

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

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



**5 JULY 2011**

***Flying Operations***

***QF-4-AIRCREW EVALUATION CRITERIA***

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

---

**ACCESSIBILITY:** Publications and forms are available for downloading or ordering on the e-Publishing website at [www.e-publishing.af.mil](http://www.e-publishing.af.mil).

**RELEASABILITY:** There are no releasability restrictions on this publication.

---

OPR: ACC/A3TV

Certified by: AF/A3O-A (Col Jeffrey R.  
McDaniels)

Supersedes: AFI11-2F-QF-4V2, 6 May  
2008

Pages: 27

---

This volume implements AFD 11-2, *Aircraft Rules and Procedures*; AFD 11-4, *Aviation Service*; and AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program*. It applies to all QF-4 units. This instruction applies to Air National Guard (ANG) and Air Force Reserve Command (AFRC). Major Commands (MAJCOMs)/Direct Reporting Units (DRUs)/ Field Operating Agencies (FOAs) are to forward proposed MAJCOM/DRU/FOA-level supplements to this volume to AF/A3O-AT, through ACC/A3TV, for approval prior to publication. Copies of MAJCOM/ DRU/FOA-level supplements, after approved and published, will be provided by the issuing MAJCOM/DRU/FOA to ACC/A3TV and the user MAJCOM/ DRU/FOA and ANG offices of primary responsibility. Field units below MAJCOM/ DRU/FOA level will forward copies of their supplements to this publication to their parent MAJCOM/DRU/FOA office of primary responsibility for post publication review. **Note:** The terms Direct Reporting Unit (DRU) and Field Operating Agency (FOA) as used in this paragraph refer only to those DRUs/FOAs that report directly to HQ USAF.

Keep supplements current by complying with AFI 33-360, *Publications and Forms Management*. See paragraph 1.2 of this volume for guidance on submitting comments and suggesting improvements to this publication. This publication requires the collection and or maintenance of information protected by the Privacy Act (PA) of 1974. The authorities to collect and or maintain the records prescribed in this publication are Title 10, United States Code, Chapter 857 and Executive Order 9397, Numbering System for Federal Accounts Relating to Individual Persons, November 22, 1943, as amended. Forms affected by the PA have an appropriate PA statement. System of records notice F011 AF XO A, *Aviation Resource Management System (ARMS)* applies. Paperwork Reduction Act of 1974 as amended in 1996 affects this instruction. Ensure that all records created as a result of processes prescribed in this

publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at <https://www.my.af.mil/afrims/afrims/afrims/rims.cfm>. Recommendations for improvements to this volume will be submitted on AF Form 847, *Recommendation for Change of Publication*, through channels, to the parent MAJCOM Stan/Eval. Parent MAJCOM Stan/Eval will forward approved recommendations to lead command OPR (ACC/A3TV, 204 Dodd Blvd, Suite 133, Langley AFB VA 23665-2789). AF/A35 is the approval authority for changes to this instruction.

**SUMMARY OF CHANGES**

This document is substantially revised and must be completely reviewed.

This revision incorporates interim change (IC) 2000-1.

This revision includes many minor administrative updates to reflect changes to other publications. AFI11- 2F/QF-4 changed to AFI11-2QF-4V2 for all references. The opening paragraph to this instruction has been reworded for clarity and updated. **Table 1.1** new layout. **Table 2.1** new layout. All F-4 and German Air Force (GAF) references have been deleted including references to the flight simulator, video tape recorder, and data transfer cartridge. A large portion of Chapter Two has been reworded for accuracy and clarity and for increased standardization with other Mission Design Series (MDS). Additional guidance for failed boldface examination has been added to chapter 1 and guidance for evaluation of CRM and combined evaluations has been added to chapter two. In addition, clarified guidance for Rear Cockpit (RCP) landing qualification evaluations was added to chapter two.

<b>Chapter 1—GENERAL INFORMATION</b>	<b>4</b>
1.1. General. ....	4
1.2. Recommended Changes/Waivers. ....	4
1.3. Procedures: ....	4
1.4. Grading Instructions. ....	4
Table 1.1. General Criteria. ....	5
1.5. Emergency Procedures Evaluation (EPE). ....	5
<b>Chapter 2—EVALUATION REQUIREMENTS</b>	<b>7</b>
2.1. General: ....	7
2.2. Pilot Instrument/Qualification Evaluation. ....	7
2.3. Mission Evaluation. ....	8
2.4. Formal Course Evaluation. ....	8
2.5. Instructor Evaluation. ....	8
2.6. Formal Training Unit (FTU) Mission Evaluations. ....	8

<b>AFI11-2QF-4V2 5 July 2011</b>	<b>3</b>
2.7. Instructor Pilot Rear Cockpit Evaluations. ....	8
Table 2.1. Evaluation Requirements. ....	9
<b>Chapter 3—EVALUATION CRITERIA</b>	<b>12</b>
3.1. General Grading Standards: ....	12
3.2. General: ....	12
3.3. Instrument: ....	21
3.4. QF-4 DFS (FCS/MCS) Flight: ....	23
<b>Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION</b>	<b>26</b>

## Chapter 1

### GENERAL INFORMATION

**1.1. General.** All evaluations will be conducted IAW the provisions of AFI 11-202V2, and this volume.

**1.2. Recommended Changes/Waivers.** Waiver authority for this publication is the MAJCOM/A3, IAW AFI 11-202 Vol 2. 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 (FEs) will use the evaluation criteria contained in this volume for conducting all flight and Emergency Procedures Evaluations. To ensure standard and objective evaluations, flight examiners will be thoroughly familiar with the prescribed evaluation criteria.

1.3.2. The FE will brief the examinee on the purpose of the evaluation and how it will be conducted prior to flight. The examinee will accomplish required flight planning in accordance with the flight position during the evaluation. Higher Headquarter (HHQ) FEs (and unit FEs as determined locally) will be furnished a copy of necessary mission data and mission materials.

1.3.3. The FE will thoroughly debrief all aspects of the evaluation. This debrief will include the examinee's overall rating, specific deviations, area grades assigned (if other than qualified) and any required additional training.

1.3.4. Required areas are shown in **Table 2.1** When it is impossible to evaluate a required area in flight, it may be evaluated by an alternate method (i.e., in a cockpit procedure trainer (CPT) or by verbal examination) in order to complete the evaluation. The reason why required area(s) were not evaluated in-flight and the alternate method of evaluation used will be documented in the Comments portion of the AF Form 8, *Certificate of Aircrew Qualification*.

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

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

1.4.2. When grading criteria specify that airspeed and/or Angle of Attack (AOA) be evaluated and the flight manual lists only a minimum/maximum/recommended Airspeed/AOA for that area, the examinee will brief the desired airspeed/AOA.

