

Flying Training

Navigator Introductory Flight Training

April 2004



Air Education and Training Command

April 2004

This syllabus outlines the training required to achieve the proficiency specified in the course training standards. It prescribes the course content, instructions to conduct the training, and the approximate time necessary to successfully complete all requirements. Any training not specifically authorized in this syllabus or other AETC directives is prohibited without prior approval of this headquarters. Forward suggestions to HQ AETC/DOFI, 1 F STREET STE 2, RANDOLPH AFB TX 78150-4325. The next planned revision is April 2006.

OFFICIAL



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Supersedes AETC Syllabus S-V8A-E, May 2003

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Summary of Changes

The revised *Navigator Introductory Flight Training* Syllabus includes the following changes:

- Changes the intent and direction of NIFT to allow students the opportunity to solo
- Does not authorize any waiver to the 20-hour completion time to complete solo opportunity
- Allows students to fly sorties with their instructor to complete a cross-country out-and-back upon completion of their solo
- Students are graded on numerous facets leading up to the solo opportunity
- Allows some students the opportunity to compete for RPA training upon completion of CSO Training

Chapter 1

Course Description

1. **Title** — Navigator Introductory Flight Training (NIFT)
2. **Number** — S-V8A-E
3. **Objective** — Prepare navigator candidates for entry into Joint Specialized Undergraduate Navigator Training (JSUNT) and screen candidates for possible entry into Remotely Piloted Aircraft (RPA) Training. This training includes:
 - a. Flying training to teach the principles and techniques used in basic flying operations
 - b. Ground training to supplement and reinforce flying training.
4. **Duration** — 5 preflight days, plus 20 flying training days. The entire NIFT program should be completed within 45 calendar days. The program should be completed no later than 15 days prior to beginning Joint Specialized Undergraduate Navigator Training.
5. **Entry Prerequisites** — Selected as a candidate for JSUNT and be medically qualified by completing a Federal Aviation Administration (FAA) Class III Medical Certificate. Students with an FAA private pilot or higher certificate and formerly rated military pilots are not entered into this program.
6. **Status Upon Graduation** — Commissioned officer graduates of this course are qualified to enter JSUNT.
7. **Flying Training** — The training objectives are designed to expose the student to basic flight operations and are derived from the private pilot certificate (PPC) practical test standards. The times specified are actual mission times and do not include time for briefing or debriefing.

Sorties/Approximate Hours

Dual Flying	14/19.1
Solo Flying*	<u>1/0.9</u>
<i>Total</i>	15/20.0

* All navigator candidates are given the opportunity to solo. Navigator candidates who are unable to solo fly dual-only and may be restricted from the RPA track.

8. **Ground Training** — NIFT students complete an FAA-approved ground training program. Students must pass the FAA Knowledge Test.

Chapter 2

Course Administration

Section A — Syllabus Management

1. **Syllabus Interpretation** — This syllabus is directive and must be followed as written. If no clear syllabus guidance exists, contact the OPR, HQ AETC/DOFI, at DSN 487-6341, or Commercial (210) 652-6341.
2. **Syllabus Waiver** — An approved syllabus waiver is required for any *planned* exception to the syllabus caused by special or unusual circumstances. Permanent or blanket waivers are *not* authorized, but should be suggested as syllabus changes. Submit waiver requests electronically or in writing, on AETC Form 6, *Waiver Request*, through 19 AF/DOZ to 19 AF/DO. 19 AF/DOZ provides AETC/DOFI a copy of all waiver requests with the approval/denial outcomes annotated. Do not accomplish or omit any training requested in a waiver until notification of approval. Maintain a permanent record of all approved waivers in the students' training folders.
3. **Syllabus Deviation** — A syllabus deviation is any *unplanned* variation from syllabus requirements such as prerequisite flow. Document *all* syllabus deviations in the student's training folder. All syllabus-directed training must be accomplished unless a waiver request is approved. If unforeseen circumstances result in an omission of required training, the flight instructor determines if the omitted training can be accomplished later in the syllabus flow without adversely affecting the quality of student training. Document instructor-directed corrective actions, and the accomplishment of the omitted training in the student's training folder.

