drop Zone)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>N34°54.90'</td>
<td>W92°18.10'</td>
<td></td>
</tr>
</tbody>
</table>

**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:
   a. During 1 Oct-15 Apr maintain 3000' MSL from (A) to (E) to avoid bird flyways.
4. 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.
5. Do not exceed 1500' MSL within 16 NM of LRF TACAN (CH 29) unless in contact with Little Rock Approach Control.
6. 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.


HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

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<th>Altitude Data</th>
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<tr>
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<td>A</td>
<td>N35°19.50'</td>
<td>W92°20.40'</td>
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<tr>
<td></td>
<td>B</td>
<td>N35°19.50'</td>
<td>W92°52.30'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>N34°52.30'</td>
<td>W92°39.50'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>N34°54.90'</td>
<td>W92°18.10'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:
(1) Do not exceed 1600' MSL within 16 NM of the LRF TACAN (CH 29).
(2) Due to extensive coordination required, users must contact 19 OSS/OSK prior to use on these routes.
(3) 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).
(4) Re-entry track from (D) to (A) at or below 1600' MSL.
(5) Primary Entry Point (A).
(6) 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:

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<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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<tbody>
<tr>
<td></td>
<td>A</td>
<td>N35°19.50'</td>
<td>W92°20.40'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N35°44.60'</td>
<td>W92°20.40'</td>
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<td></td>
<td>C</td>
<td>N35°51.00'</td>
<td>W93°11.70'</td>
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</tbody>
</table>

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:
(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) Avoid overflight of the town of Wooster AR north of (J).
(5) Avoid overflight of Enola School complex 8 NM prior to (K).
(6) Minimum altitude 300' AGL day and 500' AGL night except:
   (a) 2000' MSL from 17 NM prior to (E) until (E).
   (b) 500' AGL from (E) until 6 NM from (F);
   (c) 500' AGL from (I) until (J);
   (d) 1000' AGL from (J) until 4 NM past (J);
(7) Re-entry track from (H) to (A) at or below 1600' MSL.
(8) Primary Entry Point is (A).
(9) Primary Exit Point for SR-218A is (H).
(10) Primary Exit Point for SR-218B is (K).
(11) 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:

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<th>Pt</th>
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<th>Lat/Long</th>
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<td>W96°11.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N33°08.00'</td>
<td>W95°50.00'</td>
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</tbody>
</table>
SR ROUTES

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).

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 (K).
   c. 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.

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:

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<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>N35°19.50'</td>
<td>W92°20.40'</td>
</tr>
<tr>
<td>B</td>
<td>N35°33.60'</td>
<td>W92°22.60'</td>
</tr>
<tr>
<td>C</td>
<td>N35°55.50'</td>
<td>W92°09.70'</td>
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<tr>
<td>D</td>
<td>N35°56.20'</td>
<td>W91°29.70'</td>
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<td>E</td>
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</tr>
<tr>
<td>E1</td>
<td>N35°28.90'</td>
<td>W91°34.90'</td>
</tr>
<tr>
<td>F</td>
<td>N35°07.10'</td>
<td>W91°35.10'</td>
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<tr>
<td>G</td>
<td>N35°01.80'</td>
<td>W91°52.40'</td>
</tr>
<tr>
<td>H</td>
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<td>W92°28.10'</td>
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(a) All American Drop Zone: from (E)

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<th>Lat/Long</th>
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<td>W91°34.90'</td>
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<td>I</td>
<td>N35°21.10'</td>
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(b) Blackjack Drop Zone: from (E)

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:

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<tbody>
<tr>
<td>A</td>
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<td>W92°20.40'</td>
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<tr>
<td>B</td>
<td>N35°44.80'</td>
<td>W92°20.50'</td>
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<tr>
<td>C</td>
<td>N35°44.00'</td>
<td>W91°55.50'</td>
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</tbody>
</table>

3-25
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'

G
N34°54.90'
W92°18.10'

(b) BLACKJACK DROP ZONE:

D
N35°28.90'
W91°34.90'

H
N35°21.10'
W91°47.70'

I
N35°12.50'
W92°01.40'

(c) ALL AMERICAN DROP ZONE:

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'

(d) BLACKJACK DROP ZONE:

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.

Avoid congested area 3 NM either side of Hwy 67 by 1000’ AGL between (F) and (G) on SR-230A.

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.

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).


(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.

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'

HOURS OF OPERATION: Continuous

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:

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<th>Pt</th>
<th>Fac/Rad/Dist Lat/Long</th>
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</tr>
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<td>B</td>
<td>N35°30.20' W92°58.20'</td>
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</tr>
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<td>C</td>
<td>N35°17.30' W93°25.20'</td>
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</tr>
<tr>
<td>D</td>
<td>N34°54.90' W93°07.00'</td>
<td></td>
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<tr>
<td>(a) ALL AMERICAN DROP ZONE:</td>
<td></td>
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</tr>
<tr>
<td>D</td>
<td>N34°54.90' W93°07.00'</td>
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</tr>
<tr>
<td>E</td>
<td>N34°52.30' W92°39.50'</td>
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<tr>
<td>F</td>
<td>N34°54.90' W92°18.10'</td>
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<tr>
<td>(b) BLACKJACK DROP ZONE:</td>
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</tr>
<tr>
<td>D</td>
<td>N34°54.90' W93°07.00'</td>
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<tr>
<td>G</td>
<td>N34°57.70' W92°44.40'</td>
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<tr>
<td>H</td>
<td>N35°11.70' W92°27.00'</td>
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</tr>
<tr>
<td>I</td>
<td>N35°12.50' W92°01.40'</td>
<td></td>
</tr>
</tbody>
</table>

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 complexes 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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 03 AGL</td>
<td>A</td>
<td>N32°36.00' W100°04.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>B</td>
<td>N32°59.00' W100°24.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>C</td>
<td>N32°55.00' W101°03.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>D</td>
<td>N33°19.00' W101°16.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>E</td>
<td>N33°20.00' W100°14.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>F</td>
<td>N33°03.20' W100°03.40'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>G</td>
<td>N32°45.00' W100°01.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>H</td>
<td>N32°25.00' W99°52.00'</td>
</tr>
<tr>
<td>at or above 03 AGL</td>
<td>I</td>
<td>N32°24.00' W99°58.00'</td>
</tr>
</tbody>
</table>

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:

ROUTE WIDTH - 5 NM either side of centerline.

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) 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)


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:

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:

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.
   b. Point (E) is the Entry Point for SR-73 and SR-74 (Memphis Air National Guard).
   c. Primary Entry Point is (A).
   d. Primary Exit Point is (E).
3. 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  N33°19.50' W92°20.40'
B  N35°26.40' W91°50.60'
C  N35°15.20' W91°01.70'
D  N35°04.20' W90°42.60'
E  N34°50.00' W90°24.00'

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

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
A  N33°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.


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 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;
(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 05 AGL | A | N32°39.20' | W93°17.80'
 at or above 05 AGL | B | N35°52.10' | W93°32.00'
 at or above 05 AGL | C | N36°11.10' | W93°24.20'
 at or above 05 AGL | D | N36°25.90' | W93°30.80'
 at or above 05 AGL | E | N36°25.60' | W93°46.80'
 at or above 05 AGL | F | N35°38.60' | W93°18.00'
 at or above 05 AGL | G | N36°25.60' | W93°46.80'
 at or above 05 AGL | H | N36°25.90' | W93°46.80'

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:
(3) Maintain 300' AGL or higher for entire route.
(4) Entry Point: ABIL VORTAC (CH 84) 296/13.
(5) Exit Point: ABIL VORTAC (CH 84) 221/07.
(6) Aircraft must contact Abilene Approach prior to entering the Abilene Class C airspace to deconflict with departing/arriving traffic.
(7) This call should be made at least 15 NM north or south of Dyess AFB.
(8) 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:**

**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:**

At or above 03 AGL

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<tr>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td>N32°36.00' W100°04.00'</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>N32°44.00' W99°52.52'</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>N32°49.65' W99°15.78'</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>N32°23.05' W99°15.12'</td>
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<td>E</td>
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<td>N31°38.12' W99°21.33'</td>
</tr>
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<td>F</td>
<td></td>
<td>N31°31.88' W99°41.43'</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td>N32°12.60' W99°50.50'</td>
</tr>
<tr>
<td>H</td>
<td></td>
<td>N32°25.00' W99°52.00'</td>
</tr>
<tr>
<td>I</td>
<td></td>
<td>N32°24.00' W99°58.00'</td>
</tr>
</tbody>
</table>

**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) 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.

SCHEDULING ACTIVITY: Same as Originating Activity

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'
SR ROUTES

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 N32°46.00’ W99°35.00’
B N33°11.00’ W99°22.00’
C N33°01.00’ W99°59.00’
D N32°45.00’ W100°01.00’
E N32°25.00’ W99°52.00’
F N32°24.00’ W99°58.00’

(a) ALL AMERICAN DROP ZONE:
G N32°46.00’ W99°35.00’

(b) BLACKJACK DROP ZONE:
F N34°44.60’ W92°52.40’
G N34°52.30’ W92°39.50’
H N34°54.90’ W92°28.10’
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)


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
c/ 05 AGL A N36°33.00’ W97°17.00’
G N36°33.00’ W96°54.00’
C N36°50.00’ W96°51.00’
D N36°59.50’ W96°18.00’
F N36°41.00’ W96°29.00’
E N36°44.60’ W92°52.40’
H N36°17.00’ W96°34.50’
I N36°25.00’ W96°47.00’
J N36°44.60’ W92°52.40’

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°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-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°45.00' W99°43.00'
at or above 03 AGL C N32°56.00' W99°55.00'
SR ROUTES

SR-253

(VANCE)


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:

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:

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/Marion 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  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 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'

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 ROUTES

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:

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-274

(FT WORTH) FTW


HOURS OF OPERATION: Sunrise to Sunset daily

ROUTE DESCRIPTION:

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.

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 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, CS80-213-7850.

SCHEDULING ACTIVITY: 32 FTS/DOOT, Vance AFB, OK 73705-5202 DSN 448-6251, CS80-213-6251.

HOURS OF OPERATION: Sunrise to Sunset daily

ROUTE DESCRIPTION:

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 hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

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 B 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, 2 NM 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) 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 (excld hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:
Altitude Data Pt Fac/Rad/Dist Lat/Long
A N34°46.80' W102°06.00'
B N34°27.50' W102°12.00'

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.

SR-280

(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:

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.

SR-281

(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:

Altimeter Data  Pt  Fac/Rad/Dist    Lat/Long

A  N32°34.00'  W100°34.00'
B  N32°30.00'  W100°10.00'
C  N32°19.00'  W99°52.00'
D  N32°24.00'  W99°58.00'

(A) LAREDO TRANSITION:

E  N28°37.30'  W100°02.70'
F  N28°18.70'  W99°57.70'
G  N28°32.00'  W99°24.00'
H  N28°52.50'  W99°36.00'
I  N29°05.80'  W99°56.20'

(Alternate Entry/Exit Point)

J  N29°14.70'  W100°12.10'

(Alternate Entry/Exit Point)

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'

(Alternate Entry/Exit Point)

S  N29°05.80'  W100°12.00'
T  N29°45.00'  W100°12.00'
U  N29°48.70'  W100°35.50'
V  N30°07.50'  W100°41.70'
W  N30°24.30'  W100°31.00'
X  N30°24.00'  W100°56.50'
Y  N30°10.70'  W101°01.00'
Z  N29°58.00'  W101°09.00'

(B) PLEASANTON TRANSITION:

E1  N28°49.20'  W99°25.00'
E2  N27°28.50'  W99°09.50'
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'

(Alternate Exit Point)

J  N29°29.80'  W100°12.00'
J1  N29°46.50'  W100°04.70'
J2  N30°02.50'  W99°50.30'

(Alternate Exit Point)

G  N29°05.80'  W99°56.20'
H  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'

(Alternate Entry/Exit Point)

J  N29°29.80'  W100°12.00'
J1  N29°46.50'  W100°04.70'
J2  N30°02.50'  W99°50.30'
TRANSITION:

(d) SAN ANGELO TRANSITION:

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).

(a) 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).

(b) 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).

(c) 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).

(d) SAN ANGELO TRANSITION - 4 NM either side of centerline.

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-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).

(d) Primary Entry Point: A.

(e) Alternate Entry Points: C, H, I and J.

(f) Primary Exit Point: R.

(g) Alternate Exit Points: E2, E3, E4, F2, F4, H, I, J, J7 and O1.

(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.

(d) SR 281 is available utilizing the following schedule only:

1. Monday:
   a. (A-H) HUGHES
   b. (J-R) CLINE
2. Tuesday: Not available
3. Wednesday:
   a. (A-H) HUGHES
   b. (J-R) CLINE
4. Thursday: Not available
5. Friday:
   a. (A-H) HUGHES
   b. (J-R) CLINE
6. Active weekend routes shall be determined by the Scheduling Activity weekend Supervisor.

(e) Use of SAN ANGELO TRANSITION requires simultaneous scheduling of SR-283.

(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-281 is the reverse routing of SR-282. Both Routes will not be active at the same time.

(d) Route is VMC only.

(4) Conflicts:

Note: Pleasanton, Llano, and Laredo transitions are not included in the following deconfliction procedures.

(a) CLINE conflicts with IR-170, IR-149, IR-123, VR-143 and SR-283/284.

1. IR-170 crosses between K and L, O and P.

2. IR-149 and IR-170 crosses at entry J.
   a. 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).

3. 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.

4. IR-123 is common with route segment from M to N.

5. VR-143 is common with route from M to N.

6. SR-283/284 is common with route segment from Q to R.

7. IR-169 crosses over top from N to O at 4000' MSL.

8. SR-283/284 share common scheduling activity. Call 301 OG/SUA, NAS JRB Fort Worth to deconflict IR-123 and VR-143; DSN 379-6903/6904/6905, C817-784-6903/6904/6905. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict. Call COMTRAWING TWO, NAS JRB Fort Worth to deconflict IR-123 and VR-143; DSN 379-6903/6904/6905. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict. Call 87 FTS/DOS, Laughlin AFB to deconflict IR-170/149; DSN 739-6903/6904/6905. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict. Call 87 FTS/DOS, Laughlin AFB to deconflict IR-170/149; DSN 739-6903/6904/6905. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict.

9. IR-169 crosses over top from N to Q at 4000' MSL.

10. SR-283/284 share common scheduling activity. Call 301 OG/SUA, NAS JRB Fort Worth to deconflict IR-123 and VR-143; DSN 379-6903/6904/6905, C817-784-6903/6904/6905. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict. Call COMTRAWING TWO, NAS JRB Fort Worth to deconflict IR-123 and VR-143; DSN 379-6903/6904/6905. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict. Call 87 FTS/DOS, Laughlin AFB to deconflict IR-170/149; DSN 739-6903/6904/6905. 47 FTW aircrews will calculate potential conflict points and alter route profile to deconflict.

(b) SR-283/284 and SR-281/282 are to be deconflicted by scheduling for the route.

(c) 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
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. Make a position report to Carkco Springs/Dimmitt 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 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 field Laughlin Radials.

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
SR ROUTES

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), 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 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 Exit Point: R.
(e) Primary Entry Points: D, E, I, I1, J, K, M1, M3, N1, N2 and N3.
(f) Active Exit Points: I, J, K and P.
(g) Active Transition Points: I, D, L, I1, I2, I3, I4, I5, I6, I7, D1, N1, N2, N3, N4, N5, N6, N7, N8, N9, N10.

(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:

<table>
<thead>
<tr>
<th>Day</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Not available</td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>(A-I) LOMA</td>
</tr>
<tr>
<td>b.</td>
<td>(J-R) DAVIS</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Not available</td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>(A-I) LOMA</td>
</tr>
<tr>
<td>b.</td>
<td>(J-R) DAVIS</td>
</tr>
<tr>
<td>Friday</td>
<td>Not available</td>
</tr>
<tr>
<td>Active weekend routes shall be determined by the Scheduling Activity weekend Supervisor.</td>
<td></td>
</tr>
<tr>
<td>(e) Use of SAN ANGELO TRANSITION requires simultaneous scheduling of SR-284.</td>
<td></td>
</tr>
</tbody>
</table>

(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) Aircraft shall be scheduled with minimum of 10 minutes separation.
(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...
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 (N29-55.5 W100-37.75). Maintain this altitude until route exit.

c. 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.

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-283</td>
<td>Cloudy and foggy conditions are expected along the route.</td>
</tr>
<tr>
<td>VR-168</td>
<td>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.</td>
</tr>
</tbody>
</table>

(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 J and L.
(g) Moore community between M and N.
(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 hol).

HOURS OF OPERATION: Sunrise-Sunset daily

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N29°35.70'</td>
<td>W101°04.30'</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>N29°45.00'</td>
<td>W101°08.20'</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>N30°07.80'</td>
<td>W101°34.30'</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>N30°14.10'</td>
<td>W101°15.30'</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>N30°24.00'</td>
<td>W101°14.70'</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>N30°41.80'</td>
<td>W101°28.70'</td>
<td></td>
</tr>
</tbody>
</table>
SR ROUTES

3-45

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: 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 A to B.
(b) IR-123/ VR-143 cross between D to E.
(c) VR-186 crosses between G and H. Call 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 47 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 or (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.

