

Flying Training

# Combat Systems Officer Initial Flight Training

August 2015



Air Education and Training Command

DEPARTMENT OF THE AIR FORCE  
Headquarters Air Education and Training Command  
Randolph AFB TX 78150-4325

AETC Syllabus S-V8C-S

August 2015

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/A3FP, 1 F STREET STE 2, RANDOLPH AFB TX 78150-4325. The next planned revision is August 2017.

OFFICIAL

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### **Summary of Changes**

- Modifies the name of the program from Initial Flight Screening to Initial Flight Training to reflect a shift in emphasis from screening to training
- Expands the additional training sortie guidance
- Clarifies guidance on maximum daily student flying activities.
- Deletes ground reference maneuvers and no-flap landings from the CTS / MIF tables and Unit Objectives.
- Deletes CSO-flown area maneuvers on final check.
- Makes additional updates to the CTS / MIF table.
- Updates the Course Prerequisites table.
- Adds 1 hr of academic training and reduces ground instruction by .5 hr.
- Changes the numbering of AETCI 36-2205 to AETCI 36-2605
- Makes minor administrative corrections.

# Chapter 1

## Course Description

1. **Title** — Combat Systems Officer (CSO) Initial Flight Training (IFT)
2. **Number** — S-V8C-S
3. **Objective** — Motivate and prepare CSO candidates for entry into Undergraduate CSO Training (UCT). 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.
  - c. Orientation to military flight training.
4. **Location** — Pueblo, Colorado
5. **Duration** — 18 training days.
6. **Entry Prerequisites** — Selected as a candidate for UCT and medically qualified (USAF Flying Class 1A Medical Examination, IAW AFI 48-123, *Medical Examinations and Standards*.)
7. **Status Upon Graduation** — Graduates of this course are qualified to enter UCT and are awarded an AF Form 1256, *Certificate of Training*.
8. **Flying Training** — The times specified are actual mission times and do not include time for briefing or debriefing.

	<i>Sorties</i>	<i>Hours</i>
Dual Flying	10	13.8
<i>Total</i>	10	13.8

<b>9. Course Summary</b>	<i>Hours</i>
a. Indoctrination	5.0
b. Academic Training	16.0
c. Officer Development	11.0
d. Ground Training	11.0
e. Aircraft	13.8
<i>Total Course Hours</i>	56.8

## 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, resolve the situation using the appropriate chain of command. If the logical course of action appears to conflict with other directives, contact the OPR, HQ AETC/A3FP, DSN 487-9652, Commercial (210) 652-9652.

##### 2. Syllabus Waiver

An approved syllabus waiver is required for any *planned* exception to the syllabus caused by special or unusual circumstances. 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. Permanent or blanket waivers are not authorized, but should be suggested as syllabus changes. Submit syllabus and entry prerequisite waiver requests electronically or in writing, on AETC Form 6, Waiver Request, through AETC/A3FP to AETC/A3F.

##### 3. Syllabus Deviation

A syllabus deviation is any *unplanned* variation from syllabus requirements such as prerequisite flow, turn times, landing currency, or maneuver item file (MIF) requirements. Document *all* syllabus deviations in the student's training folder. All syllabus-directed training must be accomplished unless a waiver request or proficiency advancement is approved. If unforeseen circumstances result in an omission of required training, the 306 FTG/CC (or designated representative) determines if the omitted training can be accomplished later in the syllabus flow without adversely affecting the quality of student training. 306 FTG/CC (or designated representative) will document corrective actions and the accomplishment of the omitted training in the student's training folder.

#### Section B — Training Management

##### 1. Military Flight Commander Responsibilities

a. Monitor student training. Coordinate with and assist the contractor-appointed civilian flight commander who is responsible for the day-to-day and normal training of each student under their supervision. Mentor, motivate, and prepare students for UCT. The contractor-appointed civilian flight commander ensures the military flight commander is aware of each student's progress and status to include the decision to proficiency advance a student, double-turn a student before the 300 unit, make a sortie incomplete, or give a student an additional training sortie.

b. Assist students and flight instructors with the training review process and provide for motivation, discipline, physical and mental well-being, and general welfare of students. Flight commanders must be aware of each student's progress in all areas, including the potential effect of external factors (personal problems, etc.). Flight commanders accomplish the following:

(1) Perform Student Counseling — Counsel students as necessary on military matters, including personal problems and disciplinary matters. Refer students to appropriate support agencies (Chaplain, Legal Office, etc.) for further assistance, if necessary. If training is affected, ensure the contractor-appointed civilian flight commander is aware of the situation and any actions taken.

(2) Oversee the contractor's maintenance of student training folders IAW AETCI 36-2605, Vol. 1, *Formal Aircrew Training Administration and Management*, and AETCI 36-2605, Vol. 3, *Formal Aircrew Training Administration and Management — Initial Flight Training*.

**Note: Maintain sensitive personal information in a secure location.**

(3) Ensure proper management of military training, including student processing.

(4) Assist in syllabus-directed functions.

##### 2. Squadron Commander Responsibilities

a. Execute and enforce a fitness program, IAW AFI 36-2905, *Fitness Program*, and AETCI 36-2605, Vol. 1.

b. Fulfill the responsibilities stipulated in AETCI 36-2605, Vol. 3.

### 3. Contractor Responsibilities

Fulfill the requirements stipulated in the *Performance Work Statement for IFT*.

### 4. Training Requirements and Restrictions

- a. *Training Practices* — The student’s civilian flight commander and assigned instructor ensure overall maneuver continuity and currency throughout each unit. No more than three different instructors and one supervisor fly with a student prior to N306.
- b. *Average Hours / Events* — Students complete the course objectives with an average of 13.8 flying hours. Some students may require additional time because of additional training (AT) sorties, unsatisfactory sorties at the end of a unit, and progress / elimination checks. Above average students (or students with prior flying experience) may require less flying time per unit or fewer sorties to prepare for the final check. Individual sorties may be shortened if unit objectives are met, and the student may be proficiency advanced if performance dictates. As a minimum, students accomplish at least one sortie (meeting MIF requirements) in each training unit. The decision to proficiency advance a student at any point in training rests with the contractor’s chief pilot (or designated representative in consultation with the contractor’s chief pilot), and must be documented in the student’s training folder.
- c. *Maneuver Continuity* — As a guide, each “+”MIF item should be accomplished every other sortie. Give priority to “+” items followed by optioned but not “+” items. The contractor develops policies, practices, and review procedures to ensure students have proper maneuver currency and recency of experience. This does not apply to maneuvers specifically cited in unit training objectives to be accomplished once.
- d. *Maximum Daily Student Flying Activities* — Students do not normally exceed one sortie per day through N201 or double turn from N201 to N301 except to complete an incomplete sortie. Beginning with the 300 Unit, students do not exceed two sorties per day. The contractor’s chief pilot (or designated representative) may approve a student to exceed one sortie per day prior to the 300 Unit based on the student’s prior flying experience and ability. Document any such authorizations in the student’s training folder.
- e. *Minimum Total Hours* — No student may complete this program with less than 10.0 hours.
- f. *Extracurricular Flying* — IFT students are prohibited from participating in any other flying training activity.
- g. *Sortie Lengths* — Sorties and approximate flying hours are listed below. Adhere to the approximate time per lesson as closely as possible for the average student.

<i>Unit</i>	<i>Sortie Time</i>	<i>Total Time</i>
N101 – 02	1.2/1.4	2.6
N201	1.4	1.4
N301 – 06	1.4	8.4
<b>N490</b>	1.4	1.4
	<i>Total</i>	13.8

### 5. Additional Training (AT) Sorties

AT sorties provide extra training to students. Fly AT sorties in the current unit or the most recently completed unit and code for that unit. These sorties do not satisfy any maneuver requirements in any unit. AT sorties are normally graded No Grade (NG), but may be graded Unsatisfactory (U) for safety of flight, flight discipline, or airsickness reasons (IAW AETCI 36-2605, Vol. 3). (*Note:* Following an AT sortie graded unsatisfactory, the student returns to the normal syllabus flow.) An AT sortie graded U does not count toward triggering a progress check (PC) or elimination check (EC), nor does an AT sortie graded NG break a string of unsatisfactory syllabus sorties. Do not document AT sorties as incomplete except when objectives are not met because of unusual circumstances.

