

NAVAL AIR TRAINING COMMAND



**NAS CORPUS CHRISTI, TEXAS
CIN Q-2D-1185**

**CNATRAINST 1542.185
27 Jul 2021**

CHIEF OF NAVAL AIR TRAINING



PRIMARY NAVAL AIR VEHICLE OPERATOR TRAINING SYSTEM (NAVOTS) CURRICULUM

2021



DEPARTMENT OF THE NAVY
CHIEF OF NAVAL AIR TRAINING
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CNATRA INSTRUCTION 1542.185

From: Chief of Naval Air Training

Subj: PRIMARY NAVAL AIR VEHICLE OPERATOR TRAINING SYSTEM

1. Purpose. To publish the curriculum for training Student Air Vehicle Operators in the Primary Naval Air Vehicle Operator Training System phase of training .
2. Action. This curriculum is effective on receipt. No changes will be made without written authorization by the Chief of Naval Air Training (CNATRA).
3. Records Management. Records created as a result of this instruction, regardless of media and format, must be managed per Secretary of the Navy Manual 5210.1 of September 2019.
4. Review and Effective Date. Per OPNAVINST 5215.17A, CNATRA N7 will review this instruction annually around the anniversary of its effective date to ensure applicability, currency, and consistency with Federal, Department of Defense, Secretary of the Navy, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will be in effect for 10 years, unless revised or cancelled in the interim, and will be reissued by the 10-year anniversary date if it is still required, unless it meets one of the exceptions in OPNAVINST 5215.17A paragraph 9. Otherwise, if the instruction is no longer required, it will be processed for cancellation as soon as the need for cancellation is known following the guidance in OPNAV Manual 5215.1 of May 2016.
5. Forms. The CNATRA forms required by this instruction are automated in the Training Learning Management System (T/LMS) computer program. Additional copies of CNATRA forms are available on the CNATRA website <https://www.cnatra.navy.mil/pubs/forms.htm>.

A handwritten signature in black ink, appearing to read "K. H. DELANO", is positioned above the typed name.

K. H. DELANO
By direction

Releasability and distribution:

This instruction is cleared for public release and is available electronically only via CNATRA Issuances Website, <https://cpf.navy.deps.mil/sites/cnatra/Pages/Instructions.aspx>.

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COURSE DATA

1. Course Title. Primary Naval Air Vehicle Operator Training System (NAVOTS) Curriculum.
2. Course Identification Number (CIN). Primary NAVOTS, Q-2D-1185.
3. Location. Naval Air Station (NAS) Pensacola.
4. Course Status. Active.
5. Course Mission. Primary NAVOTS is designed to qualify graduates of this course for follow-on Intermediate NAVOTS training and to prepare them for their future responsibilities as Naval Air Vehicle Operators.
6. Prerequisite Training. Successful completion of NIFE 1, Q-9B-0178 and NIFE 2, Q-9B-1178 with two exceptions. Intermediate Water Survival Course (C-050-0605) and Aircrew Indoctrination NASTP Training Course (B-9E-1231) are not required training for Student Air Vehicle Operators (SAVOs).
7. Security Clearance Requirements. None.
8. Follow-on Training. Assigned by the graduate's parent service.
9. Course Length. For time-to-train calculations for this MCG please refer to CNATRA N3 Annual Time-to-Train Entitlement Notice for active 1542 series instructions on the CNATRA website: <https://cnatra.navy.mil> under Resources, Publications, CNATRA OPS Documents.
10. Class Capacity. Variable.
11. Instructor Requirements. As established by Chief of Naval Operations (CNO) planning factors.
12. Course Curriculum Model Manager. Commander, Training Air Wing SIX (COMTRAWING SIX).
13. Quota Management Authority. Chief of Naval Air Training.
14. Quota Control. CNO.

15. Course Training Subjects

a. Primary

(1) Administration

ADMINISTRATION		
Stage	Symbol	Hours
Check-In and Checkout	ADM0101-2	4.00
Totals		4.00

(2) Ground Training

GROUND TRAINING		
Stage	Symbol	Hours
Aviation Student Indoctrination	ASI0101-20	12.5
Systems Engineering 1	ENG0101-24	26.0
Engineering Exam	ENG0125	1.5
Systems Engineering 2 - UTD Cockpit Fam*	ENG0201-2	4.5
NATOPS	NA0101-8	7.0
OPs and NATOPS Exam	NA0109	1.5
OPs and NATOPS Exam Remediation & Critique	NA0110	1.0
Emergency Procedures	EP0101-6	11.0
EP Boldface Procedures Exam	EP0107	1.5
EP Boldface Procedures Exam Remediation & Critique	EP0108	0.5
VFR Communication	COM0101-2	3.0
Crew Resource Management	CRM0101	2.0
Meteorology	MET0101-7	8.0
Meteorology Exam	MET0108	1.5
Instrument Navigation 1	NAV0101-26	32.0
Instruments 1 Exam	NAV0127	2.0

GROUND TRAINING (cont.)		
Stage	Symbol	Hours
Instrument Navigation 2	NAV0201-14	21.0
Instruments 2 Exam	NAV0215	2.0
Instrument Navigation 3	NAV0301-11	17.5
Instrument Flight Planning	NAV0401-40	47.5
Instrument Flight Planning Exam	NAV0441	2.0
TP-13 Practical Final Exam	NAV0442	1.5
Instrument Flight Planning Exam Remediation & Critique	NAV0443	1.5
Totals		212.0

*ENG0201 and ENG0202 are ground training events conducted in the 2F207 T-6A Unit Training Device (UTD).

b. Flight Support

FLIGHT SUPPORT		
Stage	Symbol	Hours
Familiarization 1	FAM1101-6	11.0
Familiarization 2	FAM1201-3	10.5
Instrument Navigation Flight Preparation	NAV1101-2	6.0
Operational Navigation 1	ON1101-9	32.5
Operational Navigation Exam	ON1110	1.5
Operational Navigation Exam Remediation & Critique	ON1111	1.0
ONAV Self-Study/Chart Prep	ON1112	5.0
Formation	FRM1101-8	17.0
Formation Exam	FRM1109	1.5
Formation Self-Study	FRM1110	6.5
Totals		92.5

c. Flight Training. The programmed times for each phase, stage, and media are:

FLIGHT TRAINING				
Flight/Events	T-6A UTD*		T-6A OFT	
	Flts	Hrs	Flts	Hrs
Familiarization Procedures Training	3	4.5	2	3.0
Familiarization Check Flight			1	1.5*
Instrument Navigation	9	13.5		
Instrument Navigation Check Flight			1	1.5*
Operational Navigation			2	3.0
Formation (including Aerial Refueling)			3	4.5
Totals	12	18.0	9	13.5**

*Any UTD event may be conducted in the OFT. OFT events must be conducted in the OFT unless otherwise directed by TRAWING Commander.

**OFT total hours include the Familiarization and Instrument Navigation Check Flights, which will be conducted by stage qualified Check Instructor pilots. These events also require a CI or IOS operator be assigned to run the training device.

16. Training Preparation Time. In addition to the hours formally planned and scheduled for academic classes and simulator events, significant additional time to prepare and study outside of scheduled training hours should be expected by the SAVO. The amount of time will vary depending on the complexity of the material and individual student needs. For simulator events, specific brief and taxi times will be programmed into the CNATRA approved Training and Learning Management System (T/LMS) and accounted for on the flight schedule, per the following table:

ADDITIONAL FORMAL TRAINING TIME PER EVENT			
Training Area	Brief/ Preflight/ Taxi	Taxi/ Debrief	Total
Simulator Events: All	0.5	0.5	1.0

17. Physical Requirements. As specified in the Manual of the Medical Department, Chapter 15, and all applicable anthropometric standards.

18. Obligated Service. Refer to MILPERSMAN for Naval personnel.

19. Primary Instructional Methods. Lecture, Mediated Interactive Lecture (MIL), Computer-Assisted Instruction (CAI), 2B47 Basic Instrument Navigation Trainer, facility tours, self- and group-paced study, and 2F207 Unit Training Device (UTD) and 2F208 Operational Flight Trainer (OFT) simulator instruction.

20. Preceding Curriculum Data. N/A.

21. Student Performance Measurement/Application of Standards. The standards outlined in Chapter IX, Course Training Standards, are used to evaluate student performance for all items on all events. Final judgment regarding the satisfactory performance of any item rests with the instructor. Refer to CNATRAINST 1500.4J, Chapter 6, for further guidance.

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ABBREVIATIONS

The following is a list of abbreviations used in the curriculum:

AGL	-	Above Ground Level
AIM	-	Aeronautical Information Manual
AOB	-	Angle of Bank
ASR	-	Airport Surveillance Radar
ATC	-	Air Traffic Control
ATF	-	Aviation Training Form
ATIS	-	Automated Terminal Information Service
ATJ	-	Aviation Training Jacket
ATS	-	Aviation Training Summary or Approach Turn Stall
AVO	-	Air Vehicle Operator
AWOS	-	Automated Weather Observing System
BAC	-	Basic Approach Configuration
BAR	-	Basic Airwork Recognition
BAW	-	Basic Airwork
CDI	-	Course Deviation Indicator
CFS	-	Canopy Fracturing System
CHUM	-	Chart Updating Manual
CIN	-	Course Identification Number
CNO	-	Chief of Naval Operations
CO	-	Commanding Officer
CO-PC	-	Commanding Officer Progress Check
COMTRAWING SIX	-	Commander, Training Air Wing SIX
CRM	-	Crew Resource Management
CTAF	-	Common Traffic Advisory Frequency

CTS	-	Course Training Standard
DA	-	Decision Altitude
DME	-	Distance Measuring Equipment
DOR	-	Drop on Request
DRAFT	-	Destination, Route, Altitude, Fuel, Time
ELP	-	Emergency Landing Pattern
EOB	-	End of Block
EP	-	Emergency Procedure
ER	-	Event Rehearsal
ET	-	Extra Training
ETA	-	Estimated Time of Arrival
ETE	-	Estimated Time Enroute
FAA	-	Federal Aviation Administration
FAF	-	Final Approach Fix
FAM	-	Familiarization
FAR	-	Federal Aviation Regulations
FIH	-	Flight Information Handbook
FSS	-	Flight Service Station
FTI	-	Flight Training Instruction
FWOP	-	Fixed-Wing Operating Procedures
GCA	-	Ground-Controlled Approach
GPS	-	Global Positioning System
GPU	-	Ground Power Unit
H/X	-	Hours per Event
HEFOE	-	Hydraulic, Electrical, Fuel, Oxygen, Engine
IAF	-	Initial Approach Fix

IAW	-	In Accordance With
ICS	-	Intercommunication System
IFR	-	Instrument Flight Rules
ILS	-	Instrument Landing System
IP	-	Instructor Pilot
IPC	-	Initial Progress Check
KIAS	-	Knots Indicated Airspeed
LP	-	Local Procedures
LSC	-	Level Speed Change
MAF	-	Maintenance Action Form
MAP	-	Missed Approach Point
MCF	-	Mission Completion Fuel
MDA	-	Minimum Descent Altitude
MIF	-	Maneuver Item File
MIL	-	Mediated Interactive Lecture
MOA	-	Military Operating Area
MTR	-	Military Training Route
NAS	-	Naval Air Station
NATOPS	-	Naval Air Training Operating Procedures Standardization
NAVAID	-	Navigational Aid
NAVFLR	-	Naval Aviation Flight Record
NFS	-	Naval Flight Student
NG	-	No Grade
NM	-	Nautical Mile(s)
NORDO	-	No Radio
NOTAMs	-	Notices to Airmen

NSS	-	Navy Standard Score
NU	-	Number of UNSATs
OBOGS	-	On-Board Oxygen Generating System
OFT	-	Operational Flight Trainer
OLF	-	Outlying Field
ONAV	-	Operational Navigation
OPSO	-	Operations Officer
PA	-	Precision Aerobatics
PAR	-	Precision Approach Radar
PAS	-	Phase Aggregate Score
PAT	-	Power, Attitude, Trim
PCL	-	Power Control Lever
PEL	-	Precautionary Emergency Landing
PMSV	-	Pilot Meteorological Information Service
PMU	-	Power Management Unit
POS	-	Power Off Stall
PPEL	-	Practice Precautionary Emergency Landing
PTP	-	Point-to-Point
RA	-	Radar Approach
RMU	-	Radio Management Unit
RRU	-	Ready Room UNSAT
SA	-	Situational Awareness
SAVO	-	Student Air Vehicle Operator
SMS	-	Student Monitoring Status
SOP	-	Standard Operating Procedure
SS	-	Self-Study

SSR	-	Special Syllabus Requirement
STAR	-	Standard Terminal Arrival Route
SUA	-	Special Use Airspace
TAD	-	Trim Aid Device
T/LMS	-	Training Learning Management System
TOT	-	Training Time Out
TP	-	Trainer Practical
TPC	-	Tactical Pilotage Chart
TRB	-	Training Review Board
UHF	-	Ultra High Frequency
UNSAT	-	Unsatisfactory
UTD	-	Unit Training Device
VDP	-	Visual Descent Point
VFR	-	Visual Flight Rules
VHF	-	Very High Frequency
VMC	-	Visual Meteorological Conditions
VOR	-	VHF Omnidirectional Range
XO	-	Executive Officer

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GLOSSARY

1. Advancing X. Completed event within the normal syllabus flow. Generally excludes events with last characters in the range 84-89 unless specified by CNATRAINST 1500.4J.
2. Aviation Training Form (ATF). Any form used to document training performance in the Naval Aviation Training Command pipelines (computer generated grade sheets and supplemental administrative documents).
3. Aviation Training Jacket (ATJ). A complete administrative record of all aviation training received while attending flight training at Naval Aviation Training Command (NATRACOM) activities. It contains ATFs, calendar card, grade reports, and all other associated training information. ATJs are maintained in student control and follow the students through all phases of training.
4. Block of Training. A sequential series of lessons within a training stage sharing identical MIFs. The second numerical character in the lesson designator identifies the block.
5. Blue Supplemental ATF. Document that states the purpose and background for CO-directed ET sortie(s) that is printed on blue paper. This document is filed on the left side of the student ATJ.
6. Check Flight (XX90). A simulator check event in any stage of training.
7. Class Advisor. An Instructor Air Vehicle Operator (AVO) assigned to each class as mentor and advisor to monitor student progress, assist when difficulties arise, and instill the Naval Aviation culture.
8. Commanding Officer Progress Check (CO-PC) (XX89). Progress check either directed by the Commanding Officer or triggered by NFS performance. A satisfactory CO-PC returns the student to normal syllabus flow. An UNSAT CO-PC results in a TRB.
9. Course of Training. The entire program of simulation, academics, and officer development conducted in all media during the programmed training days.
10. Course Training Standard (CTS). CTS define the behavior associated with each maneuver and standards or tolerances recommended for successful stage completion. These standards are defined in Chapter IX.
11. Courseware. The technical data, flight training instructions, audio, video, film, CAI, instructor guides, student study guides, and other training material developed to support and implement the syllabus of instruction.

12. Deliverables. A CNATRA 1542/1827 TRB Summary Form generated by the TRB that summarizes a specific student's progress in a given syllabus and provides detailed information on the application of AVO training for that student. Deliverables indicate whether the quality and continuity of training provided was IAW CNATRAINST 1542.185.
13. Drop on Request (DOR). The self-initiated termination of training. Anytime a student makes a statement such as "I quit" or "DOR," they shall be immediately removed from the training environment and referred to the training officer for administrative action.
14. Emergency Procedure (EP). An established procedure used by aircrew to assist in safely controlling the aircraft in the event of a flight control failure or airborne emergency.
15. End of Block (EOB). Last event in a block. The student must meet or exceed MIF on all mandatory items in the block to progress past EOB.
16. Event. scheduled period of prescribed instruction. It may be in an academic or laboratory classroom, a simulator, or flight environment.
17. Event Rehearsal (ER). A hard scheduled flight support simulator event designed to prepare the student for the current block of simulator training. This event may be scheduled as student only, or it may require the addition of an IOS operator to assist the student in using the training device. This requirement will be specified for each event.
18. Extra Training (XX87). Additional student training events ordered by the CO in order to remediate training deficiencies.
19. Fixed-Wing Operating Procedures Manual (FWOP). A Training Air Wing directive describing standard operating procedures for local fixed-wing aircraft.
20. Flight Training Instruction (FTI). Training publications that define maneuvers and acceptable performance standards for each maneuver the student is expected to perform. Each FTI covers one or more stages of instruction.
21. Hours per Event (H/X). The resourced duration for each event, rounded to the nearest tenth of an hour.
22. Initial Progress Check (XX88). A special check given by an experienced instructor (senior O-3 or above) as designated in writing by the CO. A satisfactory IPC returns the student to normal syllabus flow. An IPC can count as a progressing event at the CO's discretion. An UNSAT IPC results in a CO-PC

23. Lesson Designator. All syllabus events have a lesson designator consisting of a stage identifier of up to three letters and an event code of four numbers representing order and required resourcing. Refer to the CNATRA 1550.6F for further information. This MCG utilizes the following lesson designators:

Char	Meaning	Remarks		
1 st - 3 rd	Stage	ADM - Administration ASI - Aviation Student Indoctrination COM - VFR Communication	CRM - Crew Resource Management ENG - Engineering EP - Emergency Procedures FAM - Familiarization	FRM - Formation MET -Meteorology ON-Operational Navigation NAV - Instrument Navigation NA - NATOPS
4 th	Media	0 - Ground Event 1 - Academics	2 - CPT 3 - Simulator	
5 th	Block	Sequential, indicating block within stage.		
6 th & 7 th	Event/ Check Identifier	Sequential, indicating event within block, or other event types as shown below: 84 - Adaptation Flight 85 - Practice Sim 86 - Warmup 87 - Extra Training 88 - Initial Progress Check 89 - Final Progress Check 90 - Check Flight		

24. Mandatory Item. Any maneuver coded with a plus sign (+). This symbol indicates the maneuver is required and must be accomplished to the specified standard in that block of training.