SR-284

(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 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'
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 H-23B.
(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 D to E.
(c) VR-186 crosses between G and H. Call 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. 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 or (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.
(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.

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**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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N30°30.00'</td>
<td>W98°16.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N30°51.00'</td>
<td>W98°07.00'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>N30°57.00'</td>
<td>W97°20.00'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>N30°36.00'</td>
<td>W97°14.00'</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>N30°15.00'</td>
<td>W97°16.00'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>N30°06.00'</td>
<td>W97°17.00'</td>
</tr>
</tbody>
</table>

**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:

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**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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N29°07.50'</td>
<td>W98°09.50'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N28°53.50'</td>
<td>W98°25.00'</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>N28°35.50'</td>
<td>W97°58.00'</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>N28°45.50'</td>
<td>W97°32.00'</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>N29°00.00'</td>
<td>W97°45.00'</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>N29°14.00'</td>
<td>W97°57.50'</td>
</tr>
</tbody>
</table>
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.
(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 the 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): CWK 129/020.
(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 congruent 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 radius 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°34.00' W96°42.00'  
at or above 05 AGL  C    N29°33.00' W97°18.00'  
at or above 05 AGL  D    N29°33.00' W97°18.00'  
at or above 05 AGL  E    N29°43.50' W97°16.70'  

3-47
SR ROUTES

**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 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. 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 deconflict with traffic from SR-293.
5. Avoid flying over the Double D ranch between (E) and (F).
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. White Oak Airfield located at N30-12.5 W99-05.8 has turf runway. Do not confuse 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-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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
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<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N29°58.50'</td>
<td>W98°24.80'</td>
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<td>at or above 05 AGL</td>
<td>B</td>
<td>N29°57.00'</td>
<td>W97°40.40'</td>
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<td>at or above 05 AGL</td>
<td>C</td>
<td>N29°34.00'</td>
<td>W97°23.00'</td>
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<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>N29°43.50'</td>
<td>W97°16.70'</td>
</tr>
</tbody>
</table>

**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.
4. Aircrews will call turning north on 255.4 to deconflict with traffic from SR-293.
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).
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 confuse 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 | C | N36°03.00' | W98°58.00'
At or above 05 AGL (Alternate Entry Point) | D | N35°33.00' | W98°52.00'
At or above 05 AGL | 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 (Alternate Entry Point) | I | N34°36.00' | W97°58.00'
At or above 05 AGL | J | N35°08.00' | W97°40.00'
At or above 05 AGL (Alternate Entry/Exit Point) | K | N34°51.00' | W98°00.00'
At or above 05 AGL | L | N34°39.00' | W98°18.00'
At or above 05 AGL | M | N34°36.00' | W97°58.00'

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
2. Avoid flight within 1500' AGL or 3 NM of airports when practicable.
3. Alternate Entry Points: (C), (E) and (F).
4. 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


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 | E | N35°06.00' | W98°44.00'
at or above 05 AGL (Alternate Entry Point) | F | N35°08.00' | W97°48.00'
at or above 05 AGL | G | N35°08.00' | W97°48.00'

3-49
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).
(4) Contact Lawton-Ft Sill Approach om 120.55 or 322.4 at Point (F) for traffic advisories.
(5) Alternate Exit Point: (E).

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:

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(Alternate Entry/Exit Point)

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<td>T</td>
<td>N39°18.20' W122°29.50'</td>
</tr>
<tr>
<td>U</td>
<td>N39°04.10' W122°01.50'</td>
</tr>
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</table>

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 Flt Test, McClellan AFB (DSN 633-6435), IR-300, HQ SAC/DONA, Offutt AFB (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 MARSA 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 ROUTES

(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:

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, 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 MARSA 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 (I) 03 AGL B 93 MSL, (I) to (J) 10 AGL B 104 MSL, (J) to (K) 03 AGL B 77 MSL, (K) to (L) 03 AGL B 114 MSL, (L) to (M) 03 AGL B 104 MSL, (M) to (N) 03 AGL B 104 MSL, (N) to (O) 03 AGL B 95 MSL, (O) to (P) 03 AGL B 79 MSL, (P) to (Q) 03 AGL B 77 MSL, (Q) to (R) 03 AGL B 93 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

3-51
SR ROUTES

ROUTE DESCRIPTION:

**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.

### Altitude Data

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<th>Pt</th>
<th>Fac/Rad/Dist Lat/Long</th>
</tr>
</thead>
<tbody>
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<td>N39°36.00’ W120°06.00’</td>
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<td>C</td>
<td>N39°29.00’ W120°25.00’</td>
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<td>D</td>
<td>N39°06.50’ W120°28.00’</td>
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<td>I</td>
<td>N38°25.00’ W121°12.00’</td>
</tr>
</tbody>
</table>

**ROUTE WIDTH** - 3 NM either side of centerline.

**SCHEDULING ACTIVITY**: Same as Originating Activity

**HOURS OF OPERATION**: Continuous

### SR-359

**ORIGINATING ACTIVITY**: 129 RQW/DOW, PO Box 103, Stop 14, Moffett Federal Afld, CA 94035-5000 DSN 359-9356/7, C650-603-9356/7.

**SCHEDULING ACTIVITY**: Same as Originating Activity

**HOURS OF OPERATION**: Continuous

(SACRAMENTO) SAC

**ORIGINATING ACTIVITY**: 129 RQW/DOW, PO Box 103, Stop 14, Moffett Federal Afld, CA 94035-5000 DSN 359-9356/7, C650-603-9356/7.
ROUTE DESCRIPTION:
Altitude Data  Pt  Fac/Rad/Dist  Lat/Long
(A) N38°25.00'  W121°12.00'
(B) N38°34.00'  W120°43.00'
(C) N38°32.00'  W120°15.00'
(D) N38°39.00'  W120°07.00'
(E) N38°54.00'  W120°36.00'
(F) N39°06.00'  W120°28.00'
(G) N39°29.00'  W120°25.00'
(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-390

(RENO) RNO

ORIGINATING ACTIVITY: 129 RW/DOW, PO Box 103, Stop 14, Moffett Federal Aflfd, 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:

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 de-confliction.

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:

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 - 3 NM either side of centerline from (A) to (D), 3 NM either side of centerline from (D) to (F).

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°07.0', Power lines, left of centerline between (B) to (C).

SR-398

(UKIAH)

ORIGINATING ACTIVITY: 129 RQW/DOW, PO Box 103, Stop 14, Moffett Federal Afld, CA 94035-5000 DSN 359-9356/7, 650-603-9356/7.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: Continuous

ROUTE DESCRIPTION:

(Alternate Entry/Exit Point)

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.

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'

Altitude Data Pt Fac/Rad/Dist Lat/Long
A  N38°53.00' W122°58.00'
B  N38°59.00' W123°14.00'
C  N38°46.00' W123°06.00'
D  N38°31.00' W123°07.00'

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'

Altitude Data Pt Fac/Rad/Dist Lat/Long
A  N38°53.00' W123°09.00'

CAUTION: Uncharted obstacles/obstructions: N38°53.0' W123°09.0', Power lines, left of centerline between (B) to (C).
SR ROUTES

SR-488
(SEATTLE) SEA


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


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 left to N47-01 W122-22, then continue on to N46-49 W122-23, then turn right to intercept (A), then via the published route.

ROUTE WIDTH - 5 NM either side of centerline.

Remarks: Altitude data: 300' AGL to 1500' AGL.

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'  

ROUTE WIDTH - 3 NM either side of centerline.

3-55
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'

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 - 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


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 ROUTES

SR-702

(DETROIT) DET, MBS


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1600-0400Z++ Tue-Sat, 1600-2200Z++ Sun

ROUTE DESCRIPTION:

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<td>N43°14.00' W83°13.00'</td>
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<td>C</td>
<td></td>
<td></td>
<td>N43°36.00' W83°21.00'</td>
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<tr>
<td>D</td>
<td></td>
<td></td>
<td>N43°53.00' W83°16.00'</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td>N43°54.00' W82°54.00'</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td>N43°27.00' W83°04.00'</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
<td>N43°02.00' W82°46.00'</td>
</tr>
<tr>
<td>H</td>
<td></td>
<td></td>
<td>N42°40.00' W82°38.00'</td>
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<tr>
<td>I</td>
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<td>N42°36.00' W82°50.00'</td>
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</table>

ROUTE WIDTH - 5 NM either side of centerline.

Remarks:
(1) Minimum altitude: 500’ AGL.
(2) Entry Point: MTC TACAN 324/23.
(3) Exit Point: MTC TACAN 173/0.8.

SR-703

(DETROIT) DET, MBS


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1600-0400Z++ Tue-Sat, 1600-2200Z++ Sun

ROUTE DESCRIPTION:

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<td>D</td>
<td></td>
<td></td>
<td>N43°53.00' W83°16.00'</td>
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<tr>
<td>E</td>
<td></td>
<td></td>
<td>N43°54.00' W82°54.00'</td>
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<tr>
<td>F</td>
<td></td>
<td></td>
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<td>G</td>
<td></td>
<td></td>
<td>N43°02.00' W82°46.00'</td>
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<tr>
<td>H</td>
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<td>N42°40.00' W82°38.00'</td>
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<td></td>
<td></td>
<td>N42°36.00' W82°50.00'</td>
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ROUTE WIDTH - 3 NM either side of centerline.

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-707

(COLUMBUS)


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0700-2300 local daily

ROUTE DESCRIPTION:

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<tr>
<td>B</td>
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<td>N40°32.00' W82°18.00'</td>
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<td></td>
<td>N40°21.00' W82°05.00'</td>
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<td>D</td>
<td></td>
<td></td>
<td>N40°26.00' W81°12.00'</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td>N40°35.00' W81°37.00'</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td>N40°48.00' W82°01.00'</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
<td>N40°51.00' W82°18.00'</td>
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<tr>
<td>H</td>
<td></td>
<td></td>
<td>N40°50.00' W82°32.00'</td>
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Altitude Data Point Fac/Rad/Distance Latitude/Longitude

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<td>N40°32.00'</td>
<td>W82°18.00'</td>
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<td>N40°48.00'</td>
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<td>N40°51.00'</td>
<td>W82°18.00'</td>
<td>N40°50.00'</td>
<td>W82°32.00'</td>
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</tbody>
</table>

ROUTE WIDTH - 3 NM either side of centerline.

Remarks: Night Altitude data: As per AFI 11-2 MDS Vol 3.

SR-708

(COLUMBUS)


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)


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-710

(COLUMBUS)


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:**

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**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:**

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**ROUTE WIDTH** - 2 NM either side of centerline.

**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:**

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**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:**

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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


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°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


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’
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


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:

ROUTE WIDTH - 5 NM either side of centerline.

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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 2200-0330Z++ Tue-Fri;
1500-2200Z++ Sat-Sun

ROUTE DESCRIPTION:

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)


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 2000-0400Z++ Tue-Fri; 1600-2200Z++ Sat-Sun

ROUTE DESCRIPTION:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N43°58.00'</td>
<td>W90°39.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N43°46.00'</td>
<td>W90°16.00'</td>
</tr>
<tr>
<td>(Alternate Entry Point)</td>
<td>C</td>
<td>N43°09.00'</td>
<td>W89°52.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>N43°02.00'</td>
<td>W90°23.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td>N43°27.00'</td>
<td>W90°57.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>F</td>
<td>N43°50.00'</td>
<td>W90°58.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>G</td>
<td>N43°58.00'</td>
<td>W90°39.00'</td>
</tr>
</tbody>
</table>

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: 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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N45°01.00'</td>
<td>W83°47.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N45°04.00'</td>
<td>W84°40.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>C</td>
<td>N45°31.00'</td>
<td>W84°38.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>N45°24.00'</td>
<td>W84°05.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td>N45°12.00'</td>
<td>W83°45.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>F</td>
<td>N45°05.00'</td>
<td>W83°33.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:
(1) Minimum altitude: 500' AGL.

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:

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N45°03.00'</td>
<td>W83°14.00'</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>N44°42.00'</td>
<td>W83°16.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>C</td>
<td>N44°49.00'</td>
<td>W84°03.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>N45°08.00'</td>
<td>W84°39.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td>N45°29.00'</td>
<td>W84°08.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>F</td>
<td>N45°12.00'</td>
<td>W83°45.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>G</td>
<td>N45°05.00'</td>
<td>W83°33.00'</td>
</tr>
</tbody>
</table>

ROUTE WIDTH - 3 NM either side of centerline.

Remarks:
(1) Minimum altitude: 500' AGL.
For traffic de-confliction information with VR-1624, VR-1625, VR-1627 and VR-1628, contact 127 WG/OG, Selfridge ANGB, MI.

**SR-785**

**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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N43°56.00' W90°15.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>B</td>
<td>N44°20.00' W90°35.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>C</td>
<td>N44°32.00' W89°59.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>N44°23.00' W89°24.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td>N44°04.00' W89°25.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>F</td>
<td>N43°55.00' W89°45.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>G</td>
<td>N43°56.00' W90°15.00'</td>
</tr>
</tbody>
</table>

**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.

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**SR-801**

**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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N39°49.00' W75°58.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>B</td>
<td>N39°27.00' W75°52.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>C</td>
<td>N39°28.00' W75°02.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>N39°36.00' W74°42.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td>N39°34.00' W74°18.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>F</td>
<td>N39°38.00' W74°02.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>G</td>
<td>N39°12.00' W75°02.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>H</td>
<td>N39°38.00' W74°42.00'</td>
</tr>
</tbody>
</table>

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**SR-800**

**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:**

<table>
<thead>
<tr>
<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>at or above 05 AGL</td>
<td>A</td>
<td>N39°49.00' W75°58.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>B</td>
<td>N39°27.00' W75°52.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>C</td>
<td>N38°57.00' W76°05.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>D</td>
<td>N38°50.00' W75°19.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td>N39°12.00' W75°02.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>F</td>
<td>N39°38.00' W74°42.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>G</td>
<td>N39°30.00' W74°18.00'</td>
</tr>
</tbody>
</table>
SR ROUTES

ROUTE WIDTH - 4 NM either side of centerline from (A) to (B), 5 NM either side of centerline from (B) to (E), 2 NM eitherside 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°32.00’ W78°05.00’
at or above 05 AGL C N39°11.00’ W78°04.00’
at or above 05 AGL D 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°05.00’
at or above 05 AGL C N39°11.00’ W78°04.00’
at or above 05 AGL D 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’
SR ROUTES

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


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' | (Alternate Entry Point)
B | N39°27.00' | W75°52.00' | (Alternate Entry Point)
C | N39°21.00' | W75°22.00' |
D | N39°12.00' | W75°02.00' |
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:

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-820

(WASHINGTON) DCA, SBY, CHO


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0900-2300 local daily

ROUTE DESCRIPTION:

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


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0900-2300 local daily

ROUTE DESCRIPTION:
ROUTE WIDTH - 2 NM right side of centerline from (A) to (B), 1 NM either side of centerline from (B) to (G).

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:
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 A5, 10460 Wagner Dr, Niagara Falls Intl Airport, NY 14304-5010, DSN 238-2135.

SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 1500-0300Z++

ROUTE DESCRIPTION:

<table>
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<tr>
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<th>Pt</th>
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<td>W78°14.00'</td>
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<td>B</td>
<td>N42°38.00'</td>
<td>W77°23.00'</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>N42°11.00'</td>
<td>W77°38.00'</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>N42°50.00'</td>
<td>W78°26.00'</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>N43°06.00'</td>
<td>W78°21.00'</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>N43°07.00'</td>
<td>W78°42.00'</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>N43°07.00'</td>
<td>W78°57.00'</td>
<td></td>
</tr>
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</table>

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).

SR-835
(WASHINGTON) DCA, SBY, CHO


SCHEDULING ACTIVITY: Same as Originating Activity

HOURS OF OPERATION: 0900-2300 local

ROUTE DESCRIPTION:

<table>
<thead>
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<td></td>
</tr>
<tr>
<td>B</td>
<td>N38°08.00'</td>
<td>W77°30.00'</td>
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<td>N38°30.00'</td>
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<tr>
<td>F</td>
<td>N38°25.00'</td>
<td>W77°06.00'</td>
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</table>

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 ROUTES

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:

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<td>at or above 05 AGL</td>
<td>B</td>
<td></td>
<td>N39°11.00' W75°08.00'</td>
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<td>at or above 05 AGL</td>
<td>C</td>
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<td>N38°49.00' W75°13.00'</td>
</tr>
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<td>at or above 05 AGL</td>
<td>D</td>
<td></td>
<td>N39°12.00' W75°02.00'</td>
</tr>
<tr>
<td>at or above 05 AGL</td>
<td>E</td>
<td></td>
<td>N39°38.00' W74°42.00'</td>
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<td>at or above 05 AGL</td>
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<td>at or above 05 AGL</td>
<td>J</td>
<td></td>
<td>N39°49.00' W74°27.00'</td>
</tr>
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</table>

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 (J), 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:

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<td>C</td>
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<td>N39°38.00' W75°11.00'</td>
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<td>O</td>
<td></td>
<td>N39°49.00' W74°27.00'</td>
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</table>

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 (I) to (J).

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 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) Do not over-fly southern tip of Long Beach Island, bird nesting area.

