

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

**AIR FORCE INSTRUCTION 11-2RQ-4,
VOLUME 2**



30 NOVEMBER 2012

Flying Operations

RQ-4 – CREW EVALUATION CRITERIA

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ACCESSIBILITY: Publications and forms are available for downloading or ordering on the e-Publishing web site at www.e-publishing.af.mil

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: ACC/A3CH

Certified by: AF/A3O
(Maj Gen James J. Jones)

Supersedes: AFI11-2RQ-4V2, 9 January
2007

Pages: 49

This volume implements AFD 11-4, *Aviation Service*; AFI 11-200, *Aircrew Training Standardization/Evaluation, and General Operating Structure*, and AFI 11-202V2, *Aircrew Standardization/Evaluation Program*. It applies to all RQ-4 and EQ-4 units. This publication applies to Air Force Reserve Command personnel who operate USAF RQ-4 or EQ-4 air vehicles. This publication does not apply to the Air National Guard. Major commands (MAJCOM)/direct reporting units (DRU)/field operating agencies (FOA) are to forward proposed MAJCOM/DRU/FOA-level supplements to this volume to AF/A3O-AI, through ACC/A3CH, for approval prior to publication in accordance with (IAW) AFI 11-200. **NOTE:** The terms DRU and FOA as used in this paragraph refer only to those DRU/FOAs that report directly to HQ USAF. Keep supplements current by complying with AFI 33-360, *Publications and Forms Management*. **NOTE:** See [paragraph 1.2](#) of this volume for guidance on submitting comments and suggesting improvements to this publication. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW AFMAN 33-363, *Management of Records*, and disposed of IAW the Air Force Records Disposition Schedule (RDS) maintained in the Air Force Records Information Management System (AFRIMS) located at <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm>. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through the appropriate functional's chain of command.

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*Public Law 93-294 (Aviation Career Incentive Act of 1974); DOD Directive 7730.57, Aviation Career Incentive Act and Required Annual Report; Air Force Instruction 11-401, Aviation Management; and Executive Orders 9397 and 13478. System of records notices F011 AF XO A, Aviation Resource Management System (ARMS), and F036 AF PC N, Unit Assigned Personnel Information (available at <http://privacy.defense.gov/notices/usaf/>), applies. The reporting requirements in this instruction are exempt from licensing IAW AFI 33-324, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Intra-agency Air Force Information Collections.**

SUMMARY OF CHANGES

Corrects publication format IAW the latest release of AFI 33-360. Corrects OPR references throughout the document, due to changes in ACC office symbols. Rewords and reorganizes multiple sections to simplify guidance. Reformats grading criteria in chapters 3, 4 and 5 into tabular format. Moves CRM evaluation criteria to Area 22, Crew Coordination. Adds an exception for permanent-party pilots assigned at FOLs to accomplish periodic mission evaluations in the LRE ([para 2.3.1.1](#)). Updates references, acronyms and abbreviations, and definitions in [Attachment 1](#).

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Chapter 1

GENERAL INFORMATION

1.1. General. Conduct all evaluations IAW the provisions of AFI 11-401, *Aviation Management*, AFI 11-202V2, and this volume.

1.1.1. Air Combat Command, C2ISR Operations Division (ACC/A3C), has overall responsibility for administration of this AFI.

1.1.2. Copies will be current and available to planning staffs from headquarters to aircrew level.

1.2. Recommended Changes/Waivers. Do not deviate from the policies and guidance in this AFI under normal circumstances. If an urgent requirement or emergency dictates otherwise, the pilot in command, or instructor, will take the appropriate action to safely recover the air vehicle.

1.2.1. Submit proposed changes to this AFI through appropriate channels to ACC/A3CH according to AFI 11-215, *USAF Flight Manuals Program (FMP)*. Use AF Form 847, *Recommendation for Change of Publication*.

1.2.2. When a controlling source publication changes, that publication takes precedence until the change is incorporated herein. After a change is made to a controlling source, a change to this AFI will be distributed in a timely manner.

1.2.3. Waiver authority for this publication is the MAJCOM/A3, IAW AFI 11-202V2. Waivers will be requested from the parent MAJCOM Stan/Eval through appropriate channels. Waiver authority for supplemental guidance will be as specified in the supplement and approved through the higher level coordination authority.

1.3. Procedures.

1.3.1. Flight Examiners (FE) will use the evaluation criteria contained in Table 3.1. or Table 4.1. as appropriate when conducting all flight and emergency procedure evaluations (EPE).

1.3.2. FEs should not normally occupy a primary crew position during an evaluation, but may do so if acting as a student for an instructor evaluation, mission requirements dictate a crew change, or in other situations where doing so is deemed necessary by the evaluator.

1.3.3. FEs will brief evaluatees on the evaluation purpose, conduct, and specific areas prior to flight. Evaluatees will accomplish required flight planning for the evaluation IAW requirements for their crew position. Higher headquarters (HHQ) flight examiners (and unit flight examiners as determined locally) may assist in mission planning and briefing as tasked and will be furnished a copy of all required mission materials upon request.

1.3.4. FEs will thoroughly debrief all aspects of the flight evaluation. This debrief will include the evaluatee's overall rating, specific deviations, area grades assigned (if other than qualified) and any required additional training. To the maximum extent possible, evaluations will be debriefed with the squadron commander (SQ/CC) or evaluatee's supervisor.

1.4. Grading Instructions. Standards and performance parameters are contained in AFI 11-202V2, MAJCOM supplement, this instruction, and the appropriate unit addendum.

1.4.1. FEs will compare evaluatee performance for each area accomplished during the evaluation with the standards provided and assign an appropriate grade for the area. The overall flight evaluation grade is derived from the area grades and is based on a composite of the observed events and tasks IAW AFI 11-202V2 and this instruction. If the evaluatee receives an unqualified area grade in any of the CRITICAL areas identified in **Table 2.1**, an overall unqualified grade will be assigned.

1.4.1.1. FEs will use the evaluation criteria in **Chapters 3, 4, and 5** of this volume to determine individual area grades. FEs must exercise judgment when the wording of areas is subjective and when specific situations are not covered. FE judgment is paramount in the determination of the overall evaluation grade and all aspects of the flight should be considered.

1.4.1.2. FEs will consider cumulative deviations when determining the overall evaluation grade. See **Attachment 1** for definitions of the terms deviation, omission, and error and how the words minor and major apply to these terms.

1.4.2. When grading criteria specify evaluation of a specific flight parameter and the flight manual lists only a minimum, maximum, or recommended flight parameter for that area, the evaluatee should brief the crew if deviation is necessary for any reason.

1.5. Emergency Procedures Evaluation. FEs will use an approved Aircrew Training Device (ATD), if available, to conduct EPEs. FEs will evaluate in the ATD only those areas that can be evaluated realistically in simulation. If not using an ATD, or for areas that cannot be evaluated realistically in simulation, FEs will administer the EPE orally. FEs will use the evaluation criteria in **Chapter 5** to determine individual area grades. This evaluation will include areas commensurate with evaluatee's Ready Aircrew Program (RAP) training level.

1.5.1. The following items will be included on all EPEs:

1.5.1.1. **General Knowledge.** Evaluate pilots and sensor operators (SO) on general air vehicle, ground station, and mission systems knowledge as required by their crew position.

1.5.1.2. **Emergency Procedures.** Evaluate a minimum of one abnormal or emergency procedure per phase of flight (e.g., pre-takeoff, takeoff, cruise, and landing).

1.5.1.2.1. FEs will evaluate pilot-initiated stop taxi procedure or pilot-initiated abort procedures on all pilot qualification (QUAL) EPEs. On Pilot initial (INIT) QUAL and requalification (REQUAL) EPEs, these items must be evaluated using the ATD; they may be evaluated orally on periodic QUAL evaluations at the discretion of the evaluator. Incorrect stop taxi procedure or pilot-initiated abort procedure requires an unqualified (Q-3) EPE grade. A pilot who receives a Q-3 as a result of stop taxi or pilot-initiated abort procedure error is not permitted to serve in his or her aircrew position until a successful reevaluation is accomplished.

1.5.1.2.2. FEs will limit SO EPEs to general knowledge, checklist procedures, and crew coordination. SO emergency procedure responsibilities are limited to assisting the pilot in diagnosing the problem, completing necessary tasks, and using available aids to resolve the emergency. Do not evaluate SOs on in-depth air vehicle systems

knowledge related to emergency procedures except for sensor system faults. SOs may be evaluated on ground station emergencies.

1.5.1.3. Contingency Management, Alternates, and Diverts. Evaluate pilots on overall contingency management. Include performance evaluation of at least one contingency (if using an ATD) and oral evaluation of all contingency modes on each EPE. Include performance or oral evaluation of coordination procedures and unique characteristics of landing an RQ-4 at alternate or divert airfields.

1.5.1.4. Crew Coordination. Evaluate crew coordination where applicable.

1.5.2. Evaluatees may use publications during the EPE that are normally available during a flight.

1.5.3. Evaluatees receiving an overall unqualified grade will be placed in supervised status until recommended additional training is completed and/or reevaluation is successfully accomplished. On EPEs graded as qualified with additional training, the FE will indicate whether the additional training need be accomplished before the next flight. Additional training and reevaluations will be accomplished IAW AFI 11-202V2.

1.5.4. Normally, separate EPEs are required for pilot instrument (INSTM)/QUAL, and mission (MSN) evaluations. If an EPE is conducted while the evaluatee is within both the INSTM/QUAL and MSN evaluation eligibility windows, a single EPE may be administered to fulfill the requisites for the combined INSTM, QUAL, and MSN evaluations. The combined EPE must be of sufficient scope and length to ensure all required areas for each evaluation are accomplished.

1.6. Documentation of Reconnaissance Employment Results. Document reconnaissance employment results in the Mission Description Section of the Comments Block on the AF Form 8, *Certificate of Aircrew Qualification*.

Chapter 2

EVALUATION REQUIREMENTS

2.1. General.

2.1.1. Evaluation requirements for QUAL and MSN evaluations listed in this chapter are generic. Specific areas required for flight evaluations are indicated in Table 2.1. and specific areas required for EPEs are indicated in **Table 2.2**. Prior to the mission, the FE will ensure the evaluatee understands which areas will be evaluated. The criteria in **Table 3.1**, **Table 4.1**, and **Table 5.1** (as appropriate), will be used to evaluate the mission.

2.1.2. **Evaluation Requirements.** Areas in Table 2.1. and Table 2.2. marked with an “R” are required items for that evaluation. A required area is a specific area that must be evaluated to complete the evaluation. All required areas must be included in the flight evaluation profile. However, if it is impossible to accomplish a required area in-flight, the FE may elect to evaluate the area by an alternate method (e.g. using an ATD or orally) in order to complete the evaluation. If the FE determines the required item cannot be adequately evaluated by an alternate method, the evaluatee will require an additional flight to complete the evaluation.

2.1.3. **Publications Check.** FEs will check the following publications:

2.1.3.1. Electronic Flight Manual (EFM). See **Attachment 1** for definition of and evaluation procedures for electronic publications.

