

**BY ORDER OF THE COMMANDER
AIR FORCE SPECIAL OPERATIONS
COMMAND**

**AIR FORCE SPECIAL OPERATIONS
COMMAND MANUAL 11-2TSO,
VOLUME 3**



29 NOVEMBER 2023

Flying Operations

**TACTICAL SYSTEMS OPERATOR
OPERATIONS PROCEDURES**

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RELEASABILITY: There are no releasability restrictions on this publication.

OPR: AFSOC/A3V

Certified by: AFSOC/A3V
(Lt Col Darrell C. Dardenne)

Supersedes: AFSOCMAN 11-2TSOV3, 16 August 2019

Pages: 23

This manual implements AFD 11-2, *Aircrew Operations*, and references AFMAN 11-202V3, *Flight Operations*, as well as the appropriate Air Force Tactics Techniques and Procedures (AFTTP). It provides policies and procedures to Tactical Systems Operators (TSO) flying on AFSOC aircraft under most circumstances but should not replace sound judgment. This manual applies to AFSOC, including AFSOC gained Air National Guard and Air Force Reserve members. This publication does not apply to United States Space Force. Ensure all records generated as a result of processes prescribed in this publication adhere to AFI 33-322, *Records Management and Information Governance Program*, and are disposed IAW the Air Force Records Disposition Schedule located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the OPR using DAF Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command IAW [paragraph 1.7](#). The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See DAFMAN 90-161, *Publishing Processes and Procedures*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority or alternately, to the Publication OPR for non-tiered compliance items IAW [paragraph 1.4](#). This publication may be supplemented at any level, but all Supplements must be routed to the OPR of this publication for coordination prior to certification and approval IAW [paragraph 1.5](#). This publication requires the collection and/or maintenance of information protected by the Privacy Act of 1974 authorized by Title 10 U.S.C., Sec 9013, *Secretary of the Air Force*; 37 U.S.C. 301a, *Incentive Pay: aviation career*; Public Law

92-204, *Appropriations Act for 1973*; Section 715 Public Law 93-570, *Appropriations Act for 1974*; *Incentive Pays and Continuation Bonus Program*; and Executive Order (E.O.) 9397 (SSN), as amended by E.O. 13478, *Amendments to Executive Order 9397 Relating to Federal Agency Use of Social Security Numbers*. The applicable System of Records Notice (SORN) F011 AF XO A, Aviation Resource Management Systems (ARMS) is available at: <https://dpcl.d.defense.gov/Privacy/SORNsIndex/DOD-Component-Notices/Air-Force-Article-List/>. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

SUMMARY OF CHANGES

This document has been updated to reflect current AFSOC guidance. Removed requirement to carry physical inflight guide (IFG). Removed duplicated material from parent publications. Redesigned **Table 5.1**.

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Chapter 1

GENERAL INFORMATION

1.1. General. This manual provides guidelines and restrictions for TSOs who operate onboard AFSOC aircraft. It is an original source document for many areas but also restates information found in aircraft flight manuals, flight information publications and other Air Force directives. When guidance in this AFSOCMAN conflicts with another basic/source document for aircraft specific information, that document takes precedence. If conflicting TSO guidance is given in aircraft tactics manuals or handbooks, this volume takes precedence. TSOs will be familiar with applicable AFMAN 11-2MDSV3 for USAF aircraft in which they routinely support. This volume is written for normal and contingency operations to reduce procedural changes at the onset of contingencies. All TSO operations shall be conducted in accordance with US domestic law and international law, to include the law of armed conflict. Training procedures are included.

1.2. Applicability. This manual is applicable to all TSO operations. References to units, personnel, and aircraft in this manual include all gained forces unless specifically exempted by this manual.

1.3. Aircrew Responsibility. This volume, in conjunction with other governing directives, prescribes operating procedures for the TSO crew position under most circumstances. It is not to be used as a substitute for sound judgment or common sense. Operations or procedures not specifically addressed may be accomplished if they safely enhance mission accomplishment.

1.3.1. Key Words Explained.

1.3.1.1. “Must,” “Shall,” and “Will” indicate a mandatory requirement.

1.3.1.2. “Should” indicates a preferred, but not mandatory, method of accomplishment.

1.3.1.3. “May” indicates an acceptable or suggested means of accomplishment.

1.3.1.4. “NOTE” indicates operating procedures, techniques, etc., considered essential to emphasize.

1.3.1.5. “CAUTION” indicates operating procedures, techniques, etc., which could result in damage to equipment if not carefully followed.

1.3.1.6. “WARNING” indicates operating procedures, techniques, etc., which could result in personal injury or loss of life if not carefully followed.

