

NAVAL AIR TRAINING COMMAND



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CHIEF OF NAVAL AIR TRAINING



INTERMEDIATE T-6A STRIKE FIGHTER NAVAL FLIGHT OFFICER TRAINING SYSTEM (NFOTS) CURRICULUM

2022



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CHIEF OF NAVAL AIR TRAINING
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CNATRA INSTRUCTION 1542.163C

From: Chief of Naval Air Training

Subj: INTERMEDIATE STRIKE FIGHTER NAVAL FLIGHT OFFICER TRAINING
SYSTEM CURRICULUM

1. Purpose. This master curriculum guide is issued for the standardization of instruction and guidance to instructors and administrators within the Naval Air Training Command.
2. Cancellation. CNATRINST 1542.163B will be canceled when the last student enrolled completes this curriculum or is enrolled or transitioned to the 1542.163C.
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, 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.
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.asp>.


J. RIFAS
Chief of Staff

Releasability and distribution:

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

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COURSE DATA

1. Course Title. Intermediate Strike Fighter Naval Flight Officer Training System (NFOTS) Curriculum.
2. Course Identification Number (CIN). Intermediate Strike Fighter NFOTS, Q-2D-1263.
3. Location(s). Naval Air Station (NAS) Pensacola.
4. Course Status. Active.
5. Course Mission. Intermediate Strike Fighter NFOTS is designed to qualify graduates of this course for follow-on advanced Strike Fighter flight training in the T-45C aircraft, and to prepare them for their future responsibilities as Naval Flight Officers.
6. Prerequisite Training. Successful completion of Primary NFOTS, Q-2D-3162 or Primary NFOTS, Q-2D-7162.
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. Administration

ADMINISTRATION		
Stage	Symbol	Hours
Check-In and Checkout	ADM0101-2	4.0
Total		4.0

b. Flight Support

FLIGHT SUPPORT		
Stage	Symbol	Hours
Airways Navigation Flight Support	AN1101-2	8.0
Intermediate Strike Familiarization Flight Support	ISF1101-5	24.0
Total		32.0

c. Flight Training

FLIGHT TRAINING						
Flight/Events	T-6A UTD		T-6A OFT		T-6A Aircraft (Dual)	
	Flts	Hrs	Flts	Hrs	Flts	Hrs
Airways Navigation	2	3.0			5	7.5
Airways Navigation Check Flight					1	1.5
Intermediate Strike Familiarization			1	1.5		
Tactical Formation					4	4.8
Strike Fighter					7	10.5
Strike Fighter Check Flight					1	1.5
Totals	2	3.0	1	1.5	18	25.8

16. Training Preparation Time. In addition to the hours formally planned and scheduled for academic classes, simulators, and flights, significant additional time to prepare and study outside of scheduled training hours should be expected by the Student Naval Flight Officer (SNFO). The amount of time will vary depending on the complexity of the material and individual student needs. For simulator and flight 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 CURRICULUM HOUR/EVENT			
Training Area	Brief/ Preflight/ Taxi	Taxi/ Debrief	Total
Simulator Events: All	0.5	0.5	1.0
Flight Events: All	2.0	1.5	3.5

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 Instruction Methods. Lecture, Mediated Interactive Lecture (MIL), self- and group-paced study, 2F207 Unit Training Device (UTD) and 2F208 Operational Flight Trainer simulator instruction, and T-6A aircraft in-flight instruction.

20. Preceding Curriculum Data. This curriculum replaces CNATRAINST 1542.163B.

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 1500.4K, 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
AGSM	-	Anti-G 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
AWOS	-	Automated Weather Observation System
BAR	-	Basic Airwork Recognition
CDI	-	Course Deviation Indicator
CFS	-	Canopy Fracturing System
CHUM	-	Chart Updating Manual
CI	-	Contract Instructor
CIN	-	Course Identification Number
CNATRA	-	Chief of Naval Air Training
CO	-	Commanding Officer
CO-PC	-	Commanding Officer Progress Check
CRM	-	Crew Resource Management
CTAF	-	Common Traffic Advisory Frequency
CTS	-	Course Training Standards
DA	-	Decision Altitude

DME	-	Distance Measuring Equipment
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 En route
FAA	-	Federal Aviation Administration
FAF	-	Final Approach Fix
FAR	-	Federal Aviation Regulations
FSS	-	Flight Service Station
FTI	-	Flight Training Instruction
FWOP	-	Fixed-Wing Operating Procedures
GCA	-	Ground-Controlled Approach
GPS	-	Global Positioning System
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
K/S/A	-	Knowledge/Skills/Ability
LECT	-	Lecture
LOC	-	Localizer
MAP	-	Missed Approach Point
MCF	-	Mission Completion Fuel
MDA	-	Minimum Descent Altitude
MIF	-	Maneuver Item File
MIL	-	Mediated Interactive Lecture
MTR	-	Military Training Route
NATOPS	-	Naval Air Training and Operating Procedures Standardization
NAVAID	-	Navigational Aid
NFO	-	Naval Flight Officer
NFOTS	-	Naval Flight Officer Training System
NFS	-	Naval Flight Student
NG	-	No Grade
NM	-	Nautical Miles
NORDO	-	No Radio
NOTAMs	-	Notices to Airmen
NSS	-	Naval Standard Score
OFT	-	Operational Flight Trainer
ONAV		Operational Navigation
OPSO	-	Operations Officer
PAR	-	Precision Approach Radar

PCL	-	Pocket Checklist
PEL	-	Precautionary Emergency Landing
PMSV	-	Pilot Meteorological Information Service
PTP	-	Point-to-Point
RA	-	Radar Approach
RAIM	-	Receiver Autonomous Integrity Monitoring
RRU	-	Ready Room Unsatisfactory
SA	-	Situational Awareness
SFF	-	Strike Fighter Formation
SNFO	-	Student Naval Flight Officer
SOP	-	Standard Operating Procedure
SS	-	Self-Study
SSR	-	Special Syllabus Requirement
STAR	-	Standard Terminal Arrival Route
SUA	-	Special Use Airspace
T/LMS	-	Training and Learning Management System
TOT	-	Time-On-Target
TPC	-	Tactical Pilot Chart
TRAWING	-	Training Wing
TRB	-	Training Review Board
TTO	-	Training Time Out
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 Condition
- VNAV - Visual Navigation
- VOR - Very High Frequency Omnidirectional Range
- XO - Executive Officer

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GLOSSARY

1. Advancing X. Completed event within the normal syllabus flow. Excludes events with last numerical characters in the range 84-89 unless specified by CNATRAINST 1500.4K.
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 follows 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. A standard ATF that is printed on blue paper. The blue supplemental ATF is used to denote an Extra Training (ET) event.
6. Check Flight (XX90). A flight check in any stage of training.
7. Class Advisor. An 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) (XX89). A progress check is a special event either directed by the Commanding Officer, or triggered by student performance. A satisfactory CO-PC returns the student to normal syllabus flow. An UNSAT CO-PC results in a TRB, normally given by the Commanding Officer or Executive Officer. 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 preflight, flight, simulation, academics, and officer development conducted in all media during the programmed training days.
10. Course Training Standard (CTS). Define the behavior associated with each maneuver and standards or tolerances required to earn a grade of Good/4. These standards are in Chapter IX.
11. Courseware. The technical data, FTIs, 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 NFO training for that student. Deliverables indicate whether the quality and continuity of training provided was IAW CNATRAINST 1542.162C.
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 block. The student must meet or exceed MIF on all mandatory items and all demonstration items attempted in the block to progress past EOB.
16. Event. A 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 instructor and 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 CNATRAINST 1550.6F CH-1 for further information. This MCG utilizes the following lesson designators:

Char	Meaning	Remarks		
1 st - 3 rd	Stage	ADM - Administration	AN – Airways Navigation ISF – Intermediate Strike Familiarization	TAC – Tactical Formation STK – Strike Fighter
4 nd	Media	0 - Ground Event 1 - Academics	2 - CPT 3 - Simulator	4 - Aircraft
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 - CO-PC 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 CNATRA instruction tailored to a specific phase of training.

27. Phase of Training. A chief subdivision of a course of training. The NFOTS syllabus is comprised of Primary followed by either Intermediate Strike Fighter or Intermediate Maritime Command and Control. Intermediate training is then followed by either the Advanced Strike Fighter or Advanced Maritime Command and Control phase 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 1500.4K.

32. Progress Check Instructor. An instructor authorized by the CO to administer Initial or Command Directed Progress Checks.
33. 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 1500.4K, Ch. 6, for further information on missed briefs.
34. 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.
35. Special Syllabus Requirement (SSR). One-time, ungraded demonstration item(s).
36. Stage. A subdivision of a training phase, which is comprised of events leading to a single set of objectives, that are designated by a common symbol (e.g., ENG, FAM, ON, FRM, etc.). Refer to CNATRAINST 1550.6F CH-1, Appendix D, for further information.
37. Standard Operating Procedure (SOP). An instruction or directive that provides guidance on TRAWING or squadron operating rules for local aircraft.
38. Training Media. Intermediate Strike Fighter NFOTS media include aircraft, simulator (UTD/OFT), and ground training and flight support lectures. The first numerical character in the lesson identifier designates the training media. Refer to CNATRAINST 1550.6F CH-1 for further information.
39. Training Review Board (TRB). A fact-finding board appointed to conduct an administrative review of training following a failed CO-PC. Refer to CNATRAINST 1500.4K for further information.
40. 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 NSF or the instructor may call a TTO.
41. 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 CH-1.

