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**Flying Operations**

**FLIGHT TEST AIRCREW EVALUATION  
CRITERIA**



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This instruction 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 AFMC units and AFMC gained flying units and personnel. This supplement does not apply to the Air National Guard or US Air Force Reserve units and members except those under AFMC OPCON. Field units below MAJ-COM level will forward copies of their proposed supplements to this publication to AFMC/DOV for review and approval. Keep supplements current by complying with AFI 33-360V1, Publications Management Program. See paragraph 1.2. of this instruction for guidance on submitting comments and suggesting improvements to this publication. This instruction is affected by the Paperwork Reduction Act as amended in 1996. The Privacy Act of 1974 affects this instruction. The Privacy Act System Number F011 AF XO A, Aviation Resource Management System (ARMS) covers required information. The authority for maintenance of the system is Title 37 U.S.C. 301a (Incentive Pay), Public Law 92-204, Section 715 (Appropriations Act for 1973), Public Laws 93-570 (Appropriations Act for 1974), 93-294 (Aviation Career Incentive Act of 1974), and Executive Order 9397. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFD 37-1, *Information Management of Records* and AFMAN 37-123, *Management of Records* and disposed of in accordance with *Air Force Records Disposition Schedule (RDS)* located at <https://webrims.amc.af.mil>.

**SUMMARY OF REVISIONS**

This revision clarifies IRC as an instrument evaluation requisite and clarifies helicopter grading criteria.

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## Chapter 1

### GENERAL INFORMATION

**1.1. General.** AFMC publishes a three-volume set of Flight Test (FT) instructions containing attachments for each weapon system flown in AFMC. These instructions are numbered AFI 11-2FT Volume 1, 2, and 3, and will contain the training, evaluation criteria, and operations procedures, respectively, for each weapon system. AFMC uses these instructions in lieu of AFI 11-2 MDS-specific Volumes for flying operations. In the absence of published guidance AFMC units will coordinate with HQ AFMC/DOV for approval of locally developed guidelines. If possible, these guidelines should be consistent with similar guidance specified in the appropriate AFI 11-2 MDS-specific Volumes. In addition, aircraft on loan to AFMC undergoing short-term flight test programs will be flown according to the lead MAJCOM guidance if no AFMC guidance exists.

1.1.1. All evaluations will be conducted IAW the provisions of AFI 11-202, Volume 2 and this instruction. Information gathering documents will be established as forms in accordance with AFI 33-360, Volume 2, *Forms Management Program*.

**1.2. Recommended Changes/Waivers.** Recommendations for improvements to this instruction will be submitted on AF Form 847, **Recommendation for Change of Publication**, to AFMC/DOV. IAW AFDP 11-2, AF/XO is approval authority for interim changes/revisions to this instruction. Waiver authority for this instruction is AFMC/DOV. Waivers will be requested through AFMC/DOV.

### 1.3. Procedures:

1.3.1. Stan/Eval Flight Examiners (SEFE) will use the evaluation criteria contained in **Attachment 2** through **Attachment 6** for conducting all flight evaluations and paragraph **1.5** for all emergency procedures evaluations. To ensure standard and objective evaluations, SEFEs will be thoroughly familiar with the prescribed evaluation criteria. If guidance published in this volume is not sufficient or does not apply (for example; U-2), follow lead MAJCOM guidance.

1.3.2. Unless specified, the examinee or SEFE may fly in any flight position (to include chase) which will best enable the SEFE to conduct a thorough evaluation.

1.3.3. The SEFE will brief the examinee on the purpose of the evaluation and how it will be conducted prior to flight. The examinee will accomplish required flight planning in accordance with the flight position during the evaluation. Flight Examiners will be furnished a copy of necessary mission data, and mission materials.

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

**1.4. Grading Instructions.** This instruction and its attachments contain the standards and criteria for conducting flight evaluations in AFMC aircraft. These standards when applied with SEFE judgement are the determining factor in awarding subarea and overall evaluation grades.

1.4.1. The SEFE will evaluate flight parameters based 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 SEFE will consider cumulative deviations when determining the overall grade.

1.4.2. The SEFE will evaluate each area accomplished during the evaluation using the standards provided in this instruction and assign an appropriate grade for the area. Derive the overall flight evaluation grade from a composite of the area grades. SEFE judgment must be exercised when the wording of areas is subjective and when specific situations are not covered. SEFE judgment will be the determining factor in arriving at the overall grade.

1.4.3. If the examinee receives an unqualified grade in any critical area, an overall unqualified grade will be assigned.

