NAVAL AIR TRAINING COMMAND

NAS CORPUS CHRISTI, TEXAS
CIN Q-2D-3185

CNATRAINST 1542.185A
8 Nov 2023

CHIEF OF NAVAL AIR TRAINING

PRIMARY NAVAL AIR VEHICLE PILOT TRAINING SYSTEM MASTER CURRICULUM GUIDE

2023

DEPARTMENT OF THE NAVY
CHIEF OF NAVAL AIR TRAINING
250 LEXINGTON BLVD SUITE 179
CORPUS CHRISTI TX 78419-5041

CNATRAINST 1542.185A
N719
8 Nov 2023

CNATRA INSTRUCTION 1542.185A

From: Chief of Naval Air Training

Subj: PRIMARY NAVAL AIR VEHICLE PILOT TRAINING SYSTEM CURRICULUM

1. Purpose. To publish the curriculum for training Student Air Vehicle Pilots in the Primary Naval Air Vehicle Pilot Training System phase of training.

2. Cancellation. CNATRAINST 1542.185 will be canceled when the last student enrolled completes this curriculum or is enrolled or transitioned to the 1542.185A.

3. Action. This curriculum is effective on receipt. No changes will be made without written authorization by the Chief of Naval Air Training (CNATRA).

4. 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.

5. Review and Effective Date. Per this instruction, 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, DoD, SECNAV, 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.

6. 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 Web site https://www.cnatra.navy.mil/pubs/forms.htm.

J. RIVAS
Chief of Staff

Releasability and distribution:
This instruction is cleared for public release and is available electronically only via Chief of Naval Air Training Issuances Web site, https://flankspeed.sharepoint-mil.us/sites/CPF-CNATRA/SitePages/Publications.asp.

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SUMMARY OF CHANGES

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COURSE DATA

1. Course Title. Primary Naval Air Vehicle Pilot Training System Curriculum.

2. Course Identification Number (CIN). Primary NAVPTS, Q-2D-3185.

3. Location. Naval Air Station (NAS) Pensacola.

4. Course Status. Active.

5. Course Mission. Primary Naval Air Vehicle Pilot Training System (NAVPTS) is designed to qualify graduates of this course for follow-on Intermediate NAVPTS training and to prepare them for their future responsibilities as Naval Air Vehicle Pilots.

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 Pilots (SAVP).

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 Chief of Naval Air Training (CNATRA) N3 Annual Time-to-Train Entitlement Notice for active 1542 series instructions on the CNATRA web site: 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. CNATRA.

14. Quota Control. CNO.

15. Course Training Subjects

a. Administration

ADMINISTRATION		
Stage	**Symbol**	**Hours**
Check-In	ADM0101	2.0
Checkout	ADM0102	2.0
Totals		**4.0**

b. Ground Training

GROUND TRAINING		
Stage	**Symbol**	**Hours**
Aviation Student Indoctrination	ASI0101-20	14.0
Systems Engineering 1	ENG0101-24	29.0
Engineering Exam	ENG0125	1.5
Systems Engineering 2	ENG0201-2	4.5
NATOPS	NA0101-7	6.0
OPs and NATOPS Exam	NA0108	1.5
OPs and NATOPS Exam Remediation	NA0109	1.0
Emergency Procedures	EP0101-6	11.0
EP Boldface Procedures Exam	EP0107	1.5
EP Boldface Procedures Exam Remediation	EP0108	1.0
VFR Communication	COM0101-2	4.0
Crew Resource Management	CRM0101	2.5
Meteorology	MET0101-7	8.0
Meteorology Exam	MET0108	1.5
Instrument Navigation 1	NAV0101-26	33.5
Instruments 1 Exam	NAV0127	2.0
Instrument Navigation 2	NAV0201-14	21.0
Instruments 2 Exam	NAV0215	2.0

GROUND TRAINING (CONT.)		
Stage	**Symbol**	**Hours**
EKB Instrument Navigation Introduction	NAV0216	3.0
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	NAV0443	1.5
Totals		**218.5**

c. Flight Support

FLIGHT SUPPORT		
Stage	**Symbol**	**Hours**
Familiarization Flight Preparation 1	FAM1101-6	11.0
Familiarization Flight Preparation 2	FAM1201	5.0
Instrument Navigation Flight Preparation	NAV1101-4	10.5
Operational Navigation 1	ON1101-3	8.0
Aerial Refueling Familiarization	AR1101-2	7.0
Totals		**41.5**

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

SIMULATOR TRAINING					
Flight/Events		**T-6A UTD***		**T-6A OFT**	
		Flts	**Hrs**	**Flts**	**Hrs**
FAM21	Familiarization Cockpit Procedures Training	1	1.5		
FAM31	Familiarization Procedures Training	3	4.5	2	3.0
NAV31	Instrument Navigation	9	13.5		
ON31	Operational Navigation			1	1.5
	Totals	**13**	**19.5**	**3**	**4.5**

Note: *UTD events may be conducted in the OFT. OFT events must be conducted in the OFT unless elsewise directed by TRAWING commander.

16. Training Time Analysis. 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 SAVP. 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 Management System (TMS) and accounted for on the flight schedule, per the following table:

ADDITIONAL FORMAL TRAINING TIME PER EVENT			
Training Area	**Brief**	**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 Aided Instruction (CAI); 2B47 Basic Instrument Navigation Trainer, facility tours; self- and group-paced study; simulator instruction in the 2F207 Unit Training Device (UTD), and 2F208 and 2F205A Operational Flight Trainers (OFT).

20. Preceding Curriculum Data. Replaces CNATRAINST 1542.185.

21. Student Performance Measurement and 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 1500.4L for further guidance.

GLOSSARY

1. Advancing X. Completed event within the normal syllabus flow. Generally excludes events with last characters in the range 84-89.

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. A final flight in any stage of training designed to evaluate Naval Flight Student (NFS) skill retention.

7. Class Advisor. A military flight instructor 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). A special check normally given by the Commanding Officer (CO) or Executive Officer (XO). The CO may designate, in writing, CO-PC duty to a qualified O-4 or above. This is only done if the CO or XO is unqualified or unavailable to instruct in the required stage. A satisfactory CO-PC returns the student to normal syllabus flow. An Unsatisfactory (UNSAT) CO-PC results in a Training Review Board (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 AVP training for that student. Deliverables indicate whether the quality and continuity of training provided was per the CNATRAINST 1542.185A.

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. A scheduled period of prescribed instruction. It may be in an academic or laboratory classroom, simulator, or flight environment.

17. Extra Training (ET). Additional student training events ordered by the CO in order to remediate training deficiencies.

18. Fixed-Wing Operating Procedures Manual (FWOP). A Training Air Wing directive describing standard operating procedures for local fixed-wing aircraft.