(3) All aircraft will remain a minimum of 1 NM East of Long Beach Island.

(4) 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).

(5) Over-flight of Surf City, NJ (N39-40 W74-10) prohibited (Congressional).

(6) Avoid noise sensitive area at N39-38.6 W74-35.2 by 1 NM or 1000' AGL.

(7) Contact Warren Grove Range to de-conflict with VR-1709.

(8) 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' |
SR ROUTES

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 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 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: 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 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) Exit Point: Westover VOR 171/17.
(3) Exit Point: Westover VOR.
**ROUTE DESCRIPTION:**

Altitude Data Pt Fac/Rad/Dist Lat/Long

A at or above 05 AGL N43°11.00' W71°04.00'
B at or above 05 AGL N43°29.00' W71°10.00'
C at or above 05 AGL N43°13.00' W72°07.00'
D at or above 05 AGL N42°47.00' W72°07.00'
E at or above 05 AGL N42°33.00' W71°53.00'
F at or above 05 AGL N42°03.00' W72°10.00'
G at or above 05 AGL 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**

**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

A at or above 05 AGL N42°23.00' W71°46.00'
B at or above 05 AGL N42°32.00' W72°48.00'
C at or above 05 AGL N42°30.00' W71°55.00'
D at or above 05 AGL N42°30.00' W71°40.00'

**ROUTE WIDTH** - 3 NM either side of centerline.

**Remarks:**

1. Minimum altitude: 500' AGL.

**SR-905**

**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

A at or above 05 AGL N61°18.80' W150°26.80'
B at or above 05 AGL N61°12.30' W151°10.20'

**ROUTE WIDTH** - 3 NM either side of centerline.

**Remarks:**

1. Minimum altitude: 500' AGL.

**SR-1001**

**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 at or above 05 AGL N61°18.80' W150°26.80'
B at or above 05 AGL N61°12.30' W151°10.20'
SR ROUTES

### 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:

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<td>B</td>
<td>N61°45.70' W150°35.50'</td>
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<td>C</td>
<td>N61°50.20' W150°05.20'</td>
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<td>D</td>
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<td>E</td>
<td>N61°21.30' W149°39.00'</td>
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(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:

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<tr>
<th>Altitude Data</th>
<th>Pt Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N61°18.80' W150°26.77'</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>N61°45.70' W150°35.50'</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>N62°05.60' W150°50.20'</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>N61°51.20' W150°05.20'</td>
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</tr>
<tr>
<td>E</td>
<td>N61°35.50' W149°37.00'</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>N61°21.30' W149°39.00'</td>
<td></td>
</tr>
</tbody>
</table>

(Malemute Drop Zone).

#### ROUTE WIDTH - 5 NM either side of centerline from (A) to (E), 2 NM either side of centerline from (E) to (H).

**Remarks:**

1. Day altitude: 300' AGL (A) to (G); 500' AGL (G) to 5 NM prior to (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 ROUTES
3-75

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:

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</tr>
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<td>N61°39.80' W150°25.00'</td>
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<td>C</td>
<td></td>
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</tr>
<tr>
<td>F</td>
<td></td>
<td>N61°57.30' W150°55.50'</td>
</tr>
</tbody>
</table>

(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).

3-75

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:

<table>
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<tr>
<th>Altitude Data</th>
<th>Pt Fac/Rad/Dist</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td>N61°18.80' W150°26.00'</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>N61°34.00' W150°27.70'</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>N61°37.00' W149°59.10'</td>
</tr>
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<td>D</td>
<td></td>
<td>N61°35.00' W149°38.00'</td>
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<tr>
<td>E</td>
<td></td>
<td>N61°21.30' W149°39.00'</td>
</tr>
</tbody>
</table>

(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 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:

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<tr>
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<th>Pt</th>
<th>Lat/Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
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<td>C</td>
<td>N61°34.50'</td>
<td>W150°39.70'</td>
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<tr>
<td>D</td>
<td>N61°37.00'</td>
<td>W149°59.10'</td>
</tr>
<tr>
<td>E</td>
<td>N61°35.00'</td>
<td>W149°38.00'</td>
</tr>
</tbody>
</table>

(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-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:

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<th>Altitude Data</th>
<th>Pt</th>
<th>Fac/Rad/Dist Lat/Long</th>
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</thead>
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<tr>
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<td>W150°26.80'</td>
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<tr>
<td>B</td>
<td>N61°12.30'</td>
<td>W151°10.20'</td>
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<tr>
<td>C</td>
<td>N61°23.90'</td>
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<td>D</td>
<td>N61°56.20'</td>
<td>W151°28.50'</td>
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</tbody>
</table>

(Malemute Drop Zone).
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 5 NM prior to (I).
(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).
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Chapter 4

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/ANCHORS*

See tabulation for information regarding entrance and exit reporting points and specified operational altitudes. *VFR Helicopter Refueling Tracks are shown on the appropriate AP/1B Chart.

Tracks 304 and 332 Puerto Rico see tabulation
Tracks 331 Bermuda see tabulation

(30 AUG 07)
## REFUELLING TRACKS

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<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELLING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
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<td>MLD VOR-DME</td>
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**REMARKS:** Simultaneous Opposite Direction Air Refueling Test (SODART) operations are authorized with AR2 under the DoD/FAA Operational Test Agreement.

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<th>OCS VORTAC</th>
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**REMARKS:** Simultaneous Opposite Direction Air Refueling Test (SODART) operations are authorized with AR1 under the DoD/FAA Operational Test Agreement.

| AR3H   | PGS VORTAC | PGS VORTAC | RSK VORTAC | RSK VORTAC | a. 265.050 | FL240/FL270 | 60 OSS/AO Travis AFB, CA | Denver | ARCP-386.8E |
|--------|------------|------------|------------|------------|------------|------------|----------------|--------|
|        | 065/45     | 065/140    | 224/38     | 076/65     | b. 271.650 |            | DSN 837-5582/1038 | ARCP-386.8W |
| 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 ARIP-323.2E |
| RSK VORTAC | 076/65     | 224/38     | 065/140    | 065/45     | e. 30/93   |            |                 |        |
|        | 065/45     | 065/140    | 065/45     | 065/45     |            |            |                 |        |
| N36°44.00' |         | N36°25.00' | N36°02.00' | N35°45.00' |            |            |                 |        |
| W106°45.00' |         | W108°46.00' | W110°42.00' | W112°38.00' |            |            |                 |        |
|        | RSK VORTAC | RSK VORTAC | PGS VORTAC | PGS VORTAC |            |            |                 |        |
|        | 076/65     | 224/38     | 065/140    | 065/45     |            |            |                 |        |
| N36°44.00' |         | N36°25.00' | N36°02.00' | N35°45.00' |            |            |                 |        |
| W106°45.00' |         | W108°46.00' | W110°42.00' | W112°38.00' |            |            |                 |        |

**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++.

<table>
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<th>AR3L</th>
<th>ALS VORTAC</th>
<th>RSK VORTAC</th>
<th>RSK VORTAC</th>
<th>RSK VORTAC</th>
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**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.

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**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.
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<td>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.</td>
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|        | W128°49.00'   | W126°11.00'   |                         |            | N39°19.20' | b. 278.750         | DSN 837-5582/1038 | Oakland ARCP-387.1E |
|        |               |               |                         |            | W124°00.80' | c. 1-1-2           | C707-424-5582/1038 |                |
|        |               |               |                         |            |         | d. 3/1             |                 |                |
|        |               |               |                         |            |         | e. 31/94           |                 |                |
|        |               |               |                         |            |         |                     |                 |                |
|       |               |               |                         |            |         |                     |                 |                |
|       |               |               |                         |            |         |                     |                 |                |
| 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. |</p>
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**REMARKS:** Hours of operation: 1630-2359Z++ and 0330-1400Z++ daily. All turns shall be made to the west.

**AR7A**

**REMARKS:** Refueling southbound only.

**AR7B**

**REMARKS:** Refuel northbound only.
### AR ROUTES

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**REMARKS:** Refuel southbound only.

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**REMARKS:** Refuel northbound only.
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<td>N48°40.00'</td>
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**REMARKS:** AR9 and AR9A simultaneous operations not authorized. See remarks section AR9A.
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<td>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 W110-00-00 to beginning.</td>
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| (Northwest) | 204/62 | 157/50 | 146/84 | 146/84 | 156/65 | 292.600 | 382-2635, 253-982-2635. |
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|        | W109°30.00' | W111°14.50' | W115°10.00' | W115°10.00' | W117°30.00' | 6/1 | |
|        |        |        |        |        |        | e. 51/114 | |
|        |        |        |        |        |        | |
|        |        |        |        |        |        | |
| (Southeast) | GEG VORTAC | MLP VOR-DME | HLN VORTAC | BIL VORTAC | 204/62 | FL250/FL270 | Salt Lake City ARCP-338.3W Seattle EXIT-251.1W |
|        | 156/65 | 146/84 | 155/70 | 204/62 | N46°28.50' | 28.00' | W109°30.00' | |
|        | N46°28.50' | N45°00.00' | N45°28.00' | N45°28.00' | N45°00.00' | |
|        | W117°30.00' | W115°10.00' | W111°46.50' | W111°46.50' | W109°30.00' | |
|        |        |        |        |        |        | |
| REMARKS: None |

(During non-duty hours, contact McChord Command Post DSN 382-2635, C253-982-2635.)
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<td>d. 3/1</td>
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<td>e. 31/94</td>
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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 | MLS VORTAC | MLS VORTAC | DPR VORTAC | a. 352.600 | FL270/FL310 | 28 OSS/OSXS Ellsworth AFB, SD | Salt Lake City |
| 342/31   | 216/16 | 216/16 | 097/34 | 344/25 | b. 320.900 | DSN 675-4246. After Hours relay through Raymond 33 675-3800 | ARCP-272.75E | EXIT-351.9W |
| N46°20.00’ | N46°13.00’ | N46°10.00’ | 345°30.00’ | W101°45.00’ | c. 1-2-1 | | | |
| W108°40.00’ | W106°15.00’ | W105°12.00’ | W101°45.00’ | W101°45.00’ | d. 3/1 | | | |
|              |      |      |                         |      |         | e. 31/94          |                |               |
| (West)    | DPR VORTAC | DIK VORTAC | MLS VORTAC | BIL VORTAC | a. 352.600 | FL270/FL310 | 28 OSS/OSXS Ellsworth AFB, SD | Salt Lake City |
| 344/25   | 209/75 | 209/75 | 097/34 | 342/31 | b. 320.900 | DSN 675-4246. After Hours relay through Raymond 33 675-3800 | ARCP-272.75E | EXIT-351.9W |
| N45°30.00’ | N45°56.00’ | N46°10.00’ | 345°30.00’ | W108°40.00’ | c. 1-2-1 | | | |
| W101°45.00’ | W104°00.00’ | W105°12.00’ | W101°45.00’ | W101°45.00’ | d. 3/1 | | | |
|              |      |      |                         |      |         | e. 31/94          |                |               |

REMARKS: Simultaneous opposite direction air refueling (SODAR) authorized with AR12L.
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**REMARKS:** Simultaneous opposite direction air refueling (SODAR) authorized with AR12H.

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**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++.
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<td>BFF VORTAC</td>
<td>RAP VORTAC</td>
<td>336.100</td>
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<td>Denver</td>
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<td>169/110</td>
<td>277/36</td>
<td>120/115</td>
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| AR20 (Northeast) | YQI VOR-DME | YQI VOR-DME | YHZ VOR-DME | YQY VORTAC | a. 341.750 | 15000/FL280 | NEADS/DOAS/Rome NY |
| | 250/82 | N43°49.50' | N44°55.39' | N46°09.20' | b. 349.700 | | DSN 587-6247 |
| | N42°56.72' | W66°04.95' | W63°24.11' | W60°03.35' | c. 2-1-1 | | C315-334-6247 |
| | W67°30.48' | | | | d. 5/1 | | |
| | | | | | e. 62/125 | | |
| | | | | | | | |
| 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. | |

<p>| AR24 (North) | HLC VORTAC | HCT VORTAC | TDD VOR-DME | RAP VORTAC | a. 295.400 | FL190/FL220 | 28 OSS/OSXS Ellsworth AFB, SD |
| | 06/29 | 036/59 | 052/28 | 087/40 | b. 320.900 | | DSN 675-4246. (After hours: relay through Raymond 33 |
| | N39°26.00' | N41°07.00' | N42°12.00' | N43°51.00' | c. 1-2-3 | | 675-3800) |
| | W99°38.00' | W99°57.50' | W100°11.00' | W102°07.00' | d. 3/1 | | C605-385-4246 |
| | | | | | e. 30/93 | | |
| | | | | | | | |
| | RAP VORTAC | 087/40 | TDD VOR-DME | TDD VOR-DME | HLC VORTAC | 062/29 | | |
| | 087/40 | 357/38 | 052/28 | 087/40 | 062/29 | | |
| | N43°51.00' | N42°12.00' | N43°51.00' | W99°38.00' | | | |
| | W102°07.00' | W100°11.00' | W102°07.00' | W99°38.00' | | | |
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| | | | | | | | |
| REMARKS: | None | | | | | | |</p>
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**REMARKS:**

1. Primary means of scheduling track reservation requests is email to: doas@neads.ang.af.mil.
2. SOUTH ARCP-Between 1500-1630Z++ limited to either buddy, on course or enroute cell rendezvous.
3. SOUTH EXIT-When refueling on the southbound track, aircraft will exit the track with turns to the right unless otherwise authorized by ATC.
4. Refueling is prohibited between 1900Z++ and 2100Z++.
5. 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**

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**REMARKS:**

Open for night-time use only: 0240-1200Z++. 4-15

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**Remarks:** Track comes within 12 NM of CYA 732 (controlled by Goose Bay).
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<td>LBB VORTAC 148/48</td>
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**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 302/38 | HRV VORTAC 318/13 | N29°09.00' | W87°05.00' | a. 327.600 | FL240/FL260 | 55WG Offutt AFB, NE | Houston ARCP |
|       | N31°42.00' | N30°01.80' | W89°41.00' | W87°30.00' | b. 260.200 | | DSN 271-3430 | |
|       | W90°52.00' | W90°10.33' | W88°43.00' | N25°32.00' | c. 1-1-2 | | C402-294-3430 | |
|       |          |          | W87°37.00' |          | d. 4/1 | | | |
|       |          |          |          |          | 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 | INK VORTAC 189/28 | ABI VORTAC 225/100 | ABI VORTAC 150/46 | ACT VORTAC 322/23 | a. 344.700 | FL260/FL310 | 2 OSS/OSOS Barksdale AFB, LA | Fort Worth EXIT-269.0E |
|       | N31°26.00' | N31°31.00' | N31°46.00' | N32°00.00' | b. 260.200 | | DSN 781-4832/7182 | ARCP-269.0E |
|       | W103°26.00' | W101°26.00' | W99°32.00' | W97°30.00' | c. 1-1-2 | | C318-456-4832/7182 | |
|       |          |          | W99°32.00' | W101°26.00' | d. 3/1 | | | E |
| (East) | ACT VORTAC 322/23 | ABI VORTAC 150/46 | ABI VORTAC 225/100 | INK VORTAC 189/28 | e. 31/94 | | | |
|       | N32°00.00' | N31°46.00' | N31°31.00' | N31°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.
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**REMARKS:** Simultaneous opposite direction aerial refueling (SODAR) operations are authorized with AR106L.

### AR106L (West)

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**REMARKS:** Simultaneous opposite direction aerial refueling (SODAR) operations are authorized with AR106L.

### AR107

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**REMARKS:** Refueling aircraft at the TVC VORTAC 038/56, shall execute a left turn and continue refueling southbound to the exit point.

### AR108

**AR108 (East)**

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**REMARKS:** Aerial refueling permitted from 1130-1330L and 1730-2300L daily. Simultaneous opposite direction aerial refueling (SODAR) operations are authorized with AR108 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**
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**REMARKS:**
- AR109W rendezvous/rejoin maneuvers prohibited between 1515-1630Z++.  
- After duty hours contact C660-563-1035 or Cmd Post DSN 975-3778.
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<td>W86°23.00'</td>
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<td>d. 2/1</td>
<td>E</td>
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<td>e. 30/93</td>
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</table>

**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.

<table>
<thead>
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<th>AR112H</th>
<th>IRW VORTAC</th>
<th>TUL VORTAC</th>
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<th>ARG VORTAC</th>
<th>a. 235.100</th>
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<td>191/61</td>
<td>138/44</td>
<td>282/74</td>
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<td>e. 33/96</td>
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**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.
## AR ROUTES

### AR112L

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
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<td>FL190/FL230</td>
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### AR113L

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<th>REFUELING ALTITUDES</th>
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<td>ACT VORTAC 322/23</td>
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### 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.
- Or as assigned by ATC.

- 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 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.

