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AIR FORCE SPECIAL OPERATIONS
COMMAND**

**AIR FORCE SPECIAL OPERATIONS
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VOLUME 2**



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Flying Operations

**TACTICAL SYSTEMS OPERATOR
EVALUATION CRITERIA**

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This manual implements AFPD 11-2, *Aircrew Operations*, AFPD 11-4, *Aviation Service*, and AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*. It establishes evaluation criteria for initial and periodic aircrew qualification for all Tactical Systems Operator units flying on AFSOC aircraft. It is used in conjunction with AFMAN 11-202V2, *Aircrew Standardization and Evaluation Program*, and AFSOC supplements thereto. This manual applies to AFSOC, including AFSOC gained Air National Guard and Air Force Reserve members. This manual does not apply to the 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 the DAF Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command. 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. Waivers for the accomplishment of individual aircrew items on a case-by-case basis should be routed through the OPR of this publication, or alternately, to the requestor’s commander for non-tiered compliance items. 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. This publication

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SUMMARY OF CHANGES

This publication has been substantially revised and must be completely reviewed. Major changes include: **Chapter 1** restructured. Updated Tiering throughout document. Removed duplicated material from parent publications. Updated Notes on **Table 2.1**. Rewrote **Chapter 4** and **Table 4.1** to allow for evaluations pertaining to a wider mission set. Tactical Systems Operators (TSO) will use AF Form 8A, *Certificate of Universal Aircrew Qualification*, again for all evaluations. Periodic evaluations have been further restricted to take place only on AFSOC-program-of-record aircraft, except for situational awareness (SA). AFSOC Form 48TSQ has been removed.

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Chapter 1

GENERAL INFORMATION

1.1. General. This manual establishes requirements and grading criteria for ground and flight phases of initial, requalification, and periodic evaluations. All TSO aircrew evaluations will be conducted IAW this manual and AFMAN 11-202V2_AFSOCSUP, *Aircrew Standardization and Evaluation Program*. Specific areas for evaluation are prescribed to ensure an accurate assessment of the proficiency and capabilities of aircrews. Flight examiners will use this manual when conducting aircrew evaluations. Instructors use this manual when preparing aircrews for qualification. **(T-3)**

1.1.1. The qualification process will ensure TSOs are universally qualified to fly/log time while performing in-flight duties on a wide variety of aircraft, including but not limited to: Light ISR (Intel, Surveillance, and Reconnaissance) aircraft (U-28A, MC-12W, and B-350/300 variants), Mobility aircraft (MC-130J), Strike aircraft (AC-130J) and Tilt-Rotor aircraft (CV-22). TSOs are tasked to support AFSOC missions that require in-depth ISR capabilities on designated platforms, including various USSOCOM-tasked contract and joint aircraft, at a moment's notice. To credit the TSO with the appropriate qualification and flying time, the additional platforms with a similar mission set, not listed above, will be specified in the latest AFSOC Ready Aircrew Program Tasking Memo (RTM).

1.1.2. All TSO evaluations will be documented on an AF Form 8A. Under "Section VIII. Comments: D Additional Comments" will contain the following text if the TSO is qualified on a U-28A or MC-12W: "This evaluation meets the requirements for a TSO universal qualification onboard U-28A and MC-12W. Any additional aircraft not listed in the RTM will be documented on the AF Form 4348, *USAF Aircrew Certifications*, and included in supplemental evaluations."

1.1.3. The initial flight evaluation will occur on an AFSOC Program-of-Record aircraft (i.e., U-28A, MC-12W, MC-130J, or AC-130J). Except for TSOs assigned to SA, only AFSOC Program-of-Record aircraft will be used for periodic evaluations. **(T-3)**

1.1.4. TSO evaluations of any kind will not be permitted while performing Remote Payload Operations (i.e., MQ-9). duties are conducted on missions that do not reflect the type and difficulty of tasks required in fulfillment of the TSO's operational flying mission.

1.1.5. For TSOs qualified on multiple Mission Design Series (MDS), a qualification (QUAL)/mission (MSN) eval on one satisfies the requirement for all.

1.2. Keywords and Definitions.

1.2.1. "Will" and "Must" indicate a mandatory requirement.

1.2.2. "Should" is normally used to indicate a preferred, but not mandatory, method of accomplishment.

1.2.3. "May" indicates an acceptable or suggested means of accomplishment.

1.2.4. "Note" indicates operations procedures, techniques, etc., considered essential to emphasize.

1.3. Evaluation Procedures. During the mission planning process, the examiner will inform the aircraft commander of any special requirements. **(T-3)** Flight examiners will brief the examinee on the conduct, purpose, and requirements of the evaluation, as well as all applicable evaluation criteria, prior to flight. **(T-3)** Flight examiners will acquire a copy of necessary charts, flight logs, mission folders, and any additional items they deem necessary. **(T-3)**

1.4. Roles and Responsibilities. Flight examiner and examinee responsibilities.

1.4.1. Flight examiners will ensure all required training and documentation are complete prior to initial/requalification evaluations. **(T-3)**

1.4.2. Unless requested by the examinee and approved by the squadron commander, the examinee will be current for all events evaluated during a periodic evaluation. **(T-3)**

1.4.3. Flight examiners will not intentionally fail any equipment during flight evaluations but may deny the use of systems not affecting safety of flight. **(T-3)**

1.4.4. Flight examiners will thoroughly debrief/critique all aspects of the flight. **(T-3)** During the critique, the flight examiner will review the examinee's overall rating, specific deviations, area/subarea grades assigned, and any additional training required. **(T-3)**

1.5. Grading Instructions. All evaluations will follow the guidelines in AFMAN 11-202V2_AFSOCSUP, and this manual. **(T-2)** Examiners will use the criteria in this volume to accomplish all flight, simulator, and emergency procedures evaluations. **(T-2)** To ensure standard and objective evaluations, flight examiners will be thoroughly familiar with the prescribed evaluation criteria.