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

f. Syllabus Description. Intermediate NFOTS events are flown in the T-6A training aircraft and simulator, and are divided into stages. Stages are grouped by like-flight training regimes such as Airways Navigation and Strike Fighter. Each stage may be subdivided into training blocks. If so, 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). A representation of any score relative to the average score. The scale is artificially centered at 50 (that is, 50 is average). Each NSS is a whole number and the scale is truncated at 20 and 80.

(3) NFOTS SNFO Calculations. Refer to the CNATRAINST 1500.4K for SNFO 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-4 delineates the sequence of events and their ground training prerequisites. System training management is designed to facilitate up to two graded events (flight, simulator, exam, or combination thereof) per student per day. A maximum of three events are allowed for cross-country purposes only.

(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 lapsed.

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

(5) See page I-5 for a depiction of Intermediate Strike Fighter NFOTS Course Flow.

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

c. Maneuver Continuity. Students 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. 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 deemed complete when the student receives at least the full training period as specified in the MCG. Refer to CNATRAINST 1500.4K, section 605, for further clarification.

e. Location of Training. Student events may be accomplished at home station or on cross-country/detachments where applicable.

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 and assign NG/1 as the SSR maneuver grade, and date/save SSR exposure on the T/LMS SSR tab.

g. ATJ Reviews. Class Advisors shall conduct jacket reviews IAW CNATRAINST 1500.4K.

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. 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 NFS is inadequately prepared for the scheduled event. The RRU always trigger a Progress Check, so it 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 (e.g., General Knowledge, Procedures, etc.). 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, and be graded as a normal event.

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

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

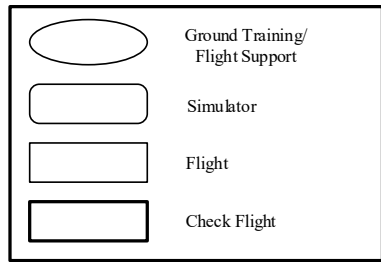
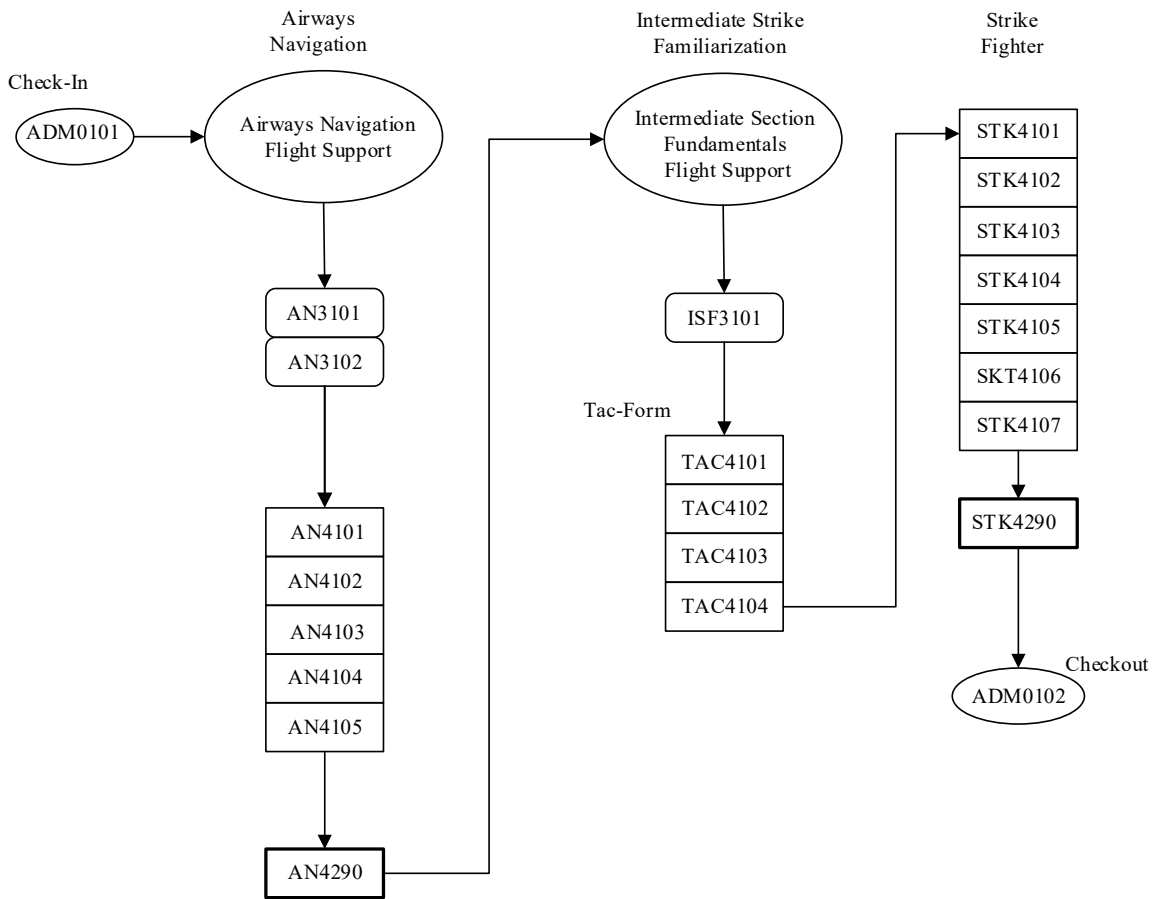
4. Training Review Board. The TRAWING shall conduct a TRB on all NFSs recommended for attrition. Refer to the CNATRAINST 1500.4K for additional information and guidance.

5. Instructor Continuity. There are no continuity requirements for the Intermediate Strike Fighter NFOTS phase.

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INTERMEDIATE STRIKE FIGHTER NFOTS COURSE FLOW



6. Training Delays and Warmup Events within Stage. A Warmup (WU) 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/NFOTS 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., STK4186).

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.

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 flight events (e.g., STK4290) 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 Sim to A/C	1 Mandatory Simulator	–Mandatory WU is not an advancing event. –Warmup event may be flown in aircraft with the TRAWING Commander’s approval.
7-13 All Others	1 Optional or 1 Mandatory (if Required)	–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. –Mandatory Warmup is required if NFS has flown less than the sum of 11.0 simulator plus aircraft hours during the last 30 days.

CRITERIA FOR AWARDING WARMUP EVENTS IN STAGE (cont.)		
BREAKS* (DAYS)	WARMUP EVENTS	<u>REMARKS</u>
14-30 Sim to A/C	2 Mandatory Simulator	–Mandatory WU is not an advancing event. –For blocks with a single simulator event, only one mandatory simulator WU event is required.
14-30 All Others	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 1500.4K for further guidance.

7. Additional Flights/Simulators

a. Extra Training (ET) Events. 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 as determined by the CO. ET events shall be coded as XX87 (e.g., AN4187).

b. Adaptation Events. The CO may provide events for adaptation to the flying environment when requested in writing by the flight surgeon for a specific reason (e.g., airsickness, eyeglasses). Adaptation events shall be coded as XX84 (e.g., STK4184).

8. 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 and simulator with:

(a) A thorough knowledge of:

1. The Discuss Items, as listed in Chapters III-VIII.

2. Procedural knowledge of the mandatory and demonstration items for the events training block.

(b) A flight profile tailored to training requirements, weak areas, and continuity.

(c) The latest ATF for the stage.

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

(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 CTS.

(b) The mission's complexity and student's progress will govern the time required for debrief. For simulator events conducted by Contract Instructors (CI), 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 IAW CNATRAINST 1500.4K prior to the SNFO's next event. Exceptions may be made for out-and-ins and cross-country flights. In such instances, the SNFO 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.

9. 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 (K/S/A). 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 timely.

(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, they 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 (+) 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 9.c.(2)(b) for check flight 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, 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) was 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 Comments section. The simulator event shall not be conducted for a time less than stated in the MCG, unless it is completing a previously incomplete event.

c. Policies for Evaluation Flights and Ground Evaluations

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

(2) Check Flight Events

(a) Check flight 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 Flight 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 training, 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.

(c) End of Stage Check Flight Events. The Final flight in a 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.

(d) UNSAT Check Flight Event - Ground Operations. A check flight event graded UNSAT solely for ground operations, like all UNSAT check flight events, 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 1500.4K 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.
- d. A Ready Room UNSAT.
- 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 1500.4K 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. 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.