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

**Table 1.1. General Criteria.**

		<b>Fixed Wing Pilot</b>	<b>Helicopter Pilot</b>	<b>Navigator/WSO</b>	<b>RQ-1 Pilot</b>
<b>Q</b>	<b>Altitude</b>	+/- 200 Feet	+/- 100 Feet	+/- 150 Feet	+/- 200 Feet
	<b>Airspeed</b>	+/- 5%	+/- 10 KIAS	+/- 5%	+10/-5 KIAS
	<b>Course</b>	+/- 5 degrees/3 NM (Whichever is greater)	+/- 5 degrees/3 NM (Whichever is greater)	+/- 5 degrees/3 NM (Whichever is greater)	+/-20 degrees/1.5 NM (Whichever is greater)
	<b>TACAN Arc</b>	+/- 2 NM	+/- 2 NM	+/- 2 NM	N/A
<b>Q-</b>	<b>Altitude</b>	+/- 300 feet	+/- 300 feet	+/- 250 feet	+/-300 feet
	<b>Airspeed</b>	+/- 10 %	+/- 20 KIAS	+/- 10 %	+15/-7 KIAS
	<b>Course</b>	+/- 10 degrees/5 NM (Whichever is greater)	+/- 10 degrees/5 NM (Whichever is greater)	+/- 10 degrees/5 NM (Whichever is greater)	+/-30 degrees/3 NM (Whichever is greater)
	<b>TACAN Arc</b>	+/- 3 NM	+/- 2 NM	+/- 3 NM	N/A
<b>U</b>		Exceeded Q-Tolerances	Exceeded Q-Tolerances	Exceeded Q-Tolerances	Exceeded Q-Tolerances

**1.5. Emergency Procedures Evaluation (EPE).** Aircrew will be administered EPEs. Use an ATD to perform EPEs (when available and properly configured) to the maximum extent possible. If an ATD is not used, the EPE will be conducted in an appropriate unit training device (UTD) or cockpit procedures trainer (CPT), in order of preference. If a CPT is not used, the EPE will be an oral evaluation.

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

1.5.1.1. Aircraft General Knowledge.

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

1.5.1.3. Crew Resource Management (CRM).

1.5.1.4. Unusual attitude recoveries will be evaluated IAW AFMAN 11-217, *Instrument Flight Procedures*, during all EPEs. If performed in an ATD, this fulfills the requirement for Unusual Attitude Recoveries on Pilot Instrument/Qualification evaluations.

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

1.5.2.1. Evaluate use of standby/emergency instruments.

1.5.2.2. Alternate/Divert Airfields. Evaluate a minimum of one approach at an airfield other than the base/airfield of assignment, mission & conditions permitting

1.5.3. EPE scenarios should be tailored to unit tasking and should include emergencies occurring during situations an aircrew might encounter while flying the unit's mission (Functional Check Flight, Weapon Delivery, etc).

1.5.4. Examinees receiving an overall unqualified grade will be placed in supervised status until a re-evaluation is successfully accomplished. Examinees receiving an overall unqualified grade because of an unsatisfactory Bold Face/CAPS evaluation will not be permitted to fly in their aircrew position until a successful re-evaluation is accomplished. If examinee receives a grade of qualified with additional training required for an EPE, the SEFE will indicate if the additional training will be accomplished before the flight evaluation. Additional training and reevaluations will be accomplished IAW AFI 11-202, Vol 2.

1.5.5. The following grading criteria will be used to grade individual items on EPE's:

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

Q-: Performance is safe, with limited proficiency. Makes errors of omission or commission.

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

**1.6. Publications.** The examinee will submit their issued copy of required publications for evaluation. Digital TO's are approved for use by individual aircrew members. Maintain one CD per individual. Maintain a disk with all applicable supplements, changes, errata, etc. Maintain a summary file/list of affected paragraphs/pages/topics that have been amended. The summary file does not reprint the amendment, it is used as a tool to identify areas that have been affected. Units that fly multiple variants of an MDS (ie AC-130H; MC-130H; HC-130P; C-130E) will declare one variant (ie C-130H) as the primary weapon system. Issue individual publications based on this determination.

## Chapter 2

### EVALUATION REQUIREMENTS

#### 2.1. General.

2.1.1. All evaluations will follow the guidelines set in AFI 11-202, Vol 2, Chapter 4. The procedures outlined in this chapter apply to all flying units.

2.1.2. Required evaluation areas are contained in forms specified in AFMC Supplement to AFI 11-202V2. When it is impossible to evaluate a required area in flight, it will be evaluated by an alternate method (i.e., in an UTD/ATD/CPT or by oral examination). Document the reason a required area was not evaluated in-flight. Document method of evaluation in the Comments portion of the AF Form 8, Certificate of Aircrew Qualification. If the SEFE determines the required item cannot be adequately evaluated by an alternate method, the examinee will require an additional flight to complete the evaluation.

2.1.3. Evaluate all issued flight publications for currency and accuracy on all flight evaluations. Units may specify additional publications to be evaluated in the unit supplement to AFI 11-202V2.