1.4.3. The FE will compare examinee performance for each area accomplished during the evaluation with the standards provided in this volume and assign an appropriate grade for the

area. Derive the overall flight evaluation grade from the area grades based on a composite for the observed events and tasks IAW this volume.

1.4.3.1. FEs will use the grading criteria in this volume to determine individual area grades. FE judgment must be exercised when the wording of areas is subjective and when specific situations are not covered.

1.4.3.2. If the examinee receives an unqualified area grade in any of the critical areas identified by this volume, an overall qualification level of "Q-3" will be assigned.

1.4.3.3. FE judgment will be the determining factor in arriving at the overall grade.

1.4.3.4. The following general criteria apply during all phases of flight except as noted for specific events and instrument final approaches:

**Table 1.1. General Criteria.**

Q	Altitude	+/- 200 feet
	Airspeed	+/- 5%
	Course	+/- 5 degrees/3 NM (whichever is greater)
	TACAN Arc	+/- 2 NM
	Fix-to-Fix	< 3 NM
Q-	Altitude	+/- 300 feet
	Airspeed	+/- 10%
	Course	+/- 10 degrees/5 NM (whichever is greater)
	TACAN Arc	+/- 3 NM
	Fix-to-Fix	> 3 NM
U		Exceeded Q- limits

**1.5. Emergency Procedures Evaluation (EPE).** In order of preference, the EPE will be conducted in a CPT, or verbally. Only conduct a verbal EPE if a CPT is not available or not configured appropriately for the evaluation. Grading criteria for each required item are listed in **Chapter 3**. This evaluation will include areas commensurate with examinee's Ready Aircrew Program (RAP) training level and event qualifications.

1.5.1. The following items will be included on all emergency procedures evaluations:

1.5.1.1. Aircraft general knowledge.

1.5.1.2. Emergency procedures. Evaluate a minimum of two emergency procedures per phase of flight (i.e., pre-takeoff, takeoff, cruise and landing). All Bold Face will be evaluated.

1.5.1.3. Cockpit/Crew Resource Management (CRM).

1.5.1.4. Unusual attitude recoveries. This also fulfills the Area 16 (Unusual Attitude Recoveries) requirement for Pilot Instrument/Qualification evaluations.

1.5.2. The following additional items will be included on EPEs as a requisite for the instrument and/or qualification evaluation:

1.5.2.1. AFMAN 11-217, Volume 1, *Instrument Flight Procedures*. Evaluate use of standby/emergency instruments.

1.5.2.2. Alternate/Divert Airfields. Evaluate a minimum of one approach at other than home base.

1.5.3. All Mission (MSN) EPEs will include the following items (tailor MSN evaluation scenarios to unit tasking/mission).

1.5.3.1. Full Scale Aerial Target (FSAT) Automatic Flight Control System (AFCS) malfunction. 1.5.3.2. Chase aircraft considerations during unmanned QF-4 EP

1.5.4. Examinees receiving an overall unqualified grade will be placed in supervised status until recommended additional training is completed and/or a reevaluation is successfully accomplished. Examinees receiving an overall unqualified grade because of an unsatisfactory Boldface accomplishment will not be permitted to fly until a successful reevaluation is accomplished. For EPEs in which the examinee is qualified, but requires additional training, the FE will indicate whether the additional training will be accomplished before the next flight. Additional training and reevaluations will be accomplished IAW AFI 11-202V2.

1.5.5. Normally, an EPE will be conducted separately for the pilot INSTM/QUAL and MSN evaluations. In situations where INSTM/QUAL and MSN evaluation eligibility zones coincide, a single EPE may be administered to fulfill the requisites for the combined MSN/INSTM/QUAL evaluations. The combined EPE must be of sufficient scope and length to ensure all required areas for each evaluation are accomplished.

1.5.6. The following grading criteria will be used to grade individual items on EPEs:

1.5.6.1. Q. Performance is correct. Quickly recognizes and corrects errors.

1.5.6.2. Q-. Performance is safe, but indicates limited proficiency. Makes errors of omission or commission.

1.5.6.3. U. Performance is unsafe or indicates lack of knowledge or ability.

## Chapter 2

### EVALUATION REQUIREMENTS

#### 2.1. General:

2.1.1. All evaluations will follow the guidelines set in AFI 11-202V2 and this instruction.

2.1.2. Evaluation requirements are depicted in **Table 2.1** Areas indicated with an "R" are required items for that evaluation. When it is impractical or not possible to accomplish a required flight evaluation area in-flight, it may be evaluated by an alternate method (i.e., CPT or verbal examination) in order to complete the evaluation. Document the reason and type of alternate method used in the Comments portion of the AF Form 8. If the FE determines the required item cannot be adequately evaluated by an alternate method, the examinee will require an additional flight to complete the evaluation.

2.1.3. Currency of Flight Publications. Publications that will be checked during the evaluation are:

2.1.3.1. **(QF-4)** T.O. 1F-4(Q) E-1CL-1

2.1.3.2. Local In-flight Guide(s)

2.1.3.3. Units may specify additional publications to be evaluated in the unit supplement to AFI 11-202V2.

2.1.4. Cockpit/Crew Resource Management (CRM). In accordance with AFI 11-290, *Cockpit/Crew Resource Management*, CRM skills will be evaluated during all evaluations. CRM skills are integral to all phases of flight and are embedded within specific grading criteria. Therefore, no specific evaluation criteria area titled CRM exists. As all the CRM skills listed on the AF Form 4031, *CRM Skills Training/ Evaluation Form*, are included/embedded, use of the Form 4031 is unnecessary for evaluations in the QF-4. The Stan/Eval trend program can be used to measure the effectiveness of CRM training.

2.1.5. Combined Evaluations. With the approval of the Operations Group Commander, the INSTM/QUAL and MSN evaluations may be combined as a single evaluation. Unit Commanders should recommend this option only for experienced pilots. Combined evaluations flown in this manner must fulfill all current INSTM/QUAL and MSN evaluation requirements, including ground phase requisites. One EPE may be accomplished that encompasses requirements of both EPEs.

**2.2. Pilot Instrument/Qualification Evaluation.** A mission flown according to instrument flight rules (to the maximum extent practical) best fulfills the objective of the INSTM/QUAL evaluation. To the maximum extent possible, INIT INSTM/QUAL evaluations will include approaches at airfields other than home or deployed locations. Approaches may be flown to fields which have a non-published, practice approach available (e.g. Visual Flight Rules (VFR) conditions only approach), but not a published FLIP approach. This evaluation may be administered on any compatible training mission with the approval of the unit commander. When two-seat aircraft are available, pilots will normally complete their INSTM/QUAL evaluation with an FE occupying the rear cockpit.

