

15 AUGUST 2002

Flying Operations

T-6 OPERATIONS PROCEDURES



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Certified by: HQ USAF/XOO  
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Pages: 39  
Distribution: F

This instruction implements AFD 11-2, *Aircraft Rules and Procedures*, and 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 pilots operating Air Force T-6 aircraft. File a copy of all approved waivers with this instruction. **Attachment 1** contains a glossary of reference and supporting information. This publication applies to Air Force Reserve Command pilots flying T-6 aircraft; it does not apply to the Air National Guard.

According to AFD 11-2, MAJCOMs will forward proposed MAJCOM-level supplements through HQ AETC/DOFV to HQ AFFSA/XOF for approval prior to publication. After approved and published, copies of MAJCOM-level supplements will be sent to HQ AFFSA/XOF, HQ AETC/DOFV, and user-MAJCOM OPRs. Field units below MAJCOM level will supplement this instruction with local operating procedures and forward copies of these supplements to their parent MAJCOM OPR for postpublication review. See paragraph 1.5. for guidance on submitting comments and suggesting improvements to this instruction.

The authority for maintenance of the system is 37 U.S.C. 301a, *Incentive Pay*; Public Law 92-204, Section 715, *DoD Appropriations Act for 1972, December 18, 1971*; Public Law 93-294, *Aviation Career Incentive Act of 1974, May 31, 1974*; Public Law 93-570, *Continuing Appropriations, 1975, February 28, 1975*; DoD Directive 7730.57, *Aviation Career Incentive Act of 1974 and Required Annual Report, February 5, 1976*; and Executive Order 9397, *Numbering System for Federal Accounting Related to Individual Persons, November 22, 1943*. The Paperwork Reduction Act of 1995 affects this instruction.

Maintain and dispose of records created as a result of processes prescribed in this publication in accordance with AFMAN 37-139, *Records Disposition Schedule* (will become AFMAN 33-322, Volume 4).

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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 pilots 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 director of operations (DO) 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, *USAF Series T-6A Flight Manual*; this instruction; and *Interim T-6 Procedures Manual* (will become AFMAN 11-2XX) which is available at <https://www.aetc.af.mil/do> under DOFV Menu, Misc. Downloads. Training units may develop phase manuals from the procedures contained in these documents. Phase manuals may be used to augment initial and mission qualification training. They may expand these basic procedures, but will *not* be less restrictive.

**1.5. Recommended Changes and Waivers.** Submit suggested improvements to this instruction on AF Form 847, **Recommendation for Change of Publication**, to the parent MAJCOM through standardization/evaluation channels. Parent MAJCOMs will forward approved recommendations to HQ AETC/DOFV. In accordance with AFPD 11-2, HQ USAF/XO is approval authority for changes or revisions to this instruction. The MAJCOM DO is waiver authority for this instruction. Waiver requests may be submitted in message or memorandum format.

**1.6. Definition of Student.** "Student" refers to any student pilot enrolled in joint specialized undergraduate pilot training (JSUPT) or Euro-NATO joint jet pilot training (ENJJPT).

## Chapter 2

### MISSION PLANNING

**2.1. Responsibilities.** The responsibility for mission planning is shared jointly by the individual pilots and the operations function of organizations.

#### **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. Takeoff and landing data (TOLD) will be completed for all flights. MAJCOM-approved tab data may be used when available.

#### **2.3. Briefing and Debriefing.**

**2.3.1. Minimum Briefing Time.** The minimum briefing time between start of the mission briefing and takeoff is 1 hour. The minimum briefing time for the first navigation sortie and all off-station, low-level navigation sorties is 1 hour and 45 minutes.

##### **2.3.2. Briefing Guides:**

2.3.2.1. Copilots, students, and passengers will be briefed on their specific duties and responsibilities related to safe mission accomplishment. Aircrews will refer to the appropriate briefing guides--located in **Attachment 2** (Mission), **Attachment 3** (Formation), **Attachment 4** (Instrument and Navigation), and **Attachment 5** (Low-Level)--and brief applicable items before each mission. Briefing guides are a reference list of items that may apply to particular missions.

2.3.2.2. 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. The flight briefing will be structured to accommodate the capabilities of each pilot in the flight.

2.3.2.4. An alternate mission will be briefed for each flight. The alternate mission will be less complex than the primary mission, but should parallel the primary mission. If the alternate mission is not parallel, specific mission elements that are different will be briefed. 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.

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

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

## **2.4. Unit-Developed Checklists and Local Pilot Aids:**

2.4.1. Unit-developed checklists may be used in lieu of the flight manual checklist if unit-developed checklists contain, as a minimum, all items (verbatim and in order) listed in the applicable flight manual checklist.

2.4.2. Unit-developed pilot aids 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 [NORDO] procedures, divert information).

2.4.2.5. Barrier information at divert bases.

2.4.2.6. Bailout area information.

2.4.2.7. Cross-country procedures to include command and control, engine documentation, Joint Oil Analysis Program samples, and aircraft servicing.

2.4.2.8. Other information as deemed necessary by the unit (for example, stereo flight plans, turn-around procedures, local training areas, instrument preflight).

## Chapter 3

### NORMAL OPERATING PROCEDURES

#### *Section 3A—Preflight*

**3.1. Visual Signals.** Pilots will ensure they receive proper acknowledgement from ground personnel before activating any system that could pose any danger to the ground crew. When ground intercom is not used, visual signals will be in accordance with AFI 11-218, *Aircraft Operation and Movement on the Ground*, and this instruction. The crew chief will repeat the given signal when it is safe to operate the system.

**WARNING:** Be especially aware of the dangers of a spinning prop. Do not allow anyone to approach an operating engine.

#### **3.2. Required Equipment:**

3.2.1. Due to the nature of the T-6 egress system, a visor will be worn by each crewmember during all phases of flight. A clear visor will be worn at night or when needed for restricted visibility.

3.2.2. On nonlocal sorties, each aircrew will carry a computer, appropriate in-flight publications, and a suitable terrain chart to cover the proposed route of flight. On sorties that will be completed on or after official sunset or begin prior to official sunrise, each aircrew will carry an operable flashlight.

3.2.3. G-suits are required for all sorties except instrument and navigation sorties.

**3.3. Aircraft Systems.** Students will not fly solo in aircraft requiring an operational check. Operational checks may be performed during dual student training sorties if they do not interfere with training objectives.

**3.4. Canopy Operation.** The canopy may remain open to motor the engine.

**3.5. Equipment Stowage.** Do not stow clothing or personal items in areas that may interfere with normal canopy operation, ejection sequence, or equipment operation.

**3.6. Foreign Object Damage (FOD).** To reduce the risk of FOD during ground operations:

3.6.1. Do not allow personnel to approach an operating engine.

3.6.2. Avoid using excessive power during ground operations.

3.6.3. Avoid prop or jet blast from other aircraft.

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

#### *Section 3B—Taxiing*

**3.7. Wingtip Obstacle Clearance.** Do not taxi with less than 25 feet of wingtip obstacle clearance unless using a marshaller in conjunction with a wing walker at each affected wingtip. When obstacles affect only one wingtip, the marshaller may also act as the wing walker and direct the aircraft while monitoring the affected wingtip. This requirement does not apply at the home station when fixed taxi routes

are marked and provide a minimum of 10 feet of wingtip clearance from other aircraft. The 10-foot restriction is waived at the home station provided the equipment is no closer than 4 feet, is in a designated and marked location, and a marshaller is being used. Additionally, during times of darkness or reduced visibility, the obstacle will be lighted during the taxiing operation.