2.1.3.2. Local In-flight Guide (when applicable).

2.1.3.3. Any additional publications issued to aircrews and specified in AFI 11-2RQ-4V3 or the unit addendum to AFI 11-202V2.

2.1.4. **Combined Evaluations.** Combined INSTM, QUAL, and MSN evaluations require only one set of ground requisites provided requirements of all evaluations are met.

2.2. Pilot Instrument and Qualification Evaluations. Initial, re-qualification, or periodic RQ-4 pilot INSTM and QUAL evaluations will be combined into a single INSTM/QUAL evaluation, and may be accomplished in the Launch and Recovery Element (LRE), the Mission Control Element (MCE), or in an approved ATD. Evaluations during exercises or deployments are allowed.

2.2.1. The following items are requisites for instrument and qualification evaluations:

2.2.1.1. Qualification Exam (Closed Book)

2.2.1.2. Qualification Exam (Open Book)

2.2.1.3. Publications check.

2.2.1.4. EPE.

2.2.1.5. Instrument examination

2.3. Mission Evaluations. All RQ-4 crewmembers will successfully complete initial and periodic MSN evaluations. Initial MSN evaluations must occur after successful completion of the initial INSTM/QUAL evaluation. Scenarios that represent unit Designed Operational

Capability (DOC) tasking and resemble operational missions satisfy the requirements of this evaluation. The mission profiles will be designed to evaluate areas commensurate with the evaluatee's RAP training level, special qualifications, and basic airmanship. Initial mission evaluations will be given in the primary DOC of the unit (when possible). Evaluatees will be evaluated in the position of their highest qualification. Evaluations during exercises or deployments are allowed.

2.3.1. For pilots, the initial, requalification, or periodic MSN evaluations will be accomplished in the MCE. Units may combine pilot periodic INSTM/QUAL/MSN evaluations and accomplish them in the MCE. EQ-4 units may substitute the Beyond Line-of-Sight LRE (BLOS LRE) for the MCE on MSN evaluations when flying mid-mission from the BLOS LRE.

2.3.1.1. For pilots assigned to permanent party positions at forward operating locations (FOL), periodic MSN evaluations may be accomplished in the LRE, with the evaluation tailored to the mission(s) specific to the location. Pilots who complete MSN evaluations in the LRE remain mission qualified, but are restricted to LRE operations only. FEs will document the restriction in the Comments block of the AF Form 8. A requalification MSN evaluation must be accomplished in the MCE to remove the restriction.

2.3.2. For SOs, the MSN evaluation is a combined QUAL/MSN evaluation accomplished in the MCE.

2.3.3. The following items are requisites for mission evaluations:

2.3.3.1. Publications check.

2.3.3.2. EPE.

2.4. Formal Course Evaluations. Syllabus evaluations will be flown IAW syllabus mission profile guidelines if stated, or on a mission profile developed from syllabus training objectives. Formal course guidelines may be modified, based on local operating considerations or FE judgment, to complete the evaluation. Training objectives and related areas will be graded using the performance criteria in **Chapters 3, 4, and 5**.

2.5. Instructor Evaluations.

2.5.1. All crewmembers selected for instructor duty must be evaluated to determine their proficiency, judgment, technical knowledge, instructor ability (including error analysis of student activity), and use of grading documents.

2.5.2. Instructors must demonstrate timely, effective and efficient instruction to a student (or qualified individual acting as a student). The evaluator may require the evaluatee to present verbal explanations of equipment operations, procedures, and techniques. Evaluators must exercise sound judgment to ensure oral questions and instructions are clear, concise, pertinent to the individual's crew duties, and do not interfere with normal mission accomplishment. The evaluator may forego additional demonstration or instruction based on time available and other factors.

2.5.3. For scheduled instructor evaluations, an evaluator who desires a critique of areas not covered in the evaluatee's prebrief will allow the evaluatee sufficient time to prepare the critique. For HHQ Standardization/Evaluation administered evaluations, the evaluator will

provide the evaluatee a performance critique as soon as possible following the evaluatee's critique.

2.5.4. Initial Instructor Evaluations.

2.5.4.1. Pilots or SOs must demonstrate the ability to instruct in some phase of the unit's mission. Specific profiles and/or events will be determined by the FE, and must include any specific requirements delineated under Area 20 in **Table 3.1** or **Table 4.1**, as appropriate.

2.5.4.2. Crewmembers who desire to re-align their INSTM, QUAL, or MSN evaluation during the initial INSTR evaluation must complete requisite written examinations, publications check, and EPE.

2.5.5. **Periodic Instructor Evaluations.** Periodic evaluations (INSTM/QUAL, MSN, and QUAL/MSN) will include evaluation of the crewmember's instructional ability.

2.5.6. Instructor Evaluation Grading

2.5.6.1. An instructor receiving an area grade of U in any instructor area will receive an overall Q-3 for the Instructor Evaluation. The instructor may not perform instructor duties until additional training and/or a successful re-evaluation is complete. This restriction is placed in the comments and YES is marked in the "restrictions" block on the AF Form 8.

2.5.6.2. An instructor receiving an area grade of U or Q- with additional training required in any grading area will not perform instructor duties until additional training is complete. This restriction is placed in the comments and YES is marked in the "restrictions" block on the AF Form 8.

2.5.6.3. If an instructor receives an area grade of Q- in any instructor area, but the flight examiner determines additional training is not appropriate or necessary, the overall qualification level (e.g. Q-1, Q-2, Q-3) awarded for the Instructor Evaluation resides within the flight examiner's judgment.

2.6. Difference Certifications and Difference Qualification Evaluations. Crewmembers require difference qualification training and either difference certification or a difference qualification evaluation to document qualifications in different air vehicle models; in new air vehicle or ground station systems, software, avionics, sensors/payloads, and displays; or in operations for which a crewmember had no previous qualification.

2.6.1. System changes will be classified as minor or major. The operations group commander (OG/CC) will determine what constitutes a minor or major system change.

2.6.2. A minor system change within the same mission design series air vehicle requires a difference certification. Difference certification training will be accomplished by a qualified instructor and certified by the SQ/CC. Units will document the difference certification on the squadron letter of certification (letter of Xs).

2.6.3. A major system change requires a difference qualification evaluation. A difference qualification evaluation does not have an expiration date established because the evaluation does not satisfy the requirements for the "full" periodic evaluation. For administrative

purposes, annotate AF Form 8, flight phase for difference qualification evaluations as a SPOT evaluation.

Table 2.1. Crew Evaluations.

AREA	NOTE	AREA TITLE	PILOT		SO
			INSTM /QUAL	MSN	QUAL/ MSN
GENERAL					
1		MISSION PLANNING	R	R	R
2		BRIEFING	R	R	R
3		TAKEOFF AND LANDING DATA	R		N/A
4		PRE-TAKEOFF	R		R
5		TAKEOFF	R		N/A
6		IN-FLIGHT CHECKS/PLANNING	R	R	R
7		TRANSFER OF AIR VEHICLE CONTROL	R		N/A
8		FUEL MANAGEMENT	R	R	N/A
9		COMMUNICATIONS AND IFF/SIF	R	R	N/A
10		STEERING COMMANDS	R	R	N/A
11		CONTINGENCY MANAGEMENT	R	R	N/A
12		LINK PROCEDURES	R	R	R
13		LANDING	R		N/A
14		AFTER LANDING	R		
15		DEBRIEFING AND CRITQUE	R	R	R
16		KNOWLEDGE	R	R	R
17	(Critical)	AIRMANSHIP AND SITUATIONAL AWARENESS	R	R	R
18	(Critical)	SAFETY	R	R	R
19	(Critical)	FLIGHT AND CREW DISCIPLINE	R	R	R
20	1	INSTRUCTOR PERFORMANCE	R	R	R
21		TASK PRIORITIZATION	R	R	R
22		CREW COORDINATION	R	R	R
INSTRUMENT					
30		INSTRUMENT DEPARTURE	R		N/A

AREA	NOTE	AREA TITLE	PILOT		SO
			INSTM /QUAL	MSN	QUAL/ MSN
31		CRUISE/NAVIGATION	R		N/A
32		HOLDING	R		N/A
33		INSTRUMENT PENETRATION	R		N/A
34		INSTRUMENT APPROACH	R		N/A
35		MISSED APPROACH/CLIMB OUT	R		N/A
36		CROSS-CHECK	R		N/A
MISSION EMPLOYMENT					
40		MISSION PLAN		R	R
41		MISSION EXECUTION		R	R
42		RADIO USE AND MISSION COMMUNICATIONS		R	R
43		MISSION NAVIGATION		R	N/A
44		INGRESS			N/A
45		EGRESS			N/A
46		TRAINING RULES AND RULES OF ENGAGEMENT		R	R
47		SENSOR/PAYLOAD MANAGEMENT		R	R
48		CREW CHANGE-OVER		R	R
49		COMMAND AND CONTROL INTEGRATION		R	R
<p>NOTES:</p> <p>1. Required only for instructor qualified pilots and SOs. Awarding a “U” in any of the Instructor Grading Criteria areas will result in a Q-3 for the overall instructor grade. The overall grade for the instructor portion of the evaluation will be no higher than the lowest overall grade awarded under INSTM/QUAL or MSN evaluation.</p> <p>“Critical” areas, if graded U, require overall evaluation grade of Q-3.</p> <p>“R” indicates areas required for each evaluation.</p>					

Table 2.2. Emergency Procedure Evaluations.

AREA	NOTE	AREA TITLE	PILOT	SO
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			INSTM / QUAL	MSN	QUAL/ MSN
GENERAL					
101		AIR VEHICLE FIRE ON THE GROUND			
102		CONTINGENCY 1 – LOST COMMUNICATIONS			
103		CONTINGENCY 2 – RETURN TO BASE			
104		CONTINGENCY 3 – EMERGENCY LANDING			
105		CONTROLLABILITY CHECK			
106		DEPARTURE FROM PREPARED SURFACE			
107		ENGINE FIRE IN FLIGHT			
108		FLIGHT TERMINATION			
109		HOT BRAKES			
110	(Critical) 1	PILOT-INITIATED STOP TAXI	R		
111	(Critical) 1	PILOT-INITIATED ABORT	R		
112		TAKEOFF ABORT			
113		TIRE FAILURE – TAKEOFF			
114		TIRE FAILURE – LANDING			
115		SYSTEMS OPERATION / KNOWLEDGE / LIMITS	R	R	R
GROUND STATION EMERGENCIES					
120		EMERGENCY EGRESS	R	R	R
121		EQUIPMENT OVERTEMPERATURE			
122		LOSS OF ELECTRICAL POWER			
123		SMOKE OR FUMES	R	R	R
AIR VEHICLE SYSTEM EMERGENCIES					
130		ACTUATORS – FLIGHT CONTROL SYSTEM			
131		AIR DATA			

AREA	NOTE	AREA TITLE	PILOT		SO
			INSTM / QUAL	MSN	QUAL/ MSN
132		AIR TRAFFIC CONTROL			
133		COMMON DATA LINK			
134		DIFFERENTIAL GLOBAL POSITIONING SYSTEM			
135		ELECTRICAL SYSTEM			
136		ELECTRO-OPTICAL SYSTEM			
137		ENGINE			
138		ENVIRONMENTAL CONTROL SYSTEM			
139		FADEC			
140		FLIGHT TERMINATION SYSTEM			
141		FUEL SYSTEM			
142		GEAR AND BRAKES			
143		GUIDANCE AND CONTROL			
144		ICE DETECTION SYSTEM			
145		IFF			
146		INERTIAL NAVIGATION SYSTEM			
147		INFRARED SENSOR			
148		INMARSAT			
149		INTEGRATED MISSION MANAGEMENT COMPUTER			
150		KU-BAND SATCOM			
151		MISSION LOAD			
152		OMNISTAR			
153		RADIO ALTIMETER			
154		RECORDER			
155		SYNTHETIC APERTURE RADAR			
156		UHF LINK CONTROL PROCESSOR 1			
157		UHF LINK CONTROL PROCESSOR 2			

AREA	NOTE	AREA TITLE	PILOT		SO
			INSTM / QUAL	MSN	QUAL/ MSN
NOTES: 1. Pilot QUAL EPEs require evaluation of either Area 110 or Area 111. “Critical” areas, if graded U, require overall evaluation grade of Q-3.					