1.5.1. Area/Subarea Grades. Areas/subareas will have a two-level (Q/U) or three-level (Q/Q-/U) grading system. **(T-3)** Discrepancies will be documented against the listed subareas. **(T-3)**

1.5.1.1. Q is the desired level of performance. The examinee demonstrated a satisfactory knowledge of all required information, performed aircrew duties within the prescribed **Table 2.1., Table 3.1, and Table 4.1** tolerances and accomplished the assigned mission.

1.5.1.2. Q- indicates the examinee is qualified to perform the assigned area/subarea tasks but requires debriefing or additional training as determined by the flight examiner. Deviations from established standards must not exceed the prescribed Q- tolerances or jeopardize flight safety. **(T-3)**

1.5.1.3. U indicates a breach of flight discipline, performance outside allowable parameters or deviations from prescribed procedures or tolerances that adversely affected mission accomplishment or compromised flight safety. An examinee receiving an area/subarea grade of U normally requires additional training. When, in the judgment of the flight examiner, additional training will not constructively improve examinee's performance, it is not required. In this case, the flight examiner must thoroughly debrief the examinee. **(T-3)**

1.5.2. Critical Areas. Critical areas require adequate accomplishment by the aircrew member to the satisfaction of the examiner in order to successfully achieve the mission objectives and will be graded either Q or U. If an aircrew member receives an unqualified grade in any critical area, the overall grade for the evaluation will also be unqualified. **(T-3)** Critical areas are identified by **“(Critical)”** in the area title.

1.6. Evaluation Requirements. Evaluation profiles will reflect a sampling of the unit's missions. **(T-3)** Evaluation tables are provided to summarize evaluation areas. Areas common to all crew members are contained in **Table 2.1**. Instructor evaluation areas are in **Table 3.1**. TSO-specific evaluation areas are in **Table 4.1**. Events required in-flight only, and/or in simulators, and/or alternate methods will be identified in the tables. For any areas without a note, flight examiners may evaluate at their discretion if observed. If required events are not observed, then the evaluation is incomplete and will be accomplished on another flight. **(T-3)**

1.6.1. Simulator. Approved Weapon System Trainers (WST)/Aircrew Training Devices (ATD) may be used to accomplish any evaluations if certified by AFSOC/A3TS. Examinees will not receive two consecutive evaluations in the simulator. **(Exception:** Initial instructor evaluations.) Simulator certifications will be located at the AFSOC/A3TS website. Use the prefix SIM to indicate evaluation was administered in a WST/ATD. All initial mission qualification evaluations will be accomplished in a mission aircraft. The Tactical Systems Emulator (TSE) is not approved for flight evaluations. However, the TSE can be used as an alternate method for sub-grading areas. Refer to **Table 4.1**. **(T-2)**

1.6.2. Alternate Method. When it is impossible to evaluate an area in-flight due to equipment malfunctions, operational requirements, scheduling restrictions, etc., the area/subarea may be evaluated via alternate method (WST/ATD, verbal examination, or TSE) unless noted. If, in the flight examiner's judgment, an item cannot be adequately evaluated by an alternate method, complete the evaluation on an additional flight. Document in the comments section of AF Form 8A which portions of the evaluation were conducted via alternate method.

1.6.3. Grading Criteria. Flight examiners will use the grading criteria in this manual to determine individual area grades. **(T-3)** Exercise judgment when the wording of areas is subjective and when specific areas are not covered. The judgment of the flight examiner should be the final determining factor in arriving at the overall grade. Consider cumulative deviations when determining the overall grade.

1.6.3.1. Base tolerances for in-flight parameters on conditions of smooth air and a stable environment. In some cases, momentary deviations are allowable provided the examinee applies prompt corrective action and such deviations do not jeopardize flying safety.

1.7. Unsatisfactory Performance. If the flight examiner observes an aircrew examinee jeopardizing safe flight, the examiner will assume the duties of that examinee. **(T-3)** The examiner must take into consideration not to exceed their Flight Duty Period as outlined in AFMAN 11-202V3_AFSOCSUP, *Flight Operations*, or AFSOCMAN 11-2TSOV3, *Tactical Systems Operator Operations Procedures*. **(T-3)** The examiner will not assume the examinee's position for unsatisfactory performance if the examiner feels the examinee can continue safely with supervision. **(T-3)** If the flight examiner assumes the examinee's duties, the flight examiner will assign a Qualification Level 3 (Q-3) as the overall grade. **(T-3)**

1.7.1. Examiners must report deviations/discrepancies from established procedures or directives in any area, regardless of the individual's crew specialty, to the squadron or group commander, along with the examiner's recommendation for corrective action IAW AFMAN 11-202V2_AFSOCSUP. **(T-2)**

1.8. Additional Training. Flight examiners are responsible for assigning additional ground and/or flight training at their discretion. Document additional training and completion IAW

AFMAN 11-202V2_AFSOCSUP. Any approved training device (WST, ATD, or TSE) or medium may be used for additional training.

1.8.1. Additional training may be accomplished on the same flight as the evaluation, when the unique situation presents a valuable training opportunity, and the discrepancy requiring the additional training will not result in an overall Q-3 evaluation. This option requires flight examiner discretion and judicious application. The examinee will be informed when the additional training begins and ends. **(T-3)**

1.9. Rechecks. Rechecks should be administered by a flight examiner other than the one who administered the original evaluation.

