

**BY ORDER OF THE COMMANDER  
944TH FIGHTER WING**



**AIR FORCE INSTRUCTION 11-2F-16  
VOLUME 3**

**944TH FIGHTER WING  
Supplement 1**

**11 AUGUST 2003**

**Flying Operations**

**F-16 OPERATIONS PROCEDURES**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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The OPR for this supplement is 944 OG/OGV (Maj Grantham). This supplement implements and extends the guidance of Air Force Instruction (AFI) 11-2F-16V3, *F-16 - Pilot Operational Procedures*, 1 July 1999. It describes 944th Fighter Wing (FW) procedures to be used in conjunction with the basic instruction. This instruction applies to all pilots flying 944 FW aircraft.

**SUMMARY OF REVISIONS**

**This document is substantially revised and must be completely reviewed.**

Pilots reading this instruction are advised to have their Hellion In-Flight Guide available for cross-reference.

**Section 8A– Introduction (Added)**

**8.3. (Added) Purpose.** The purpose of this chapter is to supplement AFI 11-2F-16V3, *F-16-Operations Procedures*, and AFI 11-2F-16V3/AETC Sup 1. This supplement prescribes standard operating procedures for all pilots assigned and attached to the 944 FW/302 Fighter Squadron (FS). It is directive in nature with intent to standardize local procedures while not restricting mission accomplishment. For additional local and higher headquarter procedures, pilots will refer to Luke Air Force Base Instruction (LAFBI) 13-203, *Airfield Operations and Base Flying Procedures*, AFI 11-212V3, *Hazard Methodology and Weapon Safety Footprints*, AFI 11-214, *Air Operations Rules and Procedures*, AFI 11-218, *Aircraft Operations and Movement on the Ground*, AFI 11-301, *Aircrew Life Support Program*, AFI 11-418, *Operations Supervision*, AFI 11-2F-16V1, *F-16 Aircrew Training*, AFI 13-212V1, Annex A/LAFB SUP 1, *Weapons Ranges*, Air Force Tactics, Techniques, and Procedures (AFTTP) 3-3V5, *Combat Aircraft Fundamentals-F-16*, LAFBI 21-108, *Items Lost or Abandoned in Flight*, 944th Operations Group (OG) Operational Instruction (OI) 11-9, *Training Documentation and Administration*, 944 FWI 11-201, *Cross Country Procedures*, 944 FWI 11-401, *Incentive/Orientation/Familiarization Flights*, 944 FWI 11-402,

*F-16 Flying and Ground Training for Pilots*, Technical Order (T.O.) 4T-1-3, *Inspection Maintenance Instruction Storage and Disposition of Aircraft Tires and Innertubes*, 302 FS Hellion In-Flight Guide, and appropriate Formal Course Syllabi.

**8.4. (Added) Authority.** This directive is written under the authority of AFI 11-2F-16V3.

**8.5. (Added) Responsibility.** Commanders, supervisors and pilots approved to fly 944 FW/302 FS aircraft are responsible for compliance with this directive.

**8.6. (Added) Deviations.** Pilots will not deviate from this directive's procedures unless an urgent requirement exists. Waivers must be approved by the 944th Operations Group Commander (944 OG/CC) or designated representative.

**8.7. (Added) Recommended Changes.** Submit an AF Form 847, **Recommendation for Change of Publication**, to 944 OG/OGV for recommended changes to this supplement.

### ***Section 8B– General Policy (Added)***

**8.8. (Added) Command and Control.** The 944 FW Supervisor of Flying (SOF) is the commander's representative directly responsible for the conduct of flying operations at LAFB and deployed locations in accordance with (IAW) AFI 11-418. The Top 3 and Hellion SOF will be the focal point for decisions during normal flying operations.

**8.9. (Added) Signout and Go/No-Go Requirements.** 944 FW Go/No-Go requirements are IAW AFI 11-2F-16V1, AFI 11-202V2/944 FW SUP, *Aircrew Standardization and Evaluation Program*, and this instruction. Signing out on the local flight clearance form is an acknowledgment that all prerequisites to flight have been (or will be via flight or mass briefing) satisfactorily completed. Additional prerequisites are:

8.9.1. (Added) 944 FW Go/No-Go (Flight Crew Information File (FCIF), Operations Group Read File (OGRF), Critical Action Procedures (CAP) (front side), pilot flight publications).

8.9.2. (Added) Weather review or brief.

8.9.3. (Added) Notice to Airmen (NOTAM) review including Attention Notices and Center NOTAMs. Pilots must review Range NOTAMs for all of SELLS military operating area (MOA), AR-647/647A, and Barry M. Goldwater Range (BMGR) operations.

8.9.4. (Added) Verification of currencies (flight and ground training) through Aviation Resource Management System (ARMS) tracking and reporting.

8.9.5. (Added) Orientation flights (incentive, familiarization, distinguished visitors, and public affairs) only: review of 944 FWI 11-401. Pilots will review flight restrictions and coordinate with Squadron Aviation Resource Management (SARM) personnel to confirm passengers have received appropriate approval authority, local medical clearance, and current egress training.

**8.10. (Added) Flying Equipment.** The anti-G suit will be worn on all missions with comfort zippers zipped. The Combat EDGE vest will be worn IAW AFI 11-2F-16V3 and AFI 11-214.

8.10.1. (Added) 302 FS/DOL (Life Support) will provide life preserver unit (LPU) 9/P on a daily basis as a pilot option. LPU-9/P must be worn on all over water flights, Operational Readiness Exercise (ORE)/Operational Readiness Inspection (ORI) exercises, and all cross-country flights that leave the local area (defined as the state of Arizona).

**8.11. (Added) Mission Symbols.** Air Force Technical Order (AFTO) Form 781, **AFORMS Aircrew/Mission Flight Data Document**, Item 32 (Reserve Status) will reflect the following symbols:

8.11.1. (Added) 1 – Active Duty (mandays/annual tour/Active Guard and Reserve (AGR)).

8.11.2. (Added) 2 – Unit Training Assembly (UTA).

8.11.3. (Added) 3 – Additional Flying/Ground Training Period (AFTP/AGTP).

8.11.4. (Added) 4 – Air Reserve Technician (ART) on civilian status.

**8.12. (Added) General Directives.**

8.12.1. (Added) Flight Briefings.

8.12.1.1. (Added) Minimum Briefing Times (prior to take-off) are:

8.12.1.1.1. (Added) 2+30 for Transition (TR) missions.

8.12.1.1.2. (Added) 2+15 for all other syllabus sorties.

8.12.1.1.3. (Added) 2+00 for Dissimilar, Mission Qualification Training (MQT), NVG, and 4v4 (or more).

8.12.1.1.4. (Added) 1+30 for all others.

8.12.1.2. (Added) Ground Control Intercept (GCI) attendance at flight briefings and debriefings is desired. When GCI support is scheduled and GCI attendance is not possible, flight leads will, to the maximum extent possible, pre-brief with GCI.