- 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.
## AR115

### ARIP

334/30
N34°49.00' W106°57.80'
W106°49.23'

### VORTAC

ONM VORTAC
N34°20.33' W106°48.00'

### EXIT

ONM VORTAC
N34°00.00' W106°48.00'
W106°55.90'

### CR PLAN

a. N/R
b. N/R
c. N/R
d. N/R
e. N/R

### REFUELING ALTITUDES

08000/09000

### SCHEDULING UNIT

58 OSS/DOO, Kirtland AFB, NM
DSN 263-5979/5888/5701
C505-853-5979/5888/5701

### ASSIGNED ARTCC

Albuquerque
ARCP-128.8E
ARCP-307.2E
EXIT-128.8E
EXIT-307.2E

### 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

### NAVIGATION CHECK POINTS

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<th>ARIP</th>
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<th>CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
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<th>EXIT</th>
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**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
**AR ROUTES**

**AR167**

**Navigation Check Points**

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<th>Number</th>
<th>ARIP</th>
<th>ARCP</th>
<th>EXIT</th>
<th>CR Plan</th>
<th>Refueling Altitudes</th>
<th>Scheduling Unit</th>
<th>Assigned ARTCC</th>
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<tbody>
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<td>340/30</td>
<td>LRD VORTAC</td>
<td>RSG VORTAC</td>
<td>RSG VORTAC</td>
<td>235.100</td>
<td>FL260/FL310</td>
<td>149 FG/DOOS Kelly AFB, TX</td>
<td>Houston, ARCP-323.1W, EXIT-380.2W</td>
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**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**

**Navigation Check Points**

<table>
<thead>
<tr>
<th>Number</th>
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<th>EXIT</th>
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<td>VUZ VORTAC</td>
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**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**

**Navigation Check Points**

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<td>HVE VORTAC</td>
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**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.
<table>
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<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
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<th>REFUELING ALTITUDES</th>
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<td>ILM VORTAC</td>
<td>N34°21.10'</td>
<td>FL250/FL280 or as assigned</td>
<td>437 OSS/OSO Charleston AFB, SC DSN 673-5554 (After duty hours 437 OPG Comd Post 673-2531)</td>
<td>Jacksonville ARTCC</td>
</tr>
<tr>
<td>AR202N (North)</td>
<td>VRB VORTAC</td>
<td>VRB VORTAC</td>
<td>N32°16.00'</td>
<td>ILM VORTAC</td>
<td>N34°21.10'</td>
<td>FL250/FL280 or as assigned</td>
<td>437 OSS/OSO Charleston AFB, SC DSN 673-5554 (After duty hours 437 OPG Comd Post 673-2531)</td>
<td>Jacksonville ARTCC</td>
</tr>
<tr>
<td>AR202S (South)</td>
<td>ILM VORTAC</td>
<td>ILM VORTAC</td>
<td>N32°16.00'</td>
<td>VRB VORTAC</td>
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<td>FL250/FL280 or as assigned</td>
<td>437 OSS/OSO Charleston AFB, SC DSN 673-5554 (After duty hours 437 OPG Comd Post 673-2531)</td>
<td>Alternate Exit - Jacksonville ARTCC</td>
</tr>
</tbody>
</table>

**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) 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) 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.

**Alternate Exit:**

1. Alternate Exit
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<tr>
<th>NUMBER</th>
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<th>CR PLAN</th>
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<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
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<tr>
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<td>BNA VORTAC</td>
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<td>271/42</td>
<td>013/21</td>
<td>210/40</td>
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<tr>
<td>REMARKS:</td>
<td>Refueling restricted to three flight levels. All air refueling prohibited during the following hours: 1530-1730Z++ and 0030-0230Z++.</td>
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<tr>
<td>AR204</td>
<td>ALB VORTAC</td>
<td>YSC VORTAC</td>
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<td>POQi VOR-DME</td>
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<td>REMARKS:</td>
<td>AR204 (Northeast) - aircraft should plan right turns after end A/R.</td>
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### AR205
- **NAVIGATION CHECK POINTS**:
  - PQI VOR-DME: 339/24, N47°05.00’W68°28.00’
  - MLT VOR-DME: 318/52, N46°00.00’W69°37.00’
- **EXIT**: ALB VORTAC 018/67, N43°52.00’W74°00.00’
- **CR PLAN**: a. 327.600, b. 282.700, c. 1-1-2, d. 3/1, e. 31/94
- **REFUELING ALTITUDES**: FL280/FL310
- **SCHEDULING UNIT**: 305 OSS/OSO McGuire AFB, NJ
- **ASSIGNED ARTCC**: Boston ARCP-319.1W

### AR206
- **REMARKS**: None

### AR206H
- **NAVIGATION CHECK POINTS**:
  - SYR VORTAC: 094/35, N43°13.70’W75°24.60’
- **EXIT**: DKK VORTAC 094/35, N43°13.70’W75°24.60’
- **CR PLAN**: a. 348.900, b. 282.700, c. 1-1-3, d. 6/1, e. 32/95
- **REFUELING ALTITUDES**: FL250/FL270, FL280/FL310
- **SCHEDULING UNIT**: 305 OSS/OSO McGuire AFB, NJ
- **ASSIGNED ARTCC**: Boston ARCP-323.0W Cleveland EXIT-354.1W

### AR206L
- **NAVIGATION CHECK POINTS**:
  - SYR VORTAC: 094/35, N43°13.70’W75°24.60’
- **EXIT**: DKK VORTAC 094/35, N43°13.70’W75°24.60’
- **CR PLAN**: a. 235.100, b. 108/105, c. 1-1-4, d. 4/1, e. 33/96
- **REFUELING ALTITUDES**: FL190/FL230
- **SCHEDULING UNIT**: 305 OSS/OSO McGuire AFB, NJ
- **ASSIGNED ARTCC**: Boston ARCP-323.0W Cleveland EXIT-307.8W

### AR207NE
- **NAVIGATION CHECK POINTS**:
  - AMG VORTAC: 036/30, N31°57.00’W82°10.00’
- **EXIT**: SSC TACAN 036/30, N33°58.67’W80°27.97’
- **CR PLAN**: a. 324.600, b. 343.250, c. 1-1-3, d. 6/1, e. 32/95
- **REFUELING ALTITUDES**: FL260/FL280
- **SCHEDULING UNIT**: 437 OSS/OSO Charleston AFB, SC
- **ASSIGNED ARTCC**: Jacksonville ARCP-319.2E EXIT-352.0E

### AR207SW
- **NAVIGATION CHECK POINTS**:
  - RDU VORTAC: N35°52.35’W78°47.00’
- **EXIT**: SSC TACAN RDU VORTAC, N35°52.35’W78°47.00’
- **CR PLAN**: a. 324.600, b. 343.250, c. 1-1-3, d. 6/1, e. 32/95
- **REFUELING ALTITUDES**: FL260/FL280
- **SCHEDULING UNIT**: 437 OSS/OSO Charleston AFB, SC
- **ASSIGNED ARTCC**: Jacksonville ARCP-352.0W EXIT-346.3W

### REMARKS:
- **AR205**: 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**: 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 a left turn at exit.
- **AR207NE**: Track manager will resolve conflictions 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**: Track manager will resolve conflictions 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.
### AR208

**NAVIGATION CHECK POINTS**
- SAC VORTAC 019/38 N38°57.00' W121°05.00'
- SAC VORTAC 027/35 N38°51.20' W121°01.80'
- HNW VOR-DME 181/14 N38°30.10' W120°50.50'
- SAC VORTAC 083/38 N38°20.00' W120°45.10'
- HNW VOR-DME 141/8 N38°10.50' W120°36.50'
- SAC VORTAC 027/35 N38°51.20' W121°01.80'
- SAC VORTAC 019/38 N38°57.00' W121°05.00'
- SAC VORTAC 083/38 N38°20.00' W120°45.10'

**EXIT CR PLAN**
- a. N/R
- b. N/R
- c. N/R
- d. N/R
- e. N/R

**REFUELING ALTITUDES**
- 06000/08000

**SCHEDULING UNIT**
- 129 RQW Moffett Federal Afd, CA DSN 359-9356/7 C650-603-9356/7

**ASSIGNED ARTCC**
- Sacramento TRA-CON ARCP-119.1E/340.9E EXIT-119.1E/340.9E

**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)

**NAVIGATION CHECK POINTS**
- N30°15.60' W127°17.50' N30°42.00' W125°26.00'
- N31°07.90' W123°32.80' ROSIN
- N31°33.50' W121°23.50' FICKY
- N31°56.50' W120°16.10' N30°42.00' W125°26.00'

**EXIT CR PLAN**
- FL230
- a. 238.900
- b. 256.650
- c. 2-1-1
- d. 3/1
- e. 30/93

**SCHEDULING UNIT**
- 452 AMW OSS/DOOA March AFB, CA DSN 447-5614/2297 C951-655-5614/2297

**ASSIGNED ARTCC**
- Los Angeles ARCP EXIT

#### (West)

**NAVIGATION CHECK POINTS**
- N31°56.50' W120°16.10' ROSIN
- N31°33.50' W121°23.50' FICKY
- N31°07.90' W123°32.80' FOOTS
- N30°15.60' W127°17.50'

**EXIT CR PLAN**
- FL230
- a. 238.900
- b. 256.650
- c. 2-1-1
- d. 3/1
- e. 30/93

**SCHEDULING UNIT**
- 452 AMW OSS/DOOA March AFB, CA DSN 447-5614/2297 C951-655-5614/2297

**ASSIGNED ARTCC**
- Los Angeles ARCP EXIT

**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.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR212</td>
<td>ALB VORTAC 018/67</td>
<td>YSC VORTAC 215/46</td>
<td>YSC VORTAC 118°/54 N45°08.00' W70°32.00'</td>
<td>PQI VOR-DME 339/24 N47°05.00' W68°28.00'</td>
<td>a. 238.900 b. 282.700 c. 1-2-0 d. 5/1 e. 50/113</td>
<td>FL190/FL220</td>
<td>305 OSS/OSEO McGuire AFB, NJ DSN 650-4394/5891 C669-754-4394/5891</td>
<td>Boston ARCP-282.2E EXIT-346.4E</td>
</tr>
<tr>
<td></td>
<td>NFL TACAN 164/6</td>
<td>NFL TACAN 179/5</td>
<td>NFL TACAN 004/5 N39°30.00' W118°38.00'</td>
<td>NFL TACAN 018/6 N39°30.00' W118°40.00'</td>
<td>a. N/R b. N/R c. N/R d. N/R e. N/R</td>
<td>15000/17000</td>
<td>NAS Fallon Range Scheduling, NV DSN 890-2416/2418 C775-426-2418</td>
<td>Oakland ARCP EXIT</td>
</tr>
</tbody>
</table>

**REMARKS:** Aircraft should plan right turn after end A/R.

**REMARKS:** Continuous refueling authorized throughout track. Restricted use for Navy tactical aircraft only. For entry and exit contact Navy Fallon 263.6.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR216</td>
<td>VUZ VORTAC</td>
<td>N33°22.00'</td>
<td>VXX VORTAC</td>
<td>194/28</td>
<td>N35°27.00'</td>
<td>FL260/FL280</td>
<td>437 OSS/OSO Charleston AFB, SC DSN 673-5549/5554 C843-963-5549/5554</td>
<td>Atlanta ARCP-363.1E EXIT-257.9E</td>
</tr>
<tr>
<td></td>
<td>RMG VORTAC</td>
<td>W85°07.17'</td>
<td>VXX VORTAC</td>
<td>244/55</td>
<td>N36°38.00'</td>
<td>1-2-1</td>
<td>3/1/94</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N34°09.75'</td>
<td>W86°02.00'</td>
<td>RMG VORTAC</td>
<td>N35°47.00'</td>
<td>W83°30.00'</td>
<td>111/47</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Northeast)</td>
<td>111/47</td>
<td>N35°27.00'</td>
<td>N35°47.00'</td>
<td>W84°01.00'</td>
<td>194/28</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>110/20</td>
<td></td>
<td>VXX VORTAC</td>
<td>110/20</td>
<td>N35°27.00'</td>
<td>N35°47.00'</td>
<td>W84°01.00'</td>
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</tr>
<tr>
<td></td>
<td>N36°38.00'</td>
<td>W85°07.17'</td>
<td>RMG VORTAC</td>
<td>N34°09.75'</td>
<td>W86°02.00'</td>
<td>111/47</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N34°09.75'</td>
<td>W86°02.00'</td>
<td>RMG VORTAC</td>
<td>N35°47.00'</td>
<td>W83°30.00'</td>
<td>194/28</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Southwest)</td>
<td>PSK VORTAC</td>
<td>N33°22.00'</td>
<td>W86°02.00'</td>
<td>FL260/FL280</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>VUZ VORTAC</td>
<td>N33°22.00'</td>
<td>VXX VORTAC</td>
<td>194/28</td>
<td>N35°27.00'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RMG VORTAC</td>
<td>W85°07.17'</td>
<td>VXX VORTAC</td>
<td>244/55</td>
<td>N36°38.00'</td>
<td>1-2-1</td>
<td>3/1/94</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N34°09.75'</td>
<td>W86°02.00'</td>
<td>RMG VORTAC</td>
<td>N35°47.00'</td>
<td>W83°30.00'</td>
<td>194/28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** Refueling/Holding not permitted 1845-2115Z++; 2300-0200Z++; 1330-1630Z++. 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).

<table>
<thead>
<tr>
<th>AR217</th>
<th>CXR VOR-DME</th>
<th>N41°31.01'</th>
<th>VXX VORTAC</th>
<th>194/28</th>
<th>N35°27.00'</th>
<th>16000/FL220</th>
<th>171 ARW Pittsburgh Intl Arpt, PA</th>
<th>Cleveland ARCP-298.95E EXIT-294.65E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-2-1</td>
<td>1-2-2</td>
<td>283.900</td>
<td>50/113</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>1-2-3</td>
<td>5/1</td>
<td>52/115</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>1-2-0</td>
<td>5/1</td>
<td>52/115</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>1-2-3</td>
<td>282.700</td>
<td>16000/FL220</td>
<td>171 ARW Pittsburgh Intl Arpt, PA</td>
<td>Cleveland ARCP-299.2W EXIT-379.2W</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>283.900</td>
<td>282.700</td>
<td>16000/FL220</td>
<td>171 ARW Pittsburgh Intl Arpt, PA</td>
<td>Cleveland ARCP-299.2W EXIT-379.2W</td>
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<td>282.700</td>
<td>16000/FL220</td>
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<td>Cleveland ARCP-299.2W EXIT-379.2W</td>
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</tbody>
</table>

**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).

<table>
<thead>
<tr>
<th>AR218</th>
<th>TON VORTAC</th>
<th>N40°34.00'</th>
<th>EWC VORTAC</th>
<th>194/28</th>
<th>W83°16.50'</th>
<th>FL190/FL220</th>
<th>171 ARW Pittsburgh Intl Arpt, PA</th>
<th>Cleveland ARCP-299.2W EXIT-379.2W</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>180/10</td>
<td>143/20</td>
<td>BSV VOR-DME</td>
<td>283/95</td>
<td>N40°44.44'</td>
<td>2/1</td>
<td>171 ARW Pittsburgh Intl Arpt, PA</td>
<td>Cleveland ARCP-299.2W EXIT-379.2W</td>
</tr>
<tr>
<td></td>
<td>N40°36.00'</td>
<td>W83°18.00'</td>
<td>BSV VOR-DME</td>
<td>283/95</td>
<td>N40°44.44'</td>
<td>2/1</td>
<td>171 ARW Pittsburgh Intl Arpt, PA</td>
<td>Cleveland ARCP-299.2W EXIT-379.2W</td>
</tr>
<tr>
<td></td>
<td>W78°16.00'</td>
<td>W79°54.00'</td>
<td>BSV VOR-DME</td>
<td>283/95</td>
<td>N40°44.44'</td>
<td>2/1</td>
<td>171 ARW Pittsburgh Intl Arpt, PA</td>
<td>Cleveland ARCP-299.2W EXIT-379.2W</td>
</tr>
<tr>
<td></td>
<td>(Southwest)</td>
<td>EWC VORTAC</td>
<td>N40°49.51'</td>
<td>W80°12.69'</td>
<td>FWA VORTAC</td>
<td>305.500</td>
<td>171 ARW Pittsburgh Intl Arpt, PA</td>
<td>Cleveland ARCP-363.1W EXIT-288.3W</td>
</tr>
<tr>
<td></td>
<td>104/28</td>
<td>104/28</td>
<td>EWC VORTAC</td>
<td>091/65</td>
<td>N40°49.51'</td>
<td>2/1</td>
<td>171 ARW Pittsburgh Intl Arpt, PA</td>
<td>Cleveland ARCP-363.1W EXIT-288.3W</td>
</tr>
<tr>
<td></td>
<td>N40°46.50'</td>
<td>W78°16.00'</td>
<td>EWC VORTAC</td>
<td>091/65</td>
<td>N40°49.51'</td>
<td>2/1</td>
<td>171 ARW Pittsburgh Intl Arpt, PA</td>
<td>Cleveland ARCP-363.1W EXIT-288.3W</td>
</tr>
<tr>
<td></td>
<td>W79°36.25'</td>
<td>W79°36.25'</td>
<td>EWC VORTAC</td>
<td>091/65</td>
<td>N40°49.51'</td>
<td>2/1</td>
<td>171 ARW Pittsburgh Intl Arpt, PA</td>
<td>Cleveland ARCP-363.1W EXIT-288.3W</td>
</tr>
</tbody>
</table>