1.3.1.7. See [Attachment 1](#) for additional terms, definitions, and references.

1.4. Deviations and Waivers. Do not deviate from the policies and guidance in this AFSOCMAN, except when the situation demands immediate action to ensure safety. Report deviations, without waiver, through channels to AFSOC/A3 within 24 hours, followed by a written report.

1.4.1. When it is necessary to protect the crew and aircraft from a situation not covered by this manual and immediate action is required, the Pilot in Command (PIC)/aircraft commander (AC), or designated airborne mission commander, has ultimate authority and responsibility for the course of action to be taken.

1.4.2. Unless otherwise indicated, AFSOC/A3 is the waiver authority for operational procedure requirements contained in this manual. AFSOC/A3 may delegate this authority to the Commander Special Operations Air Forces (COMAFSOF) for operationally assigned Special Operations Forces during contingency operations. Request waivers to this manual through proper command and control channels.

1.4.2.1. When waiver authority is delegated, AFSOC/A3V will receive a copy of all approved waivers. Refer to DAFMAN 90-161, Table A10.1. for Tier Waiver Authorities.

1.5. Local Supplement Coordination Process. Supplements will not duplicate or be less restrictive than the provisions of this manual or any other publication without prior authorization from the appropriate MAJCOM. File supplements according to DAFMAN 90-161. **Note:** Air Force Reserve units will send unit supplements to AFR/A3J who will then forward to AFSOC/A3V.

1.5.1. Units may supplement this manual. The purpose of the unit supplement is to document the process by which units implement the requirements of this manual. Post the unit supplement behind the basic manual.

1.5.2. Local Procedures Coordination Process. Units will send a copy of **Chapter 10** (Local Procedures) supplements to HQ AFSOC/A3V for validation. **(T-2)**.

1.6. Requisition and Distribution Procedures. Unit commanders shall use DAFI 90-160, *Publications and Forms Management*, procedures to provide aircrew members and associated support personnel current copies and changes of this manual.

1.7. Improvement Recommendations. Personnel at all echelons are encouraged to submit proposed changes IAW AFMAN 11-202V2_AFSOCSUP, *Aircrew Standardization and Evaluation Program*, through MAJCOM Standardization and Evaluation channels to HQ AFSOC/A3V. Use DAF Form 847, *Recommendation for Change of Publication*.

1.8. Development of New Equipment and Procedures. Units are encouraged to suggest new equipment, methods, tactics, and procedures. For new equipment, prior to airborne use, units will forward these requirements through the 361st Intelligence, Surveillance, and Reconnaissance Group (ISRG) for acquisition, testing, and approval.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. General. The AFSOC C2 system is based on the principles of centralized monitoring and decentralized control and execution. The result is a C2 mechanism which keeps the AFSOC/CC informed of the current status of AFSOC forces while enabling the Wing, Group, or Squadron Commander to exercise control over the day-to-day operations. Defining guidance for TSO employment is outlined in the AFSOC/ACC Memorandum of Agreement (MOA).

2.2. Administrative Control (ADCON). Air Combat Command (ACC) exercises ADCON of 361 ISRG personnel. ANG exercises ADCON of 137 Special Operations Group (SOG) personnel.

2.3. Operational Control (OPCON). AFSOC is the air component to the United States Special Operations Command (USSOCOM). USSOCOM may delegate OPCON of all Air Force Special Operations Forces (AFSOF) aircraft assigned or allocated to USSOCOM. In circumstances where OPCON of AFSOF aircraft has been provided to the Theater Special Operations Commands (TSOCs) within a Geographic Combatant Command for theater-based assets, AFSOC is typically designated as the controlling agency for such assets and assigned aircrew. **Exception:** In practice, responsibility for planning and executing AFSOC missions is routinely delegated to the Wing/CC or Group/CC. The Wing/CC or Group/CC, in turn, exercises control of non-close-hold missions through the command post supporting the wing or group. In the event that assigned forces undergo a change in operational control, responsibility for mission monitoring passes from the wing or group C2 facility to the gaining command. Changeover will be accomplished in accordance with the pertinent Operational Plan, Operational Order, Deployment Order, or Execution Order. **Note:** For certain close-hold activities, security considerations may compel the Wing or Group Commander to shift mission monitoring responsibilities from the command post to another wing, group, or theater agency. The Wing/CC or Group/CC will ensure procedures are established for the responsible agency to monitor mission progress and advise the HQ AFSOC/A3 or AFSOC/CC as appropriate. For mission monitoring guidance, adhere to applicable AFMAN 11-2MDSV3. (T-2).