25. Maneuver Item File (MIF). A chart listing the required maneuvers and associated proficiency levels for each block of training.

26. Master Curriculum Guide (MCG). A publication tailored to a specific phase of training.

27. Phase of Training. A chief subdivision of a course of training. The NAVOTS pipeline is comprised of Primary, Intermediate and Advanced NAVOTS phases of training.

28. Pink ATF. A standard ATF that is printed on pink paper. The pink ATF is used to denote an UNSAT event.

29. Progress Check (XX88/XX89). A student check event within a given stage of training administered by an experienced instructor IAW the CNATRAINST 1500.4J.

30. Progress Check Instructor. An instructor authorized by the CO to administer Initial or Command Directed Progress Checks.
31. Ready Room UNSAT (RRU). An UNSAT grade given for inadequate knowledge of flight procedures, systems, discuss items, emergency procedures, or deficient preflight planning or failure of a non-academic examination (e.g., NATOPS quiz/exam). Missing a brief does not constitute an RRU and shall be documented on a supplemental ATF. Refer to CNATRAINST 1500.4J, Ch. 6 for further information on missed briefs.
32. Self-Study Events (SS). A hard scheduled flight support ground event designed to prepare the student for the current block of simulator training. This event may be scheduled as a monitored classroom event or it may be scheduled as individual unsupervised study time.
33. Special Syllabus Requirement (SSR). One-time, ungraded demonstration item(s).
34. Stage. A subdivision of a training phase, which is comprised of a group of events leading to a single set of objectives that are designated by a common lesson identifier (e.g., ENG, FAM, ON, FRM). Refer to CNATRAINST 1550.6F, Appendix D, for further information.
35. Standard Operating Procedure. An instruction or directive that provides guidance on TRAWING or squadron operating rules for local aircraft.
36. Training Media. Primary NAVOTS media include simulator (UTD/OFT), and ground training and flight support events consisting of MILs, CAIs, lectures, and exams. The first numerical character in the lesson identifier designates the training media. Refer to CNATRAINST 1550.6F for further information.
37. Training Review Board (TRB). A fact-finding board appointed to conduct an administrative review of training following a failed CO-PC. Refer to CNATRAINST 1500.4J for further information.
38. Training Time Out (TTO). A pause in training when a student or Instructor expresses concern for personal safety or a need exists to clarify procedures or requirements. Either the SAVO or Instructor may call a TTO.
39. Warmup Event(s) (XX86). Additional event(s) given to allow a student to regain a level of proficiency previously demonstrated which has diminished due to a non-syllabus break in training.

Chapter I

General Instructions

1. Syllabus Management

- a. Distribution. Participating TRAWING and squadron personnel.
- b. Interpretation. The syllabus is directive. Should circumstances create situations not covered within the scope of this syllabus, or specific course of action appears to conflict with other directives, consult CNATRA (N71).
- c. Deviations. Document all deviations on the event's ATF.
- d. Changes. Recommended changes shall be submitted IAW CNATRAINST 1550.6F.
- e. Execution. All students execute Chapters II through VII.
- f. Syllabus Description. Primary NAVOTS events are flown in the T-6A simulator and are divided into stages. Stages are grouped by like flight training regimes such as Familiarization and Instrument Navigation. Each stage may be subdivided into training blocks and the training blocks consist of a specified number of events. MIFs identify the minimum acceptable level of performance in relation to the CTS that must be achieved at the completion of each training block.

g. Grade Calculation

(1) Phase Aggregate Score (PAS). PAS is a comparative ranking based on the NFS's performance on a group of events compared against that of a previous population of completers for the same set of events.

(2) Naval Standard Score (NSS). NSS is calculated to correct for potential non-normality in the distribution of PAS. NSS is calculated for each block within a curriculum and for the entire phase.

(3) SAVO Calculations. Refer to the CNATRAINST 1500.4J for SAVO PAS and NSS calculations.

2. Training Management

a. Syllabus Progression

(1) Other than noted exceptions, syllabus events shall be flown sequentially within each stage. Blocks shall not be started without all prerequisites completed. Students must complete all events in their assigned phase unless enrolled in an approved accelerated syllabus.

(2) The flowchart on page I-3 delineates the sequence of events and their ground training prerequisites. System training management is designed to facilitate up to two graded events (simulator, exam, or combination thereof) per student per day.

(3) The first event in stage must be completed within 14 calendar days of the associated flight support lecture. The associated flight support lecture must be redone if 14 or more days have elapsed.

(4) The first event in stage cannot be completed the same day as the associated flight support lecture(s).

(5) See page I-3 for a depiction of Primary NAVOTS course flow.

b. Training Acceleration Program (TAP). Students with significant prior flight time, excluding IFS/NIFE or IFS/NIFE equivalent flight time, may warrant accelerated progression. Refer to CNATRINST 1500.4J for further information and guidance on SAVO TAP.

c. Maneuver Continuity. Students must accomplish previously graded procedures frequently enough to ensure required proficiency is maintained.

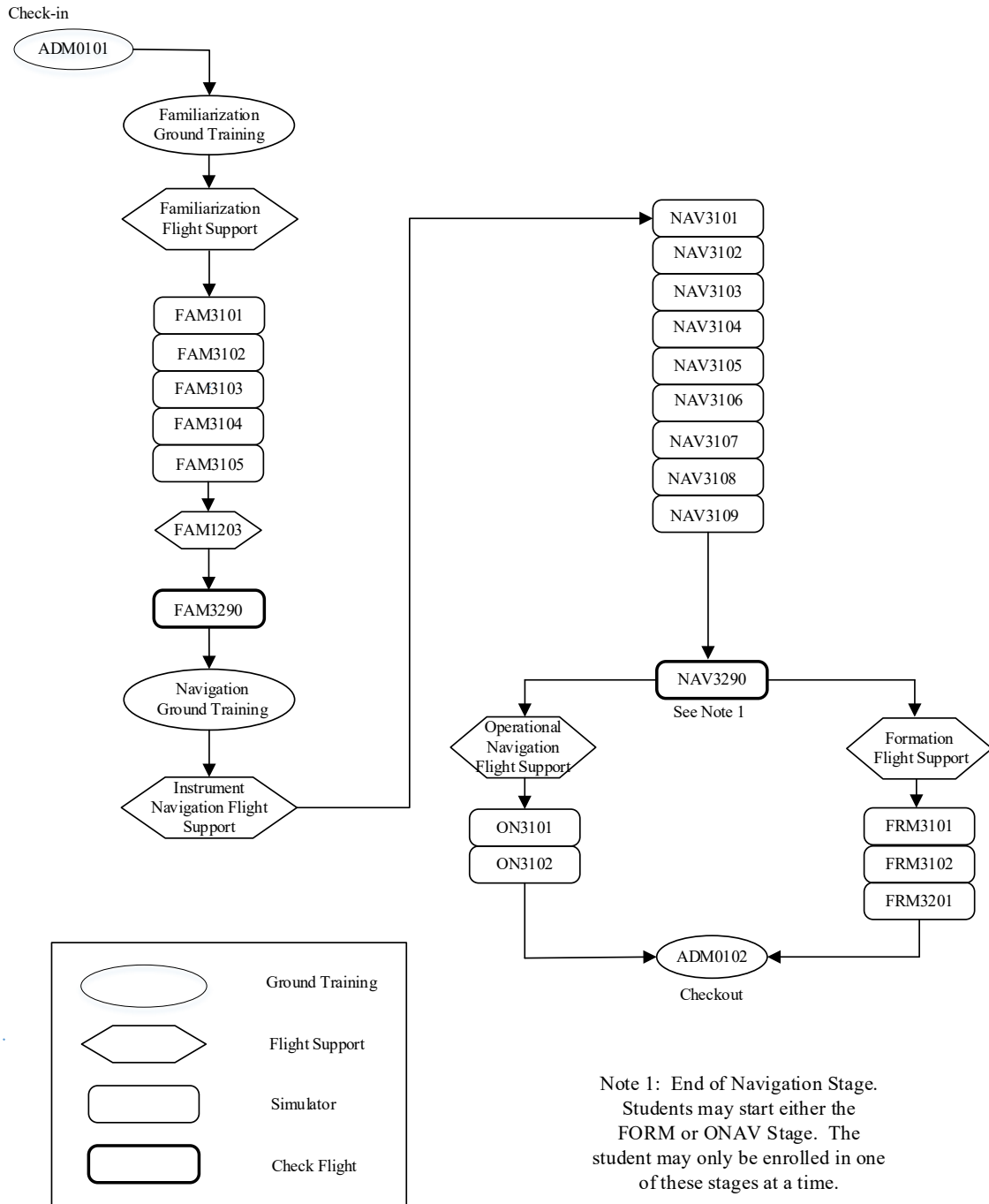
d. Hours per Event. Instructors shall plan and execute missions to meet MCG stated H/X as closely as practical. If actual event length varies from MCG stated H/X by more than 0.3 hours (greater or less than), the instructor shall annotate reason(s) in the ATF's general comments section. Note, lesser only applies to flight events. Simulator events are deemed complete when the student receives at least the full training period as specified in the MCG. Refer to CNATRINST 1500.4J, section 605, for further clarification.

e. Location of Training. Student events shall be accomplished at home station.

f. Special Syllabus Requirements (SSR). SSRs may be allocated to blocks. Unless noted otherwise, instructors may accomplish SSRs on any flight within the block. The SSRs shall be completed in the specified block. Annotate completed SSRs in the following places on the ATF: specify the SSR completed in the Comments section, assign NG/1 as the SSR maneuver grade, and date/save SSR exposure on the T/LMS SSR tab.

g. Aviation Training Jacket (ATJ) Reviews. The Class Advisor (CA) shall conduct jacket reviews IAW CNATRINST 1500.4J.

PRIMARY NAVOTS COURSE FLOW



3. Unsatisfactory (UNSAT) Performance. All training shall be suspended following an UNSAT event, except as addressed or authorized in this MCG.

a. Event Progression. Following an UNSAT event, if a PC is not required, that event shall be repeated until the NFS satisfactorily passes the event.

b. Remediation of unsatisfactory performance may be specifically tailored to address deficient skillsets. For example, an UNSAT event due solely to ground operations may be remediated by a dual CPT or ground evaluation emphasizing deficient areas.

c. Ready Room UNSAT (RRU). For purposes of determining when IPCs or CO-PCs are required, RRUs and UNSAT flight and simulator events all count towards PC triggers. An RRU is defined as either of the following:

(1) A SAVO is inadequately prepared for the scheduled event. The RRU always triggers a Progress Check, so they shall always be documented on a pink version of the event's ATF. The event will be marked as incomplete with a U/2 grade in the appropriate graded item column(s) that triggered the RRU. Upon successful completion of the Progress Check, the original RRU event shall be flown as a take two (or greater) to complete all remaining, or appropriate items, graded as a normal event.

(2) The SAVO fails a nonacademic examination (e.g., NATOPS quiz).

d. Academic. An academic examination failure is UNSAT and counts towards PC triggers.

e. Remediation. Remediation of unsatisfactory performance may be specifically tailored to address deficient skillsets. For example, an UNSAT event due solely to ground operations may be remediated by a dual CPT or ground evaluation emphasizing deficient areas.

f. Restrictions. The student shall not accomplish new training in any stage until remediating the UNSAT event.

4. Training Review Board. The TRAWING shall conduct a TRB on all NFSs recommended for attrition. Refer to the CNATRINST 1500.4J for additional information and guidance.

5. Training Delays and Warmup Events within Stage. A Warmup (WU, XX86) event is given to regain flight proficiency due to a training delay. Eligibility is based on the number of days since the last stage syllabus event, in either the aircraft or simulator. WU criteria are normally based on last event in stage because MPTS/MNTS is built on increasing levels of skill attainment between blocks or stand-alone events. Every WU event shall ensure required skills for that stage are refreshed. All Warmup events shall be coded as a XX86 events (e.g., FAM3186).

a. Optional WUs shall be scheduled and flown as the next event. If performance warrants a WU, it shall be re-coded as the last completed dual event.

b. Mandatory WUs shall be scheduled and flown as the last completed event or as directed by the Commanding Officer. The event shall be coded as a WU (XX86).

c. Individual maneuver grades on WU events will not count toward calculation of NFS stage and phase grades. WU events are however eligible for overall event UNSAT if a significant incident not related to the stage discontinuity occurred.

d. If the break in training occurs between two simulator events, a mandatory WU shall be flown and coded as the last completed event.

e. The instructor shall document on the ATF the reason and circumstances for awarding the WU event.

f. Check events (XX90) are considered part of the stage for which they are checking for WU purposes.

g. The following table is a quick reference regarding the use of WUs with respect to stage continuity, or breaks in training:

CRITERIA FOR AWARDING WARMUP EVENTS IN STAGE		
BREAKS* (DAYS)	WARMUP EVENTS	<u>REMARKS</u>
7-13	1 Optional	- Optional WU is based on performance and is required if overall grade is UNSAT. - WU is prohibited if demonstrated performance is sufficient, or will be sufficient within remaining block events, by EOB.
14-30	1 Mandatory 1 Optional	- Mandatory WU is not an advancing event. - Optional WU is based on performance and is required if overall grade is UNSAT. - WU is prohibited if demonstrated performance is sufficient, or will be sufficient within remaining block events, by EOB.

*Break = (Current Julian data) – (Julian date of last simulator or flight event in stage).

h. Training Delays and Warmups Between Stages. WUs are intended for non-curriculum breaks in training. Each curriculum is designed to allow sufficient time for academics, simulators, and flights. First events in stage following ground training are designed and graded with the delay factored in and normally do not require a WU.

i. Between stages, a mandatory WU is required if 14 to 30 days have elapsed since any curriculum event.

j. All WU events between stages shall be recorded on an ATF, and will include all required and relevant information to record the conduct and performance of that WU event.

k. Extended Training Delays. If the period between events is greater than 30 days, the squadron CO shall determine an appropriate WU training plan to regain NFS proficiency. Refer to the CNATRAINST 1500.4J for further guidance.

6. Additional Simulators

a. Extra Training (ET) Events (XX87). ET events may be awarded by the CO to compensate for either syllabus-related training deficiencies (e.g. MCG deviation) or to correct NFS performance skillset deficiencies. These events may be completed in any appropriate device determined by the CO.

7. Ground Training and Briefing Requirements

a. Mission Preparation, Briefings, and Debriefings

(1) EOB Events. The instructor shall carefully review the student's previous ATFs in planning the EOB event to ensure the profile includes opportunities to reach MIF on all mandatory items and demonstration items attempted in the block.

(2) Preparation. Students shall arrive for each flight or simulator event with a thorough knowledge of:

(a) The Discuss Items, as listed in Chapters III-VIII.

(b) Mandatory and demonstration items for the event's training block.

1. A flight profile tailored to training requirements, weak areas, and continuity.

2. The latest ATF for the stage.

(3) Briefing. The instructor shall review the SAVO's previous block ATFs before each event. Thoroughly cover the current mission's:

(a) Discuss Items, as listed in Chapters III-VIII.

(b) Specific objectives.

(c) Techniques and required procedures for accomplishing those objectives.

(d) Planned profile and contingencies.

(4) Debriefing

(a) After each event, the instructor shall critique the student's performance using cause/effect analysis, particularly with respect to the CTS.

(b) The mission's complexity and student's progress will govern the time required for debrief. For simulator events conducted by Contract Instructors, at no time shall the debrief time be less than MCG stated time. In some cases, an extended CI debrief may be required due to student performance.

(c) Debriefing must be detailed and comprehensive. The ATF shall be completed prior to the SNVO's next event. Exceptions may be made for out-and-ins and cross-country flights. In such instances, the SAVO will be provided feedback on performance as soon as possible following the event.

b. Emergency Procedures (EP) Briefing and Training

(1) EP training builds the student's confidence in the aircraft. The instructor shall conduct EP training on all aircraft events, either on the ground or in the aircraft. Correct procedural deficiencies through additional instruction and study assignments.

(2) Incorporate EP training into trainer events when practical; however, instructional block objectives take precedence.

(3) Grade the student's overall EP knowledge and performance under EPs.