- a. *Break-in-Training Events* — The contractor’s chief pilot (or designated representative) may authorize these sorties for extended delays in training. As a guide, if a student has not flown for a minimum of 5 calendar days, the contractor’s chief pilot (or designated representative) may authorize one NX86 sortie for this type break-in-training. The contractor’s chief pilot (or designated representative) may use this authority only when remaining syllabus sorties are insufficient to compensate for the student’s break-in-training. Document as NX86 sorties in the student’s training folder. Additional AT sorties for the same break-in-training require the contractor’s chief pilot’s approval and are annotated on AF Form 4293.

b. *Total Syllabus Time* — AT sorties flown to meet minimum syllabus time are normally full mission profiles. Sorties flown to meet total time are dual. The contractor's chief pilot (or designated representative) may authorize these sorties when it becomes apparent they are needed. Students must meet end of unit MIF requirements for the most recently completed unit in which the AT was given. Code these sorties as NX87.

c. Outside the PC/EC process (before **NX88** or **NX89** trigger) — The contractor's chief pilot may authorize each student up to two AT sorties before a PC or EC trigger. These sorties are not automatically given to every student. One AT sortie may be authorized when the contractor's chief pilot feels the student will successfully complete IFT with an AT sortie. An additional AT sortie may be authorized by the contractor's chief pilot if some training irregularity or anomaly occurred. The AT sorties should target student deficiencies and do not require a full mission profile. Code these sorties as NX87.

d. During the PC/EC process (after **NX88** or **NX89** trigger) — The squadron commander may authorize each student up to two AT sorties during the PC or EC process. These sorties are not automatically given to every student. One AT sortie may be authorized when the squadron commander feels the student will successfully complete IFT with an AT sortie. An additional AT sortie may be authorized by the squadron commander if some training irregularity or anomaly occurred. The AT sorties should target student deficiencies and do not require a full mission profile. Code these sorties as NX87.

e. *Reinstatement by Commander's Review* — Reference AETCI 36-2605, *Formal Aircrew Training Administration and Management*. Code sorties as a result of reinstatement as NX87.

## 6. **Airsickness**

Instructors ensure both the civilian and military flight commanders are aware of any students having airsickness problems. Refer students who experience airsickness to a flight surgeon / aero medical examiner / medical technician for examination, counseling, and appropriate treatment. Instructors document airsickness episodes in the student's training folder.

## 7. **Manifestation 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 the 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 and refer the student to the flight surgeon, aeromedical examiner, or medical technician for evaluation. Following the medical evaluation and a review of the student's training record, document the medical assessment and the student's potential to complete IFT in the student's training folder. If appropriate, and with the concurrence of the Chief Pilot, the Sq/CC justifies a recommendation for medical elimination in the student's training folder.

## 8. **Flying Safety**

Emphasize aircraft mishap prevention training by recognizing, controlling, and correcting deficiencies in the student's judgment and skill. Stress flying safety throughout the course. Present safety briefings once per week (minimum) to promote group discussions of the briefing topics and improve student attitudes associated with aircraft mishap prevention.

## 9. **Emergency Procedures (EP) Training**

a. Conduct EP training on every sortie 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.

c. Administer EP / aircraft operations limits examinations weekly (minimum). Civilian flight commanders may modify this requirement as necessary to meet training needs.

## 10. **Student Standardization Program**

Discuss standardization topics once per week (minimum) for each flying period as part of the mass briefing. Emphasize situational emergency procedures. Include overhead questioning and group discussion of topics appropriate to the student's stage of training.



### 11. Briefing Requirements

Briefings set the tone of the mission. Thoroughly brief all mission aspects, clearly establishing mission objectives, and provide instruction on student weak areas. Accomplish a post-mission briefing to measure the success of meeting the mission objectives.

### 12. Maneuver Demonstrations

Instructors demonstrate maneuvers prior to the student practicing them. Only maneuvers optioned by the MIF may be demonstrated or practiced.

### 13. Unsatisfactory Performance

- a. *Commander's Awareness Program (CAP)* — Refer to AETCI 36-2605, Vol. 3 for guidance.
- b. *Unsatisfactory Sortie Restrictions* — Following a sortie graded U overall, students progress to subsequent lessons in the same unit or repeat the last lesson of the unit, e.g., N306R. N306 and N490 sorties graded U solely because of a pre/post-flight ground evaluation are cleared by another ground evaluation.
- c. *Unsatisfactory Ground Evaluations* — After N300, students who demonstrate an unsatisfactory level of knowledge during standardization, emergency procedures briefings, or academic exams may not perform syllabus-required sorties until demonstrating satisfactory performance in the applicable areas. As a minimum, this restriction includes one flying period devoted to directed study and reevaluation unless an intervening nonflying day occurs. The nonflying day may be used for directed study provided the students are notified. The contractor's chief pilot (or designated representative) may waive the one period grounding requirement. Document grounding and reduction of grounding period, if applicable, in the student's training folder.
- d. *Unsatisfactory Academic Examination* — The minimum passing score on the academic examination (A110) and navigation examination (A111N) is 85 percent. Students who fail an academic examination receive extra instruction, emphasizing the student's weak area(s). Administer a retake not earlier than one training day after the failed examination to allow the student the opportunity for additional self-study. Students who fail an academic examination may not continue further training until the failed examination is passed. Students who fail an academic examination a second time are entered in the commander's review process.
- e. *Progress Check (PC)* — Figure 2-1 shows a list of PC triggers. When assigning an overall grade, the PC pilot should consider the student's ability to complete the course within syllabus constraints as well as overall proficiency and situational awareness. The overall grade is NG or U. Document a PC as **NX88** and include in the student's training folder.
- f. *Elimination Check (EC)* — Figure 2-1 shows a list of EC triggers. When assigning an overall grade, the EC pilot should consider the student's ability to complete the course within syllabus constraints as well as overall proficiency and situational awareness. The overall grade is NG or U. Document an EC as **NX89** and include in the student's training folder. A student who fails an EC is entered in the commander's review process according to AETCI 36-2605, Vol. 3.
- g. Final Check, Progress Check, and Elimination Check Procedures
  - (1) The following table identifies check pilots and the types of checks they are authorized to administer. Designated individuals complete a checkout program and are certified by the squadron commander. Only highly qualified Military Flight Instructors (MFIs) and CFIs may be certified as PC/EC pilots.
  - (2) The objective of the final check is to ascertain a student's ability to adapt to military flying and complete UCT.

<i>Authorized Check Pilots</i>	<i>Final Check</i>	<i>Progress Check</i>	<i>Elimination Check</i>
SQ/CC or DO	<b>X</b>	<b>X</b>	<b>X</b>
Designated MFIs	<b>X</b>	<b>X</b>	<b>X</b>
Contractor's Chief Pilot	<b>X</b>	<b>X</b>	<b>X</b>
Designated CFIs	<b>X</b>	<b>X</b>	<b>X</b>