8.12.2. (Added) Pilots will brief and fly only scheduled missions or authorized alternate missions. Pilots will not brief or fly any air-to-air or opposed air-to-ground primary or alternate mission with hot guns.

8.12.2.1. (Added) Alternate Missions. Pilots will obtain Top 3 or Hellion SOF approval before launching single-ship. Student alternate missions will be flown IAW the appropriate syllabus. Solo students without a current F-16 instrument qualification rating who get airborne as a single-ship will maintain visual meteorological conditions (VMC) and proceed to the fuel burn down area and contact the SOF for further guidance. Student pilots with a current F-16 instrument qualification rating may fly instrument proficiency approaches at AUX-1 or LAFB provided the aircraft is not loaded with heavy weight ordnance. Instructor pilots may launch/continue alternate and single-ship missions due to fallout. Live ordnance single-ship missions will not be flown. Instrument training missions will not be flown with heavy weight ordnance.

8.12.3. (Added) Quiet Hours. Refer to LAFBI 13-203. Top 3/Hellion SOF and pilots will review the daily schedule/NOTAMs/Step Brief Interactive and ensure compliance with quiet hours restrictions.

**8.13. (Added) G-Awareness Program.** G-Awareness exercises will be accomplished IAW AFI 11-2F-16V3, AFTTP 3-3V5 and AFI 11-214, and syllabus requirements. The following guidance also applies.

8.13.1. (Added) Notify the flight lead or instructor pilot (IP) of any degradation in “G” tolerance or malfunction of Combat EDGE vest, anti-g suit equipment, or aircraft anti-g equipment and terminate all tactical maneuvering. If a G-induced loss of consciousness (GLOC) or suspected GLOC occurs, declare an emergency, return to LAFB from a straight-in approach and report the occurrence to the Top 3/Hellion SOF, Flight Safety, the Flight Surgeon and maintenance (aircraft will be impounded). If during the

debrief, the flight lead discovers or suspects a GLOC incident they will report it in the same manner as an in-flight occurrence.

**8.14. (Added) Hot Weather Procedures.** Increased vigilance for the adverse affects of hot weather is required, most notably the potential for GLOC. Use the following guidance during periods of hot weather.

8.14.1. (Added) Ground Operations:

8.14.1.1. (Added) Index of thermal stress (ITS) in the Caution Zone *and* outside air temperature (OAT) < 100°F.

8.14.1.1.1. (Added) Limit ground operations to 90 minutes (outside air-conditioned environment).

8.14.2.1. (Added) ITS in the Danger Zone *or* OAT  $\geq$  100°F.

8.14.2.1.1. (Added) Limit ground operations to 45 minutes (outside air-conditioned environment). When possible, wait in a cool, shaded area if aircraft is not ready. A maximum of two exterior inspections will be performed. After starting the second aircraft, a 15-minute cool-down period is required, prior to take-off. Sortie will be cancelled if the 2nd aircraft is aborted.

8.14.2.1.2. (Added) For the second flight of the day, the minimum recovery time between flights (land time to takeoff time) is two hours. Stepping to a spare and a second exterior inspection requires TOP 3 approval.

8.14.3. (Added) Take-off:

8.14.3.1. (Added) With OAT >100° F, use a minimum of 20 seconds spacing for afterburner takeoffs.

**8.15. (Added) Inclement Weather Procedures.**

8.15.1. (Added) The crosswind takeoff and landing limit for students prior to the initial qualification (or requalification) evaluation is 15 knots, wet or dry, even if there is an IP in the rear cockpit. After initial qualification (or requalification) evaluation, dry runway crosswind takeoff and landing limits for students increases to 20 knots. **NOTE:** These restrictions do not apply to qualified F-16 students currently (basic mission capable (BMC) or combat mission ready (CMR)).

8.15.2. (Added) When flying with captive air intercept missile (AIM)-9s, training guided munitions (TGM), or targeting pod (TGP), pilots will avoid flying through visible precipitation at high speeds. If visible precipitation is unavoidable, slow to 300 knots calibrated air speed (KCAS) or optimum cruise air-speed whichever is lower and stow the TGP.

**8.16. (Added) Off Station Procedures.** Cross-country flights will reference 944 FWI 11-201 and the Airfield Suitability and Restrictions Report (ASRR). The ASRR can be found at <https://www.amc.af.mil/do/doa/dovs.htm> or <https://www.aetc.af.mil/do/> websites; access the DOFV site and select ASRR/STIF from the DOFV menu options.

8.16.1. (Added) Follow all reporting procedures contained in the Hellion In-Flight Guide. Report any open write-ups to the squadron supervisor. The squadron supervisor will coordinate with the Senior Maintenance Officer (SMO) and provide follow-on instructions. If the SMO does not clear the aircraft for flight, the squadron will coordinate with off station maintenance or deploy the appropriate maintenance team and tools to perform the required maintenance.

8.16.2. (Added) For aircraft delivery or pickup from off-station maintenance functions (i.e., programmed depot maintenance, Falcon-Up, Gila Bend Air Force Auxiliary Field (AFAF), and paint bead blast) all

AFTO Form 781 forms will be reviewed for maintenance actions accomplished. Any concerns or discrepancies will be brought to the attention of the squadron supervisor and SMO prior to flight.

***Section 8C– Ground Operation (Added)***

**8.17. (Added) Preflight.** Pilots will review the AFTO Form 781. The crew chief will retain the AFTO Form 781 for all local flights. Pilots will ensure that the nose gear pin, tail hook pin, and AIM-9 dome cover(s) are removed during the preflight. As a minimum, the Instrument Flight Rules (IFR) Supplement, Flight Information Handbook, Vol 5 High and Low Altitude Instrument Approach Procedure book, and the H2/H4 High Altitude Enroute Charts will be in each aircraft for local flights. Pilots are responsible for having applicable publications for any off-station flights.

8.17.1. (Added) Pilots will place the D-model Stick Control Switch in the “FWD” position on all missions where the rear cockpit is unoccupied or occupied by other than a fully qualified F-16 pilot. If both occupants are F-16 qualified pilots, the Stick Control Switch may be positioned to “AFT” (to provide for control from the rear cockpit in the event of birdstrikes or other front cockpit debilitating occurrences) as directed by the aircraft commander. Regardless of the Stick Control Switch position, a crew coordination briefing will be conducted IAW AFI 11-2F-16V3. A Pilot in Command for the mission will be designated and will have the final authority for the safe operation of the aircraft.

8.17.2. (Added) If pilots note a “hot” gun during preflight after briefing a “cold” gun scenario, they will contact the 944 FW expediter who will red ball an arming crew to safe the guns.

8.17.3. (Added) F-16 Main Gear Tire Wear Criteria.