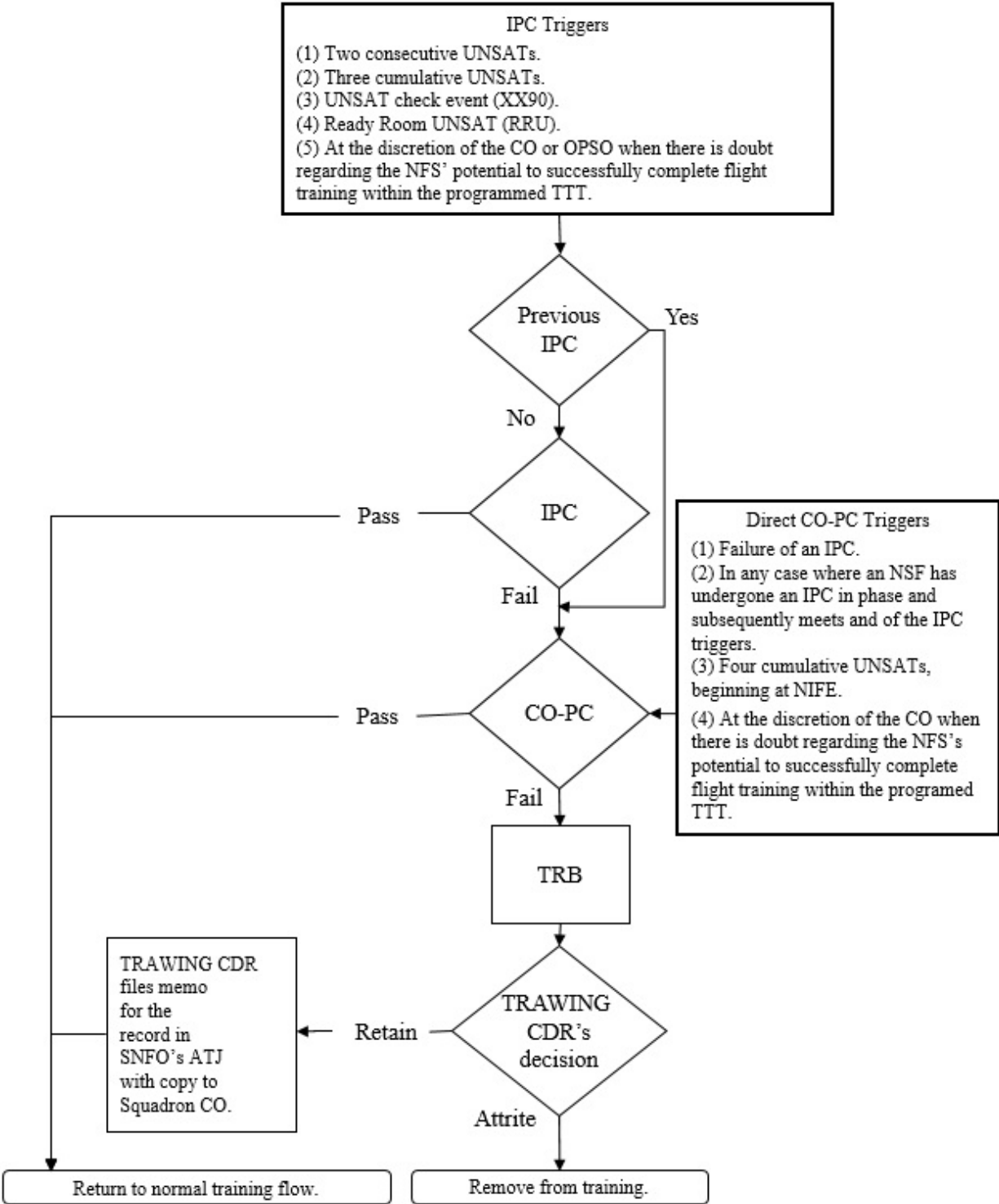
2. Upon completion of an IPC. The IPC Instructor shall counsel the NFS on the IPC results, recommendations, and future courses of action. The IPC Instructor should also strive to ensure the NFS is coping with the IPC process appropriately, and notify appropriate squadron leadership immediately if there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

3. Prior to a Commanding Officer Progress Check (CO-PC). 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 event 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 CO-PC event 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.

NFOTS PROGRESS CHECK TRAINING REVIEW PROCESS



10. Special Instructions and Restrictions

a. Flight Hour/Event Requirements and Restrictions

(1) Programmed Hours and Events. Programmed syllabus flight hours are 25.8 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 (Aircraft, Simulator or Exams). Students shall not exceed two flight, simulator, and/or exam events during one duty day, or three graded activities in one day during cross-country flights.

(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 flight, simulator event, or lecture. In the event that the student becomes delayed due to maintenance, weather, or other unplanned factors, the Instructor shall ensure the SNFO receives adequate time to rest and prepare for the next event. This does not apply to out-and-in or cross-country profile flights in the airplane; however, in all circumstances, the instructor shall ensure adequate debrief and brief time is allocated.

(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.

d. Airspace Utilization. Conduct training events in designated areas. Events may be conducted as out-and-ins or cross-country flights with OPSO approval.

e. Aircraft/Simulator Interchangeability

(1) Simulator events may be conducted in the aircraft when the UTD or OFT is unavailable for extended periods of time.

(2) Aircraft events may not be conducted in the UTD or OFT unless otherwise stated in this MCG.

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

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Chapter II

Ground Training

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

1. Prerequisite. STK4290 prior to ADM0102.

2. Events

ADM0101	Admin	Check-in		2.0	
ADM0102	Admin	Checkout		2.0	

3. Syllabus Notes. None.

4. Discuss Items. None.

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Chapter III

NATOPS Training

This chapter does not apply to the Intermediate Strike Fighter NFOTS phase of training.

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Chapter IV

Intermediate Strike Familiarization Training

1. Seating. Students shall occupy the 2F208 T-6A OFT cockpit for the simulator event in this stage.
2. Matrices. The stage included in this chapter contains only a single block. There is a single matrix following the block description in this chapter.
3. Intermediate Formation Stage Training Objectives. The Intermediate Strike Familiarization stage is designed to build upon SNFO knowledge, skills and abilities acquired during Primary NFOTS instrument, low-level, and formation training. This stage will also introduce SNFOs to mission commander responsibilities, to include analyzing mission progress and making changes to meet a real-world time-on-target. Additionally, SNFOs will plan, brief, and direct pop attack profiles on the target. Emphasis will be placed on flight planning, mission preparation, mission ownership, and procedural execution.

Blk#	Media	<u>Title</u>	Events	Hrs	Blk Name
ISF11	Class	Intermediate Strike Familiarization Flight Support	5	24.0	ISFFP

1. Prerequisites. AN4290 prior to ISF1101-5 (in order).

2. Events

ISF1101	Lect	Intermediate Strike Familiarization Ground Training		5.0	
ISF1102	SS/Lab	Intermediate Strike Familiarization Instrument Planning and Flight Preparation		3.0	
ISF1103	SS/Lab	Intermediate Strike Familiarization Low Level Chart Preparation 1		8.0	
ISF1104	Lab	Intermediate Strike Familiarization Jet Log and Low Level Chart Review		1.5	
ISF1105	SS/Lab	Intermediate Strike Familiarization Low Level Chart Preparation 2		6.5	

3. Syllabus Notes. ISF1104 is a formally scheduled event conducted by an Intermediate Strike Familiarization stage qualified academic instructor. The intent of this event is to allow the instructor an opportunity to provide feedback to individual students as they prepare jet logs and low level charts.

4. Discuss Items. None.

Blk#	Media	Title	Events	Hrs	H/X
ISF31	OFT	Intermediate Strike Familiarization	1	1.5	1.5

1. Prerequisites. ISF1105 prior to ISF3101.

2. Syllabus Notes

a. This simulator event is designed to introduce the student to Intermediate Strike Familiarization procedures learned during Intermediate Strike Familiarization Flight Support ground training. Primary focus of the event will be on general flight conduct, time management, and target attacks.

b. Students shall prepare and have available a DD-1801, jet log and kneeboard card for this event.

3. Special Syllabus Requirements. None.

4. Discuss Items

ISF3101

GPS and EFIS setup; detailed time management plan to arrive at MTR within entry window; Shift attack and Crossing attacks; formation emergency.

5. Block MIF

CTS REF	MANEUVER	ISF3101
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Composite Headwork/SA	3+
4	BAR	4+
5	CRM/Crew Coordination	4+
6	NFO Responsibilities	4+
7	Mission Planning	4+
8	Brief/Debrief	4+

MIF continued on next page.

CTS REF	MANEUVER	ISF3101
9	Ground Procedures	4+
10	Radio Procedures	3+
11	Departure	4+
12	In-Flight Checks	4+
13	Mission Ownership/Assertiveness	3+
14	In-Flight Planning	4+
15	Use of ATIS/PMSV/FSS	4+
16	In-Flight Briefings	4+
17	Fuel Management/Analysis	4+
18	In-Flight Computations	4+
19	En route Procedures	3+
32	Taxi and Marshal	4+
33	Formation Takeoff	4+
34	Wingman Communication	3+
35	TAC/ADMIN	3+
36	Formation Management	3+
43	SUA/MTR Entry/Exit Procedures	3+
47	Tactical Formation/Maneuvering	3+
49	ONAV Chart	4+
50	Turn-Point Identification	1
51	ONAV Turn-Point Procedures	1
52	Checkpoint Utilization/Correlation	1
53	Hazard Calls	1
54	Course Analysis/Corrections	1
55	Timing Analysis/Speed Corrections	1
56	Altitude Selection/Compliance	3+
58	Target Acquisition	3+
59	Section Target Attack	3+

Chapter V

Instrument Training

This chapter does not apply to the Intermediate Strike Fighter NFOTS phase of training.



