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SECRETARY OF THE AIR FORCE

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Operations

E-8--AIRCREW EVALUATION CRITERIA

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This volume implements policy guidance in AFPD 11-2, *Aircraft Rules and Procedures*; AFPD 11-4, *Aviation Service*; and AFI 11-202V2, *Aircrew Standardization/Evaluation Program*. It applies to all E-8, Joint Surveillance Target Attack Radar System (JSTARS) units. This publication does not apply to the Air National Guard (ANG) or the Air Force Reserve Command (AFRC). MAJCOMs/DRUs/FOAs are to forward proposed MAJCOM/DRU/FOA-level supplements to this volume to HQ USAF/XOOT, through HQ ACC/XOFR, for approval prior to publication IAW AFPD 11-2. Copies of MAJCOM/DRU/FOA-level supplements, after approved and published, will be provided by the issuing MAJCOM/DRU/FOA to HQ USAF/XOOT, HQ ACC/XOFR, and the user MAJCOM/DRU/FOA offices of primary responsibility. Field units below MAJCOM/DRU/FOA level will forward copies of their supplements to this publication to their parent MAJCOM/DRU/FOA office of primary responsibility for post publication review. **NOTE:** The terms direct reporting unit (DRU) and field operating agency (FOA) as used in this paragraph refer only to those units that report directly to HQ USAF. Keep supplements current by complying with AFI 33-360V1, *Publications Management Program*. See paragraph **1.2.** of this volume for procedures on how and where to submit recommended changes to this publication. Maintain and dispose of records created as a result of processes prescribed by this instruction according to AFMAN 37-139, *Records Disposition Schedule.*

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Chapter 1

GENERAL INFORMATION

1.1. General. Conduct all evaluations in accordance with (IAW) the provisions of AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, and this volume.

1.2. Recommended Changes/Waivers. Submit recommendations for changes to this volume on AF Form 847, **Recommendation for Change of Publication**, IAW AFI 11-215, *Flight Manuals Program (FMP)*, through numbered Air Force to HQ ACC/XOFR. Units will forward approved recommendations to HQ ACC/XOFS. Request waivers from HQ ACC/XO through appropriate Stan/Eval channels. HQ USAF/XO is the approval authority for interim changes (IC) and revisions to this instruction.

1.3. Procedures:

1.3.1. Flight Examiners will use the evaluation criteria in this volume to conduct all flight and emergency procedure evaluations. To ensure standard and objective evaluations, Standards and Evaluations Flight Examiners, (SEFE) will be thoroughly familiar with the prescribed evaluation criteria.

1.3.2. All evaluations fall under the heading of Qualification, Instrument, Mission, Instructor, or SPOT evaluation prescribed in AFI 11-202V2. Instrument only applies to pilot examinees. Schedule all evaluation activity on one sortie to the maximum extent possible. However, for pilot examinees, INSTM/QUAL evaluations may be accomplished in the TE-8A, if difference trained. E-8C qualified pilots, navigators and flight engineers who have completed TE-8A difference training (reflected in AFORMS) are qualified to their highest E-8C position, i.e., copilot, pilot, instructor, evaluator. Furthermore, evaluators will annotate in the Examiner's Remarks section of the AF Form 8, **Certificate of Aircrew Qualification**: "This evaluation satisfies the requirements of the TE-8A/E-8C." However, if TE-8A difference training was not completed prior to the individual's initial evaluation, the individual will be TE-8A qualified upon completion of the difference training <u>and</u> reflected in AFORMS.

1.3.3. The Flight Examiner should not occupy a primary crew position during evaluations to ensure the most comprehensive evaluation. However, *and only if special conditions warrant*, the flight examiner may occupy a primary crew position during an evaluation.

1.3.4. Areas annotated with an "R" require an in-flight evaluation. SEFEs should evaluate any other areas observed. Areas annotated with a double asterisked "R" (R**) <u>may</u> be evaluated by alternate means (simulator, procedural trainer, or verbal examination) when it is impossible to evaluate a required area in-flight due to equipment malfunctions, operational requirements or weather. Every <u>reasonable</u> effort should be made to evaluate <u>all</u> areas in-flight. If an alternate method is used to complete the evaluation, document in the Additional Comments portion of the AF Form 8. If, in the SEFEs judgment, a required item cannot be adequately evaluated by an alternate method, complete the evaluation on an additional flight.

1.3.5. SEFEs will not intentionally fail any equipment during flight evaluations, but may deny the use of systems not affecting safety of flight.

1.3.6. SEFEs will thoroughly critique all aspects of the evaluation. During the critique, the SEFE will review the overall rating, specific deviations, the area grades assigned, and any required additional training.

1.4. Grading Instructions. Standards and performance parameters are contained in AFI 11-202V2 and this volume.

1.4.1. Base tolerances for in-flight parameters on conditions of smooth air. Do not consider momentary deviations from tolerances, provided the examinee applies prompt corrective action and such deviations do not jeopardize flying safety. Consider cumulative deviations when determining the overall grade.

1.4.2. Upon completion of the flight, the SEFE will compare the examinee's performance for each area with the criteria provided in this volume and assign an appropriate grade for the area. Derive the overall flight evaluation grade from the area grades based on a composite for the observed events and tasks IAW AFI 11-202V2 and this volume.

1.4.3. SEFEs will use the grading criteria in this volume to the maximum extent possible when determining individual area grades. This volume cannot cover all situations and due to the subjective wording of some areas SEFE judgment is critical to grading. Also, SEFE judgment will be the determining factor in arriving at the overall grade.

1.5. Unsatisfactory Performance:

1.5.1. If the SEFE observes an aircrew counterpart jeopardizing safe flight, the SEFE will assume the duties of that aircrew member. This does not mean the SEFE must assume the examinee's position any time unsatisfactory performance is observed. If the SEFE feels the examinee can continue safely with supervision, the examiner is not required to assume the examinee's duties.

1.5.2. If the SEFE assumes the examinee's duties, a qualification level 3 will be assigned as the overall grade.

1.5.3. SEFEs observing unsatisfactory performance by a crewmember other than the examinee, to include one in a different crew position, will comply with the requirements in AFI 11-202V2, for reporting deviations by like/unlike specialty.

1.6. Emergency Procedures Evaluation (EPE):

1.6.1. Unit SEFEs will conduct EPEs as a requisite in conjunction with all pilot, navigator, flight engineer, or mission crew evaluations (only one EPE need be accomplished for each combined evaluation IAW AFI 11-202V2). The EPE will include areas commensurate with the examinee's crew position and training level.

1.6.2. Do not conduct EPEs immediately before or during a flight evaluation. EPEs may be administered in a simulator, weapon system trainer or aircrew training device. **NOTE:** As a minimum, the pilot's bold face response portion of the EPE must be completed in an ATD or CPT for all qualification (Qual) evaluations (unless waived by the 93OG/CC).

1.6.3. Topics and scenarios for EPEs will be identified by profiles in the unit supplement to AFI 11-202V2. EPE profiles should be scenario driven with an emphasis on emergency procedures and

systems knowledge. SEFEs may use one continuous scenario throughout the EPE or different scenarios for each emergency procedure.

1.6.4. EPE profiles should cover emergency procedure for all phases of flight (pre-takeoff, takeoff, enroute, approach, and landing). Include all bold face procedures.

1.6.4.1. Emergency procedures should cover a cross section of aircraft systems such as engines, hydraulics, electrical, avionics, fuel and pneumatics. Examinees should be able to demonstrate an understanding of aircraft systems beyond the actual steps required for an emergency procedure.

1.6.5. Examinees may use publications that are normally available in-flight. The examinee must be able to accomplish all bold face items from memory and should provide the initial steps of emergency procedures that, in the opinion of the SEFE, would not allow time for reference.

1.6.6. Units will tailor mission EPE profiles to unit mission tasking and include areas not normally evaluated in-flight. In addition to the requirements in paragraph **1.6.4.**, threat knowledge and retrograde operations will be discussed as elements of the pilot mission EPEs.

1.6.7. Examinees receiving an overall EPE grade of unqualified will be placed in supervised status until recommended additional training and a reevaluation are successfully accomplished.

1.7. Instructor Evaluations:

1.7.1. Initial Instructor Evaluations. To initially qualify as an instructor, the crewmember must successfully complete a dedicated initial instructor evaluation. The emphasis of an initial instructor evaluation should be on the crewmemberís instructional abilities and techniques. The evaluation should be conducted while actually instructing a student (if a student is not practical, the evaluator may act as a student) during a full E-8 flight profile. The initial instructor evaluation will be a separate evaluation and will not update the crewmember's mission qualification. (**EXCEPTION:** Initial instructor pilots may update Instm/Mission/Qualification dates if requisite testing is completed.)

1.7.2. Periodic Evaluations. Crewmembers designated as instructors will be evaluated on their ability to instruct during all periodic evaluations. The crewmember must occupy the primary seat position for a sufficient length of time to demonstrate proficiency in the crew position. The determination of what represents a sufficient length of time is left to the judgment of the evaluator.

1.8. Evaluation Profiles. Evaluation profiles will be designed using current tactics and unit taskings and will incorporate all appropriate evaluation requirements as required in **Chapter 3** through **Chapter 16** Mission evaluations will reflect real-world threats and threat avoidance to the greatest extent possible, weather and flight conditions permitting. These evaluations will demonstrate the individual's ability to accomplish any unit combat tasking to include special missions.

Chapter 2

GROUND REQUISITES

2.1. General. Ground requirements for qualification, instrument and mission evaluations are listed in this chapter. Flight requirements are in the position specific chapters.

2.2. All Crew Positions. Normally, all crew positions complete open and closed book testing prior to the flight phase to include the Instrument Refresher Course (IRC) for all pilots and navigators. Testing will be conducted within the 6-month eligibility window for periodic evaluations IAW AFI 11-202V2 guidance.

2.3. Flight Publications. Evaluate all issued technical orders, to include checklists, for currency and accuracy on all flight evaluations.

Table 2.1. Crew Position Specific Requirements.

Test Type	Pilot (All)			Navigator (All)		Engineer (All)	Mission Crew (All)	
	QUAL	INST	MSN	QUAL	MSN	QUAL/MSN	QUAL	MSN
OPEN BOOK	R			R		R	R	
CLOSED BOOK	R			R		R	R	
Boldface	R	R						
IRC		R		R				
EPE	R		R	R		R	R	

Chapter 3

INSTRUCTOR PILOT/PILOT/COPILOT EVALUATION REQUIREMENTS

3.1. General. The task criteria contained in this chapter are applicable to Instructor Pilot/Pilot/Copilot qualification, instrument and mission flight evaluations. Qualification/Instrument evaluations are often flown on pilot training "P" sorties (TE-8A or E-8C). Mission evaluations must be evaluated on E-8C mission sorties (e.g., M-sortie, S-sortie, exercise, combat training, enhanced combat training, or actual theater sortie). E-8C qualified pilots, who have completed TE-8A difference training are qualified to their highest E-8C position, e.g., copilot, pilot, instructor, evaluator. (Refer to paragraph **1.3.2.**)

3.1.1. Evaluations will encompass all areas identified with an "R" in **Table 3.1.**

3.2. Evaluation Requirements:

3.2.1. Initial aircraft commander/first pilot examinees (this does not include E-8 pilot upgrade examinees who are E-8 copilot qualified) will also be evaluated on one additional instrument approach and one landing from the right seat (copilot's position).

3.2.2. Aircraft commanders may be evaluated on touch and go procedures at squadron commander's discretion, allowing aircraft commanders' to be touch and go qualified.

3.2.3. Ground Phase Requisites. See **Table 2.1.**

3.2.4. Instructor Evaluation. Initial instructor pilot examinees will conduct flight evaluation requirements from the right seat (copilot's position). Instructor pilots must demonstrate the ability to instruct while performing the following required in-flight activity:

3.2.4.1. Instructor pilot air refueling will include boom envelope/limits demonstration.

3.2.4.2. Landing Attitude or Partial Flap Landing. Evaluator will identify to examinee during mission planning which maneuver will be required.

3.2.4.3. Touch and go.

3.2.4.4. Unusual attitude demonstration.

Table 3.1. Instructor Pilot/Pilot/Copilot Required Grading Areas.

AREA	IP/PILOT			COPILOT		
	QUAL (7)	INSTM (7)	MSN (8)	QUAL (7)	INSTM (7)	MSN (8)
1-Airmanship (CRITICAL)	R	R	R	R	R	R
2-Aircrew Discipline/ Coordination/CRM (CRITICAL)	R	R	R	R	R	R
3-Safety (CRITICAL)	R	R	R	R	R	R
4-Publications/ Professional and Personal Equipment	R			R		

AREA	IP/PILOT			COPILOT		
	QUAL (7)	INSTM (7)	MSN (8)	QUAL (7)	INSTM (7)	MSN (8)
5-Mission Planning	R		R	R		R
6-TOLD	R			R		
7-Mission Briefings	R		R			
8-Pre-Flight/Pre-Takeoff and Taxi Procedures	R			R		
9-ATC Clearance	R	R		R	R	
10-Takeoff (CRITICAL)	R	R		R	R	
11-Departure/Climbout	R	R		R	R	
12-Level Off	R	R		R	R	
13-Cruise/Navigation	R	R		R	R	
14-On Station Procedures			R			R
15-Msn Execution			R			R
16-Inflight Checks	R			R		
17-Comm/IFF	R		R	R		R
18-Unusual Attitudes	R(1,3)			R(1)		
19-Air Refueling	R(2)			R(2)		
20-Holding		R(1)			R(1)	
21-Fix To Fix		R(1)			R(1)	
22-Descent/Penetration	R	R		R	R	
23-Non-Precision Approach		R			R	
24-Precision Approach		R			R	
25-Missed App/Climb Out		R			R	
26-VFR Pattern	R			R		
27-Landing (CRITICAL)	R	R		R	R	
28-Three Engine Approach	R			R		
29-Three Engine Landing	R			R		

AREA	IP/PILOT			COPILOT		
	QUAL (7)	INSTM (7)	MSN (8)	QUAL (7)	INSTM (7)	MSN (8)
30-Three Engine Go Around	R			R		
31-Touch and Go (IP)	R(4)					
32-After Landing	R			R		
33-General/Systems Knowledge	R	R	R	R	R	R
34-Emergency Procedures (CRITICAL)	R(6)		R(6)	R(6)		R(6)
35-Instructional Ability (IP)	R					
36-Briefings/Critique	R					
37-Demonstrations and Performance (IP)	R					
37a-Landing Attitude (IP)	O(5)					
37b-Partial Flap Landing (IP)	O(5)					

Notes:

1. May be evaluated in flight simulator.
2. Instructor pilot air refueling will include boom envelope/limits demonstration. Copilots are only required to be able to maintain a stable/safe pre-contact position. Aircraft commanders are qualified to supervise copilot air refuelings.
3. Instructor examinee will accomplish unusual attitude demonstration.
4. Aircraft commanders may be evaluated on touch and go procedures at squadron commander's discretion, allowing aircraft commanders' to be touch and go qualified.
5. Required only for instructor pilot evaluations. Evaluator will identify to examinee during mission planning which maneuver, 37a or 37b will be required.
6. Area evaluated as part of the Emergency Procedures Evaluation (EPE). EPE's conducted as part of a mission (MSN) evaluation will include general and mission related emergency procedures. A separate EPE is required for both qualification (QUAL) and mission (MSN) evaluations, unless a combined evaluation IAW AFI 11-202V2. However, as a minimum the bold face response portion of the EPE must be accomplished in an ATD or CPT for all qualification (Qual) evaluations (unless waived by the 93OG/CC).
7. INSTM/QUAL evaluations and correspondingly all sub-area(s) may be accomplished in the TE-8A or E-8C aircraft.
8. MSN evaluations and correspondingly all sub-area(s) must be accomplished in the E-8C aircraft.

Table 3.2. Instructor Pilot/Pilot/Copilot Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.
AREA 2-AIRCREW DISCIPLINE/COORDINATION/ CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Demonstrated strict professional flight and crew discipline throughout all phases of the mission. Coordinated effectively with other crewmembers without misunderstanding, confusion, or undue delay. Effective use of CRM.
Q-	Minor deviations in flight and crew discipline did not adversely affect flight safety or mission accomplishment. Instructions and coordination not always clear and concise causing some misunderstanding, confusion and delay. CRM was the minimum acceptable.
U	Failed to exhibit strict flight or crew discipline. Violated or ignored rules or regulations. CRM was not practiced so that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Aware of and complied with all safety factors required for safe aircraft operations and conduct of the mission.
U	Was not aware of or did not comply with all safety factors required for safe operations or conduct of the mission. Did not adequately clear. Operated the aircraft in a dangerous manner.

GRADE CATEGORIES	GRADING CRITERIA
AREA 4-PUBLICATIONS/PROFESSIONAL AND PERSONAL EQUIPMENT (Grade flight manual publications [including checklists] for currency and completeness. Ensure examinee has all required professional and personal gear.)	
Q	Assigned flight manual publications were current, and contained only minor deviations, omissions, and/or errors, and were usable for any of the unit's missions. All professional and personal equipment was carried and in good working condition.
Q-	Assigned flight manual publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight. Professional and personal equipment was carried but not in good/effective working condition.
U	Assigned flight manual publications contained deviations, omissions, and/or errors; which could jeopardize the mission. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety. Omissions and/or deviations from required professional and personal equipment.
AREA 5-MISSION PLANNING	
Q	Checked all factors applicable to flight, i.e., weather, NOTAMS, alternate airfields, flight logs, fuel requirements, forms, maps, etc and in accordance with applicable directives. Aware of alternates available, if flight cannot be completed as planned. Read and initialed for all items in the FCIF. Aware of theater C2 architecture.
Q-	Same as above, except minor deviation(s), error(s) or omission(s) that could have detracted from mission effectiveness. Knowledge of performance capabilities or approved operating procedures/rules was marginal in some areas. Read and initialed for all items in the FCIF.
U	Major error(s), omission(s) or deviation(s) that would preclude safe/effective mission accomplishment. Faulty knowledge of operating data or procedures. Did not sign off FCIF prior to flight.

GRADE CATEGORIES	GRADING CRITERIA	
AREA 6-TAKEOFF AND LANDING DATA (TOLD) (Must be manually computed/checked by examinee.)		
Q	Fully knowledgeable of takeoff and landing performance data. Ensured required takeoff and landing data is computed within tolerances of:	
	Field Pressure Altitude Outside air temp Power setting (EPR) All computed speeds All computed distances All computed gross takeoff weights Stabilizer setting (units)	+/- 200 feet +/- 3 degrees +/- .02 +/- 3 knots +/- 500 feet +/- 3000 lbs. +/- .3
Q-	Limited knowledge of takeoff and landing performance data. Ensured required takeoff and landing data is computed within tolerances of:	
	Field Pressure Altitude Outside air temp Power setting (EPR) Takeoff/landing C. G. All computed speeds All computed distances All computed gross Takeoff weights Stabilizer setting (units)	+/- 500 feet +/- 5 degrees +/- .04 +/- 1.0% +/- 5 knots +/- 700 feet +/- 5000 lbs +/- .5
U	Did not ensure TOLD card was completed. Computations exceeded Q- criteria. Inadequate knowledge of performance data.	
AREA 7-MISSION BRIEFINGS		
Q	Well organized and presented in a logical sequence. Covered all pertinent items IAW operational procedures and publications. Effective use of briefing aids.	
Q-	Events out of sequence, hard to follow, some redundancy. Did not make effective use of available briefing aids. Dwelled on non-essential mission items.	
U	Failed to use briefing aids. Omitted essential items. Demonstrated lack of knowledge of subject. Disorganized. Illogical sequence during presentation caused confusion. Presented/accepted erroneous information that would affect safe/effective mission accomplishment.	

GRADE CATEGORIES	GRADING CRITERIA	
AREA 8-PRE-FLIGHT/PRE-TAKEOFF AND TAXI PROCEDURES		
Q	Established and adhered to station, start engine, taxi and take-off times as required to assure thorough preflight, crew/passenger briefings, check of personal equipment, etc. Performed all checks and procedures prior to takeoff in accordance with approved checklists and applicable directives.	
Q-	Same as above except for minor procedural deviations which did not detract from mission effectiveness.	
U	Did not use checklist or omitted major item(s) of the appropriate checklist. Major deviations in procedure that would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight. Crew errors directly contributed to a late takeoff that degraded the mission or made it non-effective.	
AREA 9-ATC CLEARANCE		
Q	Promptly complied with all controlling agencies instructions and made required reports.	
Q-	Slow to comply with controlling agency instructions or unsure of reporting requirements.	
U	Did not understand clearance or accepted clearance that could not be complied with. Did not comply with clearance. Did not make required reports.	
AREA 10-TAKEOFF (CRITICAL)		
Q	Smooth aircraft control throughout takeoff. Performed take-off in accordance with flight manual procedures.	
	Airspeed Heading	-5/+10 knots +/- 5 degrees
Q-	Deviations from published procedures did not affect safety of flight. Control was rough or erratic. Hesitant in application of procedures/corrections.	
	Airspeed Heading	-5/+15 knots +/-10 degrees
U	Lift-off potentially dangerous. Exceeded aircraft/systems limitations. Failed to establish proper climb attitude. Over-controlled aircraft resulting in excessive deviations from intended flight path. Violated flight manual procedures or exceeded airplane limits.	

GRADE CATEGORIES	GRADING CRITERIA	
AREA 11-DEPARTURE AND CLIMBOUT		
Q	Performed departure as published/directed and complied with all instructions/restrictions. Applied course/heading corrections promptly. Visually cleared the area.	
	Altitude Airspeed Course/ Heading	+/- 100 feet (intermediate leveloffs) +/- 10 knots or +/- .04 Mach +/- 5 degrees (when assigned or specified)
Q-	Deviations from published procedures did not affect safety of flight. Control was rough or erratic. Hesitant in application of procedures/corrections.	
	Altitude Airspeed Course/ Heading	+/- 200 feet (intermediate level off) +/- 15 knots or +/- .07 Mach +/- 10 degrees (when assigned or specified)
U	Failed to comply with published/directed departure instructions. Failed to visually clear the area.	
AREA 12-LEVEL-OFF		
Q	Leveled off smoothly at specified altitude. Promptly established proper cruise airspeed. Visually cleared the area.	
	Altitude Course/Heading	+/- 100 feet +/- 5 degrees
Q-	Level off was erratic. Some difficulty in maintaining proper altitude. Slow in establishing proper cruise airspeed. Visually cleared the area.	
	Altitude Course/Heading	+/- 200 feet +/- 10 degrees
U	Erratic Level-off. Exceeded Q- limits. Excessive delay or failed to establish proper cruise airspeed. Failed to visually clear the area.	
AREA 13-CRUISE/NAVIGATION		
Q	Demonstrated satisfactory capability to navigate using all available means. Used appropriate navigation procedures. Ensured navaids were properly tuned, identified and monitored. Complied with clearance instructions. Aware of position at all times.	

GRADE CATEGORIES	GRADING CRITERIA
Q-	Minor errors in procedures/use of navigation equipment, which did not adversely affect mission accomplishment/ safety. Some deviation in tuning, identifying and monitoring navaids. Slow to comply with clearance instructions. Had some difficulty in establishing exact position.
U	Major errors in procedures/use of navigation equipment. Could not establish position. Exceeded parameters for Q-.
AREA 14-ON STATION PROCEDURES	
Q	Effectively and efficiently established aircraft in mission orbit. Coordinated effectively with all required agencies. Maintained situational awareness of mission developments and requirements.
Q-	Minor deviations establishing mission orbit. Minor omissions coordinating with external agencies. Situational awareness was weak but did not detract from mission accomplishment.
U	Unable to effectively establish aircraft in mission orbit. Coordination with external agencies compromised safety or mission accomplishment. Situational awareness detracted from mission accomplishment.
AREA 15-MISSION EXECUTION(CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner and accomplished mission objectives. Conducted the mission with a sense of understanding, situational awareness and comprehension.
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.
U	Decisions, or lack thereof, resulted in a failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that overall mission objectives are not achieved. Regulations/directives were violated.
AREA 16-INFLIGHT CHECKS	
Q	Performed all in-flight checks as required.
Q-	Same as qualified, except for minor deviations, errors or omissions during checks. Did not detract from mission accomplishment.
U	Did not perform in-flight checks or monitor systems to the degree that an emergency/unsafe condition would have developed if allowed to continue uncorrected.

GRADE CATEGORIES	GRADING CRITERIA	
AREA 17-COMM/IFF		
Q	Complete knowledge of and compliance with correct Comm/IFF procedures. Transmissions concise with proper terminology. Complied with and acknowledged all required instructions. Operated Comm/IFF functions expeditiously.	
Q-	Occasional deviations from correct procedures that required re-transmissions or resetting codes. Slow in initiating required Comm/IFF actions. Transmissions contained extraneous matter, were not in proper sequence, or non-standard terminology used.	
U	Incorrect procedures or poor performance caused confusion and reduced mission effectiveness or jeopardized safety.	
AREA 18-UNUSUAL ATTITUDES		
Q	Recovery to level flight was smooth and positive. Correct recovery procedures were used, or demonstrated satisfactory knowledge of recovery procedures.	
Q-	Slow to analyze attitude or erratic in recovery to level flight. Correct recovery procedures were used.	
U	Unable to determine attitude, or improper recovery procedures.	
AREA 19-AIR REFUELING **Notes:** 1. Requires 15 minutes of boom time (may be reduced to 10 minutes for periodic and/or instructor evaluations). Three inadvertent disconnects are allowed (only two for instructor evaluations). 2. Copilots will be checked on performance of duties during rendezvous and refueling operations. Copilots will be able to establish and maintain stable pre-contact. Aircraft commanders will be evaluated on air refueling supervision.		
Q	Established and maintained proper refueling position. Aircraft control was smooth and positive. Complete knowledge of rendezvous and closure procedures. Supervision was appropriate, directive and timely; took "hands-on" corrective action if needed.	
	Altitude Airspeed Contact time	+/- 200 feet (L/O to 1 mile) +/- 10 knots (L/O to ½ mile) 10 minutes/complete onload

GRADE CATEGORIES	GRADING CRITERIA	
Q-	Slow to recognize and apply needed corrections to establish and maintain proper refueling position. Aircraft control was not always positive and smooth, but adequate. Accomplished rendezvous and closure with deviations and/or omissions that did not affect safety of flight or the successful completion of air refueling. No more than two inadvertent disconnects. Supervision was safe, but slow to direct/establish corrective action.	
	Altitude Airspeed Contact time	+/- 300 feet (L/O to 1 mile) +/- 15 knots (L/O to ½ mile) 10 minutes/complete onload
U	Erratic or dangerous in the precontact/refueling position. Deviations/omissions that affected flight safety and/or successful completion of air refueling. Unable to get scheduled onload. Less than 15/10 minutes of boom time. More than three/two inadvertent disconnects. Supervision was inadequate. Did not provide or accomplish corrective action when needed. Exceeded Q- limits.	
AREA 20-HOLDING		
Q	Entry and holding procedures IAW applicable directives and remained within airspace limits. Holding parameters exceeded by not more than:	
	Altitude Airspeed	+/- 100 feet +/- 10 knots
Q-	Nonstandard entry and holding procedures IAW applicable directives but remained within airspace limits.	
	Altitude Airspeed	+/- 200 feet +/- 15 knots
U	Exceeded airspace limits or Q- limits.	
AREA 21-FIX TO FIX		
Q	Properly followed AFMAN 11-217V1 procedures. Initial heading was within 30 degrees of required, proper updates to heading were accomplished, and crossed the desired fix within 1 mile.	
Q-	Minor deviations from prescribed procedures. Initial heading was outside 30 degrees and updates were slow to correct required heading. Crossed desired fix within 5 miles.	
U	Did not follow prescribed procedures. Initial heading was incorrect and updates were inadequate. Required intervention to fly to desired fix within 5 miles.	

GRADE CATEGORIES	GRADING CRITERIA	
AREA 22-DESCENT/PENETRATION		
Q	Performed the penetration/enroute descent and approach as published/directed and IAW applicable flight manuals. Complied with all restrictions. Made smooth and timely corrections.	
	Altitude Airspeed Course/Heading	+/- 100 feet (level off) +/- 10 knots (if applicable) +/- 5 degrees (when assigned or specified)
Q-	Performed the penetration/enroute descent and approach with minor deviations that did not affect mission accomplishment or compromise safety. Complied with all restrictions. Slow to make corrections.	
	Altitude Airspeed Course/Heading	+/- 200 feet (level off) +/- 15 knots (if applicable) +/- 10 degrees (when assigned or specified)
U	Performed the penetration/enroute descent and approach with major deviations. Erratic corrections. Exceeded Q-limits.	
AREA 23-NON-PRECISION APPROACH		
Q	Adhered to all published/directed procedures and restrictions. Used appropriate descent rate to arrive at MDA at or before VDP/MAP. Position would have permitted a safe landing. **NOTE:** The -25 foot below MDA tolerance applies only to momentary deviations.	
	Airspeed Course/Heading Localizer Minimum Descent Altitude	-5/+10 knots +/- 5 degrees less than one dot deflection -25/+100 feet
Q-	Performed approach with minor deviations. Arrived at MDA at or before the MAP, but past the VDP. Position would have permitted a safe landing. **NOTE:** The -50 foot below MDA tolerance applies only to momentary deviations.	