**2.2. Instrument Evaluation.** A mission flown according to instrument flight rules (to the maximum extent practical) best fulfills the objective of the instrument evaluation. This evaluation will include approaches at airfields other than the base of assignment or deployed locations if possible. This evaluation may be administered on any compatible mission with the approval of the unit Chief of Stan/Eval and Commander's concurrence.

2.2.1. The minimum ground phase requisites is the instrument examination.

2.2.2. RPA Instrument Qualifications. R/MQ-1/9 pilots are required to take an instrument check utilizing their assigned aircraft. RQ-4 pilots will maintain instrument currency and rating in either an Air Force aircraft or a civil commercial instrument rating.

2.2.3. Minimum In-Flight Events.

2.2.3.1. Both a Precision Approach Radar (PAR) and an Instrument Landing System (ILS)/Microwave Landing System (MLS) must be evaluated if equipment and facilities are available. If facilities or equipment are not available, the flight evaluation may be completed as long as one precision approach is flown.

2.2.3.2. Non-precision Approach. Accomplish at least one non-precision approach.

2.2.3.3. Holding and Fix to Fix. Every attempt should be made to accomplish the events. However, if mission constraints prevent accomplishment, this may be evaluated on the ground.

2.2.3.4. Instrument Penetration. Every attempt should be made to accomplish the events. However, if mission constraints prevent accomplishment, this may be evaluated on the ground.

2.2.3.5. If time and conditions permit, evaluators are encouraged to add a circling approach to the evaluation requirements.

2.2.4. Unusual Attitudes. Do not perform unusual attitude recoveries in single seat aircraft. They will be evaluated during EPEs or if evaluated in dual-seat aircraft in-flight, will be performed with a SEFE in the aircraft.

**2.3. Qualification Evaluation.** Requirements for a pilot qualification evaluation are the same as an instrument evaluation with the following exceptions and requirements:

2.3.1. Minimum ground phase requisites are closed and open book examinations, EPE, and Bold Face/CAPS Written Exam. Answers must contain all Bold Face/CAPS items in proper sequence. Abbreviations are allowed.

2.3.2. No instrument approaches or procedures (holding, fix-to-fix, instrument penetration) are required. A full flap (normal) pattern and landing is required. Emergency pattern work (engine out, no flap, partial flap, SFO) as applicable is also required. VFR traffic patterns are required (weather permitting).

2.3.3. Navigators will complete IRC and the instrument exam as a requisite for the qualification evaluation. WSO's with a set of flight controls at their position will complete pilots IRC and exam.

2.3.4. Pilots and WSOs/navigators will be evaluated on compliance with National Airspace System Rules and procedures. Particularly, evaluate compliance with minimum safe maneuvering airspeeds below 10,000 feet MSL using criteria in [Table 1.1.](#), as well as using all means available to ensure safe operations (e.g., Flight following during VFR operations). Mission planning will also be graded for adequate consideration of potential hazards during low level operations including, but not limited to: High Traffic areas, other Military Training route crossing points/deconfliction, noise sensitive areas, no-fly areas and abort considerations.

**2.4. Mission Evaluation.** The requirement for a mission evaluation for AFMC aircrews is waived according to the provisions of AFI 11-202V2, Chapter 4. However, evaluators should attempt to include mission type events on a qualification evaluation. Mission type events include any Phase II area such as: aerobatics; confidence maneuvers; safety chase; approaches to stalls; BFM; flight test techniques; formation; basic weapons deliveries; and functional checks. The mission section of the evaluation sheets contains four areas to be evaluated if mission type events are accomplished on a qualification evaluation.

**2.5. Instructor Evaluation.** Initial Instructor and Instructor Requalification evaluations will be conducted IAW AFI 11-202, Vol 2, Chapter 4. Flight evaluations will include a thorough evaluation of the examinee's instructor knowledge and ability. The instructor candidate will demonstrate to the evaluator an EPE IAW AFMC grade sheets. This is a one-time check in which the examinee must demonstrate the ability to instruct in various phases of the unit's mission. Except for requirements detailed on AFMC Evaluation Sheets, specific profiles and/or events will be determined by the SEFE. All subsequent periodic evaluations (for example, Instrument, Qualification, Mission) will include instructor portions during the evaluations. For units whose instructor pilots (IP) normally instruct from a chase aircraft, the examinee should fly a portion of the mission in the chase position, if feasible.

**2.6. Spot Evaluation.** Spot evaluations will be conducted IAW AFI 11-202, Vol 2, Chapter 4. A SPOT evaluation is an evaluation not intended to satisfy the requirements of a periodic (i.e., INSTM, QUAL, MSN, INSTR) evaluation. A spot has no particular requisites or requirements, but may be converted into a periodic evaluation if all of the requirements for that evaluation are met. SEFE objectivity evaluations will be documented as SPOT evaluations.