8. Mission Grading Procedures and Evaluation Policies

a. General Grading and Evaluation Policy. MIFs listed are minimum block completion standards per maneuver. Students who consistently perform at the absolute minimum standard through multiple blocks of training may not possess the skills required to complete follow-on training. MIF is designed to allow for minimum performance in a specific area, with the understanding that performance in other areas above the minimum MIF, will offset the weak area.

b. Grading Procedures (Aircraft and Training Devices)

(1) Absolute Maneuver Grading. Use the following grading scale to document the student's characteristic performance on maneuvers attempted during each event. This is an absolute grading scale. Judge the student's proficiency only against the item's CTS. Maneuver grades shall be consistent with the ATF comments.

(a) Demonstrated (NG/1 Level). Enter "No Grade (NG)":

1. When the instructor demonstrates the maneuver and the student does not subsequently perform it during the event.

2. To indicate accomplishing all SSRs for that block or event. Also specify completed SSRs in the ATF's maneuver item content line and document date of exposure via the SSR button on the ATF menu bar.

(b) Unable (U/2 Level). Performance is unsafe or lacks sufficient knowledge, skill, or ability. Deviations greatly exceed CTS, significantly disrupting performance. Corrections significantly lag deviations or aggravate the deviation.

(c) Fair (F/3 Level). Performance is safe, but with limited proficiency. Deviations exceed CTS, detracting from performance. Corrections noticeably lag deviations, and may not be appropriate.

(d) Good (G/4 Level). Characteristic performance is within CTS. Deviations outside CTS are allowed, provided they are brief, minor, and do not affect safety of flight. Corrections must be appropriate and timely.

(e) Excellent (E/5 Level). Greatly surpasses CTS. Performance is correct, efficient, and skillful. Deviations are very minor. The student initiates corrections, if required, and they are appropriate, smooth, and rapid.

(2) Overall Event Grades. Overall event grades represent the student's progression through the syllabus. Grade events "Pass" or "UNSAT" use the following definitions to characterize event grades. See *Awarding Overall Event Grades* for specific rules defining UNSAT performance.

(a) Pass

1. Prior to EOB. Progress is adequate to meet standards by EOB.
2. EOB. The student's performance meets or exceeds standards.

(b) UNSAT. Student exhibits dangerous tendencies or progress toward meeting EOB standards is insufficient. UNSAT overall is at the instructor's discretion. It should be noted that an event may be graded UNSAT without any individual maneuvers graded 2/Unable. All UNSAT events shall be printed on pink paper.

(3) Awarding Overall Event Grades. The student's overall grade is based on the student's performance against the MIF. The following rules govern overall event grading.

(a) EOB MIF Performance. Performance must meet MIF by EOB. If the student has previously met MIF in the block, he or she must still meet MIF in the EOB flight if the maneuver is reattempted.

(b) Prior to EOB. Performance must meet/exceed previous block MIF. Example:

1. NAV31XX MIF requires an F/3 and NAV41XX MIF requires a G/4 for Arcing.
2. The student must meet or exceed F/3 to progress out of the NAV31XX block.
3. The student must maintain or exceed F/3 until the last NAV41XX event, by which time the student must attain G/4 for Arcing

(c) MIF Performance Maintenance. Students shall maintain or exceed MIF performance from one block to the next within stage or between media within stage, except as noted below or when MIF on a subsequent block is below the preceding block MIF.

(4) Maneuver Requirements. For each block:

(a) Mandatory Items. Items with a number and a plus sign (+) are mandatory and the student must meet the required proficiency by EOB. When a maneuver is performed multiple times in a block of training, the last grade assigned for the maneuver will determine if the student meets EOB MIF.

(b) Demonstration Items. Items with a number 1 are demonstration items; however, if flown, the student must meet the required proficiency by EOB (see paragraph 8.c.(2)(b) for check event exceptions).

(c) Not Demonstrated/Not Performed. The instructor will not demonstrate, nor will the student perform:

1. Unnumbered items.
2. Items not in the stage.
3. Exceptions:
 - a. Weather-driven instrument approaches.
 - b. Prebriefed maneuvers for instructor proficiency.

(5) Incomplete Events. In general, flight instructors should consider an event complete if the student is able to accomplish a sufficient amount of the planned profile. This rule is particularly true when weather precludes finishing all maneuver items, and the instructor is able to emphasize training where weather permits. Subsequent events in the block, when available, can reverse this emphasis, hence achieving overall training balance. If a student has had ample opportunity to learn a task and subsequently flies a short mission, the mission shall not be marked incomplete solely to provide unwarranted extra training.

(a) Assessment. Assess the event complete if:

1. Seventy-five percent of the event's hours per event (H/X) were used for training,
and

2. There are sufficient events remaining in block to allow for completion of all remaining required maneuvers.

3. Otherwise, assess the event incomplete.

(b) Completion Events

1. An event may both complete a previous event and count as an advancing event.

2. For events flown exclusively to clear an incomplete, grades on maneuvers repeated from the incomplete event do not count toward the student's score, except where the grade assigned for the repeated item is lower than the lowest grade previously assigned on that item from all previous attempts at that event.

(c) Simulator Event Completion. Assess a simulator event complete if the student has received the full training period per the MCG. If required, the simulator event may be conducted for a time period greater than that stated in the MCG. If the actual simulator sortie length is greater than stated H/X by more than 0.3 hours, the instructor shall annotate the reason in the ATF's general comment section.

c. Policies for Evaluation Flights and Ground Evaluations

(1) Authorized Evaluators. The CO will designate check flight instructors for each stage.

(2) Check Events (XX90)

(a) Check events are single-event training blocks. Therefore, all rules regarding progressing out of a block apply, except:

1. NFS should fly a cross section of Demonstration items (NG/1) after all (+) graded items are adequately performed.

2. The NFS should be able to demonstrate required levels of proficiency without instructor assistance. However, instruction is allowed on check events and NFSs may re-attempt maneuvers at the instructor's discretion. If the flight profile was incomplete because too much time was dedicated to re-attempting maneuvers, or too much event time utilized for additional training, the item should be graded "U/2" and the flight should be graded UNSAT/incomplete.

3. The entire event duration should be devoted to assessing NFS skill attainment, ability, and readiness to progress to the next block of training. All required maneuvers must be completed to MIF.

(b) Incomplete Check Event.

1. A check event shall be graded as incomplete when either of the following occur:

a. Any (+) item was not flown.

b. The instructor was unable to observe sufficient examples of a given maneuver to assess the student's overall performance. If the flight profile is incomplete because too much time was dedicated to re-attempting maneuvers or excessive additional training was required, overall event grade should be UNSAT/Incomplete.

2. The subsequent completion flight need only include maneuvers required to complete the check event.

3. Exceptions. The check event is complete and the overall grade is UNSAT if:

a. Any graded item is below expected performance levels needed to succeed in follow-on trading, or

b. Any NG/1 item was not adequately prepared for, or required item knowledge was insufficient resulting in a grade of U/2 for the Demonstration item, or

c. The instructor determines inadequate performance was demonstrated on any item, or items, that will not predicate successful follow-on normal course flow training.

d. End of Stage Check Flights. Final flights in Stage may be designated as a check flight to evaluate NFS skill retention and ensure standardization of training. It is a valuable tool in assessing NFS performance and may be weighted commensurate to its importance.

e. UNSAT Check Flight - Ground Operations. A check flight graded UNSAT solely for ground operations, like all UNSAT check flights, requires a progress check. The CO will decide whether to perform the progress check as a ground evaluation in the simulator or in the aircraft.

(3) Progress Check Procedures

(a) Progress checks flown in the aircraft or simulator are holistic reviews of a student's proficiency, judgment, situational awareness, and overall ability to complete the mission. Refer to the CNATRAINST 1500.4J for further guidance and requirements.

(b) IPC. The following defines when to conduct an IPC and IPC outcomes.

1. IPC Triggers:

- a. Two consecutive UNSATs.
- b. Three cumulative UNSATs in the NATRACOM.
- c. An UNSAT check event (XX90).
- d. A Ready Room UNSAT (RRU).
- e. At the discretion of the OPSO or CO when there is doubt regarding the student's potential to successfully complete flight training within the programmed TTT.

2. IPC outcomes:

a. Pass. Returns the student to normal syllabus flow. This will normally return the student to the event that triggered the IPC.

b. Fail. An UNSAT IPC results in a CO-PC.

(c) CO-PC. The following defines when to conduct a CO-PC and CO-PC outcomes.

1. CO-PC triggers:

- a. Failure of an IPC.
- b. In any case where a student has undergone **any** IPC in phase and subsequently meets any of the IPC triggers listed above.
- c. Four cumulative UNSATs, starting with API academics.

d. At the discretion of the CO when there is doubt regarding the student's potential to successfully complete. Refer to CNATRAINST 1500.4J for additional guidance.

2. Outcomes of a CO-PC. A Supplementary Jacket Form (CNATRA-GEN 1542/16) will be used to document the results of a CO-PC. If a CO-PC results in Pass/Complete, the squadron CO's comments to return the NFS to the normal syllabus flow must include an assessment of the NFS's potential to successfully complete flight training within programmed TTT.

a. Continuation in Flight Training Process.

(1) First CO-PC in flight training. If the recommendation following the first CO-PC is to return to flight training, the CO is the approving authority.

(2) Second and subsequent cumulative CO-PCs in flight training. If the recommendation following the second CO-PC is to continue the NFS in flight training, the TRAWING Commander is the approving authority, and will be documented via a Supplementary ATF (CNATRA GEN 1542/16). TRAWING Commander approval and return to training does not require a Training Review Board (TRB). Should doubt exist however, the TRAWING Commander will direct a TRB prior to determining an attrition decision.

b. Pass. Return the NFS to normal syllabus flow. This will normally return the NFS to the event that triggered the CO-PC. The CO-PC may be considered an advancing event if the CO prescribed that course of action during the post-UNSAT CO's review process and the NFS performs adequately to earn an overall event grade of Pass.

c. Fail. An UNSAT CO-PC results in an attrition recommendation to the TRAWING Commander and a Training Review Board (TRB).

(d) Progress Check Counseling

1. Prior to an IPC (XX88). The NFS's Class Advisor (CA), Flight Leader, Student Control Officer, or Operations Officer (OPSO) shall counsel the NFS on the IPC process and document counseling on a Supplementary ATF. CO's guidance, ET authorization, and intent to count the PC as an Advancing X shall be included on the Supplementary ATF.

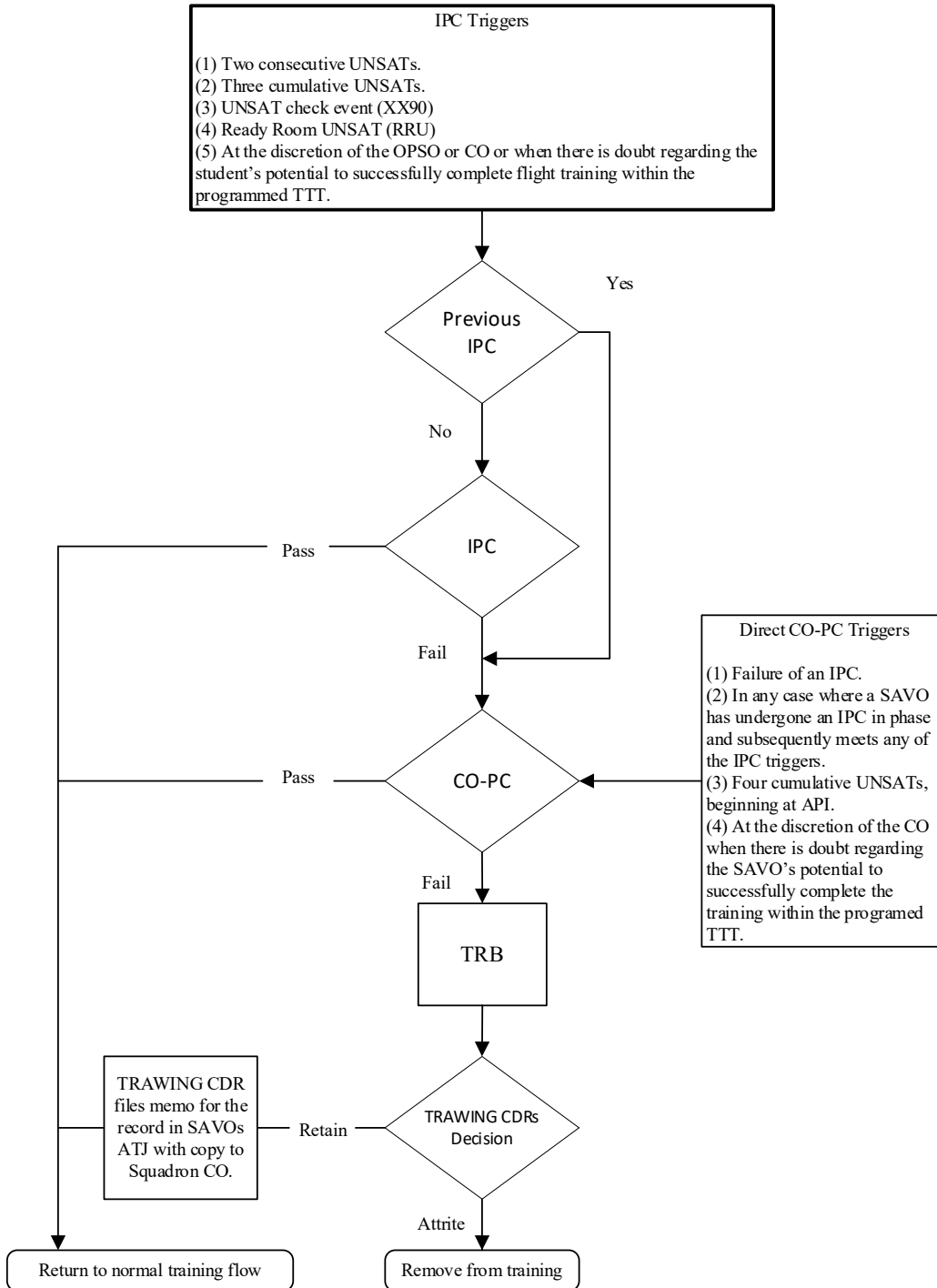
2. Upon completion of an IPC. The IPC Instructor shall counsel the NFS on the IPC results, recommendations, and future courses of action. The IPC Instructor should also strive to ensure the NFS is coping with the IPC process appropriately, and notify appropriate squadron leadership immediately if there are any concerns. Post-IPC counseling shall be documented on the IPC (XX88) ATF.

3. Prior to a Commanding Officer Progress Check (CO-PC) (XX89). The CO shall counsel the NFS on the CO-PC process. This counseling, including ET authorization and intent to count the CO-PC as an advancing event, shall be documented on the CO-PC (XX89) ATF. If the CO is not the CO-PC instructor, the CO shall document counseling on a Supplementary ATF.

4. Upon completion of a CO-PC. The CO-PC Instructor shall counsel the NFS and document on the (XX89) ATF. Counseling should consist of the CO-PC results, attrition or retention recommendations, and future courses of action. The CO-PC Instructor should also strive to ensure the NFS is coping with the CO-PC process appropriately, and notify appropriate squadron leadership immediately if there are any concerns. If the CO was not the CO-PC instructor, the CO shall counsel the NFS and document counseling on a Supplementary ATF.

5. An NFS being processed for an IPC or CO-PC and subsequently submits a Drop on Request (DOR) shall be processed as a DOR.

NAVOTS PROGRESS CHECK TRAINING REVIEW PROCESS



9. Special Instructions and Restrictions

a. Flight Hour/Event Requirements and Restrictions

(1) Programmed Hours and Events. Programmed syllabus flight hours are 33.0 hours. Event lengths for XX86, XX87, XX88, and XX89 events will cause variation. Accomplish all syllabus events.

(2) Minimum Night Hours. N/A.

(3) Minimum Solo Hours. N/A.

(4) Minimum Instrument Hours (Actual or Simulated). N/A.

(5) Maximum Daily Student Activities (Simulator or Exams). Students shall not exceed two simulator and/or exam events during one duty day.

(6) Minimum Student Turn-Times. One hour is required between the end of a scheduled debrief and the beginning of a scheduled brief for a follow-on simulator event or lecture.

(7) Crew Day. The period from the beginning of the student's first event or official duty of the day until the completion of the last event of the day, including associated debrief and paperwork. Student crew day shall not exceed 12 hours.

(8) Crew Rest. A minimum of 12 hours shall elapse between the conclusion of the student's last scheduled event of the day (including associated debrief) and his or her first scheduled event (including associated brief) of the following day. After six consecutive scheduled days, students shall receive one day off. Official duty, squadron training, and standby scheduling do not qualify as a day off.

b. Source Documents. Students are responsible for reviewing applicable source documents (NATOPS, FTIs, local SOPs, etc.) prior to commencing each stage of training.

c. Maneuver Demonstrations. Maneuver demonstrations will be accomplished as required.