2.2.1. Minimum ground phase requisites are:

2.2.1.1. Instrument examination.

2.2.1.2. Closed and open book qualification examinations.

2.2.1.3. EPE.

2.2.1.4. Boldface Written Exam. Answers must contain all items in proper sequence. Abbreviations which do not affect the correct meaning of the procedure are acceptable.

**2.3. Mission Evaluation.** MSN evaluations profiles will be designed to evaluate the training/flight position/special qualifications as well as basic airmanship of the examinee. Initial mission evaluations will be given IAW appropriate syllabus mission. Mission evaluations will normally be flown using unit formations and tactics. Examinees will be evaluated in the position of their highest qualification. If briefed, at the FE's discretion, portions may be flown in another position, but the emphasis is to have examinees evaluated at their highest qualification level. Based on the examinee's experience level, a wingman may be required to brief (to include tactics) and/or lead certain phases of the mission, but will not be evaluated using flight lead grading criteria. Evaluations during exercises or deployments are encouraged.

2.3.1. QF-4 mission evaluations require remote control operations using the Drone Formation System (DFS), and will normally be flown on a Fixed Control Site (FCS) profile. If a FCS profile is unavailable, a Mobile Control System (MCS) profile may be flown.

2.3.2. When two-seat aircraft are available, pilots will normally complete this evaluation with an FE occupying the rear cockpit. The evaluator may fly in a chase aircraft or be positioned in the MCS van with Operations Officer approval.

2.3.3. Minimum ground phase requisites are:

2.3.3.1. EPE.

2.3.3.2. Boldface Written Exam. Answers must contain all items in proper sequence. Abbreviations which do not affect the correct meaning of the procedure are acceptable.

**2.4. Formal Course Evaluation.** 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 performance criteria in this volume.

**2.5. Instructor Evaluation.** Instructor evaluations will be conducted IAW AFI 11-202V2. Flight evaluations will include a thorough evaluation of the examinee's instructor knowledge and ability. This is a one-time check in which the examinee must demonstrate ability to instruct in some phase of the unit's mission. Except for requirements delineated in **Table 2.1**, specific profiles and/or events will be determined by the flight examiner. Subsequent evaluations (for example, Instrument/Qualification, Mission) will include instructor portions during the evaluations.

**2.6. Formal Training Unit (FTU) Mission Evaluations.** FTU instructor mission evaluation profiles will normally be IAW the formal course syllabus for any mission which the instructor is qualified to instruct.

**2.7. Instructor Pilot Rear Cockpit Evaluations.** When IPs are required to perform rear cockpit instructor duties, an evaluation of rear cockpit landings will be completed prior to

performing rear cockpit instructor duties. These duties include instruction for and demonstration of landings during initial qualification training, requalification training, or additional training.

2.7.1. Examinees will complete the evaluation as follows:

2.7.1.1. All rear cockpit landing qualification evaluations will include satisfactory demonstration of: overhead and emergency patterns and a landing performed from the rear cockpit.

2.7.1.2. IPs will accomplish the rear cockpit landing qualification during either the instrument/qualification evaluation sortie, the mission evaluation sortie or during another sortie as a requisite. Each unit will specify when the rear cockpit landing qualification will be completed and identify procedures for completion of this requirement in the unit supplement to AFI 11-202V2.

2.7.2. When the rear cockpit landing qualification is evaluated during a separate sortie as a requisite for a flight evaluation, record "SPOT" in the Flight Phase block on the AF Form 8. Describe the purpose of the evaluation as "Rear Cockpit Landing Qualification" in the Mission Description section of the Comments block. In addition, FEs will document all discrepancies on the AF Form 8 in Section IV, paragraph b, under a subparagraph after the Emergency Procedures Evaluation (EPE) discrepancies as follows: "2. Rear Cockpit Landing Qualification." If no discrepancies are identified, enter "None" after the subparagraph title. A subparagraph 3 would then be used for flight discrepancies. If a reevaluation is required, an additional "SPOT" entry will be recorded in the Flight Phase block on the front of the AF Form 8. Additional training will be documented IAW AFI 11-202V2.

2.7.3. An initial rear cockpit landing qualification may be conducted independently of another evaluation. FEs will document completion of this Rear Cockpit Landing Qualification as a "SPOT" evaluation on an AF Form 8. Evaluate Rear Cockpit (RCP) landing qualification on all subsequent INSTM/QUAL evaluations. It may be an additional sortie on the INSTM/QUAL evaluation, and documented as SPOT. If the entire INSTM/QUAL evaluation sortie is flown from the RCP and RCP landing requirements IAW AFI 11-2Mission Design Series (MDS)-Vol2 are met, annotate the AF Form 8 with an INSTM/QUAL flight only, and add rear cockpit landing qualification in the mission description on the back of the AF Form 8.

**Table 2.1. Evaluation Requirements.**

<b>1 - PILOT INSTRUMENT/QUALIFICATION EVALUATION</b>				
<b>2 - PILOT MISSION EVALUATION</b>				
<b>AREA</b>	<b>NOTES</b>	<b>AREA TITLE</b>	<b>1</b>	<b>2</b>
<b>GENERAL</b>				
<b>1</b>		MISSION PLANNING	<b>R</b>	<b>R</b>
<b>2</b>		PUBLICATIONS CHECK	<b>R</b>	
<b>3</b>		BRIEFING (if applicable)	<b>R</b>	<b>R</b>
<b>4</b>		PRE-TAKEOFF	<b>R</b>	<b>R</b>
<b>5</b>		TAKEOFF	<b>R</b>	
<b>6</b>		DEPARTURE	<b>R</b>	
<b>7</b>		LEVEL OFF	<b>R</b>	