**2.7. Evaluation Instructions.** Requirements for all aircrew evaluations are identified in forms as specified in AFMC Supplement to AFI 11-202V2. Each crew position has specific section C requirements and

evaluation criteria. Use forms specified in AFMC Supplement to AFI 11-202V2 for conducting all aircrew evaluations. To conserve flying resources, units should make every attempt to combine evaluations (for example INSTM/QUAL examinations should be combined to the maximum extent possible).

**2.8. Forms Adopted.** AF Form 847, **Recommendation for Change of Publication**, AF Form 8, **Certificate of Aircrew Qualification**.

RONALD E. KEYS, Lt General, USAF  
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**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 11-2, *Aircraft Rules and Procedures*

AFPD 11-4, *Aviation Service*

AFI 11-2FT-Volume 1, *Flight Test Aircrew Training*

AFI 11-2FT-Volume 2, *Flight Test Aircrew Evaluation Criteria*

AFI 11-2FT- Volume 3, *Flight Test Operations Procedures*

AFMCI 11-201, *Supervisor of Flying Program*

AFI 11-202V1, *Aircrew Training*

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

AFI 11-202V3, *General Flight Rules*

AFH 11-203V1, *Weather for Aircrews*

AFI 11-205, *Aircraft Cockpit and Formation Flight Signals*

AFI 11-207, *Flight Delivery of Fighter Aircraft*

AFI 11-209, *Air Force Participation in Aerial Events*

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

AFI 11-214, *Aircrew, Weapons Director, and Terminal Attack Controller Procedures for Air Operations*

AFI 11-215, *Flight Manuals Program (FMP)*

AFPAM 11-216, *Air Navigation*

AFI 11-217 V1, *Instrument Flight Procedures*

AFI 11-217 V2, *Instrument Flight Procedures*

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

AFMAN 11-226, *US Standard for Terminal Instrument Procedures (TERPS)*

AFMAN 11-230, *Instrument Procedures*

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

AFI 11-301, *Aircrew Life Support Program*

AFI 33-360 V1, *Publications Management Program*

AFI 33-360 V, *Forms Management Program*

AFI 11-401, *Aviation Management*

AFI 11-410, *Personnel Parachute Operations*

AFPAM 11-419, *G-Awareness for Aircrew*

AFI 13-202, *Overdue Aircraft*

AFI 13-212V1, *Range Planning & Operations*

AFPD 37-1, *Information Management*

AFMAN 37-123, *Management of Records*

T.O. 1-1-300, *Functional Check Flight Procedures*

CJCSM 3212.02, *Performing Electronic Attack in the United States and Canada*

FAAH 7610.4, *Federal Aviation Administration Handbook*

**Note 1.** The entire AFTTP3-1 and 3-3 series of instructions contains useful reference information for areas not specifically covered in the instruction and may be used to enhance safe operations.

**Note 2.** Guidance in aircraft Flight Manuals, performance manuals, weapons delivery manuals, air refueling manuals and Technical Orders are the primary references for operation of the corresponding aircraft.

### ***Abbreviations and Acronyms***

**ACC**—Air Combat Command

**AFI**—Air Force Instruction

**AFMAN**—Air Force Manual

**AFMC**—Air Force Materiel Command

**AFMCI**—Air Force Materiel Command Instruction

**AFPAM**—Air Force Pamphlet

**AFRC**—Air Force Reserve Command

**AFTTP**—Air Force Tactics, Techniques, and Procedures

**AGL**—Above Ground Level

**AGM**—Air to Ground Missile

**AMC**—Air Mobility Command

**AOA**—Angle of Attack

**APU**—Auxiliary Power Unit

**ASR**—Airport Surveillance Report

**ATC**—Air Traffic Control

**ATD**—Aircrew Training Device

**BFM**—Basic Fighter Maneuver

**CAPS**—Critical Action Procedures

**CC**—Commander

**COMSEC**—Communications Security

**CPT**—Cockpit Procedures Trainer

**CRM**—Crew Resource Management  
**DFO**—Director of Flight Operations  
**DH**—Decision Height  
**DO**—Director of Operations  
**DR**—Dead Reckoning  
**DSO**—Defensive Systems Officer  
**DZ**—Drop Zone  
**ECM**—Electronic Countermeasures  
**EP**—Evaluator Pilot/Emergency Procedure  
**EPE**—Emergency Procedures Evaluation  
**ETA**—Expected Time of Arrival  
**EVS**—Electro-Optical Viewing System  
**EWO**—Electronic Warfare Officer  
**FAAH**—Federal Aviation Administration Handbook  
**FAR**—Federal Aviation Regulation  
**FCIF**—Flight Crew Information File  
**FLIP**—Flight Information Publications  
**GPS**—Global Positioning System  
**HF**—High Frequency  
**HQ**—Headquarters  
**IAW**—In Accordance With  
**ICAO**—International Civil Aviation Organization  
**IFR**—Instrument Flight Rules  
**ILS**—Instrument Landing System  
**IP**—Instructor Pilot or Initial Point  
**IR**—IFR Military Training Route  
**IRC**—Instrument Refresher Course  
**KIAS**—Knots Indicated Airspeed  
**LZ**—Landing Zone  
**MAJCOM**—Major Command  
**MAP**—Missed Approach Point  
**MC**—Mission Capable/Mission Commander