Chapter II

Ground Training

Blk #	Media	Title	Events	Hrs	Blk Name
ADM01	Class	Administration	2	4.0	ADMIN

1. Prerequisites. FRM3201 and ON3102 must be completed prior to event ADM0102.

2. Events

ADM0101	Admin	Check-In		2.0	
ADM0102	Admin	Checkout		2.0	

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
ASI01	Class	Aviation Student Indoctrination	20	12.5	ASI

1. Prerequisites

- a. ADM0101 prior to ASI0101-2 (in order).
- b. ASI0102 prior to ASI0103-20 (any order).

2. Events

ASI0101	Lect	VT-10 Orientation		1.0	
ASI0102	Lect	Class Advisor Brief		1.0	
ASI0103	Admin	Medical Records Check-In		1.0	
ASI0104	Lect	VT-10 CO Brief		0.25	
ASI0105	Lect	VT-10 XO Brief		0.25	
ASI0106	Lect	Safety Briefing		0.5	
ASI0107	MIL	Introduction to Safety		0.5	
ASI0108	MIL	Ground Safety ORM		0.5	
ASI0109	Lect	Aviation Safety Program		0.5	
ASI0110	MIL	Navy Flight Policy		0.5	
ASI0111	MIL	Flight Regulations and Policy		0.5	
ASI0112	Lect	Academic Welcome Aboard		0.75	
ASI0113	Lect	TSHARP In-Brief		0.75	
ASI0114	Lect	Contract Instructor Services Introduction		0.5	
ASI0115	Lect	Chaplain's Brief		0.5	

2. Events (cont)

ASI0116	MIL	Fleet Operations and Missions	1.0
ASI0117	MIL	Fleet Aircraft and Weapons	1.0
ASI0118	Lect	AVO Training System (NAVOTS) Brief	1.0
ASI0119	Lect	Pubs/Materials Inventory	1.0
ASI0120	Lab	Electronic Knee Board Issue	0.5

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
ENG01	Class	Systems Engineering 1	25	27.5	SYS1

1. Prerequisites

- a. ASI0120 prior to ENG0101.
- b. ENG0101 prior to ENG0102-24 (in order).
- c. ASI0120, ENG0124, ENG0201 and ENG0202 prior to ENG0125.

2. Events

ENG0101	MIL	Introduction to T-6 Systems		1.0
ENG0102	T-6A	T-6A Aircraft Systems Tour		2.0
ENG0103	CAI	Flight Controls		1.0
ENG0104	CAI	Hydraulic Systems 1		1.0
ENG0105	CAI	Hydraulic Systems 2		1.0
ENG0106	CAI	Flight Instruments 1		1.0
ENG0107	CAI	Flight Instruments 2		1.0
ENG0108	CAI	Communication Systems		1.0
ENG0109	CAI	Navigation Systems		1.0
ENG0110	CAI	GPS		1.0
ENG0111	MIL	Flight Controls and Hydraulics Review		2.0
ENG0112	MIL	Flight Instruments Review		1.0
ENG0113	MIL	Communications and Navigation Systems Review		2.0
ENG0114	CAI	Electrical System		0.5
ENG0115	CAI	Fuel System		0.5
ENG0116	CAI	Propulsion 1		0.5

2. Events (cont.)

ENG0117	CAI	Propulsion 2	0.5
ENG0118	CAI	Environmental System 1	0.5
ENG0119	CAI	Environmental System 2	0.5
ENG0120	CAI	Canopy System	1.0
ENG0121	CAI	Ejection System	1.0
ENG0122	MIL	Electrical and Fuel Review	1.5
ENG0123	MIL	Propulsion Review	1.5
ENG0124	MIL	Environmental, Canopy & Ejection Review	2.0
ENG0125	CAI TEST	Engineering Exam	1.5

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
ENG02	Lect/ UTD	Systems Engineering 2 – UTD Cockpit Fam	2	4.5	SYS2

1. Prerequisite. ENG0102.

2. Events

ENG0201	Lect/ UTD	T-6A Cockpit Familiarization 1		3.0	
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ENG0202	Lect/ UTD	T-6A Cockpit Familiarization 2		1.5	
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3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
NA01	Class	NATOPS	11	9.5	NATOPS

1. Prerequisite. ENG0125.

2. Events

NA0101	MIL	Introduction to Operation Procedures and NATOPS		1.0	
NA0102	Lect	NATOPS Manual Review and Updating Procedures		1.0	
NA0103	CAI	Exterior Inspection		1.0	
NA0104	CAI	Pre-Flight Checks		1.0	
NA0105	CAI	In-Flight Checks		0.5	
NA0106	CAI	Post-Flight Checks		0.5	
NA0107	CAI	Aircraft Operating Limitations		0.5	
NA0108	Lect	Operating Procedures (OPs) and NATOPS Review		1.5	
NA0109	P/P Test	OPs and NATOPS Exam		1.5	
NA0110	Lect	OPs and NATOPS Exam Remediation/Critique		1.0	

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
EP01	Class	Emergency Procedures	8	13.0	EPPROC

1. Prerequisites.

a. NA0110.

b. NA0111 prior to EP0106-8 (in order).

2. Events

EP0101	MIL	Handling Emergency Procedures		1.0	
EP0102	MIL	Takeoff Emergencies		1.0	
EP0103	MIL	In-Flight Emergencies 1		2.5	
EP0104	MIL	In-Flight Emergencies 2		2.0	
EP0105	MIL	In-Flight Emergencies 3		3.0	
EP0106	Lect	Emergency Procedures Boldface Review		1.5	
EP0107	P/P Test	EP Boldface Procedures Exam		1.5	
EP0108	Lect	EP Boldface Procedures Exam Remediation & Critique		0.5	

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
COM01	Class	VFR Communication	2	3.0	VFCOM

1. Prerequisite. EP0108 prior to COM0101-2 (in order).

2. Events

COM0101	MIL	T-6A Introduction to Communications		2.0	
COM0102	MIL	T-6A VFR Communications		1.0	

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
CRM01	Class	Crew Resource Management	1	2.0	CRM

1. Prerequisites. EP0108 prior to CRM0101.

2. Events

CRM0101	MIL	T-6A Crew Resource Management	2.0
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3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
MET01	Class	Meteorology	8	9.5	METRO

1. Prerequisite. EP0108 prior to MET0101-8 (in order).

2. Events

MET0101	MIL	Introduction to Metro		1.0	
MET0102	CAI	METARs, PIREPs, and TAFs		1.0	
MET0103	CAI	Weather Charts		1.0	
MET0104	CAI	Weather Forecasts and Advisories		1.0	
MET0105	CAI	Military Flight Weather Brief		1.0	
MET0106	MIL	Application of Weather Data		2.0	
MET0107	MIL	Meteorology Exam Review		1.0	
MET0108	CAI Test	Meteorology Exam		1.5	

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
NAV01	Class	Instrument Navigation 1	27	34.0	INST1

1. Prerequisite. FAM3290.

2. Events

NAV0101	MIL	Introduction and Basic Instruments Overview		1.0	
NAV0102	CAI	Instrument Displays and Cross-check		1.0	
NAV0103	CAI	Introduction to Radio Instruments		1.0	
NAV0104	CAI	FLIP, NOTAMs, and Charts		1.0	
NAV0105	Lab	FLIP, NOTAMs, and Charts Lab		1.0	
NAV0106	MIL	Basic Instrument Review		3.0	
NAV0107	MIL	Intro to 2B47/TP-1 Brief		0.5	
NAV0108	Lect	CR-2, Wind Analysis, and Time Gates		1.5	
NAV0109	RIOT	RIOT 1		2.0	
NAV0110	Lect/ 2B47	TP-1 Fly		2.0	
NAV0111	Lect	TP-1 Debrief		0.5	
NAV0112	MIL	Advanced Instruments Overview		0.5	
NAV0113	CAI	Instrument Takeoff and Departures		0.5	
NAV0114	CAI	Arrival Preparation and Holding		0.5	
NAV0115	MIL	Instruments Review 1		2.0	
NAV0116	MIL	Holding Lecture (6Ts)/Holding Trainer		1.5	
NAV0117	Lect	TP-2 Brief		0.5	
NAV0118	RIOT	RIOT 2		1.5	
NAV0119	Lect/ 2B47	TP-2 Fly		1.5	

2. Events (cont.)

NAV0120	Lect	TP-2 Debrief	0.5
NAV0121	Lect	FLIP Review and CR-2 Exercises	1.5
NAV0122	RIOT	RIOT 3 (Wind Analysis, GS, ETAs, Holding)	2.0
NAV0123	Lect	TP-3 Brief	0.5
NAV0124	Lect/ 2B47	TP-3 Fly (Holding)	2.0
NAV0125	Lect	TP-3 Debrief/Homework	1.0
NAV0126	Lect	Instruments 1 Exam Review	1.5
NAV0127	CAI Test	Instruments 1 Exam	2.0

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
NAV02	Class	Instrument Navigation 2	15	23.0	INST2

1. Prerequisite. NAV0127.

2. Events

NAV0201	CAI	Descent and Penetration		1.0
NAV0202	CAI	Low Altitude Approaches		0.5
NAV0203	MIL	Instruments Review 2		2.5
NAV0204	CAI	Final Approach		1.0
NAV0205	CAI	Radar Approaches		1.0
NAV0206	CAI	Transition to Landing and Missed Approach		1.0
NAV0207	MIL	Instruments Review 3		3.0
NAV0208	Lect	Homework - INAV FTI and Comms		1.5
NAV0209	MIL	Instruments Review 4		2.5
NAV0210	Lect	Comm Brief and Radar Pattern		1.0
NAV0211	Lect	TP-4 Brief /RIOT Examples		1.5
NAV0212	Lect/ 2B47	TP-4 Fly		2.0
NAV0213	Lect	TP-4 Debrief		1.0
NAV0214	MIL Offline	Instruments 2 Exam Review		1.5
NAV0215	CAI Test	Instruments 2 Exam		2.0

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
NAV03	Class	Instrument Navigation 3	11	17.5	INST3

1. Prerequisite. NAV0215.

2. Events

NAV0301	Lect	TP-5 Brief/Planning Lab		1.5
NAV0302	Lect/ 2B47	TP-5 Fly		2.0
NAV0303	Lect	TP-5 Debrief		1.5
NAV0304	Lect	TP-6 Brief/Planning Lab		1.5
NAV0305	Lect/ 2B47	TP-6 Fly		2.0
NAV0306	Lect	TP-6 Debrief		1.0
NAV0307	Lect	TP-7 Brief/TP-7R Brief/Planning Lab		2.0
NAV0308	Lect/ 2B47	TP-7 Fly		2.0
NAV0309	Lect	TP-7 Debrief		1.0
NAV0310	Lect/ 2B47	TP-7 Return Fly/Practical Final		2.0
NAV0311	Lect	TP-7 Return Debrief & Course Critique		1.0

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
NAV04	Class	Instrument Flight Planning	43	52.5	FLTPLNG

1. Prerequisite. NAV0311.

2. Events

NAV0401	Lect	INAV Procedures/FTI Brief		1.5	
NAV0402	MIL	Flight Planning Introduction and Overview		0.5	
NAV0403	MIL	Weather Requirements		1.5	
NAV0404	MIL	DD-1801		0.5	
NAV0405	MIL	Jet Logs		1.0	
NAV0406	MIL	INAV Turn Point Procedures		1.5	
NAV0407	MIL	IFR Navigation 1		1.5	
NAV0408	Lect	TP-8 Brief		2.0	
NAV0409	Lect	TP-8 Planning Lab		2.0	
NAV0410	Lect/ 2B47	TP-8 Fly		2.5	
NAV0411	Lect	TP-8 Debrief		1.0	
NAV0412	Lect	TP-8 DD-1801 and Flight Log Critique/Procedures Review		1.0	
NAV0413	Lect	IFR Navigation 2		1.0	
NAV0414	Lect	Day 1 Homework Review		1.0	
NAV0415	Lect	TP-9 Brief		0.5	
NAV0416	Lect	TP-9 Planning Lab		1.0	
NAV0417	Lect/ 2B47	TP-9 Fly		2.5	
NAV0418	Lect	TP-9 Debrief		1.0	
NAV0419	Lect	TP-9 DD-1801 and Flight Log Critique/Procedures Review		1.0	

2. Events (cont.)

NAV0420	Lect	Day 2 Homework Review	1.0
NAV0421	Lect	TP-10 Brief	0.5
NAV0422	Lect	TP-10 Planning Lab	1.0
NAV0423	Lect/ 2B47	TP-10 Fly	2.5
NAV0424	Lect	TP-10 Debrief	1.0
NAV0425	Lect	TP-10 DD-1801 and Flight Log Critique/Procedures Review	1.0
NAV0426	Lect	Day 3 Homework Review	1.0
NAV0427	Lect	TP-11 Brief	0.5
NAV0428	Lect	TP-11 Planning Lab	1.0
NAV0429	Lect/ 2B47	TP-11 Fly (Localizer Approach, Terminal Area Delay)	2.5
NAV0430	Lect	TP-11 Debrief	1.0
NAV0431	Lect	TP-11 DD-1801 and Flight Log Critique/Procedures Review	1.0
NAV0432	Lect	Day 4 Homework Review	1.0
NAV0433	Lect	TP-12 Brief	0.5
NAV0434	Lect	TP-12 Planning Lab	1.0
NAV0435	Lect/ 2B47	TP-12 Fly (Change in Flight Plan)	2.5
NAV0436	Lect	TP-12 Debrief	1.0
NAV0437	Lect	TP-12 DD-1801 and Flight Log Critique/Procedures Review	1.0
NAV0438	MIL	Flight Line Preparation Lecture	0.5
NAV0439	MIL	Instrument Flight Planning Exam Review	1.0
NAV0440	Lect	TP-13 Practical Exam Brief	0.5

2. Events (cont)

NAV0441	CAI Test	Instrument Flight Planning Exam	2.0
NAV0442	Lect/ 2B47	TP-13 Practical Final Exam	1.5
NAV0443	Lect	Instrument Flight Planning Exam Remediation & Critique	1.5

3. Syllabus Notes. None.

4. Discuss Items. None.

Chapter III

NATOPS Training



This chapter does not apply to the Primary NAVOTS training.

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Chapter IV

Familiarization Flight Training

1. General. Simulator instruction should focus on determining the instructional approach best suited for each student’s problem areas so that mission profiles can be flown to correct deficient areas.
2. Pattern Training. Utilize the overhead/break traffic pattern as much as possible for pattern training.
3. Simulator EP Training. For simulator Emergency Procedure training, the student is expected to correctly identify the given malfunction and provide the boldface procedures without error to achieve the grade of 3/Fair. Experience handling ground and in-flight emergencies, including the use of the Pocket Check List (PCL), is expected to be gained throughout Familiarization flight training.
4. Matrices. The following matrix is an overview of the Familiarization Stage. The purpose of this matrix is to provide the student and instructor the easiest way to track progress and overall status in relation to the MIF. In addition, there is a single matrix following each block description in this chapter.
5. Familiarization Stage MIF

 Simulator Event
 Check Flight Event
 CTS REF “N” = NATOPS

FAMILIARIZATION STAGE MANEUVER ITEM FILE			
CTS REF	MANEUVER	FAM3105	FAM3290
1	General Knowledge/Procedures	3+	4+
2	Emergency Procedures	3+	4+
3	Headwork/Situational Awareness	3+	4+
4	BAR/BAW	2+	3+

MIF continued on next page.

FAMILIARIZATION STAGE MANEUVER ITEM FILE			
CTS REF	MANEUVER	FAM3105	FAM3290
N	Strap-In/Interior Inspection	1	1
8	Ground Procedures	3+	4+
9	Radio Procedures	3+	3+
N	Engine Start	3+	3+
N	Start Malfunctions	3+	1
N	Fire Warning on the Ground	3+	1
N	Before Taxi/Taxi Checklists	3+	3+
N	Overspeed Governor Check	3+	3+
N	Before Takeoff/Lineup Checks	3+	3+
N	Takeoff Abort	3+	1
N	Emergency Engine Shutdown (Ground)	3+	1
10	Takeoff	3+	3+
11	Departure	3+	3+
N	After Takeoff/Climb Checklists	3+	3+
N	Operations Check	3+	3+
12	In-Flight Checks	2+	3+
13	Use of Controls/Trim	3+	3+
14	Basic Transitions	3+	3+
17	In-Flight Planning/Area Orientation	2+	1
18	Level Speed Change	2+	1
19	Turn Pattern	2+	1
20	Power-Off Stall	2+	1
21	Approach Turn Stall	2+	1
22	Spin	2+	1
23	Simulated Power Loss	2+	1

MIF continued on next page.