Chapter 3

PILOT EVALUATION CRITERIA

3.1. General.

3.1.1. The grading criteria in this chapter are divided into three sections: General, Instrument, and Mission. Use all sections for criteria applicable to the events performed on the evaluation.

3.1.2. Grade all observed areas. Assign only one grade to each area. Where major areas are divided into subareas, grades will be assigned to each subarea for which grading criteria is provided. Annotate discrepancies (less than Q performance) IAW AFI 11-202V2 and this publication.

3.1.3. Criteria are intended to ensure objective and standardized evaluations. Evaluators must realize these grading criteria cannot cover every situation. Overall performance ratings combine in-flight and ground requisite performance tempered by sound evaluator judgment.

3.2. Evaluation Criteria.

Table 3.1. Table of Evaluation Criteria.

GRADE	CRITERIA
<i>AREA 1 – MISSION PLANNING</i>	
1A. Mission Preparation	
Q	Clearly defined the mission overview and mission goals. Provided specific information on what needed to be done. Solicited feedback from other crewmembers to ensure understanding of mission requirements. Thoroughly critiqued plans to identify potential problem areas and ensured all flight members understood possible contingencies. Checked all factors applicable to flight IAW applicable directives. Adequate knowledge in mission requirements including (if applicable) Special Instructions (SPINs), Air Tasking Order (ATO), coordination with Liaison Officer and participating ground-based mission agencies. Aware of alternatives available if flight cannot be completed as planned. Read and initialed all items in the Flight Crew Information File (FCIF) and read files. Prepared at briefing time. Able to understand and interpret the current mission plan.
Q-	Did not adequately define the mission overview and mission goals. Did not adequately address potential problem areas. Did not adequately solicit feedback or critique the plans to ensure understanding of possible contingencies. Minor errors or omissions detracted from mission effectiveness, but did not affect mission accomplishment. Demonstrated limited knowledge of performance capabilities or approved operating procedures and rules in some areas.
U	Did not define the mission overview and goals. Lack of specific information on required items. Did not solicit feedback from other crewmembers to ensure

	understanding. Did not critique plans to identify potential problem areas. Major errors or omissions would have prevented a safe or effective mission. Displayed unsatisfactory knowledge of operating data or procedures. Did not understand or comply with FCIF and read file directives. Did not review or initial Go/No Go items. Not prepared at briefing time.
1B. Publications	
Q	Publications were current, complete, and usable for any of the unit's missions or combat taskings.
Q-	Publications contained minor deviations, omissions, and/or errors; however, they contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.
U	Publications contained major deviations, omissions, and/or errors which could compromise safety of flight or effective mission accomplishment.
AREA 2 – BRIEFINGS	
2A. Organization	
Q	Well organized, included all applicable information, and presented in a logical sequence. All areas of briefing were accomplished to effectively execute the mission. Concluded briefing in time to allow for preflight of personal equipment, shelter, and air vehicle.
Q-	Events out of sequence, hard to follow, some redundancy. Not fully prepared for briefing.
U	Confusing presentation. Poorly organized and not presented in a logical sequence. Failed to brief required areas. Did not allow time for preflight of personal equipment, shelter, and air vehicle.
2B. Presentation	
Q	Presented briefing in a professional manner covering all pertinent items. Effectively used available briefing aids. Crewmembers clearly understood mission objectives, requirements, and targets.
Q-	Some difficulty communicating clearly. Did not make effective use of available briefing aids. Dwelled on non-essential mission items.
U	Failed to conduct or attend required briefings. Failed to use available briefing aids. Redundant with lack of continuity. Lost interest of crew members. Demonstrated lack of subject knowledge. Presentation created doubts or confusion.
2C. Mission Coverage	
Q	Established objectives for the mission. Presented all training events and special interest items. Included effective technique discussion for accomplishing the mission.

Q-	Omitted items or objectives pertinent, but not critical, to the mission. Limited discussion of training events or special interest items. Dwelled on non-essential items. Limited discussion of valid techniques.
U	Did not establish relevant objectives for the mission. Omitted essential items. Failed to discuss training events or special interest items. Presented erroneous information and/or did not correct erroneous information that would affect safe and effective mission accomplishment. Omitted major training events.
<i>AREA 3 – TAKEOFF AND LANDING DATA</i>	
Q	Accurately computed and checked all required takeoff and landing data. Complete understanding of abort considerations, runway condition, and impact of weather on takeoff and landing operations. All distances computed to within ± 500 feet and all speeds ± 5 knots.
Q-	Computed and checked required takeoff data with minor omissions or errors, which did not detract from mission accomplishment or safety. Limited understanding of abort considerations, runway condition, and impact of weather on takeoff and landing operations. Computed distances within ± 800 feet and speeds ± 8 knots.
U	Major errors or omissions which compromise safety. Faulty or improper knowledge of takeoff and landing data. Computed distances and speeds tolerances greater than Q- parameters.
<i>AREA 4 – PRE-TAKEOFF</i>	
Q	Established and adhered to step, start engine, taxi and take-off times to assure thorough preflight, check of personal equipment, individual crew briefing, etc. Accurately determined readiness of shelter and air vehicle for flight. Performed engine start all checks and procedures and taxi IAW the flight manual and applicable directives. Coordinated with safety observer and ground crew.
Q-	Same as above except for minor procedural deviations which did not detract from mission effectiveness. Operated the air vehicle safely.
U	Omitted major item or items of the appropriate checklist. Major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of shelter and air vehicle for flight. Errors directly contributed to a late takeoff which degraded the mission or made it non-effective. Failed to coordinate with ground crew and safety observer prior to air vehicle movement. Failed to adequately monitor taxi operation. Evaluator or instructor intervention required to prevent damage to air vehicle.
<i>AREA 5 – TAKEOFF</i>	
Q	Completed all checks correctly IAW flight manual and local procedures. Operated air vehicle safely. Performed takeoff IAW flight manual procedures.
Q-	Minor deviations from published procedures without affecting safety of flight. Hesitant in application of procedures and corrections.

U	Failed to coordinate with ground crew and safety observer prior to air vehicle movement. Failed to comply with air traffic control (ATC) instructions or adequately monitor takeoff operation.
<i>AREA 6 – INFLIGHT CHECKS AND PLANNING</i>	
Q	Effectively performed in-flight checks including changing profile or route segments as required. Used current checklist and accomplished all items in proper sequence with no deviations or omissions. Effectively adapted to dynamic mission plan changes. Demonstrated ability to adjust mission profile to comply with time and fuel limitations, area weather conditions, and mission constraints and objectives.
Q-	In-flight checks, checklist use and in-flight planning included minor deviations which did not compromise safety, or significantly detract from the mission.
U	Did not perform in-flight checks or adapt to changing mission requirements. Used incorrect checklist, omitted checklist items or did not complete a required checklist. Unable to re-plan in-flight or adapt to changing mission requirements. Consistently unable to maintain situational awareness. Action or inaction compromised safety and successful mission accomplishment.
<i>AREA 7 – TRANSFER OF AIR VEHICLE CONTROL</i>	
Q	Monitored basic air vehicle control within specified tolerances dictated by the software and mission plan while orchestrating the transfer of control between ground stations. Promptly reacted to flight deviations as a result of anomalies, contingency reactions triggered by software and air vehicle conditions, manually initiated overrides, etc. All pilots constantly aware of which ground station had air vehicle control.
Q-	Minor procedural deviations which did not detract from the overall mission. Minor confusion over which ground station had air vehicle control due to communications or communication link problems. Did not pose an unsafe condition.
U	Failed to adhere to procedures for transfer of air vehicle control. Failed to anticipate air vehicle actions dictated by the software and mission plan. Failed to monitor basic air vehicle control while transferring control. Failed to promptly react to flight deviations. Confusion over which ground station has air vehicle control which caused an unsafe condition to develop.
<i>AREA 8 – FUEL MANAGEMENT</i>	
Q	Actively monitored fuel throughout the mission. Complied with all established fuel requirements.
Q-	Errors in fuel management procedures which did not preclude mission accomplishment.
U	Failed to monitor fuel status or comply with established fuel requirements. Poor fuel management led to severe mission degradation and/or precluded

	mission accomplishment. Did not adhere to briefed fuel requirements.
<i>AREA 9 – COMM/IFF/SIF</i>	
Q	Complete knowledge of and compliance with correct COMM and IFF/SIF procedures. Transmissions over radio and interphone were concise, accurate and used proper terminology. Complied with and acknowledged all required instructions. Thoroughly familiar with operations and communications security (OPSEC and COMSEC) requirements, and secure voice equipment. Understood and executed proper internal and external communications capabilities and employment for the mission.
Q-	Occasional deviations from correct COMM and IFF/SIF procedures required retransmissions or resetting codes. Slow in initiating or missed several required calls. Minor errors or omissions did not significantly detract from situational awareness, threat warning, or mission accomplishment. Transmissions contained extraneous matter, were not in proper sequence or used nonstandard terminology. Demonstrated limited knowledge of OPSEC and COMSEC requirements, and secure voice equipment.
U	Incorrect COMM and/or IFF/SIF procedures or poor performance caused confusion and jeopardized mission accomplishment. Omitted numerous required radio calls. Inaccurate or confusing terminology significantly detracted from situational awareness or mission accomplishment. Displayed inadequate knowledge of OPSEC and COMSEC requirements, and secure voice equipment.
<i>AREA 10 – STEERING COMMANDS</i>	
Q	Correctly operated steering commands including Auto, On-Track, Override, and Suspend. Successfully recognized actual or potential conflicts and adjusted air vehicle performance to safely avoid these conflicts.
Q-	Operation of steering commands included minor deviations which did not compromise safety or significantly detract from successful mission accomplishment.
U	Improper or inappropriate operation of steering commands which compromised safety or significantly detracted from successful mission accomplishment.
<i>AREA 11 – CONTINGENCY MANAGEMENT</i>	
Q	Complete understanding of all contingency modes and their proper use during the mission. Mission effectiveness was enhanced by the proper use of the appropriate contingency. Decision to use or not use specific contingency logic was made in a timely manner.
Q-	Partial understanding of some contingency modes and their proper use during the mission. Overall mission effectiveness was not affected by improper use of the appropriate contingency. Decision to use or not use specific contingency logic was delayed significantly.