8.17.3.1. (Added) General. With the average rainfall of seven inches per year in the Phoenix area, dry weather criteria for main gear tires will be used year round for local operations. Aircraft going cross-country will have sufficient tread remaining to prevent wear below the wet weather limits of technical order (T.O) specifications. For deployments, all deploying aircraft will depart with tires meeting wet weather criteria. The number of spare tires required will depend upon the expected weather conditions at the deployed location. Wet and dry weather tire wear limits are defined in T.O. 4T-1-3, *Inspection Maintenance Instruction Storage and Disposition of Aircraft Tires and Innertubes*.

**8.18. (Added) Engine Start.**

8.18.1. (Added) A working intercom between the pilot and crew chief will be used to the maximum extent possible for routine flying operations. Students will have an operating intercom for all missions. Hand signals may be used IAW AFI 11-218 and AFI 11-2F-16V3 as required to expedite launch and recovery.

8.18.2. (Added) The canopy will not be motored during Jet Fuel Starter (JFS) operations while starting the engine. If OAT is not a factor, either close the canopy completely or to within a few inches of the fully closed position prior to selecting “JFS Start 2” and then fully close the canopy after the JFS has shut off as engine speed passes 50% revolutions per minute (RPM). If OAT is a factor, start the engine with the canopy full open, and delay closing the canopy until after the JFS has shut off as engine speed passes 50% RPM. This will result in the canopy being fully closed as the engine is stabilizing in idle.

8.18.3. (Added) Pilots will not stow or wedge anything between the glare shield and the canopy. No cockpit maintenance will be accomplished or items passed to the pilot while the engine is running. When moving aircraft in the shelters, a marshaller is required to enter or exit the shelter. Wing walkers are not

required. To provide required clearance, aircraft must taxi on the centerline. Pilots will title airborne video tape recorder (AVTR) tapes prior to takeoff IAW Hellion Standards.

### **8.19. (Added) Taxi Procedures.**

8.19.1. (Added) Use 300 feet centerline taxi spacing on taxiway Delta, taxiway Bravo south of Charlie, entering to and exiting from the arming areas, and during night operations. Spacing will be 150 feet staggered during daylight operations on all other taxiways.

8.19.2. (Added) Quick Check, Arming/Dearming Procedures.

8.19.2.1. (Added) All aircraft will receive a quick check by maintenance personnel prior to takeoff. Aircraft will taxi to the first available arming spot nearest the arming crew shack.

8.19.2.2. (Added) Runway 03, use the south arming area adjacent to taxiway Charlie and enter via the north entrance. After completion of arming and quick check, taxi to the marshalling area using the spot closest to the runway. TGP and Maverick equipped aircraft may line up to facilitate a boresight check in this area.

8.19.2.3. (Added) Runway 21, use the north arming area to arm. Take the eastern most position in arming. If all 8 spots are full, take the eastern most position in Row 1 and roll forward when an arming spot becomes available. If aircraft are waiting to be armed, marshal in the northern most spot of the boresight area facing north or request to taxi across runway 21L and hold for a runway 21R departure (no IFR departure available from 21R). If required, boresight in the southern most spot of the boresight area facing south. Turn left out of the boresight area to take the active. Pilots will not hold in front of aircraft being armed with forward firing ordnance.

8.19.2.4. (Added) Pilots will not taxi across 21R extended centerline on taxiway Alpha while aircraft are on short final/low approach to, or landing on runway 21R.

8.19.3. (Added) Before Takeoff Procedures.

8.19.3.1. (Added) All aircraft will turn the landing light on when taking the runway for departure. Pilots flying D models, with the rear seat occupied will verbally confirm the EJECTION MODE SELECT HANDLE in AFT, stick control switch position, and both seats armed prior to takeoff. All student pilots on syllabus sorties will turn the AVTR on prior to takeoff and leave it on for the entire mission. On longer Average Sortie Duration (ASD) missions (Large Force Employment (LFE), cross-countries, etc.), as a minimum, AVTRs will be on for takeoffs, landings and critical areas of the sortie as determined by the flight lead or IP.

8.19.4. (Added) After Landing.

8.19.4.1. (Added) Aircraft loaded with chaff/flares, unexpended bombs, or a hot gun will taxi through de-arm after exiting the runway.

### ***Section 8D– Flying Operations (Added)***

#### **8.20. (Added) Takeoff.**

8.20.1. (Added) Afterburner will normally be terminated at 300 knots indicated air speed (KIAS), or 350 KIAS, if heavy weight.

8.20.2. (Added) Max and Unrestricted Climbs. Comply with LAFBI 13-203.

8.20.3. (Added) Live Ordnance. Takeoff runway 21 only. Busco, Nordy and VFR South are the only departures authorized with live ordnance. Additionally, VR223 is the only low level authorized for live ordnance.

**8.21. (Added) Departure Procedures.** Stereo departures depicted in Hellion In-Flight Guide will be used to the maximum extent possible. Do not use cut-off until rejoined within standard formation.

8.21.1. (Added) “VMC Only” Stereo Departures. Stereo departure procedures labeled as “VMC Only” may not provide obstacle clearance IAW current criteria. Until the procedures are approved, the only method to ensure obstacle clearance is via radar vectors no lower than the minimum vectoring altitude (MVA). Utilize the following procedures when anticipating instrument meteorological conditions (IMC) on departure.

8.21.1.1. (Added) Departures that remain within Luke airspace: Prior to takeoff, if IMCs are known or expected on departure, notify clearance delivery of the need for radar vectors for departure. If the need to penetrate weather is not realized until after takeoff, obtain radar vector clearance from departure control prior to entering the weather.

8.21.1.2. (Added) Departures which proceed outside of Luke airspace: For the Nordy-Arson, Nordy-2301W, and Tiron-Yuma departures, if IMCs are expected beyond Luke airspace, a DD Form 175, **Military Flight Plan** needs to be filed prior to takeoff to ensure an Albuquerque Center (ABQ CTR) handoff will occur. Flights to the Outlaw and Jackal maintenance operating areas (MOA) must file a DD Form 175. Likewise, if the need to penetrate weather is not realized until after takeoff, radar vector clearance must be received from departure control prior to entering the weather.

8.21.2. (Added) Radar-Assisted Trail Departures. Fly IAW AFI 11-2F-16V3, and AFTTP 3-3V5. Last aircraft will squawk mode 3/C 4000 until rejoined within standard formation. Pilots will prioritize climbout and departure groundtrack.

**8.22. (Added) Fuel Requirements.**

8.22.1. (Added) Recommended VFR bingo fuels for recovery to Luke are noted in the Hellion In-Flight Guide. Add 200 pounds for single runway operations. Subtract 200 pounds for runway (RWY) 03 recoveries from the southern areas. **NOTE:** Recommended VFR bingo fuels are based on return-to-base (RTB) from the center of the area at low altitude, climb to 10,000 feet mean sea level (MSL)/300 knots to Gila Bend TACAN (GBN)/Valley or TANKZ recovery to arrive on initial with 1000 pounds with the following aircraft configurations: air-to-air (A/A) centerline tank; air-to-ground (A/G) two empty tanks, one suspension utility unit (SUU), one triple ejector rack (TER). Flight leads should not hesitate to increase bingo fuels as flight conditions or configurations dictate. VFR and IFR Bingo fuels will be adjusted under the following conditions.