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Chapter VI

Airways Navigation Training

1. Seating. Students shall occupy the rear cockpit for all events during this stage.
2. Matrices. The following matrix provides an overview of the Airways Navigation 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 throughout this chapter.
3. Airways Navigation Stage Training Objectives. The Airways Navigation stage is designed to build upon SNFO knowledge, skills and abilities acquired during T-6A Primary NFOTS instrument training. This stage is structured to challenge the SNFO with further real-world instrument flying environments. Emphasis will be placed on flight planning and preparation, mission conduct and crew coordination. Students will assume the role of Mission Commanders in the complete execution of the event from preflight planning to post flight debrief IAW FTIs, squadron directives, and instructor recommendations.
4. Airways Navigation Stage MIF

-  Simulator Event
-  Check Flight Event

AIRWAYS NAVIGATION STAGE MANEUVER ITEM FILE				
CTS REF	MANEUVER	AN3102	AN4105	AN4290
1	General Knowledge/Procedures	4+	4+	4+
2	Emergency Procedures	4+	4+	4+
3	Composite Headwork/SA	3+	4+	4+
4	BAR	4+	4+	4+
5	CRM/Crew Coordination	3+	4+	4+
6	NFO Responsibilities	4+	4+	4+
7	Mission Planning	4+	4+	4+
8	Brief/Debrief	4+	4+	4+
9	Ground Procedures	4+	4+	4+

MIF continued on next page.

AIRWAYS NAVIGATION STAGE MANEUVER ITEM FILE				
CTS REF	MANEUVER	AN3102	AN4105	AN4290
10	Radio Procedures	4+	4+	4+
11	Departure	4+	4+	4+
12	In-Flight Checks	4+	4+	4+
13	Mission Ownership/Assertiveness	4+	4+	4+
14	In-Flight Planning	4+	4+	4+
15	Use of ATIS/PMSV/FSS	4+	4+	4+
16	In-Flight Briefings	4+	4+	4+
17	Fuel Management/Analysis	4+	4+	4+
18	In-Flight Computations	3+	4+	4+
19	En route Procedures	4+	4+	4+
20	Point-to-Point	3+	4+	4+
21	Instrument Turn-Point Procedures	4+	4+	4+
22	Arcing	1	1	1
23	Holding (VOR)	1	1	1
24	Holding (GPS)	3+	4+	1
25	VOR Approach	1	1	1
26	GPS Approach	3+	4+	1
27	Localizer Approach	1	1	1
28	ILS Approach	3+	4+	1
29	Circling Approach	1	1	1
30	RA/GCA	1	4+	1
31	Missed Approach	1	4+	1
40	Approach/Landing (Non-precision or Precision)			4+

Blk#	Media	<u>Title</u>	Events	Hrs	Blk Name
AN11	Class	Airways Navigation Flight Support	2	8.0	ANFP

1. Prerequisites. ADM0101 prior to AN1101-2 (in order).

2. Events

AN1101	Lect	Airways Navigation Flight Support Training	3.0
AN1102	SS/Lab	Airways Navigation Planning and Flight Preparation	5.0

3. Syllabus Notes. AN1102 is a formally scheduled student study period to allow sufficient time for students to prepare for simulator and flight events in this stage. The AN1102 event does not require an instructor.

4. Discuss Items. None.

<u>Blk #</u>	<u>Media</u>	<u>Title</u>	<u>Events</u>	<u>Hrs</u>	<u>H/X</u>
AN31	UTD	Airways Navigation	2	3.0	1.5

1. Prerequisite. AN1102 prior to AN3101-2 (in order).

2. Syllabus Notes

a. Build on and practice instrument navigation en route procedures and instrument approach procedures.

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

c. Scenarios should emphasis real-world situations.

3. Special Syllabus Requirements. None.

4. Discuss Items

AN3101

Departure procedures, STARs, EFIS management, cold mic operations, and any EP.

AN3102

Destination and alternate weather requirements, airborne weather divert, and any EP.

5. Block MIF

CTS REF	MANEUVER	AN3102
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Composite Headwork/SA	3+
4	BAR	4+
5	CRM/Crew Coordination	3+
6	NFO Responsibilities	4+
7	Mission Planning	4+
8	Brief/Debrief	4+
9	Ground Procedures	4+

MIF continued on next page.

CTS REF	MANEUVER	AN3102
10	Radio Procedures	4+
11	Departure	4+
12	In-Flight Checks	4+
13	Mission Ownership/Assertiveness	4+
14	In-Flight Planning	4+
15	Use of ATIS/PMSV/FSS	4+
16	In-Flight Briefings	4+
17	Fuel Management/Analysis	4+
18	In-Flight Computations	3+
19	En route Procedures	4+
20	Point-to-Point	3+
21	Instrument Turn-Point Procedures	4+
22	Arcing	1
23	Holding (VOR)	1
24	Holding (GPS)	3+
25	VOR Approach	1
26	GPS Approach	3+
27	Localizer Approach	1
28	ILS Approach	3+
29	Circling Approach	1
30	RA/GCA	1
31	Missed Approach	1

Blk #	Media	Title	Events	Hrs	H/X
AN41	T-6A	Airways Navigation	5	7.5	1.5

1. Prerequisite. AN3102 prior to AN4101-5 (in order).
2. Syllabus Notes. The purpose of this block is to continue exposing the SNFO to instrument flight in the T-6A. Emphasis should be placed on preflight briefings, procedural recall and individual maneuver item execution.
 - a. Flights in this block shall be flown as single ship.
 - b. Flights should be flown as out-and-in or cross-country events to the maximum extent possible.
 - c. Students shall prepare and have available a DD-1801 and flight log for both primary and alternate routes on each event.
 - d. A minimum of eight instrument approaches shall be performed in block of which two shall be GPS and two shall be RA/GCA.
3. Special Syllabus Requirements. None.
4. Discuss Items
 - AN4101
CNAF M-3710.7 takeoff minimums and fuel requirements, and EP, and any limitation.
 - AN4102
CNAF M-3710.7 alternate requirements, position reports, any EP, and any limitation.
 - AN4103
Operations away from home field, approach lighting systems, any EP, and any limitation.
 - AN4104
Icing, descent planning, any instrument procedure, any EP, and any limitation.
 - AN4105
T-6A type/equipment code, loading flight plan in the GPS, GPS en route procedures, RAIM, RNAV/GPS approach procedures, bingo/divert profile and execution, and Carrier/VFR landing pattern and procedures.

5. Block MIF

CTS REF	MANEUVER	AN4105
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Composite Headwork/SA	4+
4	BAR	4+
5	CRM/Crew Coordination	4+
6	NFO Responsibilities	4+
7	Mission Planning	4+
8	Brief/Debrief	4+
9	Ground Procedures	4+
10	Radio Procedures	4+
11	Departure	4+
12	In-Flight Checks	4+
13	Mission Ownership/Assertiveness	4+
14	In-Flight Planning	4+
15	Use of ATIS/PMSV/FSS	4+
16	In-Flight Briefings	4+
17	Fuel Management/Analysis	4+
18	In-Flight Computations	4+
19	En route Procedures	4+
20	Point-to-Point	4+
21	Instrument Turn-Point Procedures	4+
22	Arcing	1
23	Holding (VOR)	1
24	Holding (GPS)	4+
25	VOR Approach	1

MIF continued on next page.

CTS REF	MANEUVER	AN4105
26	GPS Approach	4+
27	Localizer Approach	1
28	ILS Approach	4+
29	Circling Approach	1
30	RA/GCA	4+
31	Missed Approach	4+

Blk #	Media	Title	Events	Hrs	H/X
AN42	T-6A	Airways Navigation Check Flight	1	1.5	1.5

1. Prerequisite. AN4105 prior to AN4290.
2. Syllabus Notes
 - a. Flight shall be flown as single ship.
 - b. Flight should be flown as part of an out-and-in or cross-country even to the maximum extent possible.
 - c. Students shall prepare and have available a DD-1801 and flight log for both primary and alternate routes on each event.
 - d. The student should plan on flying a minimum of two instrument approaches.
3. Special Syllabus Requirements. None.
4. Discuss Items. Any airways navigation procedure, any EP and any limitation.
5. Block MIF

CTS REF	MANEUVER	AN4290
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Composite Headwork/SA	4+
4	BAR	4+
5	CRM/Crew Coordination	4+
6	NFO Responsibilities	4+
7	Mission Planning	4+
8	Brief/Debrief	4+
9	Ground Procedures	4+
10	Radio Procedures	4+

MIF continued on next page.