**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).

<table>
<thead>
<tr>
<th>AR219</th>
<th>EWC VORTAC</th>
<th>N40°39.50'</th>
<th>EWC VORTAC</th>
<th>091/65</th>
<th>W80°12.69'</th>
<th>FL260/FL290</th>
<th>171 ARW Pittsburgh Intl Arpt, PA</th>
<th>Cleveland ARCP-363.1W EXIT-288.3W</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>104/89</td>
<td>104/28</td>
<td>EWC VORTAC</td>
<td>091/65</td>
<td>N40°49.51'</td>
<td>2/1</td>
<td>171 ARW Pittsburgh Intl Arpt, PA</td>
<td>Cleveland ARCP-363.1W EXIT-288.3W</td>
</tr>
<tr>
<td></td>
<td>N40°46.50'</td>
<td>W78°16.00'</td>
<td>EWC VORTAC</td>
<td>091/65</td>
<td>N40°49.51'</td>
<td>2/1</td>
<td>171 ARW Pittsburgh Intl Arpt, PA</td>
<td>Cleveland ARCP-363.1W EXIT-288.3W</td>
</tr>
<tr>
<td></td>
<td>W79°36.25'</td>
<td>W79°36.25'</td>
<td>EWC VORTAC</td>
<td>091/65</td>
<td>N40°49.51'</td>
<td>2/1</td>
<td>171 ARW Pittsburgh Intl Arpt, PA</td>
<td>Cleveland ARCP-363.1W EXIT-288.3W</td>
</tr>
</tbody>
</table>

**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).
### AR220

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR220</td>
<td>TON VORTAC   180/10  N40°34.00'  W78°18.00'</td>
<td>EWC VORTAC  143/20  N40°36.00'  W79°54.00'</td>
<td>BSV VOR-DME  N40°44.44'  W81°25.93'  283/95  N40°58.20'  W83°16.50'  CXR VOR-DME  N41°44.90'  W83°16.50'  ETG VORTAC  N41°58.00'  W83°16.50'</td>
<td>ETG VORTAC  288/33  N41°17.40'  W78°52.10'</td>
<td>a. 274.450  b. 282.700  c. 1-3-0  d. 3/1  e. 52/115</td>
<td>FL190/FL220</td>
<td>171 ARW Pittsburgh Intl Arpt, PA  DSN 294-7347 or 7374</td>
<td>Cleveland ARCP-299.2W  EXIT-291.65E</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR221</td>
<td>MCC VOR-DME  120/42  N38°09.00'  W120°48.00'</td>
<td>MCC VOR-DME  120/52  N38°02.00'  W120°39.00'</td>
<td>MCC VOR-DME  120/82  N37°39.00'  W120°13.00'</td>
<td>a. N/R  b. N/R  c. N/R  d. N/R  e. N/R</td>
<td>06000/10000</td>
<td>129 RWQ Moffett Federal Afd, CA  DSN 359-9356/7  C650-603-9356/7</td>
<td>Oakland ARCP-319.9E  EXIT-319.9E</td>
<td></td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
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</thead>
<tbody>
<tr>
<td>AR222</td>
<td>ECA VORTAC  147/14  N37°36.63'  W121°05.00'</td>
<td>PXN VORTAC  328/5  N36°47.72'  W120°48.53'</td>
<td>PXN VORTAC  328/5  N36°47.72'  W120°48.53'</td>
<td>a. N/R  b. N/R  c. N/R  d. N/R  e. N/R</td>
<td>05000/10000</td>
<td>129 RWQ Moffett Federal Afd, CA  DSN 359-9356/7  C650-603-9356/7</td>
<td>Oakland ARCP-263.1E  EXIT-357.6E</td>
<td></td>
</tr>
</tbody>
</table>

**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.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR223</td>
<td>PYE VORTAC</td>
<td>305/20</td>
<td>N38°21.00' W123°08.00'</td>
<td>PYE VORTAC</td>
<td>305/90 N39°15.00' W124°03.00'</td>
<td>a. N/R b. N/R c. N/R d. N/R e. N/R</td>
<td>05000/10000</td>
<td>129 RQW Moffett Federal Afld, CA DSN 359-9356/7 C650-603-9356/7</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Use Squadron Tactical Frequencies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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  | PGS VORTAC (East) | PGS VORTAC | RSK VORTAC | 224/38 | FL240/FL260 | 60 OSS/OSS TRAVIS AFB, CA Denver | 265.050 | 271.650 | 1-1-1 | 2/1 | 30/93 |
|        | 065/45 N35°45.10' W112°38.22' | 065/140 N35°59.10' W110°42.22' | 224/38 N36°24.63' W108°45.86' |       | |
|        | PGS VORTAC (West) | PGS VORTAC | PGS VORTAC | 065/45 N35°45.00' W112°38.00' |       | |
|        | 224/38 N36°24.00' W108°45.00' | 065/140 N35°59.00' W110°42.00' | 065/45 N35°45.00' W112°38.00' |       | |

**REMARKS:** Track cannot be scheduled simultaneously with AR3H.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION</th>
<th>EXIT</th>
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**REMARKS:** 1. 8000'-14,000' scheduled by 16th SOW Hurlburt Field, FL DSN 579-7812/7881 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 781-4832/7812, COMM 318-456-4832/7812. 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++.
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**REMARKS:** Refuel eastbound only.

**REMARKS:** Refuel westbound only.

**REMARKS:** None

**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.
### AR ROUTES

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**REMARKS:** Use of the High Altitude Block is not authorized between 1600-1900Z++. Use of Low Altitude Block is unrestricted.

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**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.

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**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.

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**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.
### AR313A

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<td>147/70</td>
<td>b. 260.200</td>
<td>N31°11.50'W92°54.90'</td>
<td>327/70 N32°46.28'W93°48.60'</td>
<td>50/113</td>
</tr>
<tr>
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<td>N31°11.50'W92°54.90'</td>
<td>N32°46.28'W93°48.60'</td>
<td>N33°49.20'W94°25.40'</td>
<td>N36°39.00'W96°03.00'</td>
<td>c. 1-3-1</td>
<td>TUL VORTAC</td>
<td>327/30 N36°39.00'W96°03.00'</td>
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<td>d. 2/1</td>
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</table>

**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.
<table>
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<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
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<tr>
<td>AR314</td>
<td>CIM VORTAC 241/100</td>
<td>CIM VORTAC N36°00.00' W104°50.00'</td>
<td>CIM VORTAC 090°/50 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'</td>
<td>BGD VORTAC N35°48.42' W101°22.93'</td>
<td>a. 295.800 b. 319.500 c. 1-2-2 d. 5/1 e. 50/113</td>
<td>FL240/FL310</td>
<td>552 OSS/OSOS Tinker AFB, OK DSN 884-1203/1204 C405-734-1203/1204</td>
<td>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</td>
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<td>CIM VORTAC N36°12.00' W103°22.00'</td>
<td>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'</td>
<td>CIM VORTAC</td>
<td>241°/100 N36°00.00' W106°50.00'</td>
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**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 act and support tankers only.
### AR ROUTES

#### AR315

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<tr>
<td>AR315</td>
<td>PXV</td>
<td>PXV VORTAC</td>
<td>N37° 55.70' W87° 45.74'</td>
<td>PXV VORTAC</td>
<td>LOZ VORTAC</td>
<td>FL190/FL220</td>
<td>121 ARW Rickenbacker IAP, OH</td>
<td>Indianapolis ARCP-353.65E</td>
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<td>104/80</td>
<td>N37° 01.99' W84° 06.60'</td>
<td>LOZ VORTAC</td>
<td>N37°15.50'</td>
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#### REMARKS:
Refueling not permitted 1500-1600Z++ and 1930-2030Z++ Mon-Fri.

#### AR318

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<tr>
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<td>PWE</td>
<td>PWE VORTAC</td>
<td>184°33' N39°40.00' W96°18.50'</td>
<td>PWE VORTAC</td>
<td>IRK VORTAC</td>
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<td>126th ARW Illinois ANG</td>
<td>Chicago ARCP-343.7E</td>
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<td>184/33</td>
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<td>318/18</td>
<td>059/84</td>
<td>DSN 760-4263/4255</td>
<td>EXIT-353.5E Kansas City</td>
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#### REMARKS:
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#### AR321

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#### 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.
<table>
<thead>
<tr>
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<td>BQN VORTAC</td>
<td>BQN VORTAC</td>
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<td>San Juan</td>
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<td>d. 3/1</td>
<td>e. 51/114</td>
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<td>e. 50/113</td>
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<td>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.</td>
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**NUMBER ARIP ARCP NAVIGATION CHECK POINTS EXIT CR PLAN REFUELING ALTITUDES SCHEDULING UNIT ASSIGNED ARTCC**

**REMARKS:** None
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<th>EXIT</th>
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<th>ALTITUDES</th>
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<td>W119°19.01'</td>
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<td>271-5109/5009/2077</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>N48°20.00'</td>
<td>W124°37.62'</td>
<td>d. 3/1</td>
<td></td>
<td>(1330-2200Z ++ wkd)</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>N48°17.99'</td>
<td>W124°37.62'</td>
<td>e. 29/92</td>
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<td>C402-294-5109/5009/2077</td>
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**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.

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<td>GEG VORTAC</td>
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<td>N47°00.00'</td>
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<td>a. 320.900</td>
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<td>Seattle ARCP</td>
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<td>EPH VORTAC</td>
<td>160/28</td>
<td>N46°55.00'</td>
<td>W119°26.00'</td>
<td>b. 238.900</td>
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<td>DSN (312)</td>
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<tr>
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<td>TOU VORTAC</td>
<td>N48°17.99'</td>
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<td>c. 2-2-1</td>
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<tr>
<td></td>
<td></td>
<td>N42°07.00'</td>
<td>W101°04.80'</td>
<td>d. 3/1</td>
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<td>(1330-2200Z ++ wkd)</td>
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<tr>
<td></td>
<td></td>
<td>N36°15.40'</td>
<td>W100°34.90'</td>
<td>e. 29/92</td>
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**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)

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<td>AR400</td>
<td>GCK VORTAC</td>
<td>165/100</td>
<td>N37°55.14'</td>
<td>W100°34.90'</td>
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<td>W100°34.90'</td>
<td>c. 3-1-2</td>
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<td>ARCP-281.4W</td>
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<td></td>
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<td>N42°07.00'</td>
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**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.

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<td>DSN 135.1/307.2</td>
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<td>N40°12.02'</td>
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<td></td>
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<td>N40°35.80'</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>N40°12.02'</td>
<td>W96°12.38'</td>
<td>e. 31/92</td>
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**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.
### AR406L

**NAVIGATION CHECK POINTS**

- **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' W98°19.90'
  - CR PLAN: a. 297.300
  - Refueling Altitudes: FL200/FL220
  - Scheduling Unit: 55th OSS/OSOS Offutt AFB, NE
  - Assigned ARTCC: Minneapolis ARCP-128.75/346.3

- **AR406L (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'
  - CR PLAN: a. 297.300
  - Refueling Altitudes: FL200/FL220
  - Scheduling Unit: 55th OSS/OSOS Offutt AFB, NE
  - Assigned ARTCC: Minneapolis ARCP-128.75/346.3

**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

**NAVIGATION CHECK POINTS**

- **AR452 (Northeast)**
  - FMG VORTAC 273/45
  - N39°49.00' W120°36.00'
  - REO VORTAC 160/49
  - N41°46.00' W117°50.00'
  - CR PLAN: a. 361.700
  - Refueling Altitudes: FL240/FL260
  - Scheduling Unit: 366 OSS/OSOS Mt Home AFB, ID
  - Assigned ARTCC: Oakland / Salt Lake City ARCP-269.0E

- **AR452 (Southwest)**
  - DLN VOR-DME 171/14
  - N45°01.00' W112°36.00'
  - BOI VORTAC 160/49
  - N41°46.00' W117°50.00'
  - CR PLAN: a. 361.700
  - Refueling Altitudes: FL240/FL260
  - Scheduling Unit: 366 OSS/OSOS Mt Home AFB, ID
  - Assigned ARTCC: Oakland / Salt Lake City ARCP-269.0E

**REMARKS:** None
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<th>CR PLAN</th>
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<td>FAR VORTAC</td>
<td>ABR VOR-DME</td>
<td>FAR VORTAC 206/46 N46°7.00' W97°28.00'</td>
<td>FAR VORTAC 206/46 N46°7.00' W97°28.00'</td>
<td>a. 291.900  b. 320.900  c. 1-1-2  d. 6/1  e. 51/114</td>
<td>FL210/FL230  FL260/FL280  FL310/FL330</td>
<td>55WG Offutt AFB, NE  DSN 271-3430  C402-294-3430</td>
<td>Minneapolis  ARCP-270.3W  EXIT-270.3W</td>
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**REMARKS:** None

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<td>AR455</td>
<td>PXV VORTAC</td>
<td>IIU VOR</td>
<td>HVQ VORTAC 080/10 N37°56.92' W87°33.50'</td>
<td>BKW VORTAC 230/27 N37°28.50' W81°32.42'</td>
<td>a. 336.100  b. 291.900  c. 1-3-1  d. 5/1  e. 29/92</td>
<td>FL250/FL270</td>
<td>552 OSS/OSOS Tinker AFB, OK  DSN 884-1203/1204  C405-734-1203/1204</td>
<td>Indianapolis  ARCP-293.22E  EXIT-290.55E</td>
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**(East)**

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<td>AR462</td>
<td>SAC VORTAC</td>
<td>FMG VORTAC</td>
<td>FMG VORTAC 020/50 N39°07.00' W120°55.00'</td>
<td>BAM VORTAC 318/61 N41°30.00' W117°30.00'</td>
<td>a. 318.000  b. 384.600  c. 1-2-2  d. 5/1  e. 29/92</td>
<td>FL240/FL260</td>
<td>60 OSS/OSOS Travis AFB, CA  DSN 837-5582  C707-424-5582</td>
<td>Oakland  ARCP-134.97E/379.2  E  EXIT-132.25E/352.0E</td>
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**(West)**

**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.

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<td>PXV VORTAC</td>
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<td>BKW VORTAC 080/10 N37°56.92' W87°33.50'</td>
<td>a. 336.100  b. 291.900  c. 1-3-1  d. 5/1  e. 29/92</td>
<td>FL250/FL270</td>
<td>552 OSS/OSOS Tinker AFB, OK  DSN 884-1203/1204  C405-734-1203/1204</td>
<td>Indianapolis  ARCP-293.22E  EXIT-290.55E</td>
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**(East)**

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<td>FMG VORTAC 020/50 N39°07.00' W120°55.00'</td>
<td>BAM VORTAC 318/61 N41°30.00' W117°30.00'</td>
<td>a. 318.000  b. 384.600  c. 1-2-2  d. 5/1  e. 29/92</td>
<td>FL240/FL260</td>
<td>60 OSS/OSOS Travis AFB, CA  DSN 837-5582  C707-424-5582</td>
<td>Oakland  ARCP-134.97E/379.2  E  EXIT-132.25E/352.0E</td>
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**(West)**

**REMARKS:** None
### AR ROUTES

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<td>N61°54.00' W160°00.00'</td>
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<td>(West) FYU VORTAC 225/44</td>
<td>ENN VORTAC 299/58</td>
<td>MCG VORTAC 321/36 N63°31.00' W156°05.00'</td>
<td>MCG VORTAC 255/48 N63°00.00' W157°22.00'</td>
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<td>N66°19.00' W147°00.00'</td>
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### 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.
### AR ROUTES

#### AR506 (North)

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<td>ORT VORTAC</td>
<td>ORT VORTAC</td>
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<td>N6°56.00'W142°01.00'</td>
<td>FL240/FL310</td>
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<td>Anchorage</td>
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<td>150/118</td>
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<td>287/67</td>
<td>N63°46.00'</td>
<td>W143°12.00'</td>
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<td>N63°40.00'</td>
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<td>W141°30.00'</td>
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**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)

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<td>BKA VOR-TAC</td>
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<td>157/121</td>
<td>N6°56.00'W142°01.00'</td>
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<td>168 ARS/DOO Eielson AFB, AK DSN 317-377-8812</td>
<td>Anchorage</td>
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<td>BKA VOR-TAC</td>
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<td>N56°29.00'</td>
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<td>N55° 25.00'</td>
<td>W134°40.00'</td>
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<td>W134°40.00'</td>
<td>FL240/FL270</td>
<td>168 ARS/DOO Eielson AFB, AK DSN 317-377-8812</td>
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**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.

#### AR507 (West)

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<td>BKA VOR-TAC</td>
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<td>W138°49.00'</td>
<td>W136°57.50'</td>
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<td>BKA VOR-TAC</td>
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**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.
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<th>ASSIGNED ARTCC</th>
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**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.