8.22.2. (Added) IFR Recoveries. If Luke weather is Ceiling: < 2,000 feet above ground level (AGL), Visibility: < 3 miles, aircraft will land with IFR divert fuel. The overhead pattern is closed, and an instrument approach is required. Visual straight-ins are permitted at the discretion of the SOF if Luke is better than 1500 feet AGL and 3 miles.

8.22.3. (Added) IFR Bingos. If Luke weather is Ceiling:  $\geq$  2,000 feet AGL and < 3,000 feet AGL, Visibility:  $\geq$  3 miles, an alternate is required. The overhead pattern is open and pilots will RTB with IFR Divert fuel but may land with normal VFR fuel.

8.22.4. (Added) Minimum IFR bingo fuels according to the declared alternate are noted in the Hellion In-Flight Guide. Minimum IFR bingo fuels are based on return to Luke, low approach to RWY 21 with divert fuel. Configurations are as follows: A/A centerline tank; A/G two empty tanks, one SUU, one TER.

8.22.5. (Added) Minimum IFR divert fuels according to the declared alternate are noted in the Hellion In-Flight Guide. Minimum IFR divert fuels are based on missed approach at LAFB, divert to alternate airfield at max range, cruise altitude IAW Hellion In-Flight Guide, instrument penetration to land with 1400 pounds (no wind). Configurations are as follows: A/A centerline tank; A/G two empty tanks, one SUU, one TER.

8.22.6. (Added) Divert Bases. A snap shot of local bases is presented in the Hellion In-Flight Guide, along with a synopsis of frequencies, arrestment gear and runway layouts.

**8.23. (Added) Operating Areas (MOA/Air Traffic Control Assigned Airspace (ATCAA) /Restricted Areas).** Area operations are described in Letters of Agreement, LAFBI 13-203, and AFI 13-212V1, Annex A/LAFB SUP 1. To the maximum extent possible, fly Luke stereo departures and recoveries to and from the operating areas, avoiding overflight of populated areas. Pilots will obtain an air traffic control (ATC) clearance prior to entering or exiting any MOA/ATCAA.

8.23.1. (Added) Weather Requirements. Pilots will maintain VMC in MOAs (< flight level (FL)180). Pilots will maintain VMC in ATCAAs (FL180 to area cap) to the maximum extent. If flight in IMC is required in an ATCAA, maintain VMC, contact the controlling center, set altimeter to 29.92, and obtain clearance.

8.23.2. (Added) Gladden/Bagdad MOA/ATCAA. IAW LAFBI 13-203 and Hellion In-Flight Guide.

8.23.2.1. (Added) Use caution when the Luke altimeter setting is less than 29.92. Altimeter will indicate an altitude lower than actual flight level and may not provide adequate separation from the area cap.

8.23.3. (Added) Yarnell ATCAA. The Yarnell ATCAA is used primarily for functional check flight (FCF) profiles. FCF pilots should coordinate with Range Management office (RMO) airspace office prior to conducting Yarnell operations to coordinate with Albuquerque Center. Pilots will use 29.92 altimeter setting. Entry will be via DD Form 175 flight plan. Pilots must obtain clearance from Albuquerque Center to exit.

8.23.4. (Added) Turtle/Quail MOA/AR-649. AR-649 will be scheduled concurrently with the Turtle MOA. Use ATC-assigned or tanker altimeter setting. The Quail MOA will normally be scheduled concurrently with the Turtle MOA.

8.23.5. (Added) SELLS MOA/ATCAA. IAW AFI 13-212V1, Annex A/LAFB SUP 1, LAFBI 13-203, and Hellion In-Flight Guide. When AR-647 or 647A is active, pilots must ensure 1000 feet deconfliction from the track.

8.23.6. (Added) Restricted Airspace (R-2301E, R-2304, R-2305). Restricted Airspace procedures are described in AFI 13-212V1, Annex A/LAFB SUP 1. Pilots utilizing range airspace will check Range NOTAMs for the status of ranges and restrictions.

**8.24. (Added) Low Level Operations.**

8.24.1. (Added) Pilots will review the 56 FW Military Training Route (MTR) Briefing Guide in addition to AP/1B before flying low levels scheduled/owned by LAFB.

8.24.2. (Added) Minimum altitude for G-Awareness Exercise is 1500 feet AGL.

8.24.3. (Added) Aircraft on MTRs passing through Sells Low Altitude Tactical Navigation (LATN) will monitor 379.4 and make position reports at points listed in Hellion In-Flight Guide (e.g. “*Helyun 1, Four Vipers, Gu Achi Peak to South Mountain, 500 feet, 500 knots*”). Sells AB Low MOA is not scheduled to one flight and may have aircraft transiting through the airspace.

8.24.4. (Added) The LATN airspace is controlled by Davis-Monthan AFB and is designed to be used by A-10’s operating at 250 KCAS or less. LATN airspace boundaries are not necessarily coincidental with the Sells Low MOA. F-16s may transit the LATN airspace at tactical airspeeds while in the lateral and vertical confines of an MTR.

8.24.5. (Added) Pilots will make every attempt to avoid overflight of noise sensitive areas at low altitude to minimize the effects of jet noise on the civilian population.

**8.25. (Added) NVG Operations.** IAW AFI 11-202V3, *General Flight Rules*, AFI 11-214, AFI 11-2F-16V1, AFI 11-2F-16V3, and the NVG syllabus.

**8.26. (Added) Recovery and Arrival Procedures.** Refer to procedures in the Hellion In-Flight Guide and LAFBI 13-203.

8.26.1. When handed off to Tower by Radar Approach Control (RAPCON), flights will make an immediate position report and state intentions.

**8.27. (Added) Radar Trail Recoveries.**

8.27.1. (Added) Coordinate radar trail recoveries with ATC prior to beginning the approach and spacing maneuver. Request “*Instrument Landing System (ILS)//TACAN trail recovery*” with RAPCON.

8.27.2. (Added) Drag Procedures. Flight lead will confirm good navigation aids (alpha check) with wingmen, and local altimeter setting.

8.27.2.1. (Added) Attempt to establish spacing in VMC. If IMC, accomplish the spacing maneuver in level flight. Lead will call all airspeed and configuration changes. Wingmen will simultaneously conform to lead’s airspeed and configuration.

