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*Flying Operations*

**B-1--AIRCREW EVALUATION CRITERIA**



**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This volume implements AFD 11-2, *Aircraft Rules and Procedures*; AFD 11-4, *Aviation Service*; and AFI 11-202V2, *Aircrew Standardization/Evaluation Program*. It applies to all B-1 units. It does not apply to the Air Force Reserve Command (AFRC). Major commands (MAJCOM), direct reporting units (DRU), and field operating agencies (FOA) are to forward proposed MAJCOM/DRU/FOA-level supplements to this volume to HQ USAF/XOOT, through HQ ACC/XOFS, for approval before publication IAW AFD 11-2. Copies of MAJCOM/DRU/FOA-level supplements, after published, will be provided by the issuing MAJCOM/DRU/FOA to HQ USAF/XOOT, HQ ACC/XOFS, and the user MAJCOM/DRU/FOA offices of primary responsibility. Field units below MAJCOM/DRU/FOA level will forward copies of their supplements to this publication to their parent MAJCOM office of primary responsibility for post publication review. **NOTE:** The terms direct reporting unit and field operating agency as used in this paragraph refer only to those DRUs/FOAs that report directly to HQ USAF. Keep supplements current by complying with AFI 33-360V1, *Publications Management Program*. See paragraph 1.2. of this volume for guidance on submitting comments and suggesting improvements to this publication.

The Privacy Act of 1974 applies to certain information gathered pursuant to this instruction. The Privacy Act System Number F011 AF XO A, Air Force Operations Resource Management Systems (AFORMS) covers required information. The authority for maintenance of the system is Title 37 U.S.C. 301a (Incentive Pay); Public Law 92-204 (Appropriation Act for 1973, Section 715 ; Public Laws 93-570 (Appropriations Act for 1974), Public Act 93-294 (Aviation Career Incentive Act of 1974), DoD Directive 7730.57 (Aviation Career Incentive Act and Required Annual Report; and Executive Order 9397. This instruction is affected by the Paperwork Reduction Act of 1974 as amended in 1996.

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## Chapter 1

### GENERAL INFORMATION

**1.1. General.** Conduct all evaluations in accordance with (IAW) the provisions of AFI 11-202V2 and this instruction.

**1.2. Recommended Changes/Waivers:**

1.2.1. Send comments and suggested improvements to this volume on an AF Form 847, **Recommendation for Change of Publication**, to the parent MAJCOM Standardization/Evaluation (Stan/Eval). Parent MAJCOM Stan/Evals will forward approved recommendations to lead command OPR (HQ ACC/XOFS, 205 Dodd Blvd, Suite 101, Langley AFB VA 23665-2789) for final approval. AF/XO is the approval authority for changes and revisions to this instruction.

1.2.2. Waivers will be requested from the parent MAJCOM/DO through Stan/Eval channels.

**1.3. Procedures:**

1.3.1. Flight examiners (FE) will use the evaluation criteria in this volume to conduct all flight, Aircrew Training Device (ATD), and Emergency Procedure Evaluations. To ensure standard and objective evaluations, flight examiners will be thoroughly familiar with the prescribed evaluation criteria.

1.3.2. Authorized recording devices, Air Combat Maneuvering Instrumentation (ACMI), Range Integration Instrumentation System (RIIS), or Video Tape Recorders (VTR) should be used, when available, to reconstruct/evaluate the mission.

1.3.3. Unless specified, the examinee or FE may fly in any flight position/seat which will best enable the FE to conduct a thorough evaluation.

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

1.3.5. 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., ATD, or by a verbal examination) in order to complete the evaluation. The reason why required area(s) were not evaluated inflight and the alternate method of evaluation used will be documented in the Comments portion of the AF Form 8, **Certificate of Aircrew Qualification**.

1.3.6. The FE will thoroughly critique all aspects of the flight. During the critique, the FE will review the examinee's overall rating, specific deviations, area grades assigned (if other than qualified), and any required additional training.

1.3.7. If an actual emergency occurs, only the initial reaction will be evaluated. Evaluator discretion will be used to determine when to terminate an evaluation.

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

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 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 AFI 11-202V2 and this volume.

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

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

1.4.3.3. **General Criteria.** 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.**

<b>Q</b>	Altitude	± 200 feet
	Airspeed/MACH	± 5%
	Course	± 5 degrees/3 NM
	TACAN Arc	± 2 NM
<b>Q-</b>	Altitude	± 300 feet
	Airspeed/MACH	± 10%
	Course	± 10 degrees/5 NM
	TACAN Arc	± 3 NM
<b>U</b>	Exceeded Q- Limits	

**1.5. Emergency Procedures/ATD Evaluation.** If available and configured appropriately, the Weapons System Trainer (WST) should be used to conduct the requisite Emergency Procedures Evaluation (EPE). **NOTE:** Airspeed and altitude tolerances are increased 50% for evaluations conducted in the WST. If the WST is unavailable, the EPE will be given verbally. This evaluation will include areas commensurate with the examinee's mission status (Combat Mission Ready [CMR] or Basic Mission Capable [BMC]). EPEs should be administered to pilots by pilots and to Weapon Systems Officers (WSO) by WSOs. EPEs may be administered to pilots and WSOs individually or as crews.

1.5.1. The following items will be included in all pilot EPEs:

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). Evaluate all Bold Face procedures.

1.5.1.3. Crew Coordination.

1.5.1.4. Terrain Following (TF) malfunction procedures.

1.5.2. The following additional items will be included on EPEs as a requisite for the instrument evaluation.

1.5.2.1. Instrument Procedures.

1.5.2.2. Unusual attitudes recoveries.

1.5.3. The following items will be included in all WSO EPEs:

1.5.3.1. Weapons delivery malfunction procedures.

1.5.3.2. OAS abnormal operations (INS, degraded radar, ACUC recycles).

1.5.3.3. DAS abnormal operations.

1.5.3.4. Crew Coordination.

**1.6. Documentation of Weapons Employment Results.** Weapons employment results will be documented in the Mission Description Section of the AF Form 8 for mission evaluations. The following abbreviations will be used to describe the various weapons deliveries: Low Level High Drag (LLHD), Low Level Low Drag (LLLD), Medium Altitude System Delivery (MASD), High Altitude System Delivery (HASD), Guided Delivery (GD), or Degraded Delivery (DD).

1.6.1. **Air-to-Surface.** Hit or Miss IAW AFI 11-2B-1V1, *B-1--Aircrew Training*, will be entered for each air-to-surface record delivery. Criteria for weapons delivery qualification (Qual), events, and deliveries on tactical evaluations will be IAW AFI 11-2B-1V3, *B-1--Operations Procedures*. On unmanned ranges where precise scoring is not available, FEs will assess weapons employment results. Results will be documented using "Hit/Miss" as in [Table 1.2](#).

**NOTE:**

Impacts exceeding AFI 11-2B-1V1 hit criteria will be documented as a "miss."

**Table 1.2. Weapons Employment Scores.**

Weapons employment scores were:		
LLHD	HASD	GD
Hit, Miss, Hit	*Hit	*Hit
*FE assessed.		

1.6.2. **FE Judgement.** The FE's judgement will be the determining factor in deciding the weapons employment grade. If the examinee fails to qualify in one or more events, the FE may elect to award a higher area grade than warranted by the score(s). The FE will include justification for such an award in the Additional Comments Section of the AF Form 8.

**1.7. Examinations:**

1.7.1. **Emergency Procedures Examination (Closed Book):**

1.7.1.1. **General Knowledge.** This exam consists of a minimum of 20 questions and includes information applicable to the individual's crew position and the unit's mission. Units may increase the number of questions to provide an in-depth evaluation of the examinee's knowledge.

1.7.1.2. **Bold Face.** This exam must consist of one question concerning each bold face applicable to the individual's specialty. The answer must contain all critical action items in proper sequence. Verbatim responses are not required; however, answers must clearly state the intended course of action.