2.4. TSO Responsibility and Authority. The TSO is:

- 2.4.1. Responsible for all Electronic Warfare (EW) capabilities on tasked platforms as assigned.
- 2.4.2. The final authority for all tasked Signals Intelligence (SIGINT) processing, exploitation, and dissemination on the aircraft.
- 2.4.3. Charged with keeping the crew informed of mission progress and difficulties.
- 2.4.4. Responsible for timely reporting of SIGINT/EW-derived data to the supported commander.
- 2.4.5. Responsible for providing government oversight of contract aircrews while flying in absence of a senior ranking aircrew member. Lapses in safe and effective contract compliance should be reported to the appropriate chain of command and government flight representative.
- 2.4.6. In command of all contract personnel while on the ground in absence of a senior ranking service member.

Chapter 3

AIRCREW COMPLEMENT AND MANAGEMENT

3.1. Aircrew Qualification. Each person assigned as a primary crew member will be qualified or in training for qualification in that crew position and mission. **(T-2).**

3.1.1. Mission Systems Certification. Each TSO assigned a specific mission system/capability will hold a current certification on that system/capability, as applicable. Routinely trained and supported certifications will be tracked by the ARMS database IAW AFSOCMAN 11-2TSOV1, *Tactical Systems Operator Aircrew Training* and the most current/applicable AFSOC Ready Aircrew Program Tasking Memo (RTM). Any non-standard/non-Program-of-Record system/capability training and certifications will be tracked by the squadron. **(T-2).**

3.2. Crew Complement. The normal crew complement for TSO operations is one, IAW AFI 65-503, *US Air Force Cost and Planning Factors*, Table A36-1.

3.2.1. Logging of Flying Time. Log flying time IAW DAFMAN 11-401, *Aviation Management*.

3.3. Interfly. Interfly is the exchange and/or substitution of aircrew members and/or aircraft between MAJCOMs to accomplish flying missions. Normally, interfly should be limited to specific operations/tests, exercises, or special circumstances.

3.3.1. IAW letters of agreement (LOA) or Memorandums of Agreement (MOA), 361 ISRG and 137 SOG TSOs are authorized interfly on designated AFRC, Air Education and Training Command and National Guard Bureau aircraft.

3.3.1.1. TSOs will be mission qualified. **(T-2).**

3.3.1.2. AFSOC will retain all flight and ground mishap reporting responsibility. **(T-2).**

3.3.2. Waiver Authority.

3.3.2.1. With a valid MOA. OG/CC or COMAFSOF is the approval authority for interfly on AFSOC aircraft under their control.

3.3.2.2. No MOA/Expired MOA. HQ AFSOC/A3 is the approval authority for interfly on AFSOC aircraft.

3.3.2.3. Contingency operations will be approved by both HQ AFSOC/A3 and respective MAJCOM/A3. **(T-2).**

3.4. Intrafly. The OG/CC or COMAFSOF is the approval authority for intrafly of AFSOC crew members on aircraft under their control.

3.4.1. 361 ISRG and 137 SOG TSOs are authorized intrafly on any AFSOC assigned aircraft.

3.4.2. TSOs will be mission qualified. **(T-2).**

3.5. Scheduling Restrictions. TSO scheduling restrictions are IAW AFMAN 11-202V3 and its AFMAN 11-202V3_AFSOCSUP, *Flight Operations*.

3.6. Alert Crew Procedures. See AFMAN 11-202V3, and its AFSOC Supplement.

3.7. Flight Duty Period and Crew Rest Restrictions. See AFMAN 11-202V3, and its AFSOC Supplement.

Chapter 4

AIRCRAFT MISSION SYSTEM OPERATIONS

4.1. General. This chapter provides guidance for operations with certain degraded equipment. If the aircraft commander elects to operate with degraded equipment or aircraft systems, coordinate mission requirements (i.e., revised departure times, fuel requirements, maintenance requirements, etc.) prior to flight with the mission control agency to ensure the decision does not adversely impact follow-on missions.

4.2. Responsibility. The final responsibility regarding required equipment for a mission rests with the aircraft commander. If one aircraft commander accepts an aircraft to conduct a mission or mission segment with a degraded or inoperative item or system, this acceptance does not commit that aircraft commander, or a different aircraft commander, to subsequent operations with the same item or system inoperative. When the aircraft commander considers an item essential, designate the component Mission Essential (ME) on the Air Force Technical Order (AFTO) Form 781A, *Aircrew/Mission Flight Data Document*, and the item will be repaired or replaced prior to departure. **(T-2).**

4.2.1. The TSO will inform the aircraft commander of degraded TSO equipment prior to crew check-in or before taxi, whichever is the soonest point in time that allows for equipment checks. Afterwards, when aircraft operations allow, the TSO will inform the aircraft commander or designated crew member in a timely manner of any changes in mission systems.