**3.8. Taxi Interval.** Avoid taxiing too close behind other aircraft. Maintain a minimum of 75 feet when staggered and 150 feet when in trail. Normal spacing may be used with caution when approaching or holding for the active runway, but be extremely aware of other aircraft accomplishing an overspeed governor check.

**3.9. Ice and/or Snow Conditions.** Do not taxi during ice and/or snow conditions until all portions of the taxi route and runway have been checked for safe operations. When ice and/or snow are present on the taxiway, taxi on the center line with a minimum of 300 feet of spacing.

### ***Section 3C—Takeoff and Landing***

**3.10. Engine Runup.** During engine runup, the crewmember not in control of the aircraft will guard and be ready to assume control of the brakes in case the rudder pedal rod end fails.

**3.11. Fuel.** Aircraft must have a full fuel load for all takeoffs. This requirement may be waived by the operations group commander. This restriction does not apply to the solo portion of a student's initial solo sortie. The following definitions apply to fuel:

3.11.1. Joker fuel—a prebriefed fuel state needed to terminate an event and transition to the next phase of flight.

3.11.2. Bingo fuel—a prebriefed 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.

3.11.3. Normal recovery fuel—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.

3.11.4. Minimum or emergency fuel --when it becomes apparent an aircraft may land at the intended destination or alternate (if required) with *minimum* fuel (that is, 150 pounds or less, 200 pounds or less on all solo student syllabus sorties) or *emergency* fuel (that is, 100 pounds or less), declare the appropriate fuel condition and add the declaration to all subsequent traffic pattern calls.

**3.12. Runway.** Minimum runway length for normal T-6 operations is 4,000 feet, and minimum runway width is 75 feet. An intersection takeoff must provide 4,000 feet of usable runway. T-6 operations require 4,000 feet between arresting cables located on or above the runway surface. This restriction does not apply to emergency airfields, which may be as short as 3,000 feet.

**3.13. Spacing.** Refer to AFI 13-203, *Air Traffic Control*, and its supplements for spacing requirements.

**3.14. Rolling Takeoffs.** These will only be performed single ship during daylight or extended daylight hours with a rated pilot on board.

**3.15. Crosswind Limitations.** Solo students and solo fixed-wing qualification trainees are restricted to a crosswind component of 15 knots. Students will not perform touch-and-go landings when the crosswind component exceeds 20 knots. This restriction does not apply to pilot instructor training (PIT) courses or pilot qualification training.

**3.16. Raising the Landing Gear.** 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 presolo contact sorties, the instructor pilot (IP) will acknowledge "clear" before the student moves the gear handle. On all other sorties, "gear clear" is an advisory call only.

**3.17. Landing Light.** Aircrews will display the landing light on all sorties.

**3.18. Flaps:**

3.18.1. Aircrews will use the takeoff (TO) or no-flap (UP) flap setting as required when flying multiple touch-and-go landings.

3.18.2. The landing (LDG) flap setting should be used for full stop landings and when landing distance is greater than or equal to 80 percent of actual field length.

3.18.3. Aircrews will use the flap setting appropriate to the situation when practicing emergency landing patterns.

**3.19. 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.

**3.20. Trim.** Aircrews should avoid trimming in the flare during normal operations.

***Section 3D—Maneuvering Parameters***

**3.21. Overview.** Before performing any maneuver, be sure to accomplish the appropriate checklists. If maneuvers are flown in a series, you are not required to run the checklist between individual maneuvers.

**3.22. Transfer of Aircraft Control.** Transfer of aircraft control will be initiated by the receiving pilot by shaking the stick and saying, "I have the aircraft." The relinquishing pilot will respond, "Roger, you have the aircraft." If the intercom fails, transfer of aircraft control will be accomplished by the pilot assuming control vigorously shaking the stick, unless briefed otherwise.

**3.23. Anti-G Straining Maneuver (AGSM).** Perform a G-awareness demonstration or exercise as described in the *Interim T-6 Procedures Manual* (projected to be AFMAN 11-2XX) during any sortie where increased Gs (above three) are anticipated. An AGSM will be accomplished while flying any maneuver that may result in increased Gs.

**3.24. Aerobatics.** Aircraft will not descend below 5,000 feet AGL during any portion of aerobatic maneuvering. Aerobatic flight must be performed in special use airspace.

**3.25. Spins and Out-of-Control Flight (OCF) Recoveries:**

- 3.25.1. Do not perform spins or OCF recoveries without a spin-current IP on board.
- 3.25.2. To avoid entering instrument meteorological conditions (IMC) during spin or OCF recovery training, a minimum of 7,000 feet (10,000 feet for advanced handling characteristics [AHC]) of airspace, clear of clouds, must exist below entry altitude. Before spin entries or OCF recoveries, verify this cloud clearance criteria exists.
- 3.25.3. When spinning over clouds, plan to complete all spin training (to include dive recoveries) at least 3,000 feet above the clouds.

### **3.26. Inadvertent Departure/Spin Survey Report (RCS: HAF-DOF[Q]0127):**

3.26.1. The operations group stan/eval division chief will send a quarterly T-6A inadvertent departure/spin survey report to 19 AF/DOU by memorandum or fax within 15 days following the end of each quarter. Negative replies are required. All inadvertent departures, spin entries, and spins should be reported. (**NOTE:** This report is designated emergency status code D. Immediately discontinue reporting during emergency conditions and MINIMIZE.) Compile the inadvertent spin data and report to include:

- 3.26.1.1. Type of mission (dual or solo).
- 3.26.1.2. Category of pilot flying the aircraft; that is, student, instructor, or proficiency pilot.
- 3.26.1.3. The maneuver being flown at the time of the inadvertent departure or spin entry.
- 3.26.1.4. Method (spin recovery or OCF) used to recover the aircraft from the departure or spin.
- 3.26.1.5. Whether the departure developed into an actual spin. If OCF or recovery controls are applied prior to a spin actually occurring (while still in the incipient stage of development), it should be reported as an inadvertent departure regardless of the type of recovery performed. When reporting an actual spin entry, use the following guidelines to determine whether an actual inadvertent spin should be reported:
  - 3.26.1.5.1. The nose stays below the horizon.
  - 3.26.1.5.2. The aircraft has definite rotation of at least one turn.
- 3.26.1.6. The pilot category that flew the recovery (student, IP, first pilot, trainee).
- 3.26.1.7. Spin entries that became inverted spins.
- 3.26.1.8. Any unusual occurrences during entry or recovery and other information considered pertinent to the situation.

3.26.2. The method of survey is determined locally. However, the survey should include all rated and students pilots flying the T-6A. The program should be structured so survey respondents remain anonymous.

3.26.3. For reporting purposes, the report will be submitted any time antispin controls must be applied to recover the aircraft. This does not include preplanned entries applicable to normal student training except those recovery attempts that result in inverted spin entries or missed recovery attempts performed by the IP.

3.26.4. On receipt of all quarterly reports, 19 AF/DOU will summarize and forward comments to each operations group commander for dissemination to aircrews.

**3.27. Wingtip Vortices.** Flight through wingtip vortices, propwash, or jetwash should be avoided. If this is unavoidable, the aircraft should be unloaded immediately to approximately 1G. Use asymmetric G limits if evaluating a jetwash-induced over-G.

