

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

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VOLUME 3**



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Flying Operations

T-6 OPERATIONS PROCEDURES

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This instruction implements AFPD 11-2, *Aircraft Rules and Procedures*, and supports AFI 11-202, Volume 3, *General Flight Rules*. Along with major command (MAJCOM) and local procedures, this instruction prescribes standard procedures to be used by all aircrew operating Air Force T-6 aircraft. The MAJCOM/A3 is waiver authority for this instruction unless specified elsewhere. File a copy of all approved waivers with this instruction. This AFI applies to all Regular Air Force and Air Force Reserve Command pilots and all Air National Guard associate instructor pilots flying the T-6A. **Attachment 1** contains a glossary of references and supporting information used in this publication.

Forward MAJCOM supplements to HQ AETC/A3V and AF/A3XI for coordination prior to MAJCOM certification and approval to the parent MAJCOM for coordination prior to publication. Submit suggested improvements to this publication via AF Form 847, Recommendation for Change of Publication, through command Stan/Eval channels to AETC/A3VO.

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SUMMARY OF CHANGES

This publication is substantially revised and must be completely reviewed. Major changes include references to AFMAN 11-248 changed to AETCMAN 11-248; 3.1.3. guidance provided on flight glove use; **3.4.4** deleted reference to aircraft equipped with a 2-position ISS; **3.9** substantially revised minimum runway guidance; **3.23** defines critical phases of flight; **3.39** deleted requirement for safety observer; **3.40** substantially changed GPS procedures section; **3.55** deleted reference to AETC LOA for uncontrolled airfields and provides procedures for OG/CCs; **3.57** moves AHC restrictions to AETCMAN 11-248; Table 4.1. updated table to reflect current MESL.

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Chapter 1

GENERAL INFORMATION

1.1. Scope. This instruction outlines the procedures applicable to the safe operation of the T-6. With the complementary references cited, this instruction prescribes standard operational procedures to be used by all aircrew operating T-6 aircraft.

1.2. Pilot's Responsibility. This instruction, in conjunction with other governing directives, prescribes T-6 procedures under most circumstances, but is not to be used as a substitute for sound judgment or common sense. The pilot in command (PIC) is ultimately responsible for the safe and effective operation of the aircraft.

1.3. Deviations. Deviations from these procedures require specific approval of the MAJCOM/A3 unless an urgent requirement or aircraft emergency dictates otherwise. In that case, the PIC will take the appropriate action to safely recover the aircraft.

1.4. References. The primary references for T-6 operations are technical order (TO) 1T-6A-1, *Flight Manual, USAF/USN Series T-6A Aircraft*; AETCMAN 11-248, *T-6 Primary Flying*; and this instruction.

1.5. Recommended Changes and Waivers:

1.5.1. USAF/A3 is the approval authority for changes or revisions to this instruction.

1.5.2. Policy and procedures are enacted to provide quality and consistency in training and evaluation whether at an undergraduate or graduate level. Occasionally, unique circumstances may warrant special consideration and possible waiver of policy provisions. At the same time, because it is important to preserve fidelity of training, evaluation, and policy implementation throughout the command, a process must be established for review of proposed waivers.

1.5.3. Waivers that change the intent of the policy outlined in this instruction are not authorized without MAJCOM A3 (T-2) approval. Unless otherwise stated in this document, Wing/CCs (T-3) are the approval authority for individual personnel exceptions to the policy outlined in this instruction caused by special or unusual circumstances.

1.5.4. Units. Coordinate T-2 waivers through AETC/A3VO as appropriate. Squadron commanders will submit all T-2 waiver requests through command channels in electronic format. Waiver requests must provide justification why the individual or unit cannot comply with requirements. AETC/A3VO and the units will file a copy of approved waivers to this volume according to AFI 33-360, Publications and Forms Management.

1.5.5. Operations Group (OG) Commander. The OG/CC of local supplements will handle waivers to unit supplemental guidance. (T-2)

1.6. Definition of Student. For purposes of this instruction, "Student" refers to any undergraduate student pilot, undergraduate combat systems officer (UCSO), or pilot enrolled in a formal training course who has not successfully completed a T-6A QUAL evaluation IAW AFI 11-2T-6, Volume 2, *T-6 Aircrew Evaluation Criteria*.

Chapter 2

MISSION PLANNING

2.1. Responsibilities. The responsibility for mission planning will be shared jointly by the individual pilots and the operations function of the organization.

2.2. General Procedures:

2.2.1. Sufficient flight planning must be done to ensure safe mission accomplishment. AFI 11-202, Volume 3, and applicable supplements specify minimum requirements.

2.2.2. Complete takeoff and landing data (TOLD) for all flights. Tab data derived from TO-1T-6A-1 approved performance charts is acceptable and may be utilized when available. All TOLD programs derived from locally produced algorithms must be submitted to MAJCOM Stan/Eval for approval. (T-2)

2.2.3. The FAA's Direct User Access Terminal Service (DUATS) is authorized for T-6A aircrew use as an AETC/A3V-validated and -approved flight planning software system IAW AFI 11-202, Volume 3, AETC Supplement. T-6A aircrew will use the ***T-6A DUATS FLIGHT PLANNING USER'S GUIDE*** when using DUATS for flight planning. The most current version of the ***T-6A DUATS FLIGHT PLANNING USER'S GUIDE*** can be found on the AETC/A3V SharePoint® site. (T-2)

2.3. Briefing and Debriefing:

2.3.1. **Minimum Briefing Time.** The minimum briefing time between the start of the mission briefing and takeoff is 1 hour. The minimum briefing time for the first navigation sortie of the day beginning or ending off-station and for all off-station, low-level navigation sorties is 1 hour and 45 minutes. (T-3). **EXCEPTION:** Two qualified instructor pilots (IP) familiar with the off-station airfield may use 1 hour minimum briefing time.

2.3.2. Briefing Guides:

2.3.2.1. Brief students and passengers on their specific duties and responsibilities related to safe mission accomplishment and appropriate training rules. Aircrews will refer to the appropriate briefing guides located in this instruction—[Attachment 3](#), [Attachment 4](#), [Attachment 5](#), and [Attachment 6](#)—and will brief applicable items before each mission. **Note:** Briefing guides are a reference list of items that may apply to particular missions. In addition, aircrews will refer to [Attachment 7](#) for T-6 training rules. Aircrew may reference a locally generated briefing guide provided it contains all information in the appropriate attachment.

2.3.2.2. The briefing guide reference items listed may be briefed in any sequence. Those items covered by written squadron standards and understood by all participants may be briefed as “standard.” Each guide may be expanded as necessary to cover other important items of the flight. Brief only those items applicable to the particular mission and in sufficient detail to prevent any misunderstanding between crewmembers.

2.3.2.3. An alternate mission will be briefed for each flight if applicable. The alternate mission will be less complex than the primary mission. Missions or events not briefed

will not be flown. Mission elements or events may be briefed airborne if it is practical to do so and flight safety is not compromised.

2.3.2.4. All missions will be briefed and debriefed, using the applicable briefing guide as a reference.

2.3.2.5. Solo students will not deviate from the briefed primary or alternate mission profile.

2.4. Unit-Developed Checklists and Local Pilot Aids / In-Flight Guides (IFGs):

2.4.1. Unit-developed checklists may be used in lieu of TO 1T-6A-1CL-1, *Pilot's Abbreviated Flight Crew Checklist*, if they contain, as a minimum, all items (verbatim and in order) listed in the checklist.

2.4.2. Unit-developed pilot aids / IFGs will include, as a minimum, the following items:

2.4.2.1. Briefing guides.

2.4.2.2. Local ultra-high frequency (UHF) and very high frequency (VHF) channelization.

2.4.2.3. Appropriate airfield diagrams.

2.4.2.4. Emergency information (for example, emergency action checklists, no-radio procedures, divert information).

2.4.2.5. Bailout area information.

2.4.2.6. Cross-country procedures to include command and control, engine documentation, and aircraft servicing.

2.4.2.7. Other information as deemed necessary by the unit (for example, stereo flight plans, turnaround procedures, local training areas, and instrument preflight).

2.4.2.8. Training rules.

2.4.3. Units will forward Unit-Developed Checklists and Local Pilot Aids/IFGs to MAJCOM Stan/Eval for review prior to release. (T-2).

Chapter 3

NORMAL OPERATING PROCEDURES

Section 3A—Preflight

3.1. Required Personal Equipment. In addition to equipment specified in AFI 11-202, Volume 3, the following requirements apply:

3.1.1. Due to the nature of the T-6 egress system, each crewmember will wear a visor during all phases of flight, and should be down prior to lowering the canopy. A clear visor will be worn at night or when needed for restricted visibility.

3.1.2. On non-local sorties, each aircrew will carry appropriate in-flight publications and a suitable terrain chart to cover the proposed route of flight.

3.1.3. G-suits are required when planning to exceed 2 Gs during any portion of a sortie. An aircrew flight equipment (AFE)-approved and tethered hook blade knife must be accessible post ejection if the G-suit is not worn. Flight gloves will be worn from engine startup until engine shutdown. Flight gloves may be worn during the exterior inspection to protect the aircrew's hands, however, use caution to ensure that gloves do not come into contact with aircraft fluids (i.e., fuel, oil, hydraulic.)

3.2. Aircraft Systems:

3.2.1. Students will not fly solo in aircraft requiring an operational check. Perform operational checks during dual-student training sorties only if they do not interfere with training objectives.

3.2.2. Off-station system requirements are listed [Table 4.1](#)

3.2.3. On dual instructional sorties, students will not conduct the exterior inspection without IP supervision.

3.3. Foreign Object Damage (FOD). To reduce the risk of FOD during ground operations, personnel will:

3.3.1. Not approach or allow others to approach an operating engine. **WARNING:** Be especially careful of the dangers of a spinning prop.

3.3.2. Avoid using excessive power.

3.3.3. Avoid prop or jet blast from other aircraft.

3.3.4. Ensure loose items are secure in the cockpit before opening the canopy.

3.3.5. To reduce the potential for damaging/scratching the canopy, do not place objects on the canopy transparency.

3.4. Procedures for Ejection Seat Safety Pin and Inter Seat Sequencer (ISS):

3.4.1. Solo student pilots will make a radio call to the controlling agency stating that the ejection seat safety pin is removed and stowed prior to being cleared for takeoff.