U	Did not understand all contingency modes and their proper use during the mission. Mission was negatively impacted by improper use of the appropriate contingency. No decision was made to use or not use specific contingency logic. The contingency used was unsafe.
<i>AREA 12 – LINK PROCEDURES</i>	
Q	Understood and executed proper communication links protocols for effective air vehicle control, sensor/payload management, and mission accomplishment.
Q-	Minor errors or omissions occurred in establishing and maintaining communications links, but did not significantly detract from air vehicle control, sensor/payload management, and mission accomplishment.
U	Incomplete understanding of the communications links led to ineffective or improper use. Mission effectiveness was negatively impacted.
<i>AREA 13 – LANDING</i>	
Q	Performed landings IAW procedures outlined in the flight manual, operational procedures, and local directives.
Q-	Performed landings with minor deviations to procedures outlined in the flight manual, operational procedures, and local directives.
U	Landing not performed IAW procedures outlined in the flight manual, operational procedures and local directives.
<i>AREA 14 – AFTER LANDING</i>	
Q	Appropriate after landing checks and air vehicle taxi procedures accomplished IAW the flight manual and applicable directives. All required forms, reports, or logs were complete, accurate, readable, accomplished on time and IAW applicable directives. Accurate debrief of significant events to applicable agencies (intelligence, maintenance, etc.).
Q-	Same as qualified except some deviations or omissions noted in performance of after landing check and/or air vehicle taxi procedures in which safety was not jeopardized. Minor errors on forms, reports, or logs did not affect conduct of the mission. Incorrect or incomplete reporting of information due to minor errors, omissions, and/or deviations.
U	Major deviations or omissions were made in performance of after-landing check or air vehicle taxi procedures which could have jeopardized safety. Forms, reports, or logs were incomplete, inaccurate, or improperly filled out. Omitted or incorrectly reported significant information due to major errors, omissions, and/or deviations.
<i>AREA 15 – DEBRIEFING AND CRITIQUE</i>	
Q	Thoroughly debriefed the mission (or applicable portions) in a timely manner. Correctly analyzed mission results with respect to established objectives. Provided specific, objective, non-threatening positive and negative feedback on team and individual performance. Debriefed deviations. Offered corrective

	guidance as appropriate. Thoroughly debriefed any breakdowns in roles and responsibilities. Asked for reactions and inputs from other mission participants. Recapped key points and compared mission results with mission objectives.
Q-	Limited debriefing. Did not thoroughly discuss performance relative to mission objectives. Minor time management problems. Debriefed mission without specific, non-threatening positive and negative feedback on individual and team performance. Did not debrief significant deviations to an acceptable level. Did not consistently seek input from other mission participants. Incomplete or inadequate recap of key points and comparison of mission results to mission objectives.
U	Did not correctly debrief mission deviations or offer corrective guidance. Used excessive time to debrief. Failed to debrief breakdowns in roles and responsibilities. Did not provide non-threatening positive and negative feedback during debriefing. Did not seek input from other mission participants. Did not recap key mission points nor compare mission results to mission objectives.
<i>AREA 16 – KNOWLEDGE</i>	
16A. General: Air Vehicle and Ground Station	
Q	Thorough knowledge of air vehicle and ground station systems, limitations, and performance characteristics.
Q-	Knowledge of air vehicle and ground station systems, limitations, and performance characteristics sufficient to perform the mission safely. Demonstrated deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of air vehicle and ground station systems, limitations, or performance characteristics.
16B. Emergency Procedures	
Q	Operated within prescribed limits and correctly diagnosed problems. Performed and explained proper corrective action for each type of malfunction. Effectively used checklists.
Q-	Operated within prescribed limits, but slow to analyze problems or apply proper corrective actions. Used the checklist when appropriate, but slow to locate required data.
U	Attempted to exceed limitations. Unable or failed to analyze problems or take proper corrective action. Did not use checklist, or lacked acceptable familiarity with its arrangement or contents.
16C. Flight Rules, Regulations and Procedures	
Q	Thorough knowledge of flight rules, regulations, and procedures.
Q-	Deficiencies in depth of knowledge.
U	Inadequate knowledge of flight rules and procedures.

16D. Local Area Procedures	
Q	Thorough knowledge of local procedures.
Q-	Limited knowledge of local procedures.
U	Inadequate knowledge of local procedures.
16E. Plans and Theater Procedures	
Q	Adequate knowledge of plans applicable to the unit mission. Thoroughly familiar with theater-specific procedures and contingencies.
Q-	Deficiencies in depth of knowledge or comprehension of plans or theater-specific procedures applicable to the unit mission.
U	Knowledge of plans and theater-specific procedures insufficient to ensure effective mission accomplishment.
16F. Authentication Procedures	
Q	Performed authentication with no errors.
Q-	Minor errors in authentication.
U	Unable to authenticate or authenticated incorrectly.
<i>AREA 17 – AIRMANSHIP AND SITUATIONAL AWARENESS (CRITICAL)</i>	
Q	Executed the assigned mission in a timely and efficient manner. Conducted the flight with a sense of understanding and comprehension. Made appropriate decisions based on available information. Recognized the need for action. Aware of performance of self and other crew members. Aware of on-going mission status. Recognized, verbalized, and correctly acted on unexpected events.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Improperly analyzed flight conditions and/or failed to recognize and understand mission developments, or demonstrated poor judgment to the extent that flight safety could have been compromised. Did not correctly adapt to meet new situational demands. Did not recognize the need for action. Not aware of performance of self and other crew members. Not aware of on-going mission status. Failed to recognize, verbalize, and act on unexpected events.
<i>AREA 18 – SAFETY (CRITICAL)</i>	
Q	Aware of and complied with all safety factors required for safe air vehicle operation and mission accomplishment.
U	Was not aware of or did not comply with all safety factors required for safe operation or mission accomplishment. Did not use available means to clear air vehicle flight path. Operated air vehicle and mission equipment in a dangerous manner.
<i>AREA 19 – FLIGHT AND CREW DISCIPLINE (CRITICAL)</i>	

Q	Provided required direction and information. Correctly adapted to meet new situational demands. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.
U	Did not provide direction and information when needed. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.
AREA 20 – INSTRUCTOR PERFORMANCE	
20A. Briefing and Debriefing	
Q	Presented a comprehensive and well organized instructional briefing and debriefing encompassing all mission events. Made excellent use of training aids. Reviewed student's present level of training and defined mission events to be performed. Excellent reconstruction and analysis of all events. Clearly defined objectives. Gave positive and negative performance feedback at appropriate times. Feedback was specific, objective, based on observable behavior, and given constructively. Recapped key points and compared mission results with objectives. When appropriate, took the initiative and time to share operational knowledge and experience. Briefed student's requirements for the next mission.
Q-	Minor errors or omissions in briefing and/or debriefing or mission critique. Occasionally unclear in reconstruction and analysis of events. Some feedback given, but was not always given at appropriate times and not always a positive learning experience. Debrief covered the mission highlights but was not specific enough. Did not adversely affect student training.
U	Major errors or omissions in briefing and/or debriefing. Did not use training aids and/or reference material effectively. Did not review student's training folder or past performance. Failed to define student's training requirements and mission objectives. Reconstruction and analysis of events or was incomplete, inaccurate, or confusing. Failed to adequately critique student or provide complete mission analysis. Overlooked or omitted major discrepancies. Briefing and/or debriefing below the caliber of that expected of instructors.
20B. Demonstration and Performance	
Q	Effectively demonstrated procedures and techniques on the ground and in-flight. Provided concise, meaningful instructional commentary. Demonstrated excellent instructor proficiency.
Q-	Demonstration and performance included minor errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Instructional commentary was sometimes unclear. Did not adversely affect student training.
U	Unable to demonstrate correct procedure or technique. Made major procedural errors. Did not provide instructional commentary. Demonstrated below average instructor proficiency.
20C. Instructor Knowledge	

Q	Demonstrated in-depth knowledge of procedures, requirements, applicable publications and regulations, air vehicle systems and performance characteristics, ground station systems, mission, and tactics beyond that expected of non-instructors.
Q-	Deficiencies in depth of knowledge, comprehension of procedures, requirements, applicable publications and regulations, air vehicle systems and performance characteristics, ground station systems, mission, or tactics.
U	Unfamiliar with procedures, requirements, applicable publications and regulations, air vehicle systems and performance characteristics, ground station systems, mission, or tactics. Lack of knowledge in certain areas seriously detracted from instructor effectiveness.
20D. Ability to Instruct	
Q	Demonstrated excellent instructor or evaluator ability. Clearly defined all mission requirements and any required additional training or corrective action. Instruction or evaluation was accurate, effective, and timely. Was completely aware of air vehicle and mission situation at all times. Demonstrated ability to communicate and instruct effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions.
Q-	Instructional performance included minor errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Problems in communication or analysis degraded effectiveness of instruction or evaluation. Did not adversely affect student training.
U	Demonstrated inadequate ability to instruct or evaluate. Unable to perform, teach, or assess techniques, procedures, systems use, or tactics. Did not remain aware of air vehicle and mission situation at all times. Unable to effectively communicate or provide timely feedback to the student. Gave instruction that was unsafe or contradicted published directives. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.
20E. Training and Evaluation Forms Preparation	
Q	Completed appropriate training or evaluation records accurately IAW directives. Adequately assessed and recorded performance relative to standard. Comments were clear and pertinent.
Q-	Minor errors or omissions in training or evaluation records. Comments were incomplete or slightly unclear.
U	Did not complete required forms or records. Comments were invalid, unclear, or did not accurately document performance.
<i>AREA 21 – TASK PRIORITIZATION</i>	
Q	Correctly identified, prioritized, and managed tasks based on existing and new information that assured mission success. Used available resources to manage workload. Communicated task priorities to other crewmembers. Asked for assistance when required. Displayed sound knowledge of systems. Effectively