8		CRUISE/NAVIGATION	R	
9		IN-FLIGHT CHECKS	R	
10		FUEL MANAGEMENT	R	R
11		COMMUNICATION/IFF	R	R
12		CREW COORDINATION/CRM	R	R
13	1	AIRWORK/ADVANCED HANDLING/ TACTICAL MANEUVER	R	
14	2	UNUSUAL ATTITUDE RECOVERIES	R	
15		DESCENT	R	
16		GO-AROUND		
17		EMERGENCY TRAFFIC PATTERNS	R	
18		EMERGENCY APPROACH/LANDING	R	
19		VFR PATTERN/APPROACH	R	
20		LANDING	R	
21		AFTER LANDING	R	
22		FLIGHT LEADERSHIP (if applicable)	R	R
23		DEBRIEFING/CRITIQUE	R	R
24		KNOWLEDGE	R	R
25	*	AIRMANSHIP	R	R
26	*	SAFETY	R	R
27	*	FLIGHT DISCIPLINE	R	R
28		INSTRUCTOR PERFORMANCE (if applicable)	R	R
29		INSTRUMENT INTERPRETATION		
30		NOT USED		
<b>1 - PILOT INSTRUMENT/QUALIFICATION EVALUATION</b>				
<b>2 - PILOT MISSION EVALUATION</b>				
<b>AREA</b>	<b>NOTES</b>	<b>AREA TITLE</b>	<b>1</b>	<b>2</b>
<b>INSTRUMENTS</b>				
31		HOLDING		
32		INSTRUMENT PENETRATION		
33		INSTRUMENT PATTERNS	R	
34		NON-PRECISION APPROACH	R	
35		MISSED APPROACH/CLIMB OUT	R	
36		CIRCLING/SIDE-STEP APPROACH		
37		INSTRUMENT CROSS-CHECK		
38	3	PRECISION APPROACH	R	
39-40		NOT USED		
<b>QF-4 DFS (FCS/MCS) FLIGHT</b>				
41		AUTO TAKEOFF		
42		AIRWORK		
43		GO AROUND		R
44		FCS/MCS PATTERN		
45		REMOTE APPROACH/LANDING		R
46		SP/CONTROLLER COORDINATION		R
*Denotes Critical Area				

**Notes:**

1. Airwork/Advanced Handling/Tactical Maneuvering. This area is required for pilots receiving Instrument/ Qualification evaluations. Units will determine appropriate proficiency maneuvers for pilot experience levels. Examples are, but are not limited to:

- a. Aerobatics
- b. Confidence maneuvers
- c. Basic Fighter Maneuver (BFM)
- d. Advanced handling characteristics
- e. Formation (fingertip, tactical, trail)

2. Unusual Attitude Recoveries will be evaluated during EPEs, or if evaluated in-flight, will be performed only with an FE occupying the rear cockpit.

3. Both a PAR and an ILS must be evaluated if equipment and facilities are available. However, if facilities or equipment are not available, the flight evaluation may be completed as long as one precision approach is flown.

## Chapter 3

### EVALUATION CRITERIA

#### 3.1. General Grading Standards:

3.1.1. The grading criteria in this chapter are divided into three sections: General, Instrument and QF-4 DFS (FCS/MCS) Flight. Use all sections for criteria applicable to the events performed on the evaluation.

3.1.2. Where major areas are divided into sub areas, only one grade will be assigned to the major areas. Discrepancies on the back of the AF Form 8 will be annotated by sub area.

#### 3.2. General:

3.2.1. Area 1--Mission Planning:

3.2.1.1. Mission Preparation:

3.2.1.1.1. Q. Developed a sound plan to accomplish the mission. Checked all factors applicable to flight in accordance with applicable directives. Aware of alternatives available if flight cannot be completed as planned. Read and initialed for all items in the Flight Crew Information File (FCIF)/ Read Files. Prepared at briefing time.

3.2.1.1.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of performance capabilities or approved operating procedures/rules in some areas.

3.2.1.1.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission.

3.2.2. Area 2 Publications Check:

3.2.2.1. Q. Publications were current, contained all supplements/changes and were properly posted.

3.2.2.2. Q-. Publications contained deficiencies which would not impact flight safety or mission accomplishment.

3.2.2.3. Not up to "Q-" standards. Contained major deviations, omissions, and/or errors.

3.2.3. Area 3--Briefing (if applicable):

3.2.3.1. Organization:

3.2.3.1.1. Q. Well organized and presented in a logical sequence. Concluded briefing in time to allow for element briefing (if applicable) and preflight of personal equipment, aircraft and ordnance.

3.2.3.1.2. Q-. Events out of sequence, hard to follow, some redundancy.

3.2.3.1.3. U. Confusing presentation. Did not allow time for element briefing (if applicable) and preflight of personal equipment, aircraft and ordnance.

3.2.3.2. Presentation:

3.2.3.2.1. Q. Presented briefing in a professional manner. Effective use of training aids. Flight members clearly understood mission requirements.

3.2.3.2.2. Q-. Did not make effective use of available training aids. Dwelled on non-essential mission items.

3.2.3.2.3. U. Did not use training aids. Redundant throughout briefing. Lost interest of flight members Presentation created doubts or confusion.

3.2.3.3. Mission Coverage:

3.2.3.3.1. Q. Established objectives for the mission. Presented all training events and effective technique discussion for accomplishing the mission.

3.2.3.3.2. Q-. Omitted some minor training events. Limited discussion of techniques.

3.2.3.3.3. U. Did not establish objectives for the mission. Omitted major training events or did not discuss techniques.

3.2.3.4. Flight Member Consideration:

3.2.3.4.1. Q. Considered the abilities of all flight members. Briefed corrective action from previous mission and probable problem areas when appropriate.

3.2.3.4.2. Q-. Did not consider all flight members' abilities. Did not identify probable problem areas.

3.2.3.4.3. U. Ignored flight members' abilities and past problem areas.

3.2.4. Area 4--Pre-Takeoff:

3.2.4.1. Q. Established and adhered to step, start engine, taxi and take-off times to assure thorough preflight, check of personal equipment, element briefing, etc. Accurately determined readiness of aircraft for flight. Performed all checks and procedures prior to takeoff in accordance with approved checklists and applicable directives.

3.2.4.2. Q-. Same as above except for minor procedural deviations which did not detract from mission effectiveness.

3.2.4.3. U. Omitted major item(s) of the appropriate checklist. Major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight. Pilot errors directly contributed to a late takeoff which degraded the mission or made it non-effective.

3.2.5. Area 5--Takeoff:

3.2.5.1. Q. Maintained smooth aircraft control throughout takeoff. Performed takeoff in accordance with flight manual procedures and techniques.

3.2.5.2. Q-. Minor flight manual procedural or technique deviations. Control was inconsistent, rough or erratic.

3.2.5.3. U. Takeoff potentially dangerous. Exceeded aircraft/systems limitations and/or violated applicable flight rules. Over-controlled aircraft resulting in excessive deviations from intended flight path.

3.2.6. Area 6--Departure:

### 3.2.6.1. Instrument/Visual Flight Rules:

3.2.6.1.1. Q. Performed departure as published/directed and complied with all restrictions.

3.2.6.1.2. Q-. Minor deviations in airspeed and navigation occurred during completion of departure.

3.2.6.1.3. U. Failed to comply with published/directed departure instructions.

### 3.2.7. Area 7--Level Off:

3.2.7.1. Q. Leveled off smoothly. Promptly established proper cruise airspeed.

3.2.7.2. Q-. Level off was erratic. Slow in establishing proper cruise airspeed. Slow to set/reset altimeter, as required.

3.2.7.3. U. Level-off was erratic. Exceeded Q- limits. Excessive delay or failed to establish proper cruise airspeed. Failed to set/reset altimeter, as required.