GRADE CATEGORIES	GRADING CRITERIA	
	Airspeed Course/Heading Localizer Minimum Descent Altitude	-10/+15 knots +/- 10 degrees Within two dot deflection -50/+150 feet
U	Did not comply with published/directed procedures or restrictions. Exceeded Q- limits. Maintained steady-state flight below the MDA. Could not land safely from the approach.	
AREA 24-PRECISION APPROACH		
Q	Performed procedures as directed and IAW applicable flight manual. Smooth and timely response to controller's instructions. Complied with decision height. Position would have permitted a safe landing. Maintained glide path with only minor deviations. <u>PAR</u> Airspeed -5/+10 knots Heading within 5 degrees of controller's instructions <u>ILS</u> Airspeed -5/+10 knots Glide Slope/Azimuth within one dot	
Q-	Performed procedures with minor deviations. Slow to respond to controller's instructions. Position would have permitted a safe landing. Improper glide path control. Initiated appropriate action at Decision Height +/- 50 feet. <u>PAR</u> Airspeed -10/+15 knots Heading within 10 degrees of controller's instructions. <u>ILS</u> Airspeed -10/+15 knots Glide Slope within one dot low/two dots high Azimuth within two dots.	
U	Performed procedures with major deviations. Erratic corrections. Did not respond to controller's instructions. Erratic glide path control. Did not comply with decision height and/or position would not have permitted a safe landing.	
AREA 25-MISSED APPROACH/CLIMB-OUT		
Q	Executed missed-approach/climb-out as published/directed. Completed all procedures IAW applicable flight manual.	

GRADE CATEGORIES	GRADING CRITERIA	
	Level Off Altitude Airspeed Course/Heading TACAN ARC	+/- 100 feet -5/+15 knots +/- 5 degrees +/- 2 miles
Q-	Executed missed approach/climb-out with minor deviations. Slow to comply with published procedures, controller's instructions, or flight manual procedures.	
	Level Off Altitude Airspeed Course/Heading TACAN ARC	+/- 200 feet -5/+20 knots +/- 10 degrees +/- 3 miles
U	Executed missed-approach/climb-out with major deviations, or did not comply with applicable directives.	
AREA 26-VFR PATTERN		
Q	Performed patterns/approaches IAW procedures outlined in the flight manual, operational procedures, and local directives. Aircraft control was smooth and positive. Accurate runway alignment. Maintained proper/briefed airspeed with deviations of no more than -5/+15 knots.	
Q-	Performed patterns/approaches with minor deviations to procedures outlined in the flight manual, operational procedures and local directives. Aircraft control was not consistently smooth, but safe. Variations in runway alignment. Slow to correct to proper/briefed airspeed with deviations of no more than -5/+20 knots.	
U	Approaches not performed IAW procedures outlined in the flight manual, operations procedures, and local directives. Erratic aircraft control. Large deviations in runway alignment.	
AREA 27-LANDING (CRITICAL)		
Q	Performed landings IAW procedures outlined in the flight manual, operational procedures, and local directives. Aircraft control was smooth and positive. Touchdown was within desired area, on centerline.	
Q-	Performed landings IAW procedures outlined in the flight manual, operational procedures, and local directives with minor deviations, omissions, and/or errors, which did not jeopardize safety of flight. Touchdown was within desired area. Did not land on centerline.	

GRADE CATEGORIES	GRADING CRITERIA	
U	Landing not performed IAW procedures outlined in the flight manual, operational procedures and local directives. Significantly left or right of centerline. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.	
AREA 28-THREE ENGINE APPROACH		
Q	Performed all required emergency checklists IAW Dash 1. Maintained positive aircraft and directional control. Rudder inputs well coordinated with power adjustments.	
	Pattern Altitude Airspeed	+/- 200 feet -5/+15 knots
Q-	Procedural errors were made which did not affect safety of flight. Poor aircraft control and rudder inputs not well coordinated with power adjustments.	
	Pattern Altitude Airspeed	+/- 300 feet -5/+20 knots
U	Pattern poorly flown. Failed to recognize and apply corrections to avoid over/undershoots. Did not comply with procedures outlined in the flight manual, checklist, and other directives. Exceeded Q- parameters.	
AREA 29-THREE ENGINE LANDING		
Q	Performed landings IAW procedures outlined in the flight manual, operational procedures, and local directives. Aircraft control was smooth and positive. Touchdown was within desired area, on centerline.	
Q-	Performed landings IAW procedures outlined in the flight manual, operational procedures, and local directives with minor deviations, omissions, and/or errors, which did not jeopardize safety of flight. Touchdown was within desired area. Did not land on centerline.	
U	Landing not performed IAW procedures outlined in the flight manual, operational procedures and local directives. Significantly left or right of centerline. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.	
AREA 30-THREE ENGINE GO AROUND		
Q	Initiated and performed go-around promptly IAW the flight manual and operational procedures manual. Smooth and positive aircraft control. Rudder inputs well coordinated with power inputs. Acquired and maintained a positive climb and straight ground track.	

GRADE CATEGORIES	GRADING CRITERIA	
	Climb Airspeed Course/Heading	-5/+15 knots +/- 5 degrees
Q-	Slow or hesitant to initiate go-around. Procedural errors which did not affect safety. Acquired and maintained a positive climb. Straight ground track was not maintained. Rudder inputs were not well coordinated with power inputs.	
	Climb Airspeed Course/Heading	-5/+20 knots +/- 10 degrees
U	Did not initiate go-around procedures when appropriate or directed. Techniques unsafe or applied incorrect procedures. Exceeded Q- parameters.	
AREA 31-TOUCH AND GO LANDING (IP and AC [If SQ/CC authorizes AC touch and go qualification])		
Q	Performed touch and go procedures IAW flight manual and operational procedures manual. Made all appropriate call outs and positively controlled and monitored the entire procedure. Touchdown was as described under Q landing criteria.	
Q-	Slight deviations from published procedures not effecting safety. Slow or hesitant with required call outs. Touchdown was as described under Q- landing criteria.	
U	Incorrectly applied or omitted applicable procedures, jeopardizing safety. Touchdown was as described under U landing criteria.	
AREA 32-AFTER LANDING		
Q	Appropriate after-landing checks and aircraft taxi procedures accomplished in accordance with the flight manual and applicable directives. Completed all required forms accurately.	
Q-	Same as qualified except some deviations or omissions noted in performance of after-landing check and/or aircraft taxi procedures. Safety was not jeopardized. Required forms completed with minor deviations, omissions, and/or errors.	
U	Major deviations, omissions, and/or errors made in performance of after-landing check or aircraft taxi procedures, which could have jeopardized safety. Data recorded inaccurately or omitted	

GRADE CATEGORIES	GRADING CRITERIA
AREA 33-GENERAL/SYSTEMS KNOWLEDGE	
Q	Thorough knowledge of aircraft systems, limitations, flight and local area rules and procedures, and performance characteristics.
Q-	Knowledge/understanding of aircraft systems, limitations, flight and local area rules and procedures, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge/understanding of aircraft systems, limitations, flight or local area rules and procedures, or performance characteristics.
AREA 34-EMERGENCY PROCEDURES (CRITICAL)	
Q	Demonstrated thorough knowledge of emergency equipment/procedures. Properly diagnosed emergency. Thoroughly familiar with additional emergency duties. Coordinated with other crewmembers without delay to effect corrective action.
Q-	Errors or omissions which did/would not result in unsafe situation.
U	Unsatisfactory knowledge of emergency equipment/procedures. Misunderstood additional emergency duties. Improperly or ineffectively coordinated with other crewmembers causing delays/confusion, which did or could have compounded the situation.
INSTRUCTOR CRITERIA	
AREA 35-INSTRUCTIONAL ABILITY (IP only)	
Q	Demonstrated ability to communicate instruction effectively. Provided appropriate corrective guidance when necessary. Planned training efficiently and made timely decisions.
Q-	Minor discrepancies in the "Q" criteria that did not adversely effect safety of flight or student training.
U	Inability to effectively communicate instruction to the student. Did not provide corrective action when necessary. Did not plan training efficiently and/or made poor decisions adversely effecting safety and/or student training.

GRADE CATEGORIES	GRADING CRITERIA
AREA 36-BRIEFINGS/CRITIQUE	
Q	Briefings were well organized, accurate and thorough. If required reviewed student's present level of training and defined mission events to be performed. Demonstrated the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Pre-briefed the student's next mission.
Q-	Minor errors or omissions in briefings, critiques and/or training documents that did not affect student progress.
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete pre-briefing of student's next mission.
AREA 37-DEMONSTRATION AND PERFORMANCE (IP only)	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.
AREA 37a-LANDING ATTITUDE (IP only)	
Q	Performed IAW applicable directives. Instruction and demonstration was well integrated. Power and control inputs effectively illustrated the proper landing picture. Subsequent go around performed IAW T.O. guidance.
Q-	Minor deviations and/or errors detracted from effective demonstration but did not compromise safety of flight. Minor deviations and/or errors during subsequent go around.

GRADE CATEGORIES	GRADING CRITERIA
U	Deviations and/or errors significantly detracted from effective demonstration of proper landing attitude.
AREA 37b-PARTIAL FLAP LANDING	
Q	Performed IAW applicable directives. Instruction and demonstration was well integrated. Power and control inputs were effectively performed. Touch and go or go around were properly executed IAW with T.O. guidance.
Q-	Minor deviations detracted from overall demonstration but did not jeopardize safety of flight.
U	Deviations and/or errors made demonstration ineffective and/or jeopardized safety of flight.

Chapter 4

NAVIGATOR EVALUATION REQUIREMENTS

4.1. General. The task criteria contained in this chapter are applicable to Navigator (N) and Instructor Navigator (IN) Qualification, and mission flight evaluations.

4.1.1. Initial Mission/Qualification, Mission/Qualification, and Initial Instructor Qualification will encompass all areas identified in the required evaluation tables. The examinee must demonstrate a degree of knowledge and proficiency essential for successful mission accomplishment and safety of flight.

4.1.2. On missions where special mission instructions (SPINS) are not available or used, use command guidance from appropriate regulations.

4.1.3. Preplanned Mission Data. An individual using a command computer product (e.g., PFPS or other command-accepted product) is responsible for the initial data input. The individual is responsible to ensure the data used in the aircraft is accurate and effective for mission accomplishment.

4.2. Evaluation Requirements. The examinee must satisfactorily demonstrate the ability to navigate the E-8 aircraft safely and effectively and provide the appropriate threat protection information and coordination to ensure the overall defense of the aircraft. (See **Table 4.1.**) Navigators who receive difference training in the TE-8A will be administered all evaluations in the E-8C. Annotation of qualification on the AF Form 8 will be per paragraph **1.3.2.** of this volume.

4.2.1. Ground Phase Requisites. See **Table 2.1.**

4.2.2. Criteria. All areas in **Table 4.2.** will be graded using the grading policy in AFI 11-202V2 and any criteria listed within the individual areas.

Table 4.1. Navigator Required Grading Areas.

AREA	QUAL	MSN	INSTR
1-Airmanship (Critical)	R	R	
2-Crew Coordination/CRM (Critical)	R	R	R
3-Safety (Critical)	R	R	
4A-Publications and Personal Equipment	R		
4B-Mission Planning	R	R	
4C-Briefing	R	R	
5-Pre-Flight	R		
6-Pre T.O. and T.O.	R		
7-Climb	R		
8-General Navigation	R		
9-Systems Operations	R	R	
10-On-Station	R	R	

AREA	QUAL	MSN	INSTR
11-A/R	R		
12-Weather Radar	R		
13-Pacing	R	R	
14-OPSEC/COMSEC/Authentication		R	
15-System Knowledge			
15a-System Knowledge/Radar		R	
15b-System Knowledge/O&C		R	
15c-System-Knowledge/ Communications		R	
16-HVAA Procedures/Retrograde (Critical)		R	
17-Descent & Landing	R		
18-Post Flight	R		
19-EP/Equipment (Critical)	R	R	
20-Instructor Ability			R
21-Briefings/Critiques			R
22-Demonstrtions and Performance			R

Table 4.2. Navigator Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension.
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.
AREA 2-CREW COORDINATION/CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay. Effective use or CRM.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Coordinated and/or reported with errors, omissions, misunderstandings, confusion or delays, which do not jeopardize mission accomplishment. CRM was the minimal acceptable.
U	Failed to coordinate. Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight and personal safety during all phases of the mission.
Q-	Minor errors or omissions that did not adversely affect safety of flight or personal safety.
U	Failed to ensure safety of flight or personal safety during all phases of the mission.
4A-MISSION PLANNING/PUBLICATIONS AND PERSONAL AND PROFESSIONAL EQUIPMENT (Grade flight manual publications [including checklists] for currency. A publications check is required in conjunction with all in-flight evaluations.)	
Q	Assigned flight manual publications were current, contained only minor deviations, omissions, and or errors and usable for any of the unit's tasking. Possessed all personal and professional equipment required to perform crew duties.
Q-	Assigned flight manual publications contained deviations, omissions, or errors; however, did not effect mission accomplishment or safety of flight. Did not possess required personal and professional equipment, or equipment was not in working condition.
U	Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
4B-MISSION PLANNING/ MISSION PREPARATION	
Q	Accurately and effectively accomplished/checked mission preparation including all pertinent items required by the flight manual and governing directives with only minor deviations, omissions or errors. Developed/checked a sound tactical plan. Prepared/checked an accurate flight plan covering all known mission requirements. Understands theater C2 integration plan.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Accomplished mission preparation with deviations, omissions, or errors not adversely affecting the mission. The tactical plan had minor deviations, errors, or omissions that did not jeopardize the aircraft. Computed flight plan contained errors and omissions that did not jeopardize mission accomplishments or flight safety.
U	Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
4C-MISSION PLANNING/ BRIEFING	
Q	Attended all required briefings. Presented/reviewed briefing in a professional manor, well organized and in a logical sequence containing all required mission information as per local governing directives. Briefing aids, when required, were used effectively.
Q-	Excessively late to or inattentive during briefings. Presented/ reviewed briefing in an unprofessional or unorganized manor. Information was out of sequence and omitted significant information. Briefing aids were not effectively used.
U	Failed to attend required briefings without permission of the aircraft commander. Not up to "Q-" standards.
AREA 5-PREFLIGHT (Includes all activity up to engine start.)	
Q	Accomplished procedures and checklist items required by the flight manual and governing directives without errors or omissions. Demonstrated satisfactory knowledge of the status, operation and use of aircraft systems and life support equipment. Recognized evidence of malfunctions and took proper corrective actions. In position at engine start time with all required items accomplished and ready for mission use unless equipment related problems requiring maintenance assistance dictated otherwise.
Q-	Used the checklist and accomplished procedures and checklist items with minor deviations, omissions, or errors. Displayed adequate knowledge of equipment status, operation, and use; however, was uncertain of malfunctions and appropriate corrective action. Required items were incomplete and equipment was not ready for mission use by engine start time.
U	Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

GRADE CATEGORIES	GRADING CRITERIA
AREA 6-PRETAKEOFF AND TAKEOFF (Includes all activity from engine start to and including established climb configuration and airspeed.)	
Q	Accomplished procedures and checklists required by the flight manual and governing directives without omissions or errors. Copied the clearance, and if applicable, coordinated with the pilots on the procedures to be followed.
Q-	Deviations occurred, detracting from overall mission efficiency. Deviations, omissions, or errors occurred which unnecessarily delayed takeoff without rendering the mission ineffective.
U	Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
AREA 7-CLIMB (This area includes that portion of the flight after establishing configuration and airspeed up to and including initial level off.)	
Q	Accomplished procedures and checklists required by the flight manual and governing directives accurately and efficiently. Monitored headings, altitudes and aircraft position throughout the departure. Used a Standard Instrument Departure or appropriate scale departure area chart. Provided pilots with appropriate information in a timely manner. Monitored appropriate radios for departure instructions to ensure compliance with Air Route Traffic Control Center (ARTCC) directives. Monitored terrain clearance. Properly performed required heading and position crosschecks.
Q-	Deviations, omissions, or errors detracting from the overall mission efficiency occurred, or performance or knowledge was the minimum acceptable. Was slow to provide pertinent information. Required heading and position crosschecks were not properly performed. Performance did not degrade mission accomplishment nor compromise safety of flight.
U	Not up to "Q-" standards. Performance could have jeopardized mission accomplishment or flight safety.

GRADE CATEGORIES	GRADING CRITERIA
AREA 8-GENERAL NAVIGATION (This area includes all navigation from initial level off through start descent for the first planned landing or approach. This area addresses the use of radio navigation as a cross check to internal navigation position via Global Positioning System (GPS), Inertial Navigation System (INS) or integrated navigation solutions. In the event of degraded operations where positions are unreliable or complete systems failure occurs, radio navigation becomes the primary means of determining aircraft position and subsequently "fixes" not to exceed one hour are required and will be annotated on the flight log. Dead reckoning (DR) procedures will be used to navigate to home station, deployed location, or the closest suitable alternate airfield. All required position checks and/or fixes will be annotated on the navigator's log.) (**NOTE:** Position checks/cross-checks do not require a fix. If the GPS is operable and providing reliable data based on INS cross checks and radio navigation information, fixes are not required.)	
Q	At no time allowed the aircraft to deviate more than 4 NM from the required course or to deviate outside of the planned orbit area or refueling track ATC assigned/protected lateral airspace. Operator Work Station (OWS)/Flight Management System (FMS-800) waypoints were kept updated with correct coordinates. Monitored aircraft position and notified pilot of deviations. Took positive action in a timely manner to ensure pilot did not deviate from assigned altitudes.
Q-	At no time allowed the aircraft to deviate more than 10 NM from the required course. OWS/FMS-800 waypoints contained erroneous coordinates but did not jeopardize mission accomplishments or flight safety. Took positive action to ensure pilot did not deviate from assigned altitudes, but not in a timely manner.
U	Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
AREA 9-SYSTEMS OPERATIONS Navigator/DSO crewmembers must demonstrate ability to utilize the OWS, FMS-800-800, and all pieces of navigational equipment effectively during all phases of flight; to include preflight and post flight.	
Q	Demonstrated satisfactory knowledge of OWS, FMS-800-800, and navigational equipment components and operation. Recognized malfunctions and took appropriate corrective actions when necessary. Effectively used OWS, FMS-800-800, navigational equipment, and Self Defense Systems (SDS) link information in a precise and accurate manner. Monitored navigation aiding/positions and ensured accurate information was transmitted to the mission equipment when in the mission mode of operation.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Displayed limited understanding of OWS, FMS-800-800, and navigational equipment components and operation. Displayed limited understanding of malfunctions or appropriate corrective actions; however, no further system degradation resulted from lack of proper corrective action. Did not effectively utilize the OWS, FMS-800-800, navigational equipment functions, and SDS link information to perform duties. Failed to monitor navigation aiding/positions and did not ensure that accurate information was transmitted to the mission equipment when in the mission mode of operation.
U	Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
AREA 10-ON STATION This area includes activity from initial orbit/area entry to orbit/area exit.	
Q	Speeds and altitudes were maintained within mission constraints or governing directives unless directed otherwise. Pattern entry maneuver was smooth and required no unnecessary maneuvering. Briefed pilot on anticipated aircraft maneuvers. On/off station positions were monitored and recorded.
Q-	Speeds and altitudes were maintained with minor errors not resulting from ARTCC direction. Pattern entry was less than smooth and required unnecessary maneuvering to capture the pattern. Failed to brief pilot on anticipated aircraft maneuvers. On/off station positions were not monitored or recorded.
U	Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
AREA 11-AIR REFUELING Any rendezvous will satisfy this requirement. Use emission control (EMCON) procedures in accordance with the flight manual and associated governing directives. Weather radar utilization for rendezvous is covered in Area 9.	
Q	Accomplished procedures and time control accurately and efficiently. Effectively utilized all available rendezvous aids to conduct the rendezvous. Positively identified the tanker beacon, if available. Turn range and offset were correctly computed within 2 NM.
Q-	Displayed limited knowledge and familiarity with checklist or rendezvous and air refueling procedures; however, knowledge was sufficient to successfully accomplish the rendezvous. Failure to use all available aids resulted in delayed or degraded rendezvous. Turn range and offset computations did not exceed 5 NM.

GRADE CATEGORIES	GRADING CRITERIA
U	Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
AREA 12-WEATHER AVOIDANCE/WEATHER RADAR USE This area addresses coordination with the pilot in the use of the weather radar to avoid weather and assist in air refueling operations.	
Q	Demonstrated satisfactory knowledge and understanding of weather radar equipment. Directed logical and effective radar configuration commands to avoid weather or support air-refueling operations. Satisfactory demonstration/knowledge of thunderstorm avoidance.
Q-	Deviations in use of radar and coordination with the pilot degraded effective use in weather avoidance or air refueling operations; flight safety was not jeopardized.
U	Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
AREA 13-PACING This area evaluates the crew members ability to manage workloads in available time. All required position checks or fixes will be annotated on the navigator's log. **NOTE:** Position checks/cross checks do not require a fix. As long as the GPS is operable and providing reliable data based on a cross check of INS and radio navigation information, fixes are not required.	
Q	Established an even workflow achieving maximum use of available time. Stayed ahead of flight progress. Position and heading checks were accomplished in accordance with all local directives and were late by no more than 5 minutes. Quickly dealt with deviations from original flight plan.
Q-	Pacing was adequate, but occasionally worked behind flight progress. Position and heading checks were late by no more than 10 minutes. Was slow to react to deviation in original flight path; however, did not jeopardize flight safety or mission accomplishment.
U	Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
AREA 14-OPSEC/COMSEC/AUTHENTICATION	
Q	Used proper OPSEC/COMSEC and authentication procedures. Familiar with requirements for use and storage of classified and COMSEC material.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Used proper OPSEC/COMSEC and authentication procedures; however, delays or errors occurred which do not affect mission accomplishment or security. Unfamiliar with requirements for use and storage of classified and COMSEC material.
U	Failed to use proper OPSEC/COMSEC or authentication procedures. Unfamiliar with use or storage requirements. Errors or omissions could have jeopardized mission accomplishment or security.
AREA 15-SYSTEM KNOWLEDGE	
15a-SYSTEM KNOWLEDGE/RADAR This area includes general knowledge and employment of the mission radar to include mission orbit changes that best utilize the E-8C radar.	
Q	Understood radar capabilities, limitations and employment.
Q-	Minor errors in knowledge of radar, limitations, or performance characteristics. Demonstrated inability to effectively coordinate with mission crew in changing orbit to better meet mission demands.
U	Unsatisfactory knowledge of radar systems, limitations, or performance characteristics. Improperly repositioned aircraft orbit that degraded mission accomplishment or aircrew survivability. Errors or omissions could have jeopardized mission accomplishment or flight safety.
15b-SYSTEM KNOWLEDGE/O&C	
Q	Understood the O&C system and how it relates to the radar and communication subsystems.
Q-	Displayed minor errors in knowledge of O&C limitations and performance.
U	Unsatisfactory knowledge of O&C limitations and performance characteristics.
15c-SYSTEM KNOWLEDGE/COMMUNICATIONS This area includes external communication with outside agencies or other aircraft as well as internal communication via the available communications nets.	
Q	Understood and maintained proper internal/external communications capabilities and employment for operational missions. Operated communication equipment in accordance with performance capabilities, mission requirements and directives.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Minor errors in knowledge of communications, limitations and performance. Communication selection and equipment operation contained errors or omissions that do not jeopardize mission accomplishment.
U	Demonstrated unsatisfactory knowledge of communications, limitations and performance characteristics. Errors or omissions could have jeopardized mission accomplishment or flight safety.
AREA 16-HVAA PROCEDURES/RETROGRADE (CRITICAL) This area includes emission control procedures, high and low altitude threat avoidance, tactical deception maneuvers, and situational awareness.	
Q	Demonstrated/discussed sound tactical maneuvers, knowledge of the briefed threat, tactical deception, and emission controls whenever conditions allowed. Performed accurate and proficient tactical planning. If available, was able to successfully bring up and effectively utilize CSOT on OWS.
Q-	Demonstrated/discussed limited tactical knowledge of the briefed threat, tactical deception, and emission controls whenever conditions allowed. Displayed the minimum acceptable tactical scenario. Unable to effectively utilize CSOT in developing and maintaining threat picture.
U	Not up to "Q-" standards. Performance could have jeopardized mission accomplishment or flight safety.
AREA 17-DESCENT AND LANDING This area includes all activity from start descent from cruise altitude through final landing.	
Q	Accomplished procedures and checklists required by the flight manual and governing directives accurately and effectively. Monitored aircraft position and approach instructions and notified pilots of deviations. Notified pilots of altitude deviations prior to exceeding +/- 100 feet. Computed, briefed and monitored the minimum INS ground speed for the approach to +/-2 knots. Monitored appropriate FLIP publications and ensured terrain clearance.
Q-	Accomplished procedures and checklists required by the flight manual and governing directives with minor omissions, deviations or errors. Monitored aircraft position and approach instructions and notified pilots of deviations. Notified pilots of altitude deviations prior to exceeding +/- 200 feet. Computed, briefed, and monitored the minimum INS ground speed for the approach to +/-4 knots. Failed to monitor appropriate FLIP publications and unsure of terrain clearance.

GRADE CATEGORIES	GRADING CRITERIA
U	Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
AREA 18-POST FLIGHT This area includes all activities from final landing up to the completion of engine shut down.	
Q	Accomplished procedures/checklists required by the flight manual and governing directives accurately and efficiently. Accurately completed all required post-flight forms and reports.
Q-	Accomplished procedures/checklists required by the flight manual and governing directives with only minor deviations, omissions, or errors. Completed required post-flight forms or reports but with errors or omissions.
U	Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
AREA 19-EP/EQUIPMENT (CRITICAL)	
Q	Demonstrated thorough knowledge of emergency procedures/ equipment. Thoroughly familiar with additional emergency duties. Coordinated with other crewmembers without delay when required.
U	Not up to "Q" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
INSTRUCTOR CRITERIA	
AREA 20-INSTRUCTIONAL ABILITY	
Q	Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Unable to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.
AREA 21-BRIEFINGS/CRITIQUE	
Q	Briefings were well-organized, accurate, and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrated the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Prebriefed the student's next mission.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Minor errors or omissions in briefings, critiques and/or training documents that did not affect student progress.
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete prebriefing of student's next mission.
AREA 22-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

Chapter 5

FLIGHT ENGINEER EVALUATION REQUIREMENTS

5.1. General. This chapter contains task areas and criteria to evaluate determine flight engineer qualifications during qualification/mission flight evaluations.

5.1.1. Initial Mission/Qualification, Mission/Qualification, and Initial Instructor Qualification will encompass all areas identified in the required evaluation tables. The examinee must demonstrate a degree of knowledge and proficiency essential for successful mission accomplishment and safety of flight. E-8C qualified flight engineers, who have completed TE-8A differences training are qualified to their highest E-8C position, e.g., instructor, evaluator. (Refer to section **1.3.2.**)

5.1.2. Every effort will be made to accomplish flight engineer evaluations with a mission crew onboard. Flight engineer evaluations may be accomplished without a mission crew onboard; however, in such instances, mission requirements will be ground evaluated. However, initial qualification evaluations will be accomplished with a mission crew on board.

5.1.3. Qualification/Mission Evaluations. These evaluations will be conducted concurrently on the E-8C. No notice evaluations may be conducted on the TE-8A utilizing the criteria in **Table 5.2.**, but will not update the QUAL/MSN evaluation.

5.2. Evaluation Requirements. The examinee must satisfactorily demonstrate the ability to accomplish all flight engineer duties safely and effectively for Qualification and Mission Evaluations. Perform these duties in accordance with the appropriate flight manuals and other pertinent directives.

5.2.1. Criteria. All areas in **Table 5.2.** will be graded using the grading policy in AFI 11-202V2 and any criteria listed within the individual areas.

Table 5.1. Flight Engineer Required Grading Areas.

AREA	QUAL/MSN	INSTR	EPE
1. Airmanship (Critical)	R		R
2. Aircrew Discipline/Crew Coordination/CRM(Critical)	R**	R	R**
3. Safety (Critical)	R		R
4. Personal/Professional Equipment/ Publications	R		
5. Mission Planning	R		
6. Takeoff and Landing Data (TOLD)	R		R
7. Weight and Balance	R		
8. Preflight/Postflight inspections	R		
9. Normal Procedures/Checklist Discipline	R		R
10. Takeoff/Transition Procedures (Critical)	R		

AREA	QUAL/MSN	INSTR	EPE
11. Cruise/On station	R		
12. Air Refueling	R(1,2)		
13. Aircraft Knowledge/System Operation	R		R
14. Flight Documentation	R		
15. Emergency Procedures General (Critical)			R
16. Instructor Ability		R	
17. Briefings / Critique		R	
18. Demonstration and Performance		R	
Notes: 1. Must be accomplished in flight for initial qualification evaluations. 2. May be accomplished on the TE-8A.			