3.4.2. After landing, solo student pilots will clear the runway and stop the aircraft prior to reinstalling their ejection seat safety pin.

3.4.3. In aircraft equipped with a 3-position ISS (SOLO, BOTH, and CMD FWD), the rear cockpit ejection seat safety pin will be removed with the ISS mode selector in the CMD FWD position during all sorties when non-rated personnel occupy the rear cockpit (RCP). **EXCEPTION:** Students enrolled in a formal training course will remove the pin and select the BOTH position on the ISS when occupying the rear seat.

Section 3B—Taxiing

3.5. Ground and Taxi Operations. Conduct ground and taxi operations according to AFI 11-218, *Aircraft Operation and Movement on the Ground*.

3.6. Taxi Interval. Maintain a minimum of 75 feet when taxiing staggered and 150 feet when in trail. Use taxi clearances IAW **paragraph 3.5** with caution when operating in the EOR. Use caution when taxiing in the vicinity of aircraft accomplishing an overspeed governor check.

3.7. Ice and/or Snow Conditions. Do not taxi if snow or ice is adhering to taxiways or runways until all portions of the taxi route and runway have been checked for safe operations. **Note:** When ice and/or snow are present on the taxiway, taxi on the centerline with a minimum of 300 feet of spacing.

Section 3C—Takeoff and Landing

3.8. Fuel. Aircraft will take off with sufficient fuel for the planned sortie, to include required reserve and alternate fuel. The following definitions and requirements apply to fuel:

3.8.1. Joker fuel is a pre-briefed fuel state needed to terminate an event and transition to the next phase of flight.

3.8.2. Bingo fuel is a pre-briefed fuel state that allows the aircraft to return to the base of intended landing or an alternate, if required, using preplanned recovery parameters and arriving with normal recovery fuel.

3.8.3. Normal recovery fuel is the fuel on initial or at the final approach fix (FAF) at the base of intended landing or alternate, if required. This fuel quantity will be the higher of what is established locally or 200 pounds.

3.8.4. Declare minimum fuel or emergency fuel to the controlling agency when it becomes apparent the fuel remaining at final touchdown will be less than the requirements indicated in **paragraph 3.8.4.1 and 3.8.4.2**, respectively. After declaring minimum or emergency fuel, add the fuel status call and the amount of fuel remaining (in minutes) to each new air traffic control (ATC) facility. Once established in the local traffic pattern, add fuel status with each radio transmission.

3.8.4.1. Minimum fuel—150 pounds (200 pounds on solo student syllabus sorties).

3.8.4.2. Emergency fuel—100 pounds or less.

3.9. Runway. Minimum runway length and width for normal T-6 operations will provide a landing distance available (LDA) of 4,000 feet long by 75 feet wide or heavy weight flaps up landing distance plus 500 feet, whichever is greater. (**EXCEPTION:** Operations group

commanders may approve the use of 3,000 feet long by 50 feet wide runways for uncontrolled airfield low approaches. Include the approval in the unit supplement or a memorandum IAW **paragraph 3.55.1.** (T-2). An intersection takeoff must provide at least 4,000 feet of usable runway. T-6 operations require at least 4,000 feet between arresting cables located on or above the runway surface. In an emergency landing situation (i.e., actual PEL/FL), pilots must consider all factors that could affect their ability to safely recover the aircraft before attempting to land on a prepared surface less than 4,000 feet long by 75 feet wide. (i.e., calculated TOLD, winds, energy/airspeed prior to touchdown, configuration, Runway Condition Reading (RCR), overruns, availability of Aircraft Crash/Fire/Rescue response, etc).

3.10. Spacing. (Note: Refer to AFI 13-204, Volume 3, *Airfield Operations Procedures and Programs*, and AETCI 11-204, *Runway Supervisory Unit [RSU] Operations*, for complete guidance).

3.10.1. Do not begin a takeoff following another departure until the preceding aircraft is airborne or a minimum separation of 3,000 feet exists.

3.10.2. Do not begin the final turn after a straight-in has reported at 2 miles unless you have the straight-in in sight, can make a normal final turn, and can maintain spacing behind the straight-in.

3.10.3. Do not cross the runway threshold to land until preceding aircraft are either airborne, clear of the runway, or a minimum separation of 3,000 feet exists when using alternate sides of the runway for similar aircraft. Minimum separation is 6,000 feet when not using alternate sides or when behind a dissimilar aircraft. For tower-controlled flight operations, minimum separation is 6,000 feet when conducting a touch-and-go landing behind a full stop. The required spacing at night is 6,000 feet (similar and dissimilar). Increase the spacing, as required when wake turbulence is expected due to calm winds or when landing with a tail wind. If it appears as if spacing between two aircraft on final will be a factor, the RSU should direct the second aircraft to go around and offset (as required).

3.10.4. Do not initiate or accomplish items in the after landing or full stop and/or taxi back checklist until clear of the runway and at a safe taxi speed.

3.11. Rolling Takeoffs. Perform rolling takeoffs during daylight or extended daylight hours with a rated pilot on board.

3.12. Crosswind Limitations:

3.12.1. Icy runway - 5 knots.

3.12.2. Standing water - 5 knots.

3.12.3. Standing water due to patchy standing water (ponding) as determined by the supervisor of flying (SOF) - 10 knots.

3.12.4. Wet runway - 10 knots.

3.12.5. Solo students - 15 knots.

3.12.6. Formation wing takeoffs and landings - 15 knots

3.12.7. Touch-and-go landings - 20 knots.

3.12.8. Initial takeoffs and full-stop landings on a dry runway - 25 knots.

3.13. Landing Gear Handle Operation. When airborne and before moving the gear handle, the pilot flying the aircraft will make an intercockpit “gear clear” call and pause momentarily before moving the gear handle. On pre-solo contact sorties, the IP will acknowledge “clear” before the student moves the gear handle. On all other sorties, “gear clear” is an advisory call only.

3.14. Flaps:

3.14.1. To prevent wear and tear on the aircraft (excessive side-loading of landing gear), LDG flap touch-and-go and full stop landings are discouraged when crosswinds (steady state or gusts) exceed 10 knots. This is not intended to limit aircrew when the use of LDG flaps is more appropriate for conditions (i.e., runway length, required training objectives, etc).

3.14.2. The LDG flap setting should be used for full-stop landings when the heavy weight flaps up landing distance is greater than or equal to 80 percent of the actual field length.

3.15. Low Approach. During low approaches, do not allow the aircraft to touch down. When a restricted low approach is directed, do not descend below 500 feet above ground level (AGL) or below the altitude specified by the controller.

Section 3D—Maneuvering Parameters

3.16. Out-of-Control Flight (OCF) Recoveries:

3.16.1. Do not practice OCF recoveries without an OCF-current IP on board.

3.16.2. To avoid entering instrument meteorological conditions (IMC) during OCF recovery training, a minimum of 7,000 feet of airspace, clear of clouds, must exist below entry altitude. Verify cloud clearance before initiating OCF entry.

3.16.3. When conducting OCF recoveries over clouds, plan to complete all OCF recoveries (to include dive recoveries) at least 3,000 feet above the clouds.

3.17. Aerobatics. Perform aerobatic flight only in special use airspace (T-2).

3.18. Contact Recoveries. Practice contact recoveries only in day visual meteorological conditions (VMC).

3.19. Aircraft Configuration. Unless specifically stated in the exercise or maneuver description, perform all maneuvers with gear and flaps in the retracted position. Do not extend the flaps in an attempt to improve aircraft performance.

3.20. Cloud Clearances:

3.20.1. When on an instrument flight rules (IFR) flight plan under radar control in a designated ATC military operating area, weather requirements for aerobatics, confidence maneuvers, stalls, and extended trail is clear of clouds with 3 miles of in-flight visibility and a discernable horizon.

3.20.2. Solo syllabus sorties must remain in VMC at all times, with sufficient ground references to visually navigate to, from, and within assigned areas.

3.20.3. When flying practice Emergency Landing Patterns (ELPs), maintain proper visual flight rules (VFR) cloud clearances.

3.21. Minimum Altitudes:

- 3.21.1. Perform all parts of aerobatic maneuvers, unusual attitudes, abnormal flight recoveries, practice lost wingman, extended trail, stalls, and slow flight above 6,000 feet AGL.
- 3.21.2. The minimum altitude to begin OCF spin training is 13,500 feet mean sea level (MSL). Ensure spinning stops above 10,000 feet pressure altitude.
- 3.21.3. Except while in the traffic pattern or during departure and recovery, the minimum en route and area altitude for a solo-student syllabus mission is 5,000 feet AGL.
- 3.21.4. The minimum altitude for VFR non-local, point-to-point navigation missions dictated by operational or training requirements is 3,000 feet AGL.
- 3.21.5. The minimum altitude to complete configured aircraft slips for training is 300 feet AGL.

3.22. Dual-Only Maneuvers. Solo students will not practice the following:

- 3.22.1. Stalls.
- 3.22.2. Stability demonstrations.
- 3.22.3. Nose-high recoveries.
- 3.22.4. Nose-low recoveries.
- 3.22.5. Inverted recoveries.
- 3.22.6. Uncontrolled airfield operations.
- 3.22.7. OCF recoveries.
- 3.22.8. ELPs or any other simulated engine-out maneuvers.
- 3.22.9. Flaps up patterns or landings.
- 3.22.10. Straight-in approaches.
- 3.22.11. Slow-flight maneuvers.
- 3.22.12. Rolling takeoffs.
- 3.22.13. Low-closed patterns.
- 3.22.14. Low level navigation.

3.23. Critical Phases of Flight. The following flight regimes are critical phases of flight: (T-2).

- 3.23.1. Terminal area operations including taxi, takeoff, and landing.
- 3.23.2. Low-level flight.
- 3.23.3. Formation operations.
- 3.23.4. All portions of any test or functional check flight (FCF).
- 3.23.5. Any aerial demonstration.
- 3.23.6. Flight below 1,000 feet AGL.