FAMILIARIZATION STAGE MANEUVER ITEM FILE			
CTS REF	MANEUVER	FAM3105	FAM3290
24	PPEL	2+	1
N	Descent/Before Landing Checklists	3+	3+
25	Landing Pattern	3+	3+
26	Landings	2+	1
27	Go Around/Waveoff	2+	1
N	After Landing/Engine Shutdown Checklists	3+	3+
N	Uncommanded Propeller Feather	1	1
N	Engine Failure During Flight	3+	1
N	Compressor Stalls	3+	1
N	PMU Failure	1	1
N	Fire Warning in Flight	3+	1
N	Generator/Battery Bus Failure	1	1
N	Low Fuel Pressure	3+	1
N	Oil System Malfunctions	3+	1
N	Hydraulic Malfunctions	3+	1
N	Trim System/TAD Failure	1	1
N	Inadvertent Departure From Controlled Flight	3+	1
N	Landing Gear Emergency Extension	3+	1
N	Emergency Landing Pattern	3+	1
N	Precautionary Emergency Landing	3+	1

Blk #	Media	Title	Events	Hrs	Blk Name
FAM11	Class	Familiarization 1	6	11.0	FAM1

1. Prerequisites

- a. ENG0125.
- b. CRM0101.

2. Events

FAM1101	MIL	T-6A Familiarization 1 - Flight Line Preparation		1.0	
FAM1102	MIL	T-6A Familiarization 2 - Ground Procedures		2.0	
FAM1103	MIL	T-6A Familiarization 3 - Course Rules/Area 1/Military Operating Area (MOA)		2.0	
FAM1104	MIL	T-6A Familiarization 4 - Flight Procedures/Night Flight		2.0	
FAM1105	Lect	T-6A Familiarization 5 - Flight Prep & Event Chalk Talk		2.0	
FAM1106	MIL	T-6A Familiarization 6 - Landing Pattern/EPs		2.0	

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
FAM12	Class	Familiarization 2	3	10.5	FAM2

1. Prerequisite. FAM1106 prior to FAM1201-3 (any order).

2. Events

FAM1201	SS/ Lab	FAM Self-Study		6.0	
FAM1202	ER/ UTD	FAM Event Rehearsal		1.5	
FAM1203	Lect/ T-6A	FAM Indoctrination Lecture		3.0	

3. Syllabus Notes

a. FAM1202 is a formally scheduled event in the T-6A UTD and does not have an instructor or IOS operator assigned.

b. FAM1203 shall be completed prior to FAM3290.

c. The student shall accomplish or simulate the following items during FAM1203:

(1) Canopy operation (exterior/interior), before interior inspections. All ground checklists, cockpit familiarization (identify all electronic displays and their function), and RMU/backup UHF control head operation.

(2) All students are required to successfully accomplish a boldface and OPS limit exam. Successful accomplishment of the boldface and OPS limit exam consists of 100 percent accuracy. Only minimal abbreviation will be acceptable. Less than 100 percent on the boldface and OPS limit exam shall be annotated on the grade sheet.

4. Discuss Items. Flight line expectations, scheduling/snivels, chain of command, class advisor program, ATF, ATJ, what-to-bring to brief, conduct of preflight briefings, discuss items, weather briefs, weight and balance, special syllabus requirements, procedures, emergency procedures, information resources, hangar/chair flying, DOR, TTO policy. General discussion of all planned items in paragraph 3 above.

Blk #	Media	Title	Events	Hrs	H/X
FAM31	UTD/OFT	Familiarization Procedures Training	5	7.5	1.5

1. Prerequisites. FAM1201-2 (Familiarization 2).

2. Syllabus Notes

a. Instructor will demonstrate simulator console operation and device use (per local instructions) on FAM3101.

b. FAM3104 and FAM3105 shall be flown as VFR events in the T-6A OFT.

c. During EP training, the student is expected to correctly identify the given malfunction and provide the boldface procedures without error to achieve the grade of 3/Fair.

d. The student will perform the emergency action items/emergency procedures for FAM3101-3. The student will verbally direct the emergency action items and the instructor will perform the action (to the max extent possible) for FAM3104-5.

e. The student will perform the following procedures on the indicated event.

FAM3101

Cockpit familiarization – includes complete strap-in; rudder pedal and seat adjustments; location of cockpit displays, switches, and engine controls; standby instruments; interior inspection; start checklist (include one GPU start); start malfunctions/abort start procedure; before taxi/taxi checklists; overspeed governor check; before takeoff checklist; lineup check; after takeoff checklist; operations check; climb checklist; descent checklist; before landing checklist; after landing checklist; engine shutdown checklist; radio procedures; OBOGS inoperative; and inadvertent departure from controlled flight.

FAM3102

All normal operating procedures, radio procedures, fire warning on the ground, emergency engine shutdown (ground), /use of canopy fracturing system, aborted takeoff, fire warning in flight, generator/battery bus failure, low fuel pressure, oil system malfunctions, ELP, and PEL.

FAM3103

All normal operating procedures, radio procedures, uncommanded propeller feather, engine failure during flight, compressor stall, smoke or fume elimination, hydraulic malfunctions, canopy unlocked, ejection, emergency landing gear extension, and ELP (with PEL).

FAM3104

Radio procedures. Takeoff, Level Speed Change, Turn Pattern Power Off Stall, Approach Turn Stall and Spin.

FAM3105

MOA, Entry/Exit Procedures, Simulated power loss (simulated and proactive EP in-flight procedures), ELP, PEL, Landing pattern: No Flap, Takeoff Flap, and landing flap Touch and Go's, Full stop landing procedures and course rules/recovery.

3. Special Syllabus Requirements. None.

4. Discuss Items

FAM3101

Simulator curriculum, student responsibilities for future simulator events, ATFs/grading procedures, conduct of event, strapping in, all normal checklists, and communication procedures.

FAM3102

ELP, CFS, and general discussion of all planned items from paragraph 2.d./FAM3102.

FAM3103

PMU, generator/battery bus inoperative, flight line expectations, and general discussion of all planned items from paragraph 2.d./FAM3103.

FAM3104

Level Speed Change, Turn Pattern, Power Off Stall, Approach Turn Stall, Spin, and landing pattern.

FAM3105

MOA Entry/Exit Procedures, Simulated power loss (simulated and practice EP in-flight procedures), ELP, PEL, Landing pattern: No Flap, Takeoff Flap, and landing flap Touch and Go's, Full stop landing procedures, and Course rules/recovery.

5. Block MIF

CTS REF	MANEUVER	FAM3105
1	General Knowledge/Procedures	3+
2	Emergency Procedures	3+
3	Headwork/Situational Awareness	3+
4	BAR/BAW	2+
N	Strap-In/Interior Inspection	1
8	Ground Procedures	3+
9	Radio Procedures	3+
N	Engine Start	3+
N	Start Malfunctions	3+
N	Fire Warning on the Ground	3+
N	Before Taxi/Taxi Checklists	3+
N	Overspeed Governor Check	3+
N	Before Takeoff/Lineup Checks	3+
N	Takeoff Abort	3+
N	Emergency Engine Shutdown (Ground)	3+
10	Takeoff	3+
11	Departure	3+
N	After Takeoff/Climb Checklists	3+
N	Operations Check	3+
12	In-Flight Checks	2+
13	Use of Controls/Trim	3+
14	Basic Transitions	3+
17	In-Flight Planning/Area Orientation	2+
18	Level Speed Change	2+
19	Turn Pattern	2+
20	Power-Off Stall	2+
21	Approach Turn Stall	2+

MIF continued on next page.

CTS REF	MANEUVER	FAM3105
22	Spin	2+
23	Simulated Power Loss	2+
24	PPEL	2+
N	Descent/Before Landing Checklists	3+
25	Landing Pattern	3+
26	Landings	2+
27	Go Around/Waveoff	2+
N	After Landing/Engine Shutdown Checklists	3+
N	Uncommanded Propeller Feather	1
N	Engine Failure During Flight	3+
N	Compressor Stalls	3+
N	PMU Failure	1
N	Fire Warning in Flight	3+
N	Generator/Battery Bus Failure	1
N	Low Fuel Pressure	3+
N	Oil System Malfunctions	3+
N	Hydraulic Malfunctions	3+
N	Trim System/TAD Failure	1
N	Inadvertent Departure From Controlled Flight	3+
N	Landing Gear Emergency Extension	3+
N	Emergency Landing Pattern	3+
N	Precautionary Emergency Landing	3+

Blk #	Media	Title	Events	Hrs	H/X
FAM32	OFT	Familiarization Check Flight	1	1.5	1.5

1. Prerequisites.
 - a. FAM1203.
 - b. FAM3105.
2. Syllabus Notes. None.
3. Special Syllabus Requirements. None.
4. Discuss Items. Previously discussed items and any EP.
5. Block MIF

CTS REF	MANEUVER	FAM3290
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	4+
4	BAR/BAW	3+
N	Strap-In/Interior Inspection	1
8	Ground Procedures	4+
9	Radio Procedures	3+
N	Engine Start	3+
N	Start Malfunctions	1
N	Fire Warning on the Ground	1
N	Before Taxi/Taxi Checklists	3+
N	Overspeed Governor Check	3+
N	Before Takeoff/Lineup Checks	3+
N	Takeoff Abort	1
N	Emergency Engine Shutdown (Ground)	1
10	Takeoff	3+

MIF continued on next page.

CTS REF	MANEUVER	FAM3290
11	Departure	3+
N	After Takeoff/Climb Checklists	3+
N	Operations Check	3+
12	In-Flight Checks	3+
13	Use of Controls/Trim	3+
14	Basic Transitions	3+
17	In-Flight Planning/Area Orientation	1
18	Level Speed Change	1
19	Turn Pattern	1
20	Power-Off Stall	1
21	Approach Turn Stall	1
22	Spin	1
23	Simulated Power Loss	1
24	PPEL	1
N	Descent/Before Landing Checklists	3+
25	Landing Pattern	3+
26	Landings	1
27	Go Around/Waveoff	1
N	After Landing/Engine Shutdown Checklists	3+
N	Uncommanded Propeller Feather	1
N	Engine Failure During Flight	1
N	Compressor Stalls	1
N	PMU Failure	1
N	Fire Warning in Flight	1
N	Generator/Battery Bus Failure	1
N	Low Fuel Pressure	1
N	Oil System Malfunctions	1
N	Hydraulic Malfunctions	1
N	Trim System/TAD Failure	1
N	Inadvertent Departure From Controlled Flight	1
N	Landing Gear Emergency Extension	1

MIF continued on next page.

CTS REF	MANEUVER	FAM3290
N	Emergency Landing Pattern	1
N	Precautionary Emergency Landing	1

Chapter V

Instrument Navigation Training

1. Matrices. The following matrices provide an overview of the Navigation Stage. The purpose of these matrices is to provide the student and instructor the easiest way to track progress and overall status in relation to the MIF. In addition, there is a single matrix following each block description throughout this chapter.

2. Instrument Navigation Stage MIF

	Simulator Event
	Check Flight Event

INSTRUMENT NAVIGATION STAGE MANEUVER ITEM FILE			
CTS REF	MANEUVER	NAV3109	NAV3290
1	General Knowledge/Procedures	4+	4+
2	Emergency Procedures	4+	4+
3	Headwork/Situational Awareness	3+	4+
4	BAR/BAW	4+	4+
5	Brief/Debrief	3+	4+
6	Mission Planning	3+	4+
7	AVO Responsibilities	4+	4+
8	Ground Procedures	4+	4+
9	Radio Procedures	3+	4+
11	Departure	4+	4+
12	In-Flight Checks	4+	4+
30	Use of ATIS/PMSV/FSS	3+	4+
31	In-Flight Computations	4+	4+
32	CRM/Crew Coordination	3+	3+
33	In-Flight Briefings	4+	4+

MIF continued on next page.

INSTRUMENT NAVIGATION STAGE MANEUVER ITEM FILE			
CTS REF	MANEUVER	NAV3109	NAV3290
34	Enroute Procedures	4+	4+
35	Point-to-Point	3+	1
36	Arcing	3+	1
37	Holding (VOR)	3+	1
38	Holding (GPS)	3+	1
39	VOR Approach	3+	1
40	GPS Approach	3+	1
41	Localizer Approach	3+	1
42	ILS Approach	3+	1
43	Circling Approach	3+	1
44	RA/GCA	3+	1
45	Missed Approach	3+	4+
46	Instrument Turnpoint Procedures	3+	3+
75	Approach/Landing (Non-precision or Precision)		3+

Blk #	Media	Title	Events	Hrs	Blk Name
NAV11	Class	Instrument Navigation Flight Preparation	2	6.0	NAVFLT PREP

1. Prerequisite. NAV0443.

2. Events

NAV1101	MIL	T-6A Instrument Navigation Flight Preparation I		3.0	
NAV1102	Lect	T-6A Instrument Navigation Flight Preparation II		3.0	

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	H/X
NAV31	UTD	Instrument Navigation	9	13.5	1.5

1. Prerequisite. NAV1102.

2. Syllabus Notes

a. Introduce and practice instrument navigation enroute procedures and instrument approach procedures.

b. Students shall prepare and have available a DD-1801 and flight log for each event.

c. Once the student has met MIF on critical items, introduce real-world situations.

3. Special Syllabus Requirements. None.

4. Discuss Items

NAV3101

AVO responsibilities, crew coordination, direct to a VOR, DRAFT procedures, radar approaches, and missed approach/climbout procedures.

NAV3102

Approach plates, VOR/DME holding, arcing, VOR approach, instrument scan, instrument checklist, and the event scenario EP.

NAV3103

Radar vectors to final, ILS approach, localizer approach, timing adjustments from FAF to MAP, and the event scenario EP.

NAV3104

VOR holding, full procedure turn approach, and intercept techniques.

NAV3105

Loading GPS flight plan, GPS approach, and the event scenario EP.

NAV3106

Standard instrument departure, high-altitude airways structure, pilot's discretion descent, VOR approach procedures, and lost communications.

NAV3107

Non-radar environment communications procedures, ILS approach procedures, and emergency divert.

NAV3108

Localizer approach procedures, radar approach procedures, localizer back course approach and the event scenario EP.

NAV3109

Loading GPS flight plan, GPS approach procedures, STARs, and the event scenario EP.

5. Block MIF

CTS REF	MANEUVER	NAV3109
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	3+
4	BAR/BAW	4+
5	Brief/Debrief	3+
6	Mission Planning	3+
7	AVO Responsibilities	4+
8	Ground Procedures	4+
9	Radio Procedures	3+
11	Departure	4+
12	In-Flight Checks	4+
30	Use of ATIS/PMSV/FSS	3+
31	In-Flight Computations	4+
32	CRM/Crew Coordination	3+
33	In-Flight Briefings	4+
34	Enroute Procedures	4+
35	Point-to-Point	3+
36	Arcing	3+
37	Holding (VOR)	3+

MIF continued on next page.

CTS REF	MANEUVER	NAV3109
38	Holding (GPS)	3+
39	VOR Approach	3+
40	GPS Approach	3+
41	Localizer Approach	3+
42	ILS Approach	3+
43	Circling Approach	3+
44	RA/GCA	3+
45	Missed Approach	3+
46	Instrument Turnpoint Procedures	3+

Blk #	Media	Title	Events	Hrs	H/X
NAV32	OFT	Instrument Navigation Check Flight	1	1.5	1.5

1. Prerequisite. NAV3109.
2. Syllabus Notes
 - a. A minimum of two approaches shall be performed.
 - b. Students shall prepare and have available a DD-1801 and flight log for this event.
3. Special Syllabus Requirements. None.
4. Discuss Items. Divert, any emergency procedure, and any instrument navigation procedure.
5. Block MIF

CTS REF	MANEUVER	NAV3290
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	4+
4	BAR/BAW	4+
5	Brief/Debrief	4+
6	Mission Planning	4+
7	AVO Responsibilities	4+
8	Ground Procedures	4+
9	Radio Procedures	4+
11	Departure	4+
12	In-Flight Checks	4+
30	Use of ATIS/PMSV/FSS	4+
31	In-Flight Computations	4+
32	CRM/Crew Coordination	3+
33	In-Flight Briefings	4+

MIF continued on next page.

CTS REF	MANEUVER	NAV3290
34	Enroute Procedures	4+
35	Point-to-Point	1
36	Arcing	1
37	Holding (VOR)	1
38	Holding (GPS)	1
39	VOR Approach	1
40	GPS Approach	1
41	Localizer Approach	1
42	ILS Approach	1
43	Circling Approach	1
44	RA/GCA	1
45	Missed Approach	4+
46	Instrument Turnpoint Procedures	3+
75	Approach/Landing (Non-precision or Precision)	3+

Chapter VI

Operational Navigation Training

1. Matrices. The stage included in this chapter contains only a single block. There is a single matrix following the block description in this chapter.