4.2.2. The TSO is expected to understand all SIGINT/EW-related mission systems controlled, managed, or troubleshot from their crew position. The TSO should be prepared to brief all the following to their crew:

4.2.2.1. Size, weight, and power requirements.

4.2.2.2. Flight profile requirements.

4.2.2.3. System classification and security concerns.

4.2.2.4. Pertinent emergency destruction procedures.

4.2.2.5. General capabilities/mission effects, depending on the crew's clearance/need-to-know.

4.2.3. All TSO mission systems will be appropriately flight tested IAW AFI 48-109, *Electromagnetic Field Radiation (EMFR) Occupational and Environmental Health Program*, and all MDS-specific guidance prior to operational employment. **(T-2).**

Chapter 5

FLIGHT PUBLICATIONS AND PERSONAL/PROFESSIONAL EQUIPMENT

5.1. Aircrew Publication Requirements.

5.1.1. Checklists. Accomplish all checklists with strict discipline. A checklist is not complete until all items have been accomplished.

5.1.2. Inflight Guides. An inflight guide (IFG) may be used as a supplement to MDS checklists. Deviations are authorized when utilizing an IFG. IFGs may be modified with notes, amplifying procedures, and limits, provided the IFG and notes are current. Currency of notes is the TSO's responsibility.

5.1.2.1. EXCEPTION: TSOs will use the HQ AFSOC/A3V-approved TSO IFG with the same discipline as a checklist for their duty position when conducting ground or flight operations. (T-2).

5.1.2.2. If an MDS checklist includes the TSO duty position, it will be opened once the TSO has reached an applicable phase of the mission and followed in lieu of the TSO IFG. Once the MDS checklist is opened, the TSO IFG may be closed until the MDS checklist is complete. After the final phase of the mission in the MDS checklist is completed, the TSO will re-open the TSO IFG to the next appropriate phase. (T-2).

5.1.2.3. If an MDS checklist does not include the TSO duty position, the TSO will have emergency procedures checklist(s) readily available.

5.1.3. Electronic Flight Bag (EFB) and Paper In-Flight Required Publications. Unless otherwise directed IAW AFMAN 11-2MDSV3, all publications may be carried on an EFB IAW AFMAN 11-202V3_AFSOCSUP and referenced electronically without an available hardcopy.

5.1.4. TSOs will maintain the unclassified publications and have a working knowledge on the classified publications that are specified in **Table 5.1** for the MDSs in which they are qualified in. Publications will include all applicable AFSOC, Wing, Group, and Squadron Supplements. (T-2). Home-station airfield and operations group publications are required for operations that originate from their station. (T-2).

Table 5.1. Required Publications.

TSO GENERAL PUBLICATIONS	
AFMAN 11-202 Vol 1, 2, 3	AFSOCI 36-2602
AFSOCMAN 11-2TSO Vol 1, 2, 3	SILENT SHIELD 3-1
AFSOC SILENT SHIELD RTM	AFTTP 3-2.5 Brevity
TSO IFG	AFTTP 3-2.6 JFIRE
DAFMAN 11-401	AFI 13-207
U-28A	MC-12W
AFMAN 11-2U28 Vol 1 & 3	AFMAN 11-2MC-12W Vol 1 & 3
U-28 AOH Vol 1 & 2.1	MC-12W AOH
U-28 AOH Vol 2.3, 2.4, 2.5	MC-12W QRC
U-28 QRH Vol 1 & 2	MC-12W TSO ISR Mod Checklist
AFTTP 3-1/3-3 U-28A	AFTTP 3-1/3-3.MC-12W
AC-130J	MC-130J
AFMAN 11-2AC-130J Vol 1 & 3	AFMAN 11-2MC-130J Vol 1 & 3
TO 1C-130(A)J-1	TO 1C-130(M)J-1
AFTTP 3-1/3-3.AC-130J	AFTTP 3-1/3-3.MC-130J
CV-22	
AFMAN 11-2CV-22 Vol 1 & 3	TO 1V-22(C)B-1
AFTTP 3-1/3-3.CV-22	

5.2. Flying Clothing.

5.2.1. On all missions, wear the aircrew uniform and other flying clothing/equipment in accordance with Technical Order 14-1-1 *U.S. Air Force Aircrew Flight Equipment Clothing and Equipment*, AFI 11-301V1_AFSOCSUP, *Aircrew Flight Equipment (AFE) Program* and DAFI 36-2903, *Dress and Personal Appearance of United States Air Force and United States Space Force Personnel*, or as directed for mission requirements.