19. Flight Training Instruction (FTI). Training publications that define maneuvers and acceptable performance standards for each maneuver the student is expected to perform.

20. Hours per Event (H/X). The resourced duration for each event, rounded to the nearest tenth of an hour.

21. Initial Progress Check (IPC). A special check performed by the most experienced instructors that have a complete understanding of NATRACOM and PC processes, and understand the gravity of their responsibility in helping maintain the standards of Naval Aviation. An UNSAT IPC results in a CO-PC.

22. 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 1550.6G for further information. This MCG utilizes the following lesson designators:

Char	Meaning	Remarks		
1st – 3rd	Stage	ADM - Administration AR - Aerial Refueling ASI - Aviation Student Indoctrination	COM - VFR Communication CRM - Crew Resource Management ENG - Engineering EP - Emergency Procedures	FAM - Familiarization MET -Meteorology ON-Operational Navigation NA - NATOPS NAV - Instrument Navigation
4th	Media	0 - Ground Event 1 - Academics	2 - CPT 3 - Simulator	
5th	Block	Sequential, indicating block within stage.		
6th & 7th	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 - Commanding Officer Progress Check 90 - Check Flight	

23. 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.

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

25. Master Curriculum Guide (MCG). A CNATRA instruction tailored to a specific phase of training.

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

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

28. Progress Check Instructor. An instructor authorized by the CO to administer an Initial Progress Check (IPC) or Commanding Officer Progress Check (CO-PC).

29. 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 or exam). Missing a brief does not constitute an RRU and shall be documented on a supplemental ATF. Refer to CNATRAINST 1500.4L for further information on missed briefs.

30. 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.

31. Special Syllabus Requirement (SSR). One-time, ungraded demonstration items. While SSRs are recommended for certain events in block, they may be accomplished at any time during the block.

32. 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 1550.6G for further information.

33. Standard Operating Procedure (SOP). An instruction or directive that provides guidance on TRAWING or squadron operating rules for local aircraft.

34. Training Media. Primary NAVPTS 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 1550.6G for further information.

35. Training Review Board (TRB). A fact-finding board appointed to conduct an administrative review of training following a failed CO-PC. Refer to CNATRAINST 1500.4L for further information.

36. 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 SAVP or Instructor may call a TTO.

37. Warmup Event. Additional event given to allow a student to regain a level of proficiency previously demonstrated which has diminished due to a non-syllabus break in training.

ABBREVIATIONS

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

AGL	-	Above Ground Level
AGSM	-	Anti-Gravity Straining Maneuver
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
AVP	-	Air Vehicle Pilot
AWOS	-	Automated Weather Observing System
BAC	-	Basic Approach Configuration
BAR	-	Basic Air Work Recognition
BAW	-	Basic Air Work
CAI	-	Computer Aided Instruction
CDI	-	Course Deviation Indicator
CFS	-	Canopy Fracturing System
CHUM	-	Chart Updating Manual
CI	-	Contract Instructor
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
CPT	-	Cockpit Procedures Trainer
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
EKB	-	Electronic Kneeboard
ELP	-	Emergency Landing Pattern
EOB	-	End of Block
EP	-	Emergency Procedure
ET	-	Extra Training
ETA	-	Estimated Time of Arrival
ETE	-	Estimated Time En route
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
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 and 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
NOTAM	-	Notice to Air Missions
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 to Metro Service
PMU	-	Power Management Unit
POS	-	Power Off Stall
PPEL	-	Practice Precautionary Emergency Landing
PTP	-	Point-to-Point
RA	-	Radar Approach
RIOT	-	Radio Instrument Orientation Trainer
RMU	-	Radio Management Unit
RRU	-	Ready Room UNSAT
SA	-	Situational Awareness

SAVP	-	Student Air Vehicle Pilot
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
TMS	-	Training 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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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 per the CNATRAINST 1550.6G.

e. Execution. All students execute Chapters II through VIII.

f. Syllabus Description. Primary NAVPTS is divided into three 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. Refer to CNATRAINST 1500.4L for information on SAVP grade calculations, Phase Aggregate Score (PAS) and Naval Standard Score (NSS).

2. Training Management

a. Syllabus Progression. Fly syllabus events within each stage sequentially. Do not start a block without all prerequisites. NFSs may be in different stages or blocks simultaneously, if allowed by MCG. Where applicable, NFSs will be eligible for, and shall be prepared for, more than one syllabus event. NFSs must complete all events except as listed in paragraph 1e. The flowchart on page I-4 delineates the sequence of flying events and their ground training prerequisites, except as listed in paragraph 1.e. and 2.b.

b. Accelerated Progression. SAVPs with previous flight experience or demonstrated exceptional proficiency may warrant accelerated progression, also known as "Proficiency Advance." A squadron CO may advance, and is encouraged to advance, an SAVP to the next block of instruction when all required items for the current block of instruction meet or exceed performance prerequisites for the follow-on block of training. This policy shall not be used to meet squadron production goals; it is strictly for instances where demonstrated proficiency makes completion of all events within a block of instruction unnecessary. All ATFs for the accelerated SAVP will be clearly marked "Accelerated Progression." ATFs for the events not

completed will include a comment in the remarks section stating, "Accelerated Progression - event not flown. ATF completed for administrative purposes only, per the CNATRAINST 1500.4L." The squadron shall closely monitor the progress of Accelerated SAVPs. If performance suffers due to acceleration, the SAVP shall return to normal syllabus progression.

(1) Other than noted exceptions, syllabus events shall be flown sequentially within each stage. A training block shall not be started without all prerequisites completed. Unless enrolled in an approved accelerated syllabus, students shall complete all events in the assigned phase of training.

(2) Flowchart on page I-5 is a depiction of Primary NAVPTS course flow, which delineates the sequence of events and their ground training prerequisites. System training management is designed to facilitate up to two graded events (simulator, or exam, or combination thereof) per NFS per day.

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

(4) The first simulator event in stage shall not be scheduled the same day as the associated flight support lecture(s) unless specified otherwise in this MCG.

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

d. Hours per Event (H/X). Instructors shall plan and execute missions to meet MCG stated H/X as closely as practical. Simulator events are deemed complete when the student receives at least the full training period as specified in the MCG. Refer to CNATRAINST 1500.4L, section 605, for further clarification.

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

f. Special Syllabus Requirements (SSR). Unless noted otherwise, instructors may accomplish SSRs on any event within the block. Annotate which SSRs were completed in the ATF Maneuver Comments section. Assign NG/1 as the SSR maneuver grade and annotate date of exposure on the SSR tab.

g. Aviation Training Jacket (ATJ) Reviews. The Class Advisor (CA) shall conduct jacket reviews per the CNATRAINST 1500.4L.