1.10. Flight Evaluation Worksheets. AF Form 3862, *Flight Evaluation Worksheet*, or an approved software generated flight evaluation worksheet should be used to assist with the evaluation. **(T-3)** If a worksheet is used, it must be current in relation to requirements outlined in this manual and evaluation tables. **(T-3)**

1.11. Flight Evaluation Documentation. All TSO universal qualification evaluations will be documented using the AF Form 8A, IAW AFMAN 11-202V2_AFSOCSUP.

1.11.1. Block II (ACFT/Crew Position) will contain the aircraft in which the flight phase evaluation was given. Under “Section VIII. Comments: D Additional Comments” will contain the following text if the TSO is qualified on a U-28A or MC-12W: “This evaluation meets the requirements for a TSO universal qualification onboard U-28A and MC-12W. Any additional aircraft not listed in the RTM will be documented on the AF Form 4348 and included in supplemental evaluations.”

Chapter 2

EVALUATION REQUIREMENTS

2.1. General. The general criteria contained in this chapter apply to all crew positions and all evaluations. The examinee must satisfactorily demonstrate the ability to perform required duties safely and effectively. **(T-3)** This includes appropriate aircraft systems operation IAW applicable technical orders, instructions, and directives.

2.1.1. Administer aircrew evaluations on any flight that, as scheduled, will accomplish all required items for that evaluation. Mission evaluations should be as realistic as possible with minimum of simulated events. Do not deviate from peacetime restrictions.

2.2. Requirements. Evaluate all TSOs with guidance in the following subparagraphs, **Table 2.1**, and **Table 4.1**. For instructor evaluations, also see **Table 3.1**.

2.2.1. Examinations. All crew members will complete open and closed book examinations as a requisite to periodic QUAL/MSN evaluations. For Initial/Requalification QUAL/MSN evaluations, open and closed book examinations are considered prerequisites and must be completed within 6 months prior to the flight phase of the evaluation. Conduct requisite examinations IAW AFMAN 11-202V2_AFSOCSUP. **(T-3)**

2.2.1.1. TSOs will complete open/closed book examinations that encompass all aircraft in which they are qualified in, but only for those MDSs are present at their duty location (e.g., Light ISR, strike, mobility, tilt-rotor aircraft).

2.2.1.2. For example, TSOs stationed at Hurlburt Field who are qualified on both the MC-12W and U-28A will only take Open and Closed Book examinations for the U-28A, in addition to any C-130 aircraft they are qualified in.

2.2.2. In requalification training, TSOs will complete examinations for all aircraft on which they were formerly qualified, but only for which are present at their duty location, unless directed otherwise by the squadron commander. If examinations are not completed, the TSO will lose qualification on all airframes not tested. **(T-2)**

2.2.3. Emergency Procedures Evaluation (EPE). EPEs are requisites for all flight evaluations. EPEs may be conducted verbally, in-flight, in a simulator, or by another method determined by the examiner or unit Stan/Eval. Wing A3Vs may develop EPE guides for flight examiner use. EPEs should be scenario-driven and tailored to the specific crew position. The EPE will include areas commensurate with the examinee's qualification and experience level. **(T-3)** Examiners should emphasize emergency procedures and systems knowledge and include other general knowledge areas as well. EPEs should include sufficient in-flight and ground emergencies to evaluate the examinee's knowledge of systems and procedures to the flight examiner's satisfaction.

2.2.3.1. Examinees may use publications that are normally available in-flight. The examinee will recite all Boldface/Critical Action Procedures (CAPs) items from memory and should provide the initial steps of emergency procedures that, in the opinion of the examiner, would not allow time for reference. **(T-3)**

2.2.3.2. Grading criteria for EPE are outlined in Area 5 of General Grading Areas. The flight examiner will assign an overall EPE grade (1, 2, or 3) in the Requisite Information block of the AF Form 8A. (T-2)

2.3. Cockpit/Crew Resource Management (CRM). IAW AFMAN 11-290, *Cockpit/Crew Resource Management Training and Threat & Error Management Program*, and AFSOCSUP, CRM skills will be evaluated during initial and periodic evaluations. (T-3) CRM skills are integral to all phases of flight; therefore, no specific area titled CRM exists. CRM skills are imbedded within specific grading criteria (mission planning, airmanship/SA, crew coordination, communication, risk management/decision making, task management, and briefing/debriefing) and include all the skills listed on the AF Form 4031, *CRM/TEM Skills Criteria Training/Evaluation*. Therefore, use of the AF Form 4031 is unnecessary for evaluations.

Table 2.1. General Grading Areas (All Evaluations).

Area	Notes	Grading Areas
1	1	Safety - CRITICAL
2	1	Aircrew Discipline - CRITICAL
3	1	Airmanship/Situational Awareness - CRITICAL
4		Boldface/Critical Action Procedures - CRITICAL
5		Emergency Procedures Evaluation (EPE)
6	1	Crew Coordination
7		Mission Planning
8		Knowledge of Directives
9	1	Preflight
10	1, 2	Use of Checklist
11		Forms/Reports/Logs
12		Personal/Professional Equipment/Flight Publications
13		Emergency and Life Support Equipment/Procedures
14		Briefings/Debriefings
15		Classified Material/Operations Security
16		Anti-Hijacking/Aircraft Security
17	1	Communication
18	1	Risk Management/Decision Making
19	1	Task Management

Notes:

1. Required in-flight or approved ATD.
2. Checklist or AFSOC-approved in-flight guide

2.4. General Grading Criteria.**2.4.1. Area 1. Safety - (CRITICAL).**

2.4.1.1. **Q.** Was aware of and complied with all safety factors required for safe aircraft/equipment operation and mission accomplishment. Identified and assessed risk appropriately. Properly considered consequences of decisions.

2.4.1.2. **U.** Was not aware of, or did not comply with, all safety factors required for the safe operation of the aircraft or mission accomplishment. Failed to properly identify and assess risk. Failed to consider consequences of decisions. Operated the equipment in a dangerous manner.