**3.28. 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.

**3.29. Minimum Altitudes:**

3.29.1. Perform all parts of aerobatic maneuvers, unusual attitudes, abnormal flight recoveries, trim malfunction training, practice lost wingman, and extended trail exercise above 5,000 feet AGL.

3.29.2. Complete stalls, slow flight, OCF recoveries, and spin recoveries above 6,000 feet AGL.

3.29.3. The minimum altitude to begin OCF training or a spin entry is 13,500 feet mean sea level (MSL). Ensure spinning stops above 10,000 feet MSL.

3.29.4. 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.

3.29.5. The minimum altitude for visual flight rules (VFR) point-to-point navigation missions dictated by operational or training requirements is 3,000 feet AGL.

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

3.30.1. Stall maneuvers.

3.30.2. Stability demonstrations.

3.30.3. Nose-high recoveries.

3.30.4. Nose-low recoveries.

3.30.5. Spins.

3.30.6. OCF recoveries.

3.30.7. ELPs or any other simulated engine-out maneuvers.

3.30.8. No-flap patterns or landings.

3.30.9. Straight-in approaches.

3.30.10. Slow-flight maneuvers.

3.30.11. Rolling takeoffs.

3.30.12. Low-closed patterns.

***Section 3E—Extended Daylight Restrictions***

**3.31. General:**

3.31.1. Extended daylight is defined as the period 15 minutes before official sunrise to 15 minutes past official sunset. For local training only, daylight traffic operations and daylight area operations are in effect during the extended daylight period.

3.31.2. 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 supervisor of flying (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***

#### **3.32. General Requirements:**

3.32.1. Student pilots will not fly solo at night.

3.32.2. Taxi spacing will be a minimum of 300 feet and on the taxiway center line. The taxi light will normally be used during all night taxiing. **EXCEPTION:** When the light might interfere with the vision of the pilot of an aircraft landing or taking off, the taxiing aircraft will come to a stop if the area cannot be visually cleared without the taxi light.

3.32.3. 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, a very high frequency omnidirectional range station Alpha (VOR-A) approach, but you must execute climbout instructions or go missed approach by the missed approach point (MAP).

3.32.4. Fly night overhead patterns and visual straight-in approaches only at the home station. **NOTE:** Kelly Field and Lackland AFB are included for the 12th Flying Training Wing (FTW).

3.32.5. Aerobatics, practice OCF recoveries, practice stalls, stability demonstrations, practice nose-high and nose-low recoveries, and spins are prohibited at night.

3.32.6. For night operations, do not file to a destination (other than the home station) unless there is an operable straight-in approach with glidepath guidance. Aircrews may perform en route descents at facilities with no glidepath guidance if they descend no lower than the published minimum descent altitude (MDA). Night landings at other than the home field require operational glidepath guidance. Visual descent path indicator or precision guidance systems constitute an acceptable glidepath guidance. Do not file to a destination at night if a circling approach is the only available approach. For night instrument flight rules (IFR) operations, alternates must have an operational instrument straight-in approach.

3.32.7. At airfields other than the home field, descents below an MDA on a nonprecision approach require an operational visual approach system. When landing from a nonprecision approach, transition to visual references no later than the visual descent point (VDP) or visual approach system glidepath intercept. In unusual circumstances, such as an aircraft precautionary or emergency or a facility outage, the PIC will determine the best method of recovery.

3.32.8. If requested by the RSU controller, aircrews may turn off strobe lights during the hours of darkness while in the home base traffic pattern.

3.32.9. Flying formation at night requires the operations group commander's approval and is limited to two aircraft.

**Section 3G—Pilot Weather Categories (PWC)**

**3.33. 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, do not include student, undergraduate flying training (UFT), or "other" flight time. 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.** (See notes 1 through 7.)

I T E M	A	B	C
	PWC	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 <i>or</i> 300 feet and 1 mile (RVR 5,000 feet), whichever is greater.
2	2	A graduate of follow-on training (PIT or FTU) who does not qualify for PWC 1.	Suitable published minimums <i>or</i> 500 feet and 1 1/2 miles, whichever is greater.
3	3	A student enrolled in a formal follow-on training course (PIT or FTU) after successful completion of a formal instrument evaluation in the assigned aircraft.	Suitable published minimums <i>or</i> 700 feet and 2 miles, whichever is greater.

**NOTES:**

1. For the purposes of this table, the terms "pilot" and "aircraft commander" in these notes are synonymous. Document PWCs in the Aviation Resource Management System (ARMS) and the Letter of Xs.
2. Assignment 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 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 the Letter of Xs. The letter will be filed in the pilot's flight training folder.
3. PWC 1 is the minimum for normal training or support missions. When overriding mission requirements dictate, operations group commanders may individually authorize highly experienced pilots to use published approach minimums. PWC 1 minimums apply to all PWC 2 pilots for approaches at the home field.
4. If an IP is on board, aircrews may use the IP's PWC.
5. If the pilot is noncurrent in instrument approaches, increase the PWC minimums by one category. The pilot may regain currency with an IP at a dual set of controls or in chase aircraft.

6. For formation approaches, the pilot with the most restrictive PWC minimums determines the flight's category.
7. Use touchdown runway visual range (RVR) to determine takeoff and landing criteria in accordance with AFI 11-203, Volume 3.

### ***Section 3H—Weather and Instrument Flight Rules (IFR)***

#### **3.34. Requirements:**

3.34.1. For local flying operations, aircrews do not have to designate an alternate airfield if *all* of the following conditions exist (per AFFSA AETC Waiver Vol 3/99002 and Federal Aviation Administration [FAA] Exemption #7389):

3.34.1.1. Departure and destination airfields are the same.

3.34.1.2. An IP or flight examiner pilot is a crewmember.

3.34.1.3. Ceiling and visibility are reported and forecasted to remain above 1,500 feet and 3 miles, respectively, for estimated time en route plus 2 hours.

3.34.2. 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 nonlocal sorties on the existing weather at takeoff time.

3.34.3. Do not file to a destination unless the ceiling and visibility for the estimated time of arrival (ETA) (plus or minus 1 hour) is at or above the appropriate PWC or suitable published minimums, whichever is greater (**Table 3.1**).

3.34.4. Weather requirements for an alternate requiring radar on the only suitable approach are the same as for an alternate without a published approach procedure.

3.34.5. Do not commence a penetration, en route descent, or 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. (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.)

3.34.6. After commencing a penetration or approach, if weather is reported 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. Determine the PWC decision height or MDA by referring to the touch down zone elevation (TDZE). When TDZE is not depicted or is unavailable, 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 [PAR], instrument landing system [ILS]) may require pilots to execute a missed approach prior to the published decision height. 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 nonprecision MAP. On reaching the nonprecision MAP, the pilot should continue with the published missed approach procedure.

3.34.7. Simulated instrument flight must be conducted according to AFI 11-202, Volume 3, and requires a qualified safety observer in the aircraft. The pilot in front or rear cockpit may act as a safety observer when the pilot in the other cockpit is flying simulated instruments. Under these conditions, an operable intercom is required. When flying instrument approaches in visual meteorological conditions (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 published minimums.

3.34.8. Practice unusual attitudes in VMC only.

3.34.9. Do not fly in any actual or forecast icing conditions.

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

3.34.11. When on an IFR flight plan under radar control in a designated air traffic control (ATC) military operating area (MOA), weather requirements for aerobatics or confidence maneuvers are clear of clouds and 3 miles of flight visibility.