1.7.2. **Qualification Examination (Open Book).** This examination will be derived from all flight manuals and governing command directives. The examination will consist of at least 50 questions. Units may increase the number of questions to provide an in-depth evaluation of the examinee's knowledge.

1.7.2.1. WSO exams will consist of questions applicable to both Offensive Systems Officer (OSO) and Defensive Systems Officer (DSO) positions.

## 1.8. Instructor Evaluations:

1.8.1. An instructor receiving an area grade of U or Q- with additional training in any area will result in an overall Qual level 3 for the instructor evaluation.

1.8.2. An instructor receiving an area grade of U or Q- with additional training in any grading area must not perform instructor duties until additional training is complete. This restriction is placed in the comments and the YES block is marked in restrictions.

1.9. **Records Disposition.** Records will be disposed of IAW AFM 37-139, *Records Disposition Schedule*, Table 13-10.

## Chapter 2

### EVALUATION REQUIREMENTS

**2.1. General.** All evaluations will follow the guidelines set in AFI 11-202V2. Evaluation requirements are depicted in [Table 2.1](#).

**2.1.1. Requirements.** For CMR aircrew to complete an evaluation, all areas annotated with an "R" must be accomplished. BMC aircrew will only be evaluated on those missions routinely performed and in those areas which they are qualified to perform unsupervised. Strive to complete all evaluation requirements on one flight for efficiency.

**2.1.2. Mission Data.** Individuals being evaluated are responsible for their own mission planning. When using a staff agency derived product, the individual is responsible to ensure the data used in the aircraft is accurate and effective for mission accomplishment.

**2.1.3. Currency of Flight Publications.** Evaluate all issued technical orders, to include checklists, for currency and accuracy IAW AFI 11-202V2. Units may specify additional publications to be evaluated in the unit supplement to AFI 11-202V2.

**2.2. Pilot Instrument, Pilot Qualification, or WSO Qualification Evaluation.** The pilot Instrument and pilot/WSO Qualification evaluations are generally flown in conjunction with Mission evaluations for efficiency. However, each evaluation may be administered on any compatible training mission with the approval of the unit Chief of Stan/Eval and the commander's concurrence.

#### 2.2.1. Minimum Ground Phase Requisites:

2.2.1.1. Closed and open book qualification examinations.

2.2.1.2. Bold Face Exam.

2.2.1.3. EPE/ATD

2.2.1.4. Instrument Refresher Course (IRC) Training.

2.2.1.5. Instrument Examination.

**2.2.2. Pilot Instrument Requirements.** The requirements for completion of the pilot instrument evaluation are delineated in [Table 2.1](#) and specific area evaluation criteria in [Chapter 3](#).

**2.2.3. Pilot Qualification Requirements.** In addition to the requirements delineated in [Table 2.1](#) and specific area evaluation criteria in [Chapter 3](#), the following information applies:

**2.2.3.1. Emergency Traffic Patterns.** Emergency/abnormal procedures will normally be accomplished in conjunction with instrument approaches. The evaluator will declare when the simulated emergency procedure (EP) is terminated.

**2.2.3.1.1. No Flap/Slat Approach/Touch and Go.** If an aircraft commander is touch and go qualified, a no flap/slat touch and go will be evaluated and another no flap/slat approach is not required. No flap/slat approaches may be evaluated IAW the procedures in paragraph [1.3.5](#) if circumstances prevent in-flight accomplishment.

**2.2.3.1.2. Simulated Two-Engine Out Approach/Go-Around.** Only Formal Training Unit (FTU)/Central Flight Instructor Course (CFIC) qualified instructors may be evaluated in flight.

Two-engine-out approaches to a touchdown or go-around will be accomplished in the WST. Units without a WST will include a discussion of two-engine-out handling characteristics during the pilot EPE.

2.2.4. **WSO Qualification Requirements.** The requirements for completion of the WSO qualification evaluation are delineated in [Table 2.1.](#) and specific area evaluation criteria in [Chapter 3.](#)

**2.3. Mission Evaluation.** Scenarios representing unit Designed Operational Capability (DOC) tasking satisfy the requirements of this evaluation. The profiles will be designed to evaluate the training/flight position/special qualifications as well as the basic airmanship of the examinee. Initial mission evaluations will be given in the primary DOC of the unit. Mission Evaluations will normally be flown using unit standards and tactics. Additionally, established profiles should evaluate a cross section of Ready Aircrew Program (RAP) tasked sortie types (e.g., Low Altitude Conventional, High/Medium Conventional, and Joint/Composite missions). Evaluate examinees at their highest qualification level. Evaluations during exercises or deployments, where permitted, are encouraged.

**NOTE:**

BMC pilots and WSOs will only be evaluated on those missions they routinely perform. Examinees will only be evaluated on those areas for which they are qualified.

2.3.1. **Evaluation Profiles.** Mission evaluations will reflect real-world threats and threat avoidance to the maximum extent possible. Mission evaluations will demonstrate the individual's ability to accomplish the unit's combat tasking to include special missions. Units will schedule actual weapon releases and formation for all mission evaluations to the maximum extent possible. However, single ship sortie profiles may be used if necessary.

2.3.2. **Weapons Employment.** Either a low or medium/high bomb run satisfies this requirement. All planned/attempted releases will be evaluated. If mission profile allows, weapons runs should be planned/executed in a tactically sound manner against a given target set and threat profile. Degraded delivery procedures can meet the requirements of the evaluation.

2.3.3. **Pilot Mission Evaluation Requirements.** For completion of a pilot mission evaluation, accomplish requirements delineated in [Table 2.1.](#), column 3.

2.3.4. **WSO Mission Evaluation Requirements.** For completion of a WSO qualification/mission evaluation, accomplish requirements delineated in [Table 2.1.](#), columns 4, 5, and 6 and specific area evaluation criteria in [Chapter 3.](#)

2.3.4.1. **Air-to-Surface Mission Evaluation Requirements.** For completion of a WSO air-to-surface mission evaluation, accomplish requirements delineated in [Table 2.1.](#), column 5.

2.3.4.2. **Electronic Warfare Mission Evaluation Requirements.** For completion of a WSO electronic warfare mission evaluation, accomplish requirements delineated in [Table 2.1.](#), column 6. At least one defensive action electronic attack (EA) run will be scheduled. The run should be scheduled against a Multiple Threat Emissions Systems (MUTES) capable site, simulators, emulators, or actual EA assets. Threat scenarios should be representative of unit taskings. If the scheduled activity is attempted and not accomplished due to circumstances beyond the aircrew's control, the requirements of this paragraph will be satisfied by accomplishing any EA run if sufficient activity is observed by the FE.

2.3.4.2.1. **Examinee Performance.** FEs will not consider WSO performance as less than qualified based solely on unreliable/substandard scores. If the procedures are completely satisfactory, unreliable/substandard scores become only an indication of equipment capability. Conversely, reliable/standard scores may result although marginal or unacceptable procedures were used.

**2.4. Offensive Systems Officer (OSO)/Defensive Systems Officer (DSO) Only Qualified Individuals .** OSO only qualified individuals will use [Table 2.1.](#), columns 3 and 4. DSO only qualified individuals will use [Table 2.1.](#), columns 3 and 5. Additionally, DSO only qualified individuals will also meet the requirements outlined in paragraph [2.3.4.2.](#)

**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. On instructor evaluations all "R" items are required for the type evaluation being flown.

2.5.1. The instructor performance area will be graded on all instructor evaluations. For instructor evaluations not accomplished in conjunction with an instrument-qualification and/or mission evaluation, the examinee will brief, instruct, and debrief a flight or ATD profile representative of the units' mission. **EXCEPTION:** Instructor Pilot evaluations will not be scheduled in the ATD.