### 3.2.8. Area 8--Cruise/Navigation:

3.2.8.1. Q. Demonstrated satisfactory capability to navigate using all available means. Used appropriate navigation procedures. Ensured nav aids were properly tuned, identified, and monitored. Complied with clearance instructions. Aware of position at all times. Remained within the confines of assigned airspace. Fix-to-Fix within +/- 2 NM.

3.2.8.2. Q-. Minor errors in procedures/use of navigation equipment. Some deviations in tuning, identifying, and monitoring nav aids. Slow to comply with clearance instructions. Had some difficulty in establishing exact position and course. Fix-to-Fix within +/- 3 NM.

3.2.8.3. U. Major errors in procedures/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. Exceeded parameters for Q-.

### 3.2.9. Area 9--In-flight Checks:

3.2.9.1. Q. Performed all in-flight checks as required.

3.2.9.2. Q-. Same as qualified, except for minor deviations or omissions during checks. Did not detract from mission accomplishment.

3.2.9.3. U. Did not perform in-flight checks or monitor systems to the degree that an emergency condition would have developed if allowed to continue uncorrected.

### 3.2.10. Area 10--Fuel Management:

3.2.10.1. Q. Properly managed fuel throughout the mission. Complied with all established fuel requirements. Adhered to briefed Joker/Bingo calls.

3.2.10.2. Q-. Errors in fuel management procedures which did not preclude mission accomplishment.

3.2.10.3. U. Failed to monitor fuel status or comply with established fuel requirements. Poor fuel management precluded mission accomplishment or required intervention for safety. Did not adhere to briefed fuel requirements.

3.2.11. Area 11--Comm/Identification, Friend or Foe (IFF):

3.2.11.1. Q. Complete knowledge of and compliance with correct Comm/IFF procedures. Transmissions concise, accurate and utilized proper terminology. Complied with and acknowledged all required instructions. Thoroughly familiar with communications security requirements, HAVE QUICK and secure voice equipment (if applicable).

3.2.11.2. Q-. Occasional deviations from correct 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 communications security requirements, HAVE QUICK and secure voice equipment (if applicable).

3.2.11.3. U. Incorrect procedures or poor performance caused confusion and jeopardized mission accomplishment. Omitted numerous required radio calls. Inaccurate or confusing terminology significantly detracted from situational awareness, threat warning or mission accomplishment. Displayed inadequate knowledge of communications security requirements, HAVE QUICK and secure voice equipment (if applicable).

3.2.12. Area 12--Crew Coordination/CRM:

3.2.12.1. Q. Effectively coordinated with other crewmember without misunderstanding. Effective use of CRM.

3.2.12.2. Q-. Coordinated with other crewmember with minor exceptions. Intra-crew communications were not clear or concise. CRM was the minimum acceptable.

3.2.12.3. U. Breakdown in coordination with other crewmember precluded mission accomplishment or jeopardized safety. CRM was lacking to the extent the mission accomplishment was severely degraded.

3.2.13. Area 13--Airwork/Advanced Handling/Tactical Maneuvering:

3.2.13.1. Q. Aircraft control during maneuvers was positive and smooth. Maneuvers performed IAW directives and appropriate to the tactical situation/ environment. Adhered to established procedures.

3.2.13.2. Q-. Aircraft control during maneuvers not always smooth and positive, but adequate. Minor procedure deviations or lack of full consideration for the tactical situation.

3.2.13.3. U. Aircraft control erratic. Aircraft handling caused unsatisfactory accomplishment of maneuvers. Exceeded Q- criteria. Failed to consider the tactical situation. Temporary loss of aircraft control.

3.2.14. Area 14--Unusual Attitude Recoveries:

3.2.14.1. Q. Smooth, positive recovery to level flight with correct recovery procedures.

3.2.14.2. Q-. Slow to analyze attitude, or erratic in recovery to level flight. Correct recovery procedures used.

3.2.14.3. U. Unable to determine attitude. Improper recovery procedures were used.

3.2.15. Area 15--Descent:

3.2.15.1. Q. Performed descent as directed, complied with all restrictions.

3.2.15.2. Q-. Performed descent as directed with minor deviations.

3.2.15.3. U. Performed descent with major deviations.

3.2.16. Area16--Go-Around:

3.2.16.1. Q. Initiated and performed go-around promptly in accordance with flight manual and operational procedures and directives.

3.2.16.2. Q-. Slow to initiate go-around or procedural steps.

3.2.16.3. U. Did not initiate go-around when appropriate or directed. Applied incorrect procedures.

3.2.17. Area 17--Emergency Traffic Pattern: (Prior to configuration. Includes simulated single engine and no-flap emergency, pattern, as appropriate.)

3.2.17.1. Q. Complied with all flight manual and operational procedures. Maintained safe maneuvering airspeed/AOA. Flew approach compatible with the situation. Adjusted approach for type emergency simulated.

3.2.17.2. Q-. Minor procedural errors. Erratic airspeed/AOA control. Errors did not detract from safe handling of the situation.

3.2.17.3. U. Did not comply with applicable procedures. Erratic airspeed/AOA control compounded problems associated with the emergency. Flew an approach which was incompatible with the simulated emergency. Did not adjust approach for simulated emergency.

3.2.18. Area 18--Emergency Approach/Landing (configuration through rollout):

3.2.18.1. Q. Used sound judgment. Configured at the appropriate position/altitude. Flew final based on recommended procedures, airspeed/AOA and glidepath. Smooth, positive control of aircraft. Could have landed safely. Set parameters for ejection if necessary. Touchdown point was IAW applicable guidance and permitted safe stopping in available runway. Arrestment gear could have been used, if appropriate.

3.2.18.2. Q-. Safety not compromised. Configured at a position and altitude which allowed for a safe approach. Could have landed safely with the following deviations:

3.2.18.2.1. Minor deviations from recommended procedures, airspeed/AOA and altitudes.

3.2.18.2.2. Unnecessary maneuvering due to minor errors in planning or judgment.

3.2.18.3. U. Major deviations from recommended procedures, airspeed/AOA and altitudes. Required excessive maneuvering due to inadequate planning or judgment. Could not have landed safely. Touchdown point was not IAW applicable guidance and did not or would not allow for safe stopping on available runway. Arrestment gear was not or could not have been used. Did not set parameters for ejection if approach was unsuccessful.

### 3.2.19. Area 19--VFR Pattern/Approach:

3.2.19.1. Q. Performed patterns/approaches IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was smooth and positive. Accurately aligned with runway. Maintained proper/briefed airspeed/AOA. Airspeed -5/+10 knots.