Blk #	Media	Title	Events	Hrs	Blk Name
ON11	Class	Operational Navigation 1	12	40.0	ONAV1

1. Prerequisite. NAV3290 prior to ON1101-12 (in order).

2. Events

ON1101	MIL	Operational Navigation Flight Planning		3.0	
ON1102	MIL	Corrections, Winds and Chart Preparation		4.0	
ON1103	MIL	Automated Flight Planning		2.0	
ON1104	Lab	JMPS Chart Preparation 1		4.0	
ON1105	Lab	JMPS Chart Preparation 2		4.0	
ON1106	MIL	Flight Procedures		6.0	
ON1107	SS/ Lab	Chart Preparation Lab 1		2.0	
ON1108	MIL	Operational Navigation Exam Review		3.0	
ON1109	SS/ Lab	Chart Preparation Lab 2		4.5	
ON1110	CAI Test	Operational Navigation Exam		1.5	
ON1111	Lect	Operational Navigation Exam Remediation & Critique		1.0	
ON1112	SS/ Lab	ONAV Self-Study/Chart Prep		5.0	

3. Syllabus Notes. ON1112 shall not be scheduled on the same day as ON3101.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	H/X
ON31	OFT	Operational Navigation	2	3.0	1.5

1. Prerequisite. ON1112.
2. Syllabus Notes
 - a. Flown as VFR events conducted in the T-6A Operational Flight Trainer.
 - b. Plan to arrive at target with a precise ETA.
 - c. Students will not use radio NAVAIDs or GPS while on the route.
3. Special Syllabus Requirements. None.
4. Discuss Items

ON3101

Ensure SAVO understands Course Training Standards, simulator wind analysis limitations, event OFT configuration settings, time and course corrections, turnpoint procedures, fix-correct-assess process, and 6-minute rule.

ON3102

Same discuss items as ON3101 (above), terrain clearance tasks, mission tasks and differences in IFR/VFR clearances.

5. Block MIF

CTS REF	MANEUVER	ON3102
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	3+
4	BAR/BAW	4+
5	Brief/Debrief	3+
6	Mission Planning	3+
7	AVO Responsibilities	4+
8	Ground Procedures	3+

MIF continued on next page.

CTS REF	MANEUVER	ON3102
9	Radio Procedures	3+
11	Departure	3+
12	In-Flight Checks	3+
15	Visual Scan/Lookout Doctrine	3+
16	SUA/ONAV Route Entry/Exit Procedures	3+
28	Course Rules	1
29	PA	1
30	Use of ATIS/PMSV/FSS	4+
31	In-Flight Computations	4+
32	CRM/Crew Coordination	3+
39	VOR Approach	1
40	GPS Approach	3+
41	Localizer Approach	1
42	ILS Approach	3+
43	Circling Approach	1
44	RA/GCA	1
45	Missed Approach	1
47	ONAV Chart	3+
48	Turnpoint Identification	3+
49	ONAV Turnpoint Procedures	3+
50	Checkpoint Utilization/Correlation	3+
51	Hazard Calls	3+
52	Course Analysis/Corrections	3+
53	Timing Analysis/Speed Corrections	3+
54	Altitude Selection/Compliance	3+
55	Fuel Management/Analysis	3+
57	Target Acquisition	3+

Chapter VII

Formation Training

1. Matrices. The following matrix is an overview of the Formation Stage. The purpose of this matrix is to provide the student and instructor the easiest way to track progress and overall status in relation to the MIF. In addition, there is a single matrix following each block description in this chapter.

2. Formation Stage MIF

 Simulator Event

FORMATION STAGE MANEUVER ITEM FILE			
CTS REF	MANEUVER	FRM3102	FRM3201
1	General Knowledge/Procedures	3+	3+
2	Emergency Procedures	3+	3+
3	Headwork/Situational Awareness	3+	3+
4	BAR/BAW	3+	3+
5	Brief/Debrief	3+	3+
6	Mission Planning	3+	3+
7	AVO Responsibilities	3+	3+
8	Ground Procedures	3+	3+
9	Radio Procedures	3+	3+
11	Departure	3+	3+
12	In-Flight Checks	3+	3+
15	Visual Scan/Lookout Doctrine	3+	
17	In-Flight Planning/Area Orientation	3+	3+
30	Use of ATIS/PMSV/FSS	4+	4+
32	CRM/Crew Coordination	3+	3+
33	In-Flight Briefings	3+	3+

MIF continued on next page.

FORMATION STAGE MANEUVER ITEM FILE			
CTS REF	MANEUVER	FRM3102	FRM3201
60	Wingman Communication	3+	3+
61	Section Management/Flight Leadership	3+	3+
62	Section Fuel Management	1	1
63	VOR/Geographic Rendezvous	1	1
64	Parade Position	3+	3+
65	Breakup and Rendezvous	3+	3+
66	Underrun	3+	3+
68	Lost Sight	3+	3+
69	Cruise Position	3+	3+
72	Rejoin	3+	3+
76	Tanker Procedures		1
76	Receiver Procedures		3+
76	RV Delta (Point Parallel) Rendezvous		1
76	RV Golf (Enroute) Rendezvous		1
76	Alternate Rendezvous		1
76	Anchor Refueling Procedures		1
76	Track Refueling Procedures		1
76	Rendezvous Overrun/Underrun		1
76	Precontact Position		3+
76	Contact Position		3+
76	Boom Limits Demonstration		1

Blk #	Media	Title	Events	Hrs	Blk Name
FRM11	Class	Formation	10	25.0	FRMFP1

1. Prerequisite. NAV3290.

2. Events

FRM1101	MIL	Formation Flight Principles		1.0	
FRM1102	MIL	Formation Flight Procedures		2.0	
FRM1103	MIL	Formation Visual Signals		1.0	
FRM1104	MIL	Formation Preparation and Flight Procedures 1		4.0	
FRM1105	MIL	Formation Preparation and Flight Procedures 2		3.0	
FRM1106	LAB	Formation Flight Procedures		2.5	
FRM1107	MIL	Formation Exam Review		2.5	
FRM1108	Lect	Aerial Refueling Procedures		1.0	
FRM1109	CAI Test	Formation Exam		1.5	
FRM1110	SS/ Lab	Formation Self-Study		6.5	

3. Syllabus Note. FRM1110 and FRM3101 shall not be scheduled on the same day.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	H/X
FRM31	OFT	Formation	2	3.0	1.5

1. Prerequisite. FRM1110.
2. Syllabus Notes. None.
3. Special Syllabus Requirements. None.
4. Discuss Items

FRM3101

Time Hack, Section Maneuvering and Positions (Parade, Cruise, and Combat Spread), Lost Sight Procedures.

FRM3102

Formation flight procedures, flight sequence, and formation emergency procedures

5. Block MIF

CTS REF	MANEUVER	FRM3102
1	General Knowledge/Procedures	3+
2	Emergency Procedures	3+
3	Headwork/Situational Awareness	3+
4	BAR/BAW	3+
5	Brief/Debrief	3+
6	Mission Planning	3+
7	AVO Responsibilities	3+
8	Ground Procedures	3+
9	Radio Procedures	3+
11	Departure	3+
12	In-Flight Checks	3+
15	Visual Scan/Lookout Doctrine	3+
17	In-Flight Planning/Area Orientation	3+
30	Use of ATIS/PMSV/FSS	4+

MIF continued on next page.

CTS REF	MANEUVER	FRM3102
32	CRM/Crew Coordination	3+
33	In-Flight Briefings	3+
60	Wingman Communication	3+
61	Section Management/Flight Leadership	3+
62	Section Fuel Management	1
63	VOR/Geographic Rendezvous	1
64	Parade Position	3+
65	Breakup and Rendezvous	3+
66	Underrun	3+
68	Lost Sight	3+
69	Cruise Position	3+
72	Rejoin	3+

Blk #	Media	Title	Events	Hrs	H/X
FRM32	OFT	Aerial Refueling Fundamentals	1	1.5	1.5

1. Prerequisite. FRM3102.
2. Syllabus Notes. Point Parallel Rendezvous should be conducted where practicable.
3. Special Syllabus Requirements. None.
4. Discuss Items
 - a. Formation flight procedures, flight sequence, and formation emergency procedures.
 - b. Aerial refueling procedures, AP-1B (Chapter 4) track procedures, DD-1801 filing requirements, flight sequence, and aerial refueling emergency procedures.

CTS REF	MANEUVER	FRM3201
1	General Knowledge/Procedures	3+
2	Emergency Procedures	3+
3	Headwork/Situational Awareness	3+
4	BAR/BAW	3+
5	Brief/Debrief	3+
6	Mission Planning	3+
7	AVO Responsibilities	3+
8	Ground Procedures	3+
9	Radio Procedures	3+
11	Departure	3+
12	In-Flight Checks	3+
17	In-Flight Planning/Area Orientation	3+
30	Use of ATIS/PMSV/FSS	4+
32	CRM/Crew Coordination	3+
33	In-Flight Briefings	3+

MIF continued on next page.

CTS REF	MANEUVER	FRM3201
60	Wingman Communication	3+
61	Section Management/Flight Leadership	3+
62	Section Fuel Management	1
63	VOR/Geographic Rendezvous	1
64	Parade Position	3+
65	Breakup and Rendezvous	3+
66	Underrun	3+
68	Lost Sight	3+
69	Cruise Position	3+
72	Rejoin	3+
76	Tanker Procedures	1
76	Receiver Procedures	3+
76	RV Delta (Point Parallel) Rendezvous	1
76	RV Golf (Enroute) Rendezvous	1
76	Alternate Rendezvous	1
76	Anchor Refueling Procedures	1
76	Track Refueling Procedures	1
76	Rendezvous Overrun/Underrun	1
76	Precontact Position	3+
76	Contact Position	3+
76	Boom Limits Demonstration	1

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Chapter VIII

Tactical Training

This chapter does not apply to the Primary NAVOTS training.

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Chapter IX

Course Training Standards

1. Purpose. These standards outline the tasks and proficiency required of SAVOs during the Primary phase.

2. Student Duties and Responsibilities

- a. Plan the mission.
- b. Operate the aircraft to accomplish the mission using sound judgment and airmanship.

3. General Standards

- a. Achieve training standards for VMC maneuvers in conjunction with visual clearing.
- b. Unless otherwise specified, use BAR/BAW standards for all items with altitude, airspeed or heading parameters.
- c. “Standard” equates to **good** (G/4).
- d. Momentary deviations outside CTS that do not compromise flight safety are acceptable if subsequent corrections are timely.
- e. Procedural knowledge and application must comply with applicable directives and allow efficient mission accomplishment. If individual tasks require pre-mission planning, the standards from **Mission Planning** apply.

4. Execution. The MIF regulates student progression to meet required standards prior to phase completion. Instructor pilots shall evaluate student performance against these standards.

5. Job Tasks. Specific performance and standards required are described as follows:

BEHAVIOR STATEMENT	STANDARDS
Graded Item	
● A brief description of the behavior, required action, and/or conditions.	● The specific standards for the action. May be read as “The SAVO...”

6. Graded Items. The MIF for specific graded items varies for each stage. Several items are graded on all complete syllabus events. The standards for these universally graded items are listed first.

7. Course Training Standards

BEHAVIOR STATEMENT	STANDARDS
1. General Knowledge/Procedures	
<ul style="list-style-type: none"> ● Maintain working knowledge of all appropriate flight training instructions and directives. 	<ul style="list-style-type: none"> ● Recites, discusses, and/or performs all applicable items essential to the operation of the aircraft and completion of the mission with minimal deficiencies not pertaining to safety of flight.
2. Emergency Procedures	
<ul style="list-style-type: none"> ● Perform critical action emergency procedures. ● Maintain in-depth knowledge of all NATOPS emergency procedures. ● Utilize the Pocket Checklist IAW NATOPS and FTI guidelines. 	<ul style="list-style-type: none"> ● Correctly analyzes situation given real or hypothetical scenarios. ● Recites critical action steps from memory without error (100 percent boldface accuracy). ● Is proficient with all information contained in the PCL, is able to utilize the checklist in a correct and timely manner.
3. Headwork/Situational Awareness	
<ul style="list-style-type: none"> ● Comply with the FTI, SOP, and NATOPS while maintaining situational awareness commensurate with safety-of-flight and mission objectives. 	<ul style="list-style-type: none"> ● Has knowledge of all rules and regulations and carries out all duties with minimum supervision. ● Foresees and avoids possible difficulties by making recommendations that enhance the situation and/or overall mission effectiveness. ● Remains alert and oriented during all phases of the event. ● Maintains overall awareness with regard to fuel state, aircraft configuration, traffic in vicinity of own ship, and dynamic weather conditions.
4. Basic Airwork Recognition (BAR)/Basic Airwork	
<ul style="list-style-type: none"> ● Monitor/direct aircraft control and perform an instrument/composite scan as appropriate to maintain planned navigation parameters, ATC clearances and assigned altitude, airspeed, and heading during flight. 	<ul style="list-style-type: none"> ● Recognizes airwork deviations in a timely manner based on the phase of flight, not to exceed 30 seconds (enroute phase), and effectively corrects or directs corrections to: <ul style="list-style-type: none"> ▶ Maintain aircraft within 100 feet, 10 KIAS, $\pm 5^\circ$ of assigned altitudes, speeds, and headings, respectively. ▶ Initiate/direct level-off from all climbs/descents.

BEHAVIOR STATEMENT	STANDARDS
5. Brief/Debrief	
<ul style="list-style-type: none"> ● Prepared for the brief and, as required, brief the flight in preparation for the mission. ● During debrief, recall flight progression and play an active role in the mission/aircrew evaluation. 	<ul style="list-style-type: none"> ● Briefs the flight in accordance with the squadron briefing guide for the event. ● Demonstrates proficient knowledge of discuss items with minimal deficiencies. ● Demonstrates knowledge of all aspects related to conduct of flight event. ● Recalls specifics of the mission and is able to accurately assess aircrew performance.
6. Mission Planning	
<ul style="list-style-type: none"> ● Perform mission planning to include takeoff, climb, enroute, descent, approach, and landing data. ● Prepare chart and mission material. ● Obtain applicable weather, bird activity, and NOTAMs. ● Plan alternate execution. ● Prepare flight log/DD-1801, as required. ● Adjust mission's profile based on real-world/weather concerns. 	<ul style="list-style-type: none"> ● Correctly interprets a valid Wx briefing/information for all flights. ● Completes DD-1801 with 100 percent accuracy. ● Completes Jet Log with 90 percent accuracy, as required. ● Reviews FLIP documents, NOTAMs, and other applicable flight information. ● Has all required materials (Wx brief, FLIP publications, NOTAMs) prior to brief. ● Accurately adjusts mission profile based on current and forecast weather.
7. AVO Responsibilities	
<ul style="list-style-type: none"> ● Accomplish required in-flight duties. 	<ul style="list-style-type: none"> ● Performs appropriate in-flight checklists, when required, per NATOPS and FTI. ● Gives proper takeoff calls, altitude warning calls and landing rollout calls per FTI to 90 percent accuracy.
8. Ground Procedures	
<ul style="list-style-type: none"> ● Begins when departing for the aircraft and ends when cleared for takeoff. ● Begins again when aircraft clears the runway and ends when Before Leaving Aircraft Checklist is complete. 	<ul style="list-style-type: none"> ● Correctly performs aircraft inspections, and all ground checklists, procedures, and required briefs IAW NATOPS, FTI, and SOPs. ● Monitors engine instruments for proper indications during start. ● Safely directs/monitors the taxi of the aircraft via local procedures, using applicable airfield diagram as a reference.

BEHAVIOR STATEMENT	STANDARDS
9. Radio Procedures	
<ul style="list-style-type: none"> ● Effectively communicate via the use of UHF/VHF radios and ICS as required. ● Use standard terminology IAW AIM/FAR and FTIs. 	<ul style="list-style-type: none"> ● Understands and responds to 90 percent of incoming calls. ● Communicates clearly and concisely with appropriate agencies using standard military and FAA terminology.
10. Takeoff	
<ul style="list-style-type: none"> ● Begins when cleared for takeoff and ends when After Takeoff Checklist complete and climb power and airspeed are established. 	<ul style="list-style-type: none"> ● Performs/directs takeoff procedures IAW NATOPS, FTI, and SOP. <ul style="list-style-type: none"> ▶ Ensures MAX power is set. ▶ Ensures computed MIN power at 60 KIAS is met. ▶ Ensures rotation is initiated at 85 KIAS. ▶ Ensures proper takeoff attitude is met. ● Monitors engine instruments and annunciator panel and reports abnormalities. ● Ensures gear retraction after verifying two positive rates of climb and flap retraction after verifying a minimum of 110 KIAS and prior to exceeding aircraft limitations.
11. Departure	
<ul style="list-style-type: none"> ● Begins when climb airspeed is established and ends when published departure is complete or established in assigned working area. ● If no published departure, ends when initiating pitch change for level-off. 	<ul style="list-style-type: none"> ● Directs compliance with ATC/departure/flight plan clearances. ● Performs an operations check after making radio contact with Departure Control, safety of flight permitting.
12. In-Flight Checks	
<ul style="list-style-type: none"> ● Accomplish in-flight checks IAW NATOPS, FTI, and SOP. 	<ul style="list-style-type: none"> ● Identifies nearest divert field. ● Perform operations check at least every 20 minutes.
13. Use of Controls/Trim	
<ul style="list-style-type: none"> ● Properly trim the aircraft as required by changes in airspeed, power, or configuration. 	<ul style="list-style-type: none"> ● Attempts to maintain balanced flight and trims in the correct sequence: rudder, elevator, and aileron.