5.2.2. If the wear of civilian clothing is authorized by the Foreign Clearance Guide (FCG), or a combatant commander or their delegated authority, aircrews may wear conservatively- styled civilian clothing when required for mission or operational requirements (e.g., FCG) and approved by the unit commander. Civilian clothing worn should consist of casual slacks or cargo pants, collared shirts, closed-toed shoes, or hiking boots. Denim jeans, T-shirts, or clothing predominately made from non-cotton materials are not authorized. When wearing civilian clothes, aircrew will still comply with all requirements of [paragraph 5.3](#).

5.3. Personal and Professional Equipment. In addition to, and in the absence of, any MDS-specific personal and professional equipment requirements, TSOs will adhere to the below guidance: **(T-2)**.

5.3.1. Passports. Carry passports on missions when required by the FCG.

5.3.2. Shot Record. Aircrew members will ensure they meet immunization requirements for the mission area of operations. **(T-2)**.

5.3.3. Identification. Identification tags (dog tags) will be worn around the neck or carried in a flight suit pocket. A valid US government issued identification card (commonly referred to as Common Access Card or CAC) will also be carried on all flights. **(T-2)**.

5.3.4. Flight Gloves. TSOs will have flight gloves readily available during all flights. **(T-2)**.

5.3.5. Restricted Area Badges. Carry the restricted area badge on all missions (except combat missions) and display badge only in designated restricted areas.

5.3.6. Headset. Carry an aircraft compatible headset on all flights.

5.3.7. Illumination Device. Carry an operable flashlight/headlamp on all flights.

5.3.8. Reflective Belt. Carry a reflective belt on all flights when occupation of the flight line will occur during hours of reduced visibility.

5.3.9. Spare LAN cable. Carry a spare LAN cable of appropriate length on any aircraft with carry-on mission systems if not included with a mission kit or pre-positioned on the aircraft.

5.3.10. Electronic Flight Bag (EFB) and Paper In-Flight Required Publications. Carry an EFB IAW AFMAN 11-202V3 AFSOCSUP and any paper in-flight required publications IAW AFMAN 11-2MDSV3.

5.3.11. Driver's License. A valid state driver's license is required on each TDY where use of US government general purpose vehicle may be required.

5.4. Foreign Object Damage (FOD) Hazards . Aircrew will not wear wigs, hairpieces, rings, scarves, ornaments, pins, hair clips or fasteners, or earrings in the aircraft or on the flight line. Crew members will remove rings and scarves before performing aircrew duties. EXCEPTION: Plain elastic hair fasteners or plastic barrettes are allowed, providing they do not interfere with the wearing of headsets or helmets, or the donning of oxygen equipment. All devices will be accounted for before and after flight. **(T-3)**

Chapter 6

GENERAL OPERATING PROCEDURES

6.1. General. This chapter establishes procedures for TSO employment on USSOCOM-supporting aircraft. In addition to the duties listed in applicable technical orders (TO), directives, and this manual, the PIC/AC may assign other duties as necessary. In addition to the guidance outlined below refer to the AFMAN 11-2MDSV3 and applicable aircraft manuals for Mission Design Series (MDS)-specific guidance.

6.2. Mission Planning Factors.

6.2.1. Mission Planning. Detailed information on mission planning can be found in this manual, AFTTP 3-1, Vol. 1 (S), *General Planning and Employment Considerations*, AFTTP 3-1, Vol. 2 (S), *Threat Reference Guide and Countertactics*, and MDS specific AFTTP 3-1(S) and AFTTP 3-3(U) volumes as well as any applicable AFSOCH volumes.

6.2.2. After coordinating with appropriate entities, the TSO will conduct mission planning with the aircrew. The TSO will brief expected scenario inputs based on the analytical data, as required. **(T-2)**.

6.2.3. The TSO is responsible for coordinating with all appropriate agencies to obtain all required or anticipated mission planning, professional and SILENT SHIELD equipment, and approvals from authorities for the duration of the flight/deployment. The TSO will ensure all equipment is inventoried and inspected prior to flight/deployment. **(T-2)**.

6.3. Flight Briefings and Procedures. TSOs should cover the following items and areas, as a minimum, during most pre-mission planning briefings.