	identified contingencies and alternatives. Gathered and crosschecked available data before acting. Clearly stated decisions and ensured they were understood. Investigated doubts and concerns of other crewmembers when necessary.
Q-	Made minor errors in prioritization, management of tasks, and system knowledge which did not affect safe or effective mission accomplishment. Did not completely communicate task priorities to other crewmembers. Made minor errors in identifying contingencies, gathering data, or communicating a decision which did not affect safe or effective mission accomplishment.
U	Incorrectly prioritized or managed tasks. Displayed lack of systems knowledge causing task overload that seriously degraded mission accomplishment or safety of flight. Failed to communicate task priorities to other flight members. Failed to ask for assistance when overloaded. Improperly or ineffectively identified contingencies, gathered data, or communicated a decision that seriously degraded mission accomplishment or safety of flight.
AREA 22 – CREW COORDINATION	
Q	Effectively coordinated with other crewmembers without misunderstanding. Effective use of Crew Resource Management (CRM). See AFI 11-290, <i>Cockpit/Crew Resource Management Training Program</i> , and use AF Form 4031, <i>CRM Skills Criteria Training/Evaluation</i> , as a reference.
Q-	Coordinated with other crewmembers with minor exceptions. Intra-crew communications were not clear or concise. CRM was the minimum acceptable.
U	Breakdown in coordination with other crewmembers precluded mission accomplishment or jeopardized safety. CRM was lacking to the extent the mission accomplishment was severely degraded.
AREA 30 – INSTRUMENT DEPARTURE	
Q	Complied with all restrictions or controlling agency instructions. Made all required reports. Applied course or heading corrections promptly. Effectively monitored air vehicle control, performance, and departure position.
Q-	Minor deviations in navigation occurred during departure. Slow to comply with controlling agency instructions or unsure of reporting requirements. Slow to apply course or heading corrections. Minor deviations in monitoring air vehicle control, performance, and departure position.
U	Failed to comply with published or directed departure or with controlling agency instructions. Accepted an inaccurate clearance. Failed to monitor air vehicle control and performance. Unable to identify airvehicle position on departure routing.
AREA 31 – CRUISE AND NAVIGATION	
Q	Demonstrated satisfactory capability to navigate using all available means. Used appropriate navigation procedures. Complied with clearance instructions. Aware of position at all times. Remained within the confines of assigned

	airspace.
Q-	Minor errors in procedures and use of navigation equipment. Slow to comply with clearance instructions. Had some difficulty in establishing exact position and course.
U	Major errors in procedures and use of navigation equipment. Could not establish position. Failed to recognize checkpoints or adjust for deviations in time and course. Did not remain within the confines of assigned airspace.
<i>AREA 32 – HOLDING</i>	
Q	Performed entry and holding IAW published procedures and directives. Understood all aspects of the “suspend” command and the holding pattern flown by the air vehicle after a “suspend” command is issued.
Q-	Performed entry and holding procedures with minor deviations. Unclear on some aspects of the “suspend” command and the holding pattern flown by the air vehicle after a “suspend” command is issued.
U	Holding was not IAW published procedures and directives. Unable to effectively or safely hold the air vehicle. Did not understand the “suspend” command and the holding pattern flown by the air vehicle after a “suspend” command is issued.
<i>AREA 33 – INSTRUMENT PENETRATION (ENROUTE DESCENT TO IAF)</i>	
Q	Performed the penetration (enroute descent) as published or directed and IAW flight manuals. Complied with all restrictions and with mission plan constraints. Complied with ATC instructions and procedures. Effectively monitored air vehicle control, performance, and position orientation within air vehicle limitations.
Q-	Performed the penetration (enroute descent) with minor deviations in procedures and monitoring air vehicle control, performance, and position. Complied with all restrictions.
U	Performed the penetration (enroute descent) with major deviations in procedures and monitoring air vehicle control, performance, and position. Unable to maintain position orientation or ATC assigned airspace.
<i>AREA 34 – INSTRUMENT APPROACH</i>	
Q	Performed approach IAW procedures outlined in the flight manual, operational procedures, and local directives. Maintained basic control and position orientation within air vehicle performance limitations. Complied with ATC instructions and procedures. Complied with mission plan approach and flight manual standards.
Q-	Performed approach with minor deviations to procedures outlined in the flight manual, operational procedures, and local directives.
U	Approach not performed IAW procedures outlined in the flight manual, operational procedures, and local directives. Unable to maintain position

	orientation or ATC assigned airspace. Unsafe inputs jeopardized safety.
<i>AREA 35 – MISSED APPROACH AND CLIMBOUT</i>	
Q	Executed Contingency 4 IAW published procedures and directives. Understood the Contingency 4 logic and accurately predicted air vehicle programmed actions. Complied with ATC instructions.
Q-	Executed Contingency 4 with minor deviations to published procedures. Slow to comply with published procedures, ATC instructions, or flight manual procedures. Unclear on minor aspects of Contingency 4 logic.
U	Executed Contingency 4 with major deviations or did not comply with applicable directives. Did not anticipate or understand Contingency 4 logic or incorrectly predicted programmed actions of the air vehicle. Did not comply with ATC instructions.
<i>AREA 36 – CROSS-CHECK</i>	
Q	Performed proper crosscheck of air vehicle instruments and other displays during all phases of flight. Maintained situational awareness as necessary to comply with ATC instructions and mission plan changes.
Q-	Minor deviations in crosscheck which did not compromise safety or significantly detract from successful mission accomplishment.
U	Improper or ineffective crosscheck. Unable to maintain situational awareness. Failed to recognize actual or potential conflicts or system faults.
<i>AREA 40 – MISSION PLAN</i>	
Q	Realistic, well-developed plan that encompassed mission objectives, threats, and crewmember capabilities. Addressed contingencies in development of plan. Adequate knowledge in mission requirements including (if applicable) SPINs, ATO, coordination with Liaison Officer and participating ground-based mission entities. Effectively coordinated with other crewmembers.
Q-	Minor omissions in the plan resulted in less than optimum achievement of objectives and detracted from mission effectiveness. Planned tactics resulted in unnecessary difficulty.
U	Major errors in the plan precluded accomplishment of the stated objectives.
<i>AREA 41 – MISSION EXECUTION</i>	
Q	Applied tactics consistent with the threat, current directives, and good judgment. Executed the plan and achieved mission goals. Quickly adapted to changing environment. Maintained situational awareness.
Q-	Minor deviations from tactical plan which did not result in an ineffective mission. Slow to adapt to changing environment. Low situational awareness.
U	Unable to accomplish the mission due to major errors of commission or omission during plan execution. Situational awareness lost.

AREA 42 – RADIO USE AND MISSION COMMUNICATIONS	
Q	Radio communications were standard, concise, accurate, and effective.
Q-	Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness or mission accomplishment. Extraneous comments over primary or secondary radios presented minor distractions.
U	Radio communications over primary or secondary radios were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from situational awareness or mission accomplishment.
AREA 43 – MISSION NAVIGATION	
Q	Navigated effectively to the desired destination, met required mission times, recognized all major threats, and maintained situational awareness during the operational portion of the mission. Adhered to airspace restrictions. <i>Note:</i> Airspace restrictions include buffer zones, restrictive fire plans, fire support coordination lines, friendly artillery fans, ingress and egress corridors, and other airspace restrictions.
Q-	Recognized and corrected deviations from planned route of flight. Minor deviations from required mission times. Minor deviations from situational awareness and limited consideration of some threats.
U	Did not recognize or correct deviations from planned route of flight or mission times. Failed to identify threats effectively resulting in unnecessary exposure. Did not maintain operational situational awareness.
AREA 44 – INGRESS	
Q	Aware of all known or simulated threats and defenses. Employed effective route selection to complete an expeditious ingress to the mission area. Appropriately ran ingress checklist.
Q-	Ignored some of the known or simulated threats and defenses. Ingress route contributed to unnecessary exposure to threats and delayed arrival in mission area. Minor deviations from ingress checklist.
U	Failed to honor known or simulated threats and defenses. Ingress egress route and/or plan caused excessive exposure to threats. Failed to properly use ingress checklists.
AREA 45 – EGRESS	
Q	Aware of all known and simulated threats and defenses. Employed effective route selection to complete an expeditious egress from the mission area. Appropriately ran egress checklist.
Q-	Ignored some of the known or simulated threats and defenses. Egress route contributed to unnecessary exposure to threats and delayed departure from mission area. Minor deviations from egress checklist.
U	Failed to honor known and simulated threats and defenses. Egress route and/or

	plan caused excessive exposure to threats. Failed to properly use egress checklist.
AREA 46 – TRAINING RULES AND RULES OF ENGAGEMENT	
Q	Adhered to and knowledgeable of all training rules and ROE.
Q-	Minor deviations. Made timely and positive corrections. Did not jeopardize safety of flight.
U	Significant deviations indicating a lack of knowledge of training rules and ROE.
AREA 47 – SENSOR/PAYLOAD MANAGEMENT	
Q	Correctly planned, briefed, prioritized, and executed a sound sensor/payload management plan. Operated sensor/payload IAW all technical requirements. Executed effective troubleshooting when required. Accounted for threats, changes in tasking, ad-hoc tasking, weather and crewmember experience. Re-prioritized tasks based on existing and new information to ensure mission success. Displayed sound sensor/payload systems knowledge. Successfully placed the air vehicle in position to allow optimum sensor/payload employment IAW mission requirements.
Q-	Made minor errors in planning, prioritization, management and troubleshooting of sensor/payload without seriously degrading mission accomplishment. Did not completely account for threats, changes in tasking, ad-hoc tasking, weather, or crewmember experience. Air vehicle maneuvering or poor positioning affected or reduced sensor/payload employment.
U	Incorrectly prioritized or managed sensors in a manner which seriously degraded mission accomplishment or safety of flight. Over tasked other crewmembers or failed to communicate task overload. Displayed lack of sensor/payload systems knowledge. Unable to troubleshoot and follow technical directives for sensor/payload abnormal conditions. Air vehicle maneuvering or poor positioning affected or reduced sensor/payload employment.
AREA 48 – CREW CHANGE-OVER	
Q	Effective transfer of air vehicle and mission control to the next crew or effective receipt of air vehicle and mission control.
Q-	Transfer had minor errors because of poor communication or incomplete briefing, but did not endanger the mission or air vehicle.
U	Change-over adversely affected the safety of the mission or air vehicle. Incomplete briefing caused major mission deviations.
AREA 49 – COMMAND-AND-CONTROL (C2) INTEGRATION	
Q	Effectively planned for and worked with C2 agencies to enhance mission and achieve objectives. Effectively integrated theater airspace control, ground-based mission agencies, and Air Operations Center (AOC) information into tactical plan when necessary. Requested threat declarations when required.

	Communicated changes in the tactical situation, weather, and threats to C2 agencies.
Q-	Less than optimum planning for and working with C2 agencies. Slow to integrate theater airspace control, DGS, and AOC information into tactical plan when necessary. Slow to request threat declarations. Incomplete communication of changes in the tactical situation, weather and threats to C2 agencies. Minor deviations which did not affect mission collection.
U	Inadequate planning for and ineffective work with C2 agencies. Failed to integrate theater airspace control, DGS, and AOC information into tactical plan when necessary. Failed to request or did not abide by threat declarations. Inadequate communication of changes in the tactical situation, weather and threats to C2 agencies.

Chapter 4

SENSOR OPERATOR EVALUATION CRITERIA

4.1. General.

4.1.1. The grading criteria in this chapter are divided into two sections: General and Mission. Use both sections for criteria applicable to the events performed on the evaluation.

4.1.2. Grade all observed areas. Assign only one grade to each area. Where major areas are divided into subareas, grades will be assigned to each subarea for which grading criteria is provided. Annotate discrepancies (less than Q performance) IAW AFI 11-202V2 and this publication.

4.1.3. Criteria are intended to ensure objective and standardized evaluations. Evaluators must realize these grading criteria cannot cover every situation. Overall performance ratings combine in-flight and ground requisite performance tempered by sound evaluator judgment.