CTS REF	MANEUVER	AN4290
11	Departure	4+
12	In-Flight Checks	4+
13	Mission Ownership/Assertiveness	4+
14	In-Flight Planning	4+
15	Use of ATIS/PMSV/FSS	4+
16	In-Flight Briefings	4+
17	Fuel Management/Analysis	4+
18	In-Flight Computations	4+
19	En route Procedures	4+
20	Point-to-Point	4+
21	Instrument Turn-Point Procedures	4+
22	Arcing	1
23	Holding (VOR)	1
24	Holding (GPS)	1
25	VOR Approach	1
26	GPS Approach	1
27	Localizer Approach	1
28	ILS Approach	1
29	Circling Approach	1
30	RA/GCA	1
31	Missed Approach	1
40	Approach/Landing (Non-precision or Precision)	4+

Chapter VII

Strike Fighter Training

1. Seating. Student shall occupy the rear cockpit during this stage.
2. Matrices. The following matrix is an overview of the Strike Fighter 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 throughout this chapter.
3. Strike Fighter Stage Training Objectives. The Strike Fighter stage is designed to develop and prepare the SNFO for follow-on training in the Advanced Strike Fighter NFOTS flown in a high performance jet aircraft. This chapter is structured to familiarize and practice instrument and strike mission planning and procedures, mission fuel analysis and management, and mission ownership during section instrument flight and low-altitude strike training events. Students will assume the role of Mission Commanders in the complete execution of the event from preflight planning to post flight debrief IAW FTIs, squadron directives, and instructor recommendations.
4. Strike Fighter Stage MIF

 Check Flight Event

STRIKE FIGHTER STAGE MANEUVER ITEM FILE			
CTS REF	MANEUVER	STK4107	STK4290
1	General Knowledge/Procedures	4+	4+
2	Emergency Procedures	4+	4+
3	Composite Headwork/SA	4+	4+
4	BAR	4+	4+
5	CRM/Crew Coordination	4+	4+
6	NFO Responsibilities	4+	4+
7	Mission Planning	4+	4+

MIF continued on next page.

STRIKE FIGHTER STAGE MANEUVER ITEM FILE			
CTS REF	MANEUVER	STK4107	STK4290
8	Brief/Debrief	4+	4+
9	Ground Procedures	4+	4+
10	Radio Procedures	4+	4+
11	Departure	4+	4+
12	In-Flight Checks	4+	4+
13	Mission Ownership/Assertiveness	4+	4+
14	In-Flight Planning	4+	4+
15	Use of ATIS/PMSV/FSS	4+	4+
16	In-Flight Briefings	4+	4+
17	Fuel Management/Analysis	4+	4+
18	In-Flight Computations	4+	4+
19	En route Procedures	4+	1
20	Point-to-Point	4+	1
21	Instrument Turn-Point Procedures	4+	1
22	Arcing	1	1
23	Holding (VOR)	1	1
24	Holding (GPS)	4+	1
25	VOR Approach	4+	1
26	GPS Approach	4+	1
27	Localizer Approach	1	1
28	ILS Approach	4+	1
29	Circling Approach	1	1
30	RA/GCA	4+	1
31	Missed Approach	4+	1
32	Taxi and Marshal	4+	4+
33	Formation Takeoff	3+	4+
34	Wingman Communication	3+	1

MIF continued on next page.

STRIKE FIGHTER STAGE MANEUVER ITEM FILE			
CTS REF	MANEUVER	STK4107	STK4290
35	TAC/ADMIN	4+	4+
36	Formation Management	4+	4+
39	Section Approach Procedures	4+	4+
40	Approach/Landing (Non-precision or Precision)	1	4+
41	Section Break	4+	1
43	SUA/MTR Entry/Exit Procedures	4+	1
45	Visual Lookout	4+	4+
46	Lost Sight Exercise	1	1
48	Tail-Chase/Pursuit Curves (Pure, Lead, Lag)	1	1
49	ONAV Chart	4+	1
50	Turn-Point Identification	4+	1
51	ONAV Turn-Point Procedures	4+	1
52	Checkpoint Utilization/Correlation	4+	1
53	Hazard Calls	4+	1
54	Course Analysis/Corrections	4+	1
55	Timing Analysis/Speed Corrections	4+	1
56	Altitude Selection/Compliance	4+	1
57	Wind Analysis/Compensation	4+	1
58	Target Acquisition	4+	1
59	Section Target Attack	4+	1

Blk #	Media	Title	Events	Hrs	H/X
STK41	T-6A	Strike Fighter	7	10.5	1.5

1. Prerequisite. TAC4104 prior to STK4101-7 (in order).

2. Syllabus Notes

- a. Flights in this block shall be flown in section.
- b. Student will alternate leading section events. Student will assume lead during section flight when not paired up with student wingman.
- c. Wing student should be prepared to take the lead at any point during any flight.
- d. A minimum of three instrument approaches shall be performed as lead and three approaches shall be performed as wing in block.
- e. During this block, students must fly a minimum of three low-level events and three section instrument events.
- f. Flights should be flown as out-and-in or cross-country events to the maximum extent possible.
- g. Students shall prepare and have available a DD-1801 and flight log for both primary and alternate routes on each event.
- h. Formation management shall be graded for both the lead and wing on all Strike Fighter Formation events.
- i. Type of approach performed shall be documented on the ATF for both lead and wing. When performing an instrument approach from either the lead or wing aircraft, both students shall be graded on the maneuver item entitled "Section Approach Procedures," however only the lead student will be graded on the appropriate approach flown.
- j. Students will plan, brief, execute, and debrief a section tactical formation event. Students shall accomplish at least one NAV/geographic rendezvous as lead and wing.
- k. Low altitude route events in block shall be accomplished on a low-altitude MTR using visual navigation procedures at prescribed route altitudes, no lower than 500 feet AGL.

3. Special Syllabus Requirements. None.

4. Discuss Items

STK4101

CNAF M-3710 formation takeoff and approach minimums, section crew coordination, section missed approach procedures, and any EP and limitation.

STK4102

Lost Sight procedure, any formation EP and limitation, and any EP and limitation.

STK4103

Section fuel management; individual clearances for departure, individual clearances for recovery, section management on instrument approach, any EP and limitation.

STK4104

Low level route entry techniques, entry timing, and any EP or limitation.

STK4105

Low-altitude flight safety, crew coordination for low-altitude operations, wingman responsibilities on the MTR, and any EP and limitation.

STK4106

Section low-altitude target attacks, and target attack abort parameters, and any EP and limitation.

STK4107

Advanced strike planning, execution and timing control, and any EP and limitation.

5. Block MIF

CTS REF	MANEUVER	STK4107
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Composite Headwork/SA	4+
4	BAR	4+
5	CRM/Crew Coordination	4+
6	NFO Responsibilities	4+
7	Mission Planning	4+
8	Brief/Debrief	4+
9	Ground Procedures	4+
10	Radio Procedures	4+
11	Departure	4+
12	In-Flight Checks	4+
13	Mission Ownership/Assertiveness	4+
14	In-Flight Planning	4+
15	Use of ATIS/PMSV/FSS	4+
16	In-Flight Briefings	4+
17	Fuel Management/Analysis	4+
18	In-Flight Computations	4+
19	En route Procedures	4+
20	Point-to-Point	4+
21	Instrument Turn-Point Procedures	4+
22	Arcing	1
23	Holding (VOR)	1
24	Holding (GPS)	4+
25	VOR Approach	4+
26	GPS Approach	4+
27	Localizer Approach	1

MIF continued on next page.

CTS REF	MANEUVER	STK4107
28	ILS Approach	4+
29	Circling Approach	1
30	RA/GCA	4+
31	Missed Approach	4+
32	Taxi and Marshal	4+
33	Formation Takeoff	3+
34	Wingman Communication	3+
35	TAC/ADMIN	4+
36	Formation Management	4+
39	Section Approach Procedures	4+
40	Approach/Landing (Non-precision or Precision)	1
41	Section Break	4+
43	SUA/MTR Entry/Exit Procedures	4+
45	Visual Lookout	4+
46	Lost Sight Exercise	1
48	Tail-Chase/Pursuit Curves (Pure, Lead, Lag)	1
49	ONAV Chart	4+
50	Turn-Point Identification	4+
51	ONAV Turn-Point Procedures	4+
52	Checkpoint Utilization/Correlation	4+
53	Hazard Calls	4+
54	Course Analysis/Corrections	4+
55	Timing Analysis/Speed Corrections	4+
56	Altitude Selection/Compliance	4+
57	Wind Analysis/Compensation	4+
58	Target Acquisition	4+
59	Section Target Attack	4+

Blk #	Media	Title	Events	Hrs	H/X
STK42	T-6A	Strike Fighter Check Flight	1	1.5	1.5

1. Prerequisite. STKF4107 prior to STK4290.

2. Syllabus Notes

a. Event may be flown as a section instrument flight, low altitude MTR event, or any combination of the two disciplines.

b. Emphasis will be placed on mission ownership, flight leadership, and assertiveness.

c. Flight shall be flown in section. Wing student should be prepared to take the lead at any point during any flight. Students should lead this event unless they were the lead during the STK4107 flight event.

d. Students shall prepare and have available a DD-1801 and flight log for both primary and alternate routes for this event.

e. Formation management shall be graded for both the lead and wing aircraft.

f. Type of approach performed shall be documented on the ATF for both lead and wing aircraft. When performing an instrument approach from either the lead or wing aircraft, both students shall be graded on the maneuver item entitled "Section Approach Procedures" AND "Approach/Landing."

g. Low altitude route events in block shall be accomplished on a low-altitude MTR using visual navigation procedures at prescribed route altitudes, no lower than 1000 feet AGL.