3. Unsatisfactory (UNSAT) Performance. All subsequent 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 SAVP satisfactorily passes the event.

b. Remediation. Remediation of unsatisfactory performance may be specifically tailored to address deficient skillsets.

c. Ready Room UNSAT (RRU). A RRU is when a NFS is inadequately prepared for the scheduled event. RRUs count towards PC triggers. Refer to CNATRAINST 1500.4L for further information on RRU.

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

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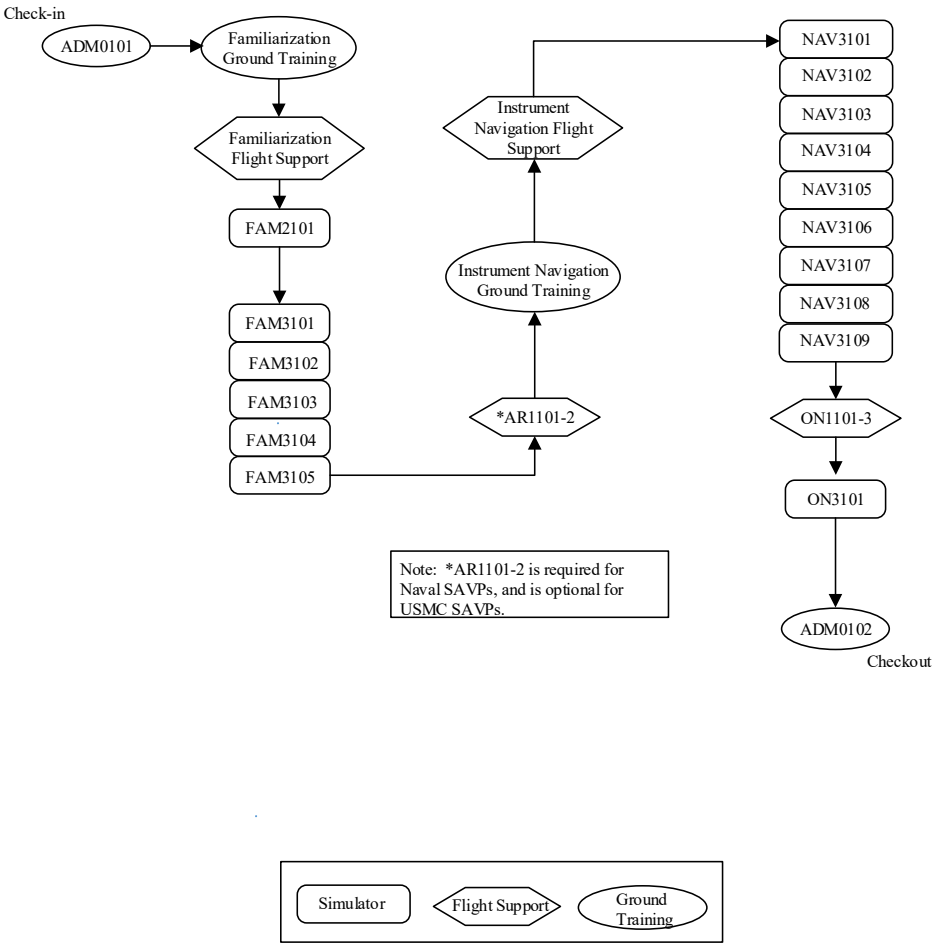
PRIMARY NAVPTS COURSE FLOW



4. Training Delays and Warmup Events

a. Training Delays Within Stage. A Warmup (WU) event is given to regain flight proficiency due to a training delay within stage. WU criteria is normally based on last event in stage Primary NAVPTS is built on increasing levels of skill attainment between blocks. WU eligibility is based on the number of days since the last stage syllabus event, in either aircraft or simulator. Every WU event shall ensure required skills for that stage are refreshed. Warmup events shall be coded as a XX86 (e.g., FAM3186) and shall include a justification in the general comments section of the ATF. Refer to CNATRAINST 1500.4L for Warmup event guidelines.

b. 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**	**REMARKS**
7-13	1 WU	– WU is awarded at instructor's discretion and based upon an assessment of student stage performance. – WU is prohibited if demonstrated performance is sufficient, or will be sufficient within remaining block events, by EOB.
14-30	2 WUs	– First WU is not an advancing event. – Second WU is awarded at instructor's discretion and based upon an assessment of student stage performance. – Second 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).

c. Extended Training Delays. If the period between events in stage exceeds 30 days, the squadron CO shall determine an appropriate WU training plan to regain NFS proficiency. Refer to the CNATRAINST 1500.4L for further guidance.

d. Training Delays Between Stages. WUs are intended for non-curriculum breaks in training. First events in stage following ground training are designed and graded with the delay factored in and normally do not require a WU. No WU is required if 14 to 30 days since any curriculum event was accomplished have elapsed between stages when executing Primary NAVPTS.

e. Extended Training Delays Between Stages. If the period between stages is greatly extended, the squadron CO shall develop an appropriate WU training plan to regain NFS proficiency. Refer to the CNATRAINST 1500.4L for further guidance.

5. Additional Simulators. Extra Training (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. ET events shall be coded as XX87 events (e.g., FAM3187). Refer to CNATRAINST 1500.4L for additional ET event guidance.

6. 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 simulator event with a thorough knowledge of:

(a) The Discuss Items, as listed in Chapters IV – VI.

(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 SAVP's previous block ATFs before each event. Thoroughly cover the current mission's:

(a) Discuss Items, as listed in Chapters IV – VI.

(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 and 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 event ATF shall be completed prior to the SAVP's next event.

b. Emergency Procedures (EP) Briefing and Training. EP training builds the NFS's confidence in the aircraft. Incorporate EP training into simulator events when practical; however, instructional block objectives take precedence.