3.24. Rear Cockpit Landings. Only RCP-landing qualified IPs (or pilots receiving training to gain or regain a RCP-landing qualification under the supervision of a RCP-landing qualified IP in the FCP), may perform RCP landings.

Section 3E—Extended Daylight

3.25. Definition. Extended daylight is defined as the period 15 minutes before official sunrise to 15 minutes past official sunset. At the home station and local auxiliary fields only, daylight traffic and area operations are in effect during the extended daylight period.

3.26. Maneuvers. All maneuvers normally accomplished during normal daylight hours may be performed within the extended daylight window, including solo syllabus sorties. Under certain weather conditions, such as low ceiling and visibility, the SOF should decide if maneuvers are appropriate or safe during the above-defined times. Further restrictions may be imposed by the operations group commander.

Section 3F—Night Flying

3.27. Prohibited Maneuvers. Aerobatics, practice OCF recoveries, practice stalls, stability demonstrations, practice contact recoveries, practice ELPs, and practice flaps up patterns and landings are prohibited at night.

3.28. Solo. Student pilots will not fly solo at night.

3.29. Formation. Flying formation at night is prohibited.

3.30. Taxiing. Taxi with a minimum interval of 300 feet and on the taxiway centerline.

3.31. Lighting:

3.31.1. **Landing and Taxi Lights.** The landing and taxi lights will normally be used during all night taxiing. **EXCEPTION:** When the lights might interfere with the vision of the pilot of an aircraft landing or taking off, taxiing aircraft may extinguish their landing and taxi lights. However, the taxiing aircraft will come to a stop if the area cannot be visually cleared without the landing and taxi lights.

3.31.2. **Anti-collision.** Aircrews may turn off anti-collision lights during the hours of darkness while in the home base traffic pattern (based on local guidance).

3.32. Overhead Patterns. Fly night overhead patterns only at the home station. **Note:** Kelly Field is included for the 12th Operations Group.

3.33. Instrument Procedures:

3.33.1. **Night Landings.** Night landings at other than the home field require operational glide path guidance. Visual descent path indicator or precision guidance systems constitute acceptable glide path guidance. At towered fields meeting this criteria, aircrew are allowed under IFR to receive vectors for “visual approaches” to increase the frequency and repetition of night landings.

3.33.2. **Filing at Night.** Do not file to a base of intended landing (other than the home station) unless there is an operable straight-in approach with glide path guidance. Night alternates must have an operational instrument straight-in approach with glide path guidance.

3.33.3. **Night Non-precision Approaches.** At airfields other than the home field, descents below a minimum descent altitude (MDA) on a non-precision approach require glide path guidance. However, aircrews may perform practice approaches at facilities with no glide path guidance if they descend no lower than the published MDA. When landing from a non-precision approach, intercept and fly the appropriate glide path guidance (visual, ILS, etc.).

3.33.4. **Night Circling.** Do not practice the visual circling maneuver portion of an instrument approach or perform a low-closed pattern at night. You may fly the instrument portion of a designated circling approach (for example, very high frequency omnidirectional range station [VOR]-A), but you must execute climb out instructions or go missed approach by the missed approach point (MAP).

3.33.5. **Unusual Circumstances at Night.** In unusual circumstances, such as an aircraft emergency or a facility outage, the PIC will determine the best method of recovery, which may or may not include glide path guidance.

Section 3G—Pilot Weather Categories (PWC)

3.34. PWC Minimums. PWCs are designed to reduce the exposure of pilots with limited experience to the risks inherent during periods of low ceiling and visibility. **Table 3.1.** specifies PWC minimums. Before assigning a lower PWC, a PWC 1 pilot must evaluate the pilot's instrument proficiency. When calculating total time for the purpose of PWC, the PWC 1 pilot will not include student, undergraduate flying training, or "other" flight time. **Note:** Hours in an assigned aircraft may include all series or mission types of that aircraft.

Table 3.1. Pilot Weather Categories (PWC) for T-6 Aircrews.

I T E M	A	B	C
	PWC (Notes 1 through 6)	Minimum Flying Hour Criteria	Takeoff and Approach Ceiling/Visibility Minimums
1	1	150 rated hours primary flight time in assigned aircraft and 600 hours total rated time <i>or</i> 250 rated hours in the assigned aircraft and 450 hours total rated time.	Suitable published minimums.
2	2	A graduate of follow-on training (pilot instructor training or formal training unit) who does not qualify for PWC 1.	Suitable published minimums <i>or</i> 300 feet and 1 mile (runway visual range (RVR) 5,000 feet), whichever is greater.
Notes:			
1. Document PWCs in the Aviation Resource Management System and the Letter of Xs.			
2. Certification of PWC 1 status is dependent on the pilot's demonstrated knowledge and performance in flight under PWC 2 operations and in aircrew training devices with a low visibility capability. The commander of the flying squadron to which the pilot is assigned or attached will certify assignment to PWC 1 by signing an AF Form 4348, <i>USAF Aircrew Certifications</i> . File the AF Form 4348 in the pilot's flight training folder and annotate the LoX			
3. OG/CC may authorize PWC 2 pilots to use PWC 1 minimums for approaches at the home field.			

4. If an IP is on board, aircrew may use the IP's PWC.
5. If the pilot is non-current in instrument approaches, instrument approaches will not be flown until currency is regained by flying an instrument approach under the supervision of an instrument approach current IP
6. Use the approach-end RVR to determine takeoff and landing criteria.

Section 3H—Weather Restrictions for Instrument Approaches

3.35. Filing Weather. Do not file to a destination unless the ceiling and visibility for the estimated time of arrival (plus or minus 1 hour) is at or above the appropriate PWC or suitable published minimums, whichever is greater (**Table 3.1**). Reference AFI 11-202, Volume 3 for additional guidance.

3.36. Takeoff. Takeoff minimums are specified in **Table 3.1**. Base the decision to launch a local sortie on the existing weather and forecast for planned landing plus 1 hour. Base the decision to launch non-local sorties on the existing weather at takeoff time. Reference AFI 11-202, Volume 3 for additional guidance.

3.37. Before Starting Penetration. Do not commence an en route descent or published approach unless existing ceiling and visibility meet the requirements of **Table 3.1**. During actual IMC, a precision approach monitored by surveillance radar is the preferred approach. **Note:** This does not prevent instrument practice for other types of approaches if the ceiling and visibility are at or above minimums for the approach being flown.

3.38. After Starting Penetration. If a pilot has begun the en route descent, arrival or published approach (or has received a radar vector for the approach) and subsequently determines, weather is below the required PWC or published minimums (ceiling or visibility), the pilot may continue the approach to the PWC or published minimums, whichever is higher. The pilot will determine the PWC decision altitude (DA) or MDA by referring to the touchdown zone elevation (TDZE). When TDZE is not depicted or is unavailable, the pilot will use the runway threshold elevation or airport elevation, in that order. The pilot may land if the runway environment is in sight and the aircraft is in a position to make a safe landing. In all cases, the pilot will comply with the last clearance received until obtaining a revised clearance. **CAUTION:** The use of PWC minimums on a precision approach (precision radar approach, instrument landing system) may require a pilot to execute a missed approach prior to the published DA. In these instances, on reaching PWC minimums and making the decision not to continue the approach, the pilot should start a climb immediately while proceeding to the non-precision MAP. On reaching the non-precision MAP, the pilot should continue with the published missed approach procedure or alternate missed approach instructions, as appropriate.

3.39. Simulated Instrument Flight. Simulated instrument flight must be conducted according to AFI 11-202, Volume 3. If both cockpits are occupied, the pilot not flying will act as a safety observer when the pilot in the other cockpit is flying simulated instruments. When flying a practice approach without a safety observer, the pilot must maintain a composite crosscheck that maintains situational awareness with terrain and other traffic. The pilot is not relieved of the responsibility to see and avoid other traffic, terrain and obstacles. When flying instrument approaches in VMC, pilots may fly down to approach minimums if the runway environment is in sight when reaching applicable PWC minimums. Pilots must acknowledge reaching PWC

minimums and state their intentions to crewmembers if continuing to publish minimums. Vision restriction devices will not be worn in the front cockpit.

3.40. Global Positioning System (GPS):

3.40.1. The T-6A KLN 900 GPS is approved for en route, terminal, and non-precision approach operations requiring a minimum required navigation performance (RNP) value of 0.3. T-6A aircrew may use GPS as the primary navigational source for en route IFR operations, as well as during the following area navigation (RNAV) operations:

3.40.1.1. RNAV 2 procedures (i.e., T and Q routes).

3.40.1.2. RNAV 1 procedures (i.e., standard instrument departures [SID], standard terminal arrivals [STAR], departure procedures [DP]).

3.40.1.3. RNP APCH (Required Navigation Performance Approach) procedures down to lateral navigation (LNAV) minima (i.e., approaches with “RNAV (GPS)” in the title). Additionally, GPS overlay approaches (i.e., approaches with “or GPS” in the title) may also be flown.

3.40.2. Aircrew will check Jeppesen® NAVDATA Alerts/Change Notices/Notices to Airmen (NOTAM) prior to every flight in which the Jeppesen® database will be utilized. The GPS will not be used as a primary source of IFR navigation with an expired database.

3.40.3. Fault detection and exclusion (FDE) must be checked before using GPS as a primary source of IFR navigation. A loss of FDE constitutes an unacceptable degradation of system performance. In order to meet the requirements of AFI 11-202, Volume 3, FDE must indicate “YES” before using GPS as a primary source of IFR navigation within the National Air Space System.

3.40.4. The KLN 900 is a baro-aided GPS system. When below the transition altitude, aircrew should set the local altimeter setting on the altimeter page of the KLN 900 prior to commencing RNAV instrument approaches, SIDs, DPs, STARs, T or Q routes. In some cases, an incorrect altimeter setting may induce an erroneous receiver autonomous integrity monitoring (RAIM) failure indication resulting in an aborted GPS operation.