2.5.2. For scheduled instructor evaluations, the evaluator may require the examinee to present verbal explanations of equipment operations and procedures pertinent to crew duties and responsibilities. Special demonstrations or instruction requested by the evaluator should not interfere with normal mission accomplishment. An evaluator who desires a critique of areas not covered in the examinee's pre-brief will allow the examinee sufficient time to prepare the critique. For Numbered Air Force (NAF) Stan/Eval conducted evaluations, flight or ATD, the examinee will critique following the crew debrief. NAF Stan/Eval will provide the examinee a performance critique as soon as possible following the examinee's critique.

2.5.3. **Instructor Pilot Evaluations.** All initial and recurring instructor pilot evaluations may be administered in conjunction with Instrument/Qualification/Mission evaluations. Except for the requirements delineated in [Table 2.1.](#), specific profiles and/or events will be determined by the FE.

2.5.4. **Instructor WSO Evaluations.** All initial and recurring instructor WSO evaluations may be administered in conjunction with Qualification/Mission evaluations. The initial Instructor WSO evaluation may be conducted in flight or in the WST. The instructor examinee must demonstrate instructor abilities in both the OSO and DSO positions. As a minimum, the scheduled profile will include bombing and EA. If qualified as an OSO or DSO only, the examinee will perform duties for the respective position being evaluated.

2.5.5. **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.

Table 2.1. Evaluation Requirements.

1 - Pilot Instrument 2 - Pilot Qualification Evaluation 3 - Pilot Mission Evaluation 4 - WSO Qualification Evaluation 5 - WSO Air-to-Surface Mission Evaluation 6 - WSO Electronic Warfare Mission Evaluation									
AREA	NOTES	AREA TITLE	1	2	3	4	5	6	
<b>GENERAL</b>									
1		MISSION PLANNING		R	R	R	R	R	
2		BRIEFING (IF APPLICABLE)		R	R	R	R	R	
3		PRE-TAKEOFF		R	R	R	R	R	
4		TAKEOFF		R					
5		DEPARTURE		R		R			
6		LEVEL-OFF		R					
7	5	CRUISE/NAVIGATION		R	R	R	R	R	
8		FORMATION							
9		IN-FLIGHT CHECKS		R	R	R	R	R	
10		FUEL MANAGEMENT		R	R				
11		COMM/IFF/SIF		R	R	R	R	R	
12		CREW COORDINATION/CRM		R	R	R	R	R	
13		EQUIPMENT OPERATION		R	R	R	R	R	
14		RADAR INTERPRETATION				R	R		
15	1, 3	AIR REFUELING			R				
16		DESCENT		R		R			
17		GO-AROUND							
18	6	EMERGENCY TRAFFIC PATTERNS		R					
19	2, 6	VFR PATTERN/APPROACH		R					
20	6	LANDING		R					
21		AFTER LANDING		R		R			
22		FLIGHT LEADERSHIP (IF APPLICABLE)	R	R	R				
23		DEBRIEFING/CRITIQUE		R	R	R	R	R	
24		KNOWLEDGE		R	R	R	R	R	
25	*	AIRMANSHIP		R	R	R	R	R	
26	*	SAFETY		R	R	R	R	R	
27	*	AIRCREW DISCIPLINE		R	R	R	R	R	

<b>1 - Pilot Instrument</b>									
<b>2 - Pilot Qualification Evaluation</b>									
<b>3 - Pilot Mission Evaluation</b>									
<b>4 - WSO Qualification Evaluation</b>									
<b>5 - WSO Air-to-Surface Mission Evaluation</b>									
<b>6 - WSO Electronic Warfare Mission Evaluation</b>									
AREA	NOTES	AREA TITLE	1	2	3	4	5	6	
28		INSTRUCTOR PERFORMANCE		R	R	R	R	R	R
29-40		NOT USED							
<b>INSTRUMENT</b>									
41		HOLDING							
42		INSTRUMENT PENETRATION/ ENROUTE DESCENT	R						
43	6	PRECISION APPROACH	R						
44	6	NON-PRECISION APPROACH	R						
45		MISSED APPROACH/CLIMBOUT	R						
46		CIRCLING/SIDE-STEP APPROACH							
47-50		NOT USED							
<b>TACTICAL EMPLOYMENT</b>									
<b>A. GENERAL</b>									
51		TACTICAL PLAN			R		R	R	
52		TACTICAL EXECUTION			R		R	R	
53		GCI/AWACS/CF INTERFACE							
54		RADIO/INTERPHONE TRANSMISSION		R	R	R	R	R	R
55		VISUAL/RADAR LOOKOUT			R		R		
56		MUTUAL SUPPORT (IF APPLICABLE)			R		R	R	
57	5	TACTICAL NAVIGATION			R		R	R	
58		INGRESS			R		R	R	
59		EGRESS			R		R	R	
60		COMBAT SEPARATION							
61		TRAINING RULES/ROE			R		R	R	
62	6	TACTICAL MANEUVERING			R				
63		THREAT REACTIONS			R		R	R	
64	3	TERRAIN FOLLOWING			R		R		
65		LOW ALT VISUAL CONTOUR							

1 - Pilot Instrument								
2 - Pilot Qualification Evaluation								
3 - Pilot Mission Evaluation								
4 - WSO Qualification Evaluation								
5 - WSO Air-to-Surface Mission Evaluation								
6 - WSO Electronic Warfare Mission Evaluation								
AREA	NOTES	AREA TITLE	1	2	3	4	5	6
66		IN-FLIGHT REPORT						
67	4	NVG OPERATIONS			R			
68-70		NOT USED						
<b>B. AIR-TO-SURFACE</b>								
71	6	WEAPONS EMPLOYMENT			R		R	
72		RANGE PROCEDURES						
73-80		NOT USED						
<b>C. ELECTRONIC WARFARE</b>								
81	6	ELECTRONIC ATTACK						R
82		EXPENDABLE PROCEDURES						R
83		AIRBORNE INTERCEPTOR (AI) ACTIVITY						
84-100		NOT USED						
<b>Notes:</b> * indicates a critical area.								
1. Evaluate non-air refueling qualified copilots on checklist procedures/pacing inflight or during ground evaluation.								
2. Required for all evaluations conducted during day/night VFR conditions.								
3. N/A ANG.								
4. Only required for Night Vision Goggle (NVG) qualified pilots during night evaluations, equipment and weather permitting.								
5. Not required for DSO only evaluations.								
6. Must be evaluated in-flight or in a WST (Simulator Certified (SIMCERT) 1).								

## 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 Tactical Employment. Use all sections for criteria applicable to the events performed on the evaluation.
- 3.1.2. Where major areas are divided into subareas, only one grade will be assigned to the major areas. Discrepancies on the back of the AF Form 8 will be annotated by subarea.
- 3.1.3. Areas marked (P) are for pilots and copilots only; areas marked (W) are for WSOs only. All other areas are common to all aircrews.

#### 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. Accurately and efficiently accomplished mission preparation. Checked all factors applicable to flight in accordance with applicable directives. Aware of alternatives available, if flight cannot be completed as planned.
- 3.2.1.1.2. **Q-.** Same as above, except minor deviations, omissions, and/or errors that did not detract from mission effectiveness. Knowledge of performance capabilities or approved operating procedures/rules was marginal in some areas.
- 3.2.1.1.3. **U.** Major deviations, omissions, and/or errors that would preclude safe/effective mission accomplishment. Displayed faulty knowledge of operating data or procedures. Did not review or initial Go/No-Go items.

###### 3.2.1.2. Publications:

- 3.2.1.2.1. **Q.** Assigned flight manual publications were current and usable for any of the unit's combat taskings. Contained only minor deviations, omissions, and/or errors.
- 3.2.1.2.2. **Q-.** Assigned flight manual publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.
- 3.2.1.2.3. **U.** Not up to "Q-" standards. Contained major deviations, omissions, and/or errors.