BEHAVIOR STATEMENT	STANDARDS
14. Basic Transitions	
<ul style="list-style-type: none"> ● Performs/directs/ensures proper climbs, descents, and level-offs. 	<ul style="list-style-type: none"> ● Initiates level-off at the correct altitude IAW FTI, using PAT principle. ● Performs clearing turns for climbs and descents greater than 1000 feet, as appropriate.
15. Visual Scan/Lookout Doctrine	
<ul style="list-style-type: none"> ● Maintain lookout doctrine essential for safe ground/airborne operations. ● Direct aircraft control and effective visual navigation, relying primarily on outside references. ● Keep visual scan outside the cockpit to the maximum extent practicable for safe aircraft operation, traffic, terrain hazards and hazard/weather avoidance. 	<ul style="list-style-type: none"> ● Directs aircraft maneuvers to safely avoid actual or potential conflicts. ● Alerts crew to ground/airborne hazards (i.e., traffic, weather, birds, and obstacles). ● Locates visual checkpoints to aid effective and safe navigation.
16. SUA/ONAV Route Entry/Exit Procedures	
<ul style="list-style-type: none"> ● Perform entry/exit procedures for SUA or ONAV route IAW FTI, briefing, and local standards. ● Properly use visual cues and navigational aids to identify the route or SUA entry/exit point. ● Use descent procedures (planned or unplanned) to control timing to the entry point. 	<ul style="list-style-type: none"> ● Performs required duties during entry and exit from SUA or ONAV route. ● Contacts airspace control authority and uses appropriate comms to gain clearance to enter/exit controlled airspace. ● Acquires and flies to the entry point, using offsets as necessary to start the route on the desired outbound heading. ● For restricted area operations, contacts range authority for entry/exit clearance and uses appropriate comms IAW FTI and local standards. ● Directs adherence to published or directed entry/exit restrictions with respect to altitude (to include VFR hemispheric altitudes), heading, airspeed, position, squawk, etc. ● Arrives at the entry point ± 4 minutes of briefed time.

BEHAVIOR STATEMENT	STANDARDS
17. In-Flight Planning/Area Orientation	
<ul style="list-style-type: none"> ● Navigate and remain in the confines of designated MTR, MOA, or working area/SUA. ● Remain within the MTR vertical/lateral confines as prescribed in the AP/1B. 	<ul style="list-style-type: none"> ● Maintains appropriate boundaries and altitude block within a working area as required. ● Remains aware of aircraft position in designated working area. ● Directs headings and plans maneuvers to keep aircraft in the confines of the designated working area.
18. Level Speed Change	
<ul style="list-style-type: none"> ● Perform/direct level speed change procedures. 	<ul style="list-style-type: none"> ● Executes/directs the level speed change procedures in a timely manner IAW the FTI with 100 percent accuracy. ● Commences in normal cruise configuration on any numbered heading. ● Completes the Before Landing Checklist during the maneuver. ● Makes appropriate BAR calls whether at the controls or not.
19. Turn Pattern	
<ul style="list-style-type: none"> ● Perform/direct turn pattern procedures. 	<ul style="list-style-type: none"> ● Executes/directs turn pattern procedures IAW the FTI with 100 percent accuracy. ● Commences in normal cruise or slow cruise on a cardinal heading. ● Makes appropriate BAR calls to include maintaining bank angle $\pm 10^\circ$ whether at the controls or not.
20. Power-Off Stall	
<ul style="list-style-type: none"> ● Perform/direct power-off stall procedures. 	<ul style="list-style-type: none"> ● Performs/directs power-off stall procedures IAW the FTI with 100 percent accuracy. ● Commences in normal cruise configuration. ● Establishes aircraft in proper 125 KIAS, power-off glide attitude. ● Makes appropriate BAR calls whether at the controls or not. ● Initiates/directs recovery at first indication of an impending stall.

BEHAVIOR STATEMENT	STANDARDS
21. Approach Turn Stall	
<ul style="list-style-type: none"> ● Perform/direct ATS procedures. 	<ul style="list-style-type: none"> ● Performs/directs ATS procedures IAW the FTI with 100 percent accuracy. ● Commences in the downwind configuration. ● Completes the Before Landing Checklist during the maneuver. ● Initiates/directs recovery at first indication of stall at/above 6000 feet AGL. ● Verifies positive climb and reports, “aircraft climbing.”
22. Spin	
<ul style="list-style-type: none"> ● Perform/direct spin procedures. 	<ul style="list-style-type: none"> ● Performs/directs spin procedures IAW the FTI with 100 percent accuracy. ● Commences in slow cruise configuration. ● Clearly communicates correct spin indications over ICS. ● Initiates/directs/verifies proper recovery procedures after verifying stabilized spin indications or reaching 12,500 feet AGL (whichever occurs first).
23. Simulated Power Loss	
<ul style="list-style-type: none"> ● Perform/direct simulated engine failure procedures, given simulated power loss indications above 3000 feet AGL. 	<ul style="list-style-type: none"> ● Performs/directs simulated power loss procedures IAW the FTI with 100 percent accuracy. ● Immediately recognizes the power loss and verbalizes all required boldface procedures for the given situation with 100 percent accuracy. ● Selects suitable landing site, if available. ● Effectively navigates the aircraft to intercept ELP. ● Ensures proper glide speeds +10/-5 KIAS.

BEHAVIOR STATEMENT	STANDARDS
24. Practice Precautionary Emergency Landing (PPEL)	
<ul style="list-style-type: none"> ● Given simulated condition requiring PEL, perform/direct PPEL procedures. 	<ul style="list-style-type: none"> ● Performs/directs PPEL procedures IAW the FTI with 100 percent accuracy. ● Immediately recognizes the emergency condition and verbalizes all required boldface procedures for the given situation with 100 percent accuracy. ● Selects and effectively navigates to the nearest suitable landing site. ● Manages/monitors airspeed as appropriate for climb or acceleration to high key. ● Ensures 125 +10/-5 KIAS prior to configuration. ● Ensures clean configuration for climb, configures at appropriate time for landing, and completes the Before Landing Checklist prior to touchdown.
25. Landing Pattern	
<ul style="list-style-type: none"> ● Perform/direct landing pattern procedures and BAW/BAR. ● If from initial, from rolling out on downwind to flare. ● If from takeoff, touch-and-go, or waveoff, commencing the crosswind turn to flare. 	<ul style="list-style-type: none"> ● BAR/BAW: <ul style="list-style-type: none"> ▶ Maximum 45° AOB. ▶ TO Flap: <ul style="list-style-type: none"> ▪ 115 +10/-0 KIAS from 180 until final. ▪ 105 +10/-0 KIAS until beginning landing flare. ▶ LDG Flap: <ul style="list-style-type: none"> ▪ 110 +10/-0 KIAS from 180 until final. ▪ 100 +10/-0 KIAS until beginning landing flare. ▶ No-Flap: <ul style="list-style-type: none"> ▪ 120 +10/-0 KIAS from 180 until final. ▪ 110 +10/-0 KIAS until beginning landing flare.

BEHAVIOR STATEMENT	STANDARDS
25. Landing Pattern (cont)	
<ul style="list-style-type: none"> ● Contacts tower for landing and downwind clearance or broadcasts intentions on CTAF. ● Directs/configures/trims aircraft for landing. ● Completes the Landing checklist. 	<ul style="list-style-type: none"> ● Tower/CTAF landing communications are initiated at the abeam position IAW FTI format without error. ● Crosswind request/CTAF report made IAW FTI without IP prompting. ● If turning downwind, Landing checklist complete prior to the abeam position without error. If out of the break, Landing checklist complete prior to landing without error
26. Landings	
<ul style="list-style-type: none"> ● Perform/direct normal landing per the FTI. ● From crossing runway threshold until touch-and-go, commencing crosswind turn. 	<ul style="list-style-type: none"> ● Performs/directs safe landing procedures IAW NATOPS, FTI, and local procedures. ● Attempts/directs: correct glidepath until flare initiation. ● Attempts/directs touchdown with: <ul style="list-style-type: none"> ▶ Appropriate crosswind controls. ▶ Main gear first (nose-high attitude). ▶ Nose gear ±10 feet of centerline. ● Recognizes the touchdown zone as defined by FTI and local instructions. ● Performs/directs full-stop or touch-and-go procedures per FTI. ● Makes landing rollout calls until aircraft reaches 40 KIAS, as appropriate (This is not required in the FAM stage).
27. Go Around/Waveoff	
<ul style="list-style-type: none"> ● When appropriate, discontinue approach to landing. 	<ul style="list-style-type: none"> ● Initiates/directs waveoff when required by the FTI and/or safety-of-flight to include: <ul style="list-style-type: none"> ▶ Conflicting with PEL traffic. ▶ Stall warning system actuates (stick shaker) or airframe buffet. ▶ Aircraft requires more than 45-degree AOB to avoid overshooting final. ● Ensures positive climb and configuration during waveoff.

BEHAVIOR STATEMENT	STANDARDS
28. Course Rules	
<ul style="list-style-type: none"> ● Return to home field in accordance with local procedures. 	<ul style="list-style-type: none"> ● Obtains ATIS information. ● Conducts recovery briefing. ● Visually navigates via published routing with minimal discrepancies.
29. Precision Aerobatics	
<ul style="list-style-type: none"> ● Recall in-flight PA maneuver entry parameters. 	<ul style="list-style-type: none"> ● Directs the setup configuration (proper airspeed and altitude) to begin the maneuver IAW FTI with 100 percent accuracy.
30. Use of ATIS/PMSV/FSS	
<ul style="list-style-type: none"> ● Use ATIS/PMSV to update destination conditions IAW the FTI. ● Use FSS as required to open, change, and close flight plans. 	<ul style="list-style-type: none"> ● Checks ATIS prior to contacting destination approach control. ● Updates destination and alternate weather with PMSV/AWOS/FSS enroute, when required. ● Contacts FSS to: <ul style="list-style-type: none"> ▶ Open flight plans after departure. ▶ Change flight plans enroute. ▶ Close flight plans after landing.
31. In-Flight Computations	
<ul style="list-style-type: none"> ● Compute IAW the FTI: <ul style="list-style-type: none"> ▶ Ground speed. ▶ ETE (to turnpoints). ▶ Fuel at destination IAF. 	<ul style="list-style-type: none"> ● Computes: <ul style="list-style-type: none"> ▶ Ground speed ± 12 knots. ▶ ETA ± 1 minute. ▶ Fuel at destination IAF within ± 30 pounds of instructor calculations.
32. Crew Resource Management/Crew Coordination	
<ul style="list-style-type: none"> ● Use available crew and cockpit resources to minimize workload and enhance situational awareness. ● Effectively communicate mission essential information between crewmembers. ● Build crew awareness with timely and effective descriptive comm. 	<ul style="list-style-type: none"> ● Properly identifies crew roles, responsibilities, and expectations. ● Improves mission effectiveness by minimizing crew preventable errors and optimizing crew coordination. ● Demonstrates both leadership and team member skills. ● Demonstrates proper level of assertiveness for the situation.

BEHAVIOR STATEMENT	STANDARDS
33. In-Flight Briefings	
<ul style="list-style-type: none"> ● Accomplish in-flight briefings IAW the FTI. 	<ul style="list-style-type: none"> ● Provides takeoff brief, departure brief, holding brief, field brief, DRAFT report (as required), approach brief, and missed approach/climbout instructions when required using format delineated in the FTI with 90 percent accuracy.
34. Enroute Procedures	
<ul style="list-style-type: none"> ● Perform procedures while flying between departure transition point and destination. ● Identify an intersection using appropriate NAVAID(s). ● Identify station/waypoint passage IAW FTI. ● Intercept a radial and track inbound or outbound from a station. ● Properly manipulate EFIS Control Panel. 	<ul style="list-style-type: none"> ● Maintains positional awareness using ground references, navigational aids, VFR charts, or FLIP publications. ● Determines approximate wind direction $\pm 30^\circ$ and ± 15 knots and maintains proper crab angle $\pm 5^\circ$. ● Gives position reports as required. ● Leads turns when applicable IAW FTI. ● Maintain within 2 NM of course centerline between all NAVAIDs and fixes. ● Correctly identifies NAVAID station, GPS waypoint, or intersection passage.
35. Point-to-Point	
<ul style="list-style-type: none"> ● Proceed direct to an assigned fix using PTP procedures. 	<ul style="list-style-type: none"> ● Expeditiously directs an initial heading $\pm 30^\circ$ to the fix. ● Continuously updates heading to: <ul style="list-style-type: none"> ▶ Avoid large ($>20^\circ$) heading changes within two minutes prior. ▶ Arrive within 2 NM of desired point.
36. Arcing	
<ul style="list-style-type: none"> ● Direct per FTI: <ul style="list-style-type: none"> ▶ VOR/DME arcing. ▶ Arc-to-radial intercepts. ▶ Radial-to-arc intercepts. 	<ul style="list-style-type: none"> ● Maintains the arc ± 0.5 DME. ● Calculates lead points IAW FTI to join: <ul style="list-style-type: none"> ▶ Arc ± 0.5 DME. ▶ Radial $\pm 3^\circ$.

BEHAVIOR STATEMENT	STANDARDS
37. Holding (VOR)	
<ul style="list-style-type: none"> ● Direct VOR holding IAW the FTI. 	<ul style="list-style-type: none"> ● Computes proper entry turn. ● Directs holding airspeed three minutes or less from the holding fix. ● Establishes and maintains aircraft within holding airspace. ● Properly calculates and applies drift corrections IAW the FTI. ● Properly calculates and applies timing corrections IAW the FTI.
38. Holding (GPS)	
<ul style="list-style-type: none"> ● Direct GPS holding IAW the FTI. 	<ul style="list-style-type: none"> ● Properly sets GPS for holding. ● Computes proper entry turn. ● Directs holding airspeed three minutes or less from the holding fix. ● Establishes and maintains aircraft within holding airspace. ● Properly calculates and applies drift corrections IAW the FTI.

BEHAVIOR STATEMENT	STANDARDS
39. VOR Approach	
<ul style="list-style-type: none"> ● Direct an approach IAW the FTI. 	<ul style="list-style-type: none"> ● IAF to FAF maintains course ± 1 dot or valid intercept. ● Properly directs the pilot to slow and take basic approach configuration IAW the FTI. ● By the FAF (when depicted) or initiating descent to Minimum Descent Altitude (MDA), completes Landing checklist. ● Final: <ul style="list-style-type: none"> ▶ Maintains ± 1 dot of desired course. ▶ Reaches and maintains MDA +100/-0 feet. ● Properly calculates and applies backup timing at the FAF. ● Properly identifies Visual Descent Point (VDP) when published. ● Determines if the aircraft is in a position to execute a safe landing upon reaching the MDA/MAP. ● Directs the pilot as needed to execute the appropriate missed approach or climbout instructions.

BEHAVIOR STATEMENT	STANDARDS
40. GPS Approach	
<ul style="list-style-type: none"> ● Direct a GPS approach IAW the FTI. 	<ul style="list-style-type: none"> ● IAF to FAF maintains course ± 1 dot or valid intercept. ● Initial approach waypoint to FAWP: maintains course ± 0.25 NM or valid intercept. ● At 3 NM from FAWP, ensures FAWP is active waypoint. ● At 2 NM from FAWP, ensures GPS is in active mode. ● By the FAF: <ul style="list-style-type: none"> ▶ Completes landing checklist. ▶ Ensures approach goes active prior to descent from FAF. ● Final: <ul style="list-style-type: none"> ▶ Maintains ± 1 dot of desired course. ▶ Reaches and maintains MDA +100/-0 feet. ● Determines if the aircraft is in a position to execute a safe landing upon reaching the MDA/MAP. ● Directs the pilot as needed to execute the appropriate missed approach or climbout instructions.
41. Localizer Approach	
<ul style="list-style-type: none"> ● Direct a localizer approach IAW the FTI. 	<ul style="list-style-type: none"> ● By the FAF or initiating descent to MDA, completes landing checklist. ● Final: <ul style="list-style-type: none"> ▶ Maintains ± 1 dot of desired course localizer. ▶ Reaches and maintains MDA +100/-0 feet. ▶ Begins backup timing at the FAF when applicable. ● Determines if the aircraft is in a position to execute a safe landing upon reaching the MDA/MAP. ● Directs the pilot as needed to execute the appropriate missed approach or climbout instructions.

BEHAVIOR STATEMENT	STANDARDS
42. ILS Approach	
<ul style="list-style-type: none"> ● Direct the approach IAW the FTI. 	<ul style="list-style-type: none"> ● Prior to initiating descent to Decision Altitude (DA), completes landing checklist. ● Final: <ul style="list-style-type: none"> ▶ Maintains ± 1 dot of localizer course. ▶ Maintains ± 1 dot on glideslope. ▶ Begins backup timing for the localizer approach when applicable. ▶ Ensures missed approach/climbout instructions briefed prior to the DA. ● Determines if the aircraft is in a position to execute a safe landing upon reaching the DA. ● Directs the pilot as needed to execute the appropriate missed approach or climbout instructions.
43. Circling Approach	
<ul style="list-style-type: none"> ● Direct a circling maneuver to the landing runway IAW the FTI. 	<ul style="list-style-type: none"> ● Provides the pilot proper instructions to establish the aircraft into the circling maneuver for the landing runway. ● Selects appropriate MDA for aircraft category. ● Ensures aircraft is within obstruction clearance radius for aircraft category before commencing circling maneuver. ● Directs the pilot as needed to execute the appropriate missed approach or climbout instructions. ● Maintains airspeed +10/-0 KIAS of circling airspeed. ● Maintains altitude at circling minimums -0 feet.