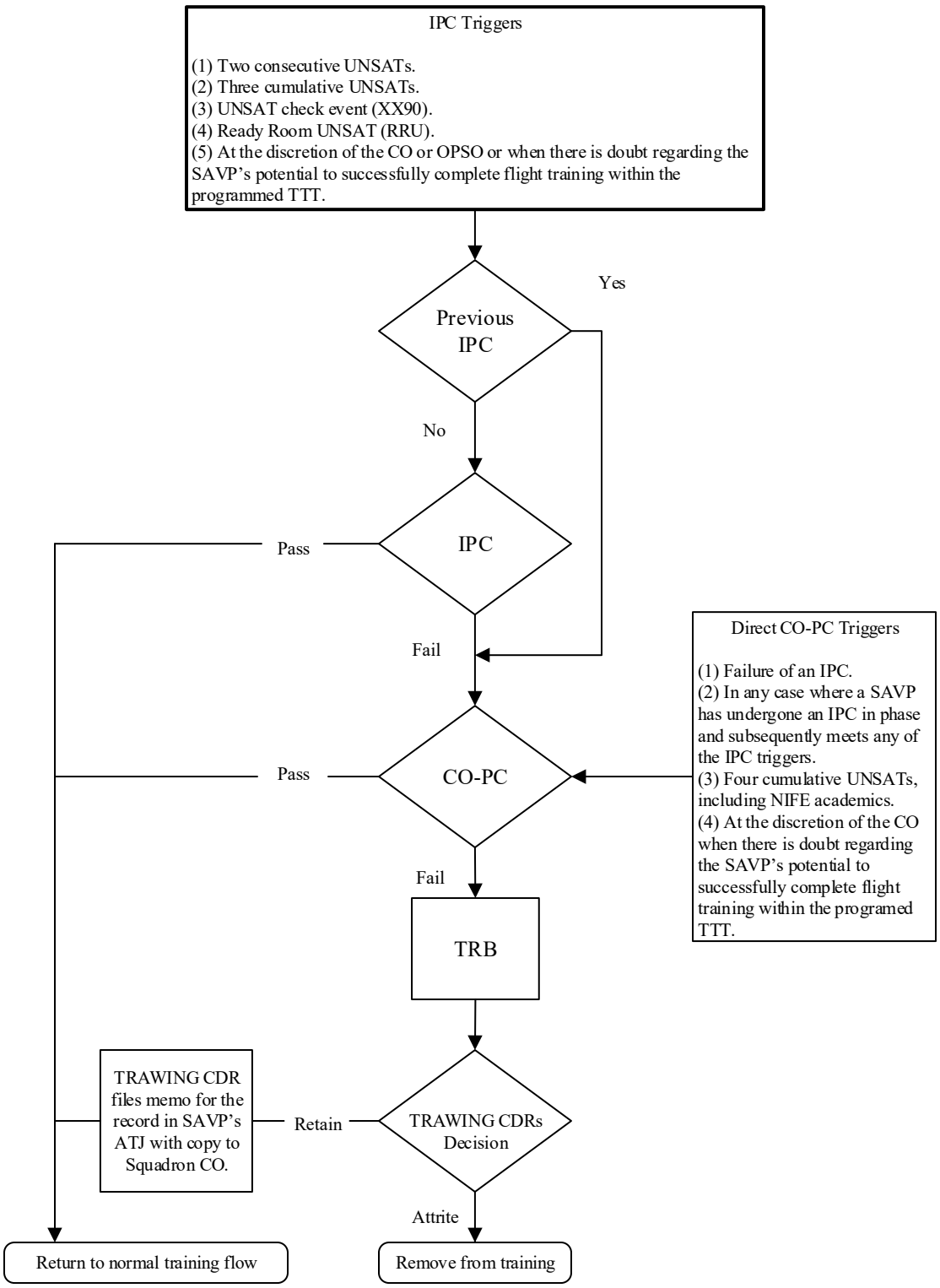
7. Mission Grading Procedures and Evaluation Policies. Refer to CNATRA 1500.4L.

8. Failure to Maintain Required Standards. Administrative procedures are established for NFSs that fail to meet the minimum acceptable standards. NATRACOM flight training is designed to enable NFSs to meet minimum curriculum standards within the published TTT. Refer to CNATRAINST 1500.4L for further information.

a. Progress Checks (PC). Progress Checks are holistic reviews of an NFS's proficiency, judgment, air sense, and overall ability to operate safely and confidently. The intent of every PC is to determine whether the NFS has the potential to reach the defined training standards of the current phase of training within the designated TTT, while demonstrating the potential to successfully complete remaining undergraduate, and for Advanced NFSs, FRS-level training. Refer to CNATRAISNT 1500.4L for further guidance on Progress Checks.

b. The flowchart on page I-9 outlines the NAVPTS Progress Check Training Review Process.

NAVPTS PROGRESS CHECK TRAINING REVIEW PROCESS



9. Special Instructions and Restrictions

a. Flight Hour and Event Requirements and Restrictions

(1) Maximum Daily Student Activities. SAVPs shall not exceed two simulator and/or academic exam events during one duty day.

(2) Minimum Student Turn-Times. When scheduled for back-to-back simulator events, SAVPs must have at least one hour between an event's debrief and following event's brief.

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

(4) Crew Rest. A minimum of 12 hours shall elapse between the conclusion of the NFS's last scheduled event of the day (including associated debrief) and the NFS's first scheduled event (including associated brief) of the following day. For scheduled non-graded events (classes, CAI, MIL, watch-standing duty days, this period may be shortened to eight hours. After six consecutive scheduled days, the NFS shall receive one day off. Note, official duty, squadron training, or standby scheduling do not qualify as a day off.

Chapter II

Ground Training

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

1. Prerequisite. ON3101 prior to 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	14.0	ASI

1. Prerequisites

   a. ADM0101 prior to ASI0101-2 (in order).

   b. ASI0102 prior to ASI0103-12 (any order).

   c. ASI0103-12 prior to ASI01013.

   d. ASI0113 prior to ASI0114-18 (any order).

   e. ASI0114-18 prior to ASI0119-20 (in order).

2. Events

ASI0101	Lect	VT-10 Orientation	1.0
ASI0102	Lect	Class Advisor Brief	1.0
ASI0103	Lab	Medical Records Check-In	1.0
ASI0104	Lect	VT-10 CO Brief	.25
ASI0105	Lect	VT-10 XO Brief	.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	Lab	Paraloft Check-In Brief	1.5
ASI0113	Lect	Academic Welcome Aboard	.75
ASI0114	Lab	TSHARP In-Brief	.75
ASI0115	Lect	Chaplain’s Brief	.50

2. Events (cont.)

ASI0116	Lect	Contract Instructor Services Introduction	0.5
ASI0117	MIL	Fleet Operations and Missions	1.0
ASI0118	MIL	Fleet Aircraft and Weapons	1.0
ASI0119	Lab	Electronic Kneeboard Issue	0.5
ASI0120	Lab	Electronic Kneeboard Setup and Use	1.0

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
ENG01	Class	Systems Engineering 1	25	30.5	SYS1

1. Prerequisites

   a. ASI0120 prior to ENG0101-24 (in order).

   b. ENG0124 and ENG0202 prior to ENG0125.