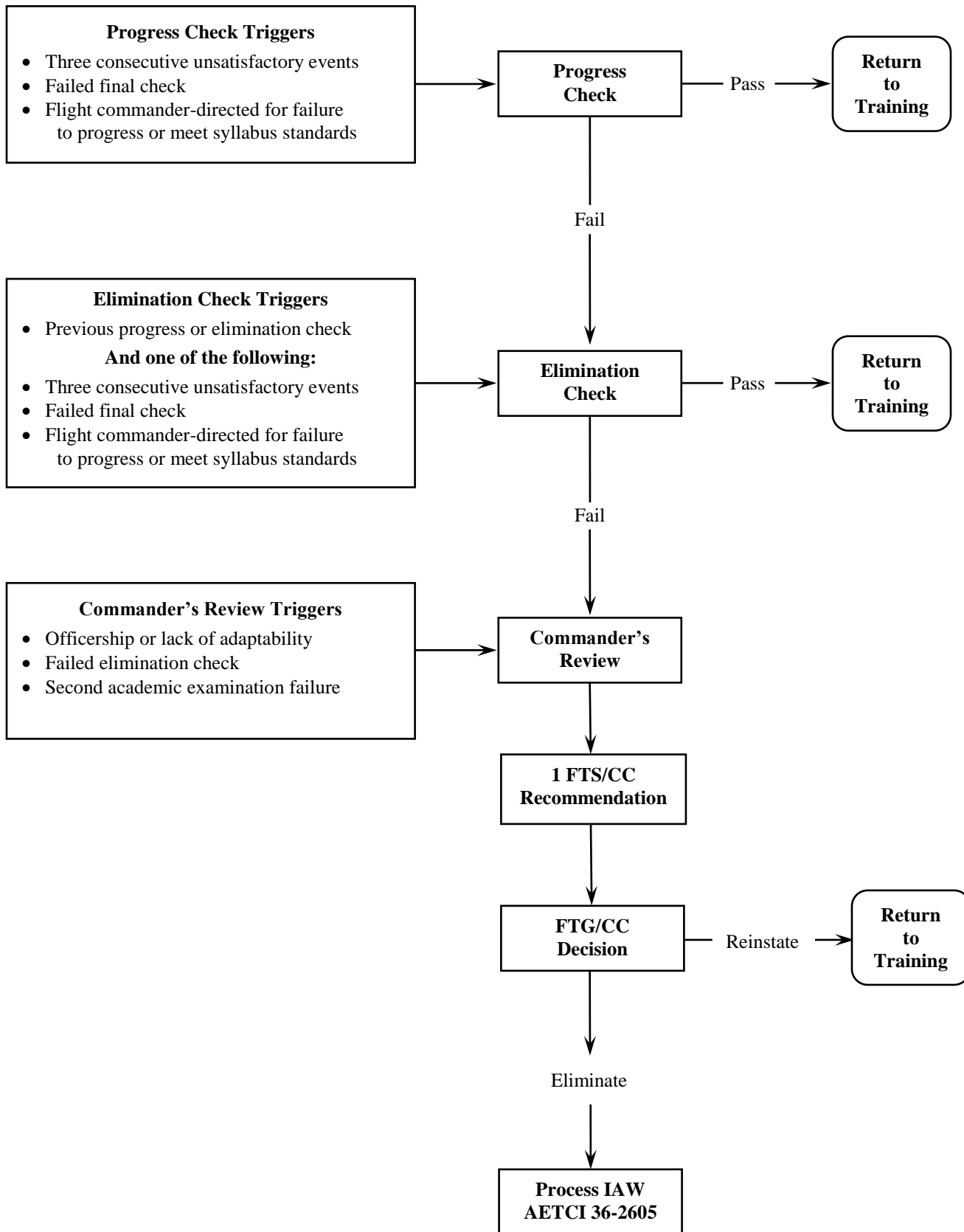


Figure 2-1 — Commander's Review Process

- a. *Passing a PC/EC* — Passing a PC/EC fulfills the requirements of the sortie that caused it to be flown and may be used to complete a unit if appropriate. If the next sortie is the final check, all sortie objectives are satisfied on the PC/EC, and the student demonstrated the abilities and potential to successfully complete UCT, the PC/EC substitutes for the final check.

#### **14. Minimum Scheduled Student Turn-Times**

Aircraft to Aircraft — 3+00

NOTE: the turn-time requirement does not apply to the second sortie in a planned out-and-back or to a sortie flown to complete an incomplete sortie.

Aircraft to Classroom — 2+30

#### **15. Commander's Review (CR) Process**

Figure 2-1 depicts the triggers and decision-making flow for progress checks, elimination checks, and commander's reviews. Students reinstated into training after a CR because of a flying deficiency must fly an elimination check following completion of the additional training sorties authorized in the reinstatement write-up.

#### **16. Cockpit / Crew Resource Management (CRM)**

Integrate CRM skills into flight briefings and debriefings, using the provisions of AFI 11-290, *Cockpit / Crew Resource Management Training Programs* and the AETC Supplement as guidelines. Grade sheets contain the following CRM items IAW AETC Sup 1 to AFI 11-290:

- a. Mission Analysis (Planning / Briefing / Debriefing)
- b. Communication
- c. Risk Management / Decision-Making
- d. Situational Awareness
- e. Task Management
- f. Crew Coordination

## Section C — Grading Procedures

### 1. Maneuver Grading

There are two methods of grading student performance: an absolute grading scale for rating individual maneuver items and a relative grading scale for assessing overall sortie performance.

### 2. Absolute Grading Scale

Instructors judge the student's performance of maneuvers against the course training standards (CTSs) in this syllabus. Grade maneuvers on the student's characteristic performance. This grade does not consider the student's type and amount of training.

<i>Proficiency Grade</i>	<i>MIF Level</i>	<i>Description</i>
<b>No Grade (NG)</b>	<b>1</b>	The instructor pilot demonstrates a maneuver the student does not practice, or a solo student flies a maneuver the instructor does not observe.
<b>Unsatisfactory (U)</b>	<b>2</b>	The student is unsafe, unable, or lacks sufficient knowledge, skill or ability to perform the operation, maneuver, or task.
<b>Fair (F)</b>	<b>3</b>	The student performs the operation, maneuver, or task safely, but has limited proficiency. Deviations occur that detract from performance and/or require instructor verbal prompting
<b>Good (G)</b>	<b>4</b>	The student performs the operation, maneuver, or task satisfactorily. Deviations occur that are recognized and corrected in a timely manner without any instructor verbal prompting.
<b>Excellent (E)</b>	<b>5</b>	The student performs the operation, maneuver or task correctly, with a high degree of skill, efficiency, and effectiveness.

### 3. Relative Grading Scale

The instructor uses the relative grading criteria to assess overall sortie performance with grades of Excellent (E), Good (G), Fair (F) or Unsatisfactory (U). Students are expected to progress as they advance in training. Students may receive grades of F or U on individual maneuvers new to them, but still receive a grade of E for overall sortie performance. A student's continued lack of progress should be reflected in an overall sortie performance grade of F or U, even if only a U is required for the maneuver proficiencies. The instructor grades the student with an overall grade of U if any maneuver is graded U when an F or G proficiency level is required.

### 4. Maneuver Item File (MIF)

a. Maneuvers followed by a plus (+) must be accomplished in the specified unit. Students are not allowed to fly maneuvers without a number. An IP may accomplish a non-numbered maneuver if required (proficiency, unexpected weather, etc.) Maneuvers with a number but without a plus (+) may be accomplished, do not require continuity, but if flown, students must meet MIF standards by the end of the unit.

b. On the last 8 sorties (N201, N301 – 306 and **N490**) MIF items #15 (Monitor Basic Flight and Area Maneuvers) and #29 (Monitor Airfield and Traffic Pattern Operations) are used to grade students on selected maneuvers flown by the IP. On those maneuvers, the student must maintain situational awareness and monitor and/or direct the IP while the IP flies the maneuver. On maneuvers flown by the IP, the student must observe the IP and announce to the IP when maneuver standards listed in the CTS may/will be exceeded.

### 5. Incomplete Sorties

The contractor's chief pilot (or designated representative) in consultation with the instructor of record determines when a sortie is incomplete and grade it NG. If a maneuver is graded U when an F or G proficiency level is required, the sortie is complete and the overall grade is U. Document all incomplete lessons and maneuvers deferred to the next lesson in the student's training folder. NOTE: If a lesson is completed by a second sortie flown the same day, any required gradebook documentation may be delayed until after the second sortie is complete.

## Section D — Course Training Standards (CTS)

### 1. Purpose

These standards outline the tasks and proficiency required of graduates of this syllabus. This program prepares students to enter UCT with a high probability of completing the training.

### 2. Duties and Responsibilities

The student accomplishes the following:

- a. Plan the mission.
- b. Ensure the aircraft is preflighted, inspected, loaded, and equipped to perform the assigned mission.
- c. Operate the aircraft to perform the mission using sound judgment and situational awareness.