4.2. Evaluation Criteria.

Table 4.1. Table of Evaluation Criteria.

<i>AREA 1 – MISSION PLANNING</i>	
1A. Mission Preparation	
Q	Clearly defined the mission overview and mission goals. Created a sound collection plan to accomplish the mission. Provided specific information on what needed to be done. Solicited feedback from other crewmembers to ensure understanding of mission requirements. Thoroughly critiqued plans to identify potential problem areas and ensured all crewmembers understood possible contingencies. Checked all factors applicable to flight IAW applicable directives. Demonstrated adequate knowledge in mission requirements including (if applicable) SPINs, ATO, RSTA and coordination with outside agencies. Aware of alternatives available if mission cannot be completed as planned. Read and initialed all items in the FCIF and read files. Prepared at briefing time. Able to understand and interpret the current mission plan.
Q-	Did not adequately define the mission overview and mission goals. Did not adequately address potential problem areas. Did not adequately solicit feedback or critique the plans to ensure understanding of possible contingencies. Minor errors or omissions detracted from mission effectiveness, but did not affect mission accomplishment. Demonstrated limited knowledge of performance capabilities or approved operating procedures and rules in some areas.
U	Did not define the mission overview and goals. Lack of specific information on required items. Did not solicit feedback from other crewmembers to ensure understanding. Did not critique plans to identify potential problem areas. Major errors or omissions would have prevented a safe or effective mission. Displayed unsatisfactory knowledge of operating data or procedures. Did not

	understand or comply with FCIF and read file directives. Did not review or initial Go/No Go items. Not prepared at briefing time.
1B. Publications	
Q	Publications are current, complete, and usable for any of the unit's missions or combat taskings.
Q-	Publications contained minor deviations, omissions, and/or errors; however, they contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.
U	Publications contained major deviations, omissions, and/or errors which could compromise safety of flight or effective mission accomplishment.
AREA 2 - BRIEFINGS	
2A. Organization	
Q	Well organized, included all applicable information, and presented in a logical sequence. All areas of briefing were accomplished to effectively execute the mission. Concluded briefing in time to allow for preflight of personal equipment, shelter, and air vehicle.
Q-	Events out of sequence, hard to follow, some redundancy. Not fully prepared for briefing.
U	Confusing presentation. Poorly organized and not presented in a logical sequence. Failed to brief required areas. Did not allow time for preflight of personal equipment, shelter, and air vehicle.
2B. Presentation	
Q	Presented briefing in a professional manner covering all pertinent items. Effectively used available briefing aids. Crewmembers clearly understood mission objectives, requirements, and targets.
Q-	Some difficulty communicating clearly. Did not make effective use of available briefing aids. Dwelled on non-essential mission items.
U	Failed to conduct or attend required briefings. Failed to use available briefing aids. Redundant with lack of continuity. Lost interest of crew members. Demonstrated lack of subject knowledge. Presentation created doubts or confusion.
2C. Mission Coverage	
Q	Established objectives for the mission. Presented all training events and special interest items. Included effective technique discussion for accomplishing the mission.
Q-	Omitted items or objectives pertinent, but not critical, to the mission. Limited discussion of training events or special interest items. Dwelled on non-essential items. Limited discussion of valid techniques.

U	Did not establish relevant objectives for the mission. Omitted essential items. Failed to discuss training events or special interest items. Presented erroneous information and/or did not correct erroneous information that would affect safe and effective mission accomplishment. Omitted major training events. Did not discuss valid techniques.
<i>AREA 4 – PRE-TAKEOFF</i>	
Q	Completed all pre-flight checks and procedures without omissions IAW approved checklists and applicable directives. Accurately coordinated with pilot and maintenance when required. Accurately determined readiness of shelter and air vehicle for flight.
Q-	Same as above except for minor procedural deviations which did not detract from mission effectiveness.
U	Omitted major item or items of the appropriate checklist. Major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of shelter and air vehicle for flight. Errors directly contributed to a late takeoff which degraded the mission or made it non-effective. Failed to coordinate with pilot or maintenance.
<i>AREA 6 – IN-FLIGHT CHECKS AND PLANNING</i>	
Q	Effectively performed in-flight checks as required including changing profile by adding or deleting collections. Used current checklist and accomplished all items in proper sequence with no deviations or omissions. Effectively adapted to dynamic mission plan changes. Demonstrated ability to adjust collection profile to comply with time and fuel limitations, area weather conditions, and mission constraints and objectives.
Q-	In-flight checks, checklist use, and collection management included minor deviations which did not compromise safety, or significantly detract from the mission.
U	Did not perform in-flight checks or adapt to changing mission requirements. Used incorrect checklist, omitted checklist items or did not complete a required checklist. Unable to re-plan in-flight or adapt to changing mission requirements. Consistently unable to maintain situational awareness. Action or inaction compromised safety and successful mission accomplishment.
<i>AREA 14 – AFTER LANDING</i>	
Q	Appropriate after landing checks accomplished IAW the flight manual and applicable directives. All required forms, reports, or logs were complete, accurate, readable, accomplished on time and IAW applicable directives. Accurate debrief of significant events to applicable agencies (Intelligence, Maintenance, etc.).
Q-	Same as qualified except some deviations or omissions noted in performance of after landing checks. Minor errors on forms, reports, or logs did not affect conduct of the mission. Incorrect or incomplete reporting of information due to

	minor errors, omissions, and/or deviations.
U	Major deviations or omissions were made in performance of after landing checks which could have jeopardized safety. Forms, reports, or logs were incomplete, inaccurate, or improperly filled out. Omitted or incorrectly reported significant information due to major errors, omissions, and/or deviations.
AREA 15 – DEBRIEFING AND CRITIQUE	
Q	Thoroughly debriefed the mission (or applicable portions) in a timely manner. Correctly analyzed mission results with respect to established objectives. Provided specific, objective, non-threatening positive and negative feedback on team and individual performance. Debriefed deviations. Offered corrective guidance as appropriate. Thoroughly debriefed any breakdowns in roles and responsibilities. Asked for reactions and inputs from other mission participants. Re-capped key points and compared mission results with mission objectives.
Q-	Limited debriefing. Did not thoroughly discuss performance relative to mission objectives. Minor time management problems. Debriefed mission without specific, non-threatening positive and negative feedback on individual and team performance. Did not debrief significant deviations to an acceptable level. Did not consistently seek input from other mission participants. Incomplete or inadequate re-cap of key points and comparison of mission results to mission objectives.
U	Did not correctly debrief mission deviations or offer corrective guidance. Used excessive time to debrief. Failed to debrief breakdowns in roles and responsibilities. Did not provide non-threatening positive and negative feedback during debriefing. Did not seek input from other mission participants. Did not re-cap key mission points nor compare mission results to mission objectives.
AREA 16 - KNOWLEDGE	
16A. Sensor Systems and Ground Station Knowledge	
Q	Demonstrated thorough knowledge of sensor systems, ground station operations/limitations and proper procedural use of systems. Demonstrated familiarity when referencing flight manual and available aids.
Q-	Demonstrated marginal knowledge of sensor systems, ground station operations/limitations in some areas. Demonstrated deficiencies either in depth of knowledge or comprehension. Occasionally displayed lack of familiarity when referencing flight manual and available aids.
U	Unsatisfactory knowledge of sensor and ground station systems, limitations, or performance characteristics. Unable to demonstrate or explain the procedures for sensor system and ground station operations. Unfamiliar with flight manual and available aids.
16B. Emergency Procedures	

Q	Operated within prescribed limits and correctly diagnosed sensor problems. Performed and explained proper corrective action for each type of malfunction. Effectively used checklists.
Q-	Operated within prescribed limits, but slow to analyze sensor problems or apply proper corrective actions. Used the checklist when appropriate, but slow to locate required data.
U	Attempted to exceed limitations. Unable or failed to analyze sensor problems or take proper corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or contents.
16C. Operating Rules and Procedures	
Q	Thorough knowledge of operating rules and procedures.
Q-	Deficiencies in depth of knowledge.
U	Inadequate knowledge of operating rules and procedures.
16D. Local Area Procedures	
Q	Thorough knowledge of local procedures.
Q-	Limited knowledge of local procedures.
U	Inadequate knowledge of local procedures.
16E. Plans and Procedures	
Q	Adequate knowledge of plans applicable to the unit mission. Thoroughly familiar with procedures and contingencies.
Q-	Deficiencies in depth of knowledge or comprehension of plans or procedures applicable to the unit mission.
U	Knowledge of plans and procedures insufficient to ensure effective mission accomplishment.
AREA 17 – AIRMANSHIP AND SITUATIONAL AWARENESS (CRITICAL)	
Q	Executed the assigned mission in a timely and efficient manner. Conducted the flight with a sense of understanding and comprehension. Made appropriate decisions based on available information. Recognized the need for action. Aware of performance of self and other crewmembers. Aware of on-going mission status. Recognized, verbalized, and correctly acted on unexpected events.
U	Decisions or lack thereof resulted in failure to accomplish the assigned mission. Improperly analyzed flight conditions and/or failed to recognize and understand mission developments, or demonstrated poor judgment to the extent that flight safety could have been compromised. Did not recognize the need for action. Not aware of performance of self and other crewmembers. Not aware of on-going mission status. Failed to recognize, verbalize, and act on unexpected events.

<i>AREA 18 – SAFETY (CRITICAL)</i>	
Q	Aware of and complied with all safety factors required for safe equipment operation and mission accomplishment.
U	Was not aware of or did not comply with all safety factors required for safe operation or mission accomplishment. Operated mission equipment in a dangerous manner.
<i>AREA 19 – FLIGHT AND CREW DISCIPLINE (CRITICAL)</i>	
Q	Provided required direction and information. Correctly adapted to meet new situational demands. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.
U	Did not provide direction and information when needed. Did not correctly adapt to meet new situational demands. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.
<i>AREA 20 – INSTRUCTOR PERFORMANCE</i>	
20A. Briefing and Debriefing	
Q	Presented a comprehensive and well organized instructional briefing and debriefing encompassing all mission events. Made excellent use of training aids. Reviewed student's present level of training and defined mission events to be performed. Excellent reconstruction and analysis of all events. Clearly defined objectives. Gave positive and negative performance feedback at appropriate times. Feedback was specific, objective, based on observable behavior, and given constructively. Re-capped key points and compared mission results with objectives. When appropriate, took the initiative and time to share operational knowledge and experience. Briefed student's requirements for the next mission.
Q-	Minor errors or omissions in briefing and/or debriefing or mission critique. Occasionally unclear in reconstruction and analysis of events. Some feedback given, but was not always given at appropriate times and not always a positive learning experience. Debrief covered the mission highlights but was not specific enough. Did not adversely affect student training.
U	Major errors or omissions in briefing and/or debriefing. Did not use training aids and/or reference material effectively. Did not review student's training folder or past performance. Failed to define student's training requirements and mission objectives. Reconstruction and analysis of events or was incomplete, inaccurate, or confusing. Failed to adequately critique student or provide complete mission analysis. Overlooked or omitted major discrepancies. Briefing and/or debriefing below the caliber of that expected of instructors.
20B. Demonstration and Performance	
Q	Effectively demonstrated and performed required sensor operations within prescribed parameters. Provided concise, meaningful instructional