2.4.2. Area 2. Aircrew Discipline - (CRITICAL).

2.4.2.1. **Q.** Demonstrated strict professional flight and crew discipline throughout all phases of the mission.

2.4.2.2. **U.** Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

2.4.3. Area 3. Airmanship/Situational Awareness - (CRITICAL).

2.4.3.1. **Q.** Executed the assigned mission in a timely, efficient manner. Anticipated situations that would have adversely affected the mission and corrected them. Made appropriate decisions based on available information. Recognized the need for action. Aware of performance of self and other flight members. Aware of on-going mission status. Recognized, verbalized, and acted on unexpected events. Recognized a loss in SA in self or others and took appropriate action to regain. Demonstrated SA throughout the mission and conducted the flight with a sense of understanding and comprehension.

2.4.3.2. **U.** Decisions or lack thereof caused failure to accomplish assigned mission. Mis-analyzed flight conditions and/or failed to recognize/understand mission developments or demonstrated poor judgment to the extent that flight safety could have been compromised. Did not recognize the need for action. Not aware of performance of self and other flight members. Not aware of on-going mission status. Failed to recognize, verbalize, and act on unexpected events.

2.4.4. Area 4. Boldface/CAPs – (CRITICAL).

2.4.4.1. **Q.** Able to recite the proper emergency Boldface/CAPs actions, as applicable, in the correct sequence to the satisfaction of the examiner.

2.4.4.2. **U.** Unable to recite emergency Boldface/CAPs actions, as applicable, in the correct sequence. Discrepancies in the procedure.

2.4.5. Area 5. Emergency Procedures Evaluation (EPE).

2.4.5.1. **Q1.** Satisfactory systems/procedural knowledge. Operated within prescribed limits and correctly diagnosed problems. Performed and/or explained proper corrective action, in the proper sequence, for each type of malfunction. Accomplished all required checklists and/or effectively used available aids. Thoroughly described the location, use and limitations of emergency equipment.

2.4.5.2. **Q2.** Marginal systems/procedural knowledge. Slow to analyze problems or apply proper corrective actions. Did not effectively use checklist and/or available aids. Minor omissions or deviations in describing the location, use and limitations of emergency equipment.

2.4.5.3. **Q3.** Unsatisfactory systems/procedural knowledge. Unable to analyze problem or take corrective action. Failed to accomplish required checklists and/or unable to locate information in available aids. Major omissions or deviations in describing the location, use and limitations of emergency equipment.

2.4.6. **Area 6. Crew Coordination.**

2.4.6.1. **Q.** Provided direction/information when needed. Adapted to meet new situational demands and focused attention on the task. Knew assigned task of other crew members. Appropriately gave and reacted to crew inputs. Communicated intentions and requirements to effect safe, efficient mission accomplishment.

2.4.6.2. **Q-.** Crew coordination was limited though adequate to accomplish the mission. Provided limited direction/information when needed. Slow to adapt to meet new situational demands due to limited focus on task. Did not consistently seek inputs from other crew members. Limited communication of intentions and requirements to effect safe, efficient mission accomplishment.

2.4.6.3. **U.** Did not provide direction/information when needed. Did not adapt to meet new situational demands and focus attention on the task. Lack of crew coordination resulted in significant degradation of mission accomplishment.

2.4.7. **Area 7. Mission Planning.**

2.4.7.1. **Q.** Prepared for flight with all documentation and briefings required by AFIs and Technical Orders (TO). Coordinated all mission information. Clearly defined the mission overview and mission goals. Provided specific information on required tasks. Solicited feedback from other crew members to ensure understanding of mission requirements. Thoroughly critiqued plans to identify potential problem areas and ensured all understood possible contingencies. Read and signed off all items in the Flight Crew Information File and unit read files.

2.4.7.2. **Q-.** Did not adequately define the mission overview and mission goals. Potential problem areas partially addressed or not at all. Did not adequately solicit feedback or critique the plans to ensure understanding of possible contingencies. Minor errors or omissions detracted from mission effectiveness but did not affect mission accomplishment.

2.4.7.3. **U.** Failed to coordinate all mission information with major errors or omissions that would preclude safe and effective mission accomplishment. Did not define the mission overview and goals. Lacked specific information on required tasks. Did not solicit feedback from other crew members to ensure understanding. Did not critique plans to identify

potential problem areas. Major errors or omissions would have prevented a safe or effective mission. Unsatisfactory knowledge of operating data or procedures. Did not review or initial Go/No Go items as required.

2.4.8. Area 8. Knowledge of Directives.

2.4.8.1. **Q.** Prepared and completed mission in compliance with existing instructions and directives. Demonstrated knowledge of operating procedures and restrictions and where to find them in the correct publications.

2.4.8.2. **Q-.** Minor deviations to procedures. Unsure of directives and/or had difficulty locating information in appropriate publications. Any instances of non-compliance did not jeopardize safety.

2.4.8.3. **U.** Unaware of procedures and/or could not locate them in the appropriate publication in a timely manner. Failed to comply with a procedure that could have jeopardized safety or mission success.

2.4.9. Area 9. Preflight.

2.4.9.1. **Q.** Completed systems preflight/inspections IAW aircraft operating manuals, checklists, and instructions. Individual technique complied with established procedures.

2.4.9.2. **Q-.** Minor deviations from established systems preflight/inspection that did not degrade mission effectiveness. Individual technique was safe but detracted from established procedures. Used individual technique instead of established procedure and was unaware of differences.

2.4.9.3. **U.** Failed to preflight critical component or could not conduct a satisfactory preflight/inspection. Individual techniques unsafe and/or in violation of established procedures.