##### 3.2.2. Area 2--Briefing:

###### 3.2.2.1. Organization:

- 3.2.2.1.1. **Q.** Well organized and presented in a logical sequence. Concluded formation briefing (if applicable) in time to allow for crew briefing.
- 3.2.2.1.2. **Q-.** Events out of sequence, hard to follow, some redundancy.

3.2.2.1.3. **U.** Disorganized. Illogical sequence during presentation caused confusion. Formation briefing (if applicable) did not allow time for adequate crew briefing.

**3.2.2.2. Presentation:**

3.2.2.2.1. **Q.** Presented briefing in a professional manner, well organized and in a logical sequence. Flight/crewmembers clearly understood mission requirements.

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

3.2.2.2.3. **U.** Presentation created doubts or confusion.

**3.2.2.3. Mission Objectives:**

3.2.2.3.1. **Q.** Established objectives for the mission. Presented all training events and effectively addressed methods for accomplishing the mission.

3.2.2.3.2. **Q-.** Objectives undefined and poorly quantified. Omitted minor training events.

3.2.2.3.3. **U.** Did not establish objectives for the mission. Omitted major training events.

**3.2.2.4. Flight/Crew Member Consideration:**

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

3.2.2.4.2. **Q-.** Did not consider all flight/crew members' abilities. Did not identify possible problem areas.

3.2.2.4.3. **U.** Ignored flight/crew members' abilities and past problem areas.

**3.2.3. Area 3--Pre-Takeoff :**

3.2.3.1. **Q.** Established and adhered to station, start engine, taxi times to assure thorough pre-flight, check of personal equipment, crew 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.

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

3.2.3.3. **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. Crew errors directly contributed to a late takeoff, which degraded the mission or made it non-effective.

**3.2.4. Area 4--(P) Takeoff:**

3.2.4.1. **Q.** Maintained smooth aircraft control throughout takeoff. Performed takeoff IAW flight manual procedures.

3.2.4.2. **Q-.** Minor flight manual procedural deviations.

3.2.4.3. **U.** Takeoff potentially dangerous. Exceeded aircraft/systems limitations. Failed to establish proper climb attitude. Over-controlled aircraft resulting in excessive deviations from intended flight path.

**3.2.5. Area 5--Departure:**

3.2.5.1. **Q.** Performed departure as published/directed and complied with all restrictions. Accomplished procedures and checklists required by the flight manual and governing directives accurately and efficiently.

3.2.5.2. **Q-.** Minor deviations in airspeed and navigation occurred during completion of departure. Minor omissions, deviations, and/or errors in procedures detracted from overall mission efficiency.

3.2.5.3. **U.** Failed to comply with published/directed departure instructions. Major omissions, deviations, and/or errors in procedures.

**3.2.6. Area 6--(P) Level-Off:**

3.2.6.1. **Q.** Levelled off smoothly. Promptly established proper cruise airspeed.

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

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

**3.2.7. Area 7--Cruise/Navigation:**

3.2.7.1. **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. Made all control times within published or briefed tolerances. At no time allowed the aircraft to deviate more than ten nautical miles from planned course. Fix-to-Fix  $\pm 3\text{NM}$  (P). WSO advised pilot of altitude deviations prior to exceeding  $\pm 200$  feet (W).

3.2.7.2. **Q-.** Minor errors in procedures or use of navigation equipment. Slow to comply with clearance instructions. Had some difficulty in establishing exact position and course. Performance demonstrated a lack of knowledge or ability that could have affected mission accomplishment. Fix-to-Fix  $\pm 5\text{NM}$  (P). WSO advised pilot of altitude deviations prior to exceeding  $\pm 300$  feet (W).

3.2.7.3. **U.** Major errors in procedures or 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-.

**3.2.8. Area 8--Formation:****3.2.8.1. Flight Lead:**

3.2.8.1.1. **Q.** Established and maintained appropriate formations utilizing published and briefed procedures. Maintained positive control of flight. Effective wingman consideration. Planned ahead and made timely decisions. Ensured that wingman flew proper position.

3.2.8.1.2. **Q-.** Made minor deviations from published and/or briefed procedures. Demonstrated limited flight management. Did not always plan ahead and/or hesitant in making decisions.

3.2.8.1.3. **U.** Formation flight not accomplished in accordance with published and/or briefed procedures. Did not establish appropriate formations. Provided little consideration for wingman. Indecisive.

**3.2.8.2. Wingman:**

3.2.8.2.1. **Q.** Maintained position in accordance with published and briefed procedures with only momentary deviations. Maintained appropriate separation and complied with leader's instructions. Rejoin was smooth and timely.

3.2.8.2.2. **Q-.** Made minor deviations to published procedures. Slow to comply with leader's instructions. Varied position considerably. Slow to rejoin.

3.2.8.2.3. **U.** Formation flight not accomplished in accordance with published and/or briefed procedures. Did not comply with leader's instructions. Unable to maintain a formation position. Did not maintain appropriate separation.

**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--(P) Fuel Management:**

3.2.10.1. **Q.** Actively monitored 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. Did not adhere to briefed fuel requirements.

**3.2.11. Area 11--Communications/Identification Friend or Foe (IFF)/Selective Identification Feature (SIF):**

3.2.11.1. **Q.** Complete knowledge of and compliance with correct Communication/IFF/SIF 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/Crew Resource Management (CRM):**

3.2.12.1. **Q.** Effectively coordinated with other crewmembers/flight members during all phases of the mission. Effective use of CRM.

3.2.12.2. **Q-.** Coordination was lacking with other crewmembers/flight members to the extent minor deviations or omissions caused delays, confusion, degraded the successful delivery of weapons, and/or crew situational awareness. Crew communications were not clear or concise. CRM was the minimum acceptable.

3.2.12.3. **U.** Breakdown in coordination with other crewmembers/flight members precluded mission accomplishment or jeopardized safety. CRM was lacking to the extent the mission accomplishment was severely degraded. Created confusion or delays that could have endangered the aircraft or prevented reliable weapon delivery.

**3.2.13. Area 13-- Equipment Operation:**

3.2.13.1. **Q.** Operated equipment according to procedures and checklists contained in the flight manuals and governing directives. Accurately and efficiently analyzed equipment malfunctions with consistent reliable mission results. No damage or significant system degradation resulted from operator inputs or lack of knowledge.

3.2.13.2. **Q-.** Operated equipment with minor deviations, omissions, and/or errors from procedures required by the flight manual or governing directives. Equipment malfunctions were consistently ignored, analyzed in error, or caused by erroneous data insertion. Deviations, omissions, and/or errors in malfunction analysis and prescribed procedures caused a degradation of equipment performance. The level of performance or knowledge consistently resulted in marginal reliability. Did not damage equipment.

3.2.13.3. **U.** Not up to "Q-" standards. Equipment damage would have resulted due to circumstances within operator's control. Could not recognize a major equipment malfunction. Could not obtain acceptable results due to poor operational procedures.

**3.2.14. Area 14--(W) Radar Interpretation:**

3.2.14.1. **Q.** Correctly interpreted radar display. Was able to compensate for system errors or unanticipated developments to successfully employ radar.

3.2.14.2. **Q-.** Slow to interpret radar display. Had difficulties compensating for system errors or unanticipated developments.

3.2.14.3. **U.** Could not interpret radar display. Could not compensate for or identify system errors or unanticipated developments.

**3.2.15. Area 15--Air Refueling.** Contact time will be at the discretion of the FE and will sufficiently demonstrate the examinees ability to receive onloads commensurate with unit taskings.

3.2.15.1. **Air Refueling Rendezvous.** Any rendezvous will satisfy this requirement (IAW AFI 11-2B-1V1 electronic rendezvous procedures). Control times to the Air Refueling Control Point (ARCP) (point parallel) or the rendezvous point (generally the Air Refueling Initial Point (ARIP))

for en route rendezvous should follow the timing guidelines defined in Tactical Navigation, General, Area 57.