	commentary. Demonstrated excellent instructor proficiency.
Q-	Demonstrated and performed required sensor operations with minor deviations from prescribed parameters. Instructional commentary was sometimes unclear. Did not adversely affect student training.
U	Unable to demonstrate or perform required sensor operations. Made major procedural errors. Did not provide instructional commentary. Demonstrated inadequate instructor proficiency.
20C. Instructor Knowledge	
Q	Demonstrated in-depth knowledge of procedures, requirements, applicable publications and regulations, sensor systems and performance characteristics, ground station systems, mission, and tactics beyond that expected of non-instructors.
Q-	Deficiencies in depth of knowledge, comprehension of procedures, requirements, applicable publications and regulations, sensor systems and performance characteristics, ground station systems, mission, or tactics.
U	Unfamiliar with procedures, requirements, applicable publications and regulations, sensor systems and performance characteristics, ground station systems, mission, or tactics. Lack of knowledge in certain areas seriously detracted from instructor effectiveness.
20D. Ability to Instruct	
Q	Demonstrated excellent instructor or evaluator ability. Clearly defined all mission requirements and any required additional training or corrective action. Instruction or evaluation was accurate, effective, and timely. Was completely aware of sensor and mission situation at all times. Demonstrated ability to communicate and instruct effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions.
Q-	Instructional performance included minor errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Problems in communication or analysis degraded effectiveness of instruction or evaluation. Did not adversely affect student training.
U	Demonstrated inadequate ability to instruct or evaluate. Unable to perform, teach, or assess techniques, procedures, systems use, or tactics. Did not remain aware of sensor and mission situation at all times. Unable to effectively communicate or provide timely feedback to the student. Gave instruction that was unsafe or contradicted published directives. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.
20E. Training and Evaluation Forms Preparation	
Q	Completed appropriate training or evaluation records accurately IAW directives. Adequately assessed and recorded performance relative to standard. Comments were clear and pertinent.

Q-	Minor errors or omissions in training or evaluation records. Comments were incomplete or slightly unclear.
U	Did not complete required forms or records. Comments were invalid, unclear, or did not accurately document performance.
AREA 21 – TASK PRIORITIZATION	
Q	Correctly identified, prioritized, and managed tasks based on existing and new information that assured mission success. Used available resources to manage workload. Communicated task priorities to other crewmembers. Asked for assistance when required. Displayed sound knowledge of systems. Effectively identified contingencies and alternatives. Gathered and crosschecked available data before acting. Clearly stated decisions and ensured they were understood. Investigated doubts and concerns of other crewmembers when necessary.
Q-	Made minor errors in prioritization, management of tasks, and system knowledge which did not affect safe or effective mission accomplishment. Did not completely communicate task priorities to other crewmembers. Made minor errors in identifying contingencies, gathering data, or communicating a decision which did not affect safe or effective mission accomplishment.
U	Incorrectly prioritized or managed tasks. Displayed lack of systems knowledge causing task overload that seriously degraded mission accomplishment or safety of flight. Failed to communicate task priorities to other flight members. Failed to ask for assistance when overloaded. Improperly or ineffectively identified contingencies, gathered data, or communicated a decision that seriously degraded mission accomplishment or safety of flight.
AREA 22 – CREW COORDINATION	
Q	Effectively coordinated with other crewmembers without misunderstanding. Effective use of CRM. See AFI 11-290, <i>Cockpit/Crew Resource Management Training Program</i> , and use AF Form 4031, <i>CRM Skills Criteria Training/Evaluation</i> , as a reference.
Q-	Coordinated with other crewmembers with minor exceptions. Intra-crew communications were not clear or concise. CRM was the minimum acceptable.
U	Breakdown in coordination with other crewmembers precluded mission accomplishment or jeopardized safety. CRM was lacking to the extent the mission accomplishment was severely degraded.
AREA 40 – MISSION PLAN	
Q	Realistic, well-developed plan that encompassed mission objectives, threats, and crewmember capabilities. Addressed contingencies in development of plan. Demonstrated adequate knowledge in mission requirements including (if applicable) SPINs, ATO, RSTA and coordination with outside agencies. Effectively coordinated with other crewmembers.
Q-	Minor omissions in the plan resulted in less than optimum achievement of objectives and detracted from mission effectiveness. Planned tactics resulted in

	unnecessary difficulty.
U	Major errors in the plan precluded accomplishment of the stated objectives.
AREA 41 – MISSION EXECUTION	
Q	Applied tactics consistent with the threat, current directives, and good judgment. Executed the plan and achieved mission goals. Quickly adapted to changing environment. Maintained situational awareness.
Q-	Minor deviations from tactical plan which did not result in an ineffective mission. Slow to adapt to changing environment. Low situational awareness.
U	Unable to accomplish the mission due to major errors of commission or omission during plan execution. Situational awareness lost.
AREA 42 – RADIO USE AND MISSION COMMUNICATIONS	
Q	Interphone communications were standard, concise, accurate, and effective. Thoroughly familiar with OPSEC and COMSEC requirements.
Q-	Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness or mission accomplishment. Extraneous comments over interphone presented minor distractions. Demonstrated limited knowledge of OPSEC and COMSEC requirements.
U	Interphone communications were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from situational awareness or mission accomplishment. Displayed inadequate knowledge of OPSEC and COMSEC requirements.
AREA 46 – TRAINING RULES AND ROE	
Q	Adhered to and knowledgeable of all training rules and ROE.
Q-	Minor deviations. Made timely and positive corrections. Did not jeopardize safety of flight.
U	Significant deviations indicating a lack of knowledge of training rules and ROE.
AREA 47 – SENSOR MANAGEMENT	
47A. General	
Q	Correctly planned, briefed, prioritized, and executed a sound sensor management plan. Identified high task periods and primary sensor based on mission priorities. Accounted for threats, changes in and ad-hoc tasking, weather and crewmember experience. Re-prioritized sensor tasks based on existing and new information to ensure mission success. Able to employ the sensors effectively to accomplish the mission. Possessed a high level of knowledge of all applicable sensor capabilities and functions. Performed sensor operation procedures and understood how to apply good sensor control to enhance mission accomplishment.

Q-	Made minor errors in planning, prioritization, and management of sensors. Did not completely account for threats, changes in and ad-hoc tasking, weather, or crewmember experience. Possessed an adequate level of knowledge of applicable sensor capabilities and functions.
U	Incorrectly prioritized or managed sensors in a manner which seriously degraded mission accomplishment or safety of flight. Over tasked other crewmembers or failed to communicate task overload. Displayed lack of sensor systems knowledge.
47B. Imaging Operations	
Q	Successfully displayed waypoints and/or created auto-tracks. Successfully tied electro-optical (EO), infrared (IR), synthetic aperture radar (SAR), and/or SAR moving target indicator (MTI) scenes to the pre-planned and/or auto-track waypoints. Continually monitored sensor image output and completed actions to optimize sensor performance when required. Imaged all desired targets for optimal coverage and resolution. Appropriately ran Time-sensitive Target (TST) and/or Ad Hoc checklist. Performed correct actions to successfully recover from gimble faults or other sensor anomalies.
Q-	Minor misapplications in EO, IR, SAR, and SAR MTI image operations. Sensor optimization operations were not consistently verified or corrected. Slow to perform basic sensor operation functions. Recognized and corrected target acquisition attempts. Minor deviations on TST and/or Ad Hoc checklist. Require excessive time to recover from sensor anomalies. Minor impact to mission effectiveness.
U	Failed to effectively conduct EO, IR, SAR, and SAR MTI image operations. Did not recognize or correct target acquisition attempts. Failed to accurately collect TST and/or Ad Hoc targets. Required assistance to perform sensor optimization and/or recover from sensor anomalies. Mission effectiveness seriously impaired.
47C. Integrated Sensor System (ISS) Boot-up	
Q	Correctly performed ISS boot-up and mission planner set-up procedures IAW checklist. Correctly initiated situational awareness displays. Properly verified ISS boot-up sequence. Effectively performed initial sensor calibrations and verified sensor operation within parameters.
Q-	Missed minor set-up procedures with no significant impact to sensor operation or mission effectiveness.
U	Failed to successfully complete ISS boot-up or initiate situational awareness displays. Failed to verify the ISS boot-up sequence or perform initial sensor calibrations.
47D. ISS Re-boot Procedures	
Q	Successfully recovered from ISS shutdown. Correctly completed ISS re-boot procedures. Effectively re-initialized and synchronized planners. Successfully

	re-calibrated sensors and re-established sensor control.
Q-	Minor misapplications to ISS reboot procedures. Minor impact to mission.
U	Improperly executed ISS re-boot procedures. Significant impact to mission effectiveness.
<i>AREA 48 – CREW CHANGE-OVER</i>	
Q	Effective transfer of sensor and mission control to the next crew or effective receipt of sensor and mission control.
Q-	Transfer had minor errors because of poor communication or incomplete briefing, but did not endanger the mission or sensors.
U	Change-over adversely affected the safety of the mission or sensors. Incomplete briefing caused major mission deviations.
<i>AREA 49 – C2 INTEGRATION</i>	
Q	Effectively planned for and worked with C2 agencies to enhance mission and achieve objectives. Effectively integrated DGS and AOC information into tactical plan when necessary. Requested threat declarations when required. Communicated changes in the tactical situation, weather, and threats to C2 agencies.
Q-	Less than optimum planning for and working with C2 agencies. Slow to integrate DGS and AOC information into tactical plan when necessary. Slow to request threat declarations. Incomplete communication of changes in the tactical situation, weather and threats to C2 agencies. Minor deviations which did not affect mission collection.
U	Inadequate planning for and ineffective work with C2 agencies. Failed to integrate DGS and AOC information into tactical plan when necessary. Failed to request or did not abide by threat declarations. Inadequate communication of changes in the tactical situation, weather and threats to C2 agencies.

Chapter 5

EPE EVALUATION CRITERIA

5.1. Grading Standards. The grading criteria in this chapter are for use during emergency procedures evaluations. Due to the unique nature of the autonomous emergency actions of the RQ-4, there are no critical action procedure malfunctions. Malfunctions are identified through a series of fault warnings displayed to the pilot or SO which may or may not require their interaction with the air vehicle. When crew interaction is required, use the following criteria applicable to the events performed on the evaluation.

Table 5.1. Table of Pilot EPE Criteria.