3.40.5. **RNAV 1 and RNAV 2 procedures.** Aircrew are approved to conduct RNAV 1 procedures (RNAV SID, STAR, DP) and RNAV 2 procedures (T or Q routes) IAW AFI 11-202, Volume 3 and FAA Advisory Circular (AC) 90-100A, *U. S. Terminal and En Route Area Navigation (RNAV) Operations*, with the following restrictions:

3.40.5.1. If flying RNAV SIDs, DPs, STARs, T or Q routes, or RNAV alternate/substitution, aircrew will check “terminal” predictive receiver autonomous integrity monitoring (P-RAIM) for their route of flight during preflight planning at <http://sapt.faa.gov> to ensure GPS satellite coverage. Aircrew will use the “with baro-aiding” tabs when referencing this site. While the KLN 900 GPS has the on-board capability to provide non-precision approach (NPA) P-RAIM, it does not have an on-board P-RAIM capability for “terminal” or “en-route operations”.

3.40.5.2. When flying an RNAV SID, DP or STAR the procedure must be retrieved by procedure name from the onboard navigation database in its entirety and conform to the charted procedure. Aircrew will verify their aircraft navigation system is operating correctly and the correct runway and departure procedure (including any applicable en

route transition) are entered and properly depicted. If a SID, DP, or STAR contains a course to altitude (CA) leg or a fix to manual termination (FM) leg, utilization of the omnibearing select (OBS) function and manual selection of the course may be necessary. Aircrew will not attempt to fly radius to fix (RF) legs.

3.40.5.3. When flying RNAV SIDs or DPs aircrew will have an RNAV (GPS) approach loaded for the airfield that they are departing. This will ensure proper RAIM sensitivity within 30 nautical miles (nm) of the departure airfield and that the course deviation index (CDI) is in the proper scale. For SIDs and DPs extending beyond 30 nm, aircrew will ensure the CDI is set to terminal sensitivity (1 nm) on the Mode page for the remainder of the SID or DP and that the aircraft remains within half-scale deflection. **Note:** While it is possible for aircrew to select a desired CDI scale for the KLN 900, it is not possible to select the RAIM sensitivity. Improper RAIM sensitivity beyond 30 nm is permitted under FAA AC 90-100A.

3.40.5.4. When flying RNAV STARs aircrew will have an RNAV (GPS) approach loaded for their destination to ensure proper RAIM and CDI sensitivity within 30 nm of the destination. If commencing an RNAV STAR outside of 30 nm, aircrew will ensure the CDI is set to terminal sensitivity (1 nm) on the Mode page and that the aircraft remains within half-scale deflection. Improper RAIM sensitivity beyond 30 nm is permitted under FAA AC 90-100A.

3.40.5.5. When flying conventional SIDs, DPs, STARs, or IAPs (Instrument Approach Procedures) using RNAV, comply with RNAV alternate/substitution guidance in AFMAN 11-217, Volume 1, *Instrument Flight Procedures*, AFI 11-202, Volume 3, and FAA AC 90-108, *Use of Suitable Area Navigation (RNAV) Systems on Conventional Routes and Procedures*. Aircrew will ensure the CDI is set to terminal sensitivity (1 nm) on the Mode page.

3.40.5.5.1. The KLN-900 is a suitable navigation system for substitute/alternate means of navigation on Terminal Arrival Areas (TAA) published on conventional ILS procedures IAW FAA AC 90-108.

3.40.5.5.1.1. If a conventional ILS approach contains the note “GPS Required” and contains a standalone waypoint requiring the use of GPS (i.e., a TAA), aircrew are authorized to fly this approach and must retrieve the waypoint from the database. **Note:** If navigation requires lateral guidance based on a localizer course (i.e., holding), localizer raw data must be monitored for lateral navigation.

3.40.5.5.1.2. Aircrew are not authorized to fly conventional ILS approach procedures which contain the note “GPS Required” and contain RNAV segments consisting of multiple consecutive RNAV waypoints or contain a missed approach (point or segment) based solely on RNAV.

3.40.5.6. It is not possible to retrieve entire RNAV T and Q routes from the database of the KLN 900; however, extracting individual named fixes from the database is permitted under FAA AC 90-100A, provided all fixes along the published route to be flown are inserted. Manual entry of waypoints using latitude and/or longitude or place and/or bearing is not permitted. To ensure that the aircraft remains within the expected distance

from route centerline, aircrew will ensure a CDI scale of 1 nm is selected from the Mode page and that the aircraft remains within full scale deflection.

3.40.6. RNP APCH procedures. The KLN 900 GPS is approved for RNP APCH procedures (i.e., approaches with RNAV (GPS) in the title) utilizing the LNAV and circling lines of minima IAW AFI 11-202, Volume 3 and FAA AC 90-105, *Approval Guidance for RNP Operations and Barometric Vertical Navigation in the U.S. National Airspace System*. Suitable procedures for the T-6A will state “GPS Required” or “GNSS Required”. Aircrew are **NOT** authorized to fly RNP AR APCH (Required Navigation Performance Authorization Required Approach) procedures (i.e., approaches with RNAV (RNP) in the title). RNAV (GPS) approaches will be flown in accordance with AFI 11-202, Volume 3, MAJCOM and local supplements. Aircrew must complete MAJCOM-directed training for use of these systems down to LNAV minima before IFR use. Additionally, the following restrictions apply:

3.40.6.1. Aircrew should check P-RAIM prior to departure and will check P-RAIM on STA 5 prior to commencing an RNAV (GPS) approach. Ensure that the ETA for the prediction is accurate.

3.40.6.2. Aircrew will not attempt to fly radius to fix (RF) legs.

3.40.6.3. The KLN 900 GPS does not display RNAV instrument approach segment distances in tenths of a mile. In order to meet the requirements of AFMAN 11-217, Volume 1, aircrew must ensure that once established on the unverified segments of the approach, the electronic horizontal situation indicator (EHSI) distance is evaluated to ensure an appropriate published charted value. If the value is appropriate based on current aircraft position, crews may continue the approach. Deviations from expected values should be treated conservatively and crews will abort the approach if the evaluated distance does not correspond to within 0.1 nm of the FLIP published value.

Section 3I—Formation

3.41. Maximum Size. The maximum flight formation size is four aircraft. MAJCOM Stan/Eval may approve larger formations upon request.

3.42. Lead Change:

3.42.1. The minimum altitude for a lead change within a formation is 500 feet AGL.

3.42.2. Do not initiate a lead change with the wingman farther back than a normal fingertip or route position or greater than 30 degrees back from line abreast. This does not restrict lead changes initiated as a result of an emergency or when other unusual circumstances dictate.

3.42.3. Do not initiate a lead change unless the aircraft assuming the lead is in a position from which the lead change can be safely initiated and visual contact maintained.

3.43. Takeoff:

3.43.1. Two-ship formation wing takeoffs require a minimum of 150 feet of runway width.

3.43.2. For formation wing takeoffs, the ceiling and visibility must be greater than or equal to circling minimums or 500 feet and 1 1/2 miles (whichever is higher). The maximum

crosswind component for wing takeoffs is 15 knots, and the runway must be free from standing water, ice, slush, or snow.

3.43.3. Formations will accomplish an interval takeoff whenever calculated minimum power at 60 KIAS is less than 85% torque.

3.43.4. Two-ship formation interval takeoffs require a minimum runway width of 75 feet.

3.43.5. For interval takeoffs, the ceiling and visibility must be greater than or equal to 1,500 feet and 3 miles, respectively.

3.43.6. Four-ship slot or echelon lineup requires a runway greater than or equal to 300 feet wide.

3.43.7. Four-ship element lineups will use 500 feet of spacing between elements on runways less than 300 feet wide. If runway length is a factor, formations will choose an alternate departure method (e.g., interval takeoff, trail departure, splitting elements, etc.)”

3.44. En Route. Four-ship formations will not cruise in IMC, but may climb or descend through IMC.

3.45. Approach and Landing:

3.45.1. Planned formation low approaches will be initiated no lower than 100 feet AGL to reduce the possibility of an inadvertent touchdown.

3.45.2. Formation wing landings are prohibited when:

3.45.2.1. The crosswind component exceeds 15 knots.

3.45.2.2. Standing water, ice, slush, or snow are on the runway.

3.45.2.3. The runway width is less than 150 feet.

3.45.2.4. The weather is less than 500 foot ceiling and 1 1/2 miles visibility or published approach minimums, whichever is higher. Additionally, do not commence a formation approach with weather reported below these minimums. (**EXCEPTION:** An actual emergency requiring a formation approach and/or landing may initiate an approach and continue to published minimums or compatible PWC minimums, whichever is higher).

3.45.3. Formation wing touch-and-go landings are prohibited.

3.45.4. The formation VMC drag maneuver may be used to establish spacing for single-ship landings when conditions do not permit a formation wing landing only when it has been pre-briefed. The briefing must include the specific traffic pattern or instrument approach procedure to be flown.

3.45.4.1. Minimum weather required for the drag maneuver is 1,500 foot ceiling and 3 miles visibility. All aircraft will maintain VMC from the drag point to landing.

3.45.4.2. Prior to directing a VMC drag maneuver while operating under IFR, the flight lead will coordinate with the appropriate ATC agency for non-standard formation for the remainder of the approach.

3.45.4.3. Minimum spacing is 3,000 feet unless greater spacing is briefed. Anytime the spacing is in question, the wingman will go-around or execute the missed approach, notify ATC, and comply with local procedures.

3.45.4.4. Wingmen may use pre-briefed power settings and configurations (speed brake, gear, and flaps) to establish and maintain spacing. Wingmen will not fly less than final approach airspeed and S-turns will not be used to gain or maintain separation while on an instrument approach final.

3.45.4.5. The latest drag point must allow adequate time for the wingman to establish required separation and then for the flight lead to slow to final approach airspeed no later than 3 nm from the runway. On instrument approaches, the drag will normally be accomplished in order to establish separation prior to the FAF or glideslope intercept.

3.46. Maneuvers:

3.46.1. **Fingertip Formation.** Limit maneuvering to 120 knots minimum airspeed, approximately 90 degrees of bank, and 2 to 3 Gs.

3.46.2. **Route.** Maximum bank angle is approximately 60 degrees.