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**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

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<th>ANCHOR PATTERN</th>
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<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
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<th>TIMES OF OPERATION</th>
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<td>CAE VORTAC 151/53</td>
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<td>CAE VORTAC 075/59</td>
<td>CAE VORTAC 075/59</td>
<td>CAE VORTAC 059/14</td>
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<td>FL240/FL280</td>
<td>20 OSS/OSOS Shaw AFB, SC</td>
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<tr>
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<td>N34°08.42'</td>
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**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.
<table>
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<tr>
<th>NUMBER</th>
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<th>ANCHOR POINT</th>
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<td>ILM VORTAC 219/36 N33°50.00' W78°15.00'</td>
<td>ILM VORTAC 219/36 N33°50.00' W78°15.00'</td>
<td>ILM VORTAC 219/110 N32°46.00' W78°59.00'</td>
<td>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'</td>
<td>CHS VORTAC 096/34  1 N32°54.00' W79°22.00'</td>
<td>a. 283.900  b. 319.700  c. 1-2-2  d. 2/1  e. 33/96</td>
<td>Free Mason  Primary  286.7 Secondary  321.2 or as assigned</td>
<td>16000/FL260  as assigned by ATC 3000' required</td>
<td>20 OSS/OSOS Shaw AFB, SC  DSN 965-1118</td>
<td>Jacksonville ARCP-381.4  EXIT-381.4</td>
<td>Unlimited</td>
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**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 N33°50.00' W78°04.00' to N33°50.00' W78°09.00' to N33°50.00' W78°04.00' to N33°50.00' W78°36.00' to N33°40.00' 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
### ATC Assigned Airspace: N35°18.00’ W103°08.00’ to N35°08.00’ W103°05.00’ to N34°09.00’ W103°36.00’ to N33°58.00’ W103°10.00’ to N33°58.00’ W103°36.00’ 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.

### 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.

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<th>Exit Points</th>
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<th>Refueling Altitudes</th>
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**AR403**

- Cannon AFB, NM
- DSN 681-2521 / 2276
- ARCP-307.175
- EXIT-307.175
### AR604

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**ATC ASSIGNED AIRSPACE:** Anchor is contained within the "Bearpaw" ATCAA N49°00.00' W110°00.00' to N49°00.00' W107°30.00' W107°00.00' to N47°30.00' W109°00.00' to N47°00.00' W99°30.00' to beginning.

**REMARKS:** Military radar and/or Salt Lake City ARTCC must be operational to conduct air refueling.

### AR606

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
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<td>RDR TACAN</td>
<td>MIB TACAN</td>
<td>MIB TACAN</td>
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<td>238/37</td>
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<td>145/51</td>
<td>134/80</td>
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<td>320.900</td>
<td>Big Foot AICC 364.2 or as assigned by ATC</td>
<td>238.4 Secondary</td>
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<td>N47°30.00'</td>
<td>N47°30.00'</td>
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<td>DSN 362-8508</td>
<td>C701-451-2508</td>
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<td>W98°30.00'</td>
<td>W98°30.00'</td>
<td>W98°30.00'</td>
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**ATC ASSIGNED AIRSPACE:** "Red River" N48°30.00' W101°00.00' to N48°30.00' W99°50.00' to N48°36.00' 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.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
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<th>MILITARY RADAR</th>
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<td>IWD VORTAC 106/35</td>
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<td>FL180</td>
<td>148 FG/DOS Duluth, MN</td>
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<td>N46°16.00'</td>
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<td>b. 320.900</td>
<td>and above</td>
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<td>EXIT-269.0</td>
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<td></td>
<td>N46°36.00'</td>
<td>N46°00.00'</td>
<td>N46°36.00'</td>
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**ATC ASSIGNED AIRSPACE:** Rhinelander Bravo N46°00.00' W88°00.00' to N46°44.00' W89°00.00' to N46°55.00' W90°05.00' to N47°05.00' W90°05.00' to N47°50.00' 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.

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<th>ARIP</th>
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<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
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<th>SCHEDULING UNIT</th>
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<td>AR608</td>
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<td>LFV VOR-DME 115/107</td>
<td>LFV VOR-DME 151/51</td>
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<td>a. 343.500</td>
<td>FL180/FL230</td>
<td>NE ADS/DOA Rome, NY</td>
<td>Unlimited</td>
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<td>FLV VOR-DME 115/107</td>
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**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.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
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<tbody>
<tr>
<td>AR609</td>
<td>SYR VORTAC 087/75, N43°27.00' W74°33.00'</td>
<td>SYR VORTAC 044/19, N43°25.00' W75°58.00'</td>
<td>SYR VORTAC 087/75, N43°27.00' W74°33.00'</td>
<td>SYR VORTAC 073/81, N43°47.00' W74°33.00'</td>
<td>SYR VORTAC 048/46, N43°46.00' W75°34.00'</td>
<td>SYR VORTAC 070/32, N43°26.00' W75°34.00'</td>
<td>GFL VORTAC 299/22, N43°26.00' W74°06.00'</td>
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<td>FL180/FL280 4000' required</td>
<td>NE ADS/DOA Rome, NY</td>
<td>Boston</td>
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**REMARKS:** Anchor area is located within the AKS 2 and 5 ATCAAs. Boston ARTCC radar must be operational.

### 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.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
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<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
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<th>REFUELING ALTITUDES</th>
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<tbody>
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<td>DLN VOR-DME 280/70, N45°50.00’ W113°55.50’</td>
<td>DLN VOR-DME 280/70, N45°50.00’ W113°55.50’</td>
<td>DLN VOR-DME N45°14.91’ W112°32.83’</td>
<td>DLN VOR-DME 011/20, N45°32.00’ W112°18.40’</td>
<td>DLN VOR-DME 305/55, N45°59.90’ W113°17.80’</td>
<td>DLN VOR-DME 282/48, N45°40.50’ W113°33.60’</td>
<td>DLN VOR-DME 104/17, N45°06.00’ W112°12.00’</td>
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<td>FL190/FL260</td>
<td>120 FW ANG Great Falls, MT</td>
<td>Salt Lake City</td>
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**REMARKS:** None

### 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
### AR610B

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<th>ANCHOR PATTERN</th>
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**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

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**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
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

ATC ASSIGNED AIRSPACE: N32°30.00' W109°44.00' to N32°54.50' 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.
<table>
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<th>Anchor Pattern</th>
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<th>SCHEDULING UNIT</th>
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<td>AR614</td>
<td>JCT VORTAC 155/30</td>
<td>JCT VORTAC 155/30</td>
<td>COT VORTAC 338/20</td>
<td>COT VORTAC 338/20</td>
<td>N28°47.50' W99°13.00'</td>
<td>COT VORTAC N28°47.50' N99°13.00'</td>
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<td>99 FTS Randolph AFB, TX</td>
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**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 FL250/FL270.

<table>
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<td>AEX VORTAC 097/13</td>
<td>AEX VORTAC 097/73</td>
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**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.
### AR616A

**Number:** AR616A  
**Entry Points:** ENE VORTAC 111/61, N43°21.00' W69°12.75'  
**Anchor Point:** ENE VORTAC 096/128  
**Anchor Pattern:** ENE VORTAC 096/128, N43°48.00' W67°43.00'  
**Exit Points:** ENE VORTAC 089/66  
**Military Radar:** FL180/FL230  
**Refueling Altitudes:** NE ADS/DOA Rome, NY  
**Scheduling Unit:** DSN 587-6247  
**Assigned ARTCC:** Boston ARCP-269.6  
**Times of Operation:** 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

**Number:** AR616B  
**Entry Points:** ENE VORTAC 086/141, N44°17.00' W67°35.00'  
**Anchor Point:** ENE VORTAC 090/75  
**Anchor Pattern:** ENE VORTAC 090/75, N43°46.50' W68°58.00'  
**Exit Points:** ENE VORTAC a. 283.900  
**Military Radar:** FL180/FL230  
**Refueling Altitudes:** NE ADS/DOA Rome, NY  
**Scheduling Unit:** DSN 587-6247  
**Assigned ARTCC:** Boston ARCP-269.6  
**Times of Operation:** 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.
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**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.
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**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

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**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.
<table>
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<td>Miami</td>
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**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.

- Tankers. To be used only by MacDill based aircraft.
- Receivers. Placid MOA unusable refueling operations.

<table>
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**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.
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).
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**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.

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**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.
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| AR625L | MVA VOR Tac  | MVA VOR Tac | MVA VOR Tac | MVA VOR Tac | MVA VOR Tac | a. 291.900 | FL180/FL210 | 57 OSS/OSOS Nellis AFB, NV | 0600-2200 Local unless other-wise coordinated
|        | N37°09.00' | N37°09.00' | N38°19.00' | W118°02.00' | W118°02.00' | b. 319.500 |               |                    | C702-652-2040 | Oakla |                   |
|        | W118°11.00' | N38°17.00' | W118°02.00' | MVA VOR Tac | MVA VOR Tac | c. 1-3-0 |               |                    |                  |      |                   |
|        | MVA VOR Tac | 102/31 | MVA VOR Tac | MVA VOR Tac | MVA VOR Tac | d. 4/1 |               |                    |                  |      |                   |
|        | N37°12.00' | W117°20.00' |               | MVA VOR Tac | MVA VOR Tac | e. 33/96 |               |                    |                  |      |                   |

**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.

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| AR626  | HQM VOR Tac  | HQM VOR Tac | TOU VOR Tac | TOU VOR Tac | TOU VOR Tac | a. 235.100 | FL250/FL270 | NAS Whidbey Island, (N38) Oak Harbor, WA | Seattle | ARCP-319.2 | 0600-2200 Local unless other-wise coordinated
|        | 269/14       | 269/14 | 222/50       | 222/50       | 225/70     | b. 292.600 |               |                    | C300-2977 | C360-257-2877 |                   |
|        | N47°01.50'   | N47°01.50' | N47°56.50'   | N47°56.50'   | N47°41.00' | c. 1-1-3 |               |                    |                  |      |                   |
|        | W124°27.50'  | W124°27.50' | W125°45.00'  | W125°45.00' | W126°04.00' | d. 4/1 |               |                    |                  |      |                   |
|        | W124°27.50'  | W124°27.50' | W125°45.00'  | W125°45.00' | W126°04.00' | e. 52/115 |               |                    |                  |      |                   |

**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.
### AR627

**Anchor Points:**
- TAY VORTAC
- N31°54.33' W84°00.25'
- TAY VORTAC
- N30°30.28' W82°33.17'
- TAY VORTAC
- N31°56.75' W83°37.42'
- TAY VORTAC
- N30°55.00' W83°17.50'
- TAY VORTAC
- N31°41.75' W83°26.00'
- TAY VORTAC
- N30°30.28' W82°33.17'
- TAY VORTAC
- N31°54.33' W84°00.25'

**Anchor Patterns:**
- TAY VORTAC
- 306/45
- TAY VORTAC
- 331/85
- TAY VORTAC
- 311/102
- TAY VORTAC
- 311/102
- TAY VORTAC
- 331/85
- TAY VORTAC
- 311/102

**Exit Points:**
- TAY VORTAC
- 306/45
- TAY VORTAC
- 311/85
- TAY VORTAC
- 311/102
- TAY VORTAC
- 331/85
- TAY VORTAC
- 331/85
- TAY VORTAC
- 331/85

**CR Plan:**
- A. 352.600 FL200/FL230
- B. 319.700
- C. 1-3-0
- D. 4/1
- E. 50/113

**Assigned ARTCC:**
- Jacksonville ARCP-379.2

**Times of Operation:**
- Continuous by schedule

**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:**
- Military radar or Seattle ARTCC radar must be operational to conduct refueling.

### AR628

**Anchor Points:**
- HQM VORTAC
- N46°14.67' W124°57.00'
- ONP VORTAC
- N45°04.67' W124°57.00'
- ONP VORTAC
- N45°04.67' W124°57.00'
- ONP VORTAC
- 308/35
- ONP VORTAC
- 287/49
- ONP VORTAC
- 287/49
- ONP VORTAC
- 287/49
- HQM VORTAC
- 170/64
- HQM VORTAC
- 170/64
- HQM VORTAC
- 186/70
- HQM VORTAC
- 186/70
- HQM VORTAC
- 186/70

**Anchor Patterns:**
- TAY VORTAC
- 196/54
- TAY VORTAC
- 196/54
- TAY VORTAC
- 196/54
- TAY VORTAC
- W124°57.00'
- TAY VORTAC
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- TAY VORTAC
- W124°57.00'
- TAY VORTAC
- 277/20
- TAY VORTAC
- 277/20
- TAY VORTAC
- 277/20

**Exit Points:**
- TAY VORTAC
- 331/102
- TAY VORTAC
- 331/102
- TAY VORTAC
- 331/102
- TAY VORTAC
- 331/102
- TAY VORTAC
- 331/102
- TAY VORTAC
- 331/102

**CR Plan:**
- A. 343.500 FL240/FL260
- B. 292.600
- C. 1-2-3
- D. 2/1
- E. 31/94

**Assigned ARTCC:**
- Seattle ARCP-379.6

**Times of Operation:**
- Unlimited

**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.
### AR629

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<td>5 OSS Minot RAPCON</td>
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**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

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**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
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**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.

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**ATC ASSIGNED AIRSPACE:** N45°44.49' W84°48.09' to N45°45.00' W84°48.10' 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 CRTC Airspace Scheduler.
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**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.

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**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

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**ATC ASSIGNED AIRSPACE:** WARNING AREA (W283 & W285A) N36°58.00' W122°55.00' to N36°33.00' W122°39.00' to N36°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 (TOPLE 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.

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**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
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**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.
## AR ROUTES

### AR637

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### ATC ASSIGNED AIRSPACE:

N37°29.83' 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°27.75' to N37°34.33' W91°56.03' to beginning.

### REMARKS:

Anchor is contained within West ATCAA and Lindbergh A ATCAA as described above, MARSA 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).
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<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
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<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
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<td>AR638</td>
<td></td>
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<td>HST TACAN</td>
<td>HST TACAN</td>
<td>HST TACAN</td>
<td>a. 324.600</td>
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<td>Miami</td>
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<td>343/12</td>
<td>262/43</td>
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<td>114/28</td>
<td>b. 343.250</td>
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<td>c. 1-1-3</td>
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<td>072/29</td>
<td>d. 4/1</td>
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<td>e. 51/114</td>
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**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.
**AR ROUTES**

**AR639**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
</tr>
</thead>
</table>

**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 258/5 N31°28.00' W109°43.50' DUG VORTAC 058/58 N31°48.50' W108°32.50' | DUG VORTAC 078/54 N31°28.42' W108°32.67' DUG VORTAC 078/20 N31°28.50' W109°12.25' | DUG VORTAC 258/5 N31°28.00' W109°43.50' DUG VORTAC 058/58 N31°48.50' W108°32.50' | DUG VORTAC 078/54 N31°28.42' W108°32.67' DUG VORTAC 078/20 N31°28.50' W109°12.25' | DUG VORTAC 330/20 N31°48.00' W109°43.00' DUG VORTAC 258/5 N31°28.00' W109°43.50' | a. 291.900 | 13000/FL280 | 355th Wing | Albuquerque | Unlimited |

**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°43.00' 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.
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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.

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.

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.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
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<tr>
<td>AR641A</td>
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<td>12000/FL230</td>
<td>554 RS/RSOO Nellis AFB, NV</td>
<td>Los Angeles ARCP-343.6</td>
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**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 MARSA 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.
<table>
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<tr>
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<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
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<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUEILING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
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<tbody>
<tr>
<td>AR642E (East)</td>
<td>162/5 N40°39.00' W113°45.00'</td>
<td>BVL VORTAC 162/5</td>
<td>BVL VORTAC 162/70</td>
<td>N39°33.00' W113°44.00'</td>
<td>BVL VORTAC 149/75 N39°31.00' W113°22.00'</td>
<td>305.5</td>
<td>17000/FL280</td>
<td>388 RANS/RST Hill AFB, UT DSN 777-4401</td>
<td>C801-777-4401</td>
<td>Salt Lake City</td>
<td>Mon-Thu 1400-0700Z++, Fri 1400-0100Z++, Sat 1500-2400Z++; closed Sun.</td>
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<td>AR642W (West)</td>
<td>231/20 N40°36.00' W114°10.00'</td>
<td>BVL VORTAC 231/20</td>
<td>BVL VORTAC 176/72</td>
<td>N39°33.00' W114°07.00'</td>
<td>BVL VORTAC 162/70 N39°33.00' W113°44.00'</td>
<td>305.5</td>
<td>17000/FL280</td>
<td>388 RANS/RST Hill AFB, UT DSN 777-4401</td>
<td>C801-777-4401</td>
<td>Salt Lake City</td>
<td>Mon-Thu 1400-0700Z++, Fri 1400-0100Z++, Sat 1500-2400Z++; closed Sun.</td>
</tr>
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</table>

**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.

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**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.
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<th>ANCHOR PATTERN</th>
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<th>CR PLAN</th>
<th>MILITARY RADAR</th>
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<th>SCHEDULING UNIT</th>
<th>Assigned ARTCC</th>
<th>TIMES OF OPERATION</th>
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<tr>
<td>AR643</td>
<td>PUB VORTAC 252/23 N38°15.50' W104°55.00'</td>
<td>ALS VORTAC 125/15 N37°09.00' W105°36.00'</td>
<td>ALS VORTAC 125/15 N37°09.00' W105°36.00'</td>
<td>PUB VORTAC 190/24 N37°55.00' W104°38.00'</td>
<td>a. 279.800 FL200/FL230 140 TFW DSN 877-9470</td>
<td>Denver ARCP-335.5/31 7.5</td>
<td>48 361.4 Secondary 395.1 or as assigned</td>
<td>As coordinated with ARTCC</td>
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**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
**AR ROUTES**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
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<th>Assigned ARTCC</th>
<th>TIMES OF OPERATION</th>
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</thead>
<tbody>
<tr>
<td><strong>AR644</strong>&lt;sup&gt;(North)&lt;/sup&gt;</td>
<td>HMN TACAN 358/74 N34°05.00' W105°54.80'&lt;br&gt;HMN TACAN 043/30 N33°10.10' W105°37.80'&lt;br&gt;HMN TACAN 049/50 N33°17.90' W105°15.30'&lt;br&gt;HMN TACAN 015/66 N33°51.50' W105°32.90'&lt;br&gt;HMN TACAN 001/53 N33°43.50' W105°54.80'</td>
<td>CME VORTAC 278/20&lt;br&gt;N33°27.00' W105°00.00'</td>
<td>a. 324.400&lt;br&gt;b. 319.500&lt;br&gt;c. 1-2-0&lt;br&gt;d. 3/1&lt;br&gt;e. 51/114</td>
<td>FL200/FL260</td>
<td>49 OSS/OSSOS Holloman AFB, NM DSN 572-3536 C505-572-3536</td>
<td>Albuquerque ARCP-257.6&lt;br&gt;EXIT-257.6</td>
<td>Continuous. Ltd. use weekdays (See Rmks)</td>
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<td><strong>AR644</strong>&lt;sup&gt;(South)&lt;/sup&gt;</td>
<td>HMN TACAN 066/51 N33°04.00' W105°07.00'&lt;br&gt;HMN TACAN 015/66 N33°51.50' W105°32.90'&lt;br&gt;HMN TACAN 001/53 N33°43.50' W105°54.80'</td>
<td>CME VORTAC 278/20&lt;br&gt;N33°27.00' W105°00.00'</td>
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<td>Albuquerque ARCP-284.0&lt;br&gt;EXIT-257.6</td>
<td>Continuous. Ltd. use weekdays (See Rmks)</td>
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</tbody>
</table>

**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/OSSOS for coordination. Caution: ARIP to ARCP headings are not parallel to track orientation.
### AR ROUTES

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
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<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
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<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
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**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.