3.2.15.1.1. **Q.** Rendezvous accomplished using proper procedures. Effective use of radio communications. Positively identified the tanker beacon/skin paint, when applicable, and did not delay final closure.

3.2.15.1.2. **Q-.** Rendezvous delayed by improper procedures and radio communications.

3.2.15.1.3. **U.** Spent excessive time in trail, excessive rendezvous delay or safety of flight jeopardized. Made an actual or attempted rendezvous with the wrong aircraft, or the individual was unable to find the correct tanker in multi-aircraft refueling. Not up to "Q-" standards.

### 3.2.15.2. **(P) Air Refueling Procedures:**

3.2.15.2.1. **Q.** Expeditiously established and maintained proper position. Used proper procedures. Aircraft control was positive and smooth. Refueled with no more than three pilot-induced disconnects.

3.2.15.2.2. **Q-.** Slow to recognize and apply needed corrections to establish and maintain proper position. Aircraft control was not always positive and smooth, but adequate. Accomplished published/directed procedures with deviations or omissions that did not affect the successful completion of air refueling. Performance caused no more than four pilot-induced disconnects.

3.2.15.2.3. **U.** Used unacceptable procedures. Excessive time to hookup delayed mission accomplishment. Unable to maintain contact position. Caused more than four pilot-induced disconnects. Unable to safely accomplish air refueling.

### 3.2.16. **Area 16-- Descent:**

3.2.16.1. **Q.** Performed descent as directed, complied with all restrictions. Accomplished procedures and checklists required by the flight manual and governing directives accurately and efficiently.

3.2.16.2. **Q-.** Performed descent as directed with minor deviations. Accomplished procedures and checklists required by the flight manual and governing directives with minor omissions, deviations, or errors.

3.2.16.3. **U.** Performed descent with major deviations. Procedures were accomplished with major deviations, omissions, and/or errors demonstrating unacceptable knowledge/performance of the flight manual or governing directives.

### 3.2.17. **Area 17--(P) Go-Around:**

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

3.2.17.2. **Q-.** Slow to initiate go-around or procedural steps.

3.2.17.3. **U.** Did not self-initiate go-around when appropriate or directed. Applied incorrect procedures. Erratic aircraft control. Large deviations in runway alignment.

### 3.2.18. **Area 18--(P) Emergency Traffic Patterns:**

3.2.18.1. **Q.** Performed emergency procedures IAW applicable directives. Adequately prioritized actions to safely recover the aircraft. Maintained aircraft control within appropriate standards.

3.2.18.2. **Q-.** Performed emergency procedures with minor deviations, omissions, and/or errors which did not jeopardize the safe recovery of the aircraft.

3.2.18.3. **U.** Performed emergency procedures with major deviations, omissions, and/or errors. Unable to safely recover the aircraft.

**3.2.19. Area 19--(P) VFR Pattern/Approach:**

3.2.19.1. **Q.** Performed patterns/approaches IAW procedures 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. AOA  $\pm$  1 degree on final approach.

3.2.19.2. **Q-.** Performed patterns/approaches with minor deviations to procedures outlined in the flight manual, operational procedures and local directives. Aircraft control was not consistently smooth, but safe. Alignment with runway varied. Slow to correct to proper/briefed airspeed/AOA. AOA  $\pm$  1 ½ degrees on final approach.

3.2.19.3. **U.** Approaches not performed IAW procedures 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--(P) Landing:**

3.2.20.1. **Q.** Performed landings IAW procedures outlined in the flight manual, operational procedures, and local directives. Aircraft control was smooth and positive. Accurate runway alignment.

3.2.20.2. **Q-.** Performed landings IAW procedures outlined in the flight manual, operational procedures, and local directives with minor deviations, omissions, and/or errors, which did not jeopardize safety of flight. Aircraft control was rough however, runway alignment was accomplished.

3.2.20.3. **U.** Landing not performed IAW procedures outlined in the flight manual, operational procedures and local directives. Not up to "Q-" standards.

**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. Safety was not jeopardized. Required forms completed with minor deviations, omissions, and/or errors.

3.2.21.3. **U.** Major deviations, omissions, and/or errors were made in performance of after-landing check or aircraft taxi procedures, which could have jeopardized safety. Data recorded inaccurately or omitted. Not up to "Q-" standards.

**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 subareas.

**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. (P) Takeoff and Landing Data (TOLD) and Minimum Mach Tolerances:**

3.2.24.2.1. **Q.** Computed all minimum runway required, critical field length, takeoff, and landing distances  $\pm 500$  feet. All computed speeds were  $\pm 5$  knots/ $\pm .03$  Mach.

3.2.24.2.2. **Q-.** Computed all minimum runway required, critical field length, takeoff, and landing distances  $\pm 800$  feet. All computed speeds were  $\pm 10$  knots/ $\pm .05$  Mach.

3.2.24.2.3. **U.** Exceeded criteria for Q-.

**3.2.24.3. Emergency Procedures:**

3.2.24.3.1. **Q.** Displayed correct, immediate response to emergency situations. Effectively used checklist.

3.2.24.3.2. **Q-.** Response to certain emergencies was slow/confused. Used the checklist when appropriate, but slow to locate required data.

3.2.24.3.3. **U.** Unable to analyze problems or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or contents.

**3.2.24.4. Flight Rules/Procedures:**

3.2.24.4.1. **Q.** Thorough knowledge of flight rules and procedures. Thorough knowledge of local area procedures.

3.2.24.4.2. **Q-**. Deficiencies in depth of knowledge. Limited knowledge of local area procedures.

3.2.24.4.3. **U**. Inadequate knowledge of flight rules and procedures. Inadequate knowledge of local area procedures.

**3.2.24.5. Weapon/Tactics/Threat:**

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

3.2.24.5.2. **Q-**. Deficiencies in depth of knowledge or comprehension of weapons systems, weapons effects, tactics and threat knowledge which would not preclude successful mission accomplishment.

3.2.24.5.3. **U**. Insufficient knowledge of weapons, tactics and threat contributed to ineffective mission accomplishment.

**3.2.25. Area 25--Airmanship (Critical):**

3.2.25.1. **Q**. Executed the assigned mission in a timely, efficient manner. Demonstrated a keen sense of situational awareness. 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 or situational awareness to the extent that safety could have been compromised. Resources were not always effectively used to the extent that specific mission objectives were not achieved.

**3.2.26. Area 26--Safety (Critical):**

3.2.26.1. **Q**. Aware of and complied with all safety factors required for safe aircraft operations and conduct of the mission.

3.2.26.2. **U**. Was not aware of or did not comply with all safety factors required for safe operations or conduct of the mission. Failed to correctly accomplish Boldface procedures. Operated the aircraft or equipment in a dangerous manner.

**3.2.27. Area 27--Aircrew Discipline (Critical):**

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

3.2.27.2. **U**. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or regulations.

**3.2.28. Area 28--Instructor Performance:**

**3.2.28.1. Briefing/Debriefing:**

3.2.28.1.1. **Q**. Presented a comprehensive, briefing/debriefing. Made use of available training aids. Analyzed 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 available 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/Equipment Operation:**

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

3.2.28.2.2. **Q-.** Performed required maneuvers or procedures 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 or procedures. 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 and performance characteristics, mission, and tactics beyond that expected of non-instructors.

3.2.28.3.2. **Q-.** Deficiencies noted in the 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. Training Forms Preparation:**

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

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

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

**3.2.28.5. Ability to Instruct:**

3.2.28.5.1. **Q.** Demonstrated sound instructor 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.

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

3.2.28.5.3. **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.

3.2.29. **Areas 29 through 40.** Not used.

**3.3. Instrument:****3.3.1. Area 41--(P) Holding:**

3.3.1.1. **Q.** Performed entry and holding IAW published procedures and directives. Tactical Air Navigation (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 42--(P) Instrument Penetration/Enroute Descent:**

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

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

3.3.2.3. **U.** Performed the penetration/enroute descent and approach with major deviations. Erratic corrections.