8.27.2.2. (Added) 4-Ship Formations: Flight lead will coordinate for non-standard element spacing prior to executing the drag. During the drag #3 will fly 4 nautical miles (NM) spacing from #1 while monitoring #2. **NOTE:** Maximum non-standard spacing within Albuquerque Center airspace is 6 NM from the lead aircraft to last aircraft. At the “*drag*” call wingman will slow, using idle power and speedbrakes, to 250 knots. Wingman will call “*saddled*” passing 1.5 NM to maintain radar trail at 1.5-2.0 NM. At the “*saddled*” call element leads will slow to 250 knots. The last aircraft will squawk mode 3/C 4000. At the “*configure*” call, all flight members will configure and slow in idle to 180 knots. At flight lead’s “*slowing to final*” call at the final approach fix, all flight members will simultaneously slow to final speed. Each aircraft will make individual gear down calls and receive individual clearance to land.

8.27.2.3. (Added) Wingman will not utilize S-turning on final to gain or maintain proper spacing. If at any time the spacing is in question, the wingman will either execute the missed approach procedure (IFR), continue to a low approach or go around (VFR), or break out from the pattern to ensure spacing and notify the ATC controller.

8.27.3. (Added) Missed approach will be IAW published procedures. Each aircraft will maintain 250 knots and assume responsibility for separation until a separate clearance is obtained, if required.

8.27.4. (Added) Radar Contact Lost. If radar contact is lost with the preceding aircraft during any portion of the recovery continue the approach with Situational Awareness Data Link (SADL) awareness from the Tactical Awareness Display (TAD) or follow procedures IAW AFI 11-2F-16V3.

8.27.5. (Added) Lost Communication. In the event of lost communications, the approach may be continued if safe separation is ensured. Follow established lost communication procedures. In the event separation cannot be ensured, execute lost wingman procedures and proceed to the appropriate IAF, then follow the lost communication procedures IAW the Hellion In-Flight Guide.

**8.28. (Added) Luke VFR Pattern.** Reference Hellion In-Flight Guide and LAFBI 13-203. Pilots will contact tower immediately following frequency change by the RAPCON. In the pattern, flights will use echelon turns for all close/route formation turns away from flight members.

8.28.1. (Added) When flying the VFR straight-in and instructed to maintain visual separation to follow instrument approach traffic, alter ground track as required to maintain adequate separation.

**8.29. (Added) SFO Procedures.** SFO approaches (reference Hellion In-Flight Guide and LAFBI 13-203.)

**8.30. (Added) Luke Radar Pattern.** IAW LAFBI 13-203.

**8.31. (Added) Night Procedures.**

8.31.1. (Added) Use official sunset to official sunrise to implement night taxiing and flying operations. Pilots without night crew rest (10 hour maximum flight duty period) will takeoff and land between official sunrise and official sunset. Pilots may perform ground operations during civil twilight and still maintain day crew rest (12 hour maximum flight duty period). Use civil twilight as published by weather. If unavailable, use 30 minutes before sunrise or after sunset.

8.31.2. (Added) The minimum requirement for external lights is the anti-collisions light, one position light per wing (upper or lower), both inlet lights, the tail light, and landing and taxi lights.

8.31.3. (Added) As a minimum, the following cockpit interior lights will be operational for all night flights:

8.31.3.1. (Added) All major interior light groups.

8.31.3.2. (Added) Spiral cord utility light or both dash-mounted pencil spotlights.

8.31.4. (Added) Night VFR Patterns. Night patterns are depicted in Hellion In-Flight Guide. Pilots will request closed traffic with Tower. Remain on Tower frequency throughout the pattern and report base. Precision Approach Path Indicator (PAPI) lights are required for these patterns.

8.31.5. (Added) Night rear cockpit landings will only be accomplished for:

8.31.5.1. (Added) Instructor course syllabus training.

8.31.5.2. (Added) Actual student performance requiring the instructor to land the aircraft.

8.31.5.3. (Added) Emergency.

**8.32. (Added) LAFB AUX-1 Procedures .** IAW LAFBI 13-203 and Hellion In-Flight Guide.

**8.33. (Added) Landing.**

8.33.1. (Added) Reference LAFBI 13-203 for reduced runway separation requirements.

8.33.2. (Added) Wake Turbulence. When surface wind conditions dictate, the 56 FW SOF will implement increased wake turbulence potential procedures. During periods of increased wake turbulence potential, pilots will increase “break” spacing from 5” to 8”. Increase runway separation to 6,000 feet.

8.33.3. (Added) Live Ordnance: Land runway 03 only. Notify the SOF prior to recovery with unexpended live ordnance. If required (runway 21 in use), SOF will coordinate an opposite direction landing on runway 03L. If the tailwind component exceeds 10 knots, land at GBN.

### ***Section 8E– Weapons Employment (Added)***

#### **8.34. (Added) General.**

8.34.1. (Added) Systems Checks. Wingmen will complete a weapon systems checks when cleared by the flight lead, or as briefed.

8.34.2. (Added) Accomplish a battle damage check on all day (and NVG) A/G missions following ordnance expenditure prior to departing restricted airspace. If able, accomplish a battle damage check following all other day A/A and A/G missions.

#### **8.35. (Added) Supersonic Restrictions and Chaff/Flare Employment.**

8.35.1. (Added) Supersonic flight is authorized IAW AFI 13-212V1, Annex A/LAFB SUP 1 and as follows:

8.35.1.1. (Added) Gladden Bagdad: Above 10,000 feet MSL but not over Aguila, Peoples Valley, Yarnell, south of Highway 89 (LUF 45 Distance Monitoring Equipment (DME) arc) in X-Ray, or south of the Harquahala Mountains (BXK 35 DME arc) in Yankee.

8.35.1.2. (Added) SELLS: Above 10,000 feet MSL but not over Ajo, Sells, Hickiwan, Vaya Chin, or within 5 NM of the Kitt Peak Observatory.

8.35.1.3. (Added) Cibola, Sunny, Outlaw/Jackal: No supersonic flights are authorized.

8.35.2. (Added) Chaff and flare dispensing is authorized according to AFI 13-212V1, Annex A/LAFB SUP 1, Hellion In-Flight Guide, and **Table 8.1. (Added)**

**Table 8.1. (Added) Chaff and Flare Employment.**

<b>AREA</b>	<b>RR-188 Chaff</b>	<b>RR-170 Chaff</b>	<b>Flares</b>
Gladden Bagdad	5,000’ AGL –FL350	Not Authorized	MOA Floor
Sells ABCDE	Sfc - FL 350	Not Authorized	MOA Floor
R 2304 (ETAC)	Sfc - FL 350	Sfc – 5000’ AGL	IAW Fire Restrictions
R 2301 E (AA H/L)	Sfc - FL 350	Sfc - FL 350	IAW Fire Restrictions
R 2301 W	300’ AGL - FL 350	300’ AGL - FL 350	IAW Fire Restrictions
Sunny/Outlaw/Jackal	Not Authorized	Not Authorized	MOA Floor
Cibola	Sfc – FL 350	Not Authorized	Not Authorized
MTRs	Not Authorized	Not Authorized	Not Authorized

**8.36. (Added) A/A.**

8.36.1. (Added) Pilots conducting air-to-air syllabus training (both IPs and students) will terminate upon activation of the low speed warning horn. IPs on continuation training (CT) sorties will take immediate action to correct a low speed condition upon activation of the low speed warning horn, but a terminate is not mandated.