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**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.
**AR ROUTES**

**AR647**

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<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
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**ATC ASSIGNED AIRSPACE:** N32°11.00' W111°39.00' to N32°19.50' W111°47.50' to N32°29.00' W111°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 AFAF (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, daytime 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.
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<th>ANCHOR PATTERN</th>
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<th>MILITARY RADAR</th>
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**ATC ASSIGNED AIRSPACE:** N32°11.00′ W111°39.00′ to N32°19.50′ W111°47.50′ to N32°29.00′ W111°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.
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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

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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
AR ROUTES

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**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.
### AR ROUTES

#### AR650

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**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

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**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, FACS FACS San Diego will provide advisory service when possible. BEAVER TACAN NSD Ch 86 located 11 NM S of NUC TACAN Ch 123.
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**ATC ASSIGNED AIRSPACE:** None.

**REMARKS:** Anchor is scheduled on non-interference basis with Valentine MOA.
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**ATC ASSIGNED AIRSPACE:** None.

**REMARKS:** For entry from the west-northeast. Track will not be used simultaneously with AR652 (North/South). Usage will be deconflicted with IR-178.

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**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.
AR ROUTES

AR653

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**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.
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.
AR ROUTES

AR655

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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.
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**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. FACS FAC San Diego will provide exclusive use airspace to aircraft participating in air refueling operations, if required. FACS FAC San Diego radar must be operational and area must be VFR.
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**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.
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<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
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<td>BVL VORTAC</td>
<td>N40°36.00' W114°21.00'</td>
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<td>BVL VORTAC</td>
<td>N40°22.80' W114°56.90'</td>
<td>BVL VORTAC 209/82 N39°42.60' W114°56.90'</td>
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<td>N39°42.60' W114°56.90'</td>
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<td>W114°21.00'</td>
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<td>N40°22.80' W114°56.90'</td>
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**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°23.60' 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.
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<th>NUMBER</th>
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<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
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<td>NLC TACAN</td>
<td>NLC TACAN</td>
<td>NLC TACAN</td>
<td>NLC TACAN</td>
<td>a. 318.000</td>
<td>8000/FL190</td>
<td>CSFWP Lemoore NAS, CA</td>
<td>c. 264.900</td>
<td>1600-0800Z++</td>
<td>Lemoore RATCF Mon-Thu;</td>
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<td>134/48</td>
<td>134/48</td>
<td>314/12</td>
<td>314/12</td>
<td>314/22</td>
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<td></td>
<td>d. 1-4-0</td>
<td>1600-0200Z++</td>
<td>Lemoore NAS, Fri;</td>
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<td>N36°31.10'</td>
<td>N36°40.00'</td>
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<td></td>
<td></td>
<td>e. 55/118</td>
<td>1800-0200Z++</td>
<td>2100-0500Z++ Sun, (Hol hr)</td>
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**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.

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<td>FL250/FL270</td>
<td>71 OSS/OSOP, Vance AFB, OK, Liberty Ops</td>
<td>b. 384.600</td>
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**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.
**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.

**ATC ASSIGNED AIRSPACE:** AR674 lies between the GUP 043/47 and the GUP 263/28 Navigation Points. KC-135s will not descend below 13,000' during the toboggan.

**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.
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<th>ANCHOR PATTERN</th>
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<td>Unlimited</td>
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**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.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ENTRY POINTS</th>
<th>ARIP</th>
<th>ANCHOR POINT</th>
<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
<th>CR PLAN</th>
<th>MILITARY RADAR</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
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**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.
### AR717A

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<td>SEA VORTAC 042/134 N48°30.00' W119°23.00'</td>
<td>SEA VORTAC 033/106 N48°30.00' W120°14.00'</td>
<td>GEG VORTAC 342/56 N48°30.00' W117°33.00'</td>
<td>GEG VORTAC 342/56 N48°30.00' W117°33.00'</td>
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<td>Seattle ARCP-291.6 EXIT-291.6</td>
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**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

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**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.
<table>
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<td>FAI VORTAC 041/55 N65°07.00' W146°00.00' YUKAN BIG VORTAC 046/29 N64°10.00' W144°41.00' BUFLO</td>
<td>EIL TACAN 031/52 N65°09.00' W145°25.00'</td>
<td>EIL TACAN 042/121 N65°26.00' W142°43.00'</td>
<td>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'</td>
<td>FAI VORTAC 041/55 N65°07.00' W146°00.00' BIG VORTAC 046/29 N64°10.00' W144°41.00'</td>
<td>a. 270.200 14000/17000 b. 263.900 FL240/FL290 c. 1-2-1 d. 3/1 e. 31/94</td>
<td>or as assigned by ATC</td>
<td>354 OSS/OSCR Eielson AFB, AK DSN 317-377-9327/2749/2718 C907-377-9327/2749/2718</td>
<td>As coordinated with ARTCC</td>
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**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 315-449-7294 at least 8 hours prior to mission brief time.

(1) Or as assigned by ATC
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<td>FAI VORTAC 144/50</td>
<td>181/115</td>
<td>BIG VORTAC</td>
<td>BIG VORTAC 213/51</td>
<td>FAI VORTAC 194/98</td>
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<td>354 OSS/OSCR Eielson AFB, AK</td>
<td>DSN 317-377-9327/2749/2</td>
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<td>As coordinated with ARTCC.</td>
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**AR720 (Northeast)**

**FAI VORTAC**
N63°58.00' W147°45.00'
N62°15.00' W147°21.00'
N63°24.00' W146°37.00'
W147°45.00'

**BEYAR**
N63°33.00' W148°15.00'

**WELLE**
N62°00.00' W148°49.00'

**BGQ VORTAC**
026/42
N62°00.00' W148°49.00'

**GKN VOR-DME**
266/18
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.
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<td>W158°30.00'</td>
<td>N60°19.00'</td>
<td>W156°06.00'</td>
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<td>AKN VORTAC 352/117</td>
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**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.
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<td>AKN VORTAC 198/142</td>
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**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

As coordinated with ARTCC

As coordinated with ARTCC

As coordinated with ARTCC
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**ATC ASSIGNED AIRSPACE**: N62°35.00' W156°00.00' to N61°53.00' W153°21.00' to N61°25.00' 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.

**AR724**

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**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.
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**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.

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**Anchorage**
- ARCP-317.5W
- EXIT-317.5W

**Refueling Altitudes**
- FL240/FL290
- or as assigned by ATC

**Scheduling Unit**
- 3 OSS/DOTS Elmendorf AFB, AK
- DSN 317-552-2406/5470
- C907-552-2406/5470

**As coordinated with ARTCC**
- Anchorage ARCP-317.5W

**CR Plan**
- a. 270.200
- b. 263.900
- c. 1-2-1
- d. 3/1
- e. 31/94
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<td>N63°04.00'</td>
<td>066/79</td>
<td>N63°02.00'</td>
<td>GAL VOR-DME</td>
<td>116/111</td>
<td>N63°04.00'</td>
<td>BEVAN</td>
<td>091/40</td>
</tr>
<tr>
<td>W152°44.00'</td>
<td>W155°05.00'</td>
<td>N63°20.00'</td>
<td>W154°04.00'</td>
<td>W152°44.00'</td>
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<td>N63°28.00'</td>
<td>W153°20.00'</td>
<td>GAL VOR-DME</td>
<td>091/40</td>
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<tr>
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<td>N63°02.00'</td>
<td>GAL VOR-DME</td>
<td>N63°04.00'</td>
<td>W153°20.00'</td>
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</tr>
<tr>
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<td>090/108</td>
<td>N63°59.00'</td>
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<td>090/108</td>
</tr>
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<td>N63°04.00'</td>
<td>MINNA</td>
<td>W154°04.00'</td>
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<td>058/33</td>
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<td>MINNA</td>
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<td>N63°04.00'</td>
<td>058/33</td>
<td>W154°26.00'</td>
<td>VEDDA</td>
<td>N63°04.00'</td>
<td>N64°33.00'</td>
<td>MCG VORTAC</td>
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</tr>
<tr>
<td>073/85</td>
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<td>073/85</td>
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<td>AMTEE</td>
<td>W153°31.00'</td>
<td>W153°31.00'</td>
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<td>073/85</td>
<td>073/85</td>
<td>073/85</td>
<td>W153°31.00'</td>
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<td>W153°31.00'</td>
<td>GAL VOR-DME</td>
<td>073/85</td>
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**ATC ASSIGNED AIRSPACE:** N64°34.00' W155°16.00' to N64°33.00' W153°00.00' to N64°00.00' W153°00.00' to N65°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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFueling ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
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<tbody>
<tr>
<td>AR15V</td>
<td>COF TACAN</td>
<td>COF TACAN</td>
<td>159/18 N27°58.10'W80°28.00'</td>
<td>COF TACAN</td>
<td>037/39 N28°46.50'W80°12.60'</td>
<td>a. 363.900 b. 252.800 c. N/R d. N/R e. 29/92</td>
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<td>COF TACAN</td>
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<td>037/39 N28°40.30'W80°14.20'</td>
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<td>159/18 N28°58.10'W80°28.00'</td>
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</tbody>
</table>

**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.

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  | NKT TACAN | NKT TACAN | 147/24 N34°36.00'W76°33.00' | NKT TACAN | 086/39 N34°49.50'W76°19.00' | a. 311.575 b. 303.125 c. N/R d. 2/1 e. 29/92 | 04000/10000 | C.G. MCAS Cherry Point, NC CHERRY POINT RATCF ARIP |
|        | NKT TACAN | NKT TACAN | 086/39 N34°49.50'W76°19.00' | NKT TACAN | 105/28 N35°00.00'W76°33.00' | | | (SOUTH) |

**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.

Airspace delegated to Cherry Point MCAS RATCF.

| AR40V  | N31°38.00' W82°40.80' | N31°38.00' W82°36.17' | N31°38.00' W82°14.00' | a. 273.750 b. 374.225 c. N/R d. N/R e. N/R | 1000/4000 | 23 OSS/OSOS Moody AFB, GA Jacksonville ARCP |
|        | N31°38.00' W82°16.08' | N31°38.00' W82°40.80' | | | | | |

**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.
### AR ROUTES

#### AR41V

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<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
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<th>REFUELING ALTITUDES</th>
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<td>1000/4000</td>
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<td>1000 AGL/4000</td>
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<td>N28°31.00'</td>
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<td>MSL</td>
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<td>N29°02.00'</td>
<td>N29°02.00'</td>
<td>N29°02.00'</td>
<td>N29°02.00'</td>
<td>e. N/R</td>
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**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

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<th>NAVIGATION CHECK POINTS</th>
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<th>REFUELING ALTITUDES</th>
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<td>N30°15.00'</td>
<td>N30°15.00'</td>
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<td>1000/4000</td>
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<td>Jacksonville ARIP</td>
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<td>W83°10.00'</td>
<td>W83°10.00'</td>
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<td>1000 AGL/4000</td>
<td>DSN 460-7831</td>
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<td>N30°15.00'</td>
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<td>e. N/R</td>
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**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.
<table>
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<tr>
<th>NUMBER</th>
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<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
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<td>(Northeast)</td>
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<td>258/30</td>
<td>019/36</td>
<td>N37°29.60'</td>
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<td>160th SOAR(A), Campbell AAF, KY DSN 635-1980/1757 C270-798-1980/1757</td>
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<tr>
<td>DARK</td>
<td>N36°47.00'</td>
<td>N36°49.62'</td>
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<td>W87°02.64'</td>
<td>N/R</td>
<td>For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERATIONS - Intermittent by NOTAM, 24 hours in advance.</td>
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<td>HORSE EAST</td>
<td>W87°06.00'</td>
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<td>W86°11.80'</td>
<td>N/R</td>
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<td></td>
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<td>BWG VORTAC</td>
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<td>(Northeast)</td>
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<td>279/32</td>
<td>008/40</td>
<td>N37°35.20'</td>
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<td>DARK</td>
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<td>For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERATIONS - Intermittent by NOTAM, 24 hours in advance.</td>
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<td>HORSE WEST</td>
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</table>
| 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). |

|-number ARIP ARCP |
|-------------------|----------------|
| AR44V             |                |
| (Northeast)       |                |
| DARK              |                |
| HORSE EAST        |                |
| AR45V             |                |
| (Northeast)       |                |
| DARK              |                |
| HORSE WEST        |                |
| 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). |
### AR46V (North) NIGHT-STALKER EAST

<table>
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<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED UNIT</th>
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<tbody>
<tr>
<td>AR46V</td>
<td>GHM VORTAC</td>
<td>GHM VORTAC</td>
<td>N35°18.02' W87°22.73'</td>
<td>GHM VORTAC</td>
<td>a. N/R</td>
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<td>160th SOAR(A), Campbell</td>
<td>Memphis ARCP</td>
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<tr>
<td>(North)</td>
<td>171/32</td>
<td>172/26</td>
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<td>EXIT</td>
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<td>N35°24.00'</td>
<td>W87°15.57'</td>
<td>N36°16.42'</td>
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<td>C270-798-1980/1975</td>
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<td></td>
<td>e. N/R</td>
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</table>

**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) NIGHT-STALKER WEST

<table>
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<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED UNIT</th>
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<tbody>
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<td>AR47V</td>
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<td>GHM VORTAC</td>
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<td>GHM VORTAC</td>
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<td>160th SOAR(A), Campbell</td>
<td>Memphis ARCP</td>
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<tr>
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<td>EXIT</td>
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</tbody>
</table>

**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).
### AR48V

#### Navigation Check Points
- **ARCP**: CCT VORTAC
- **EXIT**: CCT VORTAC
- **Refueling Altitudes**: 3000/5000
- **Scheduling Unit**: 160th SOAR(A), Campbell AAF, KY
- **Assigned ARTCC**: Memphis 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. 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.

#### AR49V

#### Navigation Check Points
- **ARCP**: CCT VORTAC
- **EXIT**: CCT VORTAC
- **Refueling Altitudes**: 3000/5000
- **Scheduling Unit**: 160th SOAR(A), Campbell AAF, KY
- **Assigned ARTCC**: Memphis 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. 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.

---

**NUMBER** | **ARIP** | **ARCP** | **Navigation Check Points** | **EXIT** | **CR Plan** | **Refueling Altitudes** | **Scheduling Unit** | **Assigned ARTCC**
---|---|---|---|---|---|---|---|---
**AR48V** (Northwest) | CCT VORTAC | CCT VORTAC | 224/37 | 230/37 | 286/60 | 3000/5000 | 160th SOAR(A), Campbell AAF, KY | Memphis ARCP
**GREEN EAST** | N36°56.00' | N36°59.08' | W87°48.50' | W87°50.95' | N37°39.50' | W88°28.40' | |
**CCT VORTAC** | 224/37 | 230/37 | 286/60 | 3000/5000 | 160th SOAR(A), Campbell AAF, KY | Memphis ARCP
**AR49V** (Northwest) | CCT VORTAC | CCT VORTAC | 226/42 | 232/42 | 283/69 | 3000/5000 | 160th SOAR(A), Campbell AAF, KY | Memphis ARCP
**GREEN WEST** | N36°54.00' | N36°57.17' | W87°54.00' | W87°57.40' | N37°38.00' | W88°40.50' | |
**CCT VORTAC** | 226/42 | 232/42 | 283/69 | 3000/5000 | 160th SOAR(A), Campbell AAF, KY | Memphis ARCP

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**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.