2. Events

ENG0101	MIL	Introduction to T-6 Systems	2.0
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	2.0
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	2.0
ENG0122	MIL	Electrical and Fuel Review	1.5
ENG0123	MIL	Propulsion Review	1.5
ENG0124	MIL	Environmental, Canopy and 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	2	4.5	SYS2

1. Prerequisite. ENG0101 prior to ENG0201-2 (in order).

2. Events

ENG0201	Lect/ UTD	T-6A Cockpit Familiarization 1	3.0
ENG0202	Lect/ UTD	T-6A Cockpit Familiarization 2	1.5

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
NA01	Class	NATOPS	9	8.5	NATOPS

1. Prerequisite. ENG0125 prior to NA0101-9 (in order).

2. Events

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

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
EP01	Class	Emergency Procedures	8	13.5	EPPROC

1. Prerequisite. ENG0125 prior to EP0101-8 (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	1.0

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
COM01	Class	VFR Communication	2	4.0	VFRCOM

1. Prerequisite. ENG0125 prior to COM0101-2 (in order).

2. Events

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

3. Syllabus Notes. None.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	Blk Name
CRM01	Class	Crew Resource Management	1	2.5	CRM

1. Prerequisite. ENG0125 prior to CRM0101.

2. Events

CRM0101	MIL	T-6A Crew Resource Management	2.5

3. Syllabus Notes. None.

4. Discuss Items. None.

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

1. Prerequisite. ENG0125 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	35.5	INST1

1. Prerequisite. AR1102 prior to NAV0101-27 (in order).

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	2.5
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	2.0

2. Events (cont.)

NAV0119	Lect/ 2B47	TP-2 Fly	1.5
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)	2.5
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	16	26.0	INST2

1. Prerequisite. NAV0127 prior to NAV0201-16 (in order).

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	Lect	Instruments 2 Exam Review	1.5
NAV0215	CAI Test	Instruments 2 Exam	2.0
NAV0216	Lect	EKB Instrument Navigation Introduction	3.0

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. NAV0216 prior to NAV0301-11 (in order).

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 and 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 prior to NAV0401-43 (in order).

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	Military Flight Plan	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 Military Flight Plan 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 Military Flight Plan 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 Military Flight Plan 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 Military Flight Plan 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 Military Flight Plan 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	1.5

3. Syllabus Notes. None.

4. Discuss Items. None.

Chapter III

NATOPS Training

This chapter does not apply to the Primary NAVPTS 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 NFS's problem areas so that mission profiles can be flown to correct deficient areas.

2. Simulator EP Training. For simulator Emergency Procedure training, the NFS 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) and electronic In-Flight Guide (eIFG), is to be gained by the NSF throughout Familiarization flight training.

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

1. Prerequisites. ENG0202, EP0108, NA0109, CRM0101, COM0102 and MET0108 prior to FAM1101-6 (in order).

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 and 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	SS	Familiarization Flight Preparation 2	1	5.0	FAM2

1. Prerequisite. FAM1106.

2. Events

FAM1201	SS	FAM Self-Study	5.0

3. Syllabus Notes. This is a formally scheduled event, which allows the NFS time to prepare for Familiarization simulator events. There is no instructor assigned for this event.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	H/X
FAM21	UTD	Familiarization Cockpit Procedures Training	1	1.5	1.5

1. Prerequisite. FAM1201.

2. Syllabus Notes

a. FAM2101: The instructor shall demonstrate the following items: simulator console operation and IOS operation, rudder pedal and seat adjustments, location of cockpit displays, switches, and engine controls, standby instruments; and interior inspection.

b. Time permitting, the instructor may demonstrate the 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, landing pattern, and radio procedures.

3. Special Syllabus Requirements. None.

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

5. Block MIF

CTS REF	MANEUVER	FAM2101
1	General Knowledge/Procedures	3+
N	Strap-In/Interior Inspection	1
9	Radio Procedures	1
N	Engine Start	1
N	Start Malfunctions	1
N	Fire Warning on the Ground	1
N	Before Taxi/Taxi Checklists	1
N	Overspeed Governor Check	1
N	Before Takeoff/Lineup Checks	1
N	Takeoff Abort	1

MIF Continued on next page.

CTS REF	MANEUVER	FAM2101
N	Emergency Engine Shutdown (Ground)	1
10	Takeoff	1
11	Departure	1
N	After Takeoff/Climb Checklists	1
12	In-Flight Checks	1
N	Operations Check	1
N	Descent/Before Landing Checklists	1
24	PPEL	1
25	Landing Pattern	1
26	Landings	1
27	Go Around/Wave-Off	1
N	After Landing/Engine Shutdown Checklists	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/Low Oil Pressure	1
N	Hydraulic Malfunctions	1
N	Trim System/TAD Failure	1
N	Inadvertent Departure From Controlled Flight	1
N	Landing Gear Emergency Extension	1
N	Emergency Landing Pattern	1
N	Precautionary Emergency Landing	1

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

1. Prerequisite. FAM2101 prior to FAM3101.

2. Syllabus Notes

a. FAM3101-5 shall be accomplished in order.

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. FAM3101-3: The student will perform the emergency action items and emergency procedures.

e. FAM3104-5: the student will verbally direct the emergency action items and the instructor will perform the action (to the max extent possible).

f. The student shall perform the following procedures on the event indicated below:

(1) FAM3101: Cockpit familiarization – includes rudder pedal and seat adjustments; EKB setup; 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; and inadvertent departure from controlled flight.

(2) FAM3102: All normal operating procedures, radio procedures, fire warning on the ground, emergency engine shutdown (ground), aborted takeoff, fire warning in flight, generator, battery bus failure, low fuel pressure, oil system malfunctions, low oil pressure, ELP, and PEL.

(3) FAM3103: All normal operating procedures, radio procedures, engine failure during flight, compressor stall, hydraulic malfunctions, emergency landing gear extension, and ELP (with PEL).

(4) FAM3104: Radio procedures, takeoff, level speed change, turn pattern power off stall, approach turn stall and spin.

(5) FAM3105: MOA, entry and exit procedures, simulated power loss (simulated and proactive EP in-flight procedures), ELP, (P)PEL, landing pattern: no flap, takeoff flap, and landing flap touch-and-go's, full-stop landing procedures and course rules and recovery.

3. Special Syllabus Requirements. None.

4. Discuss Items

FAM3101
Simulator curriculum and student responsibilities for future simulator events, ATFs, grading procedures, conduct of event, all normal checklists, and communication procedures, and general discussion of all planned items from paragraph 2.d./FAM3101.

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

FAM3103
PMU, generator and 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, landing pattern, and general discussion of all planned items from paragraph 2.e./FAM3104.

FAM3105
MOA entry and exit procedures, simulated power loss (simulated and practice EP in-flight procedures), ELP, (P)PEL, landing pattern: no flap, takeoff flap, and landing flap touch- and-go's, full-stop landing procedures, and course rules and recovery, and general discussion of all planned items from paragraph 2.e./FAM3105.