**3.3.3. Area 43--(P) Precision Approach:**

3.3.3.1. **Q.** Performed procedures as published and IAW applicable flight manual. Smooth and timely corrections to azimuth and glide slope and/or controller's instructions. Complied with decision height and position would have permitted a safe landing. Maintained proper/briefed airspeed/AOA.

3.3.3.1.1. Airspeed  $+10/-5$  knots/ AOA  $\pm 1$  degree on final approach.

3.3.3.1.2. Heading within 5 degrees of controller's instructions (Precision Approach Radar (PAR))

3.3.3.1.3. Glide Slope/Azimuth within one dot

3.3.3.2. **Q-.** Performed procedures with minor deviations. Slow to make corrections or initiate procedures. Position would have permitted a safe landing. Slow to correct to proper/briefed airspeed/AOA. Initiated appropriate action at Decision Height  $\pm 50$  feet.

3.3.3.2.1. Airspeed  $+15/-5$  knots/ AOA  $\pm 1 \frac{1}{2}$  degrees on final approach.

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

3.3.3.2.3. Glide Slope within one dot low/two dots high (Instrument Landing System (ILS)/ Airborne Instrument Landing Approach (AILA))

3.3.3.2.4. Azimuth within two dots (ILS/AILA)

3.3.3.3. **U.** Performed procedures with major deviations. Erratic corrections. Did not respond to controller's instructions. Exceeded Q- limits. Did not comply with decision height or position at Decision Height (DH) would not have permitted a safe landing.

**3.3.4. Area 44--(P) 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 airspeed/AOA.

3.3.4.1.1. Airspeed +10/-5 knots AOA  $\pm$  1 degree on final approach.

3.3.4.1.2. Heading  $\pm$  5 degrees (Airport Surveillance Radar (ASR))

3.3.4.1.3. Course  $\pm$  5 degrees at MAP

3.3.4.1.4. Localizer less than one dot deflection

3.3.4.1.5. 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 knots AOA  $\pm$  1 ½ degrees on final approach.

3.3.4.2.2. Heading  $\pm$  10 degrees (ASR)

3.3.4.2.3. Course  $\pm$  10 degrees at MAP

3.3.4.2.4. Localizer within two dots deflection

3.3.4.2.5. 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 45--(P) Missed Approach/Climb Out:**

3.3.5.1. **Q.** Executed missed approach/climbout 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 46--(P) Circling/Side-Step Approach:**

3.3.6.1. **Q.** Performed circling/side-step approach IAW procedures outlined in the flight manual and directives. Aircraft control was positive and smooth. Proper runway alignment.

3.3.6.2. **Q-.** Performed circling/side-step approach with minor deviations to procedures outlined in the flight manual and directives. 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 outlined in the flight manual and directives. Erratic aircraft control. Large deviations in runway alignment required go-around.

3.3.7. **Areas 47 through 50.** Not used.

### **3.4. Tactical Employment:**

#### **3.4.1. General:**

##### **3.4.1.1. Area 51--Tactical Plan:**

3.4.1.1.1. **Q.** Well-developed plan that included consideration of mission objectives, the threat and capabilities of all flight members. Addressed contingencies in development of plan.

3.4.1.1.2. **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.

3.4.1.1.3. **U.** Major errors in the plan precluded accomplishment of the stated objectives.

##### **3.4.1.2. Area 52--Tactical Execution:**

3.4.1.2.1. **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. Threat reactions were timely and correct.

3.4.1.2.2. **Q-.** Applied tactics with only minor deviations, omissions, and/or errors which degraded the reliable release of weapons or mission effectiveness but did not prevent the successful accomplishment of the overall mission goal. Slow to react to a changing environment. Situational awareness and timely threat reactions were poor.

3.4.1.2.3. **U.** Unable to accomplish the mission due to major errors or omissions during execution of the tactical plan. Situational awareness lost. Numerous threat reactions were omitted or incorrect. Failed to accomplish countermeasures or perform maneuvers to counter threat.

##### **3.4.1.3. Area 53--Ground Control Intercept (GCI)/Airborne Warning and Control System (AWACS)/Composite Force (CF) Interface:**

3.4.1.3.1. **Q.** Effectively planned for and used GCI/AWACS/CF Assets to enhance mission and achieve objectives. No confusion between GCI/AWACS/CF Assets.

3.4.1.3.2. **Q-.** Minor confusion between GCI/AWACS/CF Assets and fighters. Less than optimum use of GCI/AWACS/CF Assets.

3.4.1.3.3. **U.** Inadequate or incorrect use of GCI/AWACS/CF Assets resulted in loss of offensive potential.

##### **3.4.1.4. Area 54--Radio/Interphone Transmission - Usage and Discipline:**

3.4.1.4.1. **Q.** Communications (both inter- and intra-cockpit) were concise, accurate and effectively used to direct maneuvers or describe the tactical situation.

3.4.1.4.2. **Q-** Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, mutual support or mission accomplishment. Extraneous comments over primary or secondary radios presented minor distractions.

3.4.1.4.3. **U.** Communications over radios/interphone were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

**3.4.1.5. Area 55--Visual/Radar Lookout:**

3.4.1.5.1. **Q.** Demonstrated thorough knowledge and effective application of visual/radar lookout procedures for all phases of flight.

3.4.1.5.2. **Q-** Demonstrated limited knowledge of visual/radar lookout procedures. Did not establish lookout responsibilities for all phases of flight. Slow to acquire threats to flight or targets to be attacked.

3.4.1.5.3. **U.** Demonstrated unsatisfactory knowledge and/or application of visual/radar lookout responsibilities.

**3.4.1.6. Area 56--Mutual Support:**

3.4.1.6.1. **Q.** Maintained mutual support during entire employment (ingress through egress). Adhered to all engaged and support responsibilities.

3.4.1.6.2. **Q-** Mutual support occasionally broke down resulting in temporary confusion or the loss of an offensive advantage. Demonstrated limited knowledge of engaged and support responsibilities.

3.4.1.6.3. **U.** Mutual support broke down resulting in the flight being put in a defensive position from which all attacks were not negated. Demonstrated inadequate knowledge of engaged and support responsibilities.

**3.4.1.7. Area 57--Tactical Navigation:**

**3.4.1.7.1. General:**

3.4.1.7.1.1. **Q.** All control times were met within Air Tasking Order (ATO), Special Instructions (SPINS), governing directives, or briefed tolerances. Time On Target (TOT) tolerances will be met or will cover the TOT window. Navigated to desired destination and remained geographically oriented during the tactical portion of the mission along the desired route. Altitude and route of flight reflected consideration for enemy threats. Maintained terrain awareness. Complied with established altitude minimums. Adhered to airspace restrictions.

**NOTE:**

Airspace restrictions include buffer zones, restrictive fire plans, fire support coordination lines, friendly artillery fans, ingress/egress corridors and other airspace restrictions.

3.4.1.7.1.2. **Q-** Deviations from planned route of flight were recognized and corrected. Maintained terrain awareness. Altitude control contributed to exposure to threats for brief periods. Did not optimize terrain masking (if applicable).

3.4.1.7.1.3. **U.** Exceeded Q- parameters. Failed to cover TOT window due to inadequate planning or use of resources. Failed to locate desired destination. Deviations from planned route of flight exposed flight to threats. Violated airspace restrictions or altitude minimums. Poor airspeed/altitude control contributed to disorientation. Inadequate terrain awareness. Did not use terrain masking (if applicable).

**3.4.1.7.2. High Altitude:**

3.4.1.7.2.1. **Q.** Used proper procedures. Properly used available aids to navigation. Maintained altitude consistent with mission requirements/restrictions.

3.4.1.7.2.2. **Q-.** Errors in procedures. Minor errors in use of available navigation aids. Minor deviations from planned altitude.