3.2.19.2. Q-. Performed patterns/approaches with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was not consistently smooth, but safe. Alignment with runway varied. Slow to correct to proper/briefed airspeed/AOA. Airspeed -5/+15 knots.

3.2.19.3. U. Approaches not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Erratic aircraft control. Large deviations in runway alignment. Exceeded Q- parameters.

### 3.2.20. Area 20--Landing. Applicable to normal VFR approaches. Where runway configuration, arresting cable placement or flight manual limitations require an adjustment to the desired touchdown point, a simulated runway threshold will be identified and the grading criteria applied accordingly. For instrument approaches, the examinee should utilize a normal glideslope from either the decision height or from a point where visual acquisition of the runway environment is made.

3.2.20.1. Q. Performed landings IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point - 150' to 1000' from the runway threshold.

3.2.20.2. Q-. Performed landings with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point - 0' to 149' or 1001' to 1500' from the runway threshold.

3.2.20.3. U. Landing not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point exceeded Q- criteria.

### 3.2.21. Area 21--After Landing:

3.2.21.1. Q. Appropriate after landing checks and aircraft taxi procedures accomplished in accordance with the flight manual and applicable directives. Completed all required forms accurately.

3.2.21.2. Q-. Same as qualified except some deviations or omissions noted in performance of after landing check and/or aircraft taxi procedures in which safety was not jeopardized. Required forms completed with minor errors.

3.2.21.3. U. Major deviations or omissions were made in performance of after landing check or aircraft taxi procedures which could have jeopardized safety. Data recorded inaccurately or omitted.

### 3.2.22. Area 22--Flight Leadership:

3.2.22.1. Q. Positively directed the flight during accomplishment of the mission and made timely comments to correct discrepancies when required. Made sound and timely in-flight decisions.

3.2.22.2. Q-. In-flight decisions delayed mission accomplishment or degraded training benefit.

3.2.22.3. U. Did not accomplish the mission or failed to correct in-flight discrepancies. In-flight decisions jeopardized mission accomplishment.

3.2.23. Area 23--Debriefing/Critique:

3.2.23.1. Q. Thoroughly debriefed the mission (or applicable portions). Compared mission results with initial objectives that were established for the mission. Debriefed deviations. Offered corrective guidance as appropriate.

3.2.23.2. Q-. Limited debriefing. Did not thoroughly discuss performance in relationship to mission objectives. Did not debrief all deviations.

3.2.23.3. U. Did not debrief mission deviations or offer corrective guidance.

3.2.24. Area 24--Knowledge. Evaluate all applicable sub areas.

3.2.24.1. Aircraft General:

3.2.24.1.1. Q. Demonstrated thorough knowledge of aircraft systems, limitations and performance characteristics.

3.2.24.1.2. Q-. Knowledge of aircraft systems, limitations, and performance characteristics sufficient to perform the mission safely. Demonstrated deficiencies either in depth of knowledge or comprehension.

3.2.24.1.3. U. Demonstrated unsatisfactory knowledge of aircraft systems, limitations or performance characteristics.

3.2.24.2. Emergency Procedures:

3.2.24.2.1. Q. Displayed correct, immediate response to Bold Face and non-Bold Face emergency situations. Effectively used checklist.

3.2.24.2.2. Q-. Response to Bold Face emergencies 100% correct. Response to certain areas of non-Bold Face emergencies or follow-on steps to Bold Face procedures was slow/confused. Used the checklist when appropriate, but slow to locate required data.

3.2.24.2.3. U. Incorrect response for Bold Face emergency. Unable to analyze problems or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or contents.

3.2.24.3. Flight Rules/Procedures:

3.2.24.3.1. Q. Thorough knowledge of flight rules and procedures.

3.2.24.3.2. Q-. Deficiencies in depth of knowledge.

3.2.24.3.3. U. Inadequate knowledge of flight rules and procedures.

3.2.24.4. Weapon/Tactics/Threat:

3.2.24.4.1. Q. Thorough knowledge of all aircraft weapons systems, weapons effects, tactics and threats applicable to the unit mission.

- 3.2.24.4.2. Q-. Deficiencies in depth of knowledge or comprehension of weapons systems, weapons effects, tactics and threat knowledge which would not preclude successful mission accomplishment.
- 3.2.24.4.3. U. Insufficient knowledge of weapons, tactics and threat contributed to ineffective mission accomplishment.
- 3.2.24.5. Local Area Procedures:
  - 3.2.24.5.1. Q. Thorough knowledge of local procedures.
  - 3.2.24.5.2. Q-. Limited knowledge of local procedures.
  - 3.2.24.5.3. U. Inadequate knowledge of local procedures.
- 3.2.25. Area 25--Airmanship (Critical):
  - 3.2.25.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
  - 3.2.25.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.
- 3.2.26. Area 26--Safety (Critical):
  - 3.2.26.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.
  - 3.2.26.2. U. Was not aware of or did not comply with all safety factors required for safe operation or mission accomplishment. Did not adequately clear. Operated the aircraft in a dangerous manner.
- 3.2.27. Area 27--Flight Discipline (Critical):
  - 3.2.27.1. Q. Demonstrated strict professional flight and pilot discipline throughout all phases of the mission.
  - 3.2.27.2. U. Failed to exhibit strict flight or pilot discipline. Violated or ignored rules or instructions.
- 3.2.28. Area 28--Instructor Performance:
  - 3.2.28.1. Briefing/Debriefing:
    - 3.2.28.1.1. Q. Presented a comprehensive, instructional briefing/debriefing which encompassed all mission events. Made excellent use of training aids. Excellent analysis of all events/maneuvers. Clearly defined objectives.
    - 3.2.28.1.2. Q-. Minor errors or omissions in briefing/debriefing or mission critique. Occasionally unclear in analysis of events or maneuvers.
    - 3.2.28.1.3. U. Major errors or omissions in briefing/debriefing. Analysis of events or maneuvers was incomplete, inaccurate or confusing. Did not use training aids/reference material effectively. Briefing/debriefing below the caliber of that expected of instructors. Failed to define mission objectives.
  - 3.2.28.2. Demonstration of Maneuvers:

3.2.28.2.1. Q. Performed required maneuvers within prescribed parameters. Provided concise, meaningful in-flight commentary. Demonstrated excellent instructor proficiency.

3.2.28.2.2. Q-. Performed required maneuvers with minor deviations from prescribed parameters. In-flight commentary was sometimes unclear.

3.2.28.2.3. U. Was unable to properly perform required maneuvers. Made major procedural errors. Did not provide in-flight commentary. Demonstrated below average instructor proficiency.

3.2.28.3. Instructor Knowledge:

3.2.28.3.1. Q. Demonstrated in-depth knowledge of procedures, requirements, aircraft systems/performance characteristics, mission and tactics beyond that expected of non-instructors.