2.4.10. Area 10. Use of Checklist.

2.4.10.1. **Q.** Consistently used correct checklist, gave correct responses, and accomplished appropriate actions at the appropriate time throughout the mission.

2.4.10.2. **Q-.** Checklist responses were untimely and/or crew member required continual prompting for correct responses/action.

2.4.10.3. **U.** Failed to use the proper checklist or was not adequately familiar with their contents. Was unable to identify the correct checklist to use for a given situation. Omitted or did not complete checklist(s) at the appropriate time.

2.4.11. Area 11. Forms/Reports/Logs.

2.4.11.1. **Q.** All required forms and/or flight plans were complete, accurate, legible, and accomplished on time IAW applicable directives. Relayed an accurate debrief of significant events to applicable agencies.

2.4.11.2. **Q-.** Minor errors on forms and/or flight plans did not affect conduct of the flight/mission. Incorrectly or incompletely reported some information due to minor errors, omissions, and/or deviations.

2.4.11.3. **U.** Did not accomplish required forms and/or flight plans. Omitted or incorrectly reported significant information due to major errors or omissions.

2.4.12. Area 12. Personal/Professional Equipment/Flight Publications.

2.4.12.1. **Q.** Had all required personal and professional equipment. Displayed satisfactory knowledge of the care and use of such equipment and the contents of required publications. Required equipment inspections were current. Publications were current, contained all supplements/changes and were properly posted.

2.4.12.2. **Q-.** Did not have all required personal/professional equipment or had limited knowledge of the use or the content of required publications. Publications contained deficiencies that would not impact flight safety or mission accomplishment.

2.4.12.3. **U.** Did not have required personal/professional equipment essential for the mission. Unsatisfactory knowledge of the care and use of equipment or the content of required publications. Equipment inspections were overdue, or equipment was unserviceable. Publications were outdated and/or contained deficiencies that would impact flight safety or mission accomplishment.

2.4.13. Area 13. Emergency and Life Support Equipment/Procedures.

2.4.13.1. **Q.** Satisfactory systems/procedural knowledge. Displayed satisfactory knowledge of location and use of emergency and life support equipment. Operated within prescribed limits and correctly diagnosed problems. Performed/explained proper wear, use, and corrective action for each type of equipment/malfunction. Effectively used available aids.

2.4.13.2. **Q-.** Marginal systems/procedural knowledge. Limited knowledge of location and use of emergency and life support equipment. Operated within prescribed limits but was slow to analyze problems or apply proper corrective actions did not effectively use. Omitted, or deviated in use of checklist and/or available aids. Minor deficiencies that did not impact flight safety or mission accomplishment.

2.4.13.3. **U.** Unsatisfactory systems/procedural knowledge. Displayed unsatisfactory knowledge of emergency and life support equipment. Exceeded flight manual limitations. Unable or failed to analyze problem or take proper corrective action. Did not use checklist and/or available aids. Failed to use or properly employ life support equipment that could jeopardize personal or flight safety and/or mission effectiveness.

2.4.14. Area 14. Briefings/Debriefings.

2.4.14.1. **Q.** Ensured briefing contained all applicable information. Prepared at briefing time. Briefings effectively organized and professionally presented in logical sequence. Presented all objectives, training events and special interest items. Effectively used available briefing aids. Appropriately integrated crew into mission briefs. Debriefed mission using specific, non-threatening positive and negative feedback of team and individual performance. Provided specific ways to correct errors. Asked for inputs from others. Summarized key points and compared mission results with mission objectives.

2.4.14.2. **Q-.** Omitted items pertinent but not critical to the mission. Some difficulty communicating clearly. Events were out of sequence, redundant, and difficult to understand. Did not make effective use of available briefing aids. Limited discussion of

training events or special interest items. Dwelled on non-essential items. Not fully prepared for briefing. Debriefed mission without specific, non-threatening positive and negative feedback on individual and team performance. Did not consistently seek input from others. Incomplete or inadequate re-cap of key points and comparison of mission results to mission objectives.

2.4.14.3. **U.** Failed to conduct/attend required briefings. Failed to use appropriate briefing aids. Omitted essential items or did not correct erroneous information that could affect mission accomplishment. Demonstrated lack of knowledge of subject. Ignored crew and flight members' abilities, limitations, and/or questions. Briefing poorly organized and not presented in a logical sequence. Presented erroneous information that would affect safe/effective mission accomplishment. Presentation created doubts or confusion. Failed to discuss training events or special interest items. Mission timeline affected due to excessively long briefing. Did not provide non-threatening positive and/or negative feedback during debriefing. Did not seek input from others. Did not re-cap key mission points nor compare mission results to mission objectives.

2.4.15. **Area 15. Classified Material/Operations Security.**

2.4.15.1. **Q.** Demonstrated thorough knowledge of Communications Security (COMSEC), Operations Security (OPSEC), and courier (if applicable) procedures. Had positive control of classified documents and information used throughout the mission. Properly stored, handled, and/or destroyed all classified or COMSEC material or information generated during the mission. Practiced sound COMSEC and OPSEC during all phases of the mission. Identified, requested, and obtained all cryptologic material required for the mission.

2.4.15.2. **Q-.** Limited knowledge of COMSEC/OPSEC procedures and/or courier procedures (if applicable). Limited knowledge of proper storage, handling, and destruction procedures would not have resulted in compromise of classified material/COMSEC and did not impact mission accomplishment. Identified cryptologic material required for mission but was slow in requesting/obtaining material or did so only after being prompted.

2.4.15.3. **U.** Unsatisfactory knowledge of COMSEC/OPSEC. Classified documents, COMSEC or information would have been compromised because of improper control by examinee. Unfamiliarity with OPSEC procedures had or could have had a negative impact on mission accomplishment. Failed to identify, request or obtain all cryptologic materials required for the mission.