**MDS**—Mission Design Series  
**MDA**—Minimum Descent Altitude  
**MSA**—Minimum Safe Altitude  
**MSL**—Mean Sea Level  
**N/A**—Not Applicable  
**NM**—Nautical Miles  
**OG**—Operations Group  
**OPR**—Office of Primary Responsibility  
**OSO**—Offensive Systems Officer  
**PAR**—Precision Approach Radar  
**RDT&E**—Research Developmental Test and Evaluation  
**RPM**—Revolutions Per Minute  
**SAR**—Synthetic Aperture Radar  
**SD**—Senior Director  
**SEFE**—Stan/Eval Flight Examiner  
**SFO**—Simulated Flame Out  
**STAN/EVAL**—Standardization & Evaluation  
**TA**—Terrain Avoidance  
**TACAN**—Tactical Air Navigation  
**TERPS**—Terminal Instrument Procedures  
**UHF**—Ultra High Frequency  
**USAF**—United States Air Force  
**UTD**—Unit Training Device  
**VDP**—Visual Descent Point  
**VOR**—VHF Omni Range  
**VFR**—Visual Flight Rules  
**VHF**—Very High Frequency  
**VMC**—Visual Meteorological Conditions  
**WSO**—Weapons Systems Officer

### *Terms*

**Airlift**—Aircraft is considered to be performing airlift when manifested passengers or cargo are carried.  
**Allowable Cabin Load (ACL)**—The maximum payload that can be carried on an individual sortie.

**Alternate Entry Control Point (Alternate Entry Fix)**—The route point(s) upon which a control time for an alternate entry into the route is based.

**Assault Landing Zone (ALZ)**—A paved or semi-prepared (unpaved) airfield used to conduct operations in an airfield environment similar to forward operating locations. ALZ runways are typically shorter and narrower than standard runways.

**Augmented Crew**—Basic aircrew supplemented by additional qualified aircrew members to permit in-flight rest periods.

**Bingo Fuel**—The computed fuel remaining at a point in flight that will allow safe return to the point of intended landing with required fuel reserve.

**Block Time**—Time determined by the scheduling agency responsible for mission accomplishment for the aircraft to arrive at (block in) or depart from (block out) the parking spot.

**Category I Route**—Any route that does not meet the requirements of a category II route, including tactical navigation and over-water routes.

**Category II Route**—Any route on which the position of the aircraft can be accurately determined by the overhead crossing of a radio aid (NDB, VOR, TACAN) at least once each hour with the positive course guidance between such radio aids.

**Circular Error Average (CEA)**—Indicator of the accuracy of an airdrop operation. It is the radius of a circle within which half of the air-dropped personnel and items or material have fallen.

**Combat Control Team (CCT)**—A small task organized team of Air Force parachute and combat diver qualified personnel trained and equipped to rapidly establish and control drop, landing, and extraction zone air traffic in austere or hostile conditions. They survey and establish terminal airheads as well as provide guidance to aircraft for airlift operation. They provide command and control, and conduct reconnaissance, surveillance, and survey assessments of potential objective airfields or assault zones. They also can perform limited weather observations and removal of obstacles or unexploded ordnance with demolitions. Also called CCT.

**Command Chief Pilot**—An aircrew assigned to HQ AFMC/DOV or an appointee that assists the HQ Stan/Eval team and conducts flight evaluations on behalf of the headquarters

**Conference SKYHOOK**—Communication conference available to help aircrews solve in-flight problems that require additional expertise.

**Critical Phase of Flight**—Takeoff, low level (below MSA), airdrop, weapon delivery, air refueling, approach, and landing.

**Deadhead Time**—Duty time for crewmembers positioning or de-positioning for a mission or mission support function and not performing crew duties. Crewmembers will be listed on the flight authorization, but will log “other” time IAW AFI11-401. See AFI 11-202Vol 3 Chap 9 for further restrictions.

**Deviation**—A deviation occurs when takeoff time is not within  $-20/+14$  minutes of scheduled takeoff time.

**Difference (conversion) Evaluation**—An evaluation administered to an aircrew qualified in a variant of a particular aircraft. For example, variants of the B-707 airframe, different series of a particular M/D, or different block versions. Difference training is considered Phase I (initial qualification) training.

**Direct Instructor Supervision**—Supervision by an instructor of like specialty with immediate access to controls (for pilots, the instructor must occupy either the pilot or copilot seat).