6.3.1. Briefing Classification. Brief the crew on SILENT SHIELD equipment configuration and anticipated inputs. **(T-2)**

6.3.2. Ensure the crew is aware of SILENT SHIELD capabilities and limitations, Operations Security requirements, and emergency destruction procedures. **(T-2)**

6.3.3. Orbit Coordination. Coordinate with the rest of the crew, Intelligence Surveillance and Reconnaissance (ISR) Tactical Controller (ITC), and ground force elements (as applicable) to establish the best start point, orbit size, orbit orientation and egress routes to maximize mission effectiveness.

6.3.4. Communications. Mission specific communication procedures should be clearly understood by the entire crew and external parties prior to flying the mission. Radios, nets, and tactical terminology/jargon issues should be coordinated during pre-mission planning and briefings to avoid preventable mission failure due to bad communications.

6.3.5. If mIRC is available/used by a TSO during mission operations, at a minimum, they will ensure the following information is provided/understood during pre-mission planning: mission and airspace mIRC rooms; and nicknames for key players including, but not limited to ITC, FSO, airspace controller, and other aircraft in the stack/ROZ.

6.3.6. Onboard Safety Considerations. To the maximum extent possible, deconflict working areas to avoid safety hazards during flight and in the event of an egress situation.

6.3.7. Destruction of Classified Material. When in a combat environment or other sensitive area, the TSO will brief the aircrew on how to handle their classified material. Use the following as an example to brief before each flight (not required verbatim). “If for some reason I become incapacitated during the flight and we are forced to land in a hostile zone, keep in mind that my classified material will need to be destroyed/zeroized.”

6.4. Duty Station. TSOs will occupy their assigned duty station IAW AFMAN 11-202V3. **(T-2).** TSOs will notify the crew when out of seat during all phases of flight. TSOs will notify the crew prior to going off intercom.

6.5. Navigation Situational Awareness. TSO mission system permitting, TSOs will maintain situational awareness of the aircraft position and potential hazards (e.g., high terrain, foreign borders) during all phases of flight. The TSO should cross check the system-reported aircraft altitude/position with air traffic control directions and report any potentially dangerous deviations to the crew.

6.6. Mission Employment.

6.6.1. Takeoff & Landing Procedures. All TSO equipment, personnel, and gear should be organized, functional, and stowed away properly prior to takeoff.

6.6.2. If any degradation in on-board systems is discovered TSOs will pass this information to the PIC/AC. The decision to proceed rests with the PIC/AC.

6.6.3. Go-Around Calls. If any crewmember calls “go-around” the pilot flying should immediately apply power to establish a climb that clears all obstacles.

6.6.4. Tactical Operations. Execute the proper tactical procedure based upon threat analysis and 11-2MDS aircraft-specific performance envelopes. For all tactical operations, follow theater-specific air traffic control procedures to avoid potential conflicts.

6.7. Communications Procedures. TSOs will ensure proper frequencies, time hack, schedules, call signs, and COMSEC material are obtained prior to flight. Depending on the nature of the mission and the communications, the TSO will keep the crew updated on any pertinent information. Any TSO-related COMSEC equipment loaded during the mission will be zeroized at the end of the mission. **(T-2).**

6.7.1. On all aircraft, the TSO will coordinate with the crew during mission planning regarding interphone connectivity. **(T-2).**

6.8. Post Mission. In addition to appropriate debriefs, the TSO will also ensure: **(T-2).**

6.8.1. Equipment write-ups are passed on to appropriate maintenance personnel.

6.8.2. Post mission reports and data files (as required) are provided to the supporting analyst.

6.8.3. Information is provided to units summarizing mission events, as required.

Chapter 7

AIRCRAFT SECURITY

7.1. General. As an aircrew member onboard USSOCOM-supporting aircraft, the TSO is required to be familiar with the proper procedures and guidance to help maintain the security of the aircraft. TSOs will be familiar with and follow aircraft security guidance as provided in the AFMAN 11-2MDSV3.

7.1.1. Most of the ISR aircraft flown by TSOs have been approved as Temporary Sensitive Compartmented Information Facilities (TSCIFs). As such, TSOs will be familiar with and follow guidance as annotated in the *AFSOC Standard Operating Procedure (SOP) Physical Security for U-28/MC-12W/JAVAMAN (JM)*.

7.2. Mission Systems. TSO mission systems and their components will be secured to the maximum extent possible. Unclassified, but sensitive equipment may be left on the aircraft, provided the supporting TSO unit is able to maintain consistent accountability and appropriate security controls are in place. All classified TSO equipment must be removed and transported/stored IAW DoD Manual 5200.01 Vol. 3, *DoD Information Security Program: Protection of Classified Information*, with special attention paid to hard drives, COMSEC, and removable media.