3.34.12. Normally, do not exceed 30 degrees of bank in IMC. However, if the need arises to exceed 30 degrees of bank, pay strict attention to the instruments and flight parameters (altitude in particular).

3.34.13. Four-ship formations and night two-ship formations will not cruise in IMC, but may climb or descend through IMC.

3.34.14. The allied signal KLN 900 global positioning system (GPS) installed in the T-6 meets Federal Aviation Administration (FAA) TSO C-129A requirements and is approved for IFR use by aircrews. T-6 aircrews may use GPS as the primary navigational source while flying under IFR.

### ***Section 3I—Formation***

#### **3.35. Requirements:**

3.35.1. The maximum flight size is four aircraft unless waived by the 19 AF/DO.

3.35.2. Use visual signals in accordance with AFI 11-205, *Aircraft Cockpit and Formation Flight Signals*.

3.35.3. Flight leads will always consider the wingman's position and ability to safely perform a maneuver before directing it.

3.35.4. When changing leads:

3.35.4.1. A lead change will be initiated by either visual signal or radio call. During flight in limited visibility, initiate lead changes from a stabilized, wing-level attitude. A radio call is mandatory when directing position changes in limited visibility conditions.

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

3.35.4.3. Do not initiate a lead change with the wingman further back than a normal fingertip or route position or greater than 30 degrees back from line abreast.

3.35.4.4. 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.

- 3.35.5. Do not fly formation departures when existing weather is reported below PWC or compatible circling approach minimums, whichever is higher. Do not fly formation approaches or landings if the ceiling and visibility is less than 500 feet and 1 1/2 miles (respectively) or PWC, whichever is higher.
- 3.35.6. Do not perform interval takeoffs when the ceiling and visibility are reported less than 1,500 feet and 3 miles, respectively.
- 3.35.7. The maximum crosswind component for wing takeoffs and wing landings is 15 knots. Formation takeoffs or landings will not be accomplished when standing water, ice, or snow is on the runway.
- 3.35.8. During formation takeoffs, the wingman lines up with a minimum of 10 feet of lateral wingtip clearance.
- 3.35.9. Two-ship formation takeoffs and landings require a minimum of 150 feet of runway width.
- 3.35.10. Formation touch-and-go landings are prohibited.
- 3.35.11. With a four-ship formation, use a minimum of 35 feet of wingtip clearance between the lead and number two when positioning number four in the slot. Do not use the four-ship echelon lineup on runways less than 300 feet wide. Use 500 feet of element spacing on runways less than 200 feet wide.
- 3.35.12. When leading fingertip formation, limit maneuvering to approximately 90 degrees of bank, 2 to 3 Gs, and 120 knots minimum.
- 3.35.13. When leading echelon or route formation, limit bank angle to approximately 60 degrees.
- 3.35.14. During the entry to the extended trail exercise, maintain a minimum of 300 feet from the lead and do not go forward of lead's 3/9 line. Limit extended trail maneuvers to turns, lazy eights (using bank angles not to exceed approximately 120 degrees), barrel rolls, cloverleaves, modified Cuban eights, and loops. 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. Limit extended trail to two-ship formations. Perform a G-awareness exercise prior to flying maneuvers in the extended trail exercise.
- 3.35.15. When leading close trail, limit maneuvering to turns and modified lazy eights, using approximately 90 degrees of bank, 2 to 3 Gs, and 120 knots minimum. Do not fly over-the-top maneuvers in close trail formation.
- 3.35.16. In some cases, losing sight of the other aircraft in formation does not require a breakout or lost wingman procedure because sufficient spacing already exists. However, if the other aircraft is not in sight when anticipated, use the following procedures:
- 3.35.16.1. The aircrew that loses sight will notify the other aircraft of the situation by calling "blind" and stating the current altitude. In some cases, heading or turn information may also be appropriate for this call.
- 3.35.16.2. If the other aircraft has not lost sight, transmit that fact with a relative position to the "blind" aircraft; for example, "Texan 1, visual, right, 2 o'clock, high." If lead is the "blind" aircraft, but the wingman has lead in sight, lead has the option to direct a rejoin. In this case, the wingman will not rejoin closer than a route position until lead has called "visual."
- 3.35.16.3. If aircrews have lost sight of each other, lead will immediately ensure a minimum of 1,000 feet of altitude separation. Lead will specify either "AGL" or "MSL" when directing the formation to deconflict. If possible, aircrews should avoid climbing or descending through the decon-

flection altitude. Both aircrews will maintain this separation until making visual contact and initiating a rejoin.

3.35.16.4. If there is no timely acknowledgement of the original "blind" call, the flight member initiating the call will maneuver away from the last known position of the other flight member or element and alter his or her altitude.

3.35.16.5. If visual contact is still not regained, the flight lead will take additional positive action to ensure flightpath deconfliction within the flight to include a "terminate" or "knock it off (KIO)" radio call if necessary.

3.35.17. Practice lost wingman procedures during extended daylight hours and in VMC.

3.35.18. In order to reduce the possibility of an inadvertent touchdown, initiate planned formation low approaches no lower than 100 feet AGL.

3.35.19. Solo students will not fly:

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

3.35.19.2. Close trail as wingman.

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

3.35.19.4. Practice lost wingman procedures while on the wing.

3.35.20. During extended trail, solo students will only fly modified lazy eight-type maneuvers as the wingman.

3.35.21. For three- or four-ship formations, all members will be qualified pilots or navigators and a formation-qualified IP will be aboard each aircraft. The operations group commander will be responsible for approving or disapproving these flights. **NOTE:** The 12th FTW Operations Group Commander may delegate approval to the 558 FTS Squadron Commander.

3.35.22. For four-ship rejoins, flight members will join in sequence. For a straight-ahead rejoin, the number two aircraft will join on the left wing and the element will join on the right wing unless otherwise briefed. For a turning rejoin, the number two aircraft will rejoin on the inside of the turn and the element will rejoin to the outside. If mission or flight requirements dictate, the flight lead will specifically direct the desired formation positions.

3.35.23. Number three will maintain a minimum of a 100-foot clearance on the lead element until number two has stabilized in route position.

3.35.24. Number four will always rejoin to the outside of lead's turn. Number four will establish a cut-off angle no greater than number two or three and will maintain a minimum of a 100-foot clearance on number three until number three has stabilized in the route position on the outside of lead's wing.

3.35.25. Use a KIO radio call to cease maneuvering when safety of flight is a factor, especially for an in-flight emergency. Any flight member may make this call. When a dangerous situation is developing, be directive first. A KIO applies to any phase of flight and all types of missions. All participants will acknowledge a KIO by repeating the call. Aircrews may use the term "terminate" if safety of flight is not a factor. The procedures in AFI 11-214, *Aircrew, Weapons Director, and Terminal Attack Controller Procedures for Air Operations*, will be followed.

### ***Section 3J—Single-Ship, Low-Level Routes***

**3.36. Requirements:**

- 3.36.1. Low-levels will not be flown solo.
- 3.36.2. VMC low-level route abort procedures are as follows:
  - 3.36.2.1. Maintain safe separation from the terrain.
  - 3.36.2.2. Comply with VFR altitude restrictions and squawk transponder codes.
  - 3.36.2.3. Maintain VMC at all times.
  - 3.36.2.4. Attempt contact with the controlling agency, if required.
- 3.36.3. IMC low-level route and area abort procedures are as follows:
  - 3.36.3.1. Immediately climb to or above the computed route abort altitude (RAA).
  - 3.36.3.2. Maintain preplanned ground track.
  - 3.36.3.3. Attempt contact with the appropriate ATC agency for an IFR clearance. If required to fly in IMC without an IFR clearance, cruise at appropriate VFR altitudes until IFR clearance is received.

