

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



**AIR FORCE MANUAL 11-2E-11  
VOLUME 2**

**15 FEBRUARY 2024**

***Flying Operations***

***E-11 AIRCREW EVALUATION  
CRITERIA***

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This publication implements Air Force Policy Directive (AFPD) 11-2, *Aircrew Operations*. It establishes the minimum Air Force (AF) standards for qualifying and evaluating personnel performing duties in the E-11. This manual specifically addresses and applies to evaluations certifying pilots for operations. This publication applies to military and civilian members of the Regular Air Force. This publication does not apply to the Air Force Reserve, Air National Guard or the United States Space Force. AF Directorate of Operations (AF/A3) is the approval authority for changes to this manual. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) listed above using the Department of the Air Force (DAF) Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate chain of command to Air Combat Command (ACC) /Airborne Command and Control, Intelligence, Surveillance, and Reconnaissance (C2ISR) Systems Branch (ACC/A3CA). Major Commands (MAJCOMs), Direct Reporting Units (DRUs) and Field Operating Agencies (FOAs) are to forward proposed MAJCOM/DRU/FOA-level supplements to this volume to AF Director of Training and Readiness (AF/A3T), through ACC/Standardization and Evaluation Branch (ACC/A3TV) for approval prior to publication in accordance with (IAW) AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*. The issuing office provides copies of approved and published supplements to ACC/A3CA and the user MAJCOM/DRU/FOA OPRs. Send one copy to Air Combat Command/Command and Control

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## ***SUMMARY OF CHANGES***

This document has been revised and needs to be completely reviewed.

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## Chapter 1

### GENERAL INFORMATION

**1.1. General.** This manual provides the flight examiner (FE) and aircrew member being evaluated with procedures and evaluation criteria/tolerances to be used during flight evaluations required by AFMAN 11-202 Volume 2, *Aircrew Standardization and Evaluation Program* and as supplemented. Specific areas for evaluation are prescribed to ensure an accurate assessment of the proficiency and capabilities of aircrew.

**1.2. Keywords and Definitions.**

1.2.1. “Will” indicate a mandatory requirement.

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

1.2.3. “May” indicates an acceptable or suggested means of accomplishment.

1.2.4. “Note” indicates operating procedures, techniques, etc., which are considered essential.

**1.3. Roles and Responsibilities.** ACC is designated OPR for this manual.

1.3.1. Flight Examiner (FE).

1.3.1.1. FEs administer evaluations IAW AFMAN 11-202V2 and this manual.

1.3.1.2. FEs are required to be thoroughly familiar with the prescribed evaluation criteria to ensure standard and objective evaluations.

1.3.1.3. May fly in any flight position/seat that provides the FE the best position to observe and conduct the evaluation.

1.3.1.4. Apply the grading criteria contained in **Chapter 2**, as applicable for all flight, simulator (SIM), and Emergency Procedure Evaluations (EPE).

1.3.1.5. Briefs the examinee on the purpose of the evaluation and the process of administering the evaluation before grading begins.

1.3.1.6. Debrief the examinee’s overall rating, specific deviations, area grades assigned (if other than qualified), and any required additional training, at a minimum.

1.3.1.7. FEs will not intentionally fail any equipment during flight evaluations but may deny the use of systems not affecting safety of flight.

1.3.1.8. An FE other than the one who administered the original evaluation administers any re-evaluations.

1.3.1.9. Notifies the examinee’s unit commander (CC) or operations officer when less than Q-1 performance is observed.

1.3.1.10. FEs immediately corrects breaches of flight safety or flight discipline. When an examinee jeopardizes safety of flight, the evaluator may assume the duties of that aircrew member. This does not mean the FE must assume the examinee’s position any time unsatisfactory performance is observed.

1.3.2. Examinees:

1.3.2.1. Examinee demonstrates the ability to perform required duties safely and effectively, including the operation of appropriate aircraft systems.

#### 1.4. Evaluations.

1.4.1. Evaluations will be administered by a USAF or Federal Aviation Administration (FAA) certified FE in an aircraft or FAA Level D SIM, referred to as an Aircrew Training Device (ATD) in this manual. **(T-2)** Units are authorized to conduct flight evaluations on any mission.

1.4.2. Deployed CCs have the authority to allow the conduct of evaluations at their location at their discretion IAW local direction and guidance.

#### 1.5. Waivers and Deviations.

1.5.1. ACC/Director of Operations (ACC/A3) is the waiver authority for non-tiered items within this manual, unless explicitly stated in the respective paragraph. The CC/Director will forward a copy of any approved waivers to this manual's OPR for follow-on action, if required. **(T-2)** Request waivers IAW DAFI 90-160, DAFMAN 90-161 and AFMAN 11-202V2.

1.5.2. Deviations. Do not deviate from the policies and guidance in this manual. **Exception:** for reasons of safety when immediate action(s) are required to protect the crew or aircraft from a situation not covered by this manual.

**1.6. Grading Instructions.** Standards and performance parameters are contained in AFMAN 11-202V2 and this manual. Use the tolerances in **Table 1.1** (unless tolerance/criteria in **Chapter 2** is more restrictive) as a general tolerance for airspeed, altitude, and heading/course in the applicable sub-areas unless otherwise directed.

**Table 1.1. General Flight Tolerances.**

	Qualified (Q)	Q-
Altitude	+/- 100 feet	+/- 200 feet
Airspeed	+10/-5 Knots Indicated Air Speed (KIAS)	+15/-10 KIAS
Heading / Course	+/- 5 degrees	+/- 10 degrees
<b>Notes:</b> Use USAF tolerances since general altitude, airspeed and heading / course tolerances are not adequately addressed in the FAA-S-ACS-11, <i>Airline Transport Pilot and Type Rating for Airplane Airman Certification Standards</i> . Add 5 KIAS, 50 feet (when practical), and 2 degrees to all engines operating criteria for single-engine operations during the EPE or during simulated single-engine operations on the flight evaluation (if accomplished).		

1.6.1. Evaluations are graded using the three-tier area/subarea grades (Q/Q-/U) and the overall qualification level grading system (Q1/Q2/Q3).

1.6.2. The overall evaluation grade will be derived from individual area grades based on a composite for the observed events and tasks. **(T-3)** This grade should be awarded only after all evaluation requirements have been completed and given due consideration.

1.6.3. FEs should exercise sound judgment when applying subjective area grades, for specific situations not covered, and for assigning the overall grade.

1.6.4. Critical Areas. Critical areas require adequate accomplishment by the aircrew member in order to successfully achieve the mission objectives. If an aircrew member receives an unqualified grade in any critical area, the overall grade for the evaluation will also be unqualified. **(T-3)**

### **1.7. Unsatisfactory Performance.**

1.7.1. FEs will not allow substandard performance to jeopardize safety of flight. **(T-2)**

1.7.2. Examinees receiving an overall grade of unqualified (U) will be placed in supervised status until recommended additional training and re-evaluation are completed. **(T-2)**

1.7.3. A Q-3 grade will be assigned for unsatisfactory performance in any critical area or if the FE assumes the examinee's duties. **(T-1)**

1.7.4. Unsatisfactory performance in a non-critical area will result in no higher than a qualification level Q-2. **(T-1)**

1.7.5. A different FE will conduct rechecks. **(T-2)**

1.7.6. ATD may be used to accomplish additional training and re-evaluations. Areas for additional training and re-evaluation should be limited to those areas that can be realistically accomplished in the ATD.