3.46.3. **Echelon.** Maximum bank angle is approximately 60 degrees.

3.46.4. **Close Trail.** Limit maneuvering to turns and modified lazy eights, using 120 knots minimum airspeed, approximately 90 degrees of bank, and 2 to 3 Gs.

3.46.5. **Extended Trail.** Using 100 knots minimum airspeed, limit maneuvering to turns, loops, barrel rolls, modified lazy eights, modified Cuban eights, and cloverleaves. Do not perform abrupt turn reversals; that is, turns in one direction followed by a rapid, unanticipated roll into a turn in the opposite direction. Extended trail is limited to two-ship formations. Perform a G-awareness exercise before flying maneuvers in extended trail.

3.46.6. **Practice Lost Wingman.** Practice lost wingman procedures in VMC.

3.46.7. **Formation Low Levels.** Formation low levels will only be flown by 80FTW aircrew.

3.46.8. **Fluid Maneuvering.** Fluid Maneuvering will only be flown by 80FTW aircrew.

3.46.9. **Tactical Formation.** Tactical formation will only be flown by 80FTW aircrew.

3.47. Solo Students. Solo students will not fly:

3.47.1. Actual or simulated instrument approaches and landings as lead or wing.

3.47.2. Close trail as wing.

3.47.3. The fingertip position when accomplishing in-flight checks or radio channel changes.

3.47.4. Practice lost wingman procedures while on the wing.

3.47.5. Extended trail level 3 as wing.

3.47.6. Formation landings (wing or lead).

3.47.7. Formation wing or interval takeoffs from the wing position.

3.48. Three- and Four-Ship Formations. For three- and four-ship formations, all members will be qualified pilots and a 4-ship certified IP will be aboard each aircraft. The operations group commander (or designated representative) will approve all three- and four-ship flights.

Section 3J—Low-Level Routes

3.49. Solo Restriction. Single-ship low levels will not be flown solo.

3.50. Daylight Restriction. To minimize the possibility of a bird strike and avoid the problems associated with visual illusions, enter the route no earlier than 30 minutes after sunrise (1 hour for mountainous terrain) and exit the route no later than 30 minutes before sunset (1 hour for mountainous terrain).

3.51. Minimum Altitudes. Fly low-level navigation at an altitude of 500 to 1,500 feet AGL. When terrain height varies, maintain a minimum of 500 feet above the highest terrain within 2,000 feet of the aircraft.

3.52. Obstacle Clearances. Towers and other manufactured obstacles are more difficult to see than high terrain. **Note:** For towers on or near the route, plan to fly a minimum of 500 feet above the highest obstacle within 2 nm of the aircraft. Once the obstacle is acquired visually and positively identified, a 2,000-foot lateral clearance will be maintained.

Section 3K—Simulated Emergency Procedures

3.53. Restrictions:

3.53.1. Airborne simulated emergencies to include ELPs and flaps up operations will be briefed and will only be conducted during day VMC weather conditions. Simulated emergency practice will be discontinued if intercockpit communications cannot be maintained. Compound or multiple simulated emergencies are prohibited with the exception of ELPs which may be flown in any flap setting to simulate a malfunctioning Emergency Gear Extension system.

3.53.2. Pilots will not practice simulated engine failures on takeoff that require a landing straight ahead, a turn back to land opposite direction from the runway just departed, or a teardrop to another crossing or parallel runway. Those procedures will only be practiced in the simulator.

3.54. ELPs:

3.54.1. ELPs may be flown at uncontrolled airfields according to Section 3L of this instruction.

3.54.2. When conducted in controlled airspace, ELPs must be coordinated with the ATC agencies responsible for the airspace the ELP will transit.

3.54.3. ELPs at towered airfields may only be flown at airfields with an approved MAJCOM LOA (according to the MAJCOM supplement to AFI 11-202, Volume 3).

3.54.4. Zero torque ELPs may only be flown to a low approach (no lower than 200 feet AGL).

3.54.5. Straight-in ELPs may be flown at auxiliary fields by instructor development (ID) crews if no more than two aircraft are in the pattern (no solos). Bases will evaluate operational risk management impacts and publish deconfliction procedures (approved by AETC/A3V) for straight-in ELPs in a local supplement to AETCI 11-204 before implementing this training at their auxiliary fields.

Section 3L—Uncontrolled Airfield Operations

3.55. Requirements. With the operations group commander's approval, aircrews may conduct operations at uncontrolled, civil (not private) airfields, with the following restrictions:

3.55.1. Operations group commanders will designate approved uncontrolled airfields for routine use in writing in the unit supplement to this instruction or as a stand-alone memorandum. (T-2). The supplement or memorandum will, at a minimum, list the airfield name, ICAO airfield identifier, runway length and width, field elevation, common traffic advisory frequency [CTAF], pattern direction of turn (if non-standard), and any descriptors or unique characteristics identified during the airfield review. (T-2).

3.55.1.1. Operations group commanders may approve operations into specific uncontrolled airfields not designated IAW **paragraph 3.55.1**, on a case-by-case basis, for non-routine use (i.e., cross-country, out & back sorties, or airfield review/survey). Units will describe these approval procedures in the unit supplement to this instruction. (T-2).

3.55.1.2. The guidance in **paragraph 3.55.1 and 3.55.1.1** do not restrict aircrew from using any suitable runway during an actual aircraft emergency.

3.55.2. They will be flown single-ship only. Two-ship formations may split into single ships prior to commencing uncontrolled airfield operations. Split two-ship formations are considered two single ships for the purposes of this paragraph and **paragraph 3.55.6**

3.55.3. Winds must be within limits for each runway to which the aircrew operates as best as can be determined with available information. Fly the instrument approach most suited for the winds. If the uncontrolled airfield only has one approach and it is opposite direction for the wind conditions, it may be flown under any wind conditions but aircrew must monitor (via CTAF or visually) any departing aircraft to ensure safety of flight and traffic deconfliction.

3.55.4. All patterns and approaches will be flown to a low approach. (**EXCEPTION:** Full stops and takeoffs may be performed by aircrews flying to/from an auxiliary field for the purpose of manning the RSU.) In the event a landing is required at an uncontrolled airfield for other than RSU manning, the operations group commander will ensure fire or crash recovery and maintenance personnel, as appropriate to the situation, are available for the subsequent launch. (T-3). Aircrews will make CTAF radio calls prior to taxiing and taking the runway for takeoff.

3.55.5. Aircrews will monitor the published CTAF and make all radio calls and position reports recommended in AFMAN 11-217, Volume 2, *Visual Flight Procedures*, and the FAA Aeronautical Information Manual (AIM) *Official Guide to Basic Flight Information and ATC Procedures*, available at: http://www.faa.gov/air_traffic/publications/.

3.55.6. No more than two aircraft (total), military and/or civilian, may be in the pattern at any time.

3.55.7. Instrument approaches, rectangular patterns (as depicted in FAA AIM), and ELPs may be flown. Rectangular patterns and ELPs will be flown left hand traffic, unless the airfield traffic pattern indicators or flight information publications (FLIP) depict otherwise. No overhead patterns will be flown.

3.55.8. The maximum airspeed for pattern/approach operations within 1,500 feet AGL and 3 nm of an uncontrolled airfield is 150 KIAS.

3.55.9. Instrument approaches will be flown under IFR clearance. The OG/CC or equivalent is the approval authority to allow units to practice instrument approaches under VFR.

3.55.10. Weather restrictions for instrument approaches are as listed in Section 3H of this instruction.

3.55.11. For entry other than by an instrument approach, aircrews must maintain cloud clearances and visibility appropriate for their type of flight plan (IFR or VFR) and airspace. If an aircrew is approaching the airfield on an IFR clearance and not intending to fly an instrument approach, weather conditions must permit a VMC descent from the appropriate IFR en route altitude.

3.55.12. Aircrews will immediately notify the SOF if any hazardous conditions exist at an uncontrolled airfield that would prevent normal operations.

Section 3M—Operating in High Wind or Sea States

3.56. Restrictions. Units will restrict their flying operations when high winds or sea states would be hazardous to aircrew members in ejection situations. Flights are not permitted over land when steady state surface winds (forecast or actual) in training or operating areas exceed 35 knots. Unless otherwise approved by the OG/CC, over-water flights will not be permitted when forecast or actual wave heights exceed 10 feet or surface winds exceed 25 knots in training or operating areas. This is not intended to restrict operations when only a small portion of the route or area is affected.

Section 3N—Advanced Handling Characteristic (AHC) Program

3.57. Restrictions. Comply with AHC restrictions listed in AETCMAN 11-248, *T-6 Primary Flying, Attachment 4*.

Section 3O—Chase Procedures

3.58. Restrictions:

3.58.1. Any formation-qualified IP may fly safety chase for aircraft under emergency conditions (or impending emergency conditions).

3.58.2. A chase aircraft will maneuver as necessary to observe performance, but is primarily responsible for aircraft separation. Generally, a chase aircraft will maneuver in a 30- to 60-degree cone out to 1,000 feet from which the pilot can effectively clear and/or provide assistance. The chase aircraft will not stack lower than lead aircraft below 1,000 feet AGL.

3.58.3. Unless safety or circumstance dictate otherwise, a chase aircraft will low-approach no lower than 300 feet AGL.

Chapter 4

OPERATING RESTRICTIONS

4.1. General. Table 4.1 will assist the pilot in determining the minimum systems required for takeoff. Aircraft status is determined according to AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting*, and any applicable supplement.

Table 4.1. Operating Restrictions (Excluding FCF).