### 3. General Proficiency Standards

- a. Accomplish training standards in conjunction with clearing visually outside the aircraft.
- b. Aircraft control must be smooth and positive. Flight control and throttle inputs that are characteristically imprecise and erratic can warrant an unsatisfactory grade even if numerical standards are met. Slight deviations in establishing or maintaining the proper or desired aircraft attitude or position may occur during the maneuver being performed.
- c. Momentary deviations beyond flight value tolerances are acceptable if corrections are timely and flight safety is not compromised. The effects of weather (turbulence, for example) are considered when determining grades.
- d. Procedural knowledge and application must be in accordance with applicable directives and allow the mission to be accomplished efficiently. If individual tasks require pre-mission planning, the standards from **Mission Planning / Briefing / Debriefing** apply.
- e. Standards equate directly to the grade scale of Good (any deviations from the standards are recognized and corrected in a timely manner.) Tasks trained to the grading level of Fair reflect a “safe proficiency level” (deviations from the standards detract from the student’s performance.) (Section C, paragraph 2, *Absolute Grading Scale*), Special performance tasks requiring introduction or ground training are specified under the job task *Performance* description.
- f. Where no specific standard is stated, these general standards and those of **Basic Aircraft Control** apply.

### 4. Employment

- a. Conduct training in day VMC.
- b. The MIF regulates student progression to meet required standards prior to course completion. Evaluate performance using the Course Training Standards.

### 5. Tasks

The following table specifies the standards of performance required to achieve a Good level.

<i>Performance</i>	<i>Conditions</i>	<i>Standards</i>
<b>1. Mission Analysis (Planning / Briefing / Debriefing)</b>		
a. Perform appropriate mission planning to include computing takeoff and landing data: plan mission profile and alternate course of action where appropriate.	<ol style="list-style-type: none"> <li>a. Appropriate forms and aeronautical charts, and local area map.</li> <li>b. Access (in person, internet, or telephone link) to FAA or military weather briefing facility.</li> <li>c. FAR, AIM, NOTAMs, local instructions, syllabus, flight manual, and checklist.</li> </ol>	a. Plan mission in a timely manner to meet maneuver requirements, correctly complete all applicable forms, and comply with all directives.

<i>Performance</i>	<i>Conditions</i>	<i>Standards</i>
<b>2. Ground Operations</b>		
<p>a. Perform preflight inspection of aircraft including maintenance documentation and perform appropriate checklists.</p> <p>b. Taxi to takeoff position and, after landing, to parking area. Complete appropriate checklists.</p> <p>c. Check engine condition and aircraft configuration prior to takeoff. Complete appropriate checklist.</p> <p>d. Perform postflight duties</p>	<p>a. Checklist and inflight guide. b. Aircraft ready for inspection. c. Fire extinguisher available. d. Aircraft engine limitations memorized. e. Appropriate aircraft forms</p> <p>a. Designated taxi route. b. Checklist and inflight guide.</p> <p>a. Checklist and inflight guide.</p> <p>a. Checklist, inflight guide, and aircraft forms.</p>	<p>a. Correctly complete all checks and procedures in accordance with flight manual. b. Determine aircraft status and accept or reject the aircraft.</p> <p>a. Follow prescribed taxi routes while maintaining safe speeds b. Visually clear for traffic and avoid obstacles during taxi c. Maintain proper control deflection for wind conditions d. Correctly complete all checks in accordance with the flight manual</p> <p>a. Make a proper decision to accept or reject airplane after engine checks. b. Properly configure the airplane for takeoff. c. Correctly complete all checks in accordance with the flight manual.</p> <p>a. Correctly complete all checks in accordance with the flight manual.</p>
<b>3. Takeoff and Climb</b>		
<p>a. Perform a takeoff to include: (1) Complete appropriate checklists (2) Check aircraft performance (3) Maintain directional control, proper wind-drift correction, and alignment with the runway centerline throughout takeoff and climb (4) Rotate and takeoff at recommended speeds. (5) Accelerate to designated climb speed</p>	<p>a. Runway with a centerline stripe and current wind information.</p>	<p>a. Maintain runway alignment <math>\pm 10</math> feet during takeoff roll. b. Establish and maintain proper takeoff attitude and become airborne at appropriate airspeed for existing conditions. c. Hold correct pitch attitude to attain and maintain climb speed +10 to -5 KIAS. d. Maintain ground track on the extended runway centerline until intercepting the published departure routing.</p>
<b>4. Departure</b>		
<p>a. Turn aircraft to clear traffic pattern at designated altitude.</p> <p>b. Turn to proceed to navigation points at the designated altitudes and airspeeds or IAW instructions from ATC.</p> <p>c. Overfly designated corridor entry point (if designated).</p> <p>d. Navigate and fly the aircraft to the area or designated enroute point.</p>	<p>a. Published pattern procedures or ATC directions.</p> <p>a. Published departure instructions or ATC directions.</p> <p>a. GPS, in-flight guide, and map.</p> <p>a. Ground references on the departure route.</p>	<p>a. Initiate turn out of traffic and fly initial heading or ground track consistent with procedural directives.</p> <p>a. Follow local departure procedures.</p> <p>a. Recognize and track to within <math>\frac{1}{2}</math> NM of corridor entry point with limited assistance from the instructor pilot.</p> <p>a. Use map, inflight guide, ground references, and GPS to navigate to the area or designated enroute point with limited assistance from the instructor pilot.</p>

<i>Performance</i>	<i>Conditions</i>	<i>Standards</i>
<b>5. Basic Aircraft Control / Cross-Check</b>		
a. Maintain basic aircraft control with limited assistance from the instructor pilot. b. Use outside references and aircraft instruments to achieve proper flight attitude	a. At all times.	a. $\pm 100$ feet of desired altitude. b. $\pm 10$ KIAS of desired airspeed. c. $\pm 10$ degrees of desired heading. d. Maintain coordinated flight, no more than $\frac{1}{2}$ ball off-center e. Maintain smooth and positive control consistent with flight conditions
<b>6. Trim Use</b>		
a. Use trim to relieve control pressures and improve aircraft control	a. Aircraft with changing pitch and airspeed	a. Trim aircraft to establish a stable pitch attitude. (Aircraft pitch does not change appreciably if controls are released.)
<b>7. Area Orientation and Inflight Planning</b>		
a. Maintain area orientation and remain within assigned area limits.  b. Perform inflight planning to include changing profile or adding or deleting maneuvers.	a. Working area commensurate with type of mission, within specified boundaries defined by coordinates and or ground references, and upper and lower altitude boundaries.  a. Preplanned mission profile.	a. Remain within area boundaries using ground references and GPS. b. Use assigned airspace in an efficient manner with minimum delay between maneuvers.  a. Able to adjust mission profile to comply with time and/or fuel limitations, weather, and area limits.
<b>8. Climbs and Descents</b>		
a. Maintain climb and descent schedules. b. Maintain heading or bank angle and coordinated flight. c. Maintain required power. d. Level off at assigned altitude.	a. Appropriate climb and descent schedules. a. Prescribed heading and course.  a. Desired altitude and climb or descent schedule. a. Desired altitude.	a. Maintain airspeed $\pm 10$ KIAS of desired airspeed. a. $\pm 10$ degrees of desired heading or bank angle. b. No more than $\frac{1}{2}$ ball off-center. a. Use appropriate power for climbs and descents. a. $\pm 100$ feet of desired altitude. b. $\pm 10$ degrees of desired heading. c. Maintain coordinated flight, no more than $\frac{1}{2}$ ball off-center d. Maintain smooth and positive control consistent with flight conditions.
<b>9. Turns</b>		
a. Roll into and maintain designated bank angle. b. Maintain altitude. c. Return to wings-level after a designated turn. d. Maintain coordinated flight.	a. Aircraft in level flight b. Designated bank angle.  a. Designated altitude.  a. Designated rollout heading.  a. Functional turn and slip indicator.	a. $\pm 10$ degrees of desired bank angle.  a. $\pm 100$ feet of desired altitude. a. Obtain rollout heading $\pm 10^\circ$ .  a. No more than $\frac{1}{2}$ ball off-center.