### **1.8. Qualification and Difference Certification.**

1.8.1. Upon completion of an Initial (INIT) Qualification (QUAL) Evaluation, the aircraft type will be documented as "E-11" on the AF Form 8, *Certificate of Aircrew Qualification*. **(T-2)**

1.8.2. Individuals who have completed differences training are not required to take an additional QUAL evaluation in the aircraft. Annotate "E-11 FVD/6000 Certified" in the Comments section of the AF Form 8.

1.8.3. Reduced Vertical Separation Minimums (RVSM) Certification. Individuals will complete unit maintained RVSM Training. **(T-2)** Annotate "E-11 RVSM Certified" in the Comments section of the AF Form 8.

## Chapter 2

### PILOT EVALUATIONS

**2.1. Evaluation Requirements.** This manual standardizes the criteria for Instrument (INSTM), QUAL, Mission (MSN), Instructor (INSTR), Requalification (RQ), EPE, SPOT, and No-Notice (N/N) evaluations.

2.1.1. Evaluations are administered using the areas, including critical/non-critical areas, listed in [paragraph 2.3](#). INSTR evaluations adhere to guidance in [Chapter 3](#).

2.1.2. Aircrews will successfully complete an INIT evaluation for each category, then recurring evaluations as appropriate. **(T-2)** Evaluations expire on the last day of the 17<sup>th</sup> month following the month in which the previous periodic evaluation was successfully completed IAW AFMAN 11-202V2. Align dates, if possible, to minimize operational impacts and ensure requisites are met. MSN and INSTR evaluations must be accomplished in the aircraft. **(T-2)**

2.1.2.1. Alternate Method. When it is impossible to evaluate an area in-flight due to equipment malfunctions, operational requirements, scheduling restrictions, or weather, the area may be evaluated by an alternate method (e.g., procedural trainer or verbal examination). Completing evaluations using this paragraph should be utilized on a limited basis and only if no other options are available and every reasonable effort has been made to evaluate all areas in flight. Complete the evaluation on an additional sortie unless there is significant operational impact.

2.1.2.2. Approval to utilize a procedural trainer, verbal examination, or table top of an evaluation must be approved by the Continental United States (CONUS)-based E-11 CC, operations officer (DO), or Chief of Stan/Eval. Document this in the Additional Comments portion of the AF Form 8 with the area number, area title, reason not accomplished in the normal method, alternate evaluation, method used, and date. **(T-3)**

2.1.3. End-Of-Course (EOC) exams administered by a USAF-approved civilian training course will credit mandatory aircrew open and closed book QUAL evaluation testing requirements. **(T-2)**

2.1.4. An evaluation will not be changed to a training mission to avoid documenting substandard performance, nor will a training mission be changed to an evaluation. **(T-2)**

2.1.5. Grading Criteria. To the maximum extent possible, FEs will utilize grading criteria outlined in this volume to determine individual grading areas. **(T-2)** Exercise good judgment when the wording of areas is subjective and when specific areas are not covered. FE judgment factors into the overall grade. Consider cumulative deviations when determining overall grade.

2.1.6. Tolerance assessments for in-flight parameters are based on conditions of smooth air and a stable aircraft. Momentary deviations are allowable provided the examinee applies prompt corrective action and such deviations do not jeopardize safety. Consider cumulative deviations when determining the overall area/subarea grade.

## 2.2. Evaluation Categories and Requisites.

2.2.1. QUAL Evaluations.

2.2.1.1. QUAL evaluations may be administered as part of a USAF-approved civilian training program in an ATD. The EOC exams administered during civilian training academics fulfill the ground phase open and closed book QUAL evaluation testing requisites.

2.2.1.2. INIT QUAL and INSTM evaluations are graded in accordance with FAA-S-ACS-11 if administered as part of a USAF approved civilian training program in an ATD.

#### 2.2.2. INSTM Evaluations.

2.2.2.1. INSTM evaluations may be administered as part of a USAF-approved civilian training program in an ATD.

2.2.2.2. INSTM evaluation requisites include an open book written instrument examination according to AFMAN 11-210, *Instrument Refresher Program (IRP)*. **Note:** Individuals reporting to a deployed unit on an Air Expeditionary Forces (AEF) cycle will complete the instrument written portion prior to their MSN evaluation in theater. **(T-2)**

#### 2.2.3. MSN Evaluations.

2.2.3.1. MSN evaluations are administered IAW [paragraph 2.1.2](#). Individuals reporting to a deployed unit on an AEF cycle will complete the MSN evaluation following the local Mission Qualification Training (MQT) program. **(T-3)** Individuals who have completed difference training on the variant other than their INIT QUAL may take their MSN evaluation in any E-11 variant. **Note:** When possible, members should not be evaluated in an E-11 variant on which they have not completed in-unit differences certification.

2.2.3.2. At a minimum, MQT evaluation will consist of a takeoff, climb, operational mission segment, descent, and instrument approach. **(T-2)**

2.2.4. INSTR Evaluation. To initially qualify as an instructor, pilots will successfully complete an INIT INSTR evaluation. **(T-2)** The INIT INSTR evaluation includes all general grading areas under [paragraph 2.3.1](#), instructor grading areas under [Chapter 3](#), and selected mission areas as determined by the evaluator. Evaluate aircrew members designated as instructors on their ability to instruct during an MSN profile. **(T-2)**

2.2.5. EPE Evaluation. EPEs are conducted as part of a USAF approved civilian training program in an ATD by an approved civilian contractor or USAF FE. In the absence of an approved ATD, the EPE may be conducted by a USAF FE via a tabletop method. A tabletop EPE should only be used as a last resort and must be approved by the Operations Group Commander (OG/CC) or O-6 equivalent. Document this in the Additional Comments portion of the AF Form 8 with the area number, area title, reason not accomplished in the normal method, alternate evaluation, method used, and date. **(T-3)**

2.2.6. SPOT Evaluation. SPOT evaluations on E-11 aircrew must be performed by FEs who are qualified in the E-11. **(T-1)** **Note:** SPOT evaluations will not be conducted on combat missions, except when authorized by the OG/CC or for units that do not have an OG/CC, this responsibility rests with the Wing (Wg)/CC or equivalent, delegable no lower than the Squadron (Sq)/CC. **(T-3)**

2.2.7. N/N Evaluation.



2.2.7.1. Pilots may be evaluated on any mission and will be notified no later than crew show for the scheduled mission. **(T-3)**

2.2.7.2. N/N SPOT evaluations will not be conducted on combat missions unless authorized by the OG/CC or O-6 equivalent. **(T-3)**

### 2.2.8. Requisites.

2.2.8.1. Requisites for INSTM and QUAL evaluations are IAW with AFMAN 11-202V2:

2.2.8.1.1. The QUAL closed book examination requisite may be fulfilled by USAF-approved civilian training end of course testing.

2.2.8.1.2. The QUAL open book examination requisite may be fulfilled by USAF-approved civilian training end of course testing.