***Section 3K—Simulated Emergency Procedures*****3.37. Requirements:**

- 3.37.1. Airborne simulated emergencies will be briefed and will only be conducted during day VFR weather conditions. Simulated emergency practice will be discontinued if intercockpit communications cannot be maintained. Compound or multiple simulated emergencies are prohibited.
- 3.37.2. ENJJPT PIT students are authorized to practice emergency landing patterns and no-flap approaches and landings on syllabus-directed team sorties.
- 3.37.3. Pilots will not practice takeoff emergency procedures below 500 feet AGL.
- 3.37.4. Emergency airfield minimum requirements are 3,000 feet in length, no minimum width, and a hard surface.

***Section 3L—Nontowered Field Operations***

**3.38. Uncontrolled Airfields.** When AFI 11-202, Volume 3, refers to uncontrolled airfields, the following guidance applies:

- 3.38.1. With operations group commander approval, aircrews may conduct operations at nontowered, public-use airfields, with the following restrictions:
  - 3.38.1.1. Dual aircrews only.
  - 3.38.1.2. Day only.
  - 3.38.1.3. Single ship only.
  - 3.38.1.4. Winds must be within limits for each runway to which the aircrew operates as best (as can be determined with available information).

- 3.38.1.5. All patterns and approaches will be flown to a low approach no lower than 100 feet AGL. **EXCEPTION:** The operations group commander may authorize landings at nontowered airfields on a case-by-case basis.
- 3.38.1.6. Aircrews will monitor the published common traffic advisory frequency and make all radio calls and position reports recommended in the Aeronautical Information Manual for nontowered airfields.
- 3.38.1.7. No more than two aircraft (total), military and/or civilian, may be in the pattern at any time.
- 3.38.1.8. Instrument approaches, rectangular patterns (as depicted in the Aeronautical Information Manual), and ELPs may be flown. No overhead patterns will be flown.
- 3.38.1.9. The maximum airspeed for any operation at a nontowered airfield is 150 knots indicated airspeed (KIAS).
- 3.38.1.10. Instrument approaches will be flown under an IFR clearance, unless waived by HQ AETC/DOF.
- 3.38.1.11. Minimum runway length for all operations is 3,000 feet of hard surface.
- 3.38.1.12. Weather restrictions for instrument approaches are as listed in [Section 3H](#).
- 3.38.1.13. For entry other than by an instrument approach, aircrews must remain VFR at all times with minimum weather requirements of a 1,500 feet ceiling and 3 miles visibility. If approaching the airfield on an IFR clearance and the aircrew is not intending to fly an instrument approach, weather conditions must permit a VFR descent from the appropriate IFR en route altitude.
- 3.38.1.14. Aircrews will immediately notify the SOF if any hazardous conditions exist at a nontowered airfield that would prevent normal operations.
- 3.38.2. Operations group commanders will develop a training program to prepare aircrews to operate in the nontowered airfield environment. As a minimum, the program will include a discussion of all applicable Codes of Federal Regulations (CFR), advisory circulars, and AIM references on nontowered airfield operations. Training will emphasize standard civilian radio phraseology.

### ***Section 3M—Operating in High Wind or Sea States***

**3.39. Restrictions.** Units will restrict their flying operations when high winds or sea states would be hazardous to aircrew members in ejection situations. Local training flights are not permitted over land when steady state surface winds (forecast or actual) in training or operating areas exceed 35 knots. Over-water training 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.

## Chapter 4

## OPERATING RESTRICTIONS

**4.1. General.** **Table 4.1.** will help the pilot determine the minimum systems required during flight or for takeoff at locations other than the home station. Missions originating from the home base will not normally launch with a known malfunction other than as described in **Table 4.1.** Aircraft status is determined according to AFI 21-103, Equipment Inventory, Status, and Utilization Reporting, and its applicable supplements.

**Table 4.1. Operating Restrictions (Excluding FCFs).**

I T E M	A	B	C	D
	System Affected	Day VMC LCL (Dual)	Day VMC LCL (Solo)	IMC, Night, or Cross-Country/ O&B (Dual/Solo)
1	Navigation lights	Yes	Yes	Yes (note 1)
2	Landing lights	No	No	No
3	XPDR (with Mode C)	Yes (note 2)	Yes (note 2)	
4	VHF Nav (ILS, DME, or VOR)	No	No	
5	GPS	Yes	Yes	Yes
6	Anticollision strobes	No	No	No
7	Trim aid device	Yes	Yes (note 3)	Yes
8	NACWS		Yes	
9	VHF or UHF radio			

**LEGEND:**

Dual – Two student or rated pilots on board

Solo – One student or rated pilot on board

Yes – Aircraft is acceptable for flight

No – Aircraft is not acceptable for flight

**NOTES:**

1. Acceptable for daytime flight.
2. Acceptable for flight on pattern-only missions at the home field with ATC approval.
3. Acceptable when solo is a rated pilot.

**4.2. Factors To Consider for Aircraft Malfunctions.** Once airborne, aircraft commanders must weigh all pertinent factors when deciding whether to continue or abort a sortie for an aircraft malfunction. Fac-

tors include student mission requirements and weather conditions at home base and divert base. Solo students will contact the RSU controller (if in the pattern) or SOF (if outside the pattern) for instructions.

**4.3. Waiver of Restrictions.** Operations group commanders may waive 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 do 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.

#### **4.5. Functional Check Flight (FCF) Restrictions:**

4.5.1. FCFs will not be conducted with other type missions except FCF continuation training, FCF upgrade training, or FCF 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.

4.5.2. FCFs may recover at home station when originating from AETC auxiliary fields or from bases within the local flying area.

4.5.3. Instrument approaches or other AETC syllabus maneuvers not in accordance with TO -6CF-1 will not be practiced on FCF missions unless required to check the aircraft. Instrument hoods or vision-restricting devices will not be installed in FCF aircraft.

4.5.4. Touch-and-go landings are not authorized on an FCF sortie unless required to complete the FCF according to TO -6CF-1.

4.5.5. Local FCF pilots or crews are authorized to perform required FCFs on transient AETC aircraft if approved by the owning commander. All FCFs on AETC aircraft will be flown by AETC FCF pilots or crews. AETC FCF pilots or crews will not normally perform FCFs on transient aircraft from other services or commands without specific approval from the commander having operational control over the aircraft.

#### **4.6. Aircraft Handling Characteristic (AHC) Program Restrictions:**

4.6.1. Only AHC IPs certified according to the training program in AFI 11-2T-6, Volume 1, *T-6 Aircrew Training*, will conduct AHC training. Each flying training wing is authorized a maximum of three AHC IPs. The 19 AF/DO is waiver authority for this requirement. **EXCEPTION:** The 12 FTW and 80 FTW are authorized additional AHC IPs as necessary to accomplish the mission.

4.6.2. An AHC spin profile will not be performed unless the spin flightpath is VMC. To avoid IMC during AHC spin training, a minimum of 10,000 feet of airspace, clear of clouds, must exist below entry altitude. Before spin entry, verify that cloud clearance criteria exist. When spinning over clouds, plan to complete all AHC spin training (to include dive recovery) no lower than 7,000 feet below spin entry.