Table 5.2. Flight Engineer Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension.
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.
AREA 2-CREW COORDINATION/CREW RESOURCE MANAGEMENT/AIRCREW DISCIPLINE (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay. Effective use or CRM.
Q-	Coordinated and/or reported with errors, omissions, misunderstandings, confusion or delays, which did not jeopardize mission accomplishment. CRM was the minimal acceptable.

GRADE CATEGORIES	GRADING CRITERIA
U	Failed to coordinate. Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight and personal safety during all phases of the mission.
Q-	Minor errors or omissions that did not adversely affect safety of flight or personal safety.
U	Fails to ensure safety of flight or personal safety during all phases of the mission.
AREA 4-PERSONAL/PROFESSIONAL EQUIPMENT/PUBLICATIONS Grade flight manual publications (including checklists) for currency and completeness. Ensure examinee has all required professional and personal gear.	
Q	Assigned flight manual publications were current, and contained only minor deviations, omissions, and/or errors, and were usable for any of the unit's missions. All professional and personal equipment was carried and in good working condition.
Q-	Assigned flight manual publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight. Professional and personal equipment was carried but not in good/effective working condition.
U	Assigned flight manual publications contained deviations, omission, and/or errors. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment of flight safety. Omission and/or deviations from required professional and personal equipment.
AREA 5-MISSION PLANNING	
Q	Checked all factors applicable to flight. Properly prepared/checked mission planning paperwork in accordance with applicable directives. All mission planning completed and without error. Reviewed and initialed for all items in the FCIF.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Errors or an omission in checking factors applicable to flight. Mission planning paperwork accomplished/ checked with minor errors or omissions that would not interfere with mission accomplishment or safety. Limited knowledge of mission planning procedures or requirements.
U	Major errors, omissions or deviations that would preclude safe/effective mission accomplishment. Inadequate knowledge of mission planning requirements. Unable to complete mission planning. Did not review and initial for all items in the FCIF.
AREA 6-TAKEOFF AND LANDING DATA (TOLD) Normal/Emergency If TOLD is incorrect as a result of an incorrect gross weight and not due to incorrect computations of performance data, document under Area 4 Weight and Balance. Must be manually computed by examinee.	
Q	Computed/checked required takeoff and landing data within tolerances below. Fully knowledgeable of takeoff and landing performance data. Field Pressure Altitude +/- 200 feet Outside air temp +/- 3 degrees Power setting (EPR) +/- .02 All computed speeds +/- 3 knots All computed distances +/- 500 feet All computed gross weights +/- 3000 lbs. Takeoff Stabilizer setting (units) +/-.3
Q-	Computed/checked required takeoff and landing data within tolerances below. Limited knowledge of takeoff and landing data. Field Pressure Altitude +/- 500 feet Outside air temp +/- 5 degrees Power setting (EPR) +/- .04 All computed speeds +/- 5 knots All computed distances +/- 700 feet All computed gross weights +/- 5000 lbs Takeoff Stabilizer setting (units) +/- .5
U	Unable to complete TOLD card. Computations exceeded Q- criteria. Inadequate knowledge of performance data.

GRADE CATEGORIES	GRADING CRITERIA
AREA 7-WEIGHT AND BALANCE	
Q	Demonstrated a satisfactory knowledge of aircraft limitations and weight and balance. Completed or checked the DD Form 365-4 **Weight and Balance Clearance Form F-Transport Tactical** accurately. Errors in percent of MAC or gross weight did not exceed +/-0.5% or +/-2,000 lbs.
Q-	Demonstrated a limited knowledge of aircraft limitations and weight and balance. Completed a legible DD Form 365-4. Errors in percent of MAC or gross weight did not exceed +/-1.0% or +/- 5,000 lbs.
U	Unable to complete DD Form 365-4. Errors in percent of MAC or gross weight exceeded Q- criteria. Inadequate knowledge of weight and balance directives.
AREA 8-PREFLIGHT/POST FLIGHT INSPECTIONS	
Q	Accomplished required inspections in a proficient manner as outlined in applicable flight manual, checklist, and directives without omissions. Properly checked aircraft systems/components. Displayed satisfactory knowledge of information contained in AFTO Form 781 **AFORMS Aircrew/Mission Flight Data Document**.
Q-	Minor deviations or omissions in accomplishment of required inspections. Limited knowledge in proper procedures for checking aircraft systems/components. Limited knowledge of information contained in AFTO Form 781.
U	Inspection was not accomplished in a timely manner to meet mission directives. Omitted or improperly checked aircraft systems/components. Failed to properly check and determine correct aircraft status in the AFTO Form 781.
AREA 9-NORMAL PROCEDURES/CHECKLIST DISCIPLINE	
Q	Accomplished required procedures in a proficient manner. Utilized checklists properly and ensured accomplishment of all required items.
Q-	Minor deviations in accomplishment of procedures. Limited knowledge of procedures outlined in applicable flight manual or checklist.

GRADE CATEGORIES	GRADING CRITERIA
U	Procedures not accomplished in a proficient manner. Unacceptable knowledge of required procedures. Failed to utilize checklist properly. Required checklist items not accomplished.
AREA 10-TAKEOFF/TRANSITION PROCEDURES (CRITICAL)	
Q	Applied appropriate power setting for takeoff, touch and go or go around. Monitored all aircraft systems during these phases. Reported all malfunctions or anomalies to the Aircraft Commander in accordance with flight manual. All procedures accomplished in accordance with flight manual.
Q-	Power applied in an acceptable manner. Deviations in monitoring of aircraft systems did not exceed limitations.
U	Inappropriate power settings used for takeoff, touch and go, or go around. Power applied in an unacceptable manner. Failed to monitor engine or aircraft systems. Failed to comply with aircraft commander's instructions; did not accomplish required procedures as outlined in applicable flight manual.
AREA 11-CRUISE/ON STATION	
Q	In flight data computations were accurate and accomplished in a timely manner. Data computations accomplished in accordance with applicable directives.
Q-	In flight data computations had minor mathematical errors and/or errors of omission.
U	In flight data computations were not accomplished and/or not in accordance with applicable directives.
AREA 12-AIR REFUELING Must be accomplished in flight for initial qualification evaluations.	
Q	Fully knowledgeable of air refueling operations. Managed and onloaded fuel in accordance with applicable flight manuals and directives.
Q-	Limited knowledge of air refueling operations. Deviations in management/monitoring of fuel system and onload distribution. These deviations did not exceed any limitations.

GRADE CATEGORIES	GRADING CRITERIA
U	Inadequate knowledge of air refueling operations. Failed to comply with applicable flight manuals when managing and onloading fuel. Made errors in fuel onloading and management that delayed or prevented the successful accomplishment of air refueling. Limitations would have been exceeded.
AREA 13-AIRCRAFT KNOWLEDGE/SYSTEMS OPERATION	
Q	Demonstrated proper management and operation of system. Identified and located system components, explained and related the function, and specified the limitations. Stated system status and effect on related systems.
Q-	Deviations in management or operation of system. Omission or deviation in identifying, locating, explaining, or relating system functions. Stated system status but, could not determine effect on related systems. Deviations did not exceed limitations.
U	Inadequate knowledge of systems components, functions and limitations; improper management or operation of systems; unable to analyze simulated or actual malfunctions and applying corrective action; could not determine status of related systems.
AREA 14-FLIGHT DOCUMENTATION	
Q	All required forms and documents were complete and accurate in accordance with applicable directives.
Q-	Minor errors, omissions, and/or deviations caused information to be omitted or incorrect.
U	Major information or events omitted or reported incorrectly which affected mission accomplishment. Required documents or form not completed.
AREA 15-EMERGENCY PROCEDURES (CRITICAL)	
Q	Demonstrated thorough knowledge of emergency equipment/procedures. Properly diagnosed emergency. Thoroughly familiar with additional emergency duties. Coordinated with other crewmembers without delay to effect corrective action.
Q-	Errors or omissions which did/would not result in unsafe situation.

GRADE CATEGORIES	GRADING CRITERIA
U	Unsatisfactory knowledge of emergency equipment/procedures. Misunderstood additional emergency duties. Improperly or ineffectively coordinated with other crewmembers causing delays/confusion that did or could have compounded the situation.
AREA 16-INSTRUCTOR ABILITY	
Q	Demonstrated ability to communicate instruction effectively. Provided appropriate corrective guidance when necessary. Planned training efficiently and made timely decisions.
Q-	Minor discrepancies in the "Q" criteria that did not adversely effect safety of flight or student training.
U	Unable to effectively communicate instruction to the student. Did not provide corrective action when necessary. Did not plan training efficiently and/or made poor decisions adversely effecting safety and/or student training.
AREA 17-BRIEFINGS/CRITIQUE	
Q	Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrated the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents in accordance with prescribed directives. Training syllabi grade reflected actual performance of student relative to standard.
Q-	Minor errors of omissions in briefings, critiques and/or training documents that did not affect student progress.
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in training folder were incomplete. Strength and weaknesses were not identified. Overlooked or omitted major discrepancies.
AREA 18-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations

GRADE CATEGORIES	GRADING CRITERIA
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedures and/or techniques. Did not or could not distinguish between procedures and techniques. Insufficient knowledge of aircraft systems, procedures, and/or applicable publications and regulations. These deviations could affect safety and adversely affect student progress.

Chapter 6

MISSION CREW COMMANDER EVALUATION REQUIREMENTS

6.1. General. This chapter contains the task oriented criteria for qualification/mission evaluations of a Mission Crew Commander (MCC) and Instructor Mission Crew Commander (IMCC).

6.1.1. Qualification evaluations will encompass all areas identified in the required evaluation table (see **Table 6.1.**). The examinee must demonstrate a degree of knowledge and proficiency essential for successful mission accomplishment and safety of flight.

6.1.2. Mission evaluations will encompass all areas identified in the required evaluation tables for the mission profile performed. The examinee must demonstrate a degree of knowledge and proficiency essential for successful mission accomplishment and safety of flight.

6.2. Evaluation Requirements:

6.2.1. Qualification Evaluation. The examinee must demonstrate the ability to accomplish all MCC and/or IMCC duties safely, effectively, and in accordance with appropriate flight manuals, directives, and operating procedures.

6.2.2. Mission Evaluation. The examinee must demonstrate the ability to accomplish all MCC duties safely, effectively, and in accordance with appropriate flight manuals, directives, and operating procedures to ensure successful employment and mission accomplishment IAW the required evaluation areas.

6.2.3. Criteria. All areas in **Table 6.2.** will be graded using the grading policy in AFI 11-202V2 and any criteria listed within the individual areas.

6.2.4. Periodic Evaluations. Periodic evaluations will include all qualification and mission areas.

Table 6.1. Mission Crew Commander (MCC) Required Grading Areas.

AREA	QUAL	MISSION	INSTR
AREA 1-AIRMANSHIP (CRITICAL)	R	R	
AREA 2-CREW COORDINATION/CRM (CRITICAL)	R**	R**	R
AREA 3-SAFETY (CRITICAL)	R	R	
AREA 4-PREMISSION RESPONSIBILITIES	R	R	
AREA 5-MISSION PLANNING	R	R	
AREA 6-PERSONAL AND PROFESSIONAL EQUIPMENT/PUBLICATIONS	R**		
AREA 7-PREFLIGHT INSPECTION AND DEPARTURE	R		
AREA 8-ENGINE START AND TAXI	R		
AREA 9-TAKEOFF	R		

AREA	QUAL	MISSION	INSTR
AREA 10-ENROUTE OUTBOUND PROCEDURES	R		
AREA 11-ASSUMING STATION RESPONSIBILITIES	R**		
AREA12-ON-STATION PROCEDURES	R**		
AREA 13-AIR-TO-AIR REFUELING	R**		
AREA 14-EMERGENCY PROCEDURES (CRITICAL)	R	R	
AREA 15-TRANSFERRING STATION RESPONSIBILITIES	R**		
AREA 16-ENROUTE INBOUND PROCEDURES	R		
AREA 17-DESCENT AND LANDING	R		
AREA 18-ENGINE SHUTDOWN	R		
AREA 19-POST-MISSION RESPONSIBILITIES	R		
AREA 20-MISSION EXECUTION(CRITICAL)	R	R	
AREA 21-RULES OF ENGAGEMENT (CRITICAL)		R**	
AREA 22-SYSTEM KNOWLEDGE		R**	
AREA 22a-RADAR		R**	
AREA 22b-O&C		R**	
AREA 22c-COMMUNICATIONS		R**	
AREA 23-HVAA PROCEDURES/ RETROGRADE (CRITICAL)		R**	
INSTRUCTOR CRITERIA			R
AREA 24-INSTRUCTIONAL ABILITY			R
AREA 25-BRIEFING/CRITIQUES			R
AREA 26-DEMONSTRATION AND PERFORMANCE			R

Table 6.2. Mission Crew Commander (MCC) Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.
AREA 2-CREW COORDINATION/CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay. Effective use of CRM.
Q-	Coordinated and/or reported with errors, omissions, misunderstandings, confusion or delays, which did not jeopardize mission accomplishment. CRM was the minimal acceptable.
U	Failed to coordinate. Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight and personal safety during all phases of the mission.
Q-	Minor errors or omissions that did not adversely affect safety of flight or personal safety.
U	Failed to ensure safety of flight or personal safety during all phases of the mission.
AREA 4- PREMISSION RESPONSIBILITIES	
Q	Assessed information (i.e., FCIF, etc.) for impact on mission activities. Confirmed agency/agencies exercising operational command/control. Ensured flight orders/passenger manifest correctness/completeness for the mission crew.
Q-	Errors or omissions were made in confirming and assessing information concerning mission impact that did not jeopardize mission accomplishment. Errors in flight orders/passenger manifest accuracy that did not jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
U	Errors or omissions were made in confirming and assessing information concerning mission impact that could jeopardize mission accomplishment.
AREA 5- MISSION PLANNING	
Q	Preplanned/checked mission activities by determining mission tasking, Surveillance/Intelligence Support, Attack Support, Battle Management, and Special Mission Objectives, and battle plans from planning/tasking documents. Understood theater C2 architecture. Obtained and analyzed maintenance status of aircraft and primary mission equipment (PME) and determined impact on mission objectives. Directed mission crew specialized planning and determined training requirements. Coordinated mission plans with flight crew. Arranged applicable crew support. Prepared and conducted briefings according to directives.
Q-	Directed and performed mission planning with errors or omissions which did not jeopardize mission accomplishment.
U	Failed to adequately mission plan. Mission planning contained errors or omissions which could jeopardize mission accomplishment.
AREA 6 - PERSONAL AND PROFESSIONAL EQUIPMENT/PUBLICATIONS	
Q	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition and posted publications according to directives.
Q-	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition. Posted publications with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to possess all personal/professional equipment or to maintain equipment in serviceable condition. Posted publications with errors.

GRADE CATEGORIES	GRADING CRITERIA
AREA 7-PREFLIGHT INSPECTION AND DEPARTURE	
Q	Performed preflight inspections according to directives and reported discrepancies. Analyzed AFTO Forms 781 for impact on the mission. Reviewed technician inspection reports for equipment malfunctions and analyzes impact. Reported malfunctions that will adversely impact mission or delay departure to Pilot/Flight Engineer and appropriate agencies. Obtained and fitted personal emergency equipment. Coordinated requirements, mission changes, equipment discrepancies and limitations according to directives without misunderstanding, confusion or delay.
Q-	Performed preflight inspection, analysis of AFTO 781s and inspection reports, coordinated requirements and reported malfunctions with errors or omissions that did not jeopardize mission accomplishment.
U	Performed preflight inspection, analysis of AFTO 781s and inspection reports, coordinated requirements and reported malfunctions with errors or omissions that could jeopardize mission accomplishment.
AREA 8-ENGINE START AND TAXI	
Q	Performed engine start and taxi procedures according to directives. Configured communications on CMT panel and monitored nets and radios. Configured oxygen system and seat for takeoff following the checklist and confirmed headcount. Assigned and configured OWS for mission use. Performed roll call to check intercom and confirm mission crew is ready for engine start and taxi. Coordinated with FE for internal power. Reported mission crew ready for engine start and taxi.
Q-	Performed engine start and taxi procedures, configured/monitored communications and OWS, configured oxygen/seat requirements, performed roll call and reported mission crew ready with errors and omissions which did not jeopardize mission accomplishment.
U	Performed engine start and taxi procedures, configured/monitored communications and OWS, configured oxygen/seat requirements, performed roll call and reported mission crew ready with errors and omissions which could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 9-TAKEOFF	
Q	Performed before takeoff procedures according to directives and checklist. Confirmed and reported mission crew ready for takeoff.
Q-	Confirmed/reported ready for takeoff with errors or omissions that did not jeopardize mission accomplishment.
U	Confirmed/reported ready for takeoff with errors or omissions that could jeopardize mission accomplishment.
AREA 10-OUTBOUND PROCEDURES	
Q	Coordinated, directed, and supervised activities required to checkout mission systems enroute to assigned station IAW directives. Confirmed the radar, O&C, and communications systems are operational, coordinates mission changes, if required, established work-around procedures for malfunctions, and reports mission capabilities and limitations to the appropriate agencies.
Q-	Performed outbound enroute procedures with errors, omissions, or delays that did not jeopardize mission accomplishment.
U	Performed outbound enroute procedures with errors, omissions, or delay that could jeopardize mission accomplishment.
AREA 11-ASSUMING STATION RESPONSIBILITIES	
Q	Confirmed that required radios are configured for mission use, communications checks have been completed, radio and sensor coverage is adequate for assigned AOR, sensors and data links are configured to meet mission requirements. Assessed mission systems status to ensure capability exists to complete mission tasks and assume "on station/ops normal" responsibility. Declared on station and ensured mission crew monitors appropriate internal/external nets and that appropriate agencies were notified of E-8 status and limitations.
Q-	Performed assuming station responsibilities with errors, omissions, or delays that did not jeopardize mission accomplishment.
U	Performed assuming station responsibilities with errors, omissions, or delays that could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 12-ON-STATION PROCEDURES	
Q	Used all available assets to ensure the assigned mission is accomplished. Selected, interpreted, and analyzed tabular displays, graphic displays, and manipulated history playback option to monitor and supervise mission activities and target development. Managed the use of communications, O&C, and radar sub-systems. Supervised mission crew members, coordinated with flight crew, and external agencies, and performed the battle management actions required to accomplish the appropriate mission in the assigned theater of operations. Recognized potential threats to the E-8 and employed proper self-defense tactics/procedures to minimize threat and maximize mission accomplishment. Logged/Documented significant events.
Q-	Performed On-Station procedures with errors, omissions, or delays that did not jeopardize mission accomplishment.
U	Performed On-Station procedures with errors, omissions, or delays that could jeopardize mission accomplishment.
AREA 13-AIR-TO-AIR REFUELING	
Q	Prepared for air refueling IAW directives. Directed mission crew to begin air refueling checklist procedures. Coordinated with the crew to configure radar at the appropriate time. Directed CSTs to configure communications equipment for air refueling. Confirmed galley was secure and bunks have been cleared. Directed loose items be stowed. Confirmed/reported mission equipment status/mission crew was ready for air refueling. Monitored air refueling, resumed normal operations, and confirmed radar and communications were reconfigured for mission use. Analyzed changes in mission system status for mission impact and coordinated troubleshooting or work-arounds as required. Coordinated air refueling results with flight crew.
Q-	Performed air-to-air refueling procedures with errors, omissions, or delays that did not jeopardize mission accomplishment.
U	Performed air-to-air refueling procedures with errors, omissions, or delays that could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 14-EMERGENCY PROCEDURES (CRITICAL)	
Q	Conducted practice emergency drills according to directives, prepared crew members to properly perform actual emergency procedures, and lead debrief after emergency drill. Diagnosed/responded to actual emergency situations and implemented emergency procedures according to directives. Knowledgeable of the location and use of emergency equipment.
Q-	Practiced/performed emergency procedures with errors, omissions or delays that did not jeopardize mission accomplishment or cause injury or loss of life.
U	Practiced/performed emergency procedures with errors, omissions or delays that could jeopardize mission accomplishment or cause injury or loss of life.
AREA 15-TRANSFERRING STATION RESPONSIBILITIES	
Q	Established communications with relieving unit, verified link status, and ensured effective transfer of link responsibility to relieving aircraft was accomplished when applicable. Established priorities and coordinated responsibilities for tactical action in progress. Briefed relieving unit on appropriate information and air/ground situation. Confirmed relieving unit had assumed station responsibilities and directed termination of data links.
Q-	Transferred station responsibilities with errors, omissions, or delays that did not jeopardize mission accomplishment.
U	Transferred station responsibilities with errors, omissions, or delays that could jeopardize mission accomplishment.
AREA 16-ENROUTE INBOUND PROCEDURES	
Q	Coordinated with crew to terminate station operations and declared "Off-Station." Ensured external agencies were notified and debriefed as required. Directed termination of communications links. Directed transfer of sensors after determining requirement for system diagnostics. Directed technicians to perform diagnostics or power down and directed system shutdown. Collected diagnostics results, mission forms and logs, and reported maintenance status, monitored progress of and coordinated system health check completion and directed system power down.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Performed enroute inbound procedures with errors, omissions, or delays that did not jeopardize mission accomplishment.
U	Performed enroute inbound procedures with errors, omissions, or delays that could jeopardize mission accomplishment.
AREA 17-DESCENT AND LANDING	
Q	Directed mission crew to begin descent procedures and prepared for landing. Confirmed galley was secure and bunks were cleared and directed loose items be stowed. Confirmed mission crew was ready for landing.
Q-	Prepared mission crew for descent and landing procedures with errors, omissions, or delays that did not jeopardize mission accomplishment.
U	Prepared mission crew for descent and landing procedures with errors, omissions, or delays that could jeopardize mission accomplishment.
AREA 18-ENGINE SHUTDOWN	
Q	Ensured appropriate airplane cleanliness, safety and security measures were taken prior to departing the area. Ensured consoles and equipment were powered down. Directed shutdown of mission radios, radar and master PME switch. Coordinated with CST, AMSS, and FE, to transfer power. Monitored notification of disarming emergency slides.
Q-	Departed the aircraft with errors or omissions that did not jeopardize safety or result in a security deviation or compromise.
U	Departed the aircraft with errors or omissions that could jeopardize safety or result in a security deviation or compromise.
AREA 19-POST-MISSION RESPONSIBILITIES	
Q	Established priorities for equipment and classified material storage/destruction debriefings, and crew beddown. Debriefed maintenance and intelligence if required. Conducted operations debriefing with the crew. Completed, collected, and turned in all logs/forms/reports required by directives.
Q-	Accomplished post-mission responsibilities with errors or omissions that did not jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
U	Accomplished post-mission responsibilities with errors or omissions that could jeopardize mission accomplishment.
AREA 20-MISSION EXECUTION(CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner and accomplished mission objectives. Conducted the mission with a sense of understanding, situational awareness, and comprehension.
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.
U	Decisions or lack thereof, resulted in a failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that overall mission objectives were not achieved. Regulations/directives were violated.
AREA 21-RULES OF ENGAGEMENT (CRITICAL)	
Q	Implemented ROE for peacetime, transition, and wartime conditions. Understood theater ROE policies and procedures. Responded to ROE situations according to directives.
Q-	Implemented ROE procedures with errors or omissions that did not adversely effect completion of ROE actions.
U	Implemented ROE procedures with errors or omissions that could adversely effect completion of ROE actions.
AREA 22-SYSTEM KNOWLEDGE	
AREA 22a-RADAR	
Q	Understood radar capabilities, limitations and employment.
Q-	Minor errors in knowledge of radar, limitations, and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of radar systems, limitations, or performance characteristics.
AREA 22b-O&C	
Q	Had an understanding of the O&C subsystem and how it related to the radar and communications subsystems.
Q-	Minor errors in knowledge of O&C, limitations and performance. Deficiencies either in depth of knowledge or comprehension.

GRADE CATEGORIES	GRADING CRITERIA
U	Unsatisfactory knowledge of O&C, limitations, or performance characteristics.
AREA 22c-COMMUNICATIONS	
Q	Understood Internal/External communications capabilities and employment for operational missions.
Q-	Minor errors in knowledge of communications, limitations and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of communications, limitations, or performance characteristics.
AREA 23-HVAA PROCEDURES/RETROGRADE (CRITICAL)	
Q	Knew when to initiate retrograde procedures. Knew what steps to take during retrograde. Knew what threats to the aircraft exist in theater. Was familiar with counters to those threats.
Q-	Minor errors in knowledge of retrograde procedures or when to initiate them. Minor errors or deviations in steps taken during retrograde and identifying theater specific threats to the aircraft.
U	Failed to display knowledge of retrograde procedures and when to initiate them. Did not understand what steps to take during retrograde and did not correctly identify theater specific threats to the aircraft.
INSTRUCTOR CRITERIA The following areas are applicable to initial instructor upgrade/periodic instructor evaluations. Specific criteria are included in **Chapter 1**	
AREA 24-INSTRUCTIONAL ABILITY	
Q	Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

GRADE CATEGORIES	GRADING CRITERIA
AREA 25-BRIEFING/CRITIQUES	
Q	Briefings were well-organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrates the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Prebriefed the student's next mission.
Q-	Minor errors or omissions in briefings, critiques and/or training documents that did not affect student progress.
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete prebriefing of student's next mission.
AREA 26-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

Chapter 7

DEPUTY MISSION CREW COMMANDER EVALUATION REQUIREMENTS

7.1. General. This chapter contains the task oriented criteria for qualification/mission evaluations of a Deputy Mission Crew Commander (DMCC) and Instructor Deputy Mission Crew Commander (IDMCC).

7.1.1. Qualification evaluations will encompass all areas identified in the required evaluation table (see **Table 7.1.**). The examinee must demonstrate a degree of knowledge and proficiency essential for safety of flight.

7.1.2. Mission evaluations will encompass all areas identified in the required evaluation tables for the mission profile performed. The examinee must demonstrate a degree of knowledge and proficiency essential for successful mission accomplishment and safety of flight.

7.2. Evaluation Requirements. The examinee must demonstrate the ability to accomplish all DMCC and/or IDMCC duties safely, effectively, and in accordance with appropriate flight manuals, directives, and operating procedures.

7.2.1. Criteria. All areas in **Table 6.2.** will be graded using the grading policy in AFI 11-202V2 and any criteria listed within the individual areas.

7.2.2. Periodic Evaluations. Periodic evaluations will include all qualification and mission areas.

Table 7.1. Deputy Mission Crew Commander (DMCC) Required Grading Areas.