8.36.2. (Added) Level 4 Air Combat Training will go through the following approval process.

8.36.2.1. (Added) A level 4 statement will be placed in the remarks section of the daily flying schedule if Level 4 bandits are anticipated by the daily scheduler.

8.36.2.2. (Added) A signed schedule by the OG/CC is approval for Level 4 Bandit maneuvering. If there are any subsequent changes to the schedule, including names, the Top 3 or SOF will get OG/CC or his designated representative's approval and enter this into the 302 FS SOF report.

8.36.3. (Added) ACBT Floors. Recommended Floors for student training sorties will be IAW **Table 8.2. (Added)** The low floor (5,000 feet AGL) can be used for students IAW appropriate syllabi. Upgrading instructor pilots (UIP) will set the floor IAW syllabus A/A Special Instructions (SPINS) for the sortie they are instructing. Continuation training ACBT floor is 5,000 feet AGL (airspace permitting).

**Table 8.2. (Added) ACBT Floors.**

<b>AIRSPACE</b>	<b>LOW FLOOR</b>	<b>HIGH FLOOR</b>
Gladden/Bagdad	10,000 MSL	13,000 MSL
Sells ABCDE	<b>10,000 MSL</b>	<b>13,000 MSL</b>
R 2301 E (A-A H/L)	8,000 MSL	12,000 MSL
R 2301 W	8,000 MSL	13,000 MSL
Sunny	13,000 MSL	16,000 MSL
Outlaw/Jackal	13,000 MSL	15,000 MSL
Cibola	7,000 MSL	12,000 MSL

**8.37. (Added) A/G.**

8.37.1. (Added) Range descriptions, procedures, and target listings are in AFI 13-212V1, Annex A/LAFB SUP 1, and AFI 13-212V3, *Hazard Methodology and Weapon Safety Footprints*, as supplemented. Training restrictions and rules are contained in AFI 11-214, and AFI 11-2F-16V1.

8.37.2. (Added) SAT missions with adversaries will not have a hot gun.

8.37.3. (Added) Off range attacks will be conducted IAW AFI 11-214 and AFI 11-2F-16V3.

8.37.4. (Added) The minimum altitude for day radar bombing events will be 500 feet AGL for IPs and 1,000 feet AGL for students.

8.37.5. (Added) Clearing Pass. The first flight of the day to tactical ranges (i.e., N/S/E TAC) will perform a clearing pass (for personnel, vehicles, and animals) no lower than 500 feet AGL and no higher than 10,000 feet AGL prior to expending any ordnance. A dry clearing pass is not required for subsequent flights if: (a) range personnel, a forward air controller (FAC), or a departing flight confirms the range is clear, or (b) Range Operations relays that the range is clear from anyone listed in (a), provided more than

1 hour has not expired. Range Operations will consider the range clear unless reported otherwise by flights checking out.

8.37.6. (Added) Live Ordnance Procedures will be IAW AFI 13-212V1, Annex A/LAFB SUP 1 and live ordnance will be depicted on the range schedule. Reference LAFBI 13-203 for takeoff and landing restrictions. All flights will confirm live ordnance with Range Operations prior to range entry and conduct a clearing/target ID pass below 10,000 feet AGL prior to dropping live ordnance regardless of clearing pass exceptions listed in AFI 13-212V1, Annex A/LAFB SUP 1. On syllabus sorties, general-purpose live bombs will be delivered using HADB, DB, or LALD HIGH parameters only. All flights will perform a battle damage check as soon as possible following live ordnance delivery (prior to continuing any follow-on attacks). All flights will annotate ordnance expended on the Airspace Utilization worksheet for the SARMS expenditure report to RMO.

### ***Section 8F– Abnormal Procedures (Added)***

**8.38. (Added) General.** Reference LAFBI 13-203, Chapter 6 and Hellion In-Flight Guide.

8.38.1. (Added) Fuel Burndown Area and Controlled Bailout Areas (reference LAFBI 13-203 and Hellion In-Flight Guide).

8.38.2. (Added) No Radio (NORDO) Formation recoveries. Fly a straight-in approach with the NORDO aircraft on the appropriate side of the runway on which they are cleared to land (i.e., cleared to land on 21L, put NORDO aircraft on left side and offer lead) then offer the lead. NORDO aircraft will still confirm a steady green light for landing clearance.

8.38.3. (Added) Hot brake procedures. IAW LAFBI 13-203 and Hellion In-Flight Guide. Contact the fire chief in ultra high frequency (UHF) CH 9. Expect 30 minutes minimum until the chief directs aircraft shutdown. If low fuel is a factor (30 minutes will use approx. 600 pounds fuel), notify the chief for shutdown coordination. All aircraft with confirmed hot brakes will be shut down and towed to parking.

**8.39. (Added) No Taxi Conditions.** In addition to the items listed in AFI11-2F-16V3, aircraft will not taxi with any of the following known or suspected system malfunctions or conditions:

8.39.1. (Added) Hot Brakes - taxi to nearest hot brake area only.

8.39.2. (Added) Tail hook pinned.

8.39.3. (Added) B system hydraulic failure.

8.39.4. (Added) Emergency power unit (EPU) pinned.

8.39.5. (Added) EPU activated (may clear runway if required).

8.39.6. (Added) Bottomed landing gear strut.

8.39.7. (Added) Unsafe gear indication.

8.39.8. (Added) Blown Tire.

8.39.9. (Added) Electrical bus cycling during EPU check.

8.39.10. (Added) Fuel less than 600 pounds.

8.39.11. (Added) Aircraft battery failure - except to clear runway.

8.39.12. (Added) Physiological or GLOC incident– shutdown in arming area.

8.39.13. (Added) Dual generator failure.

8.39.14. (Added) Suspected or actual bird strike and/or structural damage (may taxi to clear or dearm with SOF clearance).

8.39.15. (Added) Hung live ordnance, armed live ordnance, or unsecure heavyweight inert ordnance (stop straight ahead on runway).

**8.40. (Added) Landing Gear Malfunctions.** Pilots experiencing gear extension malfunctions of any kind, or using alternate gear extension (regardless of gear indications at time of landing), will stop straight ahead on the runway and have the landing gear pins installed prior to taxiing or towing clear of the runway. This procedure applies to any malfunction that includes the hydraulic or electrical systems that affect the ability to steer, stop, or control the aircraft on the ground.

**8.41. (Added) Early Returns .** Pilots terminating their mission early, for problems not requiring declaration of an emergency, will be designated as “early returns.” Advise the Hellion SOF of the early return and the nature of the problem.

**8.42. (Added) Armament System Malfunctions.** Procedures are outlined in AFI 11-2F-16V3. Additionally, reference Hellion In-Flight Guide and LAFBI 13-203.