<i>Performance</i>	<i>Conditions</i>	<i>Standards</i>
<b>10. Slow Flight Maneuvering</b>		
a. Control altitude, airspeed, bank angle, and yaw	a. Minimum altitude: 1,500 feet AGL b. Proper configuration	a. +10 KIAS, -0 KIAS airspeed b. ±100 feet of desired altitude. c. ±10 degrees of desired heading. d. Maintain coordinated flight, no more than ½ ball off-center e. Maintain smooth and positive control consistent with flight conditions f. +0/-10 degrees of desired bank angle (not to exceed 30°)
<b>11. Steep Turns</b>		
a. Maintain altitude and airspeed. Roll into a 45° bank angle.  b. Roll out on entry heading after turning 360°.	a. Aircraft in level flight at a designated airspeed and altitude.  a. Designated roll-in and roll-out reference.	a. ±100 feet of desired altitude. b. ±10 KIAS of desired airspeed. c. Maintain bank angle ±10°. d. Maintain coordinated flight, no more than ½ ball off-center e. Maintain smooth and positive control consistent with flight conditions  a. Roll out on designated heading within ±20°.
<b>12. Power-Off and Power-On Stalls</b>		
a. Perform power-off and power-on stalls in full-flap and takeoff-flap configurations, respectively.  b. Control bank and yaw during entry.  c. Recover from stalls.	a. Minimum altitude 1,500 feet AGL b. Proper configuration  a. Specified entry parameters.  a. Stall warning indication b. Minimum altitude 1,500 feet AGL	a. Recognize and announce first indications of the impending stall. b. Initiate recovery IAW local flying procedures, upon encountering significant aerodynamic buffeting or after control effectiveness is lost.  a. Maintain heading ±10° in straight flight. Maintain ±10° of entry bank angle (20° maximum) b. Maintain coordinated flight, no more than ½ ball off-center  a. Recover to level flight or a slight positive climb with a clean configuration and a minimum altitude loss without entering a secondary stall. (Recovery confirmed by altimeter and VSI.) b. Maintain coordinated flight, no more than ½ ball off-center c. Maintain smooth and positive control consistent with flight conditions d. Retract flaps IAW normal climb schedule



<i>Performance</i>	<i>Conditions</i>	<i>Standards</i>
<b>13. Simulated Forced Landing — Pattern</b>		
<p>a. Perform simulated forced approach and landing.</p> <p>b. Slow aircraft from touchdown speed to taxi speed and exit the runway</p>	<p>a. Aircraft with a simulated engine failure. b. Runway suitable for a forced landing.</p> <p>a. Aircraft on the runway centerline. b. Aircraft properly configured.</p>	<p>a. Establish and maintain recommended best-glide attitude, configuration, and airspeed ±10 KIAS. b. Select suitable emergency landing area within gliding distance. c. Plan and follow a flight pattern to the selected landing area considering altitude, wind, terrain, and obstructions. d. Accomplish or simulate the appropriate emergency procedures. e. Maintain positive control of the airplane at all times. f. Fly the aircraft to a position where, if landing, touchdown would be:                      (1) Below approach speed.                      (2) Within 1,000 feet of the planned touchdown point.                      (3) Within 15 feet of the runway centerline with no side drift.                      g. If landing, establish recommended approach and landing configuration prior to touchdown.</p> <p>a. Make smooth, timely, and correct flight control and brake inputs. b. Maintain crosswind correction and directional control throughout rollout and exit from runway if landing fullstop.</p>
<b>14. Simulated Forced Landing — Area</b>		
<p>a. Perform simulated forced landing approach in the area.</p>	<p>a. Aircraft with a simulated engine failure. b. Landing zone suitable for a forced landing.</p>	<p>a. Establish and maintain recommended best-glide attitude, configuration, and airspeed ±10 KIAS. b. Select suitable emergency landing area within gliding distance. c. Plan and follow a flight pattern to the selected landing area considering altitude, wind, terrain, and obstructions. d. Accomplish or simulate the appropriate emergency procedures e. Maintain positive control of the airplane at all times. f. Fly the aircraft to a position where, continuation of the approach would likely result in a safe landing. g. Initiate go-around so as not to descend below 500 feet AGL.</p>
<b>15. Monitor Basic Flight and Area Maneuvers</b>		
<p>a. Direct and monitor basic flight and area maneuvers to include MIF items: 12 (Power-On and Power-Off Stalls) and 14 (Simulated Forced Landing) – Area).</p>	<p>a. Minimum altitude as specified for each maneuver: 500 feet AGL for SFL (area). 1,500 feet AGL for stalls b. Maneuver prescribed configuration c. Maneuver prescribed flight parameters</p>	<p>a. Announce entry parameters b. Perform all required callouts IAW IFT Local Flying Procedures c. Monitor and announce when deviations to maneuver flight parameters are exceeded d. Use crew coordination to perform required challenge/responses and SFL emergency procedure checklist</p>

<i>Performance</i>	<i>Conditions</i>	<i>Standards</i>
<b>16. Navigation Procedures / VOR / GPS / Map Use</b>		
a. Operate and interpret VOR/GPS navigation equipment.  b. Read in-flight guide and local area map.	a. Aircraft equipped for instrument flight. b. VOR/GPS.  a. GPS, in-flight guide, and map.	a. Locate aircraft position using navigational equipment, in-flight guide, and local area map.  a. Navigate using navigational equipment, in-flight guide, and local area map.
<b>17. Visual Navigation (VNAV) Route Entry / Exit</b>		
a. Direct visual navigation route entry and exit	a. Preplanned visual navigation route	a. Accomplish visual navigation entry and exit checklists IAW IFT Local Flying Procedures b. Accomplish required radio calls for entry and exit c. Coordinate new route entry times with the SOF, if required d. Visually identify visual navigation route entry e. Arrive at the entry point and exit points $\pm 0.5$ NM f. Direct the IP to the next scheduled activity
<b>18. VNAV Route Time Control</b>		
a. Maintain situational awareness in relation to leg and total time on the visual navigation route	a. Preplanned visual navigation route	a. Accomplish all required clock procedures IAW IFT Local Flying Procedures b. Record cumulative time at the end of each route leg c. As soon as practical after passing each waypoint, use actual time of arrival to estimate new total time of track and direct correction needed to achieve planned time of track d. Achieve preplanned total time of track $\pm 30$ seconds
<b>19. VNAV Route Ground Track Control</b>		
a. Maintain situational awareness in relation to the aircraft's position with respect to the desired course	a. Preplanned visual navigation route	a. Maintain planned course $\pm 1$ NM b. Reach each waypoint within $\pm 0.5$ NM c. Direct the pilot to use at least one "big-to-small" visual reference along the visual navigation route d. Identify at least one "funneling feature" along the visual navigation route
<b>20. VNAV Route Chart Reading</b>		
a. Use the visual navigation route chart to maintain course and timing	a. Preplanned visual navigation route	a. During mission planning, identify, brief, and use at least three clock-to-chart-to ground reference points on each route leg b. During mission planning, identify, brief, and locate all ground obstructions (towers/power lines, etc) on the visual navigation route c. Identify all route waypoints

<i>Performance</i>	<i>Conditions</i>	<i>Standards</i>
<b>21. VNAV Route Flight Parameters</b>		
<p>a. Direct and monitor aircraft flight parameters along the visual navigation route</p>	<p>a. Preplanned visual navigation route</p>	<p>a. Ensure aircraft is ± 100 feet of planned altitude                      b. Ensure aircraft is ± 10 KIAS                      c. Ensure aircraft is ± 10° of required heading                      d. Make all required callouts IAW IFT Local Flying Procedures</p>
<b>22. Arrival</b>		
<p>a. Overfly designated training area exit location, corridor entry point or other arrival intercept point</p> <p>b. Turn to proceed to navigation points at the designated altitude(s) and airspeed(s) or IAW instructions from ATC.</p> <p>c. Navigate and fly the aircraft to the traffic pattern entry point.</p>	<p>a. GPS, in-flight guide, and map.</p> <p>a. Published arrival instructions or ATC directions.</p> <p>a. Ground references on the arrival route.</p>	<p>a. Recognize and track to within ½ NM of corridor entry point or other arrival intercept point, remaining clear of any adjacent training areas with limited assistance from the instructor pilot.</p> <p>a. Follow local arrival procedures.</p> <p>a. Use map, inflight guide, ground references, and GPS to navigate to the traffic pattern entry point with limited assistance from the instructor pilot.</p>
<b>23. Traffic Pattern</b>		
<p>a. Enter the traffic pattern.</p> <p>b. Perform traffic pattern.</p>	<p>a. Published traffic pattern entry procedures or ATC directions.                      b. Inflight guide and local area map.</p> <p>a. Published pattern altitude, airspeeds, groundtrack, and final approach.</p>	<p>a. Use map, inflight guide, and ground references to identify and overfly the traffic pattern entry point.</p> <p>a. Establish and maintain appropriate groundtrack.                      b. Maintain proper spacing from other aircraft (no closer than 3,000 feet horizontally and any required wake turbulence separation)                      c. Maintain airspeed +10/-5 KIAS.                      d. Maintain altitude ±100 feet.                      e. Configure the aircraft as appropriate for pattern.</p>
<b>24. Normal Approach and Landing</b>		
<p>a. Perform approaches and landings (transition from glidepath to runway).</p>	<p>a. Aircraft established on proper visual glidepath.                      b. Aircraft properly configured.                      c. Various wind conditions.</p>	<p>a. Select suitable touchdown point.                      b. Establish recommended approach and landing configuration.                      c. Maintain stabilized approach and recommended approach speed +10, -0 KIAS on the correct ground track.                      d. Maintain crosswind correction and directional control at the appropriate airspeed throughout approach and landing.                      e. Make smooth, timely, and correct control applications during the roundout and touchdown. Touch down smoothly within the first 1,000 feet of the runway, with no side drift, and with airplane's longitudinal axis aligned with and over the runway centerline ±15 feet.</p>