5. Block MIF

CTS REF	MANEUVER	FAM3105
1	General Knowledge/Procedures	3+
2	Emergency Procedures	3+
3	Headwork/Situational Awareness	3+

MIF continued on next page.

CTS REF	MANEUVER	FAM3105
N	Strap-In/Interior Inspection	3+
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+
22	Spin	2+
23	Simulated Power Loss	2+
24	PPEL	2+
N	Descent/Before Landing Checklists	3+
25	Landing Pattern	3+
26	Landings	2+

MIF continued on next page.

CTS REF	MANEUVER	FAM3105
27	Go Around/Wave-Off	2+
29	Precision Aerobatics	1
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/Low Oil Pressure	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	Blk Name
AR11	Class/ OFT	Aerial Refueling Familiarization	2	7.0	ARFP

1. Prerequisite. FAM3105 prior to AR1101-2 (in order).

2. Events

AR1101	Lect	Aerial Refueling Procedures I	3.0
AR1102	Lab/OFT	Aerial Refueling Procedures II	4.0

3. Syllabus Notes

a. The AR1102 lab is conducted in the 2F205A T-45C OFT.

b. The following items shall be demonstrated during the AR1102: Tanker procedures, receiver procedures, pre-contact position, and contact position

4. Discuss Items. RV Delta (Point Parallel) Rendezvous, RV Golf (en route) Rendezvous, Alternate Rendezvous, anchor and track refueling procedures, military flight plan filing requirements, flight sequence, and aerial refueling emergency procedures.

Chapter V

Instrument Navigation Training

1. General. Simulator instruction should focus on determining the instructional approach best suited for each NFS's problem areas so that mission profiles can be flown to correct deficient areas.

Blk #	Media	Title	Events	Hrs	Blk Name
NAV11	Class	Instrument Navigation Flight Preparation	4	10.5	NAVFLT PREP

1. Prerequisites

   a. NAV0413 prior to NAV1101.

   b. NAV0443 and NAV1101 prior to NAV1102-4 (in order).

2. Events

NAV1101	SS/UTD	T-6A GPS Procedures Self-Study	1.5
NAV1102	MIL	T-6A Instrument Navigation Flight Preparation I	3.0
NAV1103	Lect	T-6A Instrument Navigation Flight Preparation II	3.0
NAV1104	Lect	T-6A Airways Navigation Flight Preparation	3.0

3. Syllabus Notes. NAV1101 is a ground training event designed to allow the student dedicated time to practice utilizing operable aircraft navigation equipment, including the GPS. This event will utilize the 2F207 UTD, but it does not require an instructor be assigned.

4. Discuss Items. None.

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

1. Prerequisite. NAV1104 prior to NAV3101.

2. Syllabus Notes

a. NAV3101-9 shall be accomplished in order.

b. Introduce and practice instrument navigation en route procedures and instrument approach procedures.

c. Students shall prepare and have available a military flight plan and flight log for each event.

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

e. NAV3102-9: Student shall practice at least one EP during these events. The instructor shall grade CTS #2 EP and annotate which emergency procedure was performed in the comments section of the ATF.

3. Special Syllabus Requirements. None.

4. Discuss Items

NAV3101
AVP responsibilities, crew coordination, direct to a NAVAID, DRAFT procedures, radar approaches, and missed approach and climb-out 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
NAVAID holding, full procedure turn approach, and intercept techniques, and the event scenario EP.

NAV3105
Loading GPS flight plan, GPS approach, GPS procedures, and the event scenario EP.

NAV3106
Special use airspace, high-altitude airways structure, pilot's discretion descent, VOR approach procedures, lost communications, and the event scenario EP.

NAV3107
Takeoff weather minimums, non-radar environment communications procedures, ILS approach procedures, emergency divert, and the event scenario EP.

NAV3108
Standard instrument departure, 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	Basic Air Work Recognition (BAR)	4+
5	Brief/Debrief	3+
6	Mission Planning	3+
7	AVP 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+

MIF continued on next page.

CTS REF	MANEUVER	NAV3109
32	CRM/Crew Coordination	3+
33	In-Flight Briefings	4+
34	En route Procedures	4+
35	Point-to-Point	3+
36	Arcing	3+
37	Holding (VOR)	3+
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 Turn-Point Procedures	3+

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Chapter VI

Operational Navigation Training

1. General. Simulator instruction should focus on introducing the SAVP to general low-level flight procedures normally executed by military aircraft on low altitude training routes.

Blk #	Media	Title	Events	Hrs	Blk Name
ON11	Class	Operational Navigation 1	3	8.0	ONAV1

1. Prerequisite. NAV3109 prior to ON1101-3 (in order).

2. Events

ON1101	MIL	Operational Navigation Flight Planning	3.0
ON1102	MIL	Corrections, Winds and Chart Preparation	3.0
ON1103	MIL	Automated Flight Planning	2.0

3. Syllabus Notes. ON1103 and ON3101 may be scheduled on the same day.

4. Discuss Items. None.

Blk #	Media	Title	Events	Hrs	H/X
ON31	OFT	Operational Navigation	1	1.5	1.5

1. Prerequisite. ON1103 prior to ON3101.

2. Syllabus Notes

   a. Flown as a VFR event conducted in the T-6A Operational Flight Trainer.

   b. Instructor shall demonstrate normal Operational Navigation procedures.

3. Special Syllabus Requirements. None.

4. Discuss Items. Ensure SAVP understands course training standards, time and course corrections, turn-point procedures, and 6-minute rule.

5. Block MIF

CTS REF	MANEUVER	ON3101
1	General Knowledge/Procedures	4+
2	Emergency Procedures	3+
3	Headwork/Situational Awareness	3+
5	Brief/Debrief	3+
8	Ground Procedures	3+
9	Radio Procedures	3+
11	Departure	3+
12	In-Flight Checks	1
15	Visual Scan/Lookout Doctrine	1
16	SUA/ONAV Route Entry/Exit Procedures	1
28	Course Rules	1
30	Use of ATIS/PMSV/FSS	1
31	In-Flight Computations	1
32	CRM/Crew Coordination	1

MIF continued on next page.

CTS REF	MANEUVER	ON3101
47	ONAV Chart	1
48	Turn-Point Identification	1
49	ONAV Turn-Point Procedures	1
50	Checkpoint Utilization/Correlation	1
51	Hazard Calls	1
52	Course Analysis/Corrections	1
53	Timing Analysis/Speed Corrections	1
54	Altitude Selection/Compliance	1
55	Fuel Management/Analysis	1
56	Target Acquisition	1

Chapter VII

Formation Training

This chapter does not apply to the Primary NAVPTS training.