7.2.1. Transporting Mission Systems. TSOs will review and follow DoD Manual 5200.01 Vol. 3 if required to escort or courier any classified or sensitive material through any border or customs checkpoints. Every effort should be made to transport classified or sensitive material via U.S. military transport or a U.S. carrier. Classified material must be appropriately wrapped, and the authorized courier will always maintain positive control. Unclassified but sensitive equipment may be checked as baggage or shipped unescorted via a U.S. commercial shipping company (e.g., FedEx, UPS), provided that appropriate tracking mechanisms are used.

7.2.2. Prior to beginning travel or site set-up, every effort should be made to coordinate and plan all mission system storage and transportation with appropriately cleared DoD Special Security Office (SSO) personnel.

Chapter 8

OPERATIONAL REPORTS AND FORMS

8.1. General. For assistance in completing safety forms contact the wing/group, unit, or local flight safety officer. Refer to the AFMAN 11-2MDSV3, *Operational Reports and Forms* chapter for MDS-specific guidance.

8.2. AFTO Form 781, ARMS Aircrew/Mission Flight Data Document. The AFTO Form 781 is the source document for recording and reporting operational flight or training device information for each individual authorized to take part of a mission. When flying on Air Force aircraft, TSOs should obtain an extracted copy of the filed AFTO Form 781, as required. When flying on non-Air Force aircraft, TSOs will fill out an AFTO Form 781 IAW DAFMAN 11-401 with following amplifying considerations.

8.2.1. Block 4, Unit Charged. This will be your home unit unless otherwise directed.

8.2.2. Block 7, Mission Number. This mission number must be unique for the flight. If there is not a standard already set by the supported unit, TSOs may use the following format yyXYZ[A]jjj, where yy is equal to the two-digit year, XYZ is a trigraph representing the organization flown with, [A] is a letter representing which sortie of the day, and jjj is the Julian date. *Example 1:* if the TSO flies the first flight of the day with PGS on 3 June 2018, the mission number would be 18PGSA154. *Example 2:* if the TSO flies the third flight of the day with DST on 22 October 2017, the mission number would be 17DSTC295.

8.2.3. Block 43, Certification. This will be signed by the PIC/AC or any commissioned officer in the TSO's chain of command.

8.3. AF 3521, ARMS RPA Aircrew/Mission Flight Data Document. The AF 3521 form is the source document for recording and reporting Remotely Piloted Aircraft (RPA) operational flight or training device information for each individual authorized to take part in a mission. This form is the primary record of both personnel and aerospace vehicle flying hours. The original AF Form 3521 shall be maintained in the SARM office that services the unit to which the aircraft is assigned. (T-2).

8.4. Mission Accomplishment Report (MAR). TSOs will fill out a MAR after completion of every flight accomplished, as required by their unit.

8.5. DCMA Form 644, Request for Flight Approval. When flying on GOCO/COCO aircraft, TSOs should ensure that they are listed on a DCMA Form 644 (often simply formatted as a letter) in accordance with the DCMA INST 8210.1, *Contractor's Flight and Ground Operations*, when appropriate.

Chapter 9

FLYING TRAINING POLICY

9.1. General. Refer to AFMAN 11-202V1, *Aircrew Training*, AFMAN 11-202V2, *Aircrew Standardization and Evaluation Program*, AFSOCMAN 11-2TSOV1 and AFSOCMAN 11-2TSOV2, *Tactical Systems Operator Evaluation Criteria*, for additional information.

9.2. Simulated Emergency Procedures. Practice simulated emergencies where a TSO has appropriate reactions IAW AFMAN 11-202V3.

9.2.1. Preface all emergencies with the word “simulated” and terminate all simulated emergencies if a real emergency occurs.

9.2.2. Use a realistic approach and do not compound emergencies. Limit simulated emergencies to noncritical phases of flight when possible.

Chapter 10

LOCAL OPERATING PROCEDURES

10.1. General. Units may publish local and/or unique unit operation procedures as a supplement to this chapter commencing with Paragraph 10.2.. The title will indicate the unit concerned (e.g., “**10.2. 43 IS Local Operating Procedures.**”). (T-2).

10.1.1. Procedures in this chapter will not duplicate, alter, amend, or be less restrictive than those in this manual. (T-2).