8.42.1. (Added) Weapons are considered hung if properly loaded on the stores management system (SMS), selected, and armed for release, and a release command of sufficient duration was present. The aircraft gun is considered hung, under the same conditions, if it fails to fire, stops firing prematurely, fires abnormally, or runs away. Gun firing will not be reattempted if proper switchology and indications are confirmed. Aircraft with suspected or confirmed hung ordnance will be chased during RTB. “No Spot” night bombs are considered hung if there is an indication of release on the armament displays (N/A for NVG missions).

8.42.2. (Added) For inadvertent Releases, return to land via the hung ordnance pattern and procedures. Attempt to identify the point of impact. If the release is off-range or outside of a designated impact area, notify the Hellion SOF immediately. The Top 3/Hellion SOF will initiate impoundment procedures. Do not allow dearm personnel to change any SUU or TER switches.

8.42.3. (Added) Unexpended Ordnance. If no attempt was made to release, consider ordnance unexpended. Unexpended heavyweight inerts recover to Luke via straight-in. Unexpended live ordnance contact SOF prior to recovery and comply with live ordnance procedures in the Hellion In-flight Guide.

**8.43. (Added) Dropped Object Incidents.**

8.43.1. (Added) If a pilot observes something missing from an aircraft in-flight, note the time and location (TACAN cuts, Inertial Navigation System Mark Point (INS MARK), ground references) and notify Top 3/Hellion SOF in-flight. If items are discovered missing during the post flight inspection, notify maintenance during the debriefing, and the Top 3/Hellion SOF on return to the squadron. Operations supplement will comply with reporting procedures detailed in LAFBI 21-108.

**8.44. (Added) Divert Procedures.**

8.44.1. (Added) The following are the preferred divert bases in the Luke area:

8.44.1.1. (Added) Gila Bend AFAF (primary Day/Night VFR).

8.44.1.2. (Added) Davis-Monthan AFB (primary Day/Night IFR).

8.44.1.3. (Added) Yuma Marine Corps Air Station (MCAS).

8.44.1.4. (Added) Williams Gateway Airport.

8.44.1.5. (Added) Sky Harbor International Airport.

8.44.1.6. (Added) Tucson International Airport.

8.44.1.7. (Added) Phoenix-Goodyear Airport.

8.44.1.7.1. (Added) This field will be used as a divert field, only when other fields cannot be reached because of low fuel. Phoenix-Goodyear does not have GUARD capability; reference the frequencies in Hellion In-Flight Guide. Primary landing pattern is a straight-in to RWY 03. When the decision to divert to Phoenix-Goodyear has been made, inform Luke tower or RAPCON and proceed to Caterpillar at 3,000 feet MSL. Depart Caterpillar south to intercept the Luke 11 DME arc at 2,500 feet MSL. Arc east to the Gila River wash then proceed to a two mile final to Runway 03 or a wide downwind west of the runway for a right base to RWY 21. Avoid overflight of Avondale. **CAUTION:** Power line one-half mile on final for RWY 03 at 100 feet AGL. Phoenix-Goodyear taxiways are 40 feet wide and taxiway lights are embedded in the taxiway one foot from the taxiway centerline. Properly sized chocks are in place at Phoenix-Goodyear Airport for Luke aircraft. Pilots must ensure proper chocks are used. Pilots must provide aircraft security until relieved by maintenance or security police personnel.

**8.45. (Added) Impoundment Procedures.** The decision to impound an aircraft normally rests with the 944th Maintenance Group (944 MXG/CC). The following guidance will be used.

8.45.1. (Added) Pilots will request impoundment for the following:

8.45.1.1. (Added) Pilot injury or damage to the aircraft.

8.45.1.2. (Added) Uncommanded flight control movement or out of control/departure event.

8.45.1.3. (Added) Engine flameout, stall/stagnation, loss of thrust, or in flight shutdown.

8.45.1.4. (Added) Aircraft fire, explosion, or overheat and/or fire light.

8.45.1.5. (Added) Physiological incident or GLOC.

8.45.1.6. (Added) Off-range or inadvertent release.

8.45.1.7. (Added) Engine foreign object damage (FOD) (Except known or identified engine ice).

8.45.1.8. (Added) Landing gear failure to retract or extend.

8.45.1.9. (Added) Uncommanded NWS inputs.

8.45.1.10. (Added) Uncommanded EPU activation or failure to operate.

8.45.1.11. (Added) Total brake failure.

8.45.1.12. (Added) Birdstrike.

8.45.1.13. (Added) In-flight loss of all pitot static instruments/gyro stabilized attitude indicator.

8.45.1.14. (Added) Major hydrazine leak.

8.45.1.15. (Added) Total loss of hydraulics.

8.45.1.16. (Added) Abnormal engine vibration.

**8.46. (Added) TACAN Out Procedures.** IAW LAFBI 13-203.

**8.47. (Added) Single Runway Operations.** Reference LAFBI 13-203.

8.47.1. (Added) Fuel Requirements. Add 200 pounds to planned fuels. During extended single runway operations all pilots will plan to arrive on initial with 1400 pounds for their full stop landings. If a divert is required with less than these fuels on initial, plan to use Goodyear first, then Sky Harbor.

8.47.2. (Added) Night Fuel Requirements. During extended single runway operations at night, all pilots will plan to land with VFR divert fuel for Gila bend or Sky Harbor (1800 pounds A/A, 2000 pounds A/G). If IFR, the appropriate IFR divert fuels are in effect.

8.47.3. (Added) For pattern orientations, notify Tower of intentions at 10 NM. Carry straight through initial and re-enter from departure end.

8.47.4. (Added) Alternate Hung Gun/Flare/Rocket Areas. Coordinate with the SOF for temporary procedures. For extended runway closures alternate areas will be published by FCIF.

***Section 8G– Gila Bend Air Force Auxiliary Field/Range Operations Procedures (Added)***

**8.48. (Added) General.** IAW AFI 13-212V1, Annex A/LAFB SUP 1 and Hellion In-Flight Guide.

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

AFI 11-202V2/944 FW SUP, *Aircrew Standardization and Evaluation Program*  
AFI 11-212V3, *Hazard Methodology and Weapon Safety Footprints*  
AFI 11-214, *Air Operations Rules and Procedures*  
AFI 11-218, *Aircraft Operations and Movement on the Ground*  
AFI 11-301, *Aircrew Life Support Program*  
AFI 11-418, *Operations Supervision*  
AFI 11-2F-16V1, *F-16 - Aircrew Training*  
AFI 11-2F-16V3, *F-16 - Operations Procedures*  
AFI 13-212V1, Annex A/LAFB SUP 1, *Weapons Ranges*  
AFI 13-212V3, *Hazard Methodology and Weapon Safety Footprints*  
AFTTP 3-3V5, *Combat Aircraft Fundamentals-F-16*  
LAFBI 13-203, *Airfield Operations and Base Flying Procedures*  
LAFBI 21-108, *Items Lost or Abandoned in Flight*  
944 OG OI 11-9, *Training Documentation and Administration*  
944 FWI 11-201, *Cross Country Procedures*  
944 FWI 11-401, *Incentive/Orientation/Familiarization Flights*  
944 FWI 11-402, *F-16 Flying and Ground Training for Pilots*  
T.O. 4T-1-3, *Inspection Maintenance Instruction Storage and Disposition of Aircraft Tires and Innertubes*