**4.7. Hot Weather Restrictions.** The following restrictions apply to unmodified environmental control system aircraft only:

4.7.1. When the outside air temperature is at or above 95 degrees Fahrenheit:

4.7.1.1. Apply index thermal stress danger restrictions.

4.7.1.2. Aircrews are limited to two aircraft sorties. **NOTE:** Sorties flown prior to the temperature reaching 95 degrees do not count.

4.7.1.3. Student solo sorties will not be launched. Solo students in the traffic pattern will either land immediately or depart to the MOA if properly briefed. Solo students in the auxiliary field traffic pattern will immediately return to base (RTB) for one pattern to a full stop or depart to the MOA if properly briefed. Solo students in the MOA may continue their briefed sortie and plan recovery for one pattern to a full stop.

4.7.2. When the outside air temperature is above 100 degrees Fahrenheit:

4.7.2.1. All launches will be stopped.

4.7.2.2. Airborne aircrews should limit all low altitude operations as follows:

4.7.2.2.1. Aircraft in the pattern will either full stop or depart to the MOA.

4.7.2.2.2. Aircraft at the auxiliary field will RTB for one pattern to a full stop or depart to the MOA.

4.7.2.2.3. Aircraft on low level routes will abort the route and RTB for one pattern to a full stop.

**4.8. Forms Adopted.** AF Form 847 and AFTO Form 781.

CHARLES F. WALD, Lt General, USAF  
DCS/Air & Space Operations

## Attachment 1

### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

#### ***References***

Executive Order 9397, *Numbering System for Federal Accounts Relating to Individual Persons*, November 22, 1943

Title 37, United States Code, Section 301a

Public Law 92-204, Section 715, *Appropriations Act for 1972*, December 18, 1971

Public Law 93-294, *Aviation Career Incentives Act of 1974*, May 31, 1974

Public Law 93-570, *Continuing Appropriations, 1975*, February 25, 1975

DoDD 7730.57, *Aviation Career Incentive Act of 1974 and Required Annual Report*, February 5, 1976

AFPD 11-2, *Aircraft Rules and Procedures*

AFI 11-2T-6, Volume 1, *T-6 Aircrew Training*

AFI 11-202, Volume 3, *General Flight Rules*

AFI 11-205, *Aircraft Cockpit and Formation Flight Signals*

AFI 11-214, *Aircrew, Weapons Director, and Terminal Attack Controller for Air Operations*

AFI 11-218, *Aircraft Operation and Movement on the Ground*

AFI 13-203, *Aircraft Traffic Control*

AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting*

AFMAN 37-139, *Records Disposition Schedule* (will become AFMAN 33-322, Volume 4)

TO 1T-6A-6CF-1, *Functional Check Flight Procedures*

TO 1T-6A-1, *USAF Series T-6A Flight Manual*

Aeronautical Information Manual (available at <http://www.faa.gov/ATpubs/AIM/index.htm>)

*Interim T-6 Procedures Manual* (will become AFMAN 11-2XX), available on the HQ AETC/DO web page (<https://www.aetc.af.mil/do>) under DOFV Menu, Misc. Downloads

#### ***Abbreviations and Acronyms***

**AFFSA**—Air Force Flight Standards Agency

**AGL**—above ground level

**AGSM**—anti-G straining maneuver

**AHC**—advanced handling characteristics

**ATC**—air traffic control

**ATIS**—automated terminal information service

**CFR**—Code of Federal Regulations  
**DME**—distance measuring equipment  
**DO**—director of operations  
**DR**—dead reckoning  
**ELP**—emergency landing pattern  
**ENJJPT**—Euro-NATO joint jet pilot training  
**ETA**—estimated time of arrival  
**FAA**—Federal Aviation Administration  
**FAF**—final approach fix  
**FCF**—functional check flight  
**FCIF**—flight crew information  
**FOD**—foreign object damage  
**FTU**—formal training unit  
**FTW**—flying training wing  
**GPS**—global positioning system  
**HEFOE**—hydraulic, electrical, fuel, oxygen, engine  
**IFF**—identification, friend or foe  
**IFR**—instrument flight rules  
**ILS**—instrument landing system  
**IMC**—instrument meteorological conditions  
**IP**—instructor pilot  
**KIAS**—knots indicated airspeed  
**KIO**—knock it off  
**LPU**—life preserver unit  
**MAJCOM**—major command  
**MAP**—missed approach point  
**MDA**—minimum descent altitude  
**MOA**—military operating area  
**MSL**—mean sea level  
**NACWS**—Naval Aircraft Collision Warning System  
**NAVAID**—navigation aid  
**NORDO**—no radio

**NOTAM**—notice to airmen  
**O&B**—out and back  
**OCF**—out-of-control flight  
**PAR**—precision radar approach  
**PIC**—pilot in command  
**PIT**—pilot instructor training  
**PWC**—pilot weather category  
**RSU**—runway supervisory unit  
**RTB**—return to base  
**RVR**—runway visual range  
**SIF**—selective identification feature  
**SOF**—supervisor of flying  
**TDZE**—touch down zone elevation  
**TO**—technical order  
**TOLD**—takeoff and landing data  
**UFT**—undergraduate flying training  
**UHF**—ultra-high frequency  
**VDP**—visual descent point  
**VFR**—visual flight rules  
**VHF**—very high frequency  
**VMC**—visual meteorological conditions  
**VOR**—very high frequency omnidirectional range station

## Attachment 2

### T-6 MISSION BRIEFING GUIDE

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

#### A2.1. General:

- A2.1.1. Time hack.
- A2.1.2. Mission objectives and requirements.
- A2.1.3. Mission overview.
- A2.1.4. Mission data card and call sign.
- A2.1.5. Flight crew information file (FCIF), ops notes, notices to airmen (NOTAM), and TOLD.
- A2.1.6. Weather, airfield status, navigation aid (NAVAID) status, and alternate airfield.
- A2.1.7. Sign out, engine start, and takeoff times.

#### A2.2. Mission Profile:

- A2.2.1. Ground operations as follows:
  - A2.2.1.1. AFTO Form 781, **AFORM Aircrew/Mission Flight Data Document** (review and stowage).
  - A2.2.1.2. Gear pin stowage.
  - A2.2.1.3. Exterior inspection responsibilities.
  - A2.2.1.4. Instrument cockpit check responsibilities.
  - A2.2.1.5. Spare aircraft procedures.
- A2.2.2. Takeoff (static, rolling, and crosswind procedures).
- A2.2.3. Departure (routing, altitudes, and airspeeds).
- A2.2.4. G-awareness exercise.
- A2.2.5. Specific area work and parameters.
- A2.2.6. Engine and G envelope.
- A2.2.7. Joker and bingo fuels.
- A2.2.8. Recovery (routing, altitudes, and airspeeds).
- A2.2.9. Simulated emergency procedures.

**A2.3. Alternate Mission Profile.** Brief appropriate items from the applicable briefing guide (**Attachment 2** through **Attachment 5**).

**A2.4. IMC Procedures:**

- A2.4.1. Unusual attitudes.
- A2.4.2. Spatial disorientation.
- A2.4.3. Icing restrictions.

**A2.5. Night Procedures:**

- A2.5.1. Personal equipment (flashlight and clear visor).
- A2.5.2. Aircraft and cockpit lighting.
- A2.5.3. Taxi procedures.
- A2.5.4. Spatial disorientation.
- A2.5.5. Visual illusions.
- A2.5.6. Pattern procedures (entry, reference, spacing, and breakout).
- A2.5.7. Night restrictions.