3.4.1.7.2.3. **U.** Unable to use alternate or appropriate navigation aids. Exceeded Q- tolerances. Major altitude deviations.

**3.4.1.7.3. Medium Altitude:**

3.4.1.7.3.1. **Q.** Demonstrated satisfactory capability to adjust for deviations in time and course; only minor corrections required.

3.4.1.7.3.2. **Q-.** Medium level course and airspeed control resulted in large corrections. Minor error in procedures/ use of navigation equipment.

3.4.1.7.3.3. **U.** Failed to recognize checkpoints or adjust for deviations in course. Major errors in procedures/use of navigation equipment.

**3.4.1.7.4. Low Altitude:**

3.4.1.7.4.1. **Q.** Required procedures and checklists were accomplished accurately and efficiently. Demonstrated satisfactory capability to adjust for deviations in time and course; only minor corrections required. Remained oriented to planned course or adjusted course and remained within route or airspace boundaries. Used terrain masking as circumstances allowed. Flight Information Publications (FLIP) AP/1B route width or training area/Military Operations Area (MOA) boundaries were not exceeded.

3.4.1.7.4.2. **Q-.** Procedures and checklists required by applicable directives were accomplished with omissions, deviations, or errors which detracted from effective mission accomplishment. Limited positional and situational awareness. FLIP AP/1B route width or training area/MOA boundaries were not exceeded.

3.4.1.7.4.3. **U.** Failed to recognize checkpoints or adjust for deviations in time and course. Exceeded FLIP AP/1B route width or training area/MOA boundaries. Did not use terrain masking if available and tactically required. Exceeded Q- parameters. Major errors in procedures/use of navigation equipment.

**3.4.1.8. Area 58--Ingress:**

3.4.1.8.1. **Q.** Aware of all known/simulated threats and defenses. Employed effective use of terrain masking and/or route and altitude selection. Receiver monitoring and procedures were accomplished IAW operating directives.

3.4.1.8.2. **Q-.** Ignored some of the known/simulated threats and defenses. Improper use of terrain masking and/or route and altitude selection resulted in unnecessary exposure. Proce-

dures were accomplished with only minor deviations, omissions or errors demonstrating minimum acceptable knowledge/performance of the flight manual or governing directives.

3.4.1.8.3. **U.** Failed to honor known/simulated threats and defenses significantly reducing survivability. Failed to employ effective terrain masking and/or route or altitude threat deconfliction. Procedures were accomplished with major deviations, omissions, and/or errors demonstrating unacceptable knowledge/performance of the flight manual or governing directives

**3.4.1.9. Area 59--Egress:**

3.4.1.9.1. **Q.** Effectively used evasive maneuvers and terrain masking to complete an expeditious egress from the target area. Flight join-up was accomplished as soon as possible without undue exposure to enemy defenses.

3.4.1.9.2. **Q-.** Egress contributed to unnecessary exposure to threats and delayed flight join-up and departure from target area. Required actions were incomplete or were accomplished with minor deviations, omissions, and/or errors.

3.4.1.9.3. **U.** Egress caused excessive exposure to threats. Flight join-up was not accomplished or resulted in excessive exposure to threats. Required actions were not accomplished. Demonstrated unacceptable knowledge of procedures.

**3.4.1.10. Area 60--Combat Separation:**

3.4.1.10.1. **Q.** Adhered to briefed/directed separation procedures. Positive control of flight during separation.

3.4.1.10.2. **Q-.** Minor deviations from briefed/directed separation procedures. Limited control of flight during separation. Allowed mutual support to break down intermittently.

3.4.1.10.3. **U.** Did not adhere to briefed/directed separation procedures to the degree that an emergency fuel condition would have developed if allowed to continue uncorrected. Could not effectively regain mutual support.

**3.4.1.11. Area 61--Training Rules/Rules of Engagement (ROE):**

3.4.1.11.1. **Q.** Adhered to and knowledgeable of all training rules/ROE.

3.4.1.11.2. **Q-.** Minor deviations. Made timely and positive corrections. Did not jeopardize safety of flight.

3.4.1.11.3. **U.** Significant deviations indicating a lack of knowledge of training rules/ROE.

**3.4.1.12. Area 62--(P) Tactical Maneuvering:**

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

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

3.4.1.12.3. **U.** Aircraft control erratic/excessive. Aircraft handling caused unsatisfactory accomplishment of maneuvers. Exceeded Q- criteria. Failed to consider the tactical situation.

**3.4.1.13. Area 63--Threat Reactions:**

3.4.1.13.1. **Q.** Threat reactions were timely and correct. Accomplished/expended appropriate countermeasures and performed maneuvers to counter threat.

3.4.1.13.2. **Q-.** Threat reaction/identification was slow or inconsistent. Slow to accomplish/expend appropriate countermeasures or perform maneuvers to counter threat.

3.4.1.13.3. **U.** Numerous threat reactions were omitted, incorrect, or improperly identified. Failed to accomplish/expend countermeasures or perform maneuvers to counter threat.

3.4.1.14. **Area 64--Terrain Following (TF).** A TF Flyup will be accomplished as a requirement to complete this area of evaluation.

3.4.1.14.1. **Q.** Accomplished required procedures and checklists accurately and efficiently. Used correct clearance plane setting for the route segment flown. Coordination with the crew provided accurate terrain assessment along the flight path of the aircraft. Effective use of terrain masking. Effectively controlled airspeed to meet mission timing and minimum mach requirements. Flyup procedures were properly executed.

3.4.1.14.2. **Q-.** Accomplished required procedures and checklists with minor deviations which did not preclude successful accomplishment of TF or the TF flyup. Ineffective assessment or use of terrain. Airspeed control was unnecessarily erratic but did not exceed mission timing or minimum mach requirements.

3.4.1.14.3. **U.** Not up to Q- standards. Allowed airspeed to decay below minimum Mach during TF flight. Significant procedural errors which could cause inadequate terrain clearance during TF or TF flyup operations. Flyup procedures resulted in an unsafe situation.

3.4.1.15. **Area 65--(P) Low Altitude Visual Contour:**

3.4.1.15.1. **Q.** Accomplished required procedures and checklists accurately and efficiently. Coordination with the crew provided accurate terrain assessment and visual updates as necessary along the flight path of the aircraft. Effective use of terrain masking. Effectively controlled airspeed to meet mission timing requirements.

3.4.1.15.2. **Q-.** Accomplished required procedures and checklists with some deviations which did not negate the advantages low altitude operations. Ineffective assessment or use of terrain. Airspeed control was unnecessarily erratic but did not exceed mission timing.

3.4.1.15.3. **U.** Not up to Q- standards. Except for momentary crossings over irregular terrain (with no further attempt to make corrections), deviations were in excess of minus 200 feet.

3.4.1.16. **Area 66--In-flight Report:**

3.4.1.16.1. **Q.** Gave accurate, precise in-flight reports in correct format.

3.4.1.16.2. **Q-.** Deviated from established procedures/format. Completed reports.

3.4.1.16.3. **U.** Failed to make in-flight reports. Unfamiliar with in-flight reporting procedures.

3.4.1.17. **Area 67--(P) Night Vision Goggle (NVG) Operations:**

3.4.1.17.1. **Q.** Calibration and setup of night vision equipment accomplished IAW applicable directives. Effective use of NVGs to enhance situational awareness, tactical employment, and terrain masking. Effective coordination of NVG employment with established TF procedures.

3.4.1.17.2. **Q-** Minor deviations to equipment calibration and/or setup. Ineffective coordination of NVG operations with established procedures detracted from effective mission accomplishment. Situational awareness and/or tactical employment were not optimized. Did not compromise safety of flight.

3.4.1.17.3. **U.** Not up to Q- standards.

3.4.1.18. **Areas 68 through 70.** Not used.

### 3.4.2. **Air-to-Surface:**

3.4.2.1. **Area 71--Weapons Employment.** Evaluate each planned/attempted release.