AREA	QUAL	MISSION	INSTR
AREA 1-AIRMANSHIP (CRITICAL)	R	R	
AREA 2-CREW COORDINATION/CRM (CRITICAL)	R**	R**	R
AREA 3-SAFETY (CRITICAL)	R	R	
AREA 4-MISSION PLANNING.	R	R	
AREA 5-BRIEFINGS/DEBRIEFINGS	R		
AREA 6-PERSONAL & PROFESSIONAL EQUIPMENT/PUBLICATIONS	R		
AREA 7-PREFLIGHT INSPECTIONS	R		
AREA 8-BEFORE START/TAXI	R		
AREA 9-AIR REFUELING PROCEDURES	R**		
AREA 10-SCDL SUPERVISION	R**		
AREA 11-COORDINATION	R**		
AREA 12-EQUIPMENT SET UP AND CHECKOUT	R		
AREA 13-CONSOLE OPERATIONS AND DISPLAYS	R**		

AREA	QUAL	MISSION	INSTR
AREA 14-COMMUNICATIONS SELECTION AND USE	R**		
AREA 15-EMERGENCY PROCEDURES (CRITICAL)	R	R	
AREA 16-STATION ASSUMPTION	R**		
AREA 17-TRANSFERRING STATION RESPONSIBILITIES	R**		
AREA 18-SENSOR MANAGEMENT SUPERVISION	R	R	
AREA 19-TACTICS		R	
AREA 20-TARGET AREA INFORMATION		R	
AREA 21 - POSTMISSION	R		
AREA 22-RESOURCE ALLOCATION		R**	
AREA 23-RADIO/TELEPHONE (R/T) PROCEDURES	R**		
AREA 24-MISSION EXECUTION(CRITICAL)		R	
AREA 25-RULES OF ENGAGEMENT (CRITICAL)		R**	
AREA 26-SYSTEM KNOWLEDGE		R**	
AREA 26a-RADAR		R**	
AREA 26b-O&C		R**	
AREA 26c-COMMUNICATIONS		R**	
AREA 27-HVAA PROCEDURES/ RETROGRADE (CRITICAL)		R**	
INSTRUCTOR CRITERIA			R
AREA 28-INSTRUCTIONAL ABILITY			R
AREA 29-BRIEFING/CRITIQUES			R
AREA 30-DEMONSTRATION AND PERFORMANCE			R

Table 7.2. Deputy Mission Crew Commander (DMCC) Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.
AREA 2-CREW COORDINATION/ CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay. Effective use or CRM.
Q-	Coordinated and/or reported with errors, omissions, misunderstandings, confusion or delays, which did not jeopardize mission accomplishment. CRM was the minimal acceptable.
U	Failed to coordinate. Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight and personal safety during all phases of the mission.
Q-	Minor errors or omissions that did not adversely affect safety of flight or personal safety.
U	Failed to ensure safety of flight or personal safety during all phases of the mission.
AREA 4-MISSION PLANNING	
Q	Conducted mission planning which accounted for known mission requirements, limitations, and approved operating procedures IAW directives. Understood theater C2 architecture.
Q-	Conducted mission planning with errors or omissions which did not jeopardize mission accomplishment.
U	Conducted mission planning with errors or omissions that could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 5-BRIEFINGS/ DEBRIEFINGS	
Q	Attended briefings/debriefings and extracted/provided all necessary information. Conducted briefings/debriefings in an organized, logical sequence IAW directives.
Q-	Attended briefings/debriefings and extracted/provided information or conducted briefings/debriefings with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to attend briefings/debriefings. Extracted/provided information or conducted briefings/debriefings with errors or omissions that could jeopardize mission accomplishment.
AREA 6-PERSONAL AND PROFESSIONAL EQUIPMENT/PUBLICATIONS	
Q	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition and posted publications IAW directives.
Q-	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition. Posted publications with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to posses all personal/professional equipment or to maintain equipment in serviceable condition. Posted publications with errors or omissions that could jeopardize mission accomplishment.
AREA 7-PREFLIGHT INSPECTIONS	
Q	Performed Preflight Inspection IAW directives and reported discrepancies.
Q-	Performed Preflight Inspection with errors or omissions that did not jeopardize mission accomplishment.
U	Performed Preflight Inspection with errors or omissions that could jeopardize mission accomplishment.
AREA 8-BEFORE START/TAXI	
Q	Performed engine start and taxi procedures according to directives. Configured communications on CMT panel and monitors nets and radios. Configured oxygen system and seat for takeoff following the checklist. Assigned and configured OWS for mission use.
Q-	Performed Before Start/Taxi procedures with errors or omissions that did not jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
U	Performed Before Start/Taxi procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 9-AIR REFUELING PROCEDURES	
Q	Performed Air Refueling Procedures IAW directives.
Q-	Performed Air Refueling Procedures with errors or omissions that do not jeopardize mission accomplishment.
U	Performed Air Refueling Procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 10-SCDL SUPERVISION	
Q	Ensured SCDL is configured to meet mission requirements.
Q-	SCDL Supervision met mission requirements; however, errors or omissions occurred which did not jeopardize mission accomplishment.
U	Failed to ensure SCDL operations met mission requirements. Supervision resulted in errors or omissions that could jeopardize mission accomplishment.
AREA 11-COORDINATION	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay.
Q-	Coordinated and/or reported with errors, omissions, misunderstandings, confusion or delays, which did not jeopardize mission accomplishment.
U	Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment.
AREA 12-EQUIPMENT SET UP AND CHECKOUT	
Q	Conducted, set up, check out, and ensured reporting of status of console, communications, and other operator tasked equipment to ensure operation was IAW directives.
Q-	Conducted equipment set up, check out, or status reporting with errors or omissions that did not jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
U	Conducted equipment set up, checkout, or status reporting with errors or omissions that could jeopardize mission accomplishment.
AREA 13-CONSOLE OPERATIONS AND DISPLAYS	
Q	Interpreted/initiated/updated data for computer displays, accomplished tabular display actions, and responded to alarms and alerts IAW directives.
Q-	Interpreted/initiated/updated data for computer displays, accomplished tabular display actions, and responded to alarms and alerts with errors or omissions that did not jeopardize mission accomplishment.
U	Interpreted/initiated/updated data for computer displays, accomplished tabular display actions, and responded to alarms and alerts with errors or omissions that could jeopardize mission accomplishment.
AREA 14-COMMUNICATIONS SELECTION AND USE	
Q	Conducts communications selection and operates equipment based on performance capabilities and mission tasking IAW directives.
Q-	Conducts communications selection and operates equipment based on performance capabilities and mission tasking with errors or omissions which do not jeopardize mission accomplishment.
U	Conducts communications selection and operates equipment based on performance capabilities and mission tasking with errors or omissions which could jeopardize mission accomplishment.
AREA 15-EMERGENCY PROCEDURES (CRITICAL)	
Q	Diagnosed emergency situations and implemented emergency procedures and equipment use IAW directives.
Q-	Diagnosed emergency situations and implemented emergency procedures and equipment use with errors or omissions which did not jeopardize mission accomplishment or resulted personal injury, loss of life, or damage to equipment.
U	Diagnosed emergency situations and implemented emergency procedures and equipment use with errors or omissions which could jeopardize mission accomplishment or resulted in personal injury, loss of life, or damage to equipment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 16-STATION ASSUMPTION	
Q	Ensured Army section had completed assigned tasks, as directed and assuming station requirements were accomplished IAW directives.
Q-	Army section had completed assigned tasks, as directed, with errors or omissions that did not jeopardize mission accomplishment.
U	Army section had completed assigned tasks, as directed, with errors or omissions that could jeopardize mission accomplishment.
AREA 17-TRANSFERRING STATION RESPONSIBILITIES	
Q	Ensured debrief of voice/data net participants, coordinated transfer of station responsibilities/tasks IAW directives.
Q-	Ensured debrief of voice/data net participants, coordinated transfer of station responsibilities/tasks with errors or omissions which did not jeopardize mission accomplishment.
U	Ensured debrief of voice/data net participants, coordinated transfer of station responsibilities/tasks with errors or omissions which could jeopardize mission accomplishment.
AREA 18-SENSOR MANAGEMENT SUPERVISION	
Q	Ensured radar timeline employed to accomplish mission tasking IAW directives. Recognized and reported degraded sensor performance. Requested sensor changes to optimize sensor presentation.
Q-	Ensures radar timeline employed to accomplish mission taskings, recognize and report degraded sensor performance with errors or omissions that do not jeopardize mission accomplishment.
U	Fails to ensure radar timeline employment priorities for accomplishment of mission tasking or recognize and report degraded sensor performance. Errors or omissions could jeopardize mission accomplishment.
AREA 19-TACTICS	
Q	Implemented tactics and techniques, which corroborated necessary crew and operations, section involvement, airframe employment, and mission execution.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Implemented tactics and techniques which corroborated necessary crew and operations section involvement, airframe employment, and mission execution with errors or omissions which do not jeopardize mission accomplishment.
U	Implemented tactics and techniques which corroborated necessary crew and operations section involvement, airframe employment, and mission execution with errors or omissions which could jeopardize mission accomplishment.
AREA 20-TARGET AREA INFORMATION	
Q	Ensured Attack Support to tactical objectives as needed, consistent with rules of engagement, operations plans, or battlestaff direction, and provided well-defined ground target briefings of either MTI, FTI or Radar Imaged objects.
Q-	Ensured Attack Support to tactical objectives as needed, consistent with rules of engagement, operations plans, or battlestaff direction, and provided well defined ground target briefings of either MTI, FTI or Radar Imaged objects with errors or omissions which did not jeopardize mission accomplishment.
U	Ensured Attack Support to tactical objectives as needed, consistent with rules of engagement, operations plans, or battle staff direction, and provides well defined ground target briefings of either MTI, FTI or Radar Imaged objects with errors or omissions which could jeopardize mission accomplishment.
AREA 21-POSTMISSION	
Q	Ensured reception, copy and relay of post-mission information to appropriate crew member or agency IAW directives.
Q-	Ensured reception, copy and relay of post-mission information to appropriate crewmember or agency with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to ensure reception, copy and relay of post-mission information to appropriate crewmember or agency. Errors or omissions could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 22-RESOURCE ALLOCATION	
Q	Ensured the correct employment of both onboard resources (i.e., systems and people) for internal E8 management and the battle management of the E8's products for all appropriate theater customers (i.e., GSMs, HHQs).
Q-	Ensured the correct employment of both onboard resources for internal E8 management and the battle management of the E8's products for all appropriate theater customers with errors or omissions that did not jeopardize mission accomplishment.
U	Ensured the correct employment of both onboard resources for internal E8 management and the battle management of the E8's products for all appropriate theater customers with errors or omissions that could jeopardize mission accomplishment.
AREA 23-RADIO/TELEPHONE (R/T) PROCEDURES	
Q	Employed R/T procedures IAW communications procedures. Used appropriate brevity and communications discipline.
Q-	Employed R/T procedures with errors or omissions that did not jeopardize mission accomplishment.
U	Employed R/T procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 24-MISSION EXECUTION (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner and accomplished mission objectives. Conducted the mission with a sense of understanding, situational awareness and comprehension.
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.
U	Decisions or lack thereof, resulted in a failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that overall mission objectives were not achieved. Regulations/directives were violated.

GRADE CATEGORIES	GRADING CRITERIA
AREA 25-RULES OF ENGAGEMENT (CRITICAL)	
Q	Implemented ROE for peacetime, transition, and wartime conditions. Understood theater ROE policies and procedures. Responded to ROE situations according to directives.
Q-	Implemented ROE procedures with errors or omissions that did not adversely effect completion of ROE actions.
U	Implemented ROE procedures with errors or omissions that could adversely effect completion of ROE actions.
AREA 26-SYSTEM KNOWLEDGE	
AREA 26a-RADAR	
Q	Understood radar capabilities, limitations and employment.
Q-	Minor errors in knowledge of radar, limitations, and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of radar systems, limitations, or performance characteristics.
AREA 26b-O&C	
Q	Had an understanding of the O&C subsystem and how it related to the radar and communications subsystems.
Q-	Minor errors in knowledge of O&C, limitations and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of O&C, limitations, or performance characteristics.
AREA 26c-COMMUNICATIONS	
Q	Understood Internal/External communications capabilities and employment for operational missions.
Q-	Minor errors in knowledge of communications, limitations and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of communications, limitations, or performance characteristics.
AREA 27-HVAA PROCEDURES/RETROGRADE (CRITICAL)	
Q	Knew when to initiate retrograde procedures. Knew what steps to take during retrograde. Knew what threats to the aircraft exist in theater. Was familiar with counters to those threats.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Minor errors in knowledge of retrograde procedures or when to initiate them. Minor errors or deviations in steps taken during retrograde and identifying theater specific threats to the aircraft.
U	Failed to display knowledge of retrograde procedures and when to initiate them. Did not understand what steps to take during retrograde and did not correctly identify theater specific threats to the aircraft.
INSTRUCTOR CRITERIA The following areas are applicable to initial instructor upgrade/periodic instructor evaluations. Specific criteria are included in **Chapter 1**	
AREA 28-INSTRUCTIONAL ABILITY	
Q	Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.
AREA 29-BRIEFING/CRITIQUES	
Q	Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrates the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Prebriefed the student's next mission.
Q-	Minor errors or omissions in briefings, critiques and/or training documents that did not affect student progress.
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete prebriefing of student's next mission.

GRADE CATEGORIES	GRADING CRITERIA
AREA 30-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedures and/or techniques. Did not or could not distinguish between procedures and techniques. Insufficient knowledge of aircraft systems, procedures, and/or applicable publications and regulations. These deviations could affect safety or adversely affect student progress.

Chapter 8

SENIOR DIRECTOR EVALUATION REQUIREMENTS

8.1. General. This chapter contains the task oriented criteria for qualification/mission evaluations of a Senior Director (SD) and Instructor Senior Director (ISD).

8.1.1. The SD evaluation includes both the qualification and the mission evaluation. These evaluations encompass all areas identified in the required evaluation areas (see **Table 8.1.**). All areas require a degree of knowledge/proficiency essential for successful mission accomplishment and to ensure safety of flight.

8.1.2. SD/ISD evaluations will be conducted on a live E-8 sortie with the examinee actively supervising (instructing) the operations section conduct surveillance and target attack support operations. Acceptability of required operations is based on the evaluator's determination that the objective of the evaluation has been met.

8.1.3. Completion of the SD evaluation will allow the individual to also perform duties as an AWO and SMO. Completion of the ISD evaluation will allow the individual to also instruct as an IAWO and ISMO.

8.2. Evaluation Requirements. The examinee must demonstrate the ability to accomplish all SD/ISD duties safely, effectively, and in accordance with appropriate flight manuals, directives, and operating procedures.

8.2.1. Periodic Evaluations. Periodic evaluations will include all qualification and mission areas.

Table 8.1. Senior Director (SD) Required Evaluation Areas.

AREAS	QUAL/MSN	INSTR
AREA 1-AIRMANSHIP (CRITICAL)	R	
AREA 2-CREW COORDINATION/CRM (CRITICAL)	R**	R
AREA 3-SAFETY (CRITICAL)	R	
AREA 4-EMERGENCY PROCEDURES (CRITICAL)	R	
AREA 5-MISSION PLANNING	R	
AREA 6-BRIEFINGS/DEBRIEFINGS	R	
AREA 7-PERSONAL AND PROFESSIONAL EQUIPMENT/PUBLICATIONS	R**	
AREA 8-PREFLIGHT INSPECTIONS	R	
AREA 9-ENROUTE/OUTBOUND PROCEDURES	R	
AREA 10-EQUIPMENT SET UP AND CHECKOUT	R	

AREAS	QUAL/MSN	INSTR
AREA 11-CONSOLE OPERATIONS AND DISPLAYS	R**	
AREA 12-STATION ASSUMPTION	R**	
AREA 13-TRANSFERRING STATION RESPONSIBILITIES	R**	
AREA 14-COMMUNICATIONS SELECTION AND USE	R**	
AREA 15-TACTICS	R**	
AREA 16-JTIDS OPERATIONS	R**	
AREA 17-OPSEC/COMSEC/ AUTHENTICATION PROCEDURES	R**	
AREA 18-OPERATIONS SECTION SUPERVISION (CRITICAL)	R**	
AREA 19-TARGET DEVELOPMENT	R	
AREA 20-ATTACK SUPPORT	R**	
AREA 21-SENSOR MANAGEMENT EXECUTION	R	
AREA 22-EW TACTICS	R	
AREA 23-POSTMISSION	R	
AREA 24-RESOURCE ALLOCATION	R**	
AREA 25-RADIO/TELEPHONE (R/T) PROCEDURES	R**	
AREA 26-MISSION EXECUTION (CRITICAL)	R**	
AREA 27-RULES OF ENGAGEMENT (CRITICAL)	R**	
AREA 28-SYSTEM KNOWLEDGE	R**	
AREA 28a-RADAR	R**	
AREA 28b-O&C	R**	
AREA 28c-COMMUNICATIONS	R**	
AREA 29-HVAA PROCEDURES/ RETROGRADE (CRITICAL)	R**	
INSTRUCTOR CRITERIA		R
AREA 30-INSTRUCTIONAL ABILITY		R
AREA 31-BRIEFINGS/CRITIQUES		R
AREA 32-DEMONSTRATION AND PERFORMANCE		R

Table 8.2. Senior Director (SD) Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension.
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.
AREA 2-CREW COORDINATION/CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay. Effective use or CRM.
Q-	Coordinated and/or reported with errors, omissions, misunderstandings, confusion or delays, which did not jeopardize mission accomplishment. CRM was the minimal acceptable.
U	Failed to coordinate. Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight and personal safety during all phases of the mission.
Q-	Minor errors or omissions that did not adversely affect safety of flight or personal safety.
U	Failed to ensure safety of flight or personal safety during all phases of the mission.
AREA 4-EMERGENCY PROCEDURES (CRITICAL)	
Q	Diagnosed emergency situations and implemented emergency procedures and equipment use IAW directives. Used checklist.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Diagnosed emergency situations and implemented emergency procedures and equipment use with delays, errors, or omissions which did not jeopardize mission accomplishment or result in personal injury, loss of life, or damage to equipment.
U	Failed to diagnose emergency situations and/or implemented emergency procedures and equipment use. Procedures contained delays, with errors or omissions that could jeopardize mission accomplishment or resulted in personal injury, loss of life, or damage to equipment.
AREA 5-MISSION PLANNING	
Q	Conducted mission planning which accounted for known mission requirements, limitations, integration into the theater C2 architecture and approved operating procedures. Assigned tasks to operations section. Mission planning may include, but is not limited to: Gather/extract/check mission data, accomplish assigned duties, determine mission database requirements, brief/identify mission tasks, identify/document communications requirements, coordinate with external agencies, perform/review summary brief.
Q-	Conducted mission planning with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to mission plan. Mission planning contained errors or omissions which could jeopardize mission accomplishment.
AREA 6-BRIEFINGS/DEBRIEFINGS	
Q	Attended briefings/debriefings and extracted/provided all necessary information. Conducted briefings/debriefings in an organized, logical sequence IAW directives. Conduct/review of briefs and debriefs may include but is not limited to: presentation, charity, review of mission package, crew employment, activity flow, responsibilities, radar employment, emergency procedures, administration and logs, degraded operations, area familiarization, C2 coordination, communications, lessons learned, airborne assignments.
Q-	Briefed/debriefed contain errors or omissions that did not jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
U	Failed to attend briefings/debriefings. Extracted/provided information or conducted briefings/debriefings with errors or omissions that could jeopardize mission accomplishment.
AREA 7-PERSONAL AND PROFESSIONAL EQUIPMENT/PUBLICATIONS	
Q	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition. Posts publications IAW directives.
Q-	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition. Posted publications contain errors or omissions that do not jeopardize mission accomplishment.
U	Failed to posses all personal/professional equipment or to maintain equipment in serviceable condition. Posted publications with errors or omissions that could jeopardize mission accomplishment.
AREA 8-PREFLIGHT INSPECTIONS	
Q	Performed correct and thorough preflight inspection. Supervised operations section preflight actions. Reported status of ops section.
Q-	Preflight Inspection or supervision contained errors or omissions that did not jeopardize mission accomplishment.
U	Failed to perform preflight inspection. Inspection contained errors or omissions that could jeopardize mission accomplishment. Failed to properly supervise ops section or report status.
AREA 9-ENROUTE/OUTBOUND PROCEDURES	
Q	Performed enroute outbound procedures IAW directives, briefed operations section and established external communications.
Q-	Outbound procedures were incomplete or incorrect; however, errors or omissions did not affect mission accomplishment.
U	Failed to perform outbound procedures. Outbound procedures contained errors or omissions that could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 10-EQUIPMENT SET UP AND CHECKOUT	
Q	Conducted set up, checkout, and ensured reporting of status of console, communications, and other operator-tasked equipment to ensure operation was IAW directives.
Q-	Conducted Equipment set up, checkout, or status reports contained reporting with errors or omissions which did not jeopardize mission accomplishment.
U	Failed to conduct equipment set up, checkout, or report status of equipment. Reporting contained errors or omissions that could jeopardize mission accomplishment.
AREA 11-CONSOLE OPERATIONS AND DISPLAYS	
Q	Interpreted/initiated/updated data for computer displays, accomplished tabular display and switch actions, and responded to alarms and alerts IAW directives.
Q-	Interpreted/initiated/updated data for computer displays, accomplished tabular display or switch actions, and responses to alarm and alert actions contained delays, with errors, or omissions which did not jeopardize mission accomplishment.
U	Failed to Interpret/initiate/update data for computer displays, or accomplish tabular display or switch actions. Failed to respond to alarms and alerts. Actions contained with errors or omissions that could jeopardize mission accomplishment.
AREA 12-STATION ASSUMPTION	
Q	Ensured operations section has completed assigned tasks, as directed, and station requirements were accomplished IAW directives.
Q-	Assuming station requirements were accomplished with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to ensure station requirements were accomplished. Requirements were accomplished with errors or omissions that could jeopardize mission accomplishment.
AREA 13-TRANSFERRING STATION RESPONSIBILITIES	
Q	Ensured debrief of voice/data net participants, coordinated transfer of station responsibilities/tasks IAW directives.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Debriefed voice/data net participants and coordinated transfer of station responsibilities/tasks contained errors or omissions that did not jeopardize mission accomplishment.
U	Failed to debrief voice/data net participants, coordinate transfer of station responsibilities/tasks or does so with errors or omissions which could jeopardize mission accomplishment.
AREA 14-COMMUNICATIONS SELECTION AND USE	
Q	Operated communications equipment correctly. Conducted communications selection based on mission tasking. Recommended radio changes in coordination with the CST. Prioritized, assigned, and ensured primary and secondary monitoring of internal and external communication nets by operations section.
Q-	Communications selection, equipment operation, or ops section supervision contained errors or omissions that did not jeopardize mission accomplishment.
U	Failed to select or operate communications equipment, or supervise operations section communications. Communications errors or omissions that could jeopardize mission accomplishment occur.
AREA 15-TACTICS	
Q	Implemented tactics that established necessary crew and operations section involvement, airframe employment, and mission execution.
Q-	Tactics employed contained errors or omissions which did not jeopardize mission accomplishment.
U	Failed to implement proper tactics. Tactics employed resulted in errors or omissions which could jeopardize mission accomplishment.
AREA 16-JTIDS OPERATIONS	
Q	Ensures JTIDS is configured to meet mission requirements.
Q-	JTIDS Supervision met mission requirements; however, errors or omissions occurred which did not jeopardize mission accomplishment.
U	Failed to ensure JTIDS operations met mission requirements. Supervision resulted in errors or omissions that could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 17-OPSEC/COMSEC/AUTHENTICATION PROCEDURES	
Q	Observed OPSEC/COMSEC requirements and conducted authentication procedures IAW directives.
Q-	OPSEC/COMSEC and authentication procedures contained errors or omissions that did not jeopardize mission accomplishment or result in a security deviation or compromise.
U	Failed to observe OPSEC/COMSEC and authentication procedures. Errors or omissions occur which could jeopardize mission accomplishment or result in a security deviation or compromise.
AREA 18-OPERATIONS SECTION SUPERVISION (CRITICAL)	
Q	Ensured operations section is employed to accomplish mission tasking. Implemented changes to optimize mission accomplishment. Considered systems usage when planning task accomplishment and attack support operations.
Q-	Supervision, or lack of, resulted in errors or omissions that did not jeopardize mission accomplishment.
U	Failed to ensure operations section employed to accomplish mission tasking. Errors or omissions could jeopardize mission accomplishment.
AREA 19-TARGET DEVELOPMENT	
Q	Recognized, described, and reported on assigned target areas and ensured results were recorded as assigned. Ensured the radar supports assigned tasks and understood how to use all system functions to extract information on the target area.
Q-	Did not utilize all available resources to conduct target development or development-contained errors or omissions. However, actions did not affect mission accomplishment.
U	Failed to correctly develop target or development-contained errors or omissions that could directly affect accomplishment of mission.
AREA 20-ATTACK SUPPORT	
Q	Interpreted target area information and ensured it is relayed in a timely and accurate manner, updated as required, and followed the briefed format for the supported weapons system.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Incorrectly interpreted and/or relayed target area information with errors, omissions, or delays which did not affect mission accomplishment.
U	Failed to correctly interpret or relay target area information or did so in a manner which directly impacted mission accomplishment.
AREA 21-SENSOR MANAGEMENT EXECUTION	
Q	Configured and optimized sensor systems and executed timeline management to accomplish assigned mission. Monitored sensor displays, recognized and reported degraded radar conditions. Coordinated with the AMSS, MCC, and SD. Identified and corrected sensor problems IAW applicable directives. Recognized and reported degraded sensor performance. Executed changes to optimize sensor presentation.
Q-	Configured and optimized sensor systems, executed timeline management to accomplish assigned mission with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to configure and/or optimize sensor systems or to execute timeline management to accomplish assigned mission. Errors or omissions could jeopardize mission accomplishment.
AREA 22-EW TACTICS	
Q	Knew purpose, function, and use of EP capabilities. Employed EP measures to counter EA effects IAW directives. Briefed/informed crew on EW occurrences and effects. Knew capabilities of EA systems
Q-	EP measures to counter EA effects and knowledge of EP capabilities contained errors or omissions that did not jeopardize mission accomplishment. Limited knowledge of effects or capabilities of EA systems.
U	Did not know purpose, function, or use of EP capabilities. Failed to employ EP measures to counter EA effects. Employment contained errors or omissions that could jeopardize mission accomplishment. No knowledge of effects or capabilities of EA systems.

GRADE CATEGORIES	GRADING CRITERIA
AREA 23-POSTMISSION	
Q	Ensured reception, copy and relay of post-mission information to appropriate crewmembers or agency. Signed off with external agencies, completed forms and logs, debriefed operations sections, secured area, participated in post flight debrief.
Q-	Post-mission information was incomplete or contained errors or omissions that did not jeopardize mission accomplishment.
U	Failed to ensure post mission duties were accomplished. Errors or omissions could jeopardize mission accomplishment.
AREA 24-RESOURCE ALLOCATION	
Q	Ensured correct employment of onboard resources (i.e., systems and people) for internal E-8 management and battle management of the E-8's products for all appropriate theater agencies.
Q-	Employment of onboard resources and battle management of the E-8's products contained errors or omissions that did not jeopardize mission accomplishment.
U	Failed to ensure the correct employment of onboard resources and battle management of the E8's products. Errors or omissions that could jeopardize mission accomplishment.
AREA 25-RADIO/TELEPHONE (R/T) PROCEDURES	
Q	Employed R/T procedures IAW AFI 11-214/ACC1, *Aircrew, Weapons Director, and Terminal Attack Controller Procedures for Air Operations*; AFTTP 3-1V30 (S), *Tactical Employment for JOINT STARS* (U) (pending publication); and/or allied communications procedures. Used appropriate brevity and communications discipline.
Q-	R/T procedures contained errors or omissions that did not jeopardize mission accomplishment.
U	Failed to employ proper R/T procedures or did so with errors or omissions which could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 26-MISSION EXECUTION(CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner and accomplished mission objectives. Conducted the mission with a sense of understanding, situational awareness and comprehension.
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.
U	Decisions or lack thereof, resulted in a failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that overall mission objectives were not achieved. Regulations/directives were violated.
AREA 27-RULES OF ENGAGEMENT (CRITICAL)	
Q	Implemented ROE for peacetime, transition, and wartime conditions. Understood theater ROE policies and procedures. Responded to ROE situations according to directives.
Q-	Implemented ROE procedures with errors or omissions that did not adversely affect completion of ROE actions.
U	Implemented ROE procedures with errors or omissions that could adversely effect completion of ROE actions.
AREA 28-SYSTEM KNOWLEDGE	
AREA 28a-RADAR	
Q	Understood radar capabilities, limitations, and employment.
Q-	Minor errors in knowledge of radar, limitations, and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of radar systems, limitations, or performance characteristics.
AREA 28b-O&C	
Q	Had an understanding of the O&C subsystem and its relation to the radar and communications subsystems.
Q-	Minor errors in knowledge of O&C, limitations and performance. Deficiencies either in depth of knowledge or comprehension.

GRADE CATEGORIES	GRADING CRITERIA
U	Unsatisfactory knowledge of O&C, limitations, or performance characteristics.
AREA 28c-COMMUNICATIONS	
Q	Understood Internal/External communications capabilities and employment for operational missions.
Q-	Minor errors in knowledge of communications, limitations, and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of communications, limitations, or performance characteristics.
AREA 29-HVAA PROCEDURES/RETROGRADE (CRITICAL)	
Q	Knew when to initiate retrograde procedures. Knew what steps to take during retrograde. Knew what threats to the aircraft existed in theater. Was familiar with counters to those threats.
Q-	Minor errors in knowledge of retrograde procedures or when to initiate them. Minor errors or deviations in steps taken during retrograde and identifying theater specific threats to the aircraft.
U	Failed to display knowledge of retrograde procedures and when to initiate them. Did not understand what steps to take during retrograde and did not correctly identify theater specific threats to the aircraft.
INSTRUCTOR CRITERIA The following areas were applicable to initial instructor upgrade/periodic instructor evaluations. Specific criteria are included in **Chapter 1**	
AREA 30-INSTRUCTIONAL ABILITY	
Q	Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

GRADE CATEGORIES	GRADING CRITERIA
AREA 31-BRIEFING/CRITIQUES	
Q	Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrates the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Prebriefed the student's next mission.
Q-	Minor errors or omissions in briefings, critiques and/or training documents that did not affect student progress.
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete prebriefing of student's next mission.
AREA 32-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

Chapter 9

SENSOR MANAGEMENT OFFICER EVALUATION REQUIREMENTS

9.1. General. This chapter contains the task oriented criteria for qualification/mission evaluations of a Sensor Management Officer (SMO) and Instructor Sensor Management Officer (ISMO).