2.2.8.1.3. Boldface/Critical Action Procedures (CAPs): Squadrons will generate reference CAPs based on the Bombardier “immediate action items” found in the QRH2 and E-11A BACN airplane flight manual (AFM), Sup checklists. Squadrons will create a test based on the squadron CAPs to fulfill the CAPs requisite. **(T-3)**

2.2.8.1.4. EPE. **(T-3) Note:** Initially fulfilled during USAF-approved civilian training for INIT INSTM/QUAL. All ATD evaluations conducted at the civilian contractor’s testing center satisfy the EPE requirement.

2.2.8.2. MSN and INSTR evaluations require current QUAL/INSTM evaluations. MSN and INSTR evaluations may be completed in conjunction with QUAL/INSTM evaluations.

## 2.3. Grading Criteria.

2.3.1. **Table 2.1** outlines the required grading areas for INSTR, QUAL, MSN, and INSTR evaluations. FE objectivity evaluation grading areas will be IAW AFMAN 11-202 Volume 2 ACC SUP, *Aircrew Standardization and Evaluation Program*.

**Table 2.1. Evaluation Requirements.**

AREA	DESCRIPTION	PILOTS
1	MISSION PLANNING	I/Q/M
3	PRE-TAKEOFF	Q/M
4	TAKEOFF	I/Q/M
6	DEPARTURE	I/Q/M
7	LEVEL OFF	I/Q/M
8	CRUISE/NAVIGATION	I/Q/M
10	IN-FLIGHT CHECKS	Q
11	FUEL MANAGEMENT	Q/M
12	COMMUNICATION/NAVIGATION/IFF (CNI)	I/Q/M
13	CREW COORDINATION	Q/M
18	DESCENT	I/Q/M
19	GO-AROUND	I/Q
20	RECOVERY	I/Q/M
23	VFR PATTERN/APPROACH	M

25	LANDINGS	I/Q/M
26	AFTER LANDING	Q/M
29	ACFT GENERAL KNOWLEDGE	I/Q/M
30	AIRMANSHIP/SITUATIONAL AWARENESS (CRITICAL)	I/Q/M
31	SAFETY (CRITICAL)	I/Q/M
32	FLIGHT DISCIPLINE (CRITICAL)	I/Q/M
33	INSTRUCTOR PERFORMANCE (CRITICAL)	INSTR
37	CREW RESOURCE MANAGEMENT (CRM)	Q/M
38	TAKEOFF AND LANDING DATA	Q/M
47	INSTRUCTOR BRIEFING/DEBRIEFING (CRITICAL)	INSTR
48	PRE-FLIGHT	Q/M
50	FORMS/REPORTS/LOGS	Q/M
52	EMERGENCY EQUIP/PROCEDURES	Q/M
53	RISK MANAGEMENT/DECISION MAKING	Q/M
55	INSTRUCTOR KNOWLEDGE	INSTR
56	DEMO OF MANUEVERS/PROCEDURES (CRITICAL)	INSTR
59	SYSTEM CAPABILITIES	M
63	INSTRUMENT PATTERNS	I
64	NON-PRECISION APPROACH	I
66	PRECISION APPROACH (ILS)	I
67	MISSED APPROACH/CLIMB OUT	I/Q
69	INSTRUMENT CROSS-CHECK	I/Q
70	EMERGENCY/ENGINE OUT APPROACH	Q
73	ENGINE OUT LANDING	Q
74	ENGINE OUT GO-AROUND	Q
75	TOUCH-AND-GO	INSTR
83	TACTICAL/MISSION EXECUTION	M
85	RADIO USE/TACTICAL COMMUNICATION	M
295	ORBIT PROCEDURES	M
302	CHECKLIST USAGE/CREW COORDINATION	Q/M
363	ENGINE START MALFUNCTION	Q
411	EMERGENCY PROCEDURES/AIRCRAFT MALFUNCTIONS (PRE-TAKEOFF)	Q
511	EMERGENCY PROCEDURES/AIRCRAFT MALFUNCTIONS (TAKEOFF)	Q
611	EMERGENCY PROCEDURES/AIRCRAFT MALFUNCTIONS (IN-FLIGHT)	Q
738	AUTOMATION MANAGEMENT	I/Q/M
<b>KEY:</b> I - Required for all INSTM evaluations (T-2) Q - Required for all QUAL evaluations (T-2) M - Required for all MSN evaluations (T-2) INSTR - Required for all INSTR evaluations (T-2)		

## 2.3.2. Area 1 -- MISSION PLANNING

## 2.3.2.1. Mission Preparation:

2.3.2.1.1. Q. Examinee checked all factors applicable to flight such as weather, Notices to Airman (NOTAMs), alternate airfields, airfield suitability, fuel requirements, charts, etc. Examinee displayed a high level of knowledge of performance capabilities and operating data. Examinee evaluated the performance data intended for use during takeoff/landing after final adjustments and corrections have been made. Did not exceed Q tolerances (see [Table 2.2.](#)).

2.3.2.1.2. Q-. Examinee made minor errors or omissions in checking all factors that could have detracted from mission effectiveness. Examinee exhibited marginal knowledge of performance capabilities and/or operating data. Examinee's performance calculations exceeded Q tolerances but did not exceed Q- tolerances (see [Table 2.2.](#)).

2.3.2.1.3. U. Examinee made major errors or omissions, which would have prevented a safe or effective mission. Examinee demonstrated unsatisfactory knowledge of the performance capabilities and/or operating data. Examinee's performance calculations exceeded Q- tolerances (see [Table 2.2.](#)).

**Table 2.2. Performance Tolerances.**

	Q	Q-
Takeoff Speeds (V1, Vr, V2, flap retract, slat retract):	+/-3 KIAS	+/-5 KIAS
Calculated Takeoff Weight:	+/-500 pounds and suitable for takeoff/landing	+/-1,000 pounds and suitable for takeoff/landing

## 2.3.2.2. Publications:

2.3.2.2.1. Q. Publications were current and usable for any of the unit's combat tasking. Contained no deviations, omissions, and/or errors.

2.3.2.2.2. Q-. Publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.

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

## 2.3.3. Area 3 -- PRE-TAKEOFF. Evaluation of Area 3 Ground Operations/Taxi will be observed with the examinee occupying the left seat. (T-3)

2.3.3.1. Q. Established, adhered to, and executed in timely manner, all ground Operations/Taxi checklist items to include, crew briefing, check of personal equipment, passenger briefing, engine start, and taxi. Accurately determined readiness of aircraft for flight. Completed all systems pre-flight/post-flight inspections according to flight manual, AFMAN 11-218, *Aircraft Operations and Movement on the Ground*, and local procedures.

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

2.3.3.3. U. Made errors that directly contributed operating the aircraft in an unsafe manner. Failed to accurately determine readiness for flight. Failed to pre-flight and/or post-flight a critical aircraft component or could not conduct a satisfactory pre-flight/post-flight inspection.

#### 2.3.4. Area 4 -- TAKEOFF

2.3.4.1. Q. Maintained smooth, positive aircraft control throughout the takeoff. Performed the takeoff IAW flight manual and as published/directed.

2.3.4.2. Q-. Executed minor deviations from published procedures without affecting safety of flight. Control was rough and/or erratic. Hesitant in application of procedures and/or corrections.