Section B — Training Management

1. **Supervisor Responsibilities**
 - a. Supervise and monitor student training. Supervisors are directly responsible for the day-to-day and overall training of each student under their supervision.
 - b. Assist students and flight instructors with the training review process and provide for discipline, physical and mental well-being, and general welfare of students. They must be aware of each student's progress in all areas, including the potential effect of external factors (personal problems, etc.). Supervisors accomplish the following:
 - (1) Counsel students when they are determined to be marginal performers. Conduct follow-up counseling as often thereafter as necessary.
 - (2) Maintain a training folder in accordance with local guidance, including:
 - (a) Instructor assignment.
 - (b) Documentation of any substandard performance.
 - (c) Record of formal counseling.
 - (d) Document any syllabus deviations or training waivers.

Note — Maintain sensitive personal information in a secure location.

 - (3) Ensure proper training management, including student processing.
 - (4) Assist in syllabus-directed functions.

2. Training Requirements and Restrictions

- a. *Average Hours/Events* — This syllabus permits the student to complete the course objectives in 20.0 flying hours. The flying hours reflect an estimate of the flight time required to complete the prescribed profiles. There may be slight differences in flight time requirements because of airspace or other physical considerations. However, every effort must be made to complete the sortie profiles in the allotted times.
- b. *Maximum Hours* — A maximum of 20.0 flying hours is authorized for NIFT. No waiver requests will be granted to exceed the 20.0-hour limit.
- c. *Lesson Lengths* — Lessons and approximate flying hours are listed below. Adhere to the approximate time per lesson as closely as possible for the average student. For each lesson, one additional hour is allotted for briefing and debriefing combined.

<i>Lesson</i>	<i>Flight Time</i>	<i>Briefing & Debriefing</i>	<i>Total Time</i>
C101	1.4	1.0	2.4
C201 – 05	1.4	1.0	12.0
C301 – 06	1.4	1.0	14.4
C490 (Stage Check)	1.4	1.0	2.4
C501	.9	.5	1.4
C502 (Solo)	.9	.5	1.4
<i>Total</i>	20.0	14.0	34.0

- d. *Maximum Daily Student Flying Activities* — Students may not exceed two lessons per day except to finish an incomplete lesson.
- e. *Minimum Total hours* — No student may complete this program with less than 15 hours
- f. *Post-solo flying hours* — If a student solos prior to flying 20 hours, the remaining flight hours may be used for additional **dual-only** sorties. On post-solo flights, emphasize navigation and cross country training. Students **will not** exceed 20 hours in the NIFT program.
- g. *Extracurricular Flying* — NIFT students are encouraged to participate in additional flying training (e.g. FAA private pilot training) at no expense to the government. NIFT training objectives are the primary focus of government-purchased flying time. However, since many NIFT training objectives are transferable to obtaining FAA private pilot certification, students are encouraged to use this opportunity to further their flight training at their own expense.

3. Manifestations of Apprehension (MOA) — Although some slight anxiety or nervousness is common among students learning to fly, real fear of flying can interfere with judgment, decision making, and physical ability to control aircraft. MOA may include passive or active airsickness, insomnia, loss of appetite, anxiety and tension related to the flying environment. When a student exhibits or admits to MOA symptoms that impair performance, document the situation in the student's training folder. Instructors ensure the student's supervisor is aware of any students having MOA/airsickness problems.

4. Flying Safety — Emphasize emergency procedures, air discipline, and judgment to develop flying safety awareness. Present safety briefings once per week (minimum) to promote group discussions of the briefing topics and improve student attitudes associated with aircraft mishap prevention.

5. Emergency Procedures (EP) Training

- a. Conduct EP training on all dual aircraft sorties to build the student's confidence in the aircraft. Conduct EP training during the mission briefing or debriefing for all flights, emphasizing proper application of procedures and realistic use of available publications. Attempt to correct procedural deficiencies by providing additional instruction and study assignments based on individual student needs.
- b. Thoroughly brief simulated aircraft emergencies prior to flight.