**Drop Zone (DZ)**—A specified area upon which airborne troops, equipment, or supplies are air-dropped.

**Due Regard**—Operational situations that do not lend themselves to International Civil Aviation Organization (ICAO) flight procedures, such as military contingencies, classified missions, politically sensitive missions, or training activities. Flight under “Due Regard” obligates the military aircraft commander to be his or her own air traffic control (ATC) agency and to separate his or her aircraft from all other air traffic. (See FLIP General Planning, section 7)

**DZ Entry Point**—A fixed point on DZ run-in course where an aircraft or formation or aircraft may safely begin descent from IFR en route altitude to IFR drop altitude. The DZ entry point is a maximum of 40 NM prior to the DZ exit point according to Federal Aviation Administration FAR exemption 4371C. Formation descent will not begin until the last aircraft in formation is at or past the DZ entry point.

**DZ Exit Point**—A fixed point on the DZ escape flight path centerline, established during pre-mission planning, at which the formation will be at the minimum IFR en route altitude. Calculate the exit point based upon three-engine performance at airdrop gross weight. This point will be planned no less than four NM track distance beyond the DZ trailing edge.

**Earliest Descent Point (EDP)**—Earliest point in the DZ run-in course where the lead aircraft may begin IFR descent to IFR drop altitude and be assured of terrain clearance for the entire formation. Compute EDP by subtracting formation length from the computed DZ entry point.

**Equal Time Point**—Point along a route at which an aircraft may either proceed to destination or first suitable airport or return to departure base or last suitable airport in the same amount of time based on all engines operating.

**End Maneuver Area (EMA)**—A control point terminating the bomb run area.

**Entry Control Time**—The scheduled time over the Primary/Alternate Entry Control Point.

**Entry Track**—A track, usually associated with a bomber IR and beginning at the Primary or alternate Entry Point, along which descent is made to the low altitude portion of the route.

**Estimated Time In Commission (ETIC)**—Estimated time required to complete required maintenance. Used by maintenance in increments up to mission cancel time.

**Evaluation Form**—Worksheet used to document any evaluation to prepare the AF Form 8.

**Execution**—Command-level approval for initiation of a mission or portion thereof after due consideration of all pertinent factors. Execution authority is restricted to designated command authority.

**Familiar Field**—An airport in the local flying area at which unit assigned aircraft routinely perform transition training. Each operations group commander will designate familiar fields within their local flying area.

**Fix**—A position determined from terrestrial, electronic, or astronomical data.

**Fuel:**—

**Normal Fuel**—Fuel state on initial or at the final approach fix such that the aircraft can land with the fuel reserves specified in 11-2FT Vol. 3.

**Minimum Fuel**—Fuel state, where, upon reaching the destination, the aircraft can accept little or no delay. This is not an emergency situation but merely indicates an emergency situation is possible should any undue delay occur.

**Emergency Fuel**—Fuel state requires immediate traffic priority to safely recover the aircraft. An emergency will be declared and the aircraft immediately recovered at the nearest suitable field.

**Global Decision Support System (GDSS)**—AMC primary execution command and control system. GDSS is used to manage the execution of AMC airlift and tanker missions.

**Hazardous Cargo or Materials (HAZMAT)**—Articles or substances that are capable of posing significant risk to health, safety, or property when transported by air and classified as explosive (class 1), compressed gas (class 2), flammable liquid (class 3), flammable solid (class 4) oxidizer and organic peroxide (class 5), poison and infectious substances (class 6), radioactive material (class 7), corrosive material (class 8), or miscellaneous dangerous goods (class 9). Classes may be subdivided into divisions to further identify hazard (i.e., 1.1, 2.3, 6.1, etc.).

**Initial Cadre**—Those personnel assigned to conduct flight testing of experimental, developmental, or new aircraft for which there are no established formal training programs nor standardized evaluation criteria. Initial Cadre designations are appropriate through Initial Operational Capability.

**Instructor Supervision**—Supervision by an instructor of like specialty (see also Direct Instructor Supervision).

**Inter-fly**—The exchange and/or substitution of aircrews and aircraft between Mobility Air Forces (MAF) including crewmembers and/or aircraft from AETC, ACC, PACAF, USAFE, AMC, ANG and AFRC forces not gained by AFMC.

**Jumpmaster**—The assigned airborne qualified individual who controls parachutists from the time they enter the aircraft until they exit.

**Knock-it-Off**—A term any crewmember may call to terminate a training maneuver. Upon hearing “knock-it-off” the crew should establish a safe altitude, airspeed and return the aircraft power and flight controls to a normal configuration.

**Landing Zone (LZ)**—An area of sufficient size to allow discharge or pickup of passengers or cargo by touchdown or low hover.