3. Special Syllabus Requirements. None.

4. Discuss Items. Any previous discuss item, any limitation, and any EP.

5. Block MIF

CTS REF	MANEUVER	STK4290
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Composite Headwork/SA	4+
4	BAR	4+
5	CRM/Crew Coordination	4+
6	NFO Responsibilities	4+
7	Mission Planning	4+
8	Brief/Debrief	4+
9	Ground Procedures	4+
10	Radio Procedures	4+
11	Departure	4+
12	In-Flight Checks	4+
13	Mission Ownership/Assertiveness	4+
14	In-Flight Planning	4+
15	Use of ATIS/PMSV/FSS	4+
16	In-Flight Briefings	4+
17	Fuel Management/Analysis	4+
18	In-Flight Computations	4+
19	En route Procedures	1
20	Point-to-Point	1
21	Instrument Turn-Point Procedures	1
22	Arcing	1
23	Holding (VOR)	1
24	Holding (GPS)	1
25	VOR Approach	1
26	GPS Approach	1
27	Localizer Approach	1
28	ILS Approach	1

MIF continued on next page.

CTS REF	MANEUVER	STK4290
29	Circling Approach	1
30	RA/GCA	1
31	Missed Approach	1
32	Taxi and Marshal	4+
33	Formation Takeoff	4+
34	Wingman Communication	1
35	TAC/ADMIN	4+
36	Formation Management	4+
39	Section Approach Procedures	4+
40	Approach/Landing (Non-precision or Precision)	4+
41	Section Break	1
43	SUA/MTR Entry/Exit Procedures	1
45	Visual Lookout	4+
46	Lost Sight Exercise	1
48	Tail-Chase/Pursuit Curves (Pure, Lead, Lag)	1
49	ONAV Chart	1
50	Turn-Point Identification	1
51	ONAV Turn-Point Procedures	1
52	Checkpoint Utilization/Correlation	1
53	Hazard Calls	1
54	Course Analysis/Corrections	1
55	Timing Analysis/Speed Corrections	1
56	Altitude Selection/Compliance	1
57	Wind Analysis/Compensation	1
58	Target Acquisition	1
59	Section Target Attack	1

Chapter VIII

Tactical Formation Training

1. Seating. Student shall occupy the rear cockpit during this stage.
2. Matrices. The stage included in this chapter contains only a single block. There is a single matrix following the block description in this chapter.
3. Tactical Formation Stage Training Objectives. The Tactical Formation stage is designed to build upon SNFO knowledge, skills and abilities acquired during Primary NFOTS formation training. This stage is will introduce new tactical formation flight procedures and dynamic maneuvering, and will also reinforce basic formation procedures learned during Primary NFOTS. Emphasis will be placed on flight conduct and coordination, and procedural recall and execution. Students will assume the role of Mission Commanders in the complete execution of the event from preflight planning to post flight debrief IAW FTIs, squadron directives, and instructor recommendations.

Blk #	Media	Title	Events	Hrs	H/X
TAC41	T-6A	Tactical Formation	4	4.8	1.2

1. Prerequisite. ISF3101 prior to TAC4101-4 (in order).
2. Syllabus Note. Emphasis should be placed on preflight briefings, procedural recall and individual maneuver item execution, with the following guidance:
 - a. Flights in this block shall be flown in section.
 - b. SNFO will alternate leading section events or will assume lead during section flights when not paired up with SNFO wingman.
 - c. Wing student should be prepared to take the lead at any point during any flight.
 - d. Formation Management shall be graded for both the lead and wing aircraft.
 - e. A minimum of two section approaches shall be accomplished in the block to include each student executing at least one approach from the lead position and at least one approach from the wing position.
 - f. A minimum of three touch-and-go landings in the VFR pattern shall be accomplished in the block.

3. Special Syllabus Requirements. None.

4. Discuss Items

TAC4101

Section tactical formation procedures, NAV//geographic rendezvous, and any EP.

TAC4102

Tail-chase/pursuit curves, lead change, SOP minimum landing interval and any EP.

TAC4103

Section emergencies, PEL, and any EP.

TAC4104

Landing Pattern, Blind procedures, and any EP.

5. Block MIF

CTS REF	MANEUVER	TAC4104
1	General Knowledge/Procedures	4+
2	Emergency Procedures	4+
3	Headwork/Situational Awareness	4+
4	BAR	4+
5	CRM/Crew Coordination	4+
6	NFO Responsibilities	4+
7	Mission Planning	4+
8	Brief/Debrief	4+
9	Ground Procedures	4+
10	Radio Procedures	4+
11	Departure	4+
12	In-Flight Checks	4+
14	In-Flight Planning	4+
15	Use of ATIS/PMSV/FSS	4+
16	In-Flight Briefings	4+
17	Fuel Management/Analysis	4+
32	Taxi and Marshal	4+
33	Formation Takeoff	3+
34	Wingman Communication	3+
35	TAC/ADMIN	4+
36	Formation Management	4+
37	Rendezvous	3+
38	Underrun	3+
39	Section Approach Procedures	4+
40	Approach/Landing	4+
41	Section Break	4+
42	Landing Pattern	4+
44	NAV/Geographic Rendezvous	4+

MIF continued on next page.

CTS REF	MANEUVER	TAC4104
45	Visual Lookout	4+
46	Lost Sight Exercise	3+
47	Tactical Formation/Maneuvering	4+
48	Tail-Chase Pursuit (Pure, Lead, Lag)	4+
60	Precautionary Emergency Landing (PEL)	4+
61	Section Emergencies	3+

Chapter IX

Course Training Standards

1. Purpose. These standards outline the tasks and proficiency required of SNFOs during the Intermediate Strike Fighter NFOTS phase.

2. Student Duties and Responsibilities

- a. Plan the mission.
- b. Ensure the aircraft is preflighted, inspected, and equipped for the assigned mission.
- c. Operate the aircraft to accomplish the mission using sound judgment and airmanship.

3. General Standards

- a. Achieve training standards for Visual Meteorological Condition (VMC) maneuvers in conjunction with visual clearing.
- b. Unless otherwise specified, use Basic Airwork Recognition (BAR) standards for all items with altitude, airspeed or heading parameters.
- c. “Standard” equates to *good* (G/4).
- d. Momentary deviations outside CTSs 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 SNFO...”

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. Beginning with Instruments, each stage's MIF table is listed followed by the course training standards which are introduced in that stage. Some of the standards are unique to that stage, while others may apply to later stages. Once the standard for a graded item has been established, it will not be repeated in the Course Training Standards list of later stages, but remains available to be graded.

7. Course Training Standards

UNIVERSALLY GRADED ITEMS

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 (PCL) 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. Composite Headwork/SA	
<ul style="list-style-type: none"> Comply with the FTI, SOP, and NATOPS while maintaining Situational Awareness (SA) 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.

BEHAVIOR STATEMENT	STANDARDS
4. Basic Airwork Recognition (BAR)	
<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 (en route phase) and effectively 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.
5. Crew Resource Management/Crew Coordination	
<ul style="list-style-type: none"> ● Use available crew and cockpit resources to minimize workload and enhance SA. ● 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.
6. NFO 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.
7. Mission Planning	
<ul style="list-style-type: none"> ● 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 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, FLIPs, NOTAMs) prior to brief. ● Adjusts tactical admin based on weather forecast and appropriate controlling documents. ● Ensures SUA/MTR scheduled.

BEHAVIOR STATEMENT	STANDARDS
8. Brief/Debrief	
<ul style="list-style-type: none"> ● Prepare 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.
9. Ground Procedures	
<ul style="list-style-type: none"> ● Provide astute backup for pilot during all taxi operations. ● Begin when departing for the aircraft and end when cleared for takeoff. ● Begin again when aircraft clears the runway and end 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.
10. 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. ● Makes timely transmissions without stepping on other radio calls. ● Is able to discuss or perform NORDO procedures, as required. ● If lead, executes proper formation lead communication procedures IAW the applicable FTI.