I T E M	A	B		D
	Inoperative System or Condition	May I fly this aircraft in		
		Day VMC Local (Dual)?	Day VMC Local (Solo)?	IMC, Night, or Cross-Country/O&B (Dual/Solo)?
1	Navigation lights	Yes	Yes	Yes (note 1)
2	Landing and taxi lights	Yes (note 2)	Yes (note 2)	Yes (note 2)
3	Anticollision strobe	No	No	No
4	VHF navigation	Yes	Yes	No
5	Transponder	Yes (note 3)	Yes (note 3,4)	No (note 4)
6	GPS	Yes (note 5)	Yes (note 4,5)	No
7	Trim aid device	Yes	Yes (note 4)	Yes (note 4)
8	Traffic Avoidance System	Yes	Yes (note 4)	Yes (note 4)
9	UHF comm	No	No	No
10	VHF comm	Yes	Yes	No
11	FDR MAINT or FAIL Light Illuminated	No	No	Yes (note 6)

Notes:

- Acceptable for daytime flight.
- Acceptable for daytime flight if either landing or taxi light is operational.
- Acceptable for flight on pattern-only missions at the home field with ATC approval.
- Acceptable when solo is a rated pilot.
- Acceptable for local missions other than low-level navigation.
- If no-over G is suspected, a one-time flight back to home station (to include intermediate stops for refueling) may be authorized with OG/CC and home station maintenance concurrence. Do not plan to fly any unnecessary increased-G maneuvers with an inoperative IDARS.

LEGEND:

Dual –Both cockpits occupied
Solo –Front cockpit only occupied
Yes – Aircraft is acceptable for flight
No – Aircraft is not acceptable for flight

4.2. Factors to Consider for Aircraft Malfunctions. Once airborne, aircraft commanders must weigh all pertinent factors when deciding whether to continue or to abort a sortie for an aircraft malfunction. Factors to consider include student mission requirements and weather conditions at the home base and divert base. Solo students will contact the RSU controller (if in the pattern) or the SOF (if outside the pattern) for instructions.

4.3. Deviation Approval. Operations group commanders may approve deviations from the restrictions listed in [Table 4.1](#) on a flight-by-flight basis if there is no compromise of flight safety or Air Force directives. This authority may not be delegated below the operations group deputy commander.

4.4. Solo Flying:

4.4.1. Aircraft may be flown solo with instrument or system malfunctions in the rear cockpit that does not affect safety of flight.

4.4.2. Student pilots will not fly solo in an aircraft with a known malfunction unless approved by the squadron supervisor. In addition, the aircraft must be cleared by a maintenance supervisor.

4.4.3. With any sort of engine malfunction indication (engine still running), a solo student should fly a precautionary emergency landing.

4.4.4. If a solo student experiences an engine failure (engine shutdown or not producing sufficient power to sustain level flight), serious consideration should be given to ejection. The student may attempt a forced landing with the following restriction: minimum LDA of 4,000 feet or heavy weight flaps up landing distance plus 500 feet, whichever is greater.

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Deputy Chief of Staff, Operations

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

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Adopted Forms

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AFTO Form 781, *Arms Aircrew/Mission Flight Data Document*, 11 September 2008

Abbreviations and Acronyms

AC—advisory circulars

AFE—aircrew flight equipment

AGL—above ground level

AHC—advanced handling characteristics

ATC—air traffic control

ATIS—automated terminal information service

CC—commander

CDI—course deviation index

CF—course to fix

CSO—combat systems officer

CTAF—common traffic advisory frequency

DA—decision altitude

DP—departure procedures

DUATS—Direct User Access Terminal Service

EHSI—electronic horizontal situation indicator

ELP—emergency landing pattern

EOR—end of runway

ETA—estimated time of arrival

FAA—Federal Aviation Administration
FAF—final approach fix
FCF—functional check flight
FCIF—flight crew information file
FCP—front cockpit
FDE—fault detection and exclusion
FLIP—flight information publications
FM—fix to manual termination
FOD—foreign object damage
GNSS—Global Navigation Satellite System
GPS—global positioning system
IAP—Instrument Approach Procedure
ID—instructor development
IFF—identification, friend or foe
IFG—In-flight guide
IFR—instrument flight rules
IMC—instrument meteorological conditions
IP—instructor pilot
ISS—inter seat sequencer
LDG—landing
LNAV—lateral navigation
LOA—letter of agreement
MAJCOM—major command
MAP—missed approach point
MDA—minimum descent altitude
MSL—mean sea level
NAVAID—navigation aid
NOTAM—notice to Airmen
NPA—non-precision approach
OBS—omnibearing select
O&B—out and back
OCF—out-of-control flight, operational check flight

P-RAIM—predictive receiver autonomous integrity monitoring
PCL—power control lever
PIC—pilot in command
PIT—pilot instructor training
PWC—pilot weather category
RAIM—receiver autonomous integrity monitoring
RCP—rear cockpit
RCR—runway condition reading
RF—radius to fix
RNAV—area navigation
RNP—required navigation performance
RNP APCH—required navigation performance approach
RNP AR APCH—required navigation performance authorization required approach
RSU—runway supervisory unit
RVR—runway visual range
SID—standard instrument departures
SIF—selective identification feature
SOF—supervisor of flying
Stan/Eval—standardization/evaluation
STAR—standard terminal arrivals
TAA—terminal arrival area
TDZE—touchdown zone elevation
TOLD—takeoff and landing data
TSO—technical standard orders
UHF—ultra-high frequency
UCSO—undergraduate combat systems officer
VFR—visual flight rules
VHF—very high frequency
VMC—visual meteorological conditions
VOR—very high frequency omnidirectional range station

Attachment 2

FUNCTIONAL CHECK FLIGHTS (FCF), OPERATIONAL CHECK FLIGHTS (OCF), AND FERRY FLIGHTS

A2.1. Restrictions and Requirements:

A2.1.1. FCFs will not be conducted with other types of missions except FCF pilot continuation training, FCF pilot upgrade training, or FCF pilot certification flights. All FCF requirements will be accomplished by an FCF pilot or an FCF pilot in training status with an FCF IP on board. The operations group commander may authorize a T-6 IP to fly with an FCF pilot on board. (T-2)

A2.1.2. FCF sorties take priority over other types of flying. The FCF pilot is the final authority on the appropriate crew compliment. Unless conducting an FCF pilot or FCF IP upgrade, FCFs and OCFs should be scheduled, in priority order, with the following crew complement: (T-2).

A2.1.2.1. Two FCF pilots.

A2.1.2.2. One FCF pilot and one T-6 IP.

A2.1.2.3. Solo FCF pilot.

A2.1.2.4. If the desired crew compliment is not available; consider delaying the sortie to ensure the desired crew compliment is available.

A2.1.3. OCFs will normally be flown by FCF pilots, but highly experienced non-FCF IPs may perform OCF flights with the operations group commander's approval. (T-2)

A2.1.4. IAW T.O. 1-1-300, FCFs may recover at home station when originating from auxiliary fields or from bases within the local flying area. (T-2)

A2.1.5. Aircraft within the local flying area requiring an FCF or OCF flight may be flown to the home station by an FCF pilot or crew with operations group commander approval. Approval will be for a one-time ferry flight. (T-2)

A2.1.6. Maneuvers not in accordance with TO 1T-6A-6CF-1, *Functional Check Flight Procedures Manual*, will not be flown or practiced on FCF missions. (T-2)

A2.1.7. Local FCF pilots or crews are authorized to perform required FCFs on transient AETC aircraft if approved by the aircraft's owning group commander. All FCFs on AETC T-6 aircraft will be flown by AETC FCF pilots. AETC FCF pilots will not normally perform FCFs on transient aircraft from other services or commands without specific approval from the group commander (or equivalent) that has control over the aircraft.

A2.1.8. To avoid entering IMC during an FCF sortie where OCF and/or spin recoveries are required, depending on the nature of the FCF, a minimum of 10,000 feet of airspace clear of clouds should exist below OCF or spin entry altitude. In addition, minimum weather should allow a line of sight to a suitable airfield within engine-out glide range.

Attachment 3**T-6 MISSION BRIEFING GUIDE**

A3.1. General: Note: Brief items applicable to the mission in sufficient detail to prevent any misunderstandings between crewmembers.

A3.1.1. Time hack.

A3.1.2. Mission objectives and requirements.

A3.1.3. Mission overview.

A3.1.4. Mission data card (call sign, engine start, takeoff time, etc.).

A3.1.5. Flight crew information file (FCIF), ops notes, notices to airmen (NOTAM), and TOLD.

A3.1.6. Airfield and navigation aid (NAVAID) status.

A3.1.7. Weather:

A3.1.7.1. Takeoff.

A3.1.7.2. Area or route.

A3.1.7.3. Recovery.

A3.1.7.4. Alternate.

A3.1.8. Sign out.

A3.2. Ground Operations:

A3.2.1. AFTO Form 781, *Arms Aircrew/Mission Flight Data Document* (review and stowage).

A3.2.2. Gear pin and personal equipment stowage.

A3.2.3. Exterior inspection responsibilities.

A3.2.4. Instrument cockpit check responsibilities.

A3.2.5. Engine start.

A3.2.6. Clearance and taxi procedures.

A3.2.7. End-of-runway procedures.

A3.2.8. Spare aircraft procedures.

A3.3. Takeoff (Including Static, Rolling, and Crosswind Procedures).**A3.4. Departure (Including Routing, Altitudes, and Airspeeds).****A3.5. Area Work:**

A3.5.1. G-awareness exercise.

A3.5.2. Specific area work and parameters.

A3.5.3. Engine and G envelope.

A3.5.4. Joker and bingo fuels.

A3.6. Training Rules. Brief appropriate items from [Attachment 7](#).

A3.7. Recovery (Including Routing, Altitudes, and Airspeeds).

A3.8. Simulated Emergency Procedures.

A3.9. Alternate Mission Profile. Brief appropriate items from the applicable briefing guide ([Attachment 3](#) through [Attachment 6](#) of this AFI).

A3.10. IMC Procedures:

A3.10.1. Unusual attitudes.

A3.10.2. Spatial disorientation.

A3.10.3. Icing restrictions.

A3.11. Night Procedures:

A3.11.1. Personal equipment (flashlight and clear visor).

A3.11.2. Aircraft and cockpit lighting.

A3.11.3. Taxi procedures.

A3.11.4. Spatial disorientation.

A3.11.5. Visual illusions.

A3.11.6. Pattern procedures (entry, reference, spacing, and breakout).

A3.11.7. Night restrictions.

A3.12. Crew Coordination:

A3.12.1. Aircraft commander.

A3.12.2. Transfer of aircraft control, with and without intercom.