2.4.16. **Area 16. Anti-Hijacking/Aircraft Security.**

2.4.16.1. **Q.** Explained proper anti-hijacking/aircraft security procedures.

2.4.16.2. **Q-.** Difficulty explaining proper anti-hijacking/aircraft security procedures.

2.4.16.3. **U.** Could not explain proper anti-hijacking/aircraft security procedures.

2.4.17. **Area 17. Communication.**

2.4.17.1. **Q.** Communicated using precise, standard terminology. Acknowledged all communications. Asked for/provided clarification when necessary. Stated opinions/ideas. Asked questions when uncertain. Advocated specific courses of action. Did not let rank affect mission safety.

2.4.17.2. **Q-**. Unclear or incomplete communication led to repetition or misunderstanding. Slow to ask for or give constructive feedback/clarifications. Inconsistent use of precise, standard terminology. Did not always state opinions/ideas or ask questions when uncertain.

2.4.17.3. **U**. Failed to communicate effectively. Continuously interrupted others, mumbled, and/or conduct/attitude was detrimental to communication among crew members. Withheld information and failed to solicit or respond to constructive criticism. Failed to use precise, standard terminology. Repeatedly failed to acknowledge communications. Did not state opinions or ask questions when unsure.

2.4.18. **Area 18. Risk Management/Decision Making.**

2.4.18.1. **Q**. Identified contingencies and alternatives. Gathered and cross-checked relevant data before deciding. Clearly stated problems and proposed solutions. Investigated doubts and concerns of crew members. Used facts to come up with solutions. Involved and informed necessary crew members when appropriate. Coordinated mission crew activities to establish proper balance between command authority and crew member participation and acted decisively when the situation required. Clearly stated decisions, received acknowledgement, and provided rationale for decisions.

2.4.18.2. **Q-**. Partially identified contingencies and alternatives. Made little effort to gather and cross check relevant data before deciding. Did not clearly state problems and propose solutions. Did not consistently use facts to come up with solutions. Did not effectively inform crew members when appropriate. Did not effectively coordinate mission crew activities to establish a proper balance between command authority and crew member participation and acted indecisively at times.

2.4.18.3. **U**. Failed to identify contingencies and alternatives. Made no effort to gather and cross check relevant data before deciding. Did not inform necessary crew members of results of risk management analysis. Did not use facts to come up with a solution. Avoided or delayed necessary decisions which jeopardized mission effectiveness. Did not coordinate mission crew activities to establish proper balance between command authority and crew member participation; acted indecisively.

2.4.19. **Area 19. Task Management.**

2.4.19.1. **Q**. Correctly prioritized tasks. Used available resources to manage workload. Asked for assistance when overloaded. Clearly stated problems and proposed solutions. Accepted better ideas when offered. Used facts to come up with solutions. Clearly communicated and acknowledged workload and task distribution. Demonstrated high level of vigilance in both high and low workload conditions. Prepared for expected or contingency situations. Avoided the creation of self-imposed workload/stress. Recognized and reported work overloads in self and others.

2.4.19.2. **Q-**. Did not consistently and correctly prioritize tasks. Did not effectively use available resources to manage workload. Did not clearly communicate and acknowledge workload and task distribution. Did not consistently demonstrate high level of vigilance in both high and low workload conditions. Slow to prepare for expected or contingency situations. Created some self-imposed workload/stress due to lack of planning. Slow to recognize and report work overloads in self and others.

2.4.19.3. U. Failed to correctly prioritize tasks. Did not use available resources to manage workload. Did not communicate and acknowledge workload and task distribution. Did not demonstrate high level of vigilance in both high and low workload conditions. Extremely slow to prepare for expected or contingency situations. Created self-imposed workload/stress due to lack of planning. Failed to recognize and report work overloads in self and others.

Chapter 3

INSTRUCTOR EVALUATIONS

3.1. General. The instructor grading criteria apply to initial, requalification, and all periodic instructor evaluations. The examinee will demonstrate the ability to instruct in a safe and effective manner.

3.2. Requirements. Evaluate instructors on areas listed in [Table 3.1](#). Instructor candidates will be qualified in all areas they will instruct. **(T-3)** Initial instructor evaluations may be a stand-alone evaluation or accomplished in conjunction with a periodic qualification/mission evaluation. If conducted as a stand-alone evaluation, all areas in [Table 2.1](#) will be graded in addition to [Table 3.1](#). There is no prerequisite testing for standalone instructor upgrade evaluations. Accomplish periodic instructor evaluations in conjunction with periodic qualification/mission evaluations IAW AFMAN 11-202V2_AFSOCSUP. If able, evaluate instructor candidates instructing actual students. Otherwise, the flight examiner (preferred) or another aircrew member may act as the student. A requalification instructor evaluation is required anytime an instructor is unqualified for any reason to include commander-directed downgrades. **(T-3)** Instructor requalification evaluations may be combined with the basic requalification evaluation. **(T-3)**

3.3. Instructor Evaluation. Evaluations of instructors will be accomplished in any aircraft in which the aircrew member maintains a qualification. (T-3)

3.3.1. Initial/Requalification. Evaluate instructor candidates on instructor performance during a representative sample of unit's basic mission events. There are no requisite testing exams for standalone Instructor evaluations.

3.3.2. Periodic. Qualified instructors will be evaluated to instructor grading areas during all periodic evaluations. **(T-3)**

Table 3.1. Instructor Grading Areas.

Area	Notes	Area Name
20	1	Mission Preparation
21		Instructional Ability
22	1	Instructor Knowledge
23		Briefings/Debriefings/Critique
24	1	Demonstration of Maneuvers/Procedures
25-29		<i>Reserved for future use</i>
Note:		
1. May be evaluated via alternate method without additional AF Form 8A remarks.		