9.1.1. Qualification and mission evaluations encompass all areas identified in the required evaluation areas (see **Table 9.1.**). All areas require a degree of knowledge/proficiency essential for successful mission accomplishment and to ensure safety of flight.

9.1.2. SMO/ISMO evaluations will be conducted on a live E-8 sortie. The examinee will actively manage the E-8 sensor systems while the operations section conducts surveillance and target attack support operations. Acceptability of required operations would be based on the evaluator's determination that the evaluation objective has been met.

9.1.3. Completion of the SMO evaluation will allow the individual to also perform duties as an AWO. Completion of the ISMO evaluation will allow the individual to also instruct as an IAWO.

9.2. Evaluation Requirements. The examinee must demonstrate the ability to accomplish all SMO/ISMO duties safely, effectively, and in accordance with appropriate flight manuals, directives, and operating procedures.

9.2.1. Periodic Evaluations. Periodic evaluations will include all qualification and mission areas.

Table 9.1. Sensor Management Officer (SMO) Required Grading Areas.

AREA	QUAL	MSN	INSTR
AREA 1 - AIRMANSHIP (CRITICAL)	R	R	
AREA 2-CREW COORDINATION/CRM (CRITICAL)	R**	R**	R
AREA 3-SAFETY (CRITICAL)	R	R	
AREA 4-EMERGENCY PROCEDURES (CRITICAL)	R	R	
AREA 5-MISSION PLANNING	R	R	
AREA 6-PERSONAL AND PROFESSIONAL EQUIPMENT/PUBLICATIONS	R**		
AREA 7-PREFLIGHT INSPECTIONS	R		
AREA 8-EQUIPMENT SET UP AND CHECKOUT	R		
AREA 9-CONSOLE OPERATIONS AND DISPLAYS	R**		
AREA 10-COMMUNICATIONS SELECTION AND USE	R**		
AREA 11-OPSEC/COMSEC/ AUTHENTICATION PROCEDURES	R**	R	
AREA 12-ENROUTE PROCEDURES OUTBOUND	R		
AREA 13-TRANSFERRING STATION RESPONSIBILITIES	R**		

AREA	QUAL	MSN	INSTR
AREA 14-SENSOR MANAGEMENT EXECUTION (CRITICAL)	R	R	
AREA 15-EW TACTICS		R**	
AREA 16-TARGET DEVELOPMENT		R	
AREA 17-ATTACK SUPPORT		R**	
AREA 18-MISSION EXECUTION (CRITICAL)		R	
AREA 19-RULES OF ENGAGEMENT (CRITICAL)		R**	
AREA 20-SYSTEM KNOWLEDGE		R**	
AREA 20a-RADAR		R**	
AREA 20b-O&C		R**	
AREA 20c-COMMUNICATIONS		R**	
AREA 21-HVAA PROCEDURES/RETROGRADE (CRITICAL)		R**	
AREA 22-RADIO/TELEPHONE (R/T) PROCEDURES	R**	R**	
INSTRUCTOR CRITERIA			R
AREA 23-INSTRUCTIONAL ABILITY			R
AREA 24- BRIEFINGS/CRITIQUES			R
AREA 25-DEMONSTRATION AND PERFORMANCE			R

Table 9.2. Sensor Management Officer Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension.
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.

GRADE CATEGORIES	GRADING CRITERIA
AREA 2-CREW COORDINATION/CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay. Effective use or CRM.
Q-	Coordination contained errors, omissions, misunderstandings, confusion, or delays, which did not jeopardize mission accomplishment. CRM was the minimal acceptable.
U	Failed to coordinate and/or report. Errors, omissions, misunderstandings, confusion, or delays occurred which could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight and personal safety during all phases of the mission.
Q-	Minor errors or omissions that did not adversely affect safety of flight or personal safety.
U	Failed to ensure safety of flight or personal safety during all phases of the mission.
AREA 4-EMERGENCY PROCEDURES (CRITICAL)	
Q	Diagnosed emergency situations and implemented emergency procedures and equipment use IAW directives. Used checklist.
Q-	Diagnosed emergency situations and implemented emergency procedures and equipment use with delays, errors, or omissions which did not jeopardize mission accomplishment or resulted in personal injury, loss of life, or damage to equipment.
U	Failed to diagnose emergency situations and/or implement emergency procedures and equipment use. Procedures contained delays, with errors or omissions that could jeopardize mission accomplishment or result in personal injury, loss of life, or damage to equipment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 5-MISSION PLANNING	
Q	Planned/checked sensor employment based on mission requirements, limitations, approved operating procedures and other areas as assigned by the SD. Planned best possible orbit to optimize sensor. Planned/checked radar checkout, RSR revisit rates and priorities. Briefed crew on sensor considerations, default RSR parameters, and coordination. Understood theater C2 architecture.
Q-	Mission planning had errors or omissions which did not jeopardize mission accomplishment
U	Failed to attend mission planning. Incomplete mission planning with errors or omissions which could jeopardize mission accomplishment.
AREA 6-PERSONAL AND PROFESSIONAL EQUIPMENT/PUBLICATIONS	
Q	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition. Posted publications IAW directives.
Q-	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition. Posted publications containing errors or omissions that did not jeopardize mission accomplishment.
U	Failed to posses all personal/professional equipment or to maintain equipment in serviceable condition. Posted publications with errors or omissions that could jeopardize mission accomplishment.
AREA 7-PREFLIGHT INSPECTIONS	
Q	Performed Preflight Inspection IAW applicable publications.
Q-	Preflight Inspection contained errors or omissions that did not jeopardize mission accomplishment.
U	Failed to conduct preflight inspections. Preflight contains errors or omissions that could jeopardize mission accomplishment.
AREA 8-EQUIPMENT SET UP AND CHECKOUT	
Q	Conducted set up and checkout, of console, communications, and other operator equipment to ensure operation. Reported status as required.
Q-	Conducted incomplete equipment set up and/or checkout, or reported status with errors or omissions that did not jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
U	Failed to conduct equipment set up and checkout, or report status. Contained errors or omissions that could jeopardize mission accomplishment.
AREA 9-CONSOLE OPERATIONS AND DISPLAYS	
Q	Interpreted/initiated/updated data for computer displays, accomplished tabular display and switch actions, and responded to alarms and alerts IAW directives.
Q-	Interpreted/initiated/updated data for computer displays, accomplished tabular display or switch actions, and responses to alarm and alert actions contains delays, with errors, or omissions which did not jeopardize mission accomplishment.
U	Failed to interpret/initiate/updates data for computer displays, or accomplish tabular display or switch actions. Failed to respond to alarms and alerts. Actions contained with errors or omissions that could jeopardize mission accomplishment.
AREA 10-COMMUNICATIONS SELECTION AND USE	
Q	Operated communication equipment correctly. Set up communications IAW briefed requirements and mission tasking.
Q-	Operated communication equipment with delays or errors that did not affect mission accomplishment. Set up communications with errors or omissions that did not affect mission accomplishment.
U	Failed to operate communication equipment correctly. Set up communications improperly with errors or omissions that could affect mission accomplishment.
AREA 11-OPSEC/COMSEC/AUTHENTICATION PROCEDURES	
Q	Observed OPSEC/COMSEC requirements and conducted authentication procedures IAW directives.
Q-	OPSEC/COMSEC and authentication procedures contained errors or omissions that did not jeopardize mission accomplishment or result in a security deviation or compromise.
U	Failed to observe OPSEC/COMSEC and authentication procedures. Procedures contained errors or omissions that could jeopardize mission accomplishment or result in a security deviation or compromise.

GRADE CATEGORIES	GRADING CRITERIA
AREA 12-ENROUTE PROCEDURES OUTBOUND	
Q	Ensured sensor checkout and pre-station operations were completed. Assuming station requirements were accomplished IAW directives.
Q-	Sensor checkout and pre-station operations were incomplete, containing errors or omissions that did not jeopardize mission accomplishment. Assuming station requirements were accomplished with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to ensure sensor checkout and pre-station operations were completed, or contained errors or omissions that could jeopardize mission accomplishment. Assuming station requirements were not accomplished or contained errors or omissions that could jeopardize mission accomplishment.
AREA 13-TRANSFERRING STATION RESPONSIBILITIES	
Q	Ensured debrief of voice/data net participants, coordinated transfer of station responsibilities/tasks as assigned by the Senior Director and IAW directives.
Q-	Debriefed voice/data net participants, coordinated transfer of station responsibilities/tasks contained errors or omissions that did not jeopardize mission accomplishment.
U	Failed to ensure debrief of voice/data net participants or coordinate transfer of station responsibilities/tasks. Included errors or omissions that could jeopardize mission accomplishment.
AREA 14-SENSOR MANAGEMENT EXECUTION (CRITICAL)	
Q	Configured and optimized sensor systems and executed timeline management to accomplish assigned mission. Monitored sensor displays, recognized and reported degraded radar conditions. Coordinated with the AMSS, MCC and SD to identify and correct sensor problems and applicable directives. Recognized and reported degraded sensor performance. Executed sensor changes to optimize sensor presentation.
Q-	Configured and optimized sensor systems, executed timeline management to accomplish assigned mission with errors or omissions that did not jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
U	Failed to configure and/or optimize sensor systems or to execute timeline management to accomplish assigned mission. Errors or omissions could jeopardize mission accomplishment.
AREA 15-EW TACTICS	
Q	Knew purpose, function, and use of EP capabilities. Employed EP measures to counter EA effects IAW directives. Briefed/informed crew on EW occurrences and effects. Knew capabilities of EA systems
Q-	EP measures to counter EA effects and knowledge of EP capabilities contained errors or omissions that did not jeopardize mission accomplishment. Limited knowledge of effects or capabilities of EA systems.
U	Did not know purpose, function, or use of EP capabilities. Failed to employ EP measures to counter EA effects. Employment contained errors or omissions that could jeopardize mission accomplishment. No knowledge of effects or capabilities of EA systems.
AREA 16-TARGET DEVELOPMENT	
Q	Recognized, described, and reported on assigned target areas and ensured results were recorded as assigned. Ensured the radar supports assigned tasks and understood how to use all system functions to extract information on the target area.
Q-	Did not utilize all available resources to conduct target development and/or development-contained errors or omissions. However, actions did not affect mission accomplishment.
U	Failed to correctly develop target or development-contained errors or omissions that could directly affect accomplishment of mission.
AREA 17-ATTACK SUPPORT	
Q	Interpreted target area information and ensured it is relayed in a timely and accurate manner, updated as required, and followed the briefed format for the supported weapons system.
Q-	Incorrectly interpreted and/or relayed target area information with errors, omissions, or delays which did not affect mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
U	Failed to correctly interpret or relay target area information or did so in a manner which directly impacted mission accomplishment.
AREA 18-MISSION EXECUTION (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner and accomplished mission objectives. Conducted the mission with a sense of understanding, situational awareness and comprehension.
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.
U	Decisions or lack thereof, resulted in a failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that overall mission objectives were not achieved. Regulations/directives were violated.
AREA 19-RULES OF ENGAGEMENT (CRITICAL)	
Q	Implemented ROE for peacetime, transition, and wartime conditions. Understood theater ROE policies and procedures. Responded to ROE situations according to directives.
Q-	Implemented ROE procedures with errors or omissions that did not adversely effect completion of ROE actions.
U	Implemented ROE procedures with errors or omissions that could adversely effect completion of ROE actions.
AREA 20-SYSTEM KNOWLEDGE	
AREA 20a-RADAR	
Q	Understood radar capabilities, limitations and employment.
Q-	Minor errors in knowledge of radar, limitations, and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of radar systems, limitations, or performance characteristics.
AREA 20b-O&C	
Q	Had an understanding of the O&C subsystem and how it related to the radar and communications subsystems.
Q-	Minor errors in knowledge of O&C, limitations and performance. Deficiencies either in depth of knowledge or comprehension.

GRADE CATEGORIES	GRADING CRITERIA
U	Unsatisfactory knowledge of O&C, limitations, or performance characteristics.
AREA 20c-COMMUNICATIONS	
Q	Understood Internal/External communications capabilities and employment for operational missions.
Q-	Minor errors in knowledge of communications, limitations and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of communications, limitations, or performance characteristics.
AREA 21-HVAA PROCEDURES/RETROGRADE (CRITICAL)	
Q	Knew when to initiate retrograde procedures. Knew what steps to take during retrograde. Knew what threats to the aircraft exist in theater. Was familiar with counters to those threats.
Q-	Minor errors in knowledge of retrograde procedures or when to initiate them. Minor errors or deviations in steps taken during retrograde and identifying theater specific threats to the aircraft.
U	Failed to display knowledge of retrograde procedures and when to initiate them. Did not understand what steps to take during retrograde and did not correctly identify theater specific threats to the aircraft.
AREA 22-RADIO/TELEPHONE (R/T) PROCEDURES	
Q	Employed R/T procedures IAW AFI 11-214/ACC SUP 1 and AFI 3-1 and/or allied communications procedures. Used appropriate brevity and communications discipline.
Q-	R/T procedures contained errors or omissions that did not jeopardize mission accomplishment.
U	Failed to employ proper R/T procedures or did so with errors or omissions which could jeopardize mission accomplishment.
INSTRUCTOR CRITERIA The following areas are applicable to initial instructor upgrade/periodic instructor evaluations. Specific criteria are included in **Chapter 1**	
AREA 23-INSTRUCTIONAL ABILITY	
Q	Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.
AREA 24-BRIEFING/CRITIQUES	
Q	Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrates the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Prebriefed the student's next mission.
Q-	Minor errors or omissions in briefings, critiques and/or training documents that did not affect student progress.
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete prebriefing of student's next mission.
AREA 25-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

Chapter 10

AIRBORNE INTELLIGENCE OFFICER/ TECHNICIAN EVALUATION REQUIREMENTS

10.1. General. This chapter contains the task-oriented criteria for qualification/mission evaluations of an Airborne Intelligence Officer/Technician (AIO/AIT) and Instructor Airborne Intelligence Officer/ Technician (IAIO/IAIT).

10.1.1. Qualification and mission evaluations encompass all areas identified in the required evaluation areas (see **Table 10.1.**). All areas require a degree of knowledge/proficiency essential for successful mission accomplishment and safety of flight.

10.2. Evaluation Requirements. The examinee must demonstrate the ability to accomplish all AIO/ AIT, IAIO/IAIT duties safely, effectively, and in accordance with appropriate flight manuals, directives, and operating procedures.

10.2.1. Periodic Evaluations. Periodic evaluations will include all qualification and mission areas.

Table 10.1. Airborne Intelligence Officer/Technician (AIO/T) Required Grading Areas.

AREA	QUAL	MSN	INST
AREA 1-AIRMANSHIP (CRITICAL)	R	R	
AREA 2-CREW COORDINATION/CRM (CRITICAL)	R	R	R
AREA 3-SAFETY (CRITICAL)	R	R	
AREA 5-FLIGHT/MISSION PLANNING	R		
AREA 6-KNOWLEDGE OF DIRECTIVES	R**		
AREA 7-PREFLIGHT	R		
AREA 8-USE OF CHECKLIST	R**		
AREA 9-FORMS, REPORTS, AND LOGS	R**		
AREA 10-PERSONAL AND PROFESSIONAL EQUIPMENT/ PUBLICATIONS	R**		
AREA 11-MISSION BRIEFINGS	R		
AREA 12-MISSION PREFLIGHT	R		
AREA 13-PRE-TAKEOFF	R		
AREA 14-SYSTEMS KNOWLEDGE AND OPERATIONS	R**		
AREA 15-COMMUNICATIONS	R**		
AREA 16-MONITORS TACTICAL SITUATION	R**		
AREA 17-ORBIT CHANGEOVER	R**		
AREA 18-TARGETING CONSIDERATIONS	R**		

AREA	QUAL	MSN	INST
AREA 19-BEFORE LANDING	R		
AREA 20-POST FLIGHT	R		
AREA 21-SECURITY	R**	R**	
AREA 22-EMERGENCY PROCEDURES (CRITICAL)	R	R	
AREA 23-MISSION EXECUTION (CRITICAL)		R	
AREA 24-RULES OF ENGAGEMENT (CRITICAL)		R**	
AREA 25-SYSTEM KNOWLEDGE		R**	
AREA 25a-RADAR		R**	
AREA 25b-O&C		R**	
AREA 25c-COMMUNICATIONS		R**	
AREA 26-HVAA PROCEDURES/ RETROGRADE (CRITICAL)		R**	
INSTRUCTOR CRITERIA			R
AREA 27-INSTRUCTIONAL ABILITY			R
AREA 28-BRIEFING/CRITIQUES			R
AREA 29-DEMONSTRATION AND PERFORMANCE			R

Table 10.2. Airborne Intelligence Officer/Technician (AIO/T) Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.

GRADE CATEGORIES	GRADING CRITERIA
AREA 2-CREW COORDINATION/ CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay. Effective use or CRM.
Q-	Coordinated and/or reported with errors, omissions, misunderstandings, confusion or delays, which did not jeopardize mission accomplishment. CRM was the minimal acceptable.
U	Failed to coordinate. Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight and personal safety during all phases of the mission.
Q-	Minor errors or omissions that did not adversely affect safety of flight or personal safety.
U	Failed to ensure safety of flight or personal safety during all phases of the mission.
AREA 5-FLIGHT/MISSION PLANNING	
Q	Conducted/reviewed mission planning which accounted for known mission requirements, limitations, and approved operating procedures IAW directives. Aware of the available alternatives if unable to complete the flight/mission as planned.
Q-	Made minor errors or omissions that could have detracted from mission effectiveness.
U	Made major errors or omissions that would have prevented a safe or effective mission. Did not review or initial FCIF/MCIF.
AREA 6-KNOWLEDGE OF DIRECTIVES	
Q	Prepared and completed mission in compliance with existing regulations and directives. Demonstrated knowledge of operating procedures and restrictions and where to find them in the correct publications.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Minor deviations to established procedures. Unsure of some directives but could locate information in the appropriate publications. Any instances of non-compliance did not jeopardize safety.
U	Unaware of established 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.
AREA 7-PREFLIGHT	
Q	Completed all systems preflight/inspections IAW tech orders, checklists, and regulations.
Q-	Minor deviations from established systems preflight/inspection. Used individual technique instead of established procedure and was unaware of differences.
U	Failed to preflight critical component or could not conduct preflight/inspection correctly.
AREA 8-USE OF CHECKLIST	
Q	Consistently used the correct checklist and gave the correct response at the appropriate time throughout the mission.
Q-	Checklist responses were untimely and/or crewmember required continual prompting for correct responses.
U	Used incorrect checklist or consistently omitted checklist items. Unable to identify the correct checklist to use for a given situation. Did not complete checklist prior to the event.
AREA 9-FORMS, REPORTS, AND LOGS	
Q	All required forms and/or flight plans were complete, accurate, readable, accomplished on time and IAW applicable directives. Related an accurate debrief of significant events to applicable agencies (Intel, Weather, Maintenance, etc.)
Q-	Made minor errors on forms and/or flight plans not affecting conduct of the flight/mission. Incorrectly or incompletely reported some information due to minor errors, omissions, and/or deviations.
U	Did not accomplish required forms and/or flight plans. Omitted or incorrectly reported significant information due to major errors, omissions, and/or deviations.

GRADE CATEGORIES	GRADING CRITERIA
AREA 10-PERSONAL AND PROFESSIONAL EQUIPMENT/PUBLICATIONS	
Q	Had all required personal and professional equipment, including publications and forms. Displayed satisfactory knowledge of the care and use of such equipment and the contents of required publications. Publications were current and properly filed. Required equipment inspections were current.
Q-	Did not have all required personal/professional equipment or had limited knowledge of the use or the content of required publications. Publications were current but improperly filed.
U	Did not have required personal/professional equipment essential for the mission. Displayed unsatisfactory knowledge of the care and use of equipment or the content of required publications. Publications were not current. Required equipment inspections were overdue or equipment was unserviceable.
AREA 11-MISSION BRIEFINGS	
Q	When required, contributed to briefing content to assure all applicable information was included. Briefing content and sequence were in accordance with current directives. Briefing was presented in a professional military manner with appropriately organized graphic aids.
Q-	Allowed items pertinent but not critical to the mission to be omitted. Briefing was improperly structured or poorly organized. Demonstrated marginal preparation/planning. Briefing delivery was marginal.
U	Failed to attend required briefings. Allowed critical items to be omitted or did not correct erroneous information that could affect mission accomplishment. Briefing delivery was unsatisfactory.
AREA 12-MISSION PREFLIGHT	
Q	Demonstrated thorough knowledge of the status, operation and use of all applicable aircraft systems, life support equipment, and personal equipment. Thoroughly prepared the console for the mission. Recognized malfunctions and took proper corrective action.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Demonstrated limited knowledge of the status, operation or use of applicable aircraft systems, life support equipment, and personal equipment. Console was not completely prepared for the mission. Slow to recognize or uncertain of malfunction indications or proper corrective action.
U	Demonstrated inadequate knowledge of the status, operation or use of all applicable aircraft systems, life support equipment, and personal equipment to the point that the mission accomplishment was or could have been affected. Preparation of console was unsatisfactory or not accomplished.
AREA 13-PRE-TAKEOFF	
Q	Correctly accomplished before starting engines, before taxi, and before take off procedures. Complied with AC/MCC instructions.
Q-	Performed a limited accomplishment of required procedures. Unsure of AC/MCC instructions or made minor deviations from these instructions.
U	Failed to follow established procedures. Failed to comply with AC/MCC instructions.
AREA 14-SYSTEMS KNOWLEDGE AND OPERATIONS	
Q	Accomplished/supervised all required checks thoroughly and effectively. Displayed thorough knowledge of system components, operation, and limitations. Fully determined status of required systems. Recognized and analyzed malfunction indications and applied proper corrective action. Skillfully and effectively used the OWS (Operator Work Station) during all portions of the mission.
Q-	Accomplished/supervised all required checks with minor errors, omissions or deviations. Displayed limited knowledge of system components, operation and limitations. Slow to recognize or analyze malfunction indications resulting in unnecessary delays. Made errors while using the OWS or did not use the OWS to his/her advantage.

GRADE CATEGORIES	GRADING CRITERIA
U	Failed to accomplish/supervise required checks or made major errors, omissions, or deviations in completing checks. Demonstrated unsatisfactory knowledge of system components, operation, or limitations. Failed to recognize or properly analyze malfunction indications or failed to apply corrective action. Lack of knowledge/ improper use of the OWS that adversely affected mission accomplishment.
AREA 15-COMMUNICATIONS	
Q	Monitored/employed radios and intercoms as necessary. Demonstrated proper radio procedures using brevity and correct terminology. Demonstrated thorough knowledge and operation of the CMT (Communication Management Terminal). Responded to all challenges/ instructions. Employed encryption/authentication systems correctly. Passed/relayed appropriate data to other agencies on Joint STARS monitored/controlled nets. Recognized radio malfunctions and took appropriate action in a timely manner.
Q-	Occasionally failed to respond to interphone or radio calls and/or used non-standard terminology and improper procedures. Occasionally interrupted other transmissions. Demonstrated limited knowledge about, or operation of the CMT. Demonstrated procedural errors in the use of encryption/authentication systems. Made lengthy transmissions and improperly practiced brevity. Slow in transmitting data to other agencies. Sloe to recognize radio malfunctions/problems and take appropriate action.
U	Failed to respond to essential interphone calls. Made excessive and lengthy transmissions that denied interphone or radio access to others with more essential information. Demonstrated unsatisfactory knowledge about or operation of the CMT. Rarely monitored radios or failed to employ them effectively. Improper use of encryption/authentication systems resulted in possible security compromise. Failed to pass appropriate data to other agencies. Unable to recognize radio malfunctions/ problems and failed to take appropriate action.

GRADE CATEGORIES	GRADING CRITERIA
AREA 16-MONITORS TACTICAL SITUATION	
Q	Correlated intelligence and operations inputs to remain abreast of the tactical situation. Extracted relevant information from datalink sources, radar data, and communication nets, enhancing crew situational awareness. Ensured intelligence in the OS was current and accurate. Correctly analyzed all incoming information and disseminated appropriate data to other crewmembers and outside agencies, based on mission priorities. Provided effective support and/or direction to assets relying on Joint STARS for threat warning, targeting updates, and related services.
Q-	Unable to correlate all intelligence and operations inputs to remain abreast of the tactical situation. Situational awareness was degraded, resulting in minor errors or delays in the analysis and dissemination of critical information. Made minor errors in extracting or correlating information from data link sources, radar data, and communication nets, directly decreasing crew awareness of significant events/potential threats. Intelligence data entered into the OWS contained minor mistakes in plotting/posting, causing confusion and/or decreased situational awareness. Minor delays in providing threat warning, targeting updates, or other information to assets working with/directed by Joint STARS.
U	Failed to remain sufficiently abreast of tactical situation. Ignored critical events or threat systems that directly impacted mission effectiveness. Unable to correlate/extract information from data link sources, radar data, and communication nets, causing major degradation in mission effectiveness and/or crew situational awareness. Made critical errors/omissions in plotting/posting of intelligence data in the OWS, directly degrading mission effectiveness. Critical data not passed in a timely manner to other crewmembers and/or other agencies. Failed to pass required information to associated platforms, resulting in lost opportunities for threat suppression and/or endangerment of valuable resources.

GRADE CATEGORIES	GRADING CRITERIA
AREA 17-ORBIT CHANGEOVER	
Q	Inbriefs were completed quickly and efficiently, and all pertinent information was plotted, posted, and relayed to the mission crew. Hard copy debrief was accurate and complete to the maximum extent possible. Verbal debrief was provided at the appropriate time and contained all necessary information. Questions from oncoming Joint STARS crew were answered quickly and accurately.
Q-	Inbriefs were lengthy and delayed assumption of orbit unnecessarily, or were too brief/shallow failing to provide all needed information for orbit assumption. Hard copy debrief contained minor errors/omissions that were not corrected on verbal debrief. Verbal debrief was excessive long/short, or redundant from hard copy report. Answers to questions from oncoming Joint STARS crew handled slowly, delaying orbit turnover.
U	Inbriefs were not completed, and mission crew/flight deck crew did not receive critical information, directly degrading mission effectiveness. Hard copy debrief contained major/mission critical errors that were not corrected on verbal debrief. Verbal debrief was excessively long (delaying orbit changeover), or failed to provide critical information for oncoming crew, impacting their ability to effectively prosecute the next Joint STARS mission.
AREA 18-TARGETING CONSIDERATIONS	
Q	Familiar with targeting guidance/considerations passed by higher echelons (Air Component Commander, Ground Component Commander, Joint Task Force Commander, etc.). Correctly advised MCC on target priorities for allocation of lethal and non-lethal resources in a timely manner. Prioritized and coordinated fleeting target nominations and approvals in an effective, timely manner, allowing targeting assets to be struck before being brought to bear against friendly forces.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Failed to properly prioritize fleeting targets for servicing, although a complete list of significant targets with target descriptions was available. Occasionally slow in coordination of target approvals, or advising MCC on target priorities for allocation of lethal and non-lethal assets. Delays in providing AOC with target nominations made/approved by MCC.
U	Unfamiliar with targeting guidance/priorities passed from higher headquarters. Failed to nominate viable fleeting target for servicing, using lethal/non-lethal means. Unclear on level of authority required for approval of fleeting targets, or changes in approval authority passed during the mission. Allowed assets from potential fleeting target to strike friendly forces, resulting in significant degradation of friendly capabilities. Made major mistakes in posting fleeting targets, resulting in targeting of the wrong location, or incorrect target elements.
AREA 19-BEFORE LANDING	
Q	Satisfactorily accomplished or supervised required checklist actions.
Q-	Accomplished or supervised required checklist actions with minor deviations or errors.
U	Failed to complete or supervise required checklist actions.
AREA 20-POST FLIGHT	
Q	Thoroughly accomplished post flight duties. Shutdown all equipment and stowed gear properly. All debriefing requirements were complete. Classified materials and waste were properly controlled and disposed.
Q-	Made minor deviations in shutdown/stowage of equipment that would not cause equipment damage. Debriefing requirements were incomplete.
U	Improperly shutdown/stowed equipment in a way that could have resulted in damage. Classified material/ waste ere improperly controlled/disposed. Failed to accomplish debriefing requirements.