<i>Performance</i>	<i>Conditions</i>	<i>Standards</i>
b. Slow aircraft from touchdown speed to taxi speed and exit the runway.	a. Aircraft on the runway centerline. b. Aircraft properly configured	a. Make smooth, timely, and correct flight control and brake inputs b. Maintain crosswind correction and directional control throughout rollout and exit from runway if landing fullstop.
<b>25. Forward Slip Approach and Landing</b>		
a. Perform approaches and landings (transition from glidepath to runway / landing zone) using a forward slip.  b. Slow aircraft from touchdown speed to taxi speed and exit the runway.	a. Aircraft established on proper visual glidepath. b. Aircraft properly configured. c. Various wind conditions.  a. Aircraft on the runway centerline. b. Aircraft properly configured	a. Select suitable touchdown point. b. Establish recommended approach and landing configuration. c. Maintain stabilized approach and recommended approach speed +10, -0 KIAS on the correct ground track. d. Maintain crosswind correction and directional control at the appropriate airspeed throughout approach and landing. e. Make smooth, timely, and correct control applications during the roundout and touchdown. Touch down smoothly within the first 1,500 feet of the runway with no side drift, and with airplane's longitudinal axis aligned with and over the runway centerline $\pm 15$ feet.  a. Make smooth, timely, and correct flight control and brake inputs b. Maintain crosswind correction and directional control throughout rollout and exit from runway if landing fullstop.
<b>26. Go-Around</b>		
a. Perform a go-around from approach or landing.	a. Aircraft configured for approach or landing. b. Aircraft in the approach or landing phase.	a. Make a timely decision to discontinue the approach or landing. b. Apply takeoff power and establish the proper climb attitude. c. Retract flaps IAW the flight manual. d. Maintain takeoff power to a safe maneuvering altitude, and then set power to maintain appropriate pattern speeds. e. Maintain directional control and proper wind-drift correction throughout the climb.

<i>Performance</i>	<i>Conditions</i>	<i>Standards</i>
<b>27. Touch-and-Go</b>		
a. Perform a Touch-and-Go.	a. After a landing. b. Crosswinds within limits.	a. Maintain runway alignment $\pm 10$ feet after touchdown and during takeoff roll. b. Reposition flaps and smoothly apply full power and cross-check engine instruments. c. Establish and maintain proper takeoff attitude and become airborne at appropriate airspeed for existing conditions. d. Hold correct pitch attitude to attain and maintain climb speed +10 to -5 KIAS. e. Maintain ground track on the extended runway centerline until initiating closed, turning crosswind, or intercepting published departure.
<b>28. Breakout</b>		
a. Perform breakout procedures.	a. Aircraft in the traffic pattern with insufficient spacing from other aircraft. b. Published breakout procedures c. Inflight guide and local area map.	a. Make a timely decision to breakout. b. Establish and maintain appropriate groundtrack. c. Maintain proper spacing from other aircraft. d. Maintain airspeed $\pm 10$ KIAS. e. Maintain altitude $\pm 100$ feet. f. With limited assistance from the instructor pilot
<b>29. Monitor Airfield and Traffic Pattern Operations</b>		
a. Direct and monitor airfield and traffic patterns to include MIF items 13 and 23 – 28 (SFL-Pattern, Traffic Pattern, Normal Approach and Landing, Forward Slip Approach and Landing, G-Around, Touch-and-Go, Breakout).	a. Published airfield procedures, traffic patterns and approaches with prescribed altitudes, airspeeds, and groundtracks.	a. Announce departure, arrival, approach and landing procedures IAW IFT Local Flying Procedures b. Make all pattern callouts and required radio calls IAW IFT Local Flying Procedures c. Perform crew coordination procedures IAW IFT Local Flying Procedures
<b>30. Clearing / Collision Avoidance Precautions</b>		
a. Perform cockpit and mission tasks while visually and aurally (with radios and on-board equipment) avoiding other aircraft and ground obstacle conflicts. b. Visually clear outside the aircraft. See and avoid inflight hazards.	a. Aircraft in flight or on the ground. b. Operable radio c. Traffic avoidance equipment.	a. Recognize actual or potential conflicts and adjust aircraft movement to safely avoid conflicts. b. Effectively use accepted visual clearing techniques to avoid conflicts. c. Effectively employ the radio and on-board equipment to aid in clearing.
<b>31. Checklist Use</b>		
a. Complete inflight checks.	a. Checklist and inflight guide.	a. Complete checks at the proper times in the mission. b. Use challenge and response format on dual flights

<i>Performance</i>	<i>Conditions</i>	<i>Standards</i>
<b>32. Communication</b>		
a. Perform required verbal communications. <ol style="list-style-type: none"> <li>(1) Normal and emergency transmissions with ATC and other agencies</li> <li>(2) Intercockpit communications.</li> </ol>	a. Operable radios and intercom.	<ol style="list-style-type: none"> <li>a. Make FAR, AIM, and local procedures required radio calls.</li> <li>b. Select appropriate frequencies.</li> <li>c. Use recommended terminology.</li> <li>d. Acknowledge radio calls and comply with instructions.</li> <li>e. Understand and prioritize transmissions in a multiple communications environment.</li> </ol>
<b>33. Risk Management / Decision-Making</b>		
a. Assess risks and make appropriate decisions	a. FARs, airplane flight manual (AFM), and USAF instructions and directives.	<ol style="list-style-type: none"> <li>a. Properly gather all available data before arriving at a final decision.</li> <li>b. Select suitable course of action using logical and sound judgment based on available information.</li> <li>c. Accurately identify contingencies and alternatives.</li> <li>d. Modify actions as necessary to obtain the best outcome.</li> </ol>
<b>34. Situational Awareness</b>		
a. Maintain situational awareness to include the following areas: <ol style="list-style-type: none"> <li>(1) <i>Awareness</i> — Correlate and keep track of what happens on the ground, in own aircraft, and other flight members, and cope with any subsequent mission impact as a result of these happenings.</li> <li>(2) <i>Flexibility</i> — Cope with rapidly changing situations or conditions, inflight or on the ground, and adjust mission as needed to obtain desired objectives.</li> <li>(3) <i>Capacity</i> — Recognize loss of situational awareness, respond effectively, institute valid measures to preserve situational awareness and prevent spatial disorientation.</li> </ol>	a. During mission profile.	<ol style="list-style-type: none"> <li>a. Demonstrate ability to minimize the effects of adverse factors and capitalize on opportunities to avoid mission degradation. Factors to consider may include, but are not limited to, such items as weather conditions, airspace and approach restrictions, high-density traffic, aircraft capabilities and limitations, and fuel conservation.</li> <li>b. Maintain fuel awareness during all phases of flight to include bingo fuel, alternate / divert fuel, recovery fuel, etc.</li> <li>c. Maintain awareness of time.</li> <li>d. Correctly assess all possible factors bearing on the situation.</li> <li>e. Have complete knowledge of all rules and regulations and carry out all duties with minimum supervision.</li> <li>f. Adapt to new situational demands.</li> </ol>
<b>35. Task Management</b>		
a. Prioritize and manage tasks, based on existing and new information, while maintaining constructive behavior under stress. <ol style="list-style-type: none"> <li>(1) Cognizant of how large a task loading they can cope with before becoming saturated, confused or frustrated to the degree that safety is jeopardized or the mission is ineffective.</li> <li>(2) Follow orders and carry out all required procedural steps in the proper sequence.</li> </ol>	a. During mission profile.	<ol style="list-style-type: none"> <li>a. Correctly prioritize multiple tasks to avoid saturation or under-tasking.</li> <li>b. Use all available resources to manage workload.</li> <li>c. Ask for assistance when overloaded.</li> <li>d. Accept better ideas when offered.</li> <li>e. Focus attention on task at hand.</li> </ol>