2.3.4.3. U. Takeoff was potentially dangerous. Attempted to exceed aircraft and/or systems limitations. Failed to establish proper climb attitude. Excessive deviation from intended flight path. Violated flight manual procedures.

#### 2.3.5. Area 6 -- DEPARTURE

2.3.5.1. Q. Complied with all restrictions or controlling agency instructions. Made all required reports. Applied course/heading corrections promptly. Demonstrated smooth, positive control throughout the departure. Ensured the aircraft was capable of meeting the required climb gradient.

2.3.5.2. Q-. Minor deviations in navigation occurred during departure. Slow to comply with controlling agency instructions or unsure of reporting requirements. Slow to apply course/heading corrections. Aircraft control was not consistently smooth and positive. Slow to determine if the aircraft was capable of meeting the required climb gradient.

2.3.5.3. U. Failed to comply with published and/or directed departure or controlling agency instructions. Accepted an inaccurate clearance. Aircraft control was erratic. Attempted to depart when the aircraft was unable to make the required climb gradient.

#### 2.3.6. Area 7 -- LEVEL OFF

2.3.6.1. Q. Complied with all restrictions or controlling agency instructions. Made all required reports. Applied altitude corrections promptly. Demonstrated smooth, positive control throughout the level off.

2.3.6.2. Q-. Minor deviations in altitude occurred during level off. Slow to comply with controlling agency instructions or unsure of reporting requirements. Slow to determine altitude corrections necessary and slow to apply altitude corrections. Aircraft control was not consistently smooth and positive.

2.3.6.3. U. Failed to comply with published and/or directed controlling agency instructions. Accepted an inaccurate clearance. Aircraft control was erratic.

#### 2.3.7. Area 8 -- CRUISE/NAVIGATION

2.3.7.1. Q. 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. Navigational Aids (NAVAIDs) were properly tuned, identified, and monitored.

2.3.7.2. Q-. Made minor errors in procedures and/or use of navigation equipment. Slow to comply with clearance instructions. Had some difficulty in establishing exact position and course. Slow to adjust for deviations in time and course. Some deviations in tuning, identifying, and monitoring NAVAIDs.

2.3.7.3. U. Made major errors in procedures and/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 Q- criteria. NAVAIDs were not tuned, identified, and/or monitored.

#### 2.3.8. Area 10 -- IN-FLIGHT CHECKS

2.3.8.1. Q. Accomplished in-flight checks as required by the flight manual and governing directives.

2.3.8.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge.

2.3.8.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.9. Area 11 -- FUEL MANAGEMENT

2.3.9.1. Q. Satisfactory capability to manage fuel state using all available means. Used appropriate procedures and decision making to manage fuel state towards successful mission accomplishment. Successfully managed fuel state and fuel planning when changes to mission required deviations.

2.3.9.2. Q-. Made minor errors in managing fuel state and/or use of fuel management tools. Slow to work appropriate procedures and make decisions to manage fuel state. Had some difficulty managing fuel state when changes to mission required deviations.

2.3.9.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.10. Area 12 -- COMMUNICATION/NAVIGATION/IFF (CNI)

2.3.10.1. Q. Effectively monitored, understood, and executed proper internal/external communications. Communications were standard, clear, concise, and brief. Examinee effectively configured and operated Identification, Friend or Foe (IFF)/transponder communication equipment.

2.3.10.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge. Made lengthy transmissions and/or used non-standard communications. Made errors in configuring and/or operating IFF/transponder communication equipment.

2.3.10.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.11. Area 13 -- CREW COORDINATION

2.3.11.1. Q. Effectively coordinated with other crewmembers and external agencies towards mission accomplishment. Effectively coordinated alternative mission activity in response to in-flight contingencies or mission changes.

2.3.11.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge. Crew coordination was the minimum acceptable.

2.3.11.3. U. Failed to coordinate. Coordinated and/or reported with errors, omissions, misunderstandings, confusion, or delays that could jeopardize mission accomplishment. Crew coordination was practiced such that mission accomplishment or safety of flight was jeopardized.

#### 2.3.12. Area 18 -- DESCENT

2.3.12.1. Q. Performed descent as directed. Complied with all flight manual, controlled-issued, or Standard Arrival Routes (STAR) restrictions in a proficient manner. Accomplished all required checks.

2.3.12.2. Q-. Performed descent as directed with minor deviations that did not compromise mission safety. Slow to accomplish required checks.

2.3.12.3. U. Performed descent with major deviations. Did not accomplish required checks. Erratic corrections during descent. Attempted to exceed flight manual limitations.

#### 2.3.13. Area 19 -- GO-AROUND

2.3.13.1. Q. Executed go-around IAW assigned procedures. Maintained desired speed and climb rate IAW procedures. Complied with controller's instructions. Applied smooth control inputs.

2.3.13.2. Q-. Executed go-around with minor deviations to published procedures. Minor errors in maintaining desired speed and climb performance IAW procedures. Slow to comply with controller's instructions or follow published procedure. Slightly over controlled the aircraft. Exceeded Q tolerances.

2.3.13.3. U. Did not execute go-around IAW flight manual or published procedures. Did not comply with controller's instructions. Deviation or misapplications of procedures may have led to an unsafe condition. Exceeded Q- tolerances.

#### 2.3.14. Area 20 -- RECOVERY

2.3.14.1. Q. Accomplished procedures and checklist as required by the flight manual and governing directives. Complied with all restrictions or controlling agency instructions and made all required reports. Utilized appropriate Flight Information Publication (FLIP) publications and aircraft equipment/systems to affect a controlled recovery. Smooth and positive aircraft control at all times.

2.3.14.2. Q-. Minor deviations in procedures and checklists required by the flight manual and governing directives. Slow to comply with restrictions or controlling agency instructions and made minor errors in required reports. Minor errors in utilizing appropriate FLIP publications and aircraft equipment/systems to affect a controlled recovery. Slight deviations in smooth and positive aircraft control.

2.3.14.3. U. Not up to "Q-" standards/exceeded "Q-" tolerance. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.15. Area 23 -- VFR PATTERN/APPROACH

2.3.15.1. Q. Performed traffic pattern, turn to final, and final approach IAW published procedures. Aircraft control was smooth and positive. Constantly cleared area of intended flight.

2.3.15.2. Q-. Performed traffic pattern, turn to final, and final approach with minor deviations to procedures as published and/or directed. Aircraft control was safe, but was not executed in a consistent, smooth, and positive manner. Over/under shot final approach but was able to intercept normal glide path. Adequately cleared area of intended flight.

2.3.15.3. U. Did not perform traffic pattern and/or turn to final, and/or final approach IAW published procedures. Displayed erratic aircraft control. Did not clear area of intended flight.

#### 2.3.16. Area 25 -- LANDINGS

2.3.16.1. Q. Performed landings as published/directed IAW flight manual. Braking action and reverse thrust actuation was appropriate and smooth. Did not exceed Q tolerances (see [Table 2.3.](#)).

2.3.16.2. Q-. Performed landings with minor deviation to procedures as published/directed. Landed in a slight crab. Braking action and reverse thrust actuation was unnecessarily delayed and/or not smooth. Exceeded Q tolerances (see [Table 2.3.](#)).