10.1.2. After validation, send final copies to AFSOC/A3V.

10.1.3. TSOs will adhere to local operating procedures published by their supported Special Operations Wing. (T-2).

MICHAEL E. CONLEY, Brig Gen, USAF
Director of Operations

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

AFI 33-322, *Records Management and Information Governance Program*, 23 Mar 2020

AFI 48-109, *Electromagnetic Field Radiation (EMFR) Occupational and environmental Health Program*, 1 Aug 2014

AFI 65-503, *US Air Force Cost and Planning Factors*, 13 Jul 2018

AFMAN 11-202V1, *Aircrew Training*, 27 Sep 2019

AFMAN 11-202V2, *Aircrew Standardization and Evaluation Program*, 30 Aug 2021

AFMAN 11-202V2_AFSOCSUP, *Aircrew Standardization and Evaluation Program*, 5 Aug 2022

AFMAN 11-202V3, *Flight Operations*, 10 Jan 2022

AFMAN 11-202V3_AFSOCSUP, *Flight Operations*, 4 Apr 2023

AFI 11-301V1_AFSOCSUP, *Aircrew Flight Equipment (AFE) Program*, 7 Jul 2020

AFPD 11-2, *Aircrew Operations*, 31 Jan 2019

AFSOCMAN 11-2TSOV1, *Tactical Systems Operator Aircrew Training*, 29 Nov 2023

AFSOCMAN 11-2TSOV2, *Tactical Systems Operator Evaluation Criteria*, 29 Nov 2023

DAFI 36-2903, *Dress and Personal Appearance of United States Air Force and United States Space Force Personnel*, 7 Feb 2020

DAFI 90-160, *Publications and Forms Management*, 14 Apr 2022

DAFMAN 11-401, *Aviation Management*, 27 Oct 2020

DAFMAN 90-161, *Publishing Processes and Procedures*, 18 Oct 2023

DCMA INST 8210.1, *Contractor's Flight and Ground Operations*, 13 Nov 2002

DoD Manual 5200.01 Vol. 3, *DoD Information Security Program: Protection of Classified Information*, 24 Feb 2012

Prescribed Forms

None

Adopted Forms

AF 3521, *ARMS RPA Aircrew/Mission Flight Data Document*

AF Form 847, *Recommendation for Change of Publication*

AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*

AFTO Form 781A, *Maintenance Discrepancy and Work Document*

Abbreviations and Acronyms

AC—Aircraft Commander
ACC—Air Combat Command
ADCON—Administrative Control
AFRC—Air Force Reserve Command
AFSOF—Air Force Special Operations Forces
AFTO—Air Force Technical Order
AFTTP—Air Force Tactics, Techniques, and Procedures
ANG—Air National Guard
ARMS—Aviation Resource Management Systems
C2—Command and Control
COCO—Contractor Owned, Contractor Operated
COMAFSOF—Commander Air Force Special Operations Forces
COMSEC—Communications Security
EFB—Electronic Flight Bag
EW—Electronic Warfare
FCG—Foreign Clearance Guide
FOD—Foreign Object Damage
GOCO—Government Owned, Contractor Operated
IAW—In Accordance With
IFG—Inflight Guide
ISRG—Intelligence, Surveillance, and Reconnaissance Group
ISR—Intelligence, Surveillance, and Reconnaissance
ITC—ISR Tactical Controller
LOA—Letters of Agreement
MAR—Mission Accomplishment Report
MDS—Mission Design Series
ME—Mission Essential
MEP—Mission Essential Personnel
MOA—Memorandum of Agreement
OPCON—Operational Control
OPR—Office of Primary Responsibility

PIC—Pilot in Command

RPA—Remotely Piloted Aircraft

RTM—Ready Aircrew Program Tasking Memo

SIGINT—Signals Intelligence

SOG—Special Operations Group

SSO—Special Security Office

TO—Technical Order

TSCIF—Temporary Sensitive Compartmented Information Facility

TSOC—Theater Special Operations Command

TSO—Tactical Systems Operators

USSOCOM—United States Special Operations Command

Terms

Command and Control—The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.

Exercise—A military maneuver or simulated wartime operation involving planning, preparation, and execution. It is carried out for the purpose of training or evaluation. It may be combined, joint, or single-service, depending on participating organizations.

Forward Operating Base (FOB)—An airfield without full support facilities used during mission operations for an undetermined and sometimes extended period of time.

Interfly—Intermixing of crew members from different units in the same aircrew or unit aircrews flying aircraft assigned to another unit.

Intrafly—The exchange and/or substitution of aircrew members from separate units under the same MAJCOM to accomplish flying missions.

Mission Essential Personnel (MEP)—Individuals who perform essential duties in support of a particular aircraft, aircrew, or mission.

Operational Control (OPCON)—Transferable command authority that may be exercised by commanders at any echelon at or below the level of combatant command. Operational control may be delegated and is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. Operational control includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Operational control normally provides full authority to organize commands and

forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions. Operational control does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training.