3.4. Instructor Grading Criteria. The following subparagraphs contain grading criteria for the areas listed in [Table 3.1](#).

3.4.1. **Area 20. Mission Preparation.**

3.4.1.1. **Q.** Thoroughly reviewed student's training documentation. Ascertained student's present level of training. Assisted student in pre-mission planning and allowed student time for questions. Correctly prioritized training events. Gave student a clear idea of mission training objectives.

3.4.1.2. **Q-.** Did not thoroughly review student's training folder or correctly ascertain student's present level of training. Caused student to hurry pre-mission planning. Poorly prioritized training events. Training plan/scenario made poor use of time.

3.4.1.3. **U.** Did not review student's training folder. Did not ascertain student's present level of training. Did not assist student with pre-mission planning or did not allow time for questions. Did not prioritize training events. Failed to give student a clear idea of mission training objectives, methods, and sequence of events.

3.4.2. **Area 21. Instructional Ability.**

3.4.2.1. **Q.** Demonstrated proper instructor ability and communicated effectively. Provided appropriate guidance when necessary. Planned ahead, and provided accurate, effective, and timely instruction. Identified and corrected potentially unsafe maneuvers/situations. Provided appropriate and effective differentiation between technique and procedure when offering instruction.

3.4.2.2. **Q-.** Problems in communication or analysis degraded effectiveness of instruction. Accomplished the above tasks with minor discrepancies that did not affect safety or adversely affect student progress.

3.4.2.3. **U.** Failed to effectively communicate, provide timely feedback. Performed or taught improper procedures/techniques/tactics to the student. Did not provide corrective action when necessary. Did not plan ahead or anticipate student problems. Did not identify unsafe maneuvers/situations in a timely manner. Made no attempt to instruct. Was unable to differentiate between technique and procedure.

3.4.3. **Area 22. Instructor Knowledge.**

3.4.3.1. **Q.** Demonstrated a high level of knowledge of all applicable aircraft systems, techniques, procedures, missions, publications, and tactics to be performed. Completed appropriate training records accurately. Comments were clear and pertinent.

3.4.3.2. **Q-.** Minor errors/deficiencies in knowledge of above areas did not affect safety or adversely affect student progress. Minor errors or omissions in training records. Comments were incomplete or slightly unclear.

3.4.3.3. **U.** Lack of knowledge of publications or procedures seriously detracted from instructor effectiveness. Could not apply knowledge of above areas. Did not complete required forms or records. Comments were invalid, unclear, or did not accurately document performance.

3.4.4. **Area 23. Briefings/Debriefings/Critique.**

3.4.4.1. **Q.** Briefings were well organized, accurate, and thorough. Reviewed student's present level of training and defined mission events to be performed. Showed an excellent ability during the critique to reconstruct the flight, offer mission analysis, and provide

guidance where appropriate. Training grade reflected the actual performance of the student relative to the standard. Pre-briefed the student's next mission, if required.

3.4.4.2. **Q-**. Minor errors or omissions in briefings and/or critique did not affect safety or adversely affect student progress.

3.4.4.3. **U**. Briefings/debriefings were marginal or non-existent; major errors or omissions in briefings/debriefings. Did not review student past performance. Analysis of events or maneuvers was incomplete, inaccurate, or confusing. Training grade did not reflect actual performance of student. Overlooked or omitted major discrepancies. Incomplete pre-briefing of student's next mission, if required.

3.4.5. Area 24. Demonstration of Maneuvers/Procedures.

3.4.5.1. **Q**. Effectively demonstrated procedures and techniques. Provided concise, meaningful, and timely in-flight commentary. Had thorough knowledge of applicable aircraft systems, procedures, publications, and instructions.

3.4.5.2. **Q-**. Performed required maneuvers/procedures with minor deviations from prescribed parameters. In-flight commentary was sometimes unclear or poorly timed, interfering with student performance. Discrepancies in the above areas did not adversely affect safety or student progress.

3.4.5.3. **U**. Failed to properly perform required maneuvers/procedures. Made major procedural errors. Did not provide in-flight commentary and/or in-flight commentary was incorrect or unsafe. Insufficient knowledge of aircraft systems, procedures, and/or proper source material.

3.4.6. Areas 25 - 29. Reserved for future use.

Chapter 4

TSO EVALUATIONS

4.1. General. TSOs require a combined qualification evaluation and mission evaluation. Instructors will demonstrate instructor duties on all periodic evaluations. (T-3)

4.2. Requirements. Refer to **Chapter 2** for all evaluations and **Chapter 3** for instructor grading areas and criteria. TSO required areas and criteria are listed in this chapter.

4.3. Qualification/Mission (QUAL/MSN) Evaluations. See **Table 2.1** and **Table 4.1** for required evaluation areas.

4.3.1. Initial/Requalification. All mission Evaluations profiles should include demonstrated usage of onboard mission systems during a realistic scenario that satisfies the requirements of a Combat Mission Profile IAW latest applicable AFSOC RTM.

4.3.2. Periodic Qualification/Mission. Requirements for periodic evaluations are the same as initial/requalification evaluations.

4.3.3. Simulator Evaluations. See **paragraph 1.6.1** for use of ATDs.

Table 4.1. TSO QUAL/MSN Grading Areas.

Area	Notes	Grading Areas
30	2	Radio Frequency (RF) Employment Discipline - CRITICAL
31	2	Mission Systems Knowledge/Operation - Hardware
32	2	Mission Systems Knowledge/Operation - Software
33	1	Radio Operation
34		Basic Aircraft Knowledge/Limitations
35	2	Mission Employment
36-39		<i>Reserved for future use</i>
Notes:		
1. Required in-flight or an approved ATD.		
2. Required in-flight or an approved ATD or TSE.		