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Chapter VIII

Tactical Training

This chapter does not apply to the Primary NAVPTS training.

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Chapter IX

Course Training Standards

1. Purpose. These standards outline the tasks and proficiency required of SAVPs 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 Basic Air Work Recognition (BAR) 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 SAVP…"

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	
● Maintain working knowledge of all appropriate flight training instructions and directives.	● 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	
● Perform critical action emergency procedures. ● Maintain in-depth knowledge of all NATOPS emergency procedures. ● Utilize the Pocket Checklist per NATOPS and FTI guidelines.	● 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	
● Comply with the FTI, SOP, and NATOPS while maintaining situational awareness commensurate with safety-of-flight and mission objectives.	● 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 Air Work Recognition (BAR)	
● 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.	● Recognizes air work deviations in a timely manner based on the phase of flight, not to exceed 30 seconds (en route phase), and effectively corrects or directs corrections to: ► Maintain aircraft within 100 feet, 10 KIAS, ±5° of assigned altitudes, speeds, and headings, respectively. ► Initiate/direct level-off from all climbs/descents.

BEHAVIOR STATEMENT	STANDARDS
5. Brief/Debrief	
● 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.	● 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	
● Perform mission planning to include takeoff, climb, en route, descent, approach, and landing data. ● Prepare chart and mission material. ● Obtain applicable weather, bird activity, and NOTAMs. ● Plan alternate execution. ● Prepare military flight plan/flight log, as required. ● Adjust mission's profile based on real-world/weather concerns.	● Correctly interprets a valid Wx briefing/information for all flights. ● Completes military flight plan 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. AVP Responsibilities	
● Accomplish required in-flight duties.	● 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	
● 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.	● Correctly performs aircraft inspections, and all ground checklists, procedures, and required briefs per NATOPS, the 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	
● Effectively communicate via the use of UHF/VHF radios and ICS as required. ● Use standard terminology per the AIM/FAR and FTIs.	● Understands and responds to 90 percent of incoming calls. ● Communicates clearly and concisely with appropriate agencies using standard military and FAA terminology.
10. Takeoff	
● Begins when cleared for takeoff and ends when After Takeoff Checklist complete and climb power and airspeed are established.	● Performs/directs takeoff procedures per NATOPS, FTI, and SOP. ► 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	
● 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.	● 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	
● Accomplish in-flight checks per NATOPS, the FTI, and SOP.	● Identifies nearest divert field. ● Perform operations check at least every 20 minutes.
13. Use of Controls/Trim	
● Properly trim the aircraft as required by changes in airspeed, power, or configuration.	● Attempts to maintain balanced flight and trims in the correct sequence: rudder, elevator, and aileron.

BEHAVIOR STATEMENT	STANDARDS
14. Basic Transitions	
● Performs/directs/ensures proper climbs, descents, and level-offs.	● Initiates level-off at the correct altitude per the FTI, using PAT principle. ● Performs clearing turns for climbs and descents greater than 1000 feet, as appropriate.
15. Visual Scan/Lookout Doctrine	
● 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.	● 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	
● Perform entry/exit procedures for SUA or ONAV route per 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.	● 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 per 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	
● 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.	● 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	
● Perform/direct level speed change procedures.	● Performs/directs the level speed change procedures in a timely manner per 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	
● Perform/direct turn pattern procedures.	● Performs/directs turn pattern procedures per 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 ±10° whether at the controls or not.
20. Power-Off Stall	
● Perform/direct power-off stall procedures.	● Performs/directs power-off stall procedures per 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	
● Perform/direct ATS procedures.	● Performs/directs ATS procedures per 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	
● Perform/direct spin procedures.	● Performs/directs spin procedures per 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	
● Perform/direct simulated engine failure procedures, given simulated power loss indications above 3000 feet AGL.	● Performs/directs simulated power loss procedures per 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)	
● Given simulated condition requiring PEL, perform/direct PPEL procedures.	● Directs PPEL procedures per 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	
● 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 wave-off, commencing the crosswind turn to flare.	● BAR/BAW: ► Maximum 45º AOB. ► TO Flap: ▪ 115 +10/-0 KIAS from 180 until final. ▪ 105 +10/-0 KIAS until beginning landing flare. ► LDG Flap: ▪ 110 +10/-0 KIAS from 180 until final. ▪ 100 +10/-0 KIAS until beginning landing flare. ► No-Flap: ▪ 120 +10/-0 KIAS from 180 until final. ▪ 110 +10/-0 KIAS until beginning landing flare.
● Contacts tower for landing and downwind clearance or broadcasts intentions on CTAF. ● Directs/configures/trims aircraft for landing. ● Completes the Landing checklist.	● Tower/CTAF landing communications are initiated at the abeam position per FTI format without error. ● Crosswind request/CTAF report made per 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.

BEHAVIOR STATEMENT	STANDARDS
26. Landings	
● Perform/direct normal landing per the FTI. ● From crossing runway threshold until touch-and-go, commencing crosswind turn.	● Performs/directs safe landing procedures per NATOPS, FTI, and local procedures. ● Attempts/directs: correct glide-path until flare initiation. ● Attempts/directs touchdown with: ► 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/Wave-Off	
● When appropriate, discontinue approach to landing.	● Initiates/directs wave-off when required by the FTI and/or safety-of-flight to include: ► 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 wave-off.
28. Course Rules	
● Return to home field in accordance with local procedures.	● Obtains ATIS information. ● Conducts recovery briefing. ● Visually navigates via published routing with minimal discrepancies.
29. Precision Aerobatics	
● Recall in-flight PA maneuver entry parameters.	● Directs the setup configuration (proper airspeed and altitude) to begin the maneuver per the FTI with 100 percent accuracy.

BEHAVIOR STATEMENT	STANDARDS
30. Use of ATIS/PMSV/FSS	
● Use ATIS/PMSV to update destination conditions per the FTI. ● Use FSS as required to open, change, and close flight plans.	● Checks ATIS prior to contacting destination approach control. ● Updates destination and alternate weather with PMSV/AWOS/FSS en route, when required. ● Contacts FSS to: ► Open flight plans after departure. ► Change flight plans en route. ► Close flight plans after landing.
31. In-Flight Computations	
● Compute per the FTI: ► Ground speed. ► ETE (to turn-points). ► Fuel at destination IAF.	● Computes: ► Ground speed ±12 knots. ► ETA ±1 minute. ► Fuel at destination IAF within ±30 pounds of instructor calculations.
32. Crew Resource Management (CRM)/Crew Coordination	
● 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.	● 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.
33. In-Flight Briefings	
● Accomplish in-flight briefings per the FTI.	● Provides takeoff brief, departure brief, holding brief, field brief, DRAFT report (as required), approach brief, and missed approach/climb-out instructions when required using format delineated in the FTI with 90 percent accuracy.