6. Solo Requirements and Restrictions

- a. Prior to flying C501 each student must pass a written test, demonstrating adequate knowledge of
 - (1) Federal Aviation Regulations (Title 14 Code of Federal Regulations, Parts 61 and 91.)
 - (2) Airspace rules and procedures for the airport where the solo flight is planned to be flown.
 - (3) Flight characteristics and operational limitations for the make and model of aircraft to be flown.
- b. At the conclusion of the test, all incorrect answers are reviewed before conducting the flight.
- c. Accomplish both sorties of C5XX on the same day. Where possible, use the same aircraft for the solo flight (C502) as was used on the dual sortie (C501).

7. Drop On Request (DOR) — Students may remove themselves from training by dropping on request. Supervisors must counsel the student on the implications of DOR and future flight training. Normally, students who elect to DOR are not eligible for acceptance into any other USAF course of flying training (UPT, JSUNT, ABM) at a later date. Supervisors remove the student from the NIFT program and notify the HQ 19 AF or USAFA program manager via AETC Form 126A for appropriate action (refer to AETCI 36-2205).

Chapter 3

Training Documentation

1. Task Accomplishment — Document task accomplishment on the NIFT Gradesheet, AETC Form 33, using the following grades:

- a. **Demonstrated (D)** — Enter D on the record of training when the CFI demonstrates the maneuver.
- b. **Performed (P)** — Enter P on the record of training if the student accomplishes the operation, maneuver or task.

Students ensure the AETC Form 33, NIFT Gradesheet, is provided to and completely filled out by the CFI. This gradesheet is the documentary evidence of training and lesson completion. Gradesheets can be obtained from HQ 19 AF, Randolph AFB TX or 34 OG, USAF Academy CO. When students complete NIFT, they provide their completed gradesheet(s) to the 19 AF or USAFA NIFT administrator (as appropriate). 19 AF and USAFA administrators maintain the gradesheets for historical data reference. Maintain and dispose of according to AFMAN 37-139, *Records Disposition Schedule*.

2. Course Training Standards — All tasks are required to be demonstrated (D) as a minimum to complete this program. Refer to FAA Private Pilot Practical Test Standards (FAA-S-8081-14) for description of individual tasks and objectives. Prior to their solo flight, students must meet the requirements listed in FAR 61.87.

3. Duties and Responsibilities

- a. **Flight Instructors** — Ensure student flight logbooks are properly maintained and updated. Complete flight log documentation and solo authorization in accordance with FAA regulations. Review student's NIFT Gradesheet before each flight. Document any unaccomplished tasks, waivers, or syllabus deviations on the student's NIFT Gradesheet.
- b. **Students** — Maintain an FAA approved flight logbook. Ensure the NIFT Gradesheet is accurate and complete.

Chapter 4

Flying Training

Section A — Ground Training

Enter the student in an FAA-approved ground training program. If available, the student should attend a formal classroom program. Students must **pass** the FAA Knowledge Test. Failure to pass the FAA written examination is cause for elimination from this program. Students are allowed to retake the examination until they pass, as long as they comply with FAA regulations. Supervisors must be advised and involved in any instances of student failure.

Section B — Aircraft

<i>Unit</i>	<i>Title/Objectives</i>	<i>Sorties Dual/Solo</i>	<i>Hours Dual/Solo</i>	<i>Total Hours Dual/Solo</i>
C101	Orientation (Pre-Solo)	1/0	1.4/0	1.4/0
Objective — Student practices basic aircraft control while adapting to the aircraft and basic maneuvers. Checklist use Ground operations Basic aircraft control Departure and arrival				
C201 – 205	Fundamental Maneuvers (Pre-Solo)	5/0	7.0/0	8.4/0
Objective — Student builds on basic aircraft control while adding additional maneuvers. Maneuvering during slow flight Steep turns Power-on stalls / power-off stalls Traffic patterns Normal / crosswind approach and landing No flap approach and landing Forward slips to a landing Breakout and go-around VOR/ADF operation / orientation				
C301 – 6	Flight Environment (Pre-Solo)*	6/0	8.4/0	16.8/0
Objective — Student builds on basic aircraft control and gains proficiency, while adding additional maneuvers. Previously introduced maneuvers S-Turns / Rectangular Course / Turns Around a Point High and low altitude emergency approach and landing				
* 1 sortie should be flown pattern only				
C490	Stage Check	1/0	1.4/0	18.2/0
Objective — Evaluate student performance in previously introduced maneuvers.				
C501 – 2	Supervised Solo	1/1	0.9/0.9	20.0/0.9
Objective — Student successfully flies the aircraft solo. (Prior to solo flight, ensure testing and documentation are complete.) Dual — 3 satisfactory patterns / landings, go-around Solo — 3 patterns / landings to a full stop(min)				