2.3.16.3. U. Landing not performed as published/directed. Braking or reverse thrust excessively delayed and/or actuated prior to touchdown. Examinee caused a hazardous situation by creating foreign object debris. Exceeded Q- tolerances (see [Table 2.3.](#)).

**Table 2.3. Landing Tolerances.**

	Q	Q-
Airspeed:	+10/-5 KIAS with proper wind corrections	+15/-5 KIAS with proper wind corrections
Touchdown zone:	-500 feet, +1,500 feet of briefed touchdown point	-1,000 feet, +3,000 feet of briefed touchdown point
Centerline:	Within 20 feet left or right	Within 30 feet left or right

#### 2.3.17. Area 26 -- AFTER LANDING

2.3.17.1. Q. Completed all postflight checks and procedures IAW applicable tech orders, checklist, and instructions. Completed appropriate forms and paperwork as applicable.

2.3.17.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge.

2.3.17.3. U. Not up to “Q-” standards. Errors or omissions could have jeopardized future mission accomplishment or flight safety and/or damaged aircraft equipment.

#### 2.3.18. Area 29 -- ACFT GENERAL KNOWLEDGE

2.3.18.1. Q. Examinee possessed a high level of knowledge of all aircraft regulations and procedures and understood how to apply both to accomplish the mission.

2.3.18.2. Q-. Examinee was unsure of some directives but could locate information in appropriate publications.

2.3.18.3. U. Examinee was unaware of established procedures and/or could not locate them in the appropriate publication in a timely manner.

2.3.19. Area 30 -- AIRMANSHIP/SITUATIONAL AWARENESS (CRITICAL)

2.3.19.1. Q. Examinee executed the assigned mission in a timely, efficient manner. Examinee demonstrated strict professional flight and crew discipline throughout all phases of flight. Examinee conducted the flight with a sense of understanding and comprehension.

2.3.19.2. U. Examinee made and/or omitted decisions, resulting in the failure to accomplish the assigned mission. Examinee failed to adhere to strict flight and/or crew discipline.

2.3.20. Area 31 -- SAFETY (CRITICAL)

2.3.20.1. Q. Examinee was aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.

2.3.20.2. U. Examinee was not aware of or did not comply with all safety factors required for safe aircraft operation or mission accomplishment. Examinee attempted to operate the aircraft in a dangerous manner.

2.3.21. Area 32 -- FLIGHT DISCIPLINE (CRITICAL)

2.3.21.1. Q. Examinee demonstrated strict professional flight and aircrew discipline throughout all phases of the mission.

2.3.21.2. U. Examinee failed to exhibit strict flight or aircrew discipline. Examinee violated or ignored rules or instructions.

2.3.22. Area 33 -- INSTRUCTOR PERFORMANCE

2.3.22.1. Q. Demonstrated the ability to communicate effectively. Provided appropriate guidance when necessary. Planned ahead and made timely decisions. Identified and corrected potentially unsafe maneuvers and/or situations.

2.3.22.2. Q-. Minor struggles in ability to communicate effectively. Delayed in providing guidance when necessary. Slow to plan ahead and make timely decisions. Delayed in identifying and correcting potentially unsafe maneuvers and/or situations.

2.3.22.3. U. Unable to effectively communicate or provide timely feedback to the student. Provided instruction that was unsafe or contradicted published directives. Did not provide corrective action when necessary. Did not plan ahead or anticipate student problems. Did not identify unsafe maneuvers and/or situations in a timely manner. Made no attempt to instruct.

2.3.23. Area 37 -- CREW RESOURCE MANAGEMENT (CRM). IAW AFMAN 11- 202V2, CRM skills will be evaluated for all crewmembers. CRM is an encompassing term that can be separated into seven specific skill sets. Those skill sets and further guidance on CRM can be found in AFMAN 11-290, *Cockpit/Crew Resource Management and Threat & Error Management Program*.



2.3.23.1. At a minimum the following four skill sets will be evaluated:

2.3.23.1.1. Crew/Flight Coordination. (T-2)

2.3.23.1.2. Risk Management/Decision Making. (T-2)

2.3.23.1.3. Situational Awareness. (T-2)

2.3.23.1.4. Task Management. (T-2)

2.3.23.2. Q. Examinee effectively coordinated with the other pilot throughout the assigned mission. The examinee demonstrated satisfactory knowledge of cockpit duties and responsibilities outlined in the aircraft's flight manuals. Examinee effectively applied CRM skills throughout the mission IAW AFMAN 11-290.

2.3.23.3. Q-. Examinee's crew coordination was adequate to accomplish mission, but occasionally induced unnecessary confusion. Examinee demonstrated marginal knowledge of cockpit duties and responsibilities outlined in the aircraft's flight manuals.

2.3.23.4. U. Examinee exhibited poor crew coordination that negatively affected mission accomplishment or safety of flight.

#### 2.3.24. Area 38 -- TAKEOFF AND LANDING DATA

2.3.24.1. Q. Computed/checked required takeoff and landing data within tolerances listed in **Table 2.2**. Skilled in takeoff and landing performance data.

2.3.24.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge. Data computed within tolerances listed in **Table 2.2**.

2.3.24.3. U. Not up to "Q-" standards/exceeded "Q-" tolerance. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.25. Area 47 -- INSTRUCTOR BRIEFING/DEBRIEFING(CRITICAL)

2.3.25.1. Q. Briefings were well organized, accurate, and thorough. Reviewed student's present level of training and defined mission events to be performed. During the critique, demonstrated an effective ability to reconstruct the flight, offer mission analysis, and provide guidance, where appropriate. Training grade reflected the actual performance of the student relative to established standards. Pre-briefed the student's next mission, if required.

2.3.25.2. Q-. Briefings had minor deviations in organization, accuracy, and thoroughness. Did not thoroughly review the students training and mission events needed. Minor errors in demonstrating an effective ability to reconstruct the flight, offer mission analysis, and provide guidance, where appropriate. Grading showed minor discrepancies in reflecting actual student performance. Minor errors in pre-briefing of student's next mission, if required.

2.3.25.3. U. Briefings were marginal or non-existent. Did not review student's past performance. Failed to adequately critique student and/or analyze the mission. Training grade did not reflect actual performance of student. Overlooked or omitted major discrepancies. Incomplete pre-briefing of student's next mission, if required.

#### 2.3.26. Area 48 -- PRE-FLIGHT

2.3.26.1. Q. Read all applicable items in the Flight Crew Information File (FCIF) prior to stepping to the aircraft. Completed all checks and procedures prior to takeoff in accordance with technical orders, checklists, and instructions in a timely manner.

2.3.26.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge.

2.3.26.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.27. Area 50 -- FORMS/REPORTS/LOGS

2.3.27.1. Q. All required forms and/or flight plans were complete, accurate, readable, and accomplished on time. Related an accurate debrief of significant events to applicable agencies.

2.3.27.2. Q-. Examinee made and/or failed to identify minor errors on aircraft forms and/or flight plans that did not affect conduct of the mission. Incorrectly and/or incompletely reported some information due to minor errors, omissions, and/or deviations.

2.3.27.3. U. Examinee did not accomplish required forms and/or flight plans. Omitted or incorrectly reported significant information due to major errors, omissions, and/or deviations.