BEHAVIOR STATEMENT	STANDARDS
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. ● Performs operations check at least every 20 minutes.
13. Mission Ownership/Assertiveness	
<ul style="list-style-type: none"> ● Exhibit aviation leadership. ● Take charge of the mission in all aspects of planning and execution. 	<ul style="list-style-type: none"> ● Leads planning, briefing and execution of the mission. ● Confidently influences aircrew to work in a coordinated effort toward successful task completion within the parameters of the mission objectives. ● Determines actionable solutions to potential problems articulating proactive alternatives/courses of action. ● Takes command of mission execution and provides reasoned alternatives to mission plan due to evolving and dynamic circumstances.
14. In-Flight Planning	
<ul style="list-style-type: none"> ● Plan and execute required maneuvers and/or flight profile IAW all applicable instructions. ● Understand current and required position. ● Course and destination deviation as appropriate for weather, fuel, or emergencies. 	<ul style="list-style-type: none"> ● Adjusts mission profile for external factors (weather, traffic, diverts, etc.). ● Maintains positional awareness using ground references, navigational aids, VFR charts, or FLIPs. ● Contacts appropriate controller and requests deviations in a timely manner IAW OPNAVINST 3710.7U.

BEHAVIOR STATEMENT	STANDARDS
15. 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 en route, when required. ● Contacts FSS to: <ul style="list-style-type: none"> ▶ Open flight plans after departure. ▶ Change flight plans en route. ▶ Close flight plans after landing.
16. 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/climb-out instructions when required using format delineated in the FTI with 90 percent accuracy.
17. 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. ● During the course of the event, analyze actual to preflight planned fuel at the IAF to assess mission feasibility. ● Monitor fuel status for section and direct deviations, if needed, to accomplish mission goals and land with adequate fuel reserves IAW OPNAVINST 3710.7U 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 turn-point and correctly states any trends in fuel consumption. ● Makes recommendations to mission execution based on fuel state to ensure OPNAVINST 3710.7U/TW-6/ Squadron requirements for MCF. ● Lead: <ul style="list-style-type: none"> ▶ Conducts fuel checks as required by FTI or every 20 minutes. ▶ Ensures that flight is conducted IAW SOP/NATOPS/FTI fuel requirements. ● Lead/wing: <ul style="list-style-type: none"> ▶ Recognizes and calls JOKER/BINGO fuel as necessary with 100 percent accuracy. ▶ Makes recommendations to continue visual route if applicable or return early to destination without error.

INSTRUMENT NAVIGATION

BEHAVIOR STATEMENT	STANDARDS
18. In-Flight Computations	
<ul style="list-style-type: none"> ● Compute IAW the FTI: <ul style="list-style-type: none"> ▶ Ground speed. ▶ ETE (to turn-points). ▶ 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.
19. En route 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 FLIPs. ● 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. ● Maintains within 2 NM of course centerline between all NAVAIDs and fixes. ● Correctly identifies NAVAID station, GPS waypoint, or intersection passage.
20. 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 miles of desired point.
21. Instrument Turn-Point Procedures	
<ul style="list-style-type: none"> ● Perform instrument turn-point 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 90 percent accuracy. ● Gives a wind-corrected outbound heading for a course, when able. ● Updates navigation aids appropriately.

BEHAVIOR STATEMENT	STANDARDS
22. 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 $\pm 3^\circ$.
23. 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.
24. 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
25. VOR Approach	
<ul style="list-style-type: none"> ● Direct a VOR approach IAW the FTL. 	<ul style="list-style-type: none"> ● IAF to FAF maintains course ± 1 dot or valid intercept. ● Properly directs the pilot to slow and take BAC IAW the FTL. ● By the FAF (when depicted) or initiating descent to MDA, completes landing checklist. ● Final: <ul style="list-style-type: none"> ▶ Maintains ± 1 dot of desired course. ▶ Reaches and maintains MDA +100/-0 feet. ▶ Ensures missed approach/climb-out instructions briefed prior to the MAP. ● Properly calculates and applies backup timing at the FAF. ● Properly identifies 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.
26. GPS Approach	
<ul style="list-style-type: none"> ● Direct a GPS approach IAW the FTL. 	<ul style="list-style-type: none"> ● 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 FAWP: <ul style="list-style-type: none"> ▶ Completes landing checklist. ▶ Ensures approach goes active prior to descent from FAWP. ● Final: <ul style="list-style-type: none"> ▶ Maintains ± 1 dot of desired course. ▶ Reaches and maintains MDA +100/-0 feet. ▶ Ensures missed approach/climb-out instructions briefed prior to the MAP. ● 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
27. 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. ▶ Ensures missed approach/climb-out instructions briefed prior to the MAP. ● 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.
28. ILS Approach	
<ul style="list-style-type: none"> ● Direct an ILS approach IAW the FTI. 	<ul style="list-style-type: none"> ● Prior to initiating descent to 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/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.

BEHAVIOR STATEMENT	STANDARDS
29. 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 climb-out instructions. ● Maintains airspeed +10/-0 KIAS of circling airspeed. ● Maintains altitude at circling minimums -0 feet.
30. 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/climb out instructions are received prior to DA or MAP. ● By glideslope intercept or descent to the MDA, completes landing checklist. ● Determines if the aircraft is in a position to execute a safe landing on 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 $\pm 3^\circ$.
31. 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"> ▶ Non-precision: <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.

SECTION INSTRUMENT NAVIGATION

BEHAVIOR STATEMENT	STANDARDS
32. Taxi and Marshal	
<ul style="list-style-type: none"> ● Perform taxi and marshal flight. ● Perform formation ground procedures. 	<ul style="list-style-type: none"> ● Performs IAW FTI and local procedures. ● Lead monitors wingman’s position. ● Performs appropriate section or division ground procedures as lead or wingman.
33. Formation Takeoff	
<ul style="list-style-type: none"> ● Perform section or interval takeoff. 	<ul style="list-style-type: none"> ● Performs IAW FTI and SOP. ● Lead: <ul style="list-style-type: none"> ▶ Monitors wingman. ▶ Directs appropriate type of takeoff for weather/runway conditions IAW FTI. ● Wing: Advises IP of airspeeds, engine and gear status. ● Performs responsibilities based on formation position IAW FTI and SOP.
34. 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.
35. TAC/ADMIN	
<ul style="list-style-type: none"> ● Completes Navigation check. ● Perform taxi and marshal flight. ● Execute G-warm/Fence-in at appropriate time (if applicable). ● Properly use visual cues (if applicable) and/or navigational aids to identify the route IFR/SUA/MTR entry/exit point. 	<ul style="list-style-type: none"> ● Performs IAW FTI and navigational tolerances to the pre-briefed point and updated point when changed by ATC or Lead as applicable. ● Performs IAW FTI and local procedures. ● Directs and/or executes G-warm when applicable and IAW the FTI. ● Performs assigned duties during entry and exit from SUA or MTR (if applicable). ● For MTR, contacts FSS IAW FTI to enter and exit the route and arrives at the entry point ±4 minutes of briefed time (if applicable).

BEHAVIOR STATEMENT	STANDARDS
36. Formation Management	
<ul style="list-style-type: none"> ● Use available crew and cockpit resources to minimize workload and enhance SA of section. ● Accomplish required in-flight duties. ● Plan and execute an IFR flight plan (when applicable) as a section. ● Understand and direct required section positioning. ● Accomplish/direct ADMIN/TAC ADMIN tasks in a timely manner. ● Monitor for own-ship proper section positioning (Wing). ● Monitor for proper navigation and compliance with assigned (Wing). 	<ul style="list-style-type: none"> ● Improves mission effectiveness by minimizing crew preventable errors and optimizing crew coordination. ● Performs appropriate in-flight checklists, when required, per NATOPS and FTI. ● Correctly identifies NAVAID stations, GPS waypoints, makes appropriate turn-point procedures (Instrument or low level as applicable). ● Lead: <ul style="list-style-type: none"> ▶ Maintains section in compliance with IFR flight plan, ATC clearances, prebrief approaches, etc. ▶ Adjust mission profile for external factors considering wingman (weather, terrain, traffic, etc.). ● Wing: <ul style="list-style-type: none"> ▶ Advises IP of deviations from lead-directed position and directs corrections over ICS prior to flight deviating from assigned clearance/airspace or safety-of-flight as required. ▶ Maintains positional and situational awareness so as to be able to assume the lead at any point during the mission.

BEHAVIOR STATEMENT	STANDARDS
37. Rendezvous	
<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.
38. 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.
39. Section Approach Procedures	
<ul style="list-style-type: none"> ● Execute an instrument approach as lead or wingman. 	<ul style="list-style-type: none"> ● Lead: <ul style="list-style-type: none"> ▶ Maintains instrument parameters and procedures. ▶ Utilizes wingman consideration. ▶ Manages flight configuration, communication, navigation to effectively allow wingman to make a safe touch-and-go or full stop. ● Wingman: <ul style="list-style-type: none"> ▶ Maintains position and configuration as directed by lead. ▶ Enhances pilot's situational awareness during execution of instrument approach procedures.

BEHAVIOR STATEMENT	STANDARDS
40. 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 glide-scope (if applicable). ▶ Begins backup timing when applicable. ▶ Reaches and maintains MDA +100/-0 feet. ▶ Ensures missed approach/climb-out instructions briefed prior to the DA/MAP. ● Properly identifies VDP when published (if applicable). ● 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 climb-out instructions. ● Directs safe landing procedures IAW NATOPS, FTI, and local procedures. ● Directs correct glide-path until flare initiation. ● Directs full-stop or touch-and-go procedures per FTI. ● Makes landing rollout calls until aircraft reaches 40 KIAS, as appropriate.
41. 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, NATOPS. ● Ensures no rate of descent is generated. ● As wingman, also monitors lead for level break.