BEHAVIOR STATEMENT	STANDARDS
34. En route Procedures	
● Perform procedures while flying between departure transition point and destination. ● Identify an intersection using appropriate NAVAID(s). ● Identify station/waypoint passage per FTI. ● Intercept a radial and track inbound or outbound from a station. ● Properly manipulate EFIS Control Panel.	● Maintains positional awareness using ground references, navigational aids, VFR charts, or FLIP publications. ● Determines approximate wind direction ±30° and ±15 knots and maintains proper crab angle ±5°. ● Gives position reports as required. ● Leads turns when applicable per the 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	
● Proceed direct to an assigned fix using PTP procedures.	● Expeditiously directs an initial heading ±30° to the fix. ● Continuously updates heading to: ► Avoid large (>20°) heading changes within two minutes prior. ► Arrive within 2 NM of desired point.
36. Arcing	
● Direct per FTI: ► VOR/DME arcing. ► Arc-to-radial intercepts. ► Radial-to-arc intercepts.	● Maintains the arc ±0.5 DME. ● Calculates lead points per the FTI to join: ► Arc ±0.5 DME. ► Radial ±3°.
37. Holding (VOR)	
● Direct VOR holding per the FTI.	● 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 per the FTI. ● Properly calculates and applies timing corrections per the FTI.

BEHAVIOR STATEMENT	STANDARDS
38. Holding (GPS)	
● Direct GPS holding per the FTI.	● 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 per the FTI.
39. VOR Approach	
● Direct an approach per the FTI.	● IAF to FAF maintains course ±1 dot or valid intercept. ● Properly directs the pilot to slow and take basic approach configuration per the FTI. ● By the FAF (when depicted) or initiating descent to Minimum Descent Altitude (MDA), completes Landing checklist. ● Final: ► 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 climb-out instructions.

BEHAVIOR STATEMENT	STANDARDS
40. GPS Approach	
● Direct a GPS approach per the FTI.	● 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: ► Completes landing checklist. ► Ensures approach goes active prior to descent from FAF. ● Final: ► 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 climb-out instructions.
41. Localizer Approach	
● Direct a localizer approach per the FTI.	● By the FAF or initiating descent to MDA, completes landing checklist. ● Final: ► 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 climb-out instructions.

BEHAVIOR STATEMENT	STANDARDS
42. ILS Approach	
● Direct the approach per the FTI.	● Prior to initiating descent to Decision Altitude (DA), completes landing checklist. ● Final: ► Maintains ±1 dot of localizer course. ► Maintains ±1 dot on glideslope. ► Begins backup timing for the localizer approach when applicable. ► Ensures missed approach/climb-out 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 climb-out instructions.
43. Circling Approach	
● Direct a circling maneuver to the landing runway per the FTI.	● 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 climb-out instructions. ● Maintains airspeed +10/-0 KIAS of circling airspeed. ● Maintains altitude at circling minimums -0 feet.

BEHAVIOR STATEMENT	STANDARDS
44. Radar Approach (RA)/Ground-Controlled Approach (GCA)	
● Direct the pilot, as needed, to properly comply with the FTI parameters of a PAR or ASR approach.	● Responds quickly and correctly to controller instructions. ● Ensures lost communication and missed approach/climb-out 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 climb-out instructions. ● Maintains airspeed +5/-0 KIAS on final. ● Maintains heading ±3º.
45. Missed Approach	
● Direct a missed approach per the FTI.	● Directs appropriate missed approach procedure when field not in sight and, ► Non-precision: ▪ Inside FAF and full-scale CDI deflection. ▪ At specified MAP DME. ▪ At expiration of timing in the absence of DME. ► Precision, first of: ▪ DA. ▪ Controller-directed. ► Or, not in position for safe landing.
46. Instrument Turn-Point Procedures	
● Perform instrument turn-point calls.	● Makes appropriate two-minutes-prior, mark-on-top, and wings-level calls using proper format and terminology per the 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	
● Prepare a visual navigation chart. ● Demonstrate chart/route knowledge.	● 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 turn-point (time), and ±2° 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: turn-point description, features inside TP circle, hazards on route, and all altitude changes.
48. Turn-Point Identification	
● Identify turn-points on a visual route.	● Identifies visual turn-points per the FTI to an accuracy of 67 percent.
49. ONAV Turn-Point Procedures	
● Perform ONAV turn-point calls.	● 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	
● 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.	● Identifies intermediate checkpoints to an accuracy of 50 percent. ● Uses terrain and selected cultural/non-cultural 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	
● Perform hazard calls per the FTI. ● Inputs and monitors traffic advisory frequency for hazard airfields.	● 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 STATEMENTS	STANDARDS
52. Course Analysis/Corrections	
● Determine aircraft position in relation to intended course. ● Perform standard course corrections to correct back to the specified course line per the FTI. ● Navigate on a specified visual route using dead reckoning/visual cues to correct back to planned course.	● Correlates visual references with aircraft position to an accuracy of 1 NM. ● Timely and accurately applies 80 percent of course corrections per the FTI. ● Directs appropriate heading change to return to course ±2° of IP calculations.
53. Timing Analysis/Speed Corrections	
● 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 per the FTI.	● 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	
● Select the proper altitude to and from visual route. ● Maintain route altitude per the FTI.	● Ensures aircraft maintains VFR hemispheric altitudes. ● Directs climbs two minutes prior to the turn-point.
55. Fuel Management/Analysis	
● 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 per CNAF M-3710.7 and SOP.	● Checks fuel state at least every 20 minutes. ● Calculates Joker/Bingo/MCF per the FTI ±30 pounds. ● Compares fuel state to MCF at each turn-point and correctly states any trends in fuel consumption. ● Makes recommendations to mission execution based on fuel state to ensure CNAF M-3710.7, CTW-6, and squadron requirements, for MCF.

BEHAVIOR STATEMENT	STANDARDS
56. Target Acquisition	
● Acquire and fly to the target.	● Uses target environment's visual cues to correctly correlate and identify the target. ● Directs the pilot, per the FTI, to mark on top to an accuracy of ±1/2 NM.

Chapter X

Master Materials List

1. Individually Issued Materials

NOMENCLATURE	IDENTIFICATION	QTY PER STUDENT
a. Master Curriculum	CNATRAINST 1542.185A	1
b. Flight Training Instructions	CNATRA P-Pubs	various
c. T-6A NATOPS Pocket Checklist	NAVAIR 01-T6A	1
d. NAVAIR Electronic Kneeboard	AAA-NPCL-100 Per NAVAIR Serial Number	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).

c. T-45C 2F205A 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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