3.2.28.3.2. Q-. Deficiencies in-depth of knowledge, comprehension of procedures, requirements, aircraft systems/performance characteristics, mission or tactics.

3.2.28.3.3. U. Unfamiliar with procedures, requirements, aircraft systems/performance characteristics, mission or tactics. Lack of knowledge in certain areas seriously detracted from instructor effectiveness.

3.2.28.4. Ability to Instruct:

3.2.28.4.1. Q. Demonstrated excellent instructor/evaluator ability. Clearly defined all mission requirements and any required additional training/corrective action. Instruction/evaluation was accurate, effective and timely. Was completely aware of aircraft/mission situation at all times.

3.2.28.4.2. Q-. Problems in communication or analysis degraded effectiveness of instruction/evaluation.

3.2.28.4.3. U. Demonstrated inadequate ability to instruct/evaluate. Unable to perform, teach or assess techniques, procedures, systems use or tactics. Did not remain aware of aircraft/mission situation at all times.

3.2.28.5. Training/Evaluation Forms Preparation:

3.2.28.5.1. Q. Completed appropriate training/evaluation records accurately. Adequately assessed and recorded performance. Comments were clear and pertinent.

3.2.28.5.2. Q-. Minor errors or omissions in training/evaluation records. Comments were incomplete or slightly unclear.

3.2.28.5.3. U. Did not complete required forms or records. Comments were invalid, unclear, or did not accurately document performance.

3.2.29. Area 29--Instrument Interpretation:

3.2.29.1. Q. Demonstrated satisfactory knowledge of basic instrument procedures, in-flight penetration and approach procedures. Quickly analyzed flight instruments, determine aircraft attitude and was knowledgeable of required action to correct the

aircraft to level flight. Effectively monitored energy levels to ensure parameters were not exceeded.

3.2.29.2. Q-. Demonstrated limited knowledge of instrument procedures. Slow to recognize aircraft attitudes and corrective actions required, but able to determine proper corrections.

3.2.29.3. U. Displayed faulty or insufficient knowledge of instrument procedures. Unable to properly interpret instruments or recognize aircraft attitude.

3.2.30. Area 30. Not used.

### **3.3. Instrument:**

3.3.1. Area 31--Holding:

3.3.1.1. Q. Performed entry and holding IAW published procedures and directives. TACAN holding pattern limit exceeded by not more than  $\pm 2$  NM.

3.3.1.2. Q-. Minor deviations to procedures or directives. TACAN holding pattern limit exceeded by not more than  $\pm 3$  NM.

3.3.1.3. U. Holding was not IAW published procedures and directives. Exceeded criteria for Q- or holding pattern limits.

3.3.2. Area 32--Instrument Penetration (Initial Approach Fix to Final Approach Fix/Descent Point):

3.3.2.1. Q. Performed the penetration and approach as published/directed and IAW applicable flight manuals. Complied with all restrictions. Made smooth and timely corrections.

3.3.2.2. Q-. Performed the penetration and approach with minor deviations. Complied with all restrictions. Slow to make corrections.

3.3.2.3. U. Performed the penetration and approach with major deviations. Erratic corrections.

3.3.3. Area 33--Instrument Patterns (Downwind/Base Leg):

3.3.3.1. Q. Performed procedures as published or directed and IAW flight manual. Smooth and timely response to controller instruction.

3.3.3.2. Q-. Performed procedures with minor deviations. Slow to respond to controller instruction.

3.3.3.3. U. Performed procedures with major deviations/erratic corrections. Failed to comply with controller instruction.

3.3.4. Area 34--Non-Precision Approach:

3.3.4.1. Q. Adhered to all published/directed procedures and restrictions. Used appropriate descent rate to arrive at Minimum Descent Altitude (MDA) at or before the Visual Descent Point (VDP) or Missed Approach Point (MAP). Position would have permitted a safe landing. Maintained proper/briefed AOA.

3.3.4.1.1. Airspeed  $+10/-5$  kts

3.3.4.1.2. Heading +5 degrees (Airport Surveillance Radar (ASR))

3.3.4.1.3. Course +5 degrees at MAP

3.3.4.1.4. Minimum Descent Altitude +100/-0 feet

3.3.4.2. Q-. Performed approach with minor deviations. Arrived at MDA at or before the MAP, but past the VDP. Position would have permitted a safe landing. Slow to correct to proper/briefed AOA.

3.3.4.2.1. Airspeed +15/-5 kts

3.3.4.2.2. Heading +10 degrees (ASR)

3.3.4.2.3. Course +10 degrees at MAP

3.3.4.2.4. Minimum Descent Altitude +150/-50 feet

3.3.4.3. U. Did not comply with published/directed procedures or restrictions. Exceeded Q- limits. Maintained steady state flight below the MDA, even though the -50 foot limit was not exceeded. Could not land safely from the approach.

**Note:** The -50 foot tolerance applies only to momentary excursions.

3.3.5. Area 35--Missed Approach/Climb Out:

3.3.5.1. Q. Executed missed approach/climb out as published directed. Completed all procedures IAW applicable flight manual.

3.3.5.2. Q-. Executed missed approach/climb out with minor deviations. Slow to comply with published procedures, controller's instructions or flight manual procedures.

3.3.5.3. U. Executed missed approach/climb out with major deviations, or did not comply with applicable directives.

3.3.6. Area 36--Circling/Side-Step Approach:

3.3.6.1. Q. Performed circling/side-step approach in accordance with procedures and techniques outlined in the flight manual and AFMAN 11-217. Aircraft control was positive and smooth. Proper runway alignment.

3.3.6.2. Q-. Performed circling/side-step approach with minor deviations to procedures and techniques outlined in the flight manual and AFMAN 11-217. Aircraft control was not consistently smooth, but safe. Runway alignment varied, but go-around not required.

3.3.6.3. U. Circling/side-step approach not performed in accordance with procedures and techniques outlined in the flight manual and AFMAN 11-217. Erratic aircraft control. Large deviations in runway alignment required go-around.

3.3.7. Area 37--Instrument Cross Check:

3.3.7.1. Q. Effective instrument cross check. Smooth and positive aircraft control throughout flight. Meets "Q" criteria listed in General Criteria, applicable special events or instrument final approaches.

3.3.7.2. Q-. Slow instrument cross check. Aircraft control occasionally abrupt to compensate for recognition of errors. Meets "Q-" criteria listed in General Criteria, applicable special events or instrument final approaches.

3.3.7.3. U. Inadequate instrument cross check. Erratic aircraft control. Exceeded Q-limits.

3.3.8. Area 38--Precision Approach:

3.3.8.1. Q. Performed procedures as directed and IAW applicable flight manual. Smooth and timely response to controller's instructions. Complied with decision height. Position would have permitted a safe landing. Maintained proper/briefed AOA. Maintained glide path with only minor deviations.