GRADE CATEGORIES	GRADING CRITERIA
AREA 21-SECURITY	
Q	Demonstrated satisfactory knowledge of security procedures. Examinee had positive control of classified documents and information used by the intelligence section. Properly handled, stored or destroyed all classified waste generated during the mission. Practiced sound OPSEC during all phases of the mission.
Q-	Limited knowledge of security procedures. Examinee did not have continuous control of classified documents and information used by the intelligence section (but no compromise of classified information). Improperly handled, stored, or destroyed classified waste. OPSEC not followed during all phases, but no impact on mission accomplishment.
U	Knowledge of security procedures was inadequate. Classified documents or information would have been compromised as a result of improper control by examinee. Unfamiliar with OPSEC procedures that could have impacted on mission accomplishment.
AREA 22-EMERGENCY PROCEDURES (CRITICAL)	
Q	Correctly analyzed, stated, and understood aircraft emergencies and performed required procedures to correct the emergency. Described the location, use, and limitations of emergency equipment.
Q-	Correctly analyzed and understood aircraft emergencies but had difficulty stating the Emergency Procedure. Performed required procedures to correct the emergency. Minor omissions or deviations in describing the location, use, or limitations of emergency equipment.
U	Failed to analyze, state, and did not understand aircraft emergencies and/or could not perform required procedures to correct the emergency. Major omissions or deviations in describing the location, use, or limitations of emergency equipment.
AREA 23-MISSION EXECUTION (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner and accomplished mission objectives. Conducted the mission with a sense of understanding, situational awareness and comprehension.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.
U	Decisions or lack thereof, resulted in a failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that overall mission objectives were not achieved. Regulations/directives were violated.
AREA 24-RULES OF ENGAGEMENT (CRITICAL)	
Q	Implemented ROE for peacetime, transition, and wartime conditions. Understood theater ROE policies and procedures. Responded to ROE situations according to directives.
Q-	Implemented ROE procedures with errors or omissions that did not adversely affect completion of ROE actions.
U	Implemented ROE procedures with errors or omissions that could adversely effect completion of ROE actions.
AREA 25-SYSTEM KNOWLEDGE	
AREA 25a-RADAR	
Q	Understood major components and identified single points of failure.
Q-	Minor errors in knowledge of radar, limitations, and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of radar systems, limitations, or performance characteristics.
AREA 25b-O&C	
Q	Had an understanding of the O&C subsystem and how it related to the radar and communications subsystems.
Q-	Minor errors in knowledge of O&C, limitations and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of O&C, limitations, or performance characteristics.
AREA 25c-COMMUNICATIONS	
Q	Understood internal/external communications capabilities and employment for operational missions.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Minor errors in knowledge of communications, limitations and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of communications, limitations, or performance characteristics.
AREA 26-HVAA PROCEDURES/RETROGRADE (CRITICAL)	
Q	Knew when to initiate retrograde procedures. Knew what steps to take during retrograde. Knew what threats to the aircraft exist in theater. Was familiar with counters to those threats.
Q-	Minor errors in knowledge of retrograde procedures or when to initiate them. Minor errors or deviations in steps taken during retrograde and identifying theater specific threats to the aircraft.
U	Failed to display knowledge of retrograde procedures and when to initiate them. Did not understand what steps to take during retrograde and did not correctly identify theater specific threats to the aircraft.
INSTRUCTOR CRITERIA The following areas are applicable to initial instructor upgrade/periodic instructor evaluations. Specific criteria are included in **Chapter 1**.	
AREA 27-INSTRUCTIONAL ABILITY	
Q	Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Unable to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.
AREA 28-BRIEFING/CRITIQUES	
Q	Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrates the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Prebriefed the student's next mission.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Minor errors or omissions in briefings, critiques and/or training documents that did not affect student progress.
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete prebriefing of student's next mission.
AREA 29-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

Chapter 11

SENIOR DIRECTOR TECHNICIAN EVALUATION REQUIREMENTS

11.1. General. This chapter contains the task-oriented criteria for qualification/mission evaluations of a Senior Director Technician (SDT) and Instructor Senior Director Technician (ISDT).

11.1.1. Qualification and mission evaluations encompass all areas identified in the required evaluation areas (see **Table 11.1.**). All areas require a degree of knowledge/proficiency essential for successful mission accomplishment and safety of flight.

11.1.2. Completion of the SDT evaluation will allow the individual to also perform duties as an AOT. Completion of the ISDT evaluation will allow the individual to also instruct as an IAOT.

11.2. Evaluation Requirements. The examinee must demonstrate the ability to accomplish all SDT/ISDT duties safely, effectively, and in accordance with appropriate flight manuals, directives, and operating procedures.

11.2.1. Periodic Evaluations. Periodic evaluations will include all qualification and mission areas.

Table 11.1. Senior Director Technician (SDT) Required Grading Areas.

AREA	QUAL/MSN	INST
AREA 1-AIRMANSHIP (CRITICAL)	R	
AREA 2-CREW COORDINATION/ CRM(CRITICAL)	R	R
AREA 3-SAFETY (CRITICAL)	R	
AREA 4-MISSION PLANNING	R	
AREA 5- PREMISSION REQUIREMENTS/PUBLICATIONS	R	
AREA 6-PREFLIGHT INSPECTION	R	
AREA 7-COMMUNICATIONS/COORDINATION	R**	
AREA 8-CONSOLE OPERATIONS AND DISPLAYS	R**	
AREA 8a-PROCESS TRACK	R**	
AREA 8b-PROCESS RSR	R**	
AREA 8c-PROCESS OB	R**	
AREA 8d-PROCESS JAMMER/EA-EP	R**	
AREA 8e-DISPLAY OPTIONS	R**	
AREA 9-OPSEC/COMSEC AND AUTHENTICATION	R**	
AREA 10-EMERGENCY PROCEDURES (CRITICAL)	R	
AREA 11-AREA SURV/TARGET PROSECUTION	R**	

AREA	QUAL/MSN	INST
AREA 12-STATION TRANSFER/INBOUND PROCEDURES	R**	
AREA 13-DESCENT/BEFORE LEAVING AIRCRAFT PROCEDURES	R**	
AREA 14-MISSION EXECUTION (CRITICAL)	R**	
AREA 15-SYSTEM KNOWLEDGE	R**	
AREA 15a-RADAR	R**	
AREA 15b-O&C	R**	
AREA 15c-COMMUNICATIONS	R**	
AREA 16 RULES OF ENGAGEMENT (CRITICAL)	R**	
AREA 17-HVAA PROCEDURES/RETROGRADE (CRITICAL)	R**	
AREA 18-OPERATIONS SECTION MANAGEMENT (CRITICAL)	R**	
INSTRUCTOR CRITERIA		R
AREA 19-INSTRUCTIONAL ABILITY		R
AREA 20-BRIEFING/CRITIQUES		R
AREA 21-DEMONSTRATION AND PERFORMANCE		R

Table 11.2. Senior Director Technician (SDT) Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension.
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.

GRADE CATEGORIES	GRADING CRITERIA
AREA 2-CREW COORDINATION/CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay. Effective use or CRM.
Q-	Coordinated and/or reported with errors, omissions, misunderstandings, confusion or delays, which did not jeopardize mission accomplishment. CRM was the minimal acceptable.
U	Failed to coordinate. Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight and personal safety during all phases of the mission.
Q-	Minor errors or omissions that did not adversely affect safety of flight or personal safety.
U	Failed to ensure safety of flight or personal safety during all phases of the mission.
AREA 4-MISSION PLANNING	
Q	Conducted/reviewed mission planning which accounted for known mission requirements, limitations, and approved operating procedures IAW directives. Understood theater C2 architecture. Mission planning may include, but is not limited to gather/extract/check mission data, accomplish assigned duties, determine mission database requirements, brief/identify mission task, identify/document communication requirements, coordinate with external agencies, perform summary brief.
Q-	Conducted/reviewed mission planning with errors or omissions which did not jeopardize mission accomplishment
U	Conducted/reviewed mission planning with errors or omissions which could jeopardize mission accomplishment

GRADE CATEGORIES	GRADING CRITERIA
AREA 5-PREMISSION REQUIREMENTS/PUBLICATIONS	
Q	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition and properly posted publications.
Q-	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition. Posted publications with minimal errors or omissions and no degradation of mission accomplishment.
U	Failed to possess all personal/professional equipment or to maintain equipment in serviceable condition. Posted publications with errors or omissions that could jeopardize mission accomplishment.
AREA 6-PREFLIGHT INSPECTION	
Q	Performed Preflight Inspection IAW 1E-8C-43-1-2.
Q-	Performed Preflight Inspection with minimal errors or omissions and no degradation of mission accomplishment.
U	Performed Preflight Inspection with errors or omissions that could jeopardize mission accomplishment.
AREA 7-COMMUNICATIONS/ COORDINATION	
Q	Effectively identified all assigned radio frequencies. Transmitted and received data link and voice messages. Disseminated surveillance data among mission crew and external agencies, utilizing proper R/T procedures and brevity without confusion or delay.
Q-	Communicated and/or coordinated with minimal errors, omissions, misunderstanding, confusion, delays and/or employed improper R/T procedures and no degradation of mission accomplishment
U	Communicated and/or coordinated with errors, omissions, misunderstanding, confusion, delays and/or employed improper R/T procedures that could jeopardize mission accomplishment.
AREA 8-CONSOLE OPERATIONS AND DISPLAYS	
AREA 8a-PROCESS TRACK	
Q	Interpreted/initiated/modified PROC TRK display data and associated switch actions/TDs. Responded to alerts and error messages.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Interpreted/initiated/modified PROC TRK display data, accomplished switch actions, or responds to alerts and error messages with minimal errors or omissions with no degradation of mission accomplishment.
U	Interpreted/initiated/modified PROC TRK display data, accomplished switch actions, or responded to alerts and error messages with errors or omissions which could jeopardize mission accomplishment.
AREA 8b PROCESS RSR	
Q	Interpreted/initiated/modified PROC RSR display data and associated switch actions/TDs. Responded to alerts and error messages.
Q-	Interpreted/initiated/modified PROC RSR display data, accomplished switch actions, or responded to alerts and error messages with minimal errors or omissions with no degradation of mission accomplishment.
U	Interpreted/initiated/modified PROC RSR display data, accomplished switch actions, or responded to alert and error messages with errors and omissions which could jeopardize mission accomplishments.
AREA 8c PROCESS OB	
Q	Effectively interpreted/initiated/modified PROC OB display data, and associated switch actions/TDs. Responded to alerts and error messages.
Q-	Interpreted/initiated/modified PROC OB display data, accomplished switch actions, or responded to alerts and error messages with minimal errors or omissions with no degradation to mission accomplishments.
U	Interpreted/initiated/modified PROC OB display data, accomplished switch actions, or responded to alert and error messages with errors and omissions which could jeopardize mission accomplishment.
AREA 8d PROCESS JAMMER/EA-EP	
Q	Effectively interpreted/initiated/modified PROC JMR display data and associated switch actions/TDs and employed proper EP procedures.
Q-	Interpreted/initiated/modified PROC JMR display data, accomplished switch actions/TDs, and employed EP procedures with minimal errors or omissions with no degradation to mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
U	Interpreted/initiated/modified PROC JMR display data, accomplished switch actions/TDs and employed EP procedures with errors and omissions which could jeopardize mission accomplishment
AREA 8e DISPLAY OPTIONS	
Q	Understand and effectively update all available display option TDs, and effectively utilize History Playback for optimal MTI display.
Q-	Updated available display option TDs and utilized History Playback with minimal errors or omissions with no degradation to mission accomplishment.
U	Failed to understand and effectively update display option TDs, and effectively utilize History Playback which could jeopardize mission accomplishment.
AREA 9-OPSEC/COMSEC AND AUTHENTICATION PROCEDURES	
Q	Protected, planned and operated using established OPSEC/COMSEC procedures when using communications equipment and/or handling classified material. Properly employed authentication devices and procedures.
Q-	Conducted OPSEC/COMSEC and/or authentication procedures with minimal errors or omissions and no degradation of mission accomplishment or result in a security deviation or compromise.
U	Conducted OPSEC/COMSEC and/or authentication procedures with errors or omissions that could jeopardize mission accomplishment or result in a security deviation or compromise.
AREA 10-EMERGENCY PROCEDURES (CRITICAL)	
Q	Responded to emergency situations and accomplished emergency procedures and equipment use IAW T.O. 1E-8C-43-1-2.
Q-	Responded to emergency situations or accomplished emergency procedures and equipment use with errors or omissions which did not result in personal injury, loss of life, or damage to equipment.
U	Responded to emergency situations or accomplished emergency procedures and equipment use with errors or omissions which could result in personal injury, loss of life, or damage to equipment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 11-AREA SURVEILLANCE/TARGET PROSECUTION	
Q	Understood requirements, knew sources, and processed for area surveillance and target prosecution from the JSTARS platform.
Q-	Accomplished area surveillance and target prosecution with minimal errors or omissions and no degradation to mission accomplishment.
U	Failed to understand requirements, knew sources, and procedures for area surveillance and target prosecution which could jeopardize mission accomplishment.
AREA 12-STATION TRANSFER/INBOUND PROCEDURES	
Q	Performed the transfer/termination of station responsibilities and mission systems IAW current directives.
Q-	Performed the transfer/termination of station responsibilities, mission systems and the completion of logs, reports, and forms with minimal errors or omissions and no degradation of mission accomplishment.
U	Performed the transfer/termination of station responsibilities, mission systems and the completion of logs, reports, and forms with errors or omissions which could jeopardize mission accomplishment.
AREA 13-DESCENT/BEFORE LEAVING AIRCRAFT PROCEDURES	
Q	Performed Descent/Before Leaving Aircraft Procedures IAW T.O. 1E-8C-43-1-2 and directives.
Q-	Performed Descent/Before Leaving Aircraft Procedures with minimal errors or omissions and no degradation of mission accomplishment.
U	Performed Descent/Before Leaving Aircraft Procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 14-MISSION EXECUTION (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner and accomplished mission objectives. Conducted the mission with a sense of understanding, situational awareness and comprehension.
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.

GRADE CATEGORIES	GRADING CRITERIA
U	Decisions or lack thereof, resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that overall mission objectives were not achieved. Regulations/directives were violated.
AREA 15-SYSTEM KNOWLEDGE	
AREA 15a-RADAR	
Q	Understanding/knowledge of the radar system, limitations, and performance, characteristics
Q-	Minor errors in knowledge of radar system, limitations, and performance characteristics.
U	Unsatisfactory knowledge of radar systems, limitations, and performance characteristics.
AREA 15b-O&C	
Q	Had an understanding of the O&C subsystem and how it related to the radar and communications subsystems.
Q-	Minor errors in knowledge of O&C, limitations and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of O&C, limitations, or performance characteristics.
AREA 15c-COMMUNICATIONS	
Q	Knowledge and performance of communication system capabilities/limitations to include HF, VHF, UHF, SATCOM and Data Links.
Q-	Minor errors in knowledge and performance of communication system capabilities/limitations.
U	Unsatisfactory knowledge and performance of communication system capabilities/limitations.
AREA 16-RULES OF ENGAGEMENT (CRITICAL)	
Q	Implemented ROE for peacetime, transition, and wartime conditions. Understood theater ROE policies and procedures. Responded to ROE situations according to directives.
Q-	Implemented ROE procedures with errors or omissions that did not adversely effect completion of ROE actions.
U	Implemented ROE procedures with errors or omissions that could adversely effect completion of ROE actions.

GRADE CATEGORIES	GRADING CRITERIA
AREA 17-HVAA PROCEDURES/RETROGRADE (CRITICAL)	
Q	Knew when to initiate retrograde procedures. Knew what steps to take during retrograde. Knew what threats to the aircraft exist in theater. Was familiar with counters to those threats.
Q-	Minor errors in knowledge of retrograde procedures or when to initiate them. Minor errors or deviations in steps taken during retrograde and identifying theater specific threats to the aircraft.
U	Failed to display knowledge of retrograde procedures and when to initiate them. Did not understand what steps to take during retrograde and did not correctly identify theater specific threats to the aircraft.
AREA 18-OPERATIONS SECTION MANAGEMENT (CRITICAL)	
Q	As directed by the SD efficiently conduct section management without delay and confusion to include: communications, impact of degraded operations, monitor database, assign duties, coordination with external agencies, enforce ROE, and employ assets to meet command directives.
Q-	Conducted section management with errors or omissions that did not jeopardize mission accomplishment.
U	Conducted section management with errors or omissions that could jeopardize mission accomplishment.
INSTRUCTOR CRITERIA The following areas are applicable to initial instructor upgrade/periodic instructor evaluations. Specific criteria are included in **Chapter 1**.	
AREA 19-INSTRUCTIONAL ABILITY	
Q	Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

GRADE CATEGORIES	GRADING CRITERIA
AREA 20-BRIEFING/CRITIQUES	
Q	Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrates the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Prebriefed the student's next mission.
Q-	Minor errors or omissions in briefings, critiques and/or training documents that did not affect student progress.
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete prebriefing of student's next mission.
AREA 21-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

Chapter 12

AIR WEAPONS OFFICER EVALUATION REQUIREMENTS

12.1. General. This chapter contains the task oriented criteria for qualification/mission evaluations of a Air Weapons Officer (AWO) and Instructor Air Weapons Officer (IAWO).

12.1.1. Qualification and mission evaluations encompass all areas identified in the required evaluation areas (see **Table 12.1.**). All areas require a degree of knowledge/proficiency essential for successful mission accomplishment and to ensure safety of flight.

12.1.2. AWO/IAWO evaluations will be conducted on a live E-8 sortie while the examinee actively accomplishes live surveillance and target development/attack support operations. Acceptability of required operations would be based on the evaluator's determination that the evaluation objective has been met.

12.1.3. IAWO evaluations will assess the examinee's ability to instruct a student according to the criteria in areas 25 to 27.

12.2. Evaluation Requirements. The examinee must demonstrate the ability to accomplish all AWO duties safely, effectively, and in accordance with appropriate flight manuals, directives, and operating procedures.

12.2.1. Periodic Evaluations. Periodic evaluations will include all qualification and mission areas.

Table 12.1. Air Weapons Officer (AWO) Grading Areas.

AREA	QUAL	MSN	INSTR
AREA 1-AIRMANSHIP (CRITICAL)	R	R	
AREA 2-CREW COORDINATION/CRM (CRITICAL)	R	R	R
AREA 3-SAFETY (CRITICAL)	R	R	
AREA 4-EMERGENCY PROCEDURES (CRITICAL)	R	R	
AREA 5-MISSION PLANNING	R	R	
AREA 6-PERSONAL AND PROFESSIONAL EQUIPMENT/PUBLICATIONS	R**		
AREA 7-BRIEFINGS/DEBRIEFINGS	R**	R**	
AREA 8-PREFLIGHT INSPECTIONS	R		
AREA 9-EQUIPMENT SET UP AND CHECKOUT	R		
AREA 10-CONSOLE OPERATIONS AND DISPLAYS	R**		
AREA 11-COMMUNICATIONS SELECTION AND USE	R**		

AREA	QUAL	MSN	INSTR
AREA 12- OPSEC/COMSEC/ AUTHENTICATION PROCEDURES	R**	R**	
AREA 13-TARGET DEVELOPMENT (CRITICAL)	R	R	
AREA 14-ATTACK SUPPORT (CRITICAL)	R**	R**	
AREA 15-POST MISSION	R		
AREA 16-RADIO/TELEPHONE (R/T) PROCEDURES	R**		
AREA 17-MISSION EXECUTION (CRITICAL)		R	
AREA 18-RULES OF ENGAGEMENT (CRITICAL)		R**	
AREA 19-SYSTEM KNOWLEDGE		R**	
AREA 19a-RADAR		R**	
AREA 19b-O&C		R**	
AREA 19c-COMMUNICATIONS		R**	
AREA 20-HVAA PROCEDURES/ RETROGRADE (CRITICAL)		R**	
INSTRUCTOR AREAS			R
AREA 21-INSTRUCTIONAL ABILITY			R
AREA 22-BRIEFINGS/CRITIQUES			R
AREA 23-DEMONSTRATION AND PERFORMANCE			R
**May be evaluated by alternate means.			

Table 12.2. Air Weapons Officer (AWO) Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension.
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.

GRADE CATEGORIES	GRADING CRITERIA
AREA 2-CREW COORDINATION/CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay. Effective use or CRM.
Q-	Coordinated and/or reported with errors, omissions, misunderstandings, confusion or delays, which did not jeopardize mission accomplishment. CRM was the minimal acceptable.
U	Failed to coordinate and/or reported with errors, omissions, misunderstandings, confusion, or delays which could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight and personal safety during all phases of the mission.
Q-	Minor errors or omissions that did not adversely affect safety of flight or personal safety.
U	Failed to ensure safety of flight or personal safety during all phases of the mission.
AREA 4-EMERGENCY PROCEDURES (CRITICAL)	
Q	Diagnosed emergency situations and implemented emergency procedures and equipment use IAW directives.
Q-	Diagnosed emergency situations and implemented emergency procedures and equipment use with delays, errors or omissions which did not jeopardized mission accomplishment or resulted in personal injury, loss of life, or damage to equipment.
U	Failed to diagnose emergency situations and/or implement emergency procedures and equipment use. Procedures contained with errors or omissions that could jeopardize mission accomplishment or result in personal injury, loss of life, or damage to equipment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 5-MISSION PLANNING	
Q	Conducted/reviewed mission planning which accounted for known mission requirements, limitations, and approved operating procedures IAW directives. Understood theater C2 architecture.
Q-	Conducted/reviewed mission planning with errors or omissions which did not jeopardize mission accomplishment
U	Conducted/reviewed mission planning with errors or omissions that could jeopardize mission accomplishment.
AREA 6-PERSONAL AND PROFESSIONAL EQUIPMENT/PUBLICATIONS	
Q	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition and posted publications IAW directives.
Q-	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition. Posted publications with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to posses all personal/professional equipment or to maintain equipment in serviceable condition. Posted publications with errors or omissions that could jeopardize mission accomplishment.
AREA 7-BRIEFINGS/DEBRIEFINGS	
Q	Attended briefings/debriefings and extracted/provided/checked all necessary information. Conducted briefings/debriefings in an organized, logical sequence IAW directives.
Q-	Attended briefings/debriefings and extracted/provided/checked information or conducted briefings/debriefings with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to attend briefings/debriefings. Extracted/provided/checked information or conducted briefings/debriefings with errors or omissions that could jeopardize mission accomplishment.
AREA 8-PREFLIGHT INSPECTIONS	
Q	Performed Preflight Inspection IAW directives.
Q-	Preflight Inspection contained errors or omissions that did not jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
U	Failed to conduct preflight inspection. Preflight contained errors or omissions that could jeopardize mission accomplishment.
AREA 9-EQUIPMENT SET UP AND CHECKOUT	
Q	Conducted set up, checkout, and reported status of console, communications, and other operator equipment
Q-	Equipment set up, checkout, or status reporting contained errors or omissions that did not jeopardize mission accomplishment.
U	Failed to set up, checkout, or report status of equipment; or, set up, checks, or reported with errors or omissions which could jeopardize mission accomplishment.
AREA 10-CONSOLE OPERATIONS AND DISPLAYS	
Q	Interpreted computer display data, accomplished tabular display and switch actions without hesitation or delay, responded to alarms and alerts.
Q-	Interpreted computer display data, accomplished tabular display and switch actions with hesitation or delay, responded to alarms and alerts with errors or omissions which did not jeopardize mission accomplishment.
U	Failed to interpret computer display data, accomplished tabular display or switch actions, or responded to alarms and alerts with errors or omissions which could jeopardize mission accomplishment. Tabular display or switch actions contained delays, errors, or omissions that could jeopardize mission accomplishment.
AREA 11-COMMUNICATIONS SELECTION AND USE	
Q	Operated communications equipment correctly. Set up communications IAW briefed requirements and mission tasking.
Q-	Set up or operated communications equipment with errors or delays that did not affect mission accomplishment.
U	Failed to operate communications equipment correctly. Set up communications improperly or with errors or omissions that could affect mission accomplishment.
AREA 12-OPSEC/COMSEC/AUTHENTICATION PROCEDURES	
Q	Observed OPSEC/COMSEC requirements and conducted authentication procedures IAW directives.

GRADE CATEGORIES	GRADING CRITERIA
Q-	OPSEC/COMSEC and authentication procedures contained errors or omissions that did not jeopardize mission accomplishment or result in a security deviation or compromise.
U	Failed to observe OPSEC/COMSEC and authentication procedures. Procedures contained errors or omissions that could jeopardize mission accomplishment or result in a security deviation or compromise.
AREA 13-TARGET DEVELOPMENT (CRITICAL)	
Q	Recognized, described, and reported on assigned target areas; ensured results were recorded as assigned. Ensured the radar supported assigned tasks and understood how to use all system functions to extract information on the target area.
Q-	Did not utilize all available resources to conduct target development and the development-contained errors or omissions. However, actions did not affect mission accomplishment.
U	Failed to correctly develop target or development-contained errors or omissions that could directly affect accomplishment of mission.
AREA 14-ATTACK SUPPORT (CRITICAL)	
Q	Interpreted target area information and ensured it was relayed in a timely and accurate manner, updated as required, and followed the briefed format for the supported weapons system.
Q-	Incorrectly interpreted and/or relayed target area information with errors, omissions, or delays which did not affect mission accomplishment.
U	Failed to correctly interpret or relay target area information or did so in a manner which directly impacted mission accomplishment.
AREA 15-POST MISSION	
Q	Ensured reception, copy and relay of post-mission information as assigned by the SD IAW directives.
Q-	Reception, copy, or relay of post-mission information as assigned by the SD contained errors or omissions that did not jeopardize mission accomplishment.
U	Failed to ensure reception, copy, or relay of post-mission information. Errors or omissions occurred which could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 16-RADIO/TELEPHONE (R/T) PROCEDURES	
Q	Employed R/T procedures IAW AFI 11-214 and/or allied communications procedures. Used appropriate brevity and communications discipline.
Q-	R/T procedures contained errors or omissions that did not jeopardize mission accomplishment.
U	Failed to employ correct R/T procedures. Used non-standard R/T. Procedures contained errors or omissions that could jeopardize mission accomplishment.
AREA 17-MISSION EXECUTION(CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner and accomplished mission objectives. Conducted the mission with a sense of understanding, situational awareness and comprehension.
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.
U	Decisions or lack thereof, resulted in a failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that overall mission objectives were not achieved. Regulations/directives were violated.
AREA 18-RULES OF ENGAGEMENT (CRITICAL)	
Q	Implemented ROE for peacetime, transition, and wartime conditions. Understood theater ROE policies and procedures. Responded to ROE situations according to directives.
Q-	Implemented ROE procedures with errors or omissions that did not adversely affect completion of ROE actions.
U	Implemented ROE procedures with errors or omissions that could adversely affect completion of ROE actions.
AREA 19-SYSTEM KNOWLEDGE	
AREA 19a-RADAR	
Q	Understands radar capabilities, limitations and employment.
Q-	Minor errors in knowledge of radar, limitations, and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of radar systems, limitations, or performance characteristics.

GRADE CATEGORIES	GRADING CRITERIA
AREA 19b-O&C	
Q	Had an understanding of the O&C subsystem and how it related to the radar and communications subsystems.
Q-	Minor errors in knowledge of O&C, limitations and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of O&C, limitations, or performance characteristics.
AREA 19c-COMMUNICATIONS	
Q	Understood Internal/External communications capabilities and employment for operational missions.
Q-	Minor errors in knowledge of communications, limitations and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of communications, limitations, or performance characteristics.
AREA 20-HVAA PROCEDURES/RETROGRADE (CRITICAL)	
Q	Knew when to initiate retrograde procedures. Knew what steps to take during retrograde. Knew what threats to the aircraft exist in theater. Was familiar with counters to those threats.
Q-	Minor errors in knowledge of retrograde procedures or when to initiate them. Minor errors or deviations in steps taken during retrograde and identifying theater specific threats to the aircraft.
U	Failed to display knowledge of retrograde procedures and when to initiate them. Did not understand what steps to take during retrograde and did not correctly identify theater specific threats to the aircraft.
INSTRUCTOR CRITERIA The following areas were applicable to initial instructor upgrade/periodic instructor evaluations. Specific criteria are included in **Chapter 1.**	
AREA 21-INSTRUCTIONAL ABILITY	
Q	Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.

GRADE CATEGORIES	GRADING CRITERIA
U	Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.
AREA 22-BRIEFING/CRITIQUES	
Q	Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrates the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Prebriefed the student's next mission.
Q-	Minor errors or omissions in briefings, critiques and/or training documents that did not affect student progress.
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete prebriefing of student's next mission.
AREA 23-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

Chapter 13

AIRBORNE OPERATIONS TECHNICIAN EVALUATION REQUIREMENTS

13.1. General. This chapter contains the task-oriented criteria for qualification/mission evaluations of an Air Operations Technician (AOT) and Instructor Air Operations Technician (IAOT).

13.1.1. Qualification and mission evaluations encompass all areas identified in the required evaluation areas (see **Table 13.1.**). All areas require a degree of knowledge/proficiency essential for successful mission accomplishment and safety of flight.

13.2. Evaluation Requirements. The examinee must demonstrate the ability to accomplish all AOT/IAOT duties safely, effectively, and in accordance with appropriate flight manuals, directives, and operating procedures.

13.2.1. Periodic Evaluations. Periodic evaluations will include all qualification and mission areas.

Table 13.1. Airborne Operations Technician (AOT) Required Grading Areas.