<i>Performance</i>	<i>Conditions</i>	<i>Standards</i>
<b>36. Crew Coordination</b>		
a. Direct tasks and solicit feedback.	a. During the mission profile.	a. Provide direction and information as necessary to ensure a cohesive crew. b. Direct crew members to react before safety of flight is compromised.
<b>37. Emergency Procedures</b>		
a. Perform or simulate critical action emergency procedures	a. Simulated engine loss and practice forced landing procedures. b. Ground training for other emergencies. c. Checklist and inflight guide.	a. Maintain aircraft control, analyze the situation, and take proper action. Perform, simulate, or state proper steps in critical action procedures, from memory, without error. b. Use proper checklists and inflight guide as necessary. c. Perform, simulate, or state additional required actions to satisfactory conclusion.
b. Perform or simulate non-critical action procedures to include analysis of hypothetical aircraft malfunctions.	a. Hypothetical aircraft malfunctions and emergency situations. b. Checklist and inflight guide.	a. Maintain aircraft control, analyze the situation, and take proper action. b. State proper steps to resolve non-critical action emergencies using proper checklist(s) and inflight guide as required.
<b>38. General Knowledge</b>		
a. Demonstrate knowledge of aircraft systems, flying instructions, applicable procedures, associated directives, and instructions.	a. Study guides, instructions, and manuals.	a. Demonstrate a thorough understanding of aircraft systems. b. Be able to apply procedures from tech orders and associated directives. c. Refer to applicable publications as necessary.

## Chapter 3

### Academic Training

#### Section A — Indoctrination

<i>Unit</i>	<i>Title</i>	<i>Hours</i>
F101	Commander / Military Training Officer Briefing	1.0
F102	Program Overview	3.0
F103	Flight Physiology	1.0
<i>Total</i>		5.0

#### Section B — Academics

<i>Unit</i>	<i>Title</i>	<i>Hours</i>
A101	Safety/ORM/CRM	1.0
A102	Aircraft Systems	1.5
A103	Aerodynamic Principles	1.5
A104	Airplane Performance	1.0
A105	Communications	1.0
A106	Airport Operations	2.0
A107	Weather Theory and Reports	1.5
A108	Airspace	1.5
A109	Basic Navigation	1.0
A110	Basic Flying Knowledge Examination	1.0
A111N	Navigation Examination	1.0
A112	Advanced Navigation	2.0
<i>Total</i>		16.0

#### Section C — Officer Development

<i>Unit</i>	<i>Title</i>	<i>Hours</i>
D101	Aviation Ethics	1.0
D102	Physical Training	10.0
<i>Total</i>		11.0



## Chapter 4

### Flying Training

#### Section A — Ground Training

<i>Unit</i>	<i>Title</i>	<i>Hours</i>
G101	Aircraft Preflight / Postflight	1.0
G102	Takeoffs and Traffic Patterns	1.0
G103	Departures and Arrivals	1.0
G104	Four Fundamentals	0.5
G105	Steep Turns, Slow Flight and Stalls	1.0
G106	Ground Reference Maneuvers	1.0
G107	Landings	1.0
G108	Emergency Procedures	1.0
G109	Go-Arounds, Breakouts and Forward Slips	1.0
G111	Flight Check Briefing	0.5
G112	Enroute Navigation	2.0
<i>Totals</i>		11.0

#### Section B — Aircraft

<i>Unit</i>	<i>Title and Objectives</i>	<i>Sorties</i>	<i>Hours</i>
N101-02	<b>Introduction to Flight</b>	2	2.6
	<i>Objectives</i> — Students practice basic aircraft control while adapting to the aircraft and basic maneuvers. <ol style="list-style-type: none"> <li>1. Checklist, inflight guide, and local area map use</li> <li>2. FOD prevention</li> <li>3. Sitting height assessment</li> <li>4. Cockpit organization</li> <li>5. Composite crosscheck</li> <li>6. Coordinated flight</li> <li>7. Trim use</li> <li>8. Clearing</li> <li>9. Ground operations</li> <li>10. Basic aircraft control</li> <li>11. Steep turns</li> <li>12. Traffic Pattern</li> <li>13. Normal approach and landing</li> <li>14. Forward slips to a landing</li> <li>15. Breakout and go-around</li> <li>16. Power-on stalls / power-off stalls</li> <li>17. Slow flight</li> <li>18. Departure and arrival</li> </ol>		
N201	<b>Introduction to Visual Navigation</b>	1	1.4
	<i>Objectives</i> — Students build on basic aircraft control while adding additional maneuvers. <ol style="list-style-type: none"> <li>1. Simulated forced landings (pattern and area)</li> <li>2. Visual navigation route</li> <li>3. VOR/GPS and traffic avoidance system operation / orientation</li> </ol>		

<i>Unit</i>	<i>Title and Objectives</i>	<i>Sorties</i>	<i>Hours</i>
N301 – 06	<p><b>Navigation Fundamentals</b></p> <p><i>Objectives</i> — Students build on basic aircraft control and situational awareness, practicing previously introduced maneuvers, while learning the following navigation basics.</p> <ol style="list-style-type: none"> <li>1. Flight planning</li> <li>2. Chart preparation</li> <li>3. Map reading</li> <li>4. Dead reckoning</li> <li>5. Use of navigation equipment</li> <li>6. Course, speed, and time control corrections</li> <li>7. Turn point briefings</li> </ol> <p><i>Notes</i></p> <ol style="list-style-type: none"> <li>1. Students fly a minimum of four VNAV profiles at least 75 nautical miles total distance. Fly navigation routes between 3,000 feet and 1,000 feet AGL. Selected approved legs may be flown above 500 feet AGL.</li> <li>2. When not flying the aircraft, students direct all phases of flight, performing required communications and monitoring instructor pilot actions through systems' crosscheck</li> <li>3. At least one sortie should be flown with someone other than the primary instructor</li> <li>4. Complete one hour of ground evaluation in preparation for the check</li> </ol> <p><i>Special Syllabus Requirement</i></p> <ol style="list-style-type: none"> <li>1. Students accomplish a table-top, ground training exercise for a visual navigation route abort to an alternate/auxiliary airfield (e.g., Fowler, Bullseye, Fremont County, La Junta, Spanish Peaks)</li> </ol>	6	8.4
N490	<p><b>Final Check</b></p> <p><i>Objectives</i> — Students perform the required maneuvers and a cross-section of maneuvers to the proficiency level required by the MIF. The final check grade is based on the student's ability to fly selected maneuvers and monitor and direct the IP through others maneuvers while maintaining SA and three dimensional orientation. As a minimum, evaluate the following:</p> <ol style="list-style-type: none"> <li>1. General knowledge / EP evaluation</li> <li>2. Departure/arrival</li> <li>3. Area work: Monitor Basic Flight and Area Maneuvers (Simulated forced landing (area))</li> <li>4. Pattern work: Monitor Airfield and Traffic Pattern Operations (Simulated forced landing (pattern))</li> </ol>	1	1.4
<i>Totals</i>		10	13.8