**A2.6. Crew Coordination:**

- A2.6.1. Aircraft commander.
- A2.6.2. Transfer of aircraft control, with and without intercom.
- A2.6.3. Clearing.
- A2.6.4. In-flight checks.
- A2.6.5. Radio procedures.

**A2.7. Emergency Procedures:**

- A2.7.1. General aircrew responsibilities during emergencies.
- A2.7.2. Emergency ground egress.
- A2.7.3. Takeoff emergencies.
- A2.7.4. Engine Failure.
- A2.7.5. Physiological incident.
- A2.7.6. Bird strikes.
- A2.7.7. Electrical fire.
- A2.7.8. Ejection (with and without intercom, controlled and uncontrolled).
- A2.7.9. Visual signals with intercom failure (emergency gear extension).
- A2.7.10. Emergency divert airfields.

**A2.8. Questions.**

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

**NOTE:** Brief items applicable to your mission in sufficient detail to prevent any misunderstandings between crewmembers or flight members.

**A3.1. General:**

- A3.1.1. Time hack.
- A3.1.2. Mission objectives and requirements.
- A3.1.3. Mission overview.
- A3.1.4. Mission data card and call sign.
- A3.1.5. FCIF, ops notes, NOTAMs, and TOLD.
- A3.1.6. Weather, airfield status, and alternate airfield.
- A3.1.7. Formation positions.
- A3.1.8. Sign out, check in, and takeoff times.

**A3.2. Ground Operations:**

- A3.2.1. Automated terminal information service (ATIS) and clearance.
- A3.2.2. Flight check in.
- A3.2.3. Engine start and taxi procedures.
- A3.2.4. Maintenance delays.
- A3.2.5. Spare aircraft procedures.

**A3.3. Takeoff and Departure:**

- A3.3.1. Runway lineup.
- A3.3.2. Takeoff (wing, interval, and combination with four ship).
- A3.3.3. Rejoin.
- A3.3.4. Departure (routing, altitudes, and airspeeds).

**A3.4. Area Work:**

- A3.4.1. G-awareness exercise.
- A3.4.2. Specific exercises (entry and parameters).
- A3.4.3. Rejoins (bank angle, airspeed, and position).
- A3.4.4. Joker and bingo fuels.

**A3.5. Instrument and Navigation Mission.** Include routing, altitude, and airspeed.

**A3.6. Recovery and Landing:**

- A3.6.1. Split up.
- A3.6.2. Recovery (routing, altitudes, and airspeeds).
- A3.6.3. Overhead pattern and landing (pattern entry and spacing).
- A3.6.4. Wing approach and landing:
  - A3.6.4.1. Configuration and airspeed.
  - A3.6.4.2. Instrument procedures.
  - A3.6.4.3. Circling procedures.
- A3.6.5. After-landing checks and taxi back (single ship and formation).

**A3.7. Alternate Formation Mission.** Brief appropriate items from the applicable briefing guide ([Attachment 2](#) through [Attachment 5](#)).

**A3.8. Night Procedures:**

- A3.8.1. Personal equipment (flashlight and clear visor).
- A3.8.2. Aircraft and cockpit lighting.
- A3.8.3. Taxi procedures.
- A3.8.4. Takeoff procedures (aircraft lighting and radio calls).
- A3.8.5. Formation references.
- A3.8.6. Spatial disorientation.
- A3.8.7. Visual illusions.
- A3.8.8. Pattern procedures (entry, references, spacing, and breakout procedures).
- A3.8.9. Night restrictions.

**A3.9. IMC Procedures:**

- A3.9.1. Aircraft lighting.
- A3.9.2. Icing restrictions.
- A3.9.3. Unusual attitudes.
- A3.9.4. Spatial disorientation.
- A3.9.5. Lost wingman procedures.

**A3.10. Formation Procedures:**

- A3.10.1. Radio procedures.
- A3.10.2. In-flight checks.
- A3.10.3. Route position and spacing.

- A3.10.4. Position change.
- A3.10.5. Wake turbulence.
- A3.10.6. Engine and G envelope.
- A3.10.7. Breakout.
- A3.10.8. Overshoot and collision avoidance.
- A3.10.9. KIO call.
- A3.10.10. Lost sight.
- A3.10.11. Visual signals.

**A3.11. Three-Ship Procedures:**

- A3.11.1. Runway lineup.
- A3.11.2. Takeoff (wing, interval, and combination).
- A3.11.3. Rejoin.
- A3.11.4. Radio procedures.
- A3.11.5. Phantom wingman position.
- A3.11.6. Rejoins.
- A3.11.7. Position change.
- A3.11.8. Split up.
- A3.11.9. Recovery.

**A3.12. Formation Emergencies:**

- A3.12.1. Takeoff.
- A3.12.2. In-flight malfunctions.
- A3.12.3. Element integrity.
- A3.12.4. Midair collision.
- A3.12.5. Radio failure.
- A3.12.6. Hydraulic, electrical, fuel, oxygen, engine (HEFOE).
- A3.12.7. Physiological incident.
- A3.12.8. Bird strike.
- A3.12.9. Ejection.
- A3.12.10. Recovery procedures.
- A3.12.11. Emergency divert airfields.

**A3.13. Questions.**

**A3.14. Crew Coordination:**

A3.14.1. Aircraft commander.

A3.14.2. Ground operations as follows:

A3.14.2.1. AFTO Form 781 (review and stowage).

A3.14.2.2. Exterior inspection responsibilities.

A3.14.2.3. Instrument cockpit check responsibilities.

A3.14.2.4. Gear pin stowage.

A3.14.3. Transfer of aircraft control, with and without intercom.

A3.14.4. Clearing.

A3.14.5. In-flight checks.

A3.14.6. Radio procedures.

A3.14.7. Emergency procedures as follows:

A3.14.7.1. General aircrew responsibilities during emergencies.

A3.14.7.2. Emergency ground egress.

A3.14.7.3. Takeoff emergencies.

A3.14.7.4. Engine failure.

A3.14.7.5. In-flight malfunctions.

A3.14.7.6. Physiological incident.

A3.14.7.7. Bird strikes.

A3.14.7.8. Electrical fire.

A3.14.7.9. Ejection (with and without intercom, controlled and uncontrolled).

A3.14.7.10. Visual signals with intercom failure (emergency gear extension).

A3.14.7.11. Emergency divert airfields.

**A3.15. Alternate Single-Ship Mission.** Brief appropriate items from the applicable briefing guide (**Attachment 2** through **Attachment 5**).

**A3.16. Questions.**

**Attachment 4****T-6 INSTRUMENT AND NAVIGATION BRIEFING GUIDE**

**NOTE:** Brief items applicable to your mission in sufficient detail to prevent any misunderstandings between crewmembers or flight members.

**A4.1. General:**

- A4.1.1. Time hack.
- A4.1.2. Mission objectives and requirements.
- A4.1.3. Mission overview.
- A4.1.4. Mission data card and call sign.
- A4.1.5. FCIF, ops notes, NOTAMs, and TOLD.
- A4.1.6. Weather, airfield status, NAVAID status, and alternate airfield.
- A4.1.7. Sign out, engine start, and takeoff times.
- A4.1.8. Required personal equipment (life preserver unit [LPU], flashlight, clear visor, survival kit, etc.).