AREA	QUAL	MSN	INST
AREA 1-AIRMANSHIP (CRITICAL)	R	R	
AREA 2-CREW COORDINATION/CRM (CRITICAL)	R	R	R
AREA 3-SAFETY (CRITICAL)	R	R	
AREA 4-MISSION PLANNING	R		
AREA 5-PREMISSION REQUIREMENTS/ PUBLICATIONS	R		
AREA 6-PREFLIGHT INSPECTION	R		
AREA 7-COMMUNICATIONS/ COORDINATION	R**		
AREA 8-CONSOLE OPERATIONS AND DISPLAYS	R**		
AREA 8a-PROCESS TRACK	R**		
AREA 8b-PROCESS RSR	R**		
AREA 8c-PROCESS OB	R**		
AREA 8d-PROCESS JAMMER/EA-EP	R**		
AREA 8e-DISPLAY OPTIONS	R**		
AREA 9-OPSEC/COMSEC AND AUTHENTICATION	R**	R**	
AREA 10-EMERGENCY PROCEDURES (CRITICAL)	R		
AREA 11-AREA SURV/TARGET PROSECUTION	R**		

AREA	QUAL	MSN	INST
AREA 12-STATION TRANSFER/INBOUND PROCEDURES	R**		
AREA 13-DESCENT/BEFORE LEAVING AIRCRAFT PROCEDURES	R		
AREA 14-MISSION EXECUTION (CRITICAL)		R	
AREA 15-SYSTEM KNOWLEDGE		R**	
AREA 15a-RADAR		R**	
AREA 15b-O&C		R**	
AREA 15c-COMMUNICATIONS		R**	
AREA 16-RULES OF ENGAGEMENT (CRITICAL)		R**	
AREA 17-HVAA PROCEDURES/ RETROGRADE (CRITICAL)		R**	
INSTRUCTOR CRITERIA			R
AREA 18-INSTRUCTIONAL ABILITY			R
AREA 19-BRIEFING/CRITIQUES			R
AREA 20-DEMONSTRATION AND PERFORMANCE			R
Note: **May be evaluated by alternate means.			

Table 13.2. Air Operations Technician (AOT) Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension.
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.

GRADE CATEGORIES	GRADING CRITERIA
AREA 2-CREW COORDINATION/CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay. Effective use or CRM.
Q-	Coordinated and/or reported with errors, omissions, misunderstandings, confusion or delays, which did not jeopardize mission accomplishment. CRM was the minimal acceptable.
U	Failed to coordinate. Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight and personal safety during all phases of the mission.
Q-	Minor errors or omissions that did not adversely affect safety of flight or personal safety.
U	Failed to ensure safety of flight or personal safety during all phases of the mission.
AREA 4-MISSION PLANNING	
Q	Conducted/reviewed mission planning which accounted for known mission requirements, limitations, and approved operating procedures IAW directives. Mission planning may include, but is not limited to Gather/extract/check mission data, accomplish assigned duties, determine mission database requirements, brief/identify mission task, identify/document communication requirements, coordinate with external agencies, perform/review summary brief.
Q-	Conducted mission planning with errors or omissions which did not jeopardize mission accomplishment.
U	Conducted mission planning with errors or omissions which could jeopardize mission accomplishment.
AREA 5-PREMISSION REQUIREMENTS/PUBLICATIONS	
Q	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition and properly posted publications.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition. Posted publications with minimal errors or omissions and no degradation of mission accomplishment.
U	Failed to possess all personal/professional equipment or to maintain equipment in serviceable condition. Posted publications with errors or omissions that could jeopardize mission accomplishment.
AREA 6-PREFLIGHT INSPECTION	
Q	Performed Preflight Inspection IAW 1E-8C-43-1-2.
Q-	Performed Preflight Inspection with minimal errors or omissions and no degradation of mission accomplishment.
U	Performed Preflight Inspection with errors or omissions that could jeopardize mission accomplishment.
AREA 7-COMMUNICATIONS/COORDINATION	
Q	Effectively identified all assigned radio frequencies. Transmitted and received data link and voice messages. Disseminated surveillance data among mission crew and external agencies, utilizing proper R/T procedures and brevity without confusion or delay.
Q-	Communicated and/or coordinated with minimal errors, omissions, misunderstanding, confusion, delays and/or employed improper R/T procedures and no degradation of mission accomplishment.
U	Communicated and/or coordinated with errors, omissions, misunderstanding, confusion, delays and/or employed improper R/T procedures that could jeopardize mission accomplishment.
AREA 8-CONSOLE OPERATIONS AND DISPLAYS	
AREA 8a-PROCESS TRACK	
Q	Interpreted/initiated/modified PROC TRK display data and associated switch actions/TDs. Responded to alerts and error messages.
Q-	Interpreted/initiated/modified PROC TRK display data, accomplished switch actions, or responded to alerts and error messages with minimal errors or omissions with no degradation of mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
U	Interpreted/initiated/modified PROC TRK display data, accomplished switch actions, or responded to alerts and error messages with errors or omissions which could jeopardize mission accomplishment.
AREA 8b-PROCESS RSR	
Q	Effectively Interpreted/initiated/modified PROC RSR display data and associated switch actions/TDs. Responded to alerts and error messages.
Q-	Interpreted/initiated/modified PROC RSR display data, accomplished switch actions, or responded to alerts and error messages with minimal errors or omissions with no degradation of mission accomplishment.
U	Interpreted/initiated/modified PROC RSR display data, accomplished switch actions, or responded to alert and error messages with errors and omissions which could jeopardize mission accomplishments.
AREA 8c-PROCESS OB	
Q	Effectively Interpreted/initiated/modified PROC OB display data and associated switch actions/TDs. Responded to alerts and error messages.
Q-	Interpreted/initiated/modified PROC OB display data, accomplished switch actions, or responded to alerts and error messages with minimal errors or omissions with no degradation to mission accomplishments.
U	Interpreted/initiated/modified PROC OB display data, accomplished switch actions, or responded to alert and error messages with errors and omissions which could jeopardize mission accomplishment.
AREA 8d-PROCESS JAMMER/EA-EP	
Q	Effectively interpreted/initiated/modified PROC JMR display data and associated switch actions/TDs and employed proper EP procedures.
Q-	Interpreted/initiated/modified PROC JMR display data, accomplished switch actions/TDs, and employed ECCM procedures with minimal errors or omissions with no degradation to mission accomplishment.
U	Interpreted/initiated/modified PROC JMR display data, accomplishes switch actions/TDs and employs ECCM procedures with errors and omissions which could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 8e-DISPLAY OPTIONS	
Q	Understood and effectively updated all available display option TDs and effectively utilized History Playback for optimal MTI display.
Q-	Updated available display option TDs and utilized History Playback with minimal errors or omissions with no degradation to mission accomplishment.
U	Failed to understand and effectively update display option TDs, and effectively utilize History Playback which could jeopardize mission accomplishment.
AREA 9-OPSEC/COMSEC AND AUTHENTICATION PROCEDURES	
Q	Protected plans and operations using established OPSEC/COMSEC procedures when using communications equipment and/or handling classified material. Properly employed authentication devices and procedures.
Q-	Conducted OPSEC/COMSEC and/or authentication procedures with minimal errors or omissions and no degradation of mission accomplishment or result in a security deviation or compromise.
U	Conducted OPSEC/COMSEC and/or authentication procedures with errors or omissions that could jeopardize mission accomplishment or result in a security deviation or compromise.
AREA 10-EMERGENCY PROCEDURES (CRITICAL)	
Q	Responded to emergency situations and accomplished emergency procedures and equipment use IAW T.O. 1E-8C-43-1-2.
Q-	Responded to emergency situations or accomplished emergency procedures and equipment use with errors or omissions which did not result in personal injury, loss of life, or damage to equipment.
U	Responded to emergency situations or accomplished emergency procedures and equipment use with errors or omissions which could result in personal injury, loss of life, or damage to equipment.
AREA 11-AREA SURVEILLANCE/TARGET PROSECUTION	
Q	Understood requirements, knew sources, and processes for area surveillance and target prosecution from the JSTARS platform.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Accomplished area surveillance and target prosecution with minimal errors or omissions and no degradation to mission accomplishment.
U	Failed to understand requirements, knew sources, and procedures for area surveillance and target prosecution which could jeopardize mission accomplishment.
AREA 12-STATION TRANSFER/INBOUND PROCEDURES	
Q	Performed the transfer/termination of station responsibilities and mission systems IAW current directives.
Q-	Performed the transfer/termination of station responsibilities, mission systems and the completion of logs, reports, and forms with minimal errors or omissions and no degradation of mission accomplishment.
U	Performed the transfer/termination of station responsibilities, mission systems and the completion of logs, reports, and forms with errors or omissions which could jeopardize mission accomplishment.
AREA 13-DESCENT/BEFORE LEAVING AIRCRAFT PROCEDURES	
Q	Performed Descent/Before Leaving Aircraft Procedures IAW T.O. 1E-8C-43-1-2 and aircrew aids.
Q-	Performed Descent/Before Leaving Aircraft Procedures with minimal errors or omissions and no degradation of mission accomplishment.
U	Performed Descent/Before Leaving Aircraft Procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 14-MISSION EXECUTION (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner and accomplished mission objectives. Conducted the mission with a sense of understanding, situational awareness and comprehension.
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.
U	Decisions or lack thereof, resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that overall mission objectives were not achieved. Regulations/directives were violated.

GRADE CATEGORIES	GRADING CRITERIA
AREA 15-SYSTEM KNOWLEDGE	
AREA 15a-RADAR	
Q	Understanding/knowledge of the radar system, limitations, and performance, characteristics
Q-	Minor errors in knowledge of radar system, limitations, and performance characteristics.
U	Unsatisfactory knowledge of radar systems, limitations, and performance characteristics.
AREA 15b-O&C	
Q	Had an understanding of the O&C subsystem and how it related to the radar and communications subsystems.
Q-	Minor errors in knowledge of O&C, limitations and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of O&C, limitations, or performance characteristics.
AREA 15c-COMMUNICATIONS	
Q	Knowledge and performance of communication system capabilities/limitations to include HF, VHF, UHF, SATCOM and Data Links.
Q-	Minor errors in knowledge and performance of communication system capabilities/limitations.
U	Unsatisfactory knowledge and performance of communication system capabilities/limitations.
AREA 16-RULES OF ENGAGEMENT (CRITICAL)	
Q	Implemented ROE for peacetime, transition, and wartime conditions. Understood theater ROE policies and procedures. Responded to ROE situations according to directives.
Q-	Implemented ROE procedures with errors or omissions that did not adversely effect completion of ROE actions.
U	Implemented ROE procedures with errors or omissions that could adversely effect completion of ROE actions.
AREA 17-HVAA PROCEDURES/RETROGRADE (CRITICAL)	
Q	Knew when to initiate retrograde procedures. Knew what steps to take during retrograde. Knew what threats to the aircraft exist in theater. Was familiar with counters to those threats.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Minor errors in knowledge of retrograde procedures or when to initiate them. Minor errors or deviations in steps taken during retrograde and identifying theater specific threats to the aircraft.
U	Failed to display knowledge of retrograde procedures and when to initiate them. Did not understand what steps to take during retrograde and did not correctly identify theater specific threats to the aircraft.
INSTRUCTOR CRITERIA The following areas are applicable to initial instructor upgrade/periodic instructor evaluations. Specific criteria are included in **Chapter 1.**	
AREA 18-INSTRUCTIONAL ABILITY	
Q	Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.
AREA 19-BRIEFING/CRITIQUES	
Q	Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrates the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Prebriefed the student's next mission.
Q-	Minor errors or omissions in briefings, critiques and/or training documents that did not affect student progress.
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete prebriefing of student's next mission.

GRADE CATEGORIES	GRADING CRITERIA
AREA 20-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

Chapter 14

COMMUNICATIONS SYSTEMS TECHNICIAN EVALUATION REQUIREMENTS

14.1. General. This chapter contains the task-oriented criteria for qualification/mission evaluations of an Communications Systems Technician (CST) and Instructor Communications Systems Technician (ICST). The examinee must demonstrate satisfactory ability to operate and maintain the communications systems.

14.1.1. Qualification and mission evaluations encompass all areas identified in the required evaluation areas (see **Table 14.1.**). All areas require a degree of knowledge/proficiency essential for successful mission accomplishment and to ensure safety of flight.

14.2. Evaluation Requirements. The examinee must demonstrate the ability to accomplish all CST/ICST duties safely, effectively, and in accordance with appropriate flight manuals, directives, and operating procedures.

14.2.1. Periodic Evaluations. Periodic evaluations will include all qualification and mission areas.

Table 14.1. Communications Systems Technician Required Grading Areas.

AREA	QUAL	MSN	INSTR
AREA 1-AIRMANSHIP (CRITICAL)	R	R	
AREA 2-CREW COORDINATION/CRM (CRITICAL)	R	R	R
AREA 3-SAFETY (CRITICAL)	R	R	
AREA 4-PUBLICATIONS/ PROFESSIONAL AND PERSONAL EQUIPMENT	R**		
AREA 5-MISSION PLANNING	R(1)	R(1)	
AREA 6-AIRCRAFT/MISSION EQUIPMENT PREFLIGHT	R		
AREA 7-PRE-TAKEOFF	R		
AREA 8-AFTER TAKEOFF/CLIMB	R		
AREA 9-ON-STATION	R		
AREA 10-AIR REFUELING	R**		
AREA 11-COMMUNICATIONS (CRITICAL)	R**		
AREA 12-INFLIGHT MAINTENANCE	R**(1)	R**(1)	
AREA 13-OFF-STATION/ENROUTE	R		
AREA 14-AFTER LANDING/ENGINE SHUTDOWN	R		
AREA 15-DEBRIEFING	R		
AREA 16-DATA COMMUNICATIONS SUB-SYSTEMS (JTIDS) (SCDL) (CS) (SATCOM)	R**(1)	R**(1)	

AREA	QUAL	MSN	INSTR
AREA 17-RADIO COMMUNICATIONS SUBSYSTEMS (UHF) (VHF) (HF) (SATCOM)	R**		
AREA 18-TROUBLE ANALYSIS/ CORRECTIVE ACTION	R**(1)	R**(1)	
AREA 19-EMERGENCY PROCEDURES (CRITICAL)	R		
AREA 20-COMMUNICATIONS SECURITY (CRITICAL)	R(1)	R(1)	
AREA 21-MISSION EXECUTION (CRITICAL)	R		
INSTRUCTOR CRITERIA			R
AREA 22-INSTRUCTIONAL ABILITY			R
AREA 23-BRIEFING/CRITIQUES			R
AREA 24-DEMONSTRATION AND PERFORMANCE			R

Notes:
1. In Areas 5, 12, 16, 18, and 20, only evaluate the items applicable to system enhancements for MSN evaluations
2. **May be evaluated by alternate means.

Table 14.2. Communications Systems Technician (CST) Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension.
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.

GRADE CATEGORIES	GRADING CRITERIA
AREA 2-CREW COORDINATION/CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay. Effective use or CRM.
Q-	Coordination and/or reports with errors, omissions, misunderstandings, confusion or delays, which did not jeopardize mission accomplishment. CRM was the minimal acceptable.
U	Failed to coordinate. Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight and personal safety during all phases of the mission.
Q-	Minor errors or omissions that did not adversely affect safety of flight or personal safety.
U	Failed to ensure safety of flight or personal safety during all phases of the mission.
AREA 4-PUBLICATIONS/PROFESSIONAL AND PERSONAL EQUIPMENT (Grade flight manual publications (including checklists) for currency and completeness. Ensured examinee had all required professional and personal gear.)	
Q	Assigned flight manual publications were current, and contained only minor deviations, omissions, and/or errors, and were usable for any of the unit's missions. All professional and personal equipment was carried and in good working condition.
Q-	Assigned flight manual publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight. Professional and personal equipment was carried but not in good/effective working condition.

GRADE CATEGORIES	GRADING CRITERIA
U	Assigned flight manual publications contained deviations, omissions, and/or errors; which could jeopardize the mission. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
AREA 5-MISSION PLANNING	
Q	Checked all factors applicable to flight. Properly prepares/checks mission planning paperwork in accordance with applicable directives. All mission planning completed and without error. Reviewed and initialed for all items in the FCIF.
Q-	Errors or omissions in checking factors applicable to flight. Mission planning paperwork accomplished/ checked with minor errors or omissions that would not interfere with mission accomplishment or safety. Limited knowledge of mission planning procedures or requirements.
U	Major errors, omissions or deviations that would preclude safe/effective mission accomplishment. Inadequate knowledge of mission planning requirements. Unable to complete mission planning. Did not review and initial for all items in the FCIF.
AREA 6-AIRCRAFT/MISSION EQUIPMENT PREFLIGHT	
Q	Conducted a thorough and timely inspection of applicable aircraft/ mission systems, life support equipment, and personal equipment. Thorough knowledge of the status, operation, and use of this equipment. Thoroughly prepared the aircraft/ mission systems for the mission. Immediately recognized evidence of malfunctions and took proper corrective action. Knowledgeable of all applicable sections of the AFTO Forms 781.
Q-	Conducted a limited inspection of applicable aircraft/ mission systems, life support equipment, and personal equipment. Limited knowledge of the status, operation and use of such systems/equipment. Aircraft/ mission systems were not completely prepared for the mission. Slow to recognize or uncertain of malfunction indications. Uncertain of the proper corrective action. Limited knowledge of applicable sections of AFTO Forms 781.

GRADE CATEGORIES	GRADING CRITERIA
U	Failed to conduct a satisfactory inspection of applicable aircraft/ mission systems, life support equipment, or personal equipment. Inadequate knowledge of the status, operation or use of systems/equipment, to the point that mission accomplishment was or could have been affected. Preparation of aircraft/ mission systems was unsatisfactory or not accomplished. Inadequate knowledge of AFTO Forms 781.
AREA 7-PRE-TAKEOFF	
Q	Accomplished procedures in accordance with approved checklists and applicable directives. Recognized and correctly responded to malfunctions in a safe and timely manner. Properly prepared aircraft and equipment prior to takeoff.
Q-	Accomplished procedures with minor errors, omissions, or deviations. Slow to recognize or respond to malfunctions. Minor errors in preparing aircraft and equipment prior to takeoff.
U	Accomplished procedures with major errors, omissions, or deviations. Failed to recognize or respond to malfunctions. Major errors or omissions in preparing aircraft and equipment prior to takeoff.
AREA 8-AFTER TAKEOFF/CLIMB	
Q	Conducted procedures in accordance with applicable checklist items and procedures. Conducted a thorough inspection of cabin and lower compartment. Performed all required checks. Successfully established and monitored required communications links including Have-Quick, SCDL, and JTIDS. Reports/equipment status passed.
Q-	Conducted procedures with minor errors or omissions that did not affect safety of flight. Conducted a limited inspection of cabin and lower compartment. Performed required checks with omissions or deviations that did not affect safety of flight. Slow to establish and monitor required communications links. Slow to pass reports/ equipment status.

GRADE CATEGORIES	GRADING CRITERIA
U	Failed to accomplish procedures or made major errors, omissions, or deviations that affected safety of flight. Displayed inadequate knowledge of or was unable to establish and monitor required communications links, as applicable, due to other than major equipment failure. Failed to pass Reports/equipment status. Failed to inspect cabin and lower compartment.
AREA 9-ON-STATION	
Q	Performed all required checks thoroughly with no deviations. Monitored operation of mission systems on a frequent basis. Implemented corrective maintenance actions in a timely manner as capabilities permit.
Q-	Performed required checks with minor errors, omissions or deviations that did not affect safety of flight or mission accomplishment. Conducted limited/infrequent monitoring of mission systems.
U	Failed to perform required checks or made major errors, omissions, or deviations that affected safety of flight or mission accomplishment. Failed to provide adequate monitoring of mission systems.
AREA 10-AIR REFUELING	
Q	Accomplished all air refueling procedures without error. Properly configured the aircraft and mission system radios (if applicable).
Q-	Accomplished air refueling procedures with minor errors, omissions, or deviations. Performed aircraft and mission system radio configurations with minor errors or omissions that did not prevent successful mission accomplishment.
U	Accomplished air refueling procedures with major errors, omissions, or deviations critical to safety of flight. Failed to properly configure aircraft and mission system radios (if applicable) causing critical loss of data or unsuccessful completion of the mission.

GRADE CATEGORIES	GRADING CRITERIA
AREA 11-COMMUNICATIONS (CRITICAL)	
Q	Monitored/correctly set up interphone. Monitored/employed radios as necessary. Exercised proper interphone/radio procedures, using correct terminology. Thorough knowledge/operation of communications systems. Responded to all challenges/instructions, and maintained an excellent listening watch of all appropriate communications systems.
Q-	Occasionally interrupted other transmissions. Limited knowledge/operation of communications systems. Occasionally failed to respond to interphone/radio calls or used non-standard terminology.
U	Failed to respond to interphone interrogations. Made excessive transmissions that denied interphone or radio access to others with more essential information. Unsatisfactory knowledge about, and operation of, communications systems. Rarely monitored radios or failed to employ them effectively. Caused confusion that jeopardized mission accomplishment or caused excessive delays.
AREA 12-INFLIGHT MAINTENANCE	
Q	Analyzed equipment malfunctions, and applied proper corrective action or system reconfigurations in a timely manner.
Q-	Limited ability to analyze equipment malfunctions. Slow to apply corrective action or reconfigurations.
U	Unable to analyze equipment malfunctions. Applied improper action or failed to apply corrective action which adversely affected mission accomplishment.
AREA 13-OFF-STATION/ENROUTE	
Q	Ensured applicable mission system equipment was shutdown properly. Performed all required duties.
Q-	Accomplished applicable procedures and duties with minor errors, omissions, or deviations that did not affect safety of flight or jeopardize mission accomplishment.
U	Major errors, omissions, or deviations during shutdown of applicable mission system equipment and other required duties adversely affecting mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 14-AFTER LANDING/ENGINE SHUTDOWN	
Q	Completed all applicable checklist items and post flight duties in a safe and timely manner. Shut off all equipment and stowed gear properly.
Q-	Minor omissions or deviations that did not cause equipment damage.
U	Major omissions or deviations while completing applicable checklist items and duties. Improper equipment stowage or shutdown which would result in damage to equipment. Failed to stow equipment. Failed to accomplish debriefing requirements.
AREA 15-BRIEFINGS	
Q	Attended required briefings. Contributed effectively to briefing content when required. Briefing was thorough and in accordance with current directives and procedures.
Q-	Late or inattentive during mission briefings. Allowed items pertinent, but not critical, to be omitted. Briefings were accomplished with minor errors, omissions, or deviations.
U	Failed to attend required mission briefings. Allowed critical items to be omitted or did not correct erroneous information. Briefings were accomplished with major errors, omissions, or deviations.
AREA 16-DATA COMMUNICATIONS SUBSYSTEMS (JTIDS) (SCDL) (CS) (SATCOM)	
Q	Adequate knowledge of system for proper operation. Adequate knowledge of required duties. Correctly identified and located applicable system components. Correctly determined status of system and power distribution.
Q-	Limited knowledge of system. Minor deviations in system operation that caused some delay but did not jeopardize overall mission accomplishment. Minor omissions or deviations in identification or location of system components. Unsure of system status or power distribution. Limited knowledge of required duties.

GRADE CATEGORIES	GRADING CRITERIA
U	Improper operation or inadequate knowledge of operating systems. Could not identify/locate system components. Could not determine status of system or power distribution. Insufficient knowledge of required duties. Major errors, omissions, or deviations.
AREA 17-RADIO COMMUNICATIONS SUBSYSTEMS (UHF) (VHF) (HF) (SATCOM)	
Q	Adequate knowledge of system for proper operation. Adequate knowledge of required duties. Correctly identified and located applicable system components. Correctly determined status of system and power distribution.
Q-	Limited knowledge of system. Minor deviations in system operation that caused some delay but did not jeopardize overall mission accomplishment. Minor omissions or deviations in identification or location of system components. Unsure of system status or power distribution. Limited knowledge of required duties.
U	Improper operation or inadequate knowledge of operating systems. Could not identify/locate system components. Could not determine status of system or power distribution. Insufficient knowledge of required duties. Major errors, omissions, or deviations.
AREA 18-TROUBLE ANALYSIS/CORRECTIVE ACTION	
Q	Adequate knowledge of system analysis and troubleshooting techniques in accordance with manuals, directives, and locally approved established procedures. Logical techniques and procedures when using the computer terminal, operator keyboard, BIT, and available test equipment to confirm and evaluate communications equipment malfunctions. Effective action in isolating and applying corrective action to, the communications equipment malfunctions. Utilized and properly applied available resources to maintain an operational system. Kept mission crew informed of operational limitations and advised on possible work-arounds.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Limited knowledge of system analysis and logical troubleshooting techniques. Limited knowledge of procedures and techniques when using the computer terminal, operator keyboard, BIT, and available test equipment to confirm, diagnose and isolate communications equipment malfunctions. Uncertain as to what corrective action was required. Unfamiliar with what resources are available to maintain an operational system. Kept mission crew informed, but supplied inaccurate information.
U	Unsatisfactory knowledge of system analysis and troubleshooting techniques. Failed to use the computer terminal, operator keyboard, BIT, and available test equipment to confirm, diagnose, and isolate communications equipment malfunctions. Unable to apply corrective action to the system malfunctions. Did not know what resources were available to maintain an operational system. Did not inform mission crew of system limitations or possible work-arounds.
AREA 19-EMERGENCY PROCEDURES (CRITICAL)	
Q	Correctly analyzed, stated, and understood, aircraft emergencies and performed required procedures to correct the emergency. Described the location, use, and limitations of emergency equipment.
Q-	Correctly analyzed and understood aircraft emergencies but had difficulty stating the EP. Performed required procedures to correct the emergency. Minor omissions or deviations in describing the location, use, or limitations of emergency equipment.
U	Failed to analyze, state, or understand aircraft emergencies. Could not perform required procedures to correct the emergency. Major omissions or deviations in describing the location, use, or limitations of emergency equipment.
AREA 20-COMMUNICATIONS SECURITY (CRITICAL)	
Q	Thorough knowledge of communications security requirements and procedures. Demonstrated responsible handling of classified information and equipment.
Q-	Knowledge of communications requirements and procedures was limited, but did not affect mission accomplishment or security.

GRADE CATEGORIES	GRADING CRITERIA
U	Inadequate knowledge of communications security requirements and procedures. Improper handling of classified information or equipment.
AREA 21-MISSION EXECUTION (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner and accomplished mission objectives. Conducted the mission with a sense of understanding, situational awareness and comprehension.
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.
U	Decisions or lack thereof, resulted in a failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that overall mission objectives were not achieved. Regulations/directives were violated.
INSTRUCTOR CRITERIA The following areas are applicable to initial instructor upgrade/periodic instructor evaluations. Specific criteria are included in **Chapter 1**.	
AREA 22-INSTRUCTIONAL ABILITY	
Q	Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.
AREA 23-BRIEFING/CRITIQUES	
Q	Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrates the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Prebriefed the student's next mission.
Q-	Minor errors or omissions in briefings, critiques and/or training documents that did not affect student progress.

GRADE CATEGORIES	GRADING CRITERIA
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete prebriefing of student's next mission.
AREA 24-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

Chapter 15

AIRBORNE MISSION SYSTEMS SPECIALIST EVALUATION REQUIREMENTS

15.1. General. This section contains the task-oriented criteria for qualification/mission evaluations of an Airborne Mission Systems Specialist and Instructor Airborne Mission Systems Specialist.

15.1.1. Qualification/Mission evaluations encompass all areas identified in the required evaluation areas (see **Table 15.1.**). The examinee must demonstrate a degree of knowledge and proficiency essential for successful mission accomplishment and safety of flight. Examinee must demonstrate satisfactory ability to operate and maintain the radar, operations and control subsystems, herein referred to as PME (Prime Mission Equipment), and ancillary equipment. This includes turn-on, checkout, on-station, malfunction analysis, and diagnostics on the PME and ancillary equipment.

15.2. Evaluation Requirements. The examinee must demonstrate the ability to accomplish all AMSS/IAMSS duties safely and in accordance with appropriate flight manuals, directives, and operating procedures to ensure successful employment and mission accomplishment.

Table 15.1. Airborne Mission Systems Specialist Required Evaluation Areas.