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For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERATIONS - Intermittent by NOTAM, 24 hours in advance.
### AR53V (North)

**NAVIGATION CHECK POINTS**
- ARCP: SAV VORTAC
- ARIP: SSI VORTAC
- EXIT: SAV VORTAC

**REFUELLING ALTITUDES**
- a. N/R
- b. N/R
- c. N/R
- d. N/R
- e. N/R

**SCHEDULING UNIT**
- 160th SOAR(A), SAVANAH, GA

**ASSIGNED ARTCC**
- 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. 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.

### AR54V (Northwest)

**NAVIGATION CHECK POINTS**
- ARCP: SAV VORTAC
- ARIP: SAV VORTAC
- EXIT: SAV VORTAC

**REFUELLING ALTITUDES**
- a. N/R
- b. N/R
- c. N/R
- d. N/R
- e. N/R

**SCHEDULING UNIT**
- 160th SOAR(A), SAVANAH, GA

**ASSIGNED ARTCC**
- 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. 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.

---

**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).
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR55V</td>
<td>TAY VORTAC</td>
<td>TAY VORTAC</td>
<td>SSI VORTAC</td>
<td>a. N/R</td>
<td>2000/4000</td>
<td>160th SOAR(A), SAVANAH, GA</td>
<td>Jacksonville ARCP</td>
</tr>
<tr>
<td>(Northeast)</td>
<td>259/26  1</td>
<td>264/20</td>
<td>259/24</td>
<td>b. N/R</td>
<td></td>
<td>DSN 635-1980/1757</td>
<td>EXIT</td>
</tr>
<tr>
<td>WARDOG</td>
<td>N30°23.77'</td>
<td>N30°26.70'</td>
<td>N30°56.40'</td>
<td>c. N/R</td>
<td></td>
<td>C270-798-1980/1757</td>
<td></td>
</tr>
<tr>
<td>WEST</td>
<td>W83°02.06'</td>
<td>W82°56.00'</td>
<td>W81°53.60'</td>
<td>d. N/R</td>
<td></td>
<td>For use, coordinate with scheduling unit 24 hours in advance. TIMES OF OPERATIONS - Intermittent by NOTAM, 24 hours in advance.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. N/R</td>
<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>160th SOAR(A) assigned frequencies.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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).

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR68V</td>
<td>HTO VORTAC</td>
<td>HTO VORTAC</td>
<td>DPK VOR-DME</td>
<td>a. N/R</td>
<td>00500/5500</td>
<td>106 OSF/Tactics, NY ANG, Francis S Gabreski Arpt, NY</td>
<td>Jacksonville ARCP</td>
</tr>
<tr>
<td>(East)</td>
<td>121/6</td>
<td>187/4</td>
<td>142/16</td>
<td>b. N/R</td>
<td></td>
<td>DSN 456-7320</td>
<td>EXIT</td>
</tr>
<tr>
<td></td>
<td>N40°53.32'</td>
<td>N40°50.86'</td>
<td>N40°37.00'</td>
<td>c. N/R</td>
<td></td>
<td>C631-723-7320</td>
<td></td>
</tr>
<tr>
<td></td>
<td>W72°11.39'</td>
<td>W72°18.47'</td>
<td>W73°02.00'</td>
<td>d. N/R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>e. N/R</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>106 RQW assigned frequencies.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
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<tbody>
<tr>
<td>AR117V</td>
<td>ONM VORTAC</td>
<td>ONM VORTAC</td>
<td>ONM VORTAC</td>
<td>ONM VORTAC</td>
<td>a. N/R</td>
<td>07000/09000</td>
<td>58 OSS/DOO, Kirtland AFB, NM</td>
<td>Albuquerque</td>
</tr>
<tr>
<td></td>
<td>334/30</td>
<td>334/24</td>
<td>N34°49.00'</td>
<td>165/20</td>
<td>N34°00.00'</td>
<td>e. N/R</td>
<td>DSN 263-5979/5888/5701</td>
<td>ARCP-128.8E/307.2E</td>
</tr>
<tr>
<td></td>
<td>N34°49.00'</td>
<td>W106°57.80'</td>
<td>W106°'49.23'</td>
<td>W106°'48.00'</td>
<td>c. N/R</td>
<td></td>
<td>C505-853-5979/5888/5701</td>
<td>EXIT-128.8E/307.2E</td>
</tr>
<tr>
<td></td>
<td>W106°57.80'</td>
<td>W106°'55.90'</td>
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<td></td>
<td>d. N/R</td>
<td>58 SOW assigned frequencies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
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<tbody>
<tr>
<td>AR125V</td>
<td>ABQ VORTAC</td>
<td>ABQ VORTAC</td>
<td>ONM VORTAC</td>
<td>ONM VORTAC</td>
<td>a. N/R</td>
<td>00500/03000</td>
<td>58 OSS/DOO, Kirtland AFB, NM</td>
<td>Albuquerque</td>
</tr>
<tr>
<td>(North)</td>
<td>257/37</td>
<td>248/35</td>
<td>N35°00.70'</td>
<td>234/16</td>
<td>N34°13.45'</td>
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<td>ARCP</td>
</tr>
<tr>
<td></td>
<td>N34°55.00'</td>
<td>275/26</td>
<td>N34°27.30'</td>
<td>W107°'20.00'</td>
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<td>500 AGL/3000</td>
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</tr>
<tr>
<td></td>
<td>W107°33.50'</td>
<td>W107°31.17'</td>
<td>W107°'20.00'</td>
<td>W107°'06.17'</td>
<td>d. N/R</td>
<td>AGL</td>
<td>C505-853-5979/5888/5701</td>
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<tr>
<td></td>
<td>W107°33.50'</td>
<td>W107°31.17'</td>
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<td></td>
<td>e. N/R</td>
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</tbody>
</table>

**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.
### AR126V

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR126V</td>
<td>CNX VORTAC</td>
<td>CNX VORTAC</td>
<td>303/22</td>
<td>293/19</td>
<td>a. N/R</td>
<td>01000/08500</td>
<td>49 OSS/OSOS Holloman AFB, NM</td>
<td>Albuquerque</td>
</tr>
<tr>
<td>(North)</td>
<td>N34*38.00'</td>
<td>N34*33.00'</td>
<td>193/35</td>
<td>N34*49.00'</td>
<td>b. N/R</td>
<td>1000 AGL /8500</td>
<td>DSN 572-3536</td>
<td>EXIT-257.6</td>
</tr>
<tr>
<td></td>
<td>W105*59.00'</td>
<td>W105*59.00'</td>
<td>W105*59.00'</td>
<td></td>
<td>c. N/R</td>
<td>MSL</td>
<td>C505-572-3536</td>
<td>ARIP-257.6</td>
</tr>
<tr>
<td></td>
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<td>e. N/R</td>
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</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR127V</td>
<td>PIO VOR-DME</td>
<td>PIO VOR-DME</td>
<td>119/36</td>
<td>116/32</td>
<td>a. N/R</td>
<td>01000/10000</td>
<td>49 OSS/OSOS Holloman AFB, NM</td>
<td>Albuquerque</td>
</tr>
<tr>
<td>(North)</td>
<td>N32*08.00'</td>
<td>N32*12.50'</td>
<td>345/25</td>
<td>N32*56.00'</td>
<td>b. N/R</td>
<td>1000 AGL/10,000</td>
<td>DSN 572-3536</td>
<td>EXIT-257.6</td>
</tr>
<tr>
<td></td>
<td>W104*46.00'</td>
<td>W104*48.50'</td>
<td>W105*20.00'</td>
<td></td>
<td>c. N/R</td>
<td>MSL</td>
<td>C505-572-3536</td>
<td>ARIP-257.6</td>
</tr>
<tr>
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<td>e. N/R</td>
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</tbody>
</table>

**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.
<table>
<thead>
<tr>
<th>NUMBER</th>
<th>ARIP</th>
<th>ARCP</th>
<th>NAVIGATION CHECK POINTS</th>
<th>EXIT</th>
<th>CR PLAN</th>
<th>REFUELING ALTITUDES</th>
<th>SCHEDULING UNIT</th>
<th>ASSIGNED ARTCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR135V (North)</td>
<td>N31°54.20' W111°23.42'</td>
<td>N31°59.67' W111°26.34'</td>
<td>1 2</td>
<td>N32°22.03' W111°38.17'</td>
<td>a. 238.500 b. 233.725 c. N/R d. N/R e. 31/94</td>
<td>05000</td>
<td>563 OSS/OSOS Davis-Monthan AFB, AZ DSN 228-4938 C520-228-4938</td>
<td>Albuquerque ARCP</td>
</tr>
<tr>
<td>(South)</td>
<td>N32°22.03' W111°38.17'</td>
<td>N32°16.51' W111°35.24'</td>
<td>1 2</td>
<td>N31°54.20' W111°23.42'</td>
<td>79 RQS assigned frequencies</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**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' W110°13.88' | N32°13.35' W110°17.38' | 1 2 | N33°00.21' W110°48.76' | a. 233.725 b. 238.500 c. N/R d. N/R e. 30/93 | 6500 | 563 OSS/OSOS Davis-Monthan AFB, AZ DSN 228-4938 C520-228-4938 | Albuquerque ARCP |
|                | N33°00.21' W110°48.76' | N33°04.98' W110°45.24' | 1 2 | N32°08.17' W110°13.88' | | | |

**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.
### AR137V

**NAVIGATION**

- **CHECK POINTS**: N34°12.27' W113°58.28'
- **NORTH**: N34°18.23' W113°59.20'
- **SOUTH**: N34°52.65' W114°03.47'

**EXIT**

- a. 233.725
- b. 238.500
- c. N/R
- d. N/R
- e. 30/93

**CR PLAN**

- 4500/6500

**REFUELING ALTITUDES**

- N34°52.65'
- W114°03.47'

**SCHEDULING UNIT**

- 563 OSS/OSOS

**ASSIGNED ARTCC**

- Davis-Monthan AFB, AZ
- DSN 228-4059
- C520-228-4059

**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

**NAVIGATION**

- **CHECK POINTS**: N37°11.00' W122°23.00'
- **NORTH**: N36°47.00' W122°20.00'
- **SOUTH**: N37°11.00' W122°23.00'

**EXIT**

- a. N/R
- b. N/R
- c. N/R
- d. N/R
- e. N/R

**SCHEDULING UNIT**

- 01000/02000

**ASSIGNED ARTCC**

- 129 RQW Moffett Federal Afd, CA
- DSN 359-9356/7 C650-603-9356/7

**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.

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 conditions 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.
### AR230V

**NAVIGATION CHECK POINTS**
- LAS VORTAC 025/46
- N36°40.00' W114°31.50'
- LAS VORTAC 025/81
- N37°07.00' W114°02.00'

**EXIT**
- LAS VORTAC
- W114°26.50'

**CR PLAN**
- a. N/R
- b. N/R
- c. N/R
- d. N/R
- e. N/R

**REFueling ALTITUDES**
- 06000/08000

**SCHEDULING UNIT**
- 57 OSS/OSOS Nellis AFB, NV
- DSN 682-2040
- C702-652-2040

**ASSIGNED ARTCC**
- Los Angeles 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 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

**NAVIGATION CHECK POINTS**
- BTY VORTAC 124/42
- N36°15.00' W116°09.50'
- BTY VORTAC 124/36
- N36°20.00' W116°14.75'

**EXIT**
- BTY VORTAC
- W116°14.75'

**CR PLAN**
- a. N/R
- b. N/R
- c. N/R
- d. N/R
- e. N/R

**REFueling ALTITUDES**
- 06000/08000

**SCHEDULING UNIT**
- 57 OSS/OSOS Nellis AFB, NV
- DSN 682-2040
- C702-652-2040

**ASSIGNED ARTCC**
- Los Angeles 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 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.

2. Use 66 ARS assigned frequencies

3. Use 129 RQW assigned frequencies

### AR242V

**NAVIGATION CHECK POINTS**
- N36°56.00' W120°56.00' (North)
- N36°51.00' W120°53.00'
- N36°28.00' W120°41.00'

**EXIT**
- N36°56.00' W120°56.00' (North)
- N36°56.00' W120°56.00' (South)

**CR PLAN**
- a. N/R
- b. N/R
- c. N/R
- d. N/R
- e. N/R

**REFueling ALTITUDES**
- 00500/04500
- 129 RQW Moffett Federal Afd, CA
- DSN 359-9356/7
- C650-603-9356/7

**SCHEDULING UNIT**
- Stockton APP CON
- ARIP-120.95/294.5

**ASSIGNED ARTCC**
- Stockton APP CON
- ARIP-120.95/294.5

**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. 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 Points, 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.

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**NUMBER**
- AR230V
- AR231V
- AR242V

**ARIP**
- LAS VORTAC
- BTY VORTAC
- N36°56.00' W120°56.00' (North)
- N36°56.00' W120°56.00' (South)

**ARCP**
- LAS VORTAC
- BTY VORTAC
- N36°51.00' W120°53.00'

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**NAVIGATION CHECK POINTS**

**REFueling ALTITUDES**

**SCHEDULING UNIT**

**ASSIGNED ARTCC**
- Los Angeles ARCP
- Stockton APP CON
- ARIP-120.95/294.5

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**REMARKS:**
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 Points, 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.
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| 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. | |

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<table>
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<td>LTJ VOR-DME</td>
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<td>145/47, N44°57.20', W120°49.92'</td>
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VFR HELICOPTER REFUELING ANCHOR

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<th>ANCHOR PATTERN</th>
<th>EXIT POINTS</th>
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<th>ASSIGNED ARTCC</th>
<th>TIMES OF OPERATION</th>
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**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.
Chapter 5

AVOIDANCE LOCATIONS

I. NUCLEAR POWER PLANTS

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<th>COORDINATES</th>
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<tr>
<td>Gentilly</td>
<td>N46°25' W72°22'</td>
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<tr>
<td>Nuclear Power Demonstration</td>
<td>N46°11' W77°39'</td>
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<tr>
<td>Pickering</td>
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<td>N40°37'19&quot; W80°26'02&quot;</td>
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<td>Bellefonte–AL</td>
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<td>Cooper Station–NE</td>
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<td>Crystal River–FL</td>
<td>N28°57'26&quot; W82°41'56&quot;</td>
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<td>Davis Besse–OH</td>
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<td>Diablo Canyon 1, 2–CA</td>
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<td>Dresden 1, 2, 3–IL</td>
<td>N41°23'23&quot; W88°16'16&quot;</td>
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<td>Duane Arnold–IA</td>
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<td>Farley 1, 2–AL</td>
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<td>Fermi 1, 2–MI</td>
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<td>Fitzpatrick–NY</td>
<td>N43°31'26&quot; W76°23'54&quot;</td>
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<td>Ginna–NY</td>
<td>N43°16'40&quot; W77°18'32&quot;</td>
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<td>Grand Gulf–MS</td>
<td>N32°00'27&quot; W91°02'53&quot;</td>
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<td>Haddam Neck–CT</td>
<td>N41°28'55&quot; W72°29'57&quot;</td>
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<td>Harris–NC</td>
<td>N35°38'00&quot; W78°15'22&quot;</td>
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<td>N31°56'03&quot; W82°20'40&quot;</td>
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<td>N39°28'04&quot; W75°32'17&quot;</td>
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<td>Humboldt Bay–CA</td>
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<td>Indian Point 1, 2, 3–NY</td>
<td>N41°16'17&quot; W73°57'09&quot;</td>
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<td>Limerick 1, 2–PA</td>
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<td>Maine Yankee–ME</td>
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<td>North Anna 1, 2–VA</td>
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<td>Oconee 1, 2, 3–SC</td>
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<td>Peach Bottom 1, 2, 3–PA</td>
<td>N39°45'32&quot; W76°16'09&quot;</td>
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<td>Perry–OH</td>
<td>N41°48'04&quot; W81°08'36&quot;</td>
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<td>Rancho Seco–CA</td>
<td>N38°20'46&quot; W71°07'08&quot;</td>
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<td>River Bend–LA</td>
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<td>Robinson–SC</td>
<td>N34°24'19&quot; W80°09'31&quot;</td>
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<td>Salem 1, 2–NJ</td>
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<td>San Onofre 1, 2, 3–CA</td>
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<td>Seabrook–NH</td>
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<td>St. Lucie 1, 2–FL</td>
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<td>Trojan–OR</td>
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<td>N25°26'06&quot; W80°19'53&quot;</td>
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<td>Waterford 3–L</td>
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<td>Wolf Creek–KS</td>
<td>N38°14'20&quot; W95°41'20&quot;</td>
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<td>Yankee Rowe–MA</td>
<td>N42°43'41&quot; W72°55'29&quot;</td>
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<td>Zion 1, 2–IL</td>
<td>N42°26'44&quot; W87°48'08&quot;</td>
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</table>

II. RADIOACTIVE WASTE SITES

A. West Valley, NY; 1.5 NM radius circle centered on N42°27'00" W78°38'45".
B. Morris Operation, IL; N41°22'53" W88°16'32".
C. Humboldt Bay, CA; N40°42'28" W124°12'33".
D. 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.

A. Fort Jefferson National Monument, Florida.
B. Chaco Canyon National Monument; Aztec Ruin National Monument; and Gran Quivira National Monument, New Mexico.
C. 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.