#### 2.3.28. Area 52 -- EMERGENCY EQUIP/PROCEDURES

2.3.28.1. Q. Operated within prescribed limits and correctly diagnosed problems. Performed/explained proper corrective action for each type of malfunction. Effectively used available aircrew aids and checklists.

2.3.28.2. Q-. Operated within prescribed limits, but slow to analyze problems or apply proper corrective actions. Did not effectively use and/or experienced delays, omissions, or deviations in use of checklist and/or available aids.

2.3.28.3. U. Did not operate within prescribed limits. Unable or failed to analyze problem or take proper corrective action. Did not use checklists or available aids effectively.

#### 2.3.29. Area 53 -- RISK MANAGEMENT/DECISION MAKING

2.3.29.1. Q. Appropriately identified and assessed all risk factors associated with safe aircraft operation and mission accomplishment. Made appropriate decisions to mitigate/minimize risk in order to ensure mission accomplishment.

2.3.29.2. Q-. Slight errors in identifying and assessing all risk factors associated with the safe aircraft operation and mission accomplishment. Slow to make decisions to mitigate/minimize risk affect safe flight operations and mission accomplishment.

2.3.29.3. U. Not up to "Q-" standards. Made errors or omissions in identifying risk factors or mitigating/minimizing risk that could have jeopardized mission accomplishment or flight safety.

#### 2.3.30. Area 55 -- INSTRUCTOR KNOWLEDGE

2.3.30.1. Q. Satisfactorily understood proper management and operation of systems and equipment. Could satisfactorily identify and locate system components, explain and interpret their functions, capabilities and limitations. Effectively demonstrated knowledge of mission employment, roles and responsibilities. Demonstrated knowledge of mission related external agencies and threats to mission accomplishment.

2.3.30.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge of system management or operations. Minor errors in identifying and locating system components, explaining and interpreting their functions, capabilities and limitations. Limited knowledge of mission employment, roles and responsibilities. Limited understanding of mission related external agencies and threats to mission accomplishment.

2.3.30.3. U. Not up to “Q-” standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.31. Area 56 -- DEMO OF MANUEVERS/PROCEDURES(CRITICAL)

2.3.31.1. Q. Effectively demonstrated correct procedures, systems operation, or flight maneuvers. Thorough knowledge of aircraft systems, procedures, publications, and directives.

2.3.31.2. Q-. Minor errors in demonstrating correct procedures, systems operation, or flight maneuvers. Limited knowledge of aircraft systems, procedures, publications, and directives.

2.3.31.3. U. Ineffective or incorrect demonstration of procedures, systems operation, or flight maneuvers. Insufficient depth of knowledge about aircraft systems, procedures, and/or proper source material.

#### 2.3.32. Area 59 -- SYSTEM CAPABILITIES

2.3.32.1. Q. Satisfactorily understood proper management and operation of systems and equipment. Correctly identified and located system components, explained, and interpreted their functions, capabilities, and limitations.

2.3.32.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge of system management or operations. Minor errors in identifying and locating system components, explaining and interpreting their functions, capabilities and limitations.

2.3.32.3. U. Not up to “Q-” standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.33. Area 63 -- INSTRUMENT PATTERNS

2.3.33.1. Q. Performed instrument pattern IAW published procedures and controlling agency instructions. Aircraft control was consistent, smooth, and positive.

2.3.33.2. Q-. Performed instrument pattern with minor deviations in published procedures and controlling agency instructions. Aircraft control was safe, but was not executed in a consistent, smooth, and positive manner.

2.3.33.3. U. Not up to “Q-” standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.34. Area 64 – NON-PRECISION APPROACH

2.3.34.1. Q. Approach was IAW published procedures. Used appropriate descent rate to arrive and comply with Minimum Descent Altitude (MDA), at or before the Visual Descent Point (VDP). Position did or would have permitted a safe landing. Smooth and timely response to the controller’s instructions during the Airport Surveillance Radar (ASR) approach. Did not exceed Q tolerances (see [Table 2.4.](#)).

2.3.34.2. Q-. Performed approach with minor deviations. Arrived and complied with MDA at or before VDP. Position did or would have permitted a safe landing. Slow to respond to controller’s instructions and make corrections. Exceeded Q tolerances (see [Table 2.4.](#)).

2.3.34.3. U. Approach not IAW flight manual, directives, or published procedures. Erratic flight corrections during approach. Maintained steady-state flight below the MDA. Attempted to execute Global Positioning System (GPS) approach without proper checks of the GPS signal. Did not comply with decision height (DH) and/or position at DH and would not have permitted a safe landing. Exceeded Q- tolerances (see [Table 2.4.](#)).

**Table 2.4. General Non-Precision Instrument Tolerances (Final Segment).**

	Q	Q-
Airspeed	+5/-5 KIAS	+10/-5 KIAS
MDA	When reached, within +50/-0 feet to the missed approach point	When reached, within - 0/+100 feet to the missed approach point
Course	Not more than quarter-scale deflection of the Course Deviation Indicator (CDI) or $\pm 5^\circ$ in the case of the Radio Magnetic Indicator (RMI) or bearing pointer	Not more than half-scale deflection of the CDI or $\pm 10^\circ$ in the case of the RMI or bearing pointer
<b>Notes:</b> 1. Use the above description and criteria as general tolerances for airspeed, altitude at MDA, heading, course, timing, and distance with all engines operating. 2. Airspeed, Glide Slope, and Azimuth tolerances are based upon Airline Transport Pilot and Type Rating for Airplane Airman Certification Standards (FAA-S-ACS-11).		

#### 2.3.35. Area 66 -- PRECISION APPROACH (ILS)

2.3.35.1. Q. Approach was IAW published procedures. Smooth and timely corrections to azimuth and glide slope. Complied with DH/altitude. Position did or would have permitted a safe landing. Maintained glide path with only minor deviations. Did not exceed Q tolerances (see [Table 2.4.](#)).

2.3.35.2. Q-. Performed approach with minor deviations. Slow to make corrections. Complied with DH/altitude. Position did or would have permitted a safe landing. Maintained glide path with some deviations. Exceeded Q tolerances (see [Table 2.5.](#)).

2.3.35.3. U. Approach was not IAW flight manual, directives, or published procedures. Erratic corrections. Did not comply with DH and/or position at DH and would not have permitted a safe landing. Exceeded Q- tolerances (see [Table 2.5](#)).

**Table 2.5. General Precision Instrument Tolerances (Final Segment).**

	Q	Q-
Airspeed	+5/-5 KIAS	+10/-5 KIAS
Altitude	Initiated missed approach at DH +50/-0 feet	Initiated missed approach at DH +100/-0 feet
Heading	Within 5 degrees of controller's instructions (PAR)	Within 10 degrees of controller's instructions (PAR)
Glide Slope	Within ½ dot (ILS)	Within one dot (ILS)
Azimuth	Within ½ dot (ILS)	Within one dot (ILS)
<b>Notes:</b> 1. Use the above description and criteria as general tolerances for airspeed, altitude at DH, heading, course, timing, and distance with all engines operating. 2. Airspeed, Glide Slope, and Azimuth tolerances are based upon Airline Transport Pilot and Type Rating for Airplane Airman Certification Standards (FAA-S-ACS-11).		