3.4.2.1.1. **Q.** Correctly utilized the weapon system to deliver the desired ordnance (actual or simulated) and correctly analyzed malfunctions. Target/Offset Aim Point (OAP) successfully identified on first attack using all available queues. Executed all required procedures to successfully employ the weapon. Crosshair placement/weapon score was within AFI 11-2B-1V1, established reliability criteria. Achieved all weapons release parameters. At least 50% of all bombs in each event were within hit criteria.

3.4.2.1.2. **Q-** Minor errors in knowledge of weapons delivery procedures, attack parameters, weapons computations, or error analysis for the events performed. Late to acquire target/OAP and late to prepare the weapon system to deliver the desired ordnance. Minor procedural errors degraded weapons employment. At least 50% of all bombs in each event were within hit criteria.

3.4.2.1.3. **U.** Demonstrated inadequate knowledge of weapons delivery procedures, attack parameters, weapons computations or error analysis for the events flown. Did not correctly prepare the weapon system to deliver the desired ordnance. Improper procedures during the attack resulted in unsuccessful weapons delivery. Less than 50% of all bombs in each event were within hit criteria. The overall grade for weapons employment will be unqualified when any of the following occur:

3.4.2.1.3.1. Failure to recognize an obvious malfunction/error adversely affecting delivery capability.

3.4.2.1.3.2. Unable to successfully accomplish a weapons release as a result of erroneous or incomplete inflight/mission planning.

3.4.2.1.3.3. Failure to achieve weapon safe escape and safe separation parameters for specific weapons planned.

3.4.2.1.3.4. Failure to achieve track tolerances.

3.4.2.1.3.5. Attempted or released weapons in contradiction with the mission directives/SPINS.

### **NOTE:**

If, in the FE's judgment, the pilot/WSO could not successfully attack a target, the FE may also give an unqualified grade in AIRMANSHIP.

3.4.2.2. **Area 72--Range Procedures:**

3.4.2.2.1. **Q.** Used proper procedures for entering and exiting the range. Range operations followed established procedures.

3.4.2.2.2. **Q-.** Minor deviations from established procedures for range entry, exit or operations.

3.4.2.2.3. **U.** Major deviations from established procedures for range entry, exit or operations.

3.4.2.3. **Areas 73 through 80.** Not used.

### 3.4.3. **Electronic Warfare:**

#### 3.4.3.1. **Area 81--(W) Electronic Attack:**

3.4.3.1.1. **Q.** Countermeasures were correctly applied in a timely manner IAW governing directives and all threats were identified/countered with only minor deviations. Thorough knowledge of the Defensive Avionics System (DAS) demonstrated.

3.4.3.1.2. **Q-.** Countermeasures were applied in a timely manner with deviations demonstrating minimal acceptable knowledge of the flight manual or governing directives. All threats were identified/countered consistent with DAS capabilities.

3.4.3.1.3. **U.** Countermeasures were either late or inappropriate for the threat encountered demonstrating unacceptable knowledge and indicating a definite need for additional training. Failed to identify/counter threats consistent with DAS capabilities.

3.4.3.2. **Area 82--(W) Expendable Procedures.** All expendable procedures (actual or simulated) will be graded in this area.

3.4.3.2.1. **Q.** Procedures were accomplished in a timely manner and, according to the flight manual and governing directives, with only minor deviations, omissions, and/or errors.

3.4.3.2.2. **Q-.** Procedures were accomplished according to the flight manual and governing directives, but with deviations, omissions, and/or errors demonstrating minimum acceptable knowledge of flight manual or governing directives.

3.4.3.2.3. **U.** Procedures were omitted or accomplished with deviations, omissions or errors demonstrating unacceptable knowledge of the flight manual or governing directives.

3.4.3.3. **Area 83--(W) Airborne Interceptor (AI) Activity.** This area consists of all actions taken against airborne interceptors.

3.4.3.3.1. **Q.** Countermeasures against AIs were in accordance with applicable directives. EA was timely and correctly applied with only minor deviations, omissions, and/or errors. All threats were identified/countered consistent with DAS capabilities.

3.4.3.3.2. **Q-.** Required actions were accomplished, with minor deviations, omissions, and/or errors that detracted from effective mission accomplishment. Slow to identify/counter threats consistent with DAS capabilities.

3.4.3.3.3. **U.** Required actions were accomplished with major deviations, omissions, and/or errors that significantly detracted from mission effectiveness or prevented mission accomplishment. Failed to identify/counter threats consistent with DAS capabilities.

3.4.3.4. **Areas 84 through 100.** Not used.

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DCS, Air and Space Operations

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

AFPD 11-2, *Aircraft Rules and Procedures*

AFPD 11-4, *Aviation Service*

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

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

AFI 33-360V1, *Publications Management Program*

AFMAN 37-139, *Records Disposition Schedule*

AFI 11-2B-1V1, *B-1--Aircrew Training*

AFI 11-2B-1V3, *B-1--Operations Procedures*

***Abbreviations and Acronyms***

**ACC**—Air Combat Command

**ACMI**—Air Combat Maneuvering Instrumentation

**AFI**—Air Force Instruction

**AI**—Airborne Interceptors

**AILA**—Airborne Instrument Landing Approach

**ANG**—Air National Guard

**AOA**—Angle of Attack

**ARCP**—Air Refueling Control Point

**ARIP**—Air Refueling Initial Point

**ASR**—Airport Surveillance Radar

**ATD**—Aircrew Training Device

**ATO**—Air Tasking Order

**AWACS**—Airborne Warning and Control System

**BMC**—Basic Mission Capable

**CF**—Composite Force

**CFIC**—Central Flight Instructor Course

**CMR**—Combat Mission Ready

**CRM**—Crew Resource Management

**DD**—Degraded Delivery

**DH**—Decision Height  
**DOC**—Designed Operational Capability  
**DSO**—Defensive Systems Officer  
**EA**—Electronic Attack  
**EP**—Emergency Procedures  
**EPE**—Emergency Procedures Evaluation  
**FE**—Flight Examiner  
**FLIP**—Flight Information Publications  
**FTU**—Formal Training Unit  
**GCI**—Ground Control Intercept  
**GD**—Guided Delivery  
**HASD**—High Altitude System Delivery  
**HQ**—Headquarters  
**IAW**—In Accordance With  
**IFF**—Identification Friend or Foe  
**IFR**—Instrument Flight Rules  
**ILS**—Instrument Landing System  
**IMC**—Instrument Meteorological Conditions  
**IRC**—Instrument Refresher Course  
**LLHD**—Low Level High Drag  
**LLLD**—Low Level Low Drag  
**MAJCOM**—Major Command  
**MASD**—Medium Altitude System Delivery  
**MAP**—Missed Approach Point  
**MDA**—Minimum Descent Altitude  
**MOA**—Military Operations Area  
**MSA**—Minimum Safe Altitude  
**MUTES**—Multiple Threat Emissions Systems  
**NAF**—Numbered Air Force  
**NVG**—Night Vision Goggle  
**OAP**—Offset Aim Point  
**OPR**—Office of Primary Responsibility

**OSO**—Offensive Systems Officer

**P**—Pilot

**PAR**—Precision Approach Radar

**QUAL**—Qualification

**Q**—Qualified

**R**—Required

**RIIS**—Range Integration Instrumentation System

**ROE**—Rules of Engagement

**SIF**—Selective Identification Feature

**SIMCERT**—Simulator Certified

**SPINS**—Special Instructions

**STAN/EVAL**—Standardization/Evaluation

**TACAN**—Tactical Air Navigation

**TF**—Terrain Following

**U**—Unqualified

**VDP**—Visual Descent Point

**VFR**—Visual Flight Rules

**VTR**—Video Tape Recorders

**WSO**—Weapon Systems Officer

**WST**—Weapons System Trainer

**XOFS**—Standardization Team

### *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.

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