4.4. Tactical Systems Operator Evaluation Grading Criteria. The following subparagraphs contain the evaluation grading criteria for the grading areas listed in **Table 4.1**.

4.4.1. Area 30. RF Employment Discipline - (CRITICAL).

4.4.1.1. **Q.** Demonstrated safe and effective discipline with active or passive mission systems capable of signal broadcast or collection.

4.4.1.2. **U.** Failed to demonstrate safe and effective discipline with active or passive mission systems capable of signal broadcast or collection. Major knowledge gaps or deviation from established policy or procedures.

4.4.2. Area 31. Mission Systems Knowledge/Operation - Hardware.

4.4.2.1. **Q.** Demonstrated competent operation of TSO mission hardware. Able to safely install/remove/verify hardware, cables, and antennas as required. Appropriately configured networking interfaces. Able to diagnose and troubleshoot common hardware problems.

4.4.2.2. **Q-.** Difficulty demonstrating competent operation of TSO mission hardware that did not jeopardize mission accomplishment. Difficulty safely installing/removing hardware, cables, or antennas. Difficulty configuring networking interfaces. Difficulty diagnosing or troubleshooting common hardware antenna problems.

4.4.2.3. **U.** Failed to demonstrate competent operation of TSO mission hardware. Unable to safely install/remove hardware, cables, or antennas. Failed to correctly configure networking interfaces. Failed to diagnose or troubleshoot common hardware problems.

4.4.3. Area 32. Mission Systems Knowledge/Operation - Software.

4.4.3.1. **Q.** Demonstrated competent operation of TSO mission software. Effectively manipulated the graphical user interface, input appropriate parameters, and made necessary adjustments.

4.4.3.2. **Q-.** Difficulty demonstrating competent operation of TSO mission software that did not jeopardize mission accomplishment. Had difficulty manipulating the graphical user interface, incorrectly input some mission parameters, or making necessary adjustments.

4.4.3.3. **U.** Failed to demonstrate competent operation of TSO mission software and jeopardized mission accomplishment. Failed to manipulate the graphical user interface effectively, incorrectly input many or critical mission parameters, or failed to make necessary adjustments.

4.4.4. Area 33. Radio Operation.

4.4.4.1. **Q.** Demonstrated proper set-up and use of onboard communications systems. Demonstrated satisfactory knowledge and use of proper radio and/or chat protocols/etiquette. Effectively communicated with external entities.

4.4.4.2. **Q-.** Difficulty demonstrating proper set-up and use of onboard communications systems. Demonstrated adequate knowledge and use of proper radio and/or protocols/etiquette but needs improvement. Difficulty with effectively communicating with external entities.

4.4.4.3. **U.** Failed to demonstrate proper set-up and use of onboard communications systems. Failed to demonstrate satisfactory knowledge and use of proper radio and/or chat protocols/etiquette. Did not effectively communicate with external entities.

4.4.5. Area 34. Basic Aircraft Knowledge/Limitations.

4.4.5.1. **Q.** Able to identify/explain basic aircraft systems, nomenclature, or limitations.

4.4.5.2. **Q-.** Difficulty identifying/explaining basic aircraft systems, nomenclature, or limitations.

4.4.5.3. **U.** Unable to identify/explain basic aircraft systems, nomenclature, or limitations.

4.4.6. Area 35. Mission Employment.

4.4.6.1. **Q.** Able to explain basic mission employment doctrine of the aircraft and relative impact of TSO systems/operations. Able to employ appropriate tactics, techniques, and procedures. Able to coordinate effectively with crew to correlate intelligence from multiple sources/systems.

4.4.6.2. **Q-.** Difficulty explaining basic mission employment doctrine of the aircraft and relative impact of TSO systems/operations. Had difficulty explaining or employing appropriate tactics, techniques, and procedures. Had difficulty coordinating effectively with crew to correlate intelligence from multiple sources/systems. Did not jeopardize mission accomplishment.

4.4.6.3. **U.** Unable to explain basic mission employment doctrine of the aircraft and relative impact of TSO systems/operations. Failed to explain or employ appropriate tactics, techniques, and procedures. Failed to coordinate effectively with crew to correlate intelligence from multiple sources/systems. Jeopardized mission accomplishment.

4.4.7. **Areas 36 – 39. Reserved for future use.**

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

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

AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, 3 May 2022

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

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_AFSOCSUP, *Flight Operations*, 4 Apr 2023

AFMAN 11-290, *Cockpit/Crew Resource Management and Threat & Error Management Training Program*, 25 Oct 2021

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

AFPD 11-4, *Aviation Service*, 12 Apr 2019

AFSOCMAN 11-2TSOV3, *Tactical Systems Operator Operations Procedures*, 29 Nov 2023

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

Prescribed Forms

None

Adopted Forms

AF Form 8A, *Certificate of Universal Aircrew Qualification*

AF Form 3862, *Flight Evaluation Worksheet*

AF Form 4031, *CRM/TEM Skills Criteria Training/Evaluation*

AF Form 4348, *USAF Aircrew Certifications*

DAF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

A3V—Operations, Standards & Evaluations

ARMS—Aviation Resource Management Systems

ATD—Aircrew Training Device

CAP—Critical Action Procedures

COMSEC—Communications Security

CRM—Crew Resource Management

EPE—Emergency Procedure Evaluation

ISR—Intel, Surveillance, and Reconnaissance
MDS—Mission Design Series
MSN—Mission
OPSEC—Operations Security
QUAL—Qualification
RF—Radio Frequency
RQ—Requalification
RTM—Ready Aircrew Program Tasking Memo
SA—Situational Awareness
TO—Technical Order
TSE—Tactical Systems Emulator
TSO—Tactical Systems Operators
WST—Weapon System Trainer