BEHAVIOR STATEMENT	STANDARDS
44. Radar Approach/Ground-Controlled Approach	
<ul style="list-style-type: none"> ● Direct the pilot, as needed, to properly comply with the FTI parameters of a PAR or ASR approach. 	<ul style="list-style-type: none"> ● Responds quickly and correctly to controller instructions. ● Ensures lost communication and missed approach/climbout instructions are received prior to starting descent to DA or MDA. ● By glideslope intercept or descent to the MDA, completes landing checklist. ● Determines if the aircraft is in a position to execute a safe landing upon reaching the DA or MDA/MAP. ● Directs the pilot as needed to execute the appropriate missed approach or climbout instructions. ● Maintains airspeed +5/-0 KIAS on final. ● Maintains heading $\pm 3^\circ$.
45. Missed Approach	
<ul style="list-style-type: none"> ● Direct a missed approach per the FTI. 	<ul style="list-style-type: none"> ● Directs appropriate missed approach procedure when field not in sight and, <ul style="list-style-type: none"> ▶ Nonprecision: <ul style="list-style-type: none"> ▪ Inside FAF and full-scale CDI deflection. ▪ At specified MAP DME. ▪ At expiration of timing in the absence of DME. ▶ Precision, first of: <ul style="list-style-type: none"> ▪ DA. ▪ Controller-directed. ▶ Or, not in position for safe landing.
46. Instrument Turnpoint Procedures	
<ul style="list-style-type: none"> ● Perform instrument turnpoint calls. 	<ul style="list-style-type: none"> ● Makes appropriate two-minutes-prior, mark-on-top, and wings-level calls using proper format and terminology IAW FTI with 80 percent accuracy. ● Gives a wind-corrected outbound heading for a course, when able. ● Updates navigation aids appropriately.

BEHAVIOR STATEMENT	STANDARDS
47. ONAV Chart	
<ul style="list-style-type: none"> ● Prepare a visual navigation chart. ● Demonstrate chart/route knowledge. 	<ul style="list-style-type: none"> ● Prepares a visual navigation chart, given a route and a TPC, to an accuracy of ± 15 pounds (fuel), ± 30 seconds overall and ± 20 seconds at each turnpoint (time), and $\pm 2^\circ$ plotting (course) without error. ● Ensures all CHUM present and correct, chart signed, and all airspace, diverts/conflicting airfields and applicable hazards annotated on chart. ● Briefs to IP: turnpoint description, features inside TP circle, hazards on route, and all altitude changes.
48. Turnpoint Identification	
<ul style="list-style-type: none"> ● Identify turnpoints on a visual route. 	<ul style="list-style-type: none"> ● Identifies visual turnpoints IAW FTI to an accuracy of 67 percent.
49. ONAV Turnpoint Procedures	
<ul style="list-style-type: none"> ● Perform ONAV turnpoint calls. 	<ul style="list-style-type: none"> ● Makes appropriate ONAV two-minutes-prior, mark-on-top, and wings-level calls using proper format and terminology with 80 percent accuracy.
50. Checkpoint Utilization/Correlation	
<ul style="list-style-type: none"> ● Identify/use visual intermediate checkpoints to determine aircraft position. ● Use visually distinct terrain features as aids to navigation. ● Maintain SA and position on flight planned route as required. 	<ul style="list-style-type: none"> ● Identifies intermediate checkpoints to an accuracy of 50 percent. ● Uses terrain and selected cultural/noncultural features to aid visual navigation so as to maintain position accuracy within 2 NM. ● Maintains positional awareness during route of flight using clock-chart-ground correlation.
51. Hazard Calls	
<ul style="list-style-type: none"> ● Perform hazard calls IAW FTI. ● Inputs and monitors traffic advisory frequency for hazard airfields. 	<ul style="list-style-type: none"> ● Calls 90 percent of known hazards using proper format and terminology. ● Clears aircraft of weather, birds, hazards, obstacles, and other aircraft. ● Inputs traffic advisory frequencies for all hazard airfields along ONAV route. ● Provides timely descriptive or directive hazard calls as situation dictates.

BEHAVIOR STATEMENT	STANDARDS
52. Course Analysis/Corrections	
<ul style="list-style-type: none"> ● Determine aircraft position in relation to intended course. ● Perform standard course corrections to correct back to the specified course line IAW FTI. ● Navigate on a specified visual route using dead reckoning/visual cues to correct back to planned course. 	<ul style="list-style-type: none"> ● Correlates visual references with aircraft position to an accuracy of 1 NM. ● Timely and accurately applies 80 percent of course corrections IAW FTI. ● Directs appropriate heading change to return to course $\pm 2^\circ$ of IP calculations.
53. Timing Analysis/Speed Corrections	
<ul style="list-style-type: none"> ● Plan and execute the mission to hit the route entry point at briefed real-world time. ● Plan and execute to arrive at the target at preflight planned TOT. ● Perform standard speed corrections to arrive at the target on time IAW FTI. 	<ul style="list-style-type: none"> ● Directs arrival at route entry point to ± 4 minutes of scheduled entry time. ● Gives a time hack during brief. ● Timely and accurately implements 80 percent of speed corrections in the correct magnitude, time, and direction. ● Calculates and initiates timing corrections to within ± 5 knots and ± 6 seconds of IP calculations. ● Arrives at the target within ± 1 minute from preflight real-world time on target.
54. Altitude Selection/Compliance	
<ul style="list-style-type: none"> ● Select the proper altitude to and from visual route. ● Maintain route altitude IAW FTI. 	<ul style="list-style-type: none"> ● Ensures aircraft maintains VFR hemispheric altitudes. ● Directs climbs two minutes prior to the turnpoint.

BEHAVIOR STATEMENT	STANDARDS
55. Fuel Management/Analysis	
<ul style="list-style-type: none"> ● Maintain fuel awareness throughout flight. ● Determine fuel state and any fuel consumption trends. ● Calculate Joker/Bingo/MCF. ● Monitor fuel state and direct deviations, if needed, to accomplish mission goals and land with adequate fuel reserves IAW CNAF M-3710.7 and SOP. 	<ul style="list-style-type: none"> ● Checks fuel state at least every 20 minutes. ● Calculates Joker/Bingo/MCF IAW FTI ± 30 pounds. ● Compares fuel state to MCF at each turnpoint and correctly states any trends in fuel consumption. ● Makes recommendations to mission execution based on fuel state to ensure CNAF M-3710.7/TW-6/Squadron requirements for MCF.
56. Wind Analysis/Compensation	
<ul style="list-style-type: none"> ● Determine wind direction and magnitude using course trend and time analysis. ● Correctly compensate for current wind condition on each leg. 	<ul style="list-style-type: none"> ● Determines approximate wind direction $\pm 30^\circ$ and ± 10 knots and maintains proper crab angle $\pm 5^\circ$. ● Correctly applies crab and airspeed compensations for headwinds and crosswinds to 80 percent accuracy.
57. Target Acquisition	
<ul style="list-style-type: none"> ● Acquire and fly to the target. 	<ul style="list-style-type: none"> ● Uses target environment's visual cues to correctly correlate and identify the target. ● Directs the pilot, IAW FTI, to mark on top to an accuracy of $\pm 1/2$ NM.
58. Taxi and Marshal	
<ul style="list-style-type: none"> ● Perform taxi and marshal flight. 	<ul style="list-style-type: none"> ● Performs IAW FTI. ● Lead monitors wingman's position.
59. Formation Takeoff	
<ul style="list-style-type: none"> ● Perform section or interval takeoff. 	<ul style="list-style-type: none"> ● Performs IAW FTI. ● Lead: <ul style="list-style-type: none"> ▶ Monitors wingman. ▶ Directs appropriate type of takeoff for weather/runway conditions. ● Wing: Advises IP of airspeeds, fuel, engine, and gear status.

BEHAVIOR STATEMENT	STANDARDS
60. Wingman Communication	
<ul style="list-style-type: none"> ● Safely and effectively communicate with wingman using radio/visual/aircraft. 	<ul style="list-style-type: none"> ● Correctly uses and interprets hand signals. ● Performs IAW FTI to 90 percent accuracy.
61. Section Management/Flight Leadership	
<ul style="list-style-type: none"> ● Plan and execute a parade/tacform sequence of maneuvers. ● Understand current and required position. ● Accomplishes/directs ADMIN/TAC ADMIN tasks in a timely manner. 	<ul style="list-style-type: none"> ● Lead <ul style="list-style-type: none"> ▶ Maintains section inside the confines of assigned working area. ▶ Efficiently sequences and directs maneuvers. ▶ Adjusts mission profile for external factors (weather, traffic, etc.).
62. Section Fuel Management	
<ul style="list-style-type: none"> ● Monitor fuel status for section to allow for safety of flight and mission accomplishment. 	<ul style="list-style-type: none"> ● Lead: <ul style="list-style-type: none"> ▶ Conducts fuel checks as required by FTI or every 20 minutes. ▶ Ensures that flight is completed IAW SOP/NATOPS/FTI fuel requirements. ● Lead/wing: Recognizes and calls JOKER/BINGO fuel as necessary with 100 percent accuracy.
63. VOR/Geographic Rendezvous	
<ul style="list-style-type: none"> ● Join up to parade position while lead is maintaining constant heading or in constant AOB turn at a VOR fix or over a ground reference point. 	<ul style="list-style-type: none"> ● Recalls procedures with 100 percent accuracy IAW FTI. ● Effectively navigates to the prebriefed rendezvous point. ● Visually acquires the lead aircraft. ● Continuously monitors join-up and advises IP of deviations. ● Directs underrun procedures as necessary.
64. Parade Position	
<ul style="list-style-type: none"> ● Identify and maintain proper position. 	<ul style="list-style-type: none"> ● Recognizes parameters IAW FTI: <ul style="list-style-type: none"> ▶ Lower UHF antenna on pitot tube. ▶ Near pitot tube on prop arc. ● Ensures correct position for IFR/VFR turns.

BEHAVIOR STATEMENT	STANDARDS
65. Breakup and Rendezvous	
<ul style="list-style-type: none"> ● Conduct breakup and rendezvous IAW FTI. 	<ul style="list-style-type: none"> ● Recalls procedures IAW FTI with 100 percent accuracy. ● Calls out airspeeds during rendezvous. ● Continuously monitors join-up and advises IP of deviations. ● Directs underrun procedures as necessary.
66. Underrun	
<ul style="list-style-type: none"> ● Recognize/direct underrun as necessary for safety of flight or training. 	<ul style="list-style-type: none"> ● Recognizes the need to underrun. ● Recalls/directs procedures IAW FTI with 100 percent accuracy.
67. Lead Change	
<ul style="list-style-type: none"> ● Execute an expeditious and safe lead change IAW FTI. 	<ul style="list-style-type: none"> ● Considers airspace and weather in planning maneuvers. ● Performs IAW FTI.
68. Lost Sight	
<ul style="list-style-type: none"> ● Execute simulated lost wingman procedures IAW FTI. 	<ul style="list-style-type: none"> ● Wing: Immediately directs IP to execute procedures. ● Executes procedures with 100 percent accuracy IAW the FTI.
69. Cruise Position	
<ul style="list-style-type: none"> ● Identify and maintain proper position. 	<ul style="list-style-type: none"> ● Ensures aircraft maintains position IAW FTI: <ul style="list-style-type: none"> ▶ Within 60° bearing cone. ▶ 1- to 3-plane widths. ▶ 20 feet of stepdown. ● Ensures aircraft is within range to receive visual signals.

BEHAVIOR STATEMENT	STANDARDS
70. Tail-Chase	
<ul style="list-style-type: none"> ● Execute tail-chase profile IAW FTI. 	<ul style="list-style-type: none"> ● Advises IP of wingman’s position and status. ● Advises IP of aircraft parameters including airspeed, altitude, and Gs. ● Attempts to maintain sight of wingman throughout maneuver. ● Clears for the section. ● Calls altitudes IAW FTI when within 1500 feet of airspace boundary. ● Lead: <ul style="list-style-type: none"> ▶ Ensures section G-warm complete prior to tail-chase maneuvering. ▶ Directs flight to remain within assigned area.
71. Tactical Formation/Maneuvering	
<ul style="list-style-type: none"> ● Engaging turns used to maneuver a section when in combat spread. 	<ul style="list-style-type: none"> ● Lead: <ul style="list-style-type: none"> ▶ Conducts section G-warm prior to tactical maneuvering. ▶ Maintains area/route orientation. ▶ Clears flight path. ▶ Checks six-o’clock position. ● Wingman directs appropriate position/geometry (combat spread, in-place turns, cross turns, etc.) IAW FTI. <ul style="list-style-type: none"> ▶ Ensures deconfliction from Lead. ▶ Checks six o’clock position.
72. Rejoin	
<ul style="list-style-type: none"> ● Reform to parade while lead is maintaining constant heading or in constant AOB turn. 	<ul style="list-style-type: none"> ● Recalls procedures with 100 percent accuracy IAW FTI. ● Calls out airspeeds during rendezvous. ● Continuously monitors join-up and advises IP of deviations. ● Directs underrun procedures as necessary.
73. Section Break	
<ul style="list-style-type: none"> ● Conduct VFR recovery and break (3-sec or fan break). 	<ul style="list-style-type: none"> ● Performs/directs recovery and break IAW FTI, Course Rules, FAR/AIM, and NATOPS.

BEHAVIOR STATEMENT	STANDARDS
74. Section Approach	
<ul style="list-style-type: none"> ● Execute an instrument straight-in approach as lead or wingman. 	<ul style="list-style-type: none"> ● Recalls procedures with 100 percent accuracy IAW FTI. ● Lead: <ul style="list-style-type: none"> ▶ Maintains contact or instrument parameters and procedures. ▶ Utilizes wingman consideration. ● Wingman performs IAW FTI.
75. Approach/Landing (Non-precision or precision)	
<ul style="list-style-type: none"> ● Direct a precision or non-precision approach and landing rollout IAW the FTI. 	<ul style="list-style-type: none"> ● Complies with ATC instructions and properly directs the pilot to slow and take basic approach configuration IAW the FTI for type of approach selected. ● By the FAF (when depicted) for a non-precision approach or initiating descent to MDA or DA (as applicable), completes Landing checklist. ● Final: <ul style="list-style-type: none"> ▶ Maintains ± 1 dot of desired course. ▶ Maintains ± 1 dot on glideslope (if applicable). ▶ Begins backup timing when applicable. ▶ Reaches and maintains MDA +100/-0 feet. ▶ Ensures missed approach/climbout instructions briefed prior to the DA/MAP. ● Properly identifies VDP when published (if required). ● Determines if the aircraft is in a position to execute a safe landing upon reaching the MDA/VDP/MAP/DA. ● Directs the pilot as needed to execute the appropriate missed approach or climbout instructions. ● Directs safe landing procedures IAW NATOPS, FTI, and local procedures. ● Directs correct glidepath until flare initiation. ● Directs full-stop or touch-and-go procedures per FTI. ● Makes landing rollout call until aircraft reaches 40 KIAS, as appropriate.

BEHAVIOR STATEMENT	STANDARDS
76. USN Aerial Refueling Maneuvers (AR)	
<ul style="list-style-type: none"> ● Begins when the aircraft is maneuvered to the Aerial Refueling Initial Point or the Aerial Refueling Control Point and ends after departing the Aerial Refueling Track. 	<ul style="list-style-type: none"> ● Accomplishes maneuvers IAW mission brief and the FTI. ● Demonstrates a working knowledge of aerial refueling procedures. ● Maintains a stabilized rendezvous with safe separation between aircraft. ● Demonstrates a stabilized precontact position while receiver. ● Maintains precise control of the aircraft while demonstrating aerial refueling limits.

Chapter X

Master Materials List

1. Individually Issued Materials

<u>NOMENCLATURE</u>	<u>IDENTIFICATION</u>	<u>QTY PER STUDENT</u>
a. Master Curriculum	CNATRAINST 1542.185	1
b. Flight Training Instructions	CNATRA P-Pubs	various
c. T-6A NATOPS Flight Manual	NAVAIR A1-T6A AAA-NFM-100	1
d. T-6A NATOPS Pocket Checklist	NAVAIR 01-T6A AAA-NPCL-100	1
e. Flight Crew Checklist		1

2. Major Training Devices

a. T-6A 2F207 Unit Training Device quantity controlled by Naval Air Warfare Center Training Systems Division (NAWCTSD), Training Material Management Division, Inventory Control Branch (Code 5204).

b. T-6A 2F208 Operational Flight Trainer quantity controlled by Naval Air Warfare Center Training Systems Division (NAWCTSD), Training Material Management Division, Inventory Control Branch (Code 5204).

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