BEHAVIOR STATEMENT	STANDARDS
42. 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 wave-off, 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.
<ul style="list-style-type: none"> ● Contacts tower for landing and downwind clearance or broadcasts intentions on CTAF. 	<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.
<ul style="list-style-type: none"> ● Directs/configures/trims aircraft for landing. 	<ul style="list-style-type: none"> ● By the abeam position, pattern airspeed +10/-0 KIAS.
<ul style="list-style-type: none"> ● Completes the landing checklist. 	<ul style="list-style-type: none"> ● 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.

TACTICAL FORMATION

BEHAVIOR STATEMENT	STANDARDS
43. SUA/MTR Entry/Exit Procedures	
<ul style="list-style-type: none"> ● Perform entry/exit procedures for SUA or MTR IAW FTI, briefing, and local standards. ● Properly use visual cues and navigational aids to identify the route or SUA entry/exit point. 	<ul style="list-style-type: none"> ● Performs assigned duties during entry and exit from SUA or MTR. ● Contacts airspace control authority and uses appropriate communications to gain clearance to enter/exit controlled airspace. ● For MTR, contacts FSS IAW FTI to enter and exit the route. ● Directs adherence to published or directed entry/exit restrictions with respect to altitude, heading, airspeed, position, squawk, etc. ● Arrives at the entry point ±4 minutes of briefed time.
44. NAV/Geographic Rendezvous	
<ul style="list-style-type: none"> ● Join up to parade position while lead is orbiting at a navigation 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.
45. Visual Lookout	
<ul style="list-style-type: none"> ● Keep visual on all formation members. ● Keep visual scan for any traffic/obstacles that are potential conflicts. 	<ul style="list-style-type: none"> ● Maintains visual and/or SA on all members of the formation. ● Understands and appropriately executes lost sight procedures. ● Keeps an active visual scan for any traffic/obstacles that are potential conflicts. ● Uses standard terminology and communication brevity.

BEHAVIOR STATEMENT	STANDARDS
46. Lost Sight Exercise	
<ul style="list-style-type: none"> ● Execute simulated lost sight procedures. 	<ul style="list-style-type: none"> ● Clearly and effectively directs and communicates with IP and other aircraft in the formation, as prescribed in the FTI, in order to establish safe separation.
47. Tactical Formation/Maneuvering	
<ul style="list-style-type: none"> ● Discuss/direct proper Tactical Formation positions and maneuvering. 	<ul style="list-style-type: none"> ● Correctly states/directs tactical formation positioning and maneuvering IAW FTI. ● Lead: <ul style="list-style-type: none"> ▶ 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.

BEHAVIOR STATEMENT	STANDARDS
48. Tail-Chase/Pursuit Curves (Pure, Lead, Lag)	
<ul style="list-style-type: none"> ● Execute tail-chase/ pursuit curves profile. ● Display knowledge and performance of pursuit curves. 	<ul style="list-style-type: none"> ● Performs IAW FTI. ● Displays knowledge and effective use of lead, lag, and pure pursuit. ● Lead: <ul style="list-style-type: none"> ▶ Advises IP of wingman’s position and status. ▶ Advises IP of aircraft parameters including airspeed, altitude, Gs, and fuel. ▶ Directs flight to remain within assigned area. ▶ Clears for the section. ▶ Attempts to maintain sight of wingman throughout maneuvering. ● Wingman: <ul style="list-style-type: none"> ▶ Maintains sight of Lead; advises IP when blind. ▶ Advises IP of applicable aircraft parameters including airspeed, altitude, Gs, and fuel. ▶ Makes recommendations to maintain constant relative position off Lead through use of pursuit curves.

SECTION VISUAL NAVIGATION

BEHAVIOR STATEMENT	STANDARDS
49. 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 via JMPS, IAW the FTI, to an accuracy of ±15 pounds (fuel), ±30 seconds overall and ±20 seconds at each turn-point (time), and ±2° plotting turn-point location 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 turn-point circle, hazards on route, and all altitude changes.

BEHAVIOR STATEMENT	STANDARDS
50. Turn-Point Identification	
<ul style="list-style-type: none"> ● Identify turn-points on a visual route. 	<ul style="list-style-type: none"> ● Identifies visual turn-points IAW FTI to an accuracy of 80 percent.
51. ONAV Turn-Point Procedures	
<ul style="list-style-type: none"> ● Perform ONAV turn-point calls. 	<p>Lead/Wing:</p> <ul style="list-style-type: none"> ● Makes 80 percent of ONAV two-minutes-prior, mark-on-top, and wings-level calls using proper format and terminology. ● When wings level after passing each preplanned turn-point, analyzes fuel and updates ETA to next preplanned turn-point to an accuracy of 80 percent.
52. Checkpoint Utilization/Correlation	
<ul style="list-style-type: none"> ● Identify/use visual 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. ● Determines geographic position from appropriate visual references to an accuracy of 1 NM. ● Maintains positional awareness during route of flight using clock-chart-ground correlation.
53. 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, 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
54. Course Analysis/Corrections	
<ul style="list-style-type: none"> ● Determine aircraft position in relation to intended course. ● Perform standard course corrections IAW FTI to correct back to the specified course line. ● Navigate on a specified visual route using dead reckoning/visual cues to correct back to planned course. 	<ul style="list-style-type: none"> ● Remains within 2 NM of route centerline, unless route restrictions dictate otherwise. ● Lead: <ul style="list-style-type: none"> ▶ 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. ● Wing: <ul style="list-style-type: none"> ▶ Maintains route situational awareness and makes appropriate course correction recommendations to Wing IP.
55. 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"> ● Gives a time hack during brief. ● Timely and accurately calculates and applies speed corrections IAW FTI. ● Arrives at the target within ± 1 minute from preflight real-world time on target. ● Updates ETA to 100 percent accuracy. ● Lead: <ul style="list-style-type: none"> ▶ Timely and accurately applies timing corrections IAW FTI. ▶ Calculates and initiates timing corrections to within ± 5 knots and ± 6 seconds of IP calculations. ● Wing: Maintains timing awareness and makes appropriate correction recommendations to Wing IP.

BEHAVIOR STATEMENT	STANDARDS
56. Altitude Selection/Compliance	
<ul style="list-style-type: none"> ● Select the proper altitude to and from visual route. ● Maintain route altitude. 	<ul style="list-style-type: none"> ● Lead: <ul style="list-style-type: none"> ▶ Directs IP to climb/descend as required to maintain VFR hemispheric altitudes. ▶ Directs IP to maintain route altitude. ● Wing: <ul style="list-style-type: none"> ▶ Monitors formation compliance with route altitudes. ▶ Maintains step-up on Lead in combat spread. ▶ Makes recommendations and/or directs lead aircraft when appropriate to correct relevant deviations.
57. 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 using course/timing trends and/or ground references/visual cues. 	<ul style="list-style-type: none"> ● Correctly calculates crab and airspeed compensations IAW FTI prior to brief. ● Determines approximate wind direction $\pm 30^\circ$ and ± 10 knots and maintains proper crab angle $\pm 5^\circ$. ● Correctly applies 50 percent of crab and airspeed compensations for headwinds and crosswinds. ● Directs appropriate heading change to return to course $\pm 2^\circ$ of IP calculations.
58. 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.
59. Section Target Attack	
<ul style="list-style-type: none"> ● Perform section target attack IAW FTI, briefing, and local standards. 	<ul style="list-style-type: none"> ● Determines correct parameters for Z-diagram. ● Selects proper action point. ● Directs execution of section target attack procedures and communications IAW FTI.

BEHAVIOR STATEMENT	STANDARDS
60. Precautionary Emergency Landing (PEL)	
<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. ● Lead: <ul style="list-style-type: none"> ▶ Selects and effectively navigates to the nearest suitable landing site. ▶ Executes appropriate EP procedures with 100% accuracy. ● Wing: <ul style="list-style-type: none"> ▶ Monitors for nearest suitable field. ▶ Provides backup as necessary for other aircraft.
61. Section Emergencies	
<ul style="list-style-type: none"> ● Given simulated emergency conditions, direct appropriate procedures IAW NATOPS. ● Provide support to other formation aircraft. 	<ul style="list-style-type: none"> ● Lead: <ul style="list-style-type: none"> ▶ Execute appropriate NATOPS and PCL procedures. ● Wing: <ul style="list-style-type: none"> ▶ Provide mutual support and SA to lead aircraft as appropriate.

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Chapter X

Master Materials List

1. Individually Issued Materials

<u>NOMENCLATURE</u>	<u>IDENTIFICATION</u>	<u>QTY PER STUDENT</u>
a. Master Curriculum Guide	CNATRAINST 1542.163C	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. Electronic Knee Board	NAVAIR iPad	1

2. Aircraft and Major Training Devices

a. T-6A Texan II Aircraft.

b. 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).

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

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