Chapter 5

General Instructions

Section A — Bibliography

1. Private Pilot Kit (may include)

- a. Private Pilot Manual
- b. Maneuvers Book
- c. Private Pilot FAA Airman Knowledge Study Guide and Question Bank
- d. Private Pilot FAA Practical Test Study Guide
- e. E-6B Computer
- f. Plotter
- g. FAR/AIM Book
- h. Logbook

2. Other Items (as required)

- a. Headset
- b. Sectional Charts
- c. Instrument Approach Procedures Book
- d. Ground School Videos/CD ROM Course (if not enrolled in formal classroom environment)

3. Forms Prescribed

- a. AF Form 4293, Student Activity Record (with NIFT Overprint) — Page 8
- b. AETC Form 6, Waiver Request
- c. AETC Form 33, NIFT Gradesheet — Pages 9 and 10

NAVIGATOR INTRODUCTORY FLIGHT TRAINING GRADE SHEET

This form contains personal information protected by the Privacy Act of 1974. Form will be safeguarded from unauthorized disclosure and will be disposed of according to AFI 33-332.

STUDENT NAME	SSN	MEDICAL CERTIFICATE DATE	FAA KNOWLEDGE TEST DATE	SCORE
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CFI NAME	FLIGHT SCHOOL	PRESOLO WRITTEN	USAF SUPERVISOR NAME
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GRADING P = PERFORMED D = DEMONSTRATED

DATE																				
FLIGHT LESSON NO.																				
LESSON TIME																				
CUMULATIVE TIME																				
STUDENT INITIALS																				
INSTRUCTOR INITIALS																				

GENERAL

CHECKLIST USE																				
CLEARING																				
RADIO COMMUNICATIONS																				
USE OF TRIM																				
RISK MGT AND DECISION MAKING																				
SITUATIONAL AWARENESS																				
EMERGENCY PROCEDURES																				
TASK MANAGEMENT																				

SPECIFIC

MISSION PLANNING																				
PREFLIGHT INSPECTION																				
GROUND OPS																				
NORMAL TO																				
CROSSWIND TO																				
DEPARTURE AND ARRIVAL																				
STRAIGHT AND LEVEL FLIGHT																				
CLIMBS AND DESCENTS																				
TURN																				
STEEP TURNS																				
SLOW FLIGHT																				
POWER ON/OFF STALLS																				
S-TURNS																				
TURN AROUND A POINT																				
RECTANGULAR COURSE																				
TRAFFIC PATTERN																				
NORMAL APPROACH AND LANDING																				
CROSSWIND APPROACH AND LANDING																				
NO FLAP APPROACH AND LANDING																				
FORWARD SLIP TO LANDING																				
BREAKOUT/GO AROUND																				
VOR/ADF ORIENTATION AND OPERATION																				
BASIC INSTRUMENT MANEUVERS																				
SIMULATED FORCED LANDING																				

STUDENT SOLO COMPLETED
 STUDENT COULD SOLO GIVEN ADDITIONAL HOURS

I CERTIFY THIS FORM IS TRUE AND ACCURATE.

INSTRUCTOR SIGNATURE	STUDENT SIGNATURE
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REMARKS AS REQUIRED (*Document any unusual circumstances and syllabus deviations on sortie -- include sortie number.*)