**Latest Descent Point**—Latest planned point on the DZ run-in course where the formation plans to initiate descent to drop altitude. This is planned to ensure all aircraft in the formation are stabilized (on altitude and airspeed) prior to the drop.

**Lead Crew**—A crew consisting of a lead qualified aircraft commander and a lead qualified navigator.

**Letter of “X”s**—A document used in AFMC, signed by appropriate authority, that lists each assigned/attached aircrew’s aircraft designation, crew position, and mission qualifications.

**Local Training Mission**—A mission scheduled to originate and terminate at home station (or an off-station training mission), generated for training or evaluation and executed at the local level.

**Low Altitude Navigation Leg**—The route segments of a bomber IR between the TA Initiation Point and TA Termination Point. For non-bomber IR, the low altitude navigation leg is that portion of the route designed primarily for low altitude flight; does not include segments intended for descent into and climb-out from the route.

**Maintenance Status—**

Code 1 --No maintenance required.

Code 2 (Plus Noun) --Minor maintenance required, but not serious enough to cause delay. Add nouns that identify the affected units or systems, i.e. hydraulic, ultra high frequency (UHF) radio, radar, engine, fuel control, generator, etc. Attempt to describe the nature of the system malfunction to the extent that appropriate maintenance personnel will be available to meet the aircraft. When possible, identify system as mission essential (ME) or mission contributing (MC).

Code 3 (Plus Noun) --Major maintenance. Delay is anticipated. Affected units or systems are to be identified as in Code 2 status above.

**Manmade Obstructions—**Structures that present a hazard to flight. Structure height is measured from the ground-base.

**Mark—**The time when an aircraft passes over the landing zone or ground party.

**Military Airspace Management System (MASMS)—**The term MASMS in this instruction refers to Detachment 1, HQ ACC/DOR, the Military Airspace Management System Office at Offutt AFB, NE.

**MASMS IR Route—**A route scheduled through Det 1, HQ ACC/DOSR using the MASMS scheduling system.

**Mission—**1. The task, together with the purpose, that clearly indicates the action to be taken and the reason therefore. 2. In common usage, especially when applied to lower military units, a duty assigned to an individual or unit; a task. 3. The dispatching of one or more aircraft to accomplish one particular task.

**Mission Contributing (MC)—**Any degraded component, system, or subsystem which is desired, but not essential to mission accomplishment.

**Mission Essential (ME)—**A degraded component, system, or subsystem which is essential for safe aircraft operation or mission completion.

**Modified Contour—**Flight in reference to base altitude above the terrain with momentary deviations above and below the base altitude for terrain depressions and obstructions to permit a smooth flight profile.

**Non-MASMS IR Route—**A route in which scheduling activity in AP/1B is other than Det 1, HQ ACC/DOSR.

**Off Station Training Flight—**A training flight that originates or terminates at other than home station that is specifically generated to provide the aircrew experience in operating away from home station. Off station trainers will not be generated solely to transport passengers, cargo, or position/deposition crewmembers.

**Operational Risk Management (ORM)—**A logic-based common sense approach to making calculated decisions on human, material, and environmental factors before, during, and after Air Force operations. It enables commanders, functional managers and supervisors to maximize operational capabilities while minimizing risks by applying a simple systematic process appropriated for all personnel and Air Force functions.

**Operational Site—**An LZ that has (1) been surveyed by an instructor pilot (IP) experienced in remote operations to ensure no hazards exist, (2) a photograph available for aircrews to study the site prior to landing and (3) approval from the DFO to be designated an operational site. Whenever practical,

operational sites should have permanently installed and properly maintained wind indicators (wind sock, streamer, etc.).

**Opportune Airlift**—Transportation of personnel, cargo, or both aboard aircraft with no expenditure of additional flying hours to support the airlift.

**Originating Station**—Base from which an aircraft starts on an assigned mission. May or may not be the home station of the aircraft.

**Over Water Flight**—Any flight that exceeds power off gliding distance from land.

**Primary /Alternate Exit Point**—The final way-point published in FLIP for the primary or alternate exit route. For bomber IR, the final point on the climb-out track. For other routes, may coincide with the final TA Termination Point.

**Primary/Alternate TA Initiation Point (Initial/Start TA)**—The way-point at which aircrew are authorized to begin TA operations.

**Primary/Alternate TA Termination Point (Final/End TA)**—The point which denotes the end of TA operations.

**Primary Entry Control Point (PECP)**—Referred to as the Entry Fix. The route point upon which a control time for route entry is based.

**Provisions**—A statement on the front of the AF Form 8 indicating conditions for which the evaluation may satisfy recurring evaluation requirements, usually used for no-notice or out-of-the-eligibility-period evaluation. For example: “Provision: Open and closed book exams due NLT 30 Apr 97.”

**Reentry Track**—A track, commencing at the end of a Maneuver Area, on which low altitude re-entry to the route can be achieved to execute additional bomb/ECM/AGM runs.