<b>CSO Aircraft Maneuver Item File</b>					
<b>No.</b>	<b>Maneuver</b>	<b>Units / Sorties</b>			
		<b>N1 / 2</b>	<b>N2 / 1</b>	<b>N3 / 6</b>	<b>N4 / 1</b>
1	Mission Analysis (Planning / Briefing / Debriefing)	2+	2+	3+	3+
2	Ground Operations	2+	2+	3+	3+
3	Takeoff and Climb	2	2	2+	2
4	Departure	2	2+	3+	3+
5	Basic Aircraft Control / Cross-Check	2+	2+	3+	3+
6	Trim Use	2+	2+	2+	2+
7	Area Orientation and Inflight Planning	2+	2+	3+	3+
8	Climbs and Descents	2+	2+	2+	2+
9	Turns	2+	2+	2+	2+
10	Slow Flight Maneuvering	1+	2	2	2
11	Steep Turns	1+	2	2	2
12	Power-Off and Power-On Stalls	2+	2	2	2
13	Simulated Forced Landing — Pattern		2	2	2
14	Simulated Forced Landing — Area		2	2	2
15	Monitor Basic Flight and Area Maneuvers		2+	3+	3+
16	Navigation Procedures / VOR/GPS / Map Use	2	2	3+	3+
17	VNAV Route Entry / Exit		2+	3+	3+
18	VNAV Route Time Control		2+	3+	3+
19	VNAV Route Ground Track Control		2+	3+	3+
20	VNAV Route Chart Reading		2+	3+	3+
21	VNAV Route Flight Parameters		2+	3+	3+
22	Arrival	2	2+	3+	3+
23	Traffic Patterns	2+	2	2+	2
24	Normal Approach / Landing	2+	2	2+	2
25	Forward Slip Approach / Landing	1+	2	2	2
26	Go-Around	2+	2	2	2
27	Touch-and-Go	1+	2	2+	2
28	Breakout	2	2	2	2
29	Monitor Airfield and Traffic Pattern Operations		2+	3+	3+
30	Clearing / Collision Avoidance Precautions	2+	2+	3+	3+
31	Checklist Use	2+	2+	3+	3+
32	Communication	2+	2+	3+	3+
33	Risk Management / Decision-Making	2+	2+	3+	3+
34	Situational Awareness	2+	2+	3+	3+
35	Task Management	2+	2+	3+	3+
36	Crew Coordination	2+	2+	3+	3+
37	Emergency Procedures	2	2+	3+	3+
38	General Knowledge	2+	2+	3+	3+
39	Special Syllabus Requirements			2+	

## Chapter 5

### General Instructions

#### Section A — Course Prerequisites

Syllabus Event	Prerequisite(s)		Syllabus Event	Prerequisite(s)		Syllabus Event	Prerequisite(s)	
	1	2		1	2		1	2
<b>Academics</b>			<b>Ground Training</b>			<b>Aircraft</b>		
F101			G101	A102		N101	A101	
F102	F101		G102	G101		N102	N101	
F103			G103	G102		N201	N102	G112
A101	F102		G104			N301	N201	
A102			G105			N302	N301	
A103			G106			N303	N302	
A104			G107			N304	N303	A111N
A105			G108			N305	N304	
A106			G109			N306	N305	
A107			G111	N201		<b>N490</b>	N306	G111
A108			G112	A112				
A109								
A110								
A112	A109							
A111N	A112							

#### Section B — Bibliography

1. Training Manuals, Technical Orders, and Instructions	<i>Basis of Issue</i>
a. AFI 11-290, <i>Cockpit / Crew Resource Management Training Programs</i>	1/course
b. AETCI 36-2605, Vol. 1, <i>Formal Aircrew Training Administration and Management</i> ,	1/course
c. AETCI 36-2605, Vol. 3, <i>Formal Aircrew Training Administration and Management</i> , <i>Initial Flight Training</i>	1/course
d. <i>Performance Work Statement for IFT</i>	1/course
e. <i>Inflight Guide</i> (contractor-developed)	1/student
f. <i>IFT Local Flying Procedures</i> (contractor-developed)	1/student
g. <i>Aircraft Flight Manual</i>	1/course
h. <i>Pilot's Abbreviated Flight Crew Checklist</i>	1/student
<b>2. Syllabus</b>	
a. AETC Syllabus S-V8C-S, <i>Combat Systems Officer Initial Flight Training</i>	1/instructor
<b>3. Instructor Guide</b>	
a. <i>Contractor Standard Operating Procedures</i>	1/instructor

#### Section C — Glossary

##### Terms

**Additional Training (AT) Sorties** — Additional sorties given for extended breaks in training, because of Commander's review process or for other reasons specified in the syllabus.

**Cockpit / Crew Resource Management** — The effective use of all available resources — people, weapon systems, facilities, equipment, and environment — by individuals or crews to safely and efficiently accomplish an assigned mission or task.

**Commander's Awareness Program (CAP)** — A management system used to focus supervisory attention on student's progress in training, specific deficiencies, and potential to complete the program. The flight commander administers CAP.

**Commander's Review (CR) Program** — A process to consider circumstances relative to a student's training and to arrive at specific recommendations regarding retention in training, elimination from training and future training. The Commander's Review is governed by AETCI 36-2605, Vol. 3.

**Combat Systems Officer (CSO) Candidate** — An officer or cadet scheduled to attend CSO Training

**Course** — The entire program of preflight, flying, simulation, academics, and officer development conducted in all media during the programmed training days.

**Elimination Check (EC Coded 89)** — A special check given to determine whether a student should continue in training or be recommended for elimination.

**Maneuver Item File (MIF)** — A listing of all the maneuvers and proficiency required on each maneuver for all units.

**Pilot Candidate** — An officer or cadet who is scheduled to attend SUPT.

**Progress Check (PC Coded 88)** — A special check given to determine whether a student should continue in normal syllabus flow or be recommended for an elimination check.

**Special Syllabus Requirements** — Maneuvers required on a onetime basis are documented under this heading.

**Student Activity Record (AF Form 4293)** — A form included in the training folder used to record IP/supervisor comments concerning the training given to a student.

**Undergraduate Flying Training (UFT)** — UFT includes SUPT, URT and UCT.

**Unit** — A grouping of lessons in any category with the same first two numbers in the lesson designators and the same list of maneuvers and objectives. (Example, The N2XX unit, etc.)

## Abbreviations

<i>Acronym or Initialism</i>	<i>Definition</i>	<i>Acronym or Initialism</i>	<i>Definition</i>
AETC	Air Education and Training Command	MFI	Military Flight Instructor
AETCI	AETC Instruction	MIF	Maneuver Item File
AF	Air Force	MOA	Manifestation of Apprehension
AFM	Aircraft Flight Manual	MTO	Military Training Officer
AFROTC	AF Reserve Officer Training Corps	NDB	Non-Directional Radio Beacon
AFTO	AF Technical Order	NM	Nautical Mile
AGL	Above Ground Level	NOTAM	Notice to Airmen
AT	Additional Training	OG/CC	Operations Group Commander
ATC	Air Traffic Control	OPR	Office of Primary Responsibility
CAP	Commander's Awareness Program	PC	Progress Check
CBT	Computer-Based Training	POH	Pilot Operating Handbook
CFI	Certified Flight Instructor	PT	Physical Training
CPT	Cockpit Procedures Trainer	RPA	Remotely Piloted Aircraft
CR	Commander's Review	RPM	Revolutions per Minute
CRM	Cockpit / Crew Resource Management	SFL	Simulated Forced Landing
CSO	Combat Systems Officer	SQ/CC	Squadron Commander
CTS	Course Training Standards	SUPT	Specialized Undergraduate Pilot Training
DME	Distance Measuring Equipment	TAF	Terminal Aerodrome Forecast
EC	Elimination Check	TIMS	Training Integration Management System
EP	Emergency Procedure	UCT	Undergraduate CSO Training
FAA	Federal Aviation Administration	UFT	Undergraduate Flying Training
FAR	Federal Aviation Regulations	URT	Undergraduate RPA Training
FLIP	Flight Information Publications	USAF	United States Air Force
FOD	Foreign Object Damage	USAFA	United States Air Force Academy
GPS	Global Positioning System	VMC	Visual Meteorological Conditions
IAW	In Accordance With	VNAV	Visual Navigation
IP	Instructor Pilot	VOR	VHF Omni-directional Range
KIAS	Knots Indicated Airspeed	VSI	Vertical Speed Indicator