A3.12.3. Clearing.

A3.12.4. In-flight checks.

A3.12.5. Radio procedures.

A3.12.6. Power control lever (PCL) Movement and/or Hand position.

A3.13. Emergency Procedures:

A3.13.1. General aircrew responsibilities during emergencies.

A3.13.2. Emergency ground egress.

A3.13.3. Takeoff emergencies.

A3.13.4. Physiological incident.

A3.13.5. Bird strikes.

A3.13.6. Electrical fire.

A3.13.7. Engine failure.

A3.13.8. Ejection (with and without intercom, controlled and uncontrolled).

A3.13.9. Visual signals with intercom failure (emergency gear extension).

A3.13.10. Lost-communications procedures.

A3.13.11. Lost procedures.

A3.13.12. Emergency divert airfields and procedures.

A3.14. Personal Items

A3.14.1. Rings removed

A3.14.2. Cell phone off

A3.15. Questions.

Attachment 4

T-6 FORMATION BRIEFING GUIDE

A4.1. General: Note: Brief items applicable to the mission in sufficient detail to prevent any misunderstandings between crewmembers or flight members.

- A4.1.1. Time hack.
- A4.1.2. Mission objectives and requirements.
- A4.1.3. Mission overview.
- A4.1.4. Mission data card (call sign, engine start, takeoff time, etc.).
- A4.1.5. FCIF, ops notes, NOTAMs, and TOLD.
- A4.1.6. Airfield and NAVAID status.
- A4.1.7. Weather:
 - A4.1.7.1. Takeoff.
 - A4.1.7.2. Area or route.
 - A4.1.7.3. Recovery.
 - A4.1.7.4. Alternate.
- A4.1.8. Formation positions.
- A4.1.9. Sign out.

A4.2. Ground Operations:

- A4.2.1. Engine start.
- A4.2.2. Automated terminal information service (ATIS).
- A4.2.3. Flight check-in and clearance and taxi procedures.
- A4.2.4. End-of-runway procedures.
- A4.2.5. Maintenance delays.
- A4.2.6. Spare aircraft procedures.

A4.3. Takeoff:

- A4.3.1. Runway lineup.
- A4.3.2. Takeoff (wing, interval, and combination with four ship).
- A4.3.3. Rejoin.

A4.4. Departure (Including Routing, Altitudes, and Airspeeds).

A4.5. Area Work:

- A4.5.1. G-awareness exercise.
- A4.5.2. Specific exercises (entry and parameters).

A4.5.3. Rejoins (bank angle, airspeed, and position).

A4.5.4. Joker and bingo fuels.

A4.6. Instrument and Navigation Mission (Including Routing, Altitude, and Airspeed).

A4.7. Recovery and Landing:

A4.7.1. Split-up.

A4.7.2. Recovery (routing, altitudes, and airspeeds).

A4.7.3. Overhead pattern and landing (pattern entry and spacing).

A4.7.4. Wing approach and landing:

A4.7.4.1. Configuration and airspeed.

A4.7.4.2. Instrument procedures.

A4.7.4.3. Circling procedures.

A4.7.5. After-landing checks and taxi back (single-ship and formation).

A4.8. Alternate Formation Mission. Brief appropriate items from the applicable briefing guide ([Attachment 3](#) through [Attachment 6](#) of this AFI).

A4.9. IMC Procedures:

A4.9.1. Aircraft lighting.

A4.9.2. Unusual attitudes.

A4.9.3. Spatial disorientation.

A4.9.4. Icing restrictions.

A4.9.5. Lost wingman procedures.

A4.10. Night Procedures:

A4.10.1. Personal equipment (flashlight and clear visor).

A4.10.2. Aircraft and cockpit lighting.

A4.10.3. Taxi procedures.

A4.10.4. Takeoff procedures (aircraft lighting and radio calls).

A4.10.5. Formation references.

A4.10.6. Spatial disorientation.

A4.10.7. Visual illusions.

A4.10.8. Pattern procedures (entry, references, spacing, and breakout procedures).

A4.10.9. Night restrictions.

A4.11. Formation Procedures:

A4.11.1. Radio procedures.

A4.11.2. In-flight checks.

- A4.11.3. Route position and spacing.
- A4.11.4. Position change.
- A4.11.5. Wake turbulence.
- A4.11.6. Engine and G envelope.
- A4.11.7. Breakout.
- A4.11.8. Overshoot and collision avoidance.
- A4.11.9. Knock-it-off call.
- A4.11.10. Lost sight.
- A4.11.11. Visual signals.

A4.12. Training Rules. Brief appropriate items from **Attachment 7**.

A4.13. Three- and Four-Ship Procedures:

- A4.13.1. Runway lineup.
- A4.13.2. Takeoff (wing, interval, and combination).
- A4.13.3. Rejoins.
- A4.13.4. Radio procedures.
- A4.13.5. Phantom wingman position.
- A4.13.6. Position change.
- A4.13.7. Split up and recovery.

A4.14. Formation Emergencies:

- A4.14.1. Takeoff.
- A4.14.2. In-flight malfunctions.
- A4.14.3. Element integrity.
- A4.14.4. Midair collision.
- A4.14.5. Radio failure.
- A4.14.6. Hydraulic, electrical, fuel, oxygen, engine.
- A4.14.7. Physiological incident.
- A4.14.8. Bird strike.
- A4.14.9. Ejection.
- A4.14.10. Recovery procedures.
- A4.14.11. Emergency divert airfields.

A4.15. Questions.

A4.16. Crew Coordination:

A4.16.1. Aircraft commander.

A4.16.2. Ground operations:

A4.16.2.1. AFTO Form 781 (review and stowage).

A4.16.2.2. Gear pin and personal equipment stowage.

A4.16.2.3. Exterior inspection responsibilities.

A4.16.2.4. Instrument cockpit check responsibilities.

A4.16.2.5. Spare aircraft procedures.

A4.16.3. Transfer of aircraft control, with and without intercom.

A4.16.4. Clearing.

A4.16.5. In-flight checks.

A4.16.6. Radio procedures.

A4.16.7. PCL Movement and/or Hand position.

A4.17. Emergency Procedures:

A4.17.1. General aircrew responsibilities during emergencies.

A4.17.2. Emergency ground egress.

A4.17.3. Takeoff emergencies.

A4.17.4. Physiological incident.

A4.17.5. Bird strikes.

A4.17.6. Electrical fire.

A4.17.7. Engine failure.

A4.17.8. Ejection (with and without intercom, controlled and uncontrolled).

A4.17.9. Visual signals with intercom failure (emergency gear extension).

A4.17.10. Lost-communications procedures.

A4.17.11. Lost procedures.

A4.17.12. Emergency divert airfields and procedures.

A4.18. Alternate Single-Ship Mission. Brief appropriate items from the applicable briefing guide ([Attachment 3](#) through [Attachment 6](#) of this AFI).

A4.19. Personal Items

A4.19.1. Rings removed

A4.19.2. Cell phone off

A4.20. Questions.

Attachment 5

T-6 INSTRUMENT AND NAVIGATION BRIEFING GUIDE

A5.1. General: Note: Brief items applicable to the mission in sufficient detail to prevent any misunderstandings between crewmembers or flight members.

A5.1.1. Time hack.

A5.1.2. Mission objectives and requirements.

A5.1.3. Mission overview.

A5.1.4. Mission data card (call sign, engine start, takeoff, route entry times, etc.).

A5.1.5. FCIF, ops notes, NOTAMs, and TOLD.

A5.1.6. Airfield and NAVAID status.

A5.1.7. Weather:

A5.1.7.1. Takeoff.

A5.1.7.2. Area or route.

A5.1.7.3. Recovery.

A5.1.7.4. Alternate.

A5.1.8. Sign out.

A5.1.9. Required personal equipment (life preserver unit, flashlight, clear visor, survival kit, etc.).

A5.2. Ground Operations:

A5.2.1. AFTO Form 781 (review and stowage).

A5.2.2. Gear pin and personal equipment stowage.

A5.2.3. Exterior inspection responsibilities.

A5.2.4. Instrument cockpit check responsibilities.

A5.2.5. Engine start.

A5.2.6. Clearance and taxi procedures.

A5.2.7. End of runway procedures.

A5.2.8. Spare aircraft procedures.

A5.3. Takeoff:

A5.3.1. Static, rolling, and crosswind procedures.

A5.3.2. Transition to vision-restricting device.

A5.4. Departure (Including Routing, Altitudes, and Airspeeds).

A5.5. En Route and Cruise (Including Route of Flight, Altitudes, Airspeeds, and Groundspeed Check).

A5.6. Area Work:

- A5.6.1. Specific area work and parameters.
- A5.6.2. Engine and G envelope.
- A5.6.3. Joker and bingo fuels.

A5.7. Training Rules. Brief appropriate items from **Attachment 7**.**A5.8. Arrival:**

- A5.8.1. Checks, routing, altitudes, and airspeeds.
- A5.8.2. ATIS and metro.
- A5.8.3. Instrument approach review.

A5.9. Instrument Approach Procedures:

- A5.9.1. Holding.
- A5.9.2. Penetration and en route descent.
- A5.9.3. Circling.
- A5.9.4. Transition to landing.

A5.10. Landing:

- A5.10.1. Visual illusions from different runways.
- A5.10.2. Barrier locations.

A5.11. Simulated Emergency Procedures.**A5.12. Alternate Mission Profile.** Brief appropriate items from the applicable briefing guide (**Attachment 3** through **Attachment 6** of this AFI).**A5.13. VFR Procedures:**

- A5.13.1. Turn points.
- A5.13.2. Headings.
- A5.13.3. Times.
- A5.13.4. Altitudes.
- A5.13.5. Prominent land and manmade features.
- A5.13.6. Obstacles.
- A5.13.7. Flight following.
- A5.13.8. VFR arrival.

A5.14. IMC Procedures:

- A5.14.1. Unusual attitudes.
- A5.14.2. Spatial disorientation.
- A5.14.3. Icing restrictions.