2.3.36. Area 67 -- MISSED APPROACH/CLIMB OUT. For missed approach flight maneuver tolerances, use [Table 1.1](#).

2.3.36.1. Q. Executed missed approach IAW assigned procedures. Complied with controller's instructions. Applied smooth control inputs.

2.3.36.2. Q-. Executed missed approach with minor deviations to published procedures. Slow to comply with controller's instructions or follow published procedure. Slightly over controlled the aircraft. Exceeded Q tolerances.

2.3.36.3. U. Did not execute missed approach IAW flight manual or published procedures. Did not comply with controller's instructions. Deviation or misapplications of procedures may have led to an unsafe condition. Exceeded Q- tolerances.

2.3.37. Area 69 -- INSTRUMENT CROSS-CHECK

2.3.37.1. Q. Successfully utilized cross-check of instruments to maintain consistent, smooth, and positive control of the aircraft.

2.3.37.2. Q-. Slow in utilizing cross-check of instruments. Minor deviations in maintaining consistent, smooth, and positive control of the aircraft.

2.3.37.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

2.3.38. Area 70 -- EMERGENCY/ENGINE OUT APPROACH

2.3.38.1. Q. Performed pre-landing checks, traffic pattern, and approach IAW procedures outlined in the flight manual and other directives. Aircraft control was positive and smooth.

2.3.38.1.1. Pattern altitude +/-150 ft.

2.3.38.1.2. Airspeed on final +15/-5 KIAS.

2.3.38.1.3. Airspeed pattern. Did not exceed flap placard.

2.3.38.2. Q-. Minor procedural errors during pre-landing checks, traffic pattern, approach which did not affect safety. Landed in slight crab.

2.3.38.2.1. Pattern altitude. +/- 250 ft.

2.3.38.2.2. Airspeed on final. +20/-5 KIAS.

2.3.38.2.3. Airspeed pattern. -5 KIAS did not exceed flap placard.

2.3.38.3. U. Not up to "Q-" standards/exceeded "Q-" tolerance. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.39. Area 73 -- ENGINE OUT LANDING

2.3.39.1. Q. Accomplished procedures and checklist as required by the flight manual and governing directives. Touchdown was within designated touchdown zone, with minor deviation from centerline.

2.3.39.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge. Touchdown was within designated touchdown zone, off centerline.

2.3.39.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.40. Area 74 -- ENGINE OUT GO-AROUND

2.3.40.1. Q. Accomplished procedures and checklist as required by the flight manual and governing directives. Rudder inputs well-coordinated with power inputs. Acquired and maintained a positive climb and straight ground track.

2.3.40.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge. Slow or hesitant to initiate go around. Straight ground track was not maintained. Rudder inputs not well coordinated with power inputs.

2.3.40.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.41. Area 75 -- TOUCH-AND-GO

2.3.41.1. Q. Accomplished procedures and checklists as required by the flight manual and governing directives. Made all appropriate call-outs and positively controlled the procedure.

2.3.41.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge. Slow or hesitant to make all appropriate call-outs and positively control the procedure.

2.3.41.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.42. Area 83 -- TACTICAL/MISSION EXECUTION

2.3.42.1. Q. Accomplished all procedures and coordination necessary for successful mission execution. Exhibited complete knowledge of all facets of mission execution.

2.3.42.2. Q-. Occasional deviation from procedures and coordination necessary for successful mission execution. Limited knowledge of some facets of mission execution.

2.3.42.3. U. Not up to “Q-” standards. Errors, omissions, or lack of knowledge could have jeopardized mission accomplishment or flight safety.

#### 2.3.43. Area 85 -- RADIO USE/TACTICAL COMMUNICATION

2.3.43.1. Q. Examinee exhibited complete knowledge of, and compliance with the correct communications procedures. Examinee makes radio, data, and interphone transmissions concise with proper terminology. Examinee complied with and acknowledged all required instructions including successful operation of the aircraft radios and transponder systems.

2.3.43.2. Q-. Examinee occasionally deviated from procedures that required re-transmissions or resetting codes. Examinee was slow in initiating or missed several required radio calls, data transmissions. Examinee’s transmissions contained extraneous matter, were not in proper sequence, or used non-standard terminology. Examinee exhibited difficulty in configuring the aircraft radios and transponder systems without mission impact.

2.3.43.3. U. Examinee’s incorrect procedures or poor performance caused confusion and jeopardized mission accomplishment. Examinee made unnecessary calls (radio and/or intercom) and/or failed to execute required data transmissions that led to mission confusion and/or jeopardized mission accomplishment. Examinee was unable to configure the aircraft radios and transponder systems, which resulted in a direct impact on mission success and/or safe operation of the aircraft.

#### 2.3.44. Area 295 -- ORBIT PROCEDURES

2.3.44.1. Q. Successfully accomplished all procedures and coordinated with appropriate agencies to enter a mission orbit. Successfully manipulated aircraft avionics to maintain mission orbit, change orbits, or adjust aircraft orbit parameters as necessary.

2.3.44.2. Q-. Minor deviations in orbit procedures and minor errors in coordination. Slight difficulty in manipulation of aircraft avionics to maintain mission orbit, changing orbits, or adjusting aircraft orbit parameters.

2.3.44.3. U. Not up to “Q-” standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.

#### 2.3.45. Area 302 -- CHECKLIST USAGE/CREW COORDINATION

2.3.45.1. Q. Examinee consistently used and called for the correct checklist and gave the correct response at the appropriate time throughout the mission IAW the aircraft flight manuals.

2.3.45.2. Q-. Examinee’s checklist responses were untimely and/or crewmember required continual prompting for correct response.

2.3.45.3. U. Examinee used or called for incorrect checklist or consistently omitted checklist items. Examinee was unable to identify the correct checklist to use for a given situation. Examinee did not complete checklist prior to event.

2.3.46. Area 363 -- ENGINE START MALFUNCTION

2.3.46.1. Q. Recognized actual/simulated malfunctions. Applied proper corrective actions. Effectively used checklist/flight manual. Ensured accountability. Effectively performed primary emergency duties or was thoroughly familiar with emergency duties. Effectively coordinated emergency actions with other crewmembers without delay or confusion. When required, demonstrated thorough knowledge of mission impact due to equipment failure/loss.

2.3.46.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge, minor deviations or omissions in describing/accomplishing the required steps of the emergency procedure.

2.3.46.3. U. Errors or omissions could have jeopardized mission accomplishment or flight safety and/or damaged aircraft equipment.

2.3.47. Area 411 -- EMERGENCY PROCEDURES/AIRCRAFT MALFUNCTIONS (PRE-TAKEOFF)

2.3.47.1. Q. Recognized actual/simulated malfunctions. Applied proper corrective actions. Effectively used checklist/flight manual. Ensured accountability. Effectively performed primary emergency duties or was thoroughly familiar with emergency duties. Effectively coordinated emergency actions with other crewmembers without delay or confusion. When required, demonstrated thorough knowledge of mission impact due to equipment failure/loss.

2.3.47.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge, minor deviations or omissions in describing/accomplishing the required steps of the emergency procedure.

2.3.47.3. U. Errors or omissions could have jeopardized mission accomplishment or flight safety and/or damaged aircraft equipment.