AREA	QUAL/MSN	INSTR
AREA 1-AIRMANSHIP (CRITICAL)	R	
AREA 2-CREW COORDINATION/ CRM (CRITICAL)	R	R
AREA 3-SAFETY (CRITICAL)	R	
AREA 4-MISSION PLANNING	R	
AREA 5-PREMISSION REQUIREMENTS/PUBLICATIONS	R	
AREA 6-PREFLIGHT INSPECTION	R	
AREA 7-BEFORE STARTING ENGINES	R	
AREA 8-STARTING ENGINES	R	
AREA 9-BEFORE TAKEOFF	R	
AREA 10-AFTER TAKEOFF AND CLIMB	R	
AREA 11-ENROUTE PROCEDURES OUTBOUND	R	
AREA 12-ASSUMING STATION RESPONSIBILITY	R	
AREA 13-ON STATION PROCEDURES (CRITICAL)	R	
AREA 14-AIR REFUELING PROCEDURES (CRITICAL)	R**	

AREA	QUAL/MSN	INSTR
AREA 15-ENROUTE PROCEDURES INBOUND	R	
AREA 16-AFTER LANDING	R	
AREA 17-BEFORE LEAVING AIRPLANE	R	
AREA 18-POSTFLIGHT	R	
AREA 19-GENERAL USE PROCEDURES	R	
AREA 20-MALFUNCTION ANALYSIS/ INFLIGHT REPAIR	R	
AREA 21-BRIEFINGS/DEBRIEFINGS	R	
AREA 22-MISSION EXECUTION (CRITICAL)	R	
AREA 23-EMERGENCY PROCEDURES (CRITICAL)	R	
INSTRUCTOR CRITERIA		R
AREA 24-INSTRUCTIONAL ABILITY		R
AREA 25-BRIEFING/CRITIQUES		R
AREA 26-DEMONSTRATION AND PERFORMANCE		R

Table 15.2. Airborne Mission Systems Specialist Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension.
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.

GRADE CATEGORIES	GRADING CRITERIA
AREA 2-CREW COORDINATION/CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations without misunderstanding, confusion or delay. Effective use or CRM.
Q-	Coordinated and/or reported with errors, omissions, misunderstandings, confusion or delays, which did not jeopardize mission accomplishment. CRM was the minimal acceptable.
U	Failed to coordinate. Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight during all phases of the mission.
U	Failed to ensure safety of flight during all phases of the mission.
AREA 4-MISSION PLANNING	
Q	Performed/reviewed mission planning which accounted for known mission requirements, limitations, and approved operating procedures in a timely and efficient manner. Provided and extracted/checked all pertinent data required to complete the mission.
Q-	Performed/reviewed mission planning with errors or omissions that would not jeopardize mission accomplishment.
U	Performed/reviewed mission planning with errors or omissions that could jeopardize mission accomplishment.
AREA 5-PREMISSION REQUIREMENTS/PUBLICATIONS	
Q	Possessed and maintained all personal/professional equipment in serviceable condition. Flight manuals and publications are current and complete. Complied with all MAJCOM and local operating procedures.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Possessed all personal/professional equipment and publications. Maintained personal/professional equipment in serviceable condition. Posted publications with errors or omissions that would not jeopardize mission accomplishment. Complied with all MAJCOM and local operating procedure with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to posses all personal/professional equipment and publications or maintain equipment in serviceable condition. Posted publications with errors or omissions that could jeopardize mission accomplishment. Complied with all MAJCOM and local operating procedure with errors or omissions that could jeopardize mission accomplishment.
AREA 6-PREFLIGHT INSPECTION	
Q	Performed, or ensured completion of, Preflight Inspection of radar, O&C, and ancillary equipment in a thorough, timely, and efficient manner.
Q-	Performed Preflight Inspection with errors or omissions that would not jeopardize mission accomplishment.
U	Performed Preflight Inspection with errors or omissions that could jeopardize mission accomplishment.
AREA 7-BEFORE STARTING ENGINES	
Q	Accomplished procedures in accordance with approved checklists and applicable directives. Recognized and correctly responded to malfunctions in a safe and timely manner. Properly prepared aircraft and equipment prior to Starting Engines.
Q-	Performed Before Staring Engines procedures with errors or omissions that would not jeopardize mission accomplishment.
U	Performed Before Staring Engines procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 8-STARTING ENGINES	
Q	Accomplished procedures in accordance with approved checklists and applicable directives. Recognized and correctly responded to malfunctions in a safe and timely manner.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Performed Staring Engines procedures with errors or omissions that would not jeopardize mission accomplishment.
U	Performed Starting Engines Procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 9-BEFORE TAKEOFF	
Q	Accomplished procedures in accordance with approved checklists and applicable directives. Recognized and correctly responded to malfunctions in a safe and timely manner. Properly prepared aircraft and equipment.
Q-	Performed Before Takeoff procedures with errors or omissions that would not jeopardize mission accomplishment.
U	Performed Before Takeoff procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 10-AFTER TAKEOFF AND CLIMB	
Q	Performed After Takeoff and Climb procedures IAW T.O. 1E-8C-43-1-1 in a timely, efficient and effective manner.
Q-	Performed After Takeoff and Climb procedures with errors or omissions that would not jeopardize mission accomplishment.
U	Performed After Takeoff and Climb procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 11-ENROUTE PROCEDURES OUTBOUND	
Q	Performed enroute procedures outbound IAW T.O. 1E-8C-43-1-1 in a timely, efficient and effective manner.
Q-	Performed enroute procedures outbound with errors or omissions that would not jeopardize mission accomplishment.
U	Performed enroute procedures outbound with errors or omissions that could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 12-ASSUMING STATION RESPONSIBILITY	
Q	Passed equipment status in a timely, efficient, and effective manner.
Q-	Performed Assuming Station Responsibilities with errors or omissions that would not jeopardize mission accomplishment.
U	Performed Assuming Station Responsibilities with errors or omissions that could jeopardize mission accomplishment.
AREA 13-ON STATION PROCEDURES (CRITICAL)	
Q	Performed all checklist items thoroughly with no deviations. Monitored operation of mission systems on a frequent basis. Implemented corrective maintenance actions in a timely manner as capabilities permit. Logged mission/maintenance data thoroughly and effectively.
Q-	Performed On Station Procedures with errors or omissions that would not jeopardize mission accomplishment.
U	Performed On Station Procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 14-AIR REFUELING PROCEDURES (CRITICAL)	
Q	Accomplished all air refueling procedures without error. Properly configured equipment for A/R.
Q-	Accomplished air refueling procedures with errors or omissions that would not affect safety or mission accomplishment. Properly configured equipment for A/R.
U	Failed to accomplished air refueling procedures or properly configure equipment for A/R.
AREA 15-ENROUTE PROCEDURES INBOUND	
Q	Performed off station and enroute procedures - inbound in a timely, effective, and efficient manner.
Q-	Performed off station and enroute procedures - inbound with errors or omissions that would not jeopardize mission accomplishment.
U	Performed off station and enroute procedures - inbound with errors or omissions that could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 16-AFTER LANDING	
Q	Performed after landing procedures in a timely, efficient, and effective manner.
Q-	Performed after landing procedures with errors or omissions that would not jeopardize mission accomplishment.
U	Performed after landing procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 17-BEFORE LEAVING AIRPLANE	
Q	Performed before leaving airplane procedures in a timely, efficient, and effective manner.
Q-	Performed before leaving airplane procedures with errors or omissions that would not jeopardize mission accomplishment.
U	Performed before leaving airplane procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 18-POSTFLIGHT	
Q	Performed postflight procedures in a timely, efficient, and effective manner.
Q-	Performed postflight procedures with errors or omissions that would not jeopardize mission accomplishment.
U	Performed postflight procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 19-GENERAL USE PROCEDURES	
Q	Performed General Use Procedures in a timely, efficient, and effective manner.
Q-	Performed General Use Procedures with errors or omissions that would not jeopardize mission accomplishment.
U	Performed General Use Procedures with errors or omissions that could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 20-MALFUCTION ANALYSIS/INFLIGHT REPAIR	
Q	Recognized and analyzed on-line BIT indications utilizing Joint STARS alerting system, Enhanced System Utilities, O&C and Radar panel indicators, and diagnostic results and performs in-flight maintenance in a timely, efficient and effective manner.
Q-	Recognized and analyzed on-line BIT indications utilizing Joint STARS alerting system, Enhanced System Utilities, O&C and Radar Panel indicators, and diagnostic results and performed in-flight maintenance with errors or omissions that would not jeopardize mission accomplishment.
U	Failed to recognize or analyze on-line BIT indications. Performed in-flight maintenance with errors or omissions that could jeopardize mission accomplishment.
AREA 21-BRIEFINGS/DEBRIEFINGS	
Q	Attended required briefings/debriefings. Contributed effectively to briefing content when required. Briefings/debriefings were thorough and in accordance with current directives and procedures.
Q-	Late or inattentive during mission briefings/debriefings. Allowed items pertinent, but not critical, to be omitted. Briefings/debriefings were accomplished with minor errors, omissions, or deviations.
U	Failed to attend required mission briefings/debriefings. Allowed critical items to be omitted or did not correct erroneous information. Briefings/debriefings were accomplished with major errors, omissions, or deviations.
AREA 22-MISSION EXECUTION (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner and accomplished mission objectives. Conducted the mission with a sense of understanding, situational awareness and comprehension.
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.

GRADE CATEGORIES	GRADING CRITERIA
U	Decisions or lack thereof, resulted in a failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that overall mission objectives were not achieved. Regulations/directives were violated.
AREA 23-EMERGENCY PROCEDURES (CRITICAL)	
Q	Diagnosed emergency situations and implemented emergency procedures and equipment use in a timely, efficient and effective manner.
Q-	Diagnosed emergency situations and implemented emergency procedures and equipment use with errors or omissions that would not result in personal injury, loss of life, or damage to equipment.
U	Failed to diagnose emergency situations and/or implemented emergency procedures and equipment use with errors or omissions that could result in personal injury, loss of life, or damage to equipment.
INSTRUCTOR CRITERIA The following areas are applicable to initial instructor upgrade/periodic instructor evaluations. Specific criteria are included in **Chapter 1**.	
AREA 24-INSTRUCTIONAL ABILITY	
Q	Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.
AREA 25-BRIEFING/CRITIQUES	
Q	Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrates the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Prebriefed the student's next mission.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Minor errors or omissions in briefings, critiques and/ or training documents that did not affect student progress.
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete prebriefing of student's next mission.
AREA 26-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

Chapter 16

AIRBORNE TARGET SURVEILLANCE SUPERVISOR EVALUATION REQUIREMENTS

16.1. General. This chapter contains the task-oriented criteria for qualification/mission evaluations of an Airborne Target Surveillance Supervisor and Instructor Airborne Target Surveillance Supervisor.

16.1.1. Qualification and mission evaluations encompass all areas identified in the required evaluation areas (see **Table 16.1.**). All areas require a degree of knowledge/proficiency essential for successful mission accomplishment and to ensure safety of flight.

16.1.2. ATSS/IATSS evaluations will be conducted on a live E-8 sortie while the examinee actively supports multiple GSMs (or simulated) Radar Service Requests and Freetext Messages. Acceptability of required operations would be based on the evaluator's determination that the evaluation objective has been met.

16.2. Evaluation Requirements. The examinee must demonstrate the ability to accomplish all ATSS/IATSS duties safely, effectively, and in accordance with appropriate flight manuals, directives, and operating procedures.

Table 16.1. Airborne Target Surveillance Supervisor Required Grading Areas.

AREA	QUAL	MSN	INSTR
AREA 1-AIRMANSHIP (CRITICAL)	R	R	
AREA 2-CREW COORDINATION/CRM (CRITICAL)	R	R	R
AREA 3-SAFETY (CRITICAL)	R	R	
AREA 4-MISSION PLANNING	R		
AREA 5-BRIEFINGS/DEBRIEFINGS	R		
AREA 6-PREMISSION REQUIREMENTS/ PUBLICATIONS	R		
AREA 7-PREFLIGHT INSPECTIONS	R		
AREA 8-BEFORE START/TAXI	R		
AREA 9-AIR REFUELING PROCEDURES	R**		
AREA 10-SCDL OPERATIONS	R		
AREA 11-COORDINATION	R**		
AREA 12-EQUIPMENT SET UP AND CHECKOUT	R		
AREA 13-CONSOLE OPERATIONS AND DISPLAYS	R**		
AREA 14-COMMUNICATIONS SELECTION AND USE	R**		

AREA	QUAL	MSN	INSTR
AREA 15-OPSEC/COMSEC/ AUTHENTICATION PROCEDURES	R**	R**	
AREA 16-EMERGENCY PROCEDURES (CRITICAL)	R	R	
AREA 17-STATION ASSUMPTION	R**		
AREA 18-TRANSFERRING STATION RESPONSIBILITIES	R**		
AREA 19-RADAR SERVICE REQUEST MANAGEMENT EXECUTION	R**		
AREA 20-FREETEXT MESSAGE MANAGEMENT	R**		
AREA 21-RADIO/TELEPHONE PROCEDURES	R**		
AREA 22-MISSION EXECUTION (CRITICAL)		R	
AREA 23-RULES OF ENGAGEMENT (CRITICAL)		R**	
AREA 24-SYSTEM KNOWLEDGE		R**	
AREA 24a-RADAR		R**	
AREA 24b-O&C		R**	
AREA 24c-COMMUNICATIONS		R**	
AREA 25-HVAA PROCEDURES/ RETROGRADE (CRITICAL)		R**	
INSTRUCTOR CRITERIA			R
AREA 26-INSTRUCTIONAL ABILITY			R
AREA 27-BRIEFING/CRITIQUES			R
AREA 28-DEMONSTRATION AND PERFORMANCE			R
Note: **May be evaluated by alternate means.			

Table 16.2. Airborne Target Surveillance Supervisior Evaluation Criteria and Grading Areas.

GRADE CATEGORIES	GRADING CRITERIA
AREA 1-AIRMANSHIP (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner. Demonstrated situational awareness throughout the mission and conducted the flight with a sense of understanding and comprehension.
Q-	Some decisions were not timely or efficient and/or situational awareness was not complete at times; however, did not affect mission execution or safety.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that the mission or safety was compromised.
AREA 2-CREW COORDINATION/CREW RESOURCE MANAGEMENT (CRITICAL)	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay. Effective use or CRM.
Q-	Coordinated and/or reported with errors, omissions, misunderstandings, confusion or delays, which did not jeopardize mission accomplishment. CRM was the minimal acceptable.
U	Failed to coordinate. Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment. CRM was not practiced such that mission accomplishment or safety of flight was jeopardized.
AREA 3-SAFETY (CRITICAL)	
Q	Employed all available methods to ensure safety of flight and personal safety during all phases of the mission.
Q-	Minor errors or omissions that did not adversely affect safety of flight or personal safety.
U	Failed to ensure safety of flight or personal safety during all phases of the mission.
AREA 4-MISSION PLANNING	
Q	Conducted/reviewed mission planning which accounted for known mission requirements, limitations, and approved operating procedures IAW directives.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Conducted/reviewed mission planning with errors or omissions which did not jeopardize mission accomplishment
U	Conducted/reviewed mission planning with errors or omissions which could have jeopardized mission accomplishment.
AREA 5-BRIEFINGS/DEBRIEFINGS	
Q	Attended briefings/debriefings and extracted/provided/checked all necessary information. Conducted briefings/debriefings in an organized, logical sequence IAW directives.
Q-	Attended briefings/debriefings and extracted/provided/checked information or conducted briefings/debriefings with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to attend briefings/debriefings. Extracted/provided/checked information or conducted briefings/debriefings with errors or omissions that could jeopardize mission accomplishment.
AREA 6-PREMISSION REQUIREMENTS/PUBLICATIONS	
Q	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition and posted publications IAW directives.
Q-	Possessed all personal/professional equipment and publications. Maintained equipment in serviceable condition. Posted publications with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to posses all personal/professional equipment or to maintain equipment in serviceable condition. Posted publications with errors or omissions that could jeopardize mission accomplishment.
AREA 7-PREFLIGHT INSPECTIONS	
Q	Performed Preflight Inspection IAW directives.
Q-	Performed Preflight Inspection with errors or omissions that did not jeopardize mission accomplishment.
U	Performed Preflight Inspection with errors or omissions that could jeopardize mission accomplishment.
AREA 8-BEFORE START/TAXI	
Q	Performed Before Start/Taxi procedures IAW directives.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Performed Before Start/Taxi procedures with errors or omissions that did not jeopardize mission accomplishment.
U	Performed Before Start/Taxi procedures with errors or omissions that could jeopardize mission accomplishment.
AREA 9-AIR REFUELING PROCEDURES	
Q	Performed Air Refueling Procedures IAW directives.
Q-	Performed Air Refueling Procedures with errors or omissions that did not jeopardize mission accomplishment or affect safety of flight.
U	Performed Air Refueling Procedures with errors or omissions that could jeopardize safety of flight or mission accomplishment.
AREA 10-SCDL OPERATIONS	
Q	Verified SCDL is configured to meet mission requirements. Coordinated with CST for SCDL ground check. Reported anomalies to the CST. Assisted in SCDL troubleshooting as required.
Q-	Ensured SCDL operations meet mission requirements with errors or omissions that did not jeopardize mission accomplishment.
U	Failed to ensure SCDL operations meet mission requirements with errors, omissions, or failures that could jeopardize mission accomplishment.
AREA 11-COORDINATION	
Q	Coordinated and/or reported requirements, mission changes, equipment discrepancies, and limitations IAW directives without misunderstanding, confusion or delay.
Q-	Coordinates and/or reports with errors, omissions, misunderstandings, confusion or delays, which do not jeopardize mission accomplishment.
U	Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment.
AREA 12-EQUIPMENT SET UP AND CHECKOUT	
Q	Checked out and set up console, communications, and other operator tasked equipment for mission. Reported malfunctions as required.

GRADE CATEGORIES	GRADING CRITERIA
Q-	Checked out and set up for status reporting with errors or omissions which did not jeopardize mission accomplishment.
U	Conducted equipment set up, checkout, or status reporting with errors or omissions that could jeopardize mission accomplishment.
AREA 13-CONSOLE OPERATIONS AND DISPLAYS	
Q	Interpreted/initiated/updated data for computer displays, accomplished tabular display actions, and responded to alarms and alerts IAW directives.
Q-	Interpreted/initiated/updated data for computer displays, accomplished tabular display actions, and responded to alarms and alerts with errors or omissions that did not jeopardize mission accomplishment.
U	Interpreted/initiated/updated data for computer displays, accomplished tabular display actions, and responded to alarms and alerts with errors or omissions that could jeopardize mission accomplishment.
AREA 14-COMMUNICATIONS SELECTION AND USE	
Q	Selected and operated communications equipment based on performance capabilities and mission tasking IAW directives.
Q-	Selected and operated communications equipment based on performance capabilities and mission tasking with errors or omissions which did not jeopardize mission accomplishment.
U	Selected and operated communications equipment based on performance capabilities and mission tasking with errors or omissions which could jeopardize mission accomplishment.
AREA 15-OPSEC/COMSEC/AUTHENTICATION PROCEDURES	
Q	Observed OPSEC/COMSEC and conducted authentication procedures IAW directives.
Q-	Observed OPSEC/COMSEC and conducted authentication procedures with errors or omissions that did not jeopardize mission accomplishment or result in a security deviation or compromise.
U	Observed OPSEC/COMSEC and conducted authentication procedures with errors that could jeopardize mission accomplishment or result in a security deviation or compromise.

GRADE CATEGORIES	GRADING CRITERIA
AREA 16-EMERGENCY PROCEDURES (CRITICAL)	
Q	Diagnosed emergency situations and implemented emergency procedures and equipment use IAW directives.
Q-	Diagnosed emergency situations and implemented emergency procedures and equipment use with errors or omissions which did not jeopardize mission accomplishment or result in personal injury, loss of life, or damage to equipment.
U	Diagnosed emergency situations and implemented emergency procedures and equipment use with errors or omissions that could jeopardize mission accomplishment or result in personal injury, loss of life, or damage to equipment.
AREA 17-STATION ASSUMPTION	
Q	Had console configured, voice communication check completed and verified SCDL is on and transmitting prior to assuming station.
Q-	Had console configured, voice communication check completed and verified SCDL is on and transmitting prior to assuming station with errors or omissions which did not jeopardize mission accomplishment.
U	Had console configured, voice communication check completed and verified SCDL is on and transmitting prior to assuming station with errors or omissions which could jeopardize mission accomplishment.
AREA 18-TRANSFERRING STATION RESPONSIBILITIES	
Q	Ensured debrief of voice/data net participants, coordinated transfer of station responsibilities/tasks as assigned by the Deputy Mission Crew Commander and IAW directives.
Q-	Ensured debrief of voice/data net participants, coordinated transfer of station responsibilities/tasks as assigned by the Deputy Mission Crew Commander with errors or omissions which did not jeopardize mission accomplishment.
U	Ensured debrief of voice/data net participants, coordinated transfer of station responsibilities/tasks as assigned by the Deputy Mission Crew Commander with errors or omissions which could jeopardize mission accomplishment.

GRADE CATEGORIES	GRADING CRITERIA
AREA 19-RADAR SERVICE REQUEST MANAGEMENT EXECUTION	
Q	Deconflicted, prioritized, and optimized Radar Service Requests to optimize timeline management in conjunction with the SMO. Monitored sensor displays, recognized and reported degraded sensor performance to the SMO/AMSS.
Q-	Deconflicted, prioritized, or coordinated radar service requests, contains errors or omissions that do not jeopardize mission accomplishment.
U	Failed to deconflict, prioritize, and coordinate Radar Service Requests, Errors or omissions could jeopardize mission accomplishment.
AREA 20-FREETEXT MESSAGE MANAGEMENT	
Q	Monitored outgoing/incoming freetext messages, and routed information to the proper user.
Q-	Monitored outgoing/incoming freetext messages, and routed information to the proper user with errors or omissions which did not jeopardize mission accomplishment.
U	Monitored outgoing/incoming freetext messages, and routed information to the proper user with errors or omissions which could jeopardize mission accomplishment.
AREA 21-RADIO/TELEPHONE (R/T) PROCEDURES	
Q	Employed proper R/T procedures.
Q-	R/T procedures contained errors or omissions that did not jeopardize mission accomplishment.
U	R/T procedures contained errors or omissions that could jeopardize mission accomplishment.
AREA 22-MISSION EXECUTION (CRITICAL)	
Q	Executed the assigned mission in a timely, efficient manner and accomplishes mission objectives. Conducted the mission with a sense of understanding, situational awareness and comprehension.
Q-	Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not always effectively used to the point that specific mission objectives were not achieved.

GRADE CATEGORIES	GRADING CRITERIA
U	Decisions or lack thereof, resulted a failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that overall mission objectives were not achieved. Regulations/directives were violated.
AREA 23-RULES OF ENGAGEMENT (CRITICAL)	
Q	Implements ROE for peacetime, transition, and wartime conditions. Understood theater ROE policies and procedures. Responded to ROE situations according to directives.
Q-	Implemented ROE procedures with errors or omissions that did not adversely effect completion of ROE actions.
U	Implemented ROE procedures with errors or omissions that could adversely effect completion of ROE actions.
AREA 24-SYSTEM KNOWLEDGE	
AREA 24a-RADAR	
Q	Understood major components and identified single points of failure.
Q-	Minor errors in knowledge of radar, limitations, and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of radar systems, limitations, or performance characteristics.
AREA 24b-O&C	
Q	Had an understanding of the O&C subsystem and how it related to the radar and communications subsystems.
Q-	Minor errors in knowledge of O&C, limitations and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of O&C, limitations, or performance characteristics.
AREA 24c-COMMUNICATIONS	
Q	Understood Internal/External communications capabilities and employment for operational missions.
Q-	Minor errors in knowledge of communications, limitations and performance. Deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of communications, limitations, or performance characteristics.

GRADE CATEGORIES	GRADING CRITERIA
AREA 25-HVAA PROCEDURES/RETROGRADE (CRITICAL)	
Q	Knew when to initiate retrograde procedures. Knew what steps to take during retrograde. Knew what threats to the aircraft exist in theater. Was familiar with counters to those threats.
Q-	Minor errors in knowledge of retrograde procedures or when to initiate them. Minor errors or deviations in steps taken during retrograde and identifying theater specific threats to the aircraft.
U	Failed to display knowledge of retrograde procedures and when to initiate them. Did not understand what steps to take during retrograde and did not correctly identify theater specific threats to the aircraft.
INSTRUCTOR CRITERIA The following areas are applicable to initial instructor upgrade/periodic instructor evaluations. Specific criteria are included in **Chapter 1**.	
AREA 26-INSTRUCTIONAL ABILITY	
Q	Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.
AREA 27-BRIEFING/CRITIQUES	
Q	Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrates the ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents IAW prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Prebriefed the student's next mission.
Q-	Minor errors or omissions in briefings, critiques and/or training documents that did not affect student progress.

GRADE CATEGORIES	GRADING CRITERIA
U	Briefings were marginal or nonexistent. Did not review student's level of training or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in Training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete prebriefing of student's next mission.
AREA 28-DEMONSTRATION AND PERFORMANCE	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
Q-	Minor discrepancies in the "Q" criteria that did not affect safety or adversely affect student progress.
U	Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 11-2, *Aircraft Rules and Procedures*

AFPD 11-4, *Aviation Service*

AFI 11-202V2, *Aircrew Standardization/Evaluation Program*

AFI 11-202V3, *General Flight Rules*

AFI 33-360V1, *Publications Management Program*

Abbreviations and Acronyms

AAA—Antiaircraft artillery

ACC—Air Combat Command

AFI—Air Force instruction

AFORMS—Air Force Operations Resource Management System

AFPD—Air Force policy directive

AFR—Air Force regulation (old designation)

AFRC—Air Force Reserve Command

AGM—Air-to-ground missile

ASR—Airport surveillance radar

ATA—Air traffic area

ATCAA—Air traffic control assigned airspace

ATD—Aircrew training device

ATVR—Airborne video tape recorder

AWACS—Airborne Warning and Control System

BMC—Basic mission capable

CALCM—Conventional air launched cruise missile

CC—Commander

CCTS—Combat crew training

CF—Composite force squadron

COMM—Communication(s)

CP—Co-pilot

CMR—Combat mission ready

CTP—Companion trainer program

CRM—Cockpit/crew resource management

DEG—Degree

DH—Decision height

DO—Director of Operations

DOTV—Director of Operations Training Standardization Evaluation

DOV—Director of Operations Standardization/Evaluation

ECIC—Equipment calibration and interference check

ECM—Electronic counter measures

EFC—Expect further clearance

EP—Emergency procedures

EMCOM—Emission control

EPE—Emergency procedures evaluation

EPM—Electronic protection measures

EW—Electronic warfare

EWO—Electronic warfare officer

FCIF—Flight crew information file

FEF—Flight evaluation folder

FP—First pilot

FLT—Flight

FRF—Flight record folder

FRL—Fuselage reference line

FTU—Formal training unit

GCI—Ground control intercept

HF—High frequency

HHQ—Higher headquarters

HQ—Headquarters

IAS—Indicated airspeed

IAW—In accordance with

IFF—Identification friend or foe

ILS—Instrument landing system

INTL—Initial

INSTM—Instrument

INSTR—Instructor

IP—Instructor pilot

IRC—Instrument refresher course

KIAS—Knots indicated airspeed

MAJCOM—Major command

MCOPR—Major command office of primary responsibility

MCR—Multi-command regulation (old designation)

MDA—Minimum descent altitude

MDS—Mission design series

MOA—Military operating area

MQF—Master question file

MR—Mission ready

MSN—Mission

MTS—Mountainous

N—Navigator

N/A—Not available (or not applicable)

NAF—Numbered air force

N/N—No-notice

NOTAMS—Notice to Airmen

OCR—Office of collateral responsibility

OG—Operations group

OGV—Operations group standardization/evaluation

OPR—Office of primary responsibility

P—Pilot

PAR—Precision approach radar

PCS—Permanent change of station

PME—Primary mission equipment

QUAL—Qualification

Q—Qualified

R—Required

ROE—Rules of engagement

SAM—Surface-to-air missile

SAV—Staff assistance visit

SEB—Standardization evaluation board

SEFE—Standardization evaluation flight examiner

SELO—Standardization evaluation liaison officer

SIF—Selective identification feature

SIM—Simulator

SPINS—Special instructions

SQ—Squadron

SQB—Secure question bank

SSAN—Social security numbeer

STAN/EVAL—Standardization/evaluation

TCM—Terminate counter measures

TDY—Temporary duty

U—Unqualified

UHF—Ultra high frequency

US—United States

USAF—United States Air Force

VDP—Visual descent point

VFR—Visual flight rules

VOR—VHF omnidirectional range

Terms

Deviation—Performing an action not in sequence with current procedures, directives, or regulations. Performing action(s) out of sequence due to unusual or extenuating circumstances is not considered a deviation. In some cases, momentary deviations may be acceptable; however, cumulative momentary deviations will be considered in determining the overall qualification level.

Error—Departure from standard procedures and/or performing incorrect actions.

The following definitions apply to deviation, omission and error:

Major—Detracted from mission accomplishment, adversely affected use of equipment, and/or violated safety.

Minor—Did not detract from mission accomplishment, adversely affect use of equipment, or violate safety.

Omission—To leave out a required action.