A5.15. Night Procedures:

- A5.15.1. Personal equipment (flashlight and clear visor).
- A5.15.2. Aircraft and cockpit lighting.
- A5.15.3. Taxi procedures.
- A5.15.4. Spatial disorientation.
- A5.15.5. Visual illusions.
- A5.15.6. Pattern procedures (entry, references, spacing, and breakout).
- A5.15.7. Night restrictions.

A5.16. Crew Coordination:

- A5.16.1. Aircraft commander.
- A5.16.2. Transfer of aircraft control, with and without intercom.
- A5.16.3. Clearing.
- A5.16.4. In-flight checks.
- A5.16.5. Radio procedures.
- A5.16.6. PCL movement and/or hand position.

A5.17. Emergency Procedures:

- A5.17.1. General aircrew responsibilities during emergencies.
- A5.17.2. Emergency ground egress.
- A5.17.3. Takeoff emergencies.
- A5.17.4. Physiological incident.
- A5.17.5. Bird strikes.
- A5.17.6. Electrical fire.
- A5.17.7. Engine failure.
- A5.17.8. Ejection (with and without intercom, controlled and uncontrolled).
- A5.17.9. Visual signals with intercom failure (emergency gear extension).
- A5.17.10. Lost-communications procedures.
- A5.17.11. Lost procedures.
- A5.17.12. Emergency divert airfields and procedures.

A5.18. Personal Items

- A5.18.1. Rings removed
- A5.18.2. Cell phone off

A5.19. Questions.

Attachment 6**T-6 LOW-LEVEL BRIEFING GUIDE**

A6.1. General: Note: Brief items applicable to the mission in sufficient detail to prevent any misunderstandings between crewmembers.

A6.1.1. Time hack.

A6.1.2. Mission objectives and requirements.

A6.1.3. Mission overview.

A6.1.4. Mission data card (call sign, engine start, takeoff, route entry times, etc.).

A6.1.5. FCIF, ops notes, NOTAMs, and TOLD.

A6.1.6. Airfield and NAVAID status.

A6.1.7. Weather:

A6.1.7.1. Takeoff.

A6.1.7.2. Area or low-level route.

A6.1.7.3. Minimum altimeter setting along the route.

A6.1.7.4. Recovery.

A6.1.7.5. Alternate.

A6.1.8. Sign out.

A6.2. Ground Operations:

A6.2.1. AFTO Form 781 (review and stowage).

A6.2.2. Gear pin and personal equipment stowage.

A6.2.3. Exterior inspection responsibilities.

A6.2.4. Instrument cockpit check responsibilities.

A6.2.5. Engine start.

A6.2.6. Clearance and taxi procedures.

A6.2.7. End of runway procedures.

A6.2.8. Spare aircraft procedures.

A6.3. Takeoff (Including Static, Rolling, and Crosswind Procedures).**A6.4. Departure (Including Routing, Altitudes, and Airspeeds).****A6.5. Route Entry:**

A6.5.1. Prominent features.

A6.5.2. Radial and distance measuring equipment.

A6.5.3. Maneuvering to enter route.

A6.5.4. Identification, friend or foe (IFF) and selective identification feature (SIF).

A6.5.5. Flight service station.

A6.6. Flying the Route:

A6.6.1. Dead reckoning procedures and map-reading techniques.

A6.6.2. Corridor width, minimum and maximum altitudes.

A6.6.3. Altitude control and height assessment techniques.

A6.6.4. Ground track references and correction techniques.

A6.6.5. Planned groundspeed and timing corrections.

A6.6.6. Key obstructions and avoidance procedures.

A6.6.7. Mandatory reporting points.

A6.6.8. Frequencies.

A6.6.9. Continuation and bingo fuels.

A6.6.10. Target area and acquisition.

A6.7. Conflicts Along the Route:

A6.7.1. Parallel and crossing low levels.

A6.7.2. Airfields (airport traffic areas, airport radar service areas, and instrument approach corridors).

A6.7.3. Civilian VFR routes (major highways, rivers, and local practice areas).

A6.7.4. Cities.

A6.7.5. Noise-sensitive areas.

A6.8. Route Abort (Altitude, IMC Procedures, and VMC Procedures).

A6.9. Route Exit and Recovery:

A6.9.1. Altitude.

A6.9.2. Controlling agency.

A6.9.3. Radio frequency.

A6.9.4. IFF and SIF.

A6.9.5. Route of flight.

A6.9.6. VFR arrival.

A6.10. IMC Procedures:

A6.10.1. Unusual attitudes.

A6.10.2. Spatial disorientation.

A6.10.3. Icing restrictions.

A6.11. Instrument Approach Procedures:

- A6.11.1. Holding.
- A6.11.2. Penetration and en route descent.
- A6.11.3. Precision and non-precision approach review.
- A6.11.4. Circling.
- A6.11.5. Transition to landing.

A6.12. Simulated Emergency Procedures.

A6.13. Alternate Mission. Brief appropriate items from the applicable briefing guide (**Attachment 3** through **Attachment 6** of this AFI).

A6.14. Crew Coordination:

- A6.14.1. Aircraft commander.
- A6.14.2. Transfer of aircraft control, with and without intercom.
- A6.14.3. Clearing.
- A6.14.4. In-flight checks.
- A6.14.5. Radio procedures.
- A6.14.6. PCL Movement and/or Hand position.

A6.15. Emergency Procedures:

- A6.15.1. General aircrew responsibilities during emergencies.
- A6.15.2. Emergencies while flying at low level.
- A6.15.3. Emergency ground egress.
- A6.15.4. Takeoff emergencies.
- A6.15.5. Physiological incident.
- A6.15.6. Bird strikes.
- A6.15.7. Electrical fire.
- A6.15.8. Engine failure.
- A6.15.9. Ejection (with and without intercom, controlled and uncontrolled).
- A6.15.10. Visual signals with intercom failure (emergency gear extension).
- A6.15.11. Lost-communications procedures.
- A6.15.12. Lost procedures.
- A6.15.13. Emergency divert airfields and procedures (low and medium altitude).

A6.16. Personal Items

- A6.16.1. Rings removed
- A6.16.2. Cell phone off

A6.17. Questions.

Attachment 7

T-6 TRAINING RULES

Note: Brief items applicable to your mission in sufficient detail to prevent any misunderstandings between crewmembers.

A7.1. G-Awareness Exercise. Fly the G-awareness exercise in airspace that is free from potential conflict and ensure adequate spacing between aircraft in formation.

A7.2. “Knock-It-Off” Situations. “Knock it off” will be called when safety of flight is a factor or where doubt or confusion exists. Situations requiring a knock-it-off occur when:

A7.2.1. A dangerous situation is developing.

A7.2.2. Situational awareness is lost.

A7.2.3. A violation of any of the following has occurred or appears imminent:

A7.2.3.1. Area boundaries.

A7.2.3.2. Minimum cloud separation.

A7.2.3.3. Minimum altitude.

A7.2.3.4. Minimum range.

A7.2.4. Weather is below minimums for the area or route.

A7.2.5. Any aircraft exceeds maneuvering limits that compromise safety of flight (e.g., over-G, minimum airspeed).

A7.2.6. A radio failure is recognized or a continuous wing rock is observed.

A7.2.7. Bingo fuel is inadvertently overflowed.

A7.2.8. An unbriefed or unscheduled flight enters the working area and is detrimental to the safe conduct of the mission.

A7.2.9. Any player calls “knock it off.”

A7.2.10. Aircraft flying extended trail breach the minimum range of 300 feet or are forward of the 3/9 line.

A7.3. “Knock-It-Off” Actions:

A7.3.1. Clear the flight path.

A7.3.2. Cease maneuvering and climb or descend to a safe altitude.

A7.3.3. Maintain visual.

A7.3.4. Acknowledge with a call sign.

A7.4. “Terminate” Situations. When safety of flight is not a factor, “terminate” will be used to discontinue maneuvering.

A7.4.1. Bingo fuel is reached.

A7.4.2. Desired learning objectives are met.

A7.4.3. The aircraft is out of position (extended trail, offset maneuvering cone, wing work, etc.) with no expectation of an expeditious return to position.

A7.4.4. Any player calls “terminate.”

A7.5. “Terminate” Actions:

A7.5.1. Clear the flight path.

A7.5.2. Cease maneuvering and climb or descend to a safe altitude.

A7.5.3. Maintain visual.

A7.5.4. Acknowledge with a call sign.

A7.6. Minimum Altitudes:

A7.6.1. Extended trail levels I, II, and III: 6,000 feet AGL.

A7.6.2. Aerobatics or confidence maneuvers: 6,000 feet AGL.

A7.6.3. Stalls or slow flight: 6,000 feet AGL.

A7.6.4. Spins: 13,500 feet MSL, ensure spinning stops prior to 10,000 feet pressure altitude.

A7.7. Minimum Weather:

A7.7.1. Aerobatics, confidence maneuvers, stalls, and extended trail levels I, II, and III: Clear of clouds with 3 miles in-flight visibility and a discernable horizon.

A7.7.2. Formation Wing Takeoff: Circling minimums, or 500 feet and 1 1/2 miles (whichever is higher). 15 knots maximum crosswind. Runway must be free from standing water, ice, slush, or snow.

A7.7.3. Formation Interval Takeoff: 1500 feet and 3 miles.

A7.7.4. Formation approach & landing: 500 feet and 1 1/2 miles or approach minimums, whichever is higher. 15 knots maximum crosswind. Runway must be free from standing water, ice, slush, or snow.

A7.8. Lost Sight or “Blind.” The pilot flying the aircraft that loses sight will call “blind” and their altitude in MSL. The visual aircraft will assume formation deconfliction. Both aircraft will execute the following procedures:

A7.8.1. If the #1 aircraft is blind, transmit “CS, blind, XXXX feet” and maintain a predictable flight path. The #2 aircraft will either call “continue” and state his or her position, or call “knock-it-off” (as required) and blind with their altitude in MSL.

A7.8.2. If the #2 aircraft is blind, transmit “CS, blind, XXXX feet” and maneuver away from #1’s last known position. If visual, #1 will coordinate for a rejoin.

A7.8.3. If both aircraft have lost sight of each other, #1 must immediately direct a minimum of 1000 feet altitude separation.