2.3.48. Area 511 -- EMERGENCY PROCEDURES/AIRCRAFT MALFUNCTIONS (TAKEOFF)

2.3.48.1. Q. Recognized actual/simulated malfunctions. Applied proper corrective actions. Effectively used checklist/flight manual. Ensured accountability. Effectively performed primary emergency duties or was thoroughly familiar with emergency duties. Effectively coordinated emergency actions with other crewmembers without delay or confusion. When required, demonstrated thorough knowledge of mission impact due to equipment failure/loss.

2.3.48.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge, minor deviations or omissions in describing/accomplishing the required steps of the emergency procedure.

2.3.48.3. U. Errors or omissions could have jeopardized mission accomplishment or flight safety and/or damaged aircraft equipment.



2.3.49. Area 611 -- EMERGENCY PROCEDURES/AIRCRAFT MALFUNCTIONS (IN-FLIGHT)

2.3.49.1. Q. Recognized actual/simulated malfunctions. Applied proper corrective actions. Effectively used checklist/flight manual. Ensured accountability. Effectively performed primary emergency duties or was thoroughly familiar with emergency duties. Effectively coordinated emergency actions with other crewmembers without delay or confusion. When required, demonstrated thorough knowledge of mission impact due to equipment failure/loss.

2.3.49.2. Q-. Performance included errors, omissions, or delays that did not jeopardize mission accomplishment or safety. Demonstrated limited knowledge, minor deviations or omissions in describing/accomplishing the required steps of the emergency procedure.

2.3.49.3. U. Errors or omissions could have jeopardized mission accomplishment or flight safety and/or damaged aircraft equipment.

2.3.50. Area 738 -- AUTOMATION MANAGEMENT

2.3.50.1. Q. Established/followed guidelines for the operation of automated systems; aware of when systems should be disabled. Used automation IAW flight manuals. Periodically reviewed and verified the status of aircraft automated systems. Allowed sufficient time for programming the Flight Management System (FMS). Used automated systems at appropriate levels to reduce workload, but reduced or disengaged level of automation when programming demands could have reduced situational awareness or created work overloads.

2.3.50.2. Q-. Had limited knowledge of guidelines for the operation of automated systems; unclear as to when systems should be disabled. Occasionally failed to use automation IAW flight manuals. Slow to review and verify the status of aircraft automated systems. Did not always allow sufficient time for programming the FMS. Inconsistently used automated systems at appropriate levels.

2.3.50.3. U. Did not establish and/or follow guidelines for the operation of automated systems; unaware of when systems should be disabled. Failed to use automation IAW flight manuals. Did not periodically review and verify the status of aircraft automated systems. Failed to allow sufficient time for programming the FMS. Did not use automated systems at appropriate levels, to decrease workload. Did not reduce or disengage level of automation when programming demands reduced situational awareness or created work overloads.

## Chapter 3

### INSTRUCTOR (INSTR) EVALUATIONS

**3.1. Instructor (INSTR) Evaluation.** All flying personnel selected for instructor duty must be evaluated to determine their judgment, technical knowledge, instructor ability (including error analysis of student activity), and use of grading documents as well as proficiency in their aircrew specialty. **(T-1)** To be qualified as an instructor, a crewmember must successfully complete an INIT INSTR evaluation. **(T-2)** INIT INSTR evaluations may be conducted in conjunction with the examinee's periodic qualification evaluation and should be accomplished on an actual instructional sortie whenever possible. The ability of aircrew members to instruct will be evaluated during all subsequent periodic evaluations. **(T-2)**

3.1.1. Instructors must demonstrate proficiency by instructing an actual student whenever possible (or a qualified individual acting as a student). **(T-2)** The FE may require the examinee to present verbal explanations of equipment operations, procedures, and techniques pertinent to their crew position duties and responsibilities.

ADRIAN L. SPAIN, Lt Gen, USAF  
Deputy Chief of Staff, Operations

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

DAFI 90-160, *Publications and Forms Management*, 14 April 2022

DAFMAN 90-161, *Publishing Processes and Procedures*, 18 October 2023

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

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***Adopted Forms***

AF Form 8, *Certificate of Aircrew Qualification*

DAF Form 847, *Recommendation for Change of Publication*

***Abbreviations and Acronyms***

**ACC**—Air Combat Command

**ACFT**—Aircraft

**AEF**—Air Expeditionary Forces

**AF**—Air Force

**AFI**—Air Force Instruction

**AFM**—Airplane Flight Manual

**AFMAN**—Air Force Manual

**AFPD**—Air Force Policy Directive

**ASR**—Airport Surveillance Radar

**ATD**—Aircrew Training Device

**BACN**—Battlefield Airborne Communications Node

**C2ISR**—Command and Control, Intelligence, Surveillance, and Reconnaissance

**CAP**—Critical Action Procedure

**CC**—Commander

**CDI**—Course Deviation Indicator

**CNI**—Communication/Navigation/Identification, Friend or Foe

**CONUS**—Continental United States

**CRM**—Crew Resource Management

**DAF**—Department of the Air Force

**DAFI**—Department of the Air Force Instruction

**DAFMAN**—Department of the Air Force Manual

**DH**—Decision Height

**DO**—Director of Operations

**DRU**—Direct Reporting Unit

**EOC**—End-of-Course

**EPE**—Emergency Procedures Evaluation

**FAA**—Federal Aviation Administration

**FCIF**—Flight Crew Information File

**FE**—Flight Examiner

**FLIP**—Flight Information Publication

**FMS**—Flight Management System

**FOA**—Field Operating Agencies

**GPS**—Global Positioning System

**IAW**—In Accordance With

**IFF**—Identification, Friend or Foe

**ILS**—Instrument Landing System

**IRP**—Instrument Refresher Program

**HQ**—Headquarters

**INIT**—Initial

**INSTM**—Instrument

**INSTR**—Instructor

**KIAS**—Knots Indicated Air Speed

**MAJCOM**—Major Command

**MDA**—Minimum Descent Altitude  
**MSN**—Mission  
**MQT**—Mission Qualification Training  
**NAVAID**—Navigational Aid  
**N/N**—No-Notice  
**NOTAM**—Notice to Airmen  
**OG/CC**—Operations Group Commander  
**OPR**—Office of Primary Responsibility  
**PAR**—Precision Approach Radar  
**Q—Qualified**—QRH—Quick Reaction Handbook  
**QUAL**—Qualification  
**RMI**—Radio Magnetic Indicator  
**RQ**—Requalification  
**RVSM**—Reduced Vertical Separation Minimums  
**SIM**—Simulator  
**Sq**—Squadron  
**Stan/Eval**—Standardization/Evaluation  
**STAR**—Standard Arrival Route  
**U—Unqualified**—USAF—United States Air Force  
**VDP**—Visual Descent Point  
**VFR**—Visual Flight Rules

*Office Symbols*

**ACC/A3**—ACC/Director of Operations  
**ACC/A3C**—Air Combat Command/Command and Control Intelligence, Surveillance, and Reconnaissance (C2ISR) Operations Division  
**ACC/A3CA**—ACC/ Command and Control, Intelligence, Surveillance, and Reconnaissance (C2ISR) Operations Airborne Systems Branch  
**ACC/A3TV**—ACC/Standardization and Evaluation Branch  
**AF/A3**—AF Directorate of Operations  
**AF/A3T**—AF Director of Training and Readiness