**A4.2. Mission Profile:**

- A4.2.1. Ground operations as follows:
  - A4.2.1.1. AFTO Form 781 (review and stowage).
  - A4.2.1.2. Gear pin and personal equipment stowage.
  - A4.2.1.3. Exterior inspection responsibilities.
  - A4.2.1.4. Instrument cockpit check responsibilities.
  - A4.2.1.5. Spare aircraft procedures.
- A4.2.2. Takeoff (static, rolling, and crosswind procedures).
  - A4.2.2.1. Transition to vision-restricting device.
- A4.2.3. Departure (routing, altitudes, and airspeeds).
- A4.2.4. En route and cruise (route of flight, altitudes, airspeeds, and groundspeed check).
- A4.2.5. Instrument area work and parameters.
- A4.2.6. Engine and G envelope.
- A4.2.7. Joker and bingo fuels.
- A4.2.8. Recovery (routing, altitudes, and airspeeds).
- A4.2.9. ATIS and metro.
- A4.2.10. Instrument approach review.

A4.2.11. Removal of vision-restricting device and transition from simulated instruments to visual references.

A4.2.12. Simulated emergency procedures.

**A4.3. Alternate Mission Profile.** Brief appropriate items from the applicable briefing guide ([Attachment 2](#) through [Attachment 5](#)).

**A4.4. IMC Procedures:**

A4.4.1. Unusual attitudes.

A4.4.2. Spatial disorientation.

A4.4.3. Icing restrictions.

**A4.5. VFR Procedures:**

A4.5.1. Turn points.

A4.5.2. Headings.

A4.5.3. Times.

A4.5.4. Altitudes.

A4.5.5. Prominent land and manmade features.

A4.5.6. Obstacles.

A4.5.7. Flight following.

A4.5.8. VFR arrival.

**A4.6. Night Procedures:**

A4.6.1. Personal equipment (flashlight and clear visor).

A4.6.2. Aircraft and cockpit lighting.

A4.6.3. Taxi procedures.

A4.6.4. Spatial disorientation.

A4.6.5. Visual illusions.

A4.6.6. Pattern procedures (entry, references, spacing, and breakout).

A4.6.7. Night restrictions.

**A4.7. Crew Coordination:**

A4.7.1. Aircraft commander.

A4.7.2. Transfer of aircraft control, with and without intercom.

A4.7.3. Clearing.

A4.7.4. In-flight checks.

A4.7.5. Radio procedures.

**A4.8. Emergency Procedures:**

A4.8.1. General aircrew responsibilities during emergencies.

A4.8.2. Emergency ground egress.

A4.8.3. Takeoff emergencies.

A4.8.4. Engine failure.

A4.8.5. Physiological incident.

A4.8.6. Bird strikes.

A4.8.7. Electrical fire.

A4.8.8. Ejection (with and without intercom, controlled and uncontrolled).

A4.8.9. Visual signals with intercom failure (emergency gear extension).

A4.8.10. Lost-communications procedures.

A4.8.11. Lost procedures.

A4.8.12. Emergency divert airfields.

A4.8.13. Divert procedures.

**A4.9. Questions.**

## Attachment 5

### T-6 LOW-LEVEL BRIEFING GUIDE

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

#### **A5.1. General:**

- A5.1.1. Time hack.
- A5.1.2. Mission objectives and requirements.
- A5.1.3. Mission overview and route number.
- A5.1.4. Mission data card and call sign.
- A5.1.5. FCIF, ops notes, NOTAMs, and TOLD.
- A5.1.6. Airfield status and NAVAID status.
- A5.1.7. Weather as follows:
  - A5.1.7.1. Takeoff.
  - A5.1.7.2. Low-level route.
  - A5.1.7.3. Minimum altimeter setting along the route.
  - A5.1.7.4. Recovery.
  - A5.1.7.5. Alternate airfield.
- A5.1.8. Sign out, engine start, takeoff, and route entry times.

#### **A5.2. Ground Operations:**

- A5.2.1. AFTO Form 781 (review and stowage).
- A5.2.2. Exterior inspection responsibilities.
- A5.2.3. Instrument cockpit check responsibilities.
- A5.2.4. Gear pin stowage.
- A5.2.5. Compass check.
- A5.2.6. Clock check.

**A5.3. Takeoff.** Static or rolling and crosswind procedures.

**A5.4. Departure.** Routing, altitudes, and airspeeds.

#### **A5.5. Route Entry:**

- A5.5.1. Prominent features.
- A5.5.2. Radial and distance measuring equipment (DME).

A5.5.3. Maneuvering to enter route.

A5.5.4. Identification, friend or foe (IFF) and selective identification feature (SIF).

A5.5.5. Flight service station.

**A5.6. Flying the Route:**

A5.6.1. Dead reckoning (DR) procedures and map-reading techniques.

A5.6.2. Corridor width, minimum and maximum altitudes.

A5.6.3. Altitude control and height assessment techniques.

A5.6.4. Ground track references and correction techniques.

A5.6.5. Planned groundspeed and timing corrections.

A5.6.6. Key obstructions and avoidance procedures.

A5.6.7. Mandatory reporting points.

A5.6.8. Frequencies.

A5.6.9. Continuation and bingo fuels.

A5.6.10. Target area and acquisition.

**A5.7. Conflicts Along the Route:**

A5.7.1. Parallel and crossing low levels.

A5.7.2. Airfields (airport traffic areas, airport radar service areas, and instrument approach corridors).

A5.7.3. Civilian VFR routes (major highways, rivers, and local practice areas).

A5.7.4. Cities.

A5.7.5. Noise-sensitive areas.

**A5.8. Route Abort.** Altitude, IMC procedures, and VMC procedures.

**A5.9. Route Exit and Recovery:**

A5.9.1. Altitude.

A5.9.2. Controlling agency.

A5.9.3. Radio frequency.

A5.9.4. IFF and SIF.

A5.9.5. Route of flight.

A5.9.6. VFR arrival.

**A5.10. IMC Procedures:**

A5.10.1. Pitot heat.

A5.10.2. Unusual attitudes.

A5.10.3. Spatial disorientation.

**A5.11. Instrument Approach Procedures:**

A5.11.1. Holding.

A5.11.2. Penetration and en route descent.

A5.11.3. Precision and nonprecision approach review.

A5.11.4. Circling.

A5.11.5. Transition to landing.

**A5.12. Simulated Emergency Procedures:**

**A5.13. Alternate Mission.** Brief appropriate items from the applicable briefing guide ([Attachment 2](#) through [Attachment 5](#)).

**A5.14. Crew Coordination:**

A5.14.1. Aircraft commander.

A5.14.2. Transfer of aircraft control, with and without intercom.

A5.14.3. Clearing.

A5.14.4. In-flight checks.

A5.14.5. Radio procedures.

**A5.15. Emergency Procedures:**

A5.15.1. General aircrew responsibilities during emergencies.

A5.15.2. Emergency ground egress.

A5.15.3. Takeoff emergencies.

A5.15.4. Low-level emergencies.

A5.15.5. Engine failure.

A5.15.6. Physiological incident.

A5.15.7. Bird strikes.

A5.15.8. Electrical fire.

A5.15.9. Ejection (with and without intercom, controlled and uncontrolled).

A5.15.10. Visual signals with intercom failure (emergency gear extension).

A5.15.11. Lost-communications procedures.

A5.15.12. Low-level diverts.

A5.15.13. Lost procedures.

A5.15.14. Emergency divert airfields.

**A5.16. Questions.**