<i>AREAS 101-114 – GENERAL</i>	
Q	Recognized and analyzed malfunction in a timely manner. Displayed correct and immediate response to emergency situations. Operated within prescribed limits and correctly diagnosed problems. Performed and explained proper corrective action for each type of malfunction. Effectively used checklists, flight manual, and available aids.
Q-	Operated within prescribed limits, but slow to recognize or analyze problems or apply proper corrective actions. Response to certain required steps in emergency procedures was slow or confused. Used the checklist and flight manual when appropriate, but slow to locate required data and implement guidance.
U	Unable or failed to analyze problems or take proper corrective action. Did not use checklist and flight manual or lacked acceptable familiarity with their arrangement or contents.
<i>AREA 115 – SYSTEMS OPERATION KNOWLEDGE / LIMITS</i>	
Q	Thorough knowledge of air vehicle and ground station systems, limitations, and performance characteristics.
Q-	Knowledge of air vehicle and ground station systems, limitations, and performance characteristics sufficient to perform the mission safely. Demonstrated deficiencies either in depth of knowledge or comprehension.
U	Unsatisfactory knowledge of air vehicle and ground station systems, limitations, or performance characteristics.
<i>AREAS 120-123 – GROUND STATION EMERGENCIES</i>	
Q	Recognized and analyzed malfunction in a timely manner. Displayed correct and immediate response to emergency situations. Operated within prescribed limits and correctly diagnosed problems. Performed and explained proper corrective action for each type of malfunction. Effectively used checklists, flight manual, and available aids.

Q-	Operated within prescribed limits, but slow to recognize or analyze problems or apply proper corrective actions. Response to certain required steps in emergency procedures was slow or confused. Used the checklist and flight manual when appropriate, but slow to locate required data and implement guidance.
U	Unable or failed to analyze problems or take proper corrective action. Did not use checklist and flight manual or lacked acceptable familiarity with their arrangement or contents.
<i>AREAS 130-157 – AIR VEHICLE SYSTEM EMERGENCIES</i>	
Q	Recognized and analyzed malfunction in a timely manner. Displayed correct and immediate response to emergency situations. Operated within prescribed limits and correctly diagnosed problems. Performed and explained proper corrective action for each type of malfunction. Effectively used checklists, flight manual, and available aids.
Q-	Operated within prescribed limits, but slow to recognize or analyze problems or apply proper corrective actions. Response to certain required steps in emergency procedures was slow or confused. Used the checklist and flight manual when appropriate, but slow to locate required data and implement guidance.
U	Unable or failed to analyze problems or take proper corrective action. Did not use checklist and flight manual or lacked acceptable familiarity with their arrangement or contents.

Table 5.2. Table of SO EPE Criteria.

<i>AREAS 101-114 - GENERAL</i>	
Q	Effectively assisted the pilot through the proper use of checklists, flight manual, available aids, and established procedures.
Q-	Minor omissions or errors in assisting the pilot with the use of checklists, flight manual, available aids, and established procedures. . Slow to locate required data and help the pilot avoid delays, omissions, or deviations in use of checklists or available aids.
U	Failed to assist the pilot with the use of checklists, flight manual, available aids, and established procedures. Unable to locate required data and help the pilot avoid delays, omissions, or deviations in use of checklists or available aids.
<i>AREA 115 – SYSTEMS OPERATION KNOWLEDGE / LIMITS</i>	
Q	Thorough knowledge of sensor systems and ground station operations and limitations and proper procedural use of systems with minimal reference to flight manual and available aids.
Q-	Marginal knowledge of sensor systems and ground station operations and limitations in some areas. Demonstrated deficiencies either in depth of

	knowledge or comprehension. Required moderate references to flight manual and available aids to differentiate between procedure and technique.
U	Unsatisfactory knowledge of sensor and ground station systems, limitations, or performance characteristics. Unable to demonstrate or explain the procedures for sensor system and ground station operations.
<i>AREAS 120-123 – GROUND STATION EMERGENCIES</i>	
Q	Recognized and analyzed malfunction in a timely manner. Displayed correct and immediate response to emergency situations. Operated within prescribed limits and correctly diagnosed problems. Performed and explained proper corrective action for each type of malfunction. Effectively used checklists, flight manual, and available aids.
Q-	Operated within prescribed limits, but slow to recognize or analyze problems or apply proper corrective actions. Response to certain required steps in emergency procedures was slow or confused. Used the checklist and flight manual when appropriate, but slow to locate required data and implement guidance.
U	Unable or failed to analyze problems or take proper corrective action. Did not use checklist and flight manual or lacked acceptable familiarity with their arrangement or contents.
<i>AREAS 136, 147, 155 – AIR VEHICLE SYSTEM EMERGENCIES</i>	
Q	Recognized and analyzed malfunction in a timely manner. Displayed correct and immediate response to emergency situations. Operated within prescribed limits and correctly diagnosed problems. Performed and explained proper corrective action for each type of malfunction. Effectively used checklists, flight manual, and available aids.
Q-	Operated within prescribed limits, but slow to recognize or analyze problems or apply proper corrective actions. Response to certain required steps in emergency procedures was slow or confused. Used the checklist and flight manual when appropriate, but slow to locate required data and implement guidance.
U	Unable or failed to analyze problems or take proper corrective action. Did not use checklist and flight manual or lacked acceptable familiarity with their arrangement or contents.
<i>AREAS 130-135, 137-146, 148-154, 156-157 – AIR VEHICLE SYSTEM EMERGENCIES</i>	
Q	Effectively assisted the pilot through the proper use of checklists, flight manual, available aids, and established procedures. Operated within prescribed limits and helped the pilot correctly diagnose problems.
Q-	Minor omissions or errors in assisting the pilot with the use of checklists, flight manual, available aids, and established procedures. Slow to locate required data and help the pilot avoid delays, omissions, or deviations in use of

	checklists or available aids.
U	Failed to assist the pilot with the use of checklists, flight manual, available aids, and established procedures. Unable to locate required data and help the pilot avoid delays, omissions, or deviations in use of checklists or available aids.

BURTON M. FIELD, Lt Gen, USAF
DCS, Operations, Plans and Requirements

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

AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, 19 January 2012

AFI 11-202V1, *Aircrew Training*, 22 November 2010

AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, 13 September 2010

AFI 11-202V3, *General Flight Rules*, 22 October 2010

AFI 11-215, *USAF Flight Manuals Program (FMP)*, 22 December 2008

AFI 11-218, *Aircraft Operations and Movement on the Ground*, 28 October 2011

AFI 11-290, *Cockpit/Crew Resource Management Training Program*, 11 April 2001

AFI 11-401, *Aviation Management*, 10 December 2010

AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Aviation Badges*, 13 December 2010

AFI 11-2RQ-4V1, *RQ-4—Crew Training*, 3 February 2007

AFI 11-2RQ-4V3, *RQ-4—Operations Procedures*, 14 September 2007

AFI 33-324, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Intra-agency Air Force Information Collections*, 1 June 2000

AFI 33-360, *Publications and Forms Management*, 18 May 2006

AFMAN 11-210, *Instrument Refresher Program (IRP)*, 3 February 2005

AFMAN 11-217V1, *Instrument Flight Procedures*, 22 October 2010

AFMAN 33-363, *Management of Records*, 1 March 2008

AFPD 11-4, *Aviation Service*, 1 September 2004

AFTTP 3-1.RQ-4, *Tactical Employment--RQ-4*, 5 January 2011

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

AF Form 8, *Certificate of Aircrew Qualification*

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

Abbreviations and Acronyms

ACC—Air Combat Command

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFRIMS—Air Force Records Information Management System

AOC—Air Operations Center

ARMS—Aviation Resource Management System

ATC—Air Traffic Control

ATD—Aircrew Training Device

ATO—Air Tasking Order

C2—Command and Control

COMM—Communications

COMSEC—Communications Security

CRM—Cockpit/Crew Resource Management

DGS—Distributed Ground System

DOC—Designed Operational Capability

DRU—Direct Reporting Unit

EFM—Electronic Flight Manual

EO—Electro-Optical

EPE—Emergency Procedures Evaluation

FCIF—Flight Crew Information File

FE—Flight Examiner

FOA—Field Operating Agency

FOL—Forward Operating Location

HHQ—Higher Headquarters

HQ—Headquarters

IAW—In Accordance With

IFF—Identification Friend or Foe

INIT—Initial

INSTM—Instrument

INSTR—Instructor

IR—Infrared

IRC—Instrument Refresher Course

ISS—Integrated Sensor System

LRE—Launch and Recovery Element

MAJCOM—Major Command

MCE—Mission Control Element
MSN—Mission
MTI—Moving Target Indicator
N/A—Not Applicable
OG/CC—Operations Group Commander
OPR—Office of Primary Responsibility
OPSEC—Operations Security
QUAL—Qualification
PSAT—Pilot Stand-Alone Trainer
RAP—Ready Aircrew Program
RDS—Records Disposition Schedule
REQUAL—Requalification
ROE—Rules of Engagement
SAR—Synthetic Aperture Radar
SIF—Selective Identification Feature
SO—Sensor Operator
SPINs—Special Instructions
SQ/CC—Squadron Commander
TST—Time-Sensitive Target
USAF—United States Air Force
WST—Weapon System Trainer

Terms

Aircrew Training Device—A training device that permits learning, development, and the practice of skills and procedures necessary for understanding and operating the integrated systems of a specific prime mission system.

Pilot Stand-Alone Trainer (PSAT): An RQ-4 part-task operator trainer that allows selected pilot tasks be practiced and a high degree of skill developed independently of the full elements of RQ-4 ground station operation.

Weapon System Trainer (WST): A training device that dynamically simulates the flight characteristics of the designated aircraft to train crewmembers in normal cockpit and flight procedures, emergency procedures, and combat mission execution. Trainer combines safety—of-flight operation and warfighting tasks, and provides skill integration training.

Deviation—Performing an action not in sequence with current procedures, directives, or regulations. Do not consider performing an action or actions out of sequence due to unusual or

extenuating circumstances a deviation. In some cases, momentary deviations may be acceptable; however, consider cumulative momentary deviations in determining the overall qualification level.

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

Major: Detracted from mission accomplishment, adversely affected use of equipment, or violated safety.

Electronic Publications—Technical orders and publications issued to crewmembers in electronic media.

Technical Orders: The electronic flight manual (EFM) is an electronic data base that comprises the RQ—4 Flight Manual, and requires specialized viewing software that is issued with the data base. All changes to the data base are issued electronically; therefore, evaluation of the EFM is accomplished by ensuring the individual crewmember has the current EFM loaded on their viewing device.

Other Publications: RQ—4 crewmembers also may be issued other publications in electronic (.pdf or .doc) or paper format. Units may specify evaluation of these other publications. Evaluation of electronic publications is accomplished by ensuring the individual crewmember has the current publication and changes loaded on their viewing device.

Emergency Procedures Evaluation—An evaluation of crew general knowledge and responsiveness to critical and non-critical emergency procedures conducted by a FE in an approved ATD. An EPE may be administered orally if an appropriate training device is not available.

Error—Departure from standard procedures. Performing incorrect actions or recording incorrect information.

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

Major: Detracted from mission accomplishment, adversely affected use of equipment, or violated safety.

Key Words and Definitions— “Will” and “Shall” indicate a mandatory requirement. “Should” is normally used to indicate a preferred, but not mandatory, method of accomplishment. “May” indicates an acceptable or suggested means of accomplishment.

Omission—To leave out a required action or annotation.

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

Major: Detracted from mission accomplishment, adversely affected use of equipment, or violated safety.