3.3.8.1.1. Airspeed +10/-5 kts

3.3.8.1.2. Heading within 5 degrees of controller's instructions (PAR)

3.3.8.1.3. Glide Slope/Azimuth within one dot (ILS)

3.3.8.2. Q-. Performed procedures with minor deviations. Slow to respond to controller's instructions. Position would have permitted a safe landing. Improper glide path control. Slow to correct to proper/briefed AOA. Initiated appropriate action at Decision Height +/- 50 feet.

3.3.8.2.1. Airspeed +15/-10 kts

3.3.8.2.2. Heading within 10 degrees of controller's instructions (PAR)

3.3.8.2.3. Glide Slope within one dot low/two dots high (ILS)

3.3.8.2.4. Azimuth within two dots (ILS)

3.3.8.3. U. Performed procedures with major deviations. Erratic corrections. Did not respond to controller's instructions. Erratic glide path control. Did not comply with decision height and/or position would not have permitted a safe landing.

3.3.9. Areas 39 – 40. Not used.

**3.4. QF-4 DFS (FCS/MCS) Flight:**

3.4.1. Area 41--Auto Takeoff:

3.4.1.1. Q. Ensured proper aircraft parameters throughout takeoff. Controlled in accordance with flight manual procedures.

3.4.1.2. Q-. Minor flight manual procedural deviations. Allowed some under or over control at lift-off.

3.4.1.3. U. Allowed lift-off to be potentially dangerous. Allowed aircraft/controller to exceed aircraft/systems limitations.

3.4.2. Area 42--Airwork:

3.4.2.1. Q. Ensured maneuvers performed IAW brief and aware of aircraft parameters during maneuvers. Adhered to established parameters.

3.4.2.2. Q-. Slow to recognize and/or take appropriate actions to minimize deviations from briefed parameters. Minor procedural deviations or lack of full considerations for the situation.

3.4.2.3. U. Allowed aircraft to deviate into unsafe parameters during the maneuver. Exceeded Q- criteria.

3.4.3. Area 43--Go-Around:

3.4.3.1. Q. Initiated and performed or told controller to go-around promptly IAW flight manual and operational procedures and directives.

3.4.3.2. Q-. Slow to initiate procedural steps to go-around or tell controller to go-around.

3.4.3.3. U. Did not self-initiate go-around when appropriate or directed. Techniques unsafe or applied incorrect procedures.

3.4.4. Area 44—FCS/MCS Patterns:

3.4.4.1. Q. Ensured patterns/approaches IAW procedures and techniques outlined by operational procedures and local directives. Ensured aircraft had accurate runway alignment and proper airspeed.

3.4.4.2. Q-. Slow to recognize and/or take appropriate actions to prevent significant deviations in procedures or local directives. Allowed significant deviations in runway alignment without notifying the controller. Slow to notice deviations from briefed airspeed.

3.4.4.3. U. Allowed aircraft to fly approaches not IAW procedures and techniques outlined in operational and local directives. Allowed aircraft to have large deviations in runway alignment and airspeed making aircraft approach unsafe.

3.4.5. Area 45--Remote Approach/Landing:

3.4.5.1. Q. Ensured landings IAW procedures and techniques outlined in operational and local directives.

3.4.5.2. Q-. Slow to recognize and/or take appropriate actions to prevent significant deviations from procedures or local directives.

3.4.5.3. U. Failed to provide input or take control of the aircraft in a timely manner to prevent aircraft damage or runway departure.

3.4.6. Area 46--Safety Pilot/Controller Coordination:

3.4.6.1. Q. Appropriately briefed indications and procedures for controller to safety pilot transfer of aircraft control and vice versa. Debriefed control transfers that were not flown as briefed or planned.

3.4.6.2. Q-. Omitted briefing some indication and/or procedures for controller to safety pilot transfer of aircraft control which subsequently affected the flight. Omitted debriefing transfer of aircraft control procedures which were not IAW the brief or local procedures. Flight safety was not compromised.

3.4.6.3. U. Did not brief/debrief indications and procedures for controller to safety pilot transfer of aircraft control. Transfer of aircraft control unsafe or unclear creating confusion about who was flying the aircraft.

HERBERT J. CARLISLE  
Lt Gen, USAF  
DCS, Operations, Plans and Requirements

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

AFPD 11-2, *Aircraft Rules and Procedures*, 14 Jan 2005

AFPD 11-4, *Aviation Service*, 14 Jan 2005

AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, 12 Sep 2010

AFMAN 11-210, *Instrument Refresher Course (IRC) Program*, 03 Feb 2005

AFMAN 11-217, Volume 1, *Instrument Flight Procedures*, 22 Oct 2010

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

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

AFMAN 33-363, *Management of Records*, 01 Mar 2008

***Adopted Forms***

AF Form 8, *Certificate of Aircrew Qualification*, 8 Dec 2006

AF Form 847, *Recommendation for Change of Publication*, 22 Sep 2009

AF Form 4031, *CRM Skills Training/ Evaluation Form*, 1 Mar 1998

***Abbreviations and Acronyms***

**AAMD**—All Aspect Missile Defense

**ACMI**—Air Combat Maneuvering Instrumentation

**AFCS**— Automatic Flight Control System

**AOA**—Angle of Attack

**ASR**—Airport Surveillance Radar

**BFM**—Basic Fighter Maneuver

**BIT**—Built in test

**CPT**—Cockpit Procedures Trainer

**CRM**—Cockpit/Crew Resource Management

**DFS**— Drone Formation System

**EA**—Electronic Attack

**EP**—Electronic Protect

**EPE**—Emergency Procedure Evaluation

**FCIF**—Flight Crew Information File

**FCS**— Fixed Control Site

**FE**—Flight Examiner

**FSAT**— Full Scale Aerial Target  
**FTU**—Formal Training Unit  
**HHQ**—Higher Headquarters  
**IFF**—Identification, Friend or Foe  
**IP**—Instructor Pilot  
**IRC**—Instrument Refresher Course  
**MAP**—Missed Approach Point  
**MCS**—Mobile Control System  
**MDA**—Minimum Descent Altitude  
**MDS**—Mission Design Series  
**RAP**—Ready Aircrew Program  
**RCP**—Rear Cockpit  
**SP**—Safety Pilot  
**VDP**—Visual Descent Point  
**VFR**—Visual Flight Rules  
**VTR**—Video Tape Recorder

### *Terms*

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

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

**Major**—Detracted from mission accomplishment. Adversely affected use of equipment, or violated safety.

**Minor**—Did not detract from mission accomplishment.

**Omission**—To leave out a required action or annotation.