***Abbreviations and Acronyms***

**A/A**—Air-to-Air  
**ACBT**—Air Combat Training  
**A/G**—Air-to-Ground  
**AFAF**—Air Force Auxiliary Field  
**AFI**—Air Force Instruction  
**AFTO**—Air Force Technical Order  
**AFTTP**—Air Force Tactics, Techniques, and Procedures  
**AGL**—Above Ground Level  
**AIM**—Air Intercept Missile

**ASRR**—Airfield Suitability and Restriction Report  
**ATC**—Air Traffic Control  
**ATCAA**—Air Traffic Control Assigned Area  
**ATIS**—Automated Terminal Information System  
**AUX**—Auxiliary Field  
**AVTR**—Airborne Video Tape Recorder  
**CT**—Continuation Training  
**DME**—Distance Measuring Equipment  
**EPU**—Emergency Power Unit  
**ETAC**—East Tactical Range  
**FCF**—Functional Check Flight  
**FCIF**—Flight Crew Information File  
**FL**—Flight Level  
**FS**—Fighter Squadron  
**FW**—Fighter Wing  
**FTIT**—Fan Turbine Inlet Temperature  
**GBAF**—Gila Bend Airfield  
**GBN**—Gila Bend TACAN  
**GCI**—Ground Control Intercept  
**GLOC**—G-induced Loss of Consciousness  
**IAW**—In Accordance With  
**IFR**—Instrument Flight Rules  
**ILS**—Instrument Landing System  
**IMC**—Instrument Meteorological Conditions  
**INS MARK**—Inertial Navigation System Mark Point  
**IP**—Initial Point, Instructor Pilot  
**ITS**—Index of Thermal Stress  
**JFS**—Jet Fuel Starter  
**KCAS**—Knots Calibrated Air Speed  
**KIAS**—Knots Indicated Air Speed  
**LATN**—Low Altitude Tactical Navigation  
**LAFB**—Luke Air Force Base

**LPU**—Life Preserver Unit  
**MOA**—Military Operating Area  
**MSL**—Mean Sea Level  
**MTR**—Military Training Route  
**NOTAM**—Notice to Airmen  
**NORDO**—No Radio  
**NM**—Nautical Miles  
**NVG**—Night Vision Goggles  
**OAT**—Outside Air Temperature  
**RAPCON**—Radar Approach Control  
**RMO**—Range Management Office  
**RPM**—Revolutions per Minute  
**RTB**—Return to Base  
**RWY**—Runway  
**SARM**—Squadron Aviation Resource Management  
**SFO**—Simulated Flame-Out  
**SMO**—Senior Maintenance Officer  
**SOF**—Supervisor of Flying  
**SUU**—Suspension Utility Unit  
**TACAN**—Tactical Air Navigation  
**TGP**—Targeting Pod  
**T.O**—Technical Order  
**TER**—Triple Ejector Rack  
**UIP**—Upgrading Instructor Pilot  
**VFR**—Visual Flight Rules  
**VMC**—Visual Meteorological Conditions

## Attachment 2

### STANDARD RADIO CALLS

- A2.1.** On initial contact with Ground Control, pilots will transmit: *“Ground, Helyun 1, taxi (number of aircraft) from the Reserve Ramp with (Automated Terminal Information Service (ATIS) code), (stereo departure) or ‘with clearance’ [if on a DD-175 flight plan].”*
- A2.2.** When a flight will not be rejoined prior to exiting Luke’s airspace, include *“request nonstandard departure (number) miles front to back”* to the initial taxi request with Ground Control. Maximum is 6 miles.
- A2.3.** To cross the departure end of runway 3R at the intersection of taxiway Alpha and runway 3R, contact Tower with, *“North Point.”* Respond with, *“Helyun 1”* if cleared to cross or *“Helyun 1, holding short, (runway)”* if instructed to hold short. To cross the departure end of runway 21L at the intersection of taxiway India and runway 21L, contact Tower with, *“South Point.”* Acknowledge in the same manner as stated above in this paragraph.
- A2.4.** Pilots departing the Gladden/Bagdad MOA or AUX-1 to Gila Bend will make the request with Luke RAPCON, *“Helyun 1, request VFR to Gila Bend via Buckeye with flight following.”*
- A2.5.** On initial contact with RAPCON, pilots will transmit, *“Helyun 1, altitude, ATIS code, (intentions).”*
- A2.6.** Coordinate radar trail recoveries with ATC prior to beginning the approach and spacing maneuver. Request *“ILS / TACAN trail recovery”* with RAPCON.
- A2.7.** Initial contact with tower:
- A2.7.1.** Tankz Recovery or Valley Recovery to Runway 21: *“Tower, Helyun 1, distance/cardinal direction from the field, short entry/overhead/straight-in.”*
- A2.7.2.** Valley Recovery to Runway 03: *“Tower, Helyun 1, distance/cardinal direction from the field, overhead/straight-in.”*
- A2.7.3.** Pilots being chased will inform tower. *“Helyun 91, off the AUX for high key, with chase.”* Subsequent *“with chase”* calls are not required.
- A2.8.** At five miles: *“Helyun 1, initial, (intentions).”*
- A2.9.** Base turn: *“Helyun 1, base, gear, (intentions), left/right.”*
- A2.10.** At Caterpillar/AUX-3: *“Helyun 1, caterpillar/ AUX-3.”*
- A2.11.** At 3-mile initial: *“Helyun 1, short initial, (intentions).”*
- A2.12.** At 5-mile final: *“Helyun 1, 5 miles, gear, (intentions) right/left.”*
- A2.14.** To advise short reentry via Catapillar/AUX-3: *“Helyun 1, reenter.”*
- A2.15.** To advise radar reentry: *“Helyun 1, re-enter radar.”*
- A2.16.** To request closed traffic: *“Helyun 1, request closed, (intentions), (and runway if non-standard).”*
- A2.17.** To request an SFO on the go: *“Helyun 1, request (‘low key’ if applicable) SFO.”*
- A2.18.** From AUX-1 direct to high key; *“Helyun 1, off the AUX for high key.”*

**A2.19.** Ten seconds from High Key: *“Helyun 1, 10 seconds.”*

**A2.20.** At High Key: *“Helyun 1, high key.”*

**A2.21.** At Low Key: *“Helyun 1, low key.”*

**A2.22.** At Base Key: *“Helyun 1, base key, gear, low approach, left/right.”*

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