**Restriction**—A statement on the front of the AF Form 8 that places limitations on the duties that may be performed by an aircrew, usually as a result of a failed ground or flight phase event. For example, “Restriction: Examinee will not fly unless under the supervision of an instructor pilot, Day Only, Conus Only”.

**Route Width (Route Perimeter)** —The route boundary limits within which aircraft are restricted to conduct operations.

**Senior Flight Examiner**—A commander authorized to conduct SPOT evaluations for assigned/attached aircrews.

**Significant Meteorological Information (SIGMET)**—Area weather advisory issued by an ICAO meteorological office relayed to and broadcast by the applicable ATC agency. SIGMET advisories are issued for tornadoes, lines of thunderstorms, embedded thunderstorms, large hail, severe and extreme turbulence, severe icing, and widespread dust or sand storms. SIGMET frequently covers a large geographical area and vertical thickness. They are prepared for general aviation and may not consider aircraft type or capability.

**Squadron Top 3**—Squadron ADO, DO, CC.

**Stabilization Point**—Point on the DZ run-in course at which the lead aircraft should plan to be stabilized at drop altitude and airspeed. This point will be planned to be at least 6 NM prior to the point of impact.

**Station Time**—In air transport operations, the time at which crews, passengers, and cargo are to be on board and ready for the flight.

**Start Maneuver Area (SMA)**—The point that defines the start of the bomb run area. Timing control must be within applicable tolerances.

**Suitable Airfield (C-130)**—Normally, suitable airfields are those which meet C-130 weather, fuel, and runway requirements (chapter 6) are within 50 NM of flight plan course centerline.

**Temporary - 2 (T-2) Modification**—T-2 modifications are temporary modification required to support research, development, test, and evaluation (RDT&E), in service testing of potential replacement items (form, fit, and function), and for aircraft/stores compatibility testing.

**Tactical Event (C-130)**—Airdrop, low level, formation, and threat avoidance approaches/ departures.

**TA Visual Conditions (B-52)**—Weather conditions that permit aircraft operations clear of clouds, provide the pilots visual contact with the ground, and three miles forward visibility.

**Terminal Fuel Flow (TFF) (C-130)**—The fuel flow rate expected during the last hour at cruise altitude. It is the difference between the fuel required for en-route time plus one hour and fuel required for en-route time. TFF may also be computed using the T.O. 1C-130X-1-1 fuel flow table and the estimated aircraft weight at destination. Estimated gross weight is determined by subtracting fuel burn off from takeoff gross weight.

**Terrain Avoidance (TA) (B-52)**—Method of maintaining ground clearance by Terrain Trace, EVS, or Radarscope Interpretation as close the terrain as equipment, command directives, and crew judgment allow.

**Time Out**—See definition for “Knock it Off.”

**Training Mission**—Mission executed at the unit level for the sole purpose of aircrew training for upgrade or proficiency. Does not include operational missions as defined in this AFI.

**Unilateral**—Operations confined to a single service.

**Visual Contour Flight**—Operation at a predetermined altitude above the ground, following contours visually using the radar altimeter to crosscheck altitude. An operating radar altimeter is required.

**Visual Reconnaissance**—Aerial survey of areas, routes, or LZs.

**Zero Fuel Weight**—Weight, expressed in pounds, of a loaded aircraft not including wing and body tank fuel. All weight in excess of the maximum zero fuel weight will consist of usable fuel.

**Attachment 2****PILOT EVALUATION CRITERIA****A2.1. General Grading Standards.**

A2.1.1. The grading criteria in this attachment are divided into six sections: Ground Phase, General, Qualification, Instrument, Instructor, and Mission. These areas match the graded areas for pilots found in forms specified in AFMC Supplement to AFI 11-202V2.

A2.1.2. If published guidance is not sufficient or does not apply, with concurrence from AFMC/DOV, follow lead MAJCOM criteria.

**A2.2. Area A: Ground Phase.****A2.2.1. Area A-1: Publications.**

A2.2.1.1. Digital TO's are approved for use by individual aircrew members. Maintain one CD per individual. Maintain a disk with all applicable supplements, changes, errata, etc. Maintain a summary file/list of affected paragraphs/pages/topics that have been amended. The summary file does not reprint the amendment, it is used as a tool to identify areas that have been affected.

A2.2.1.2. Q. Assigned flight publications were current, complete, and usable for any of the unit's tasking.

A2.2.1.3. Q-. Assigned flight publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.

A2.2.1.4. U. Contained major deviations, omissions, and/or errors which compromise safety of flight

**A2.2.2. Area A-2: Emergency Procedures Evaluation.**

A2.2.2.1. Q. Displayed correct, immediate response to Bold Face and non-Bold Face emergency situations. Effectively used checklist.

A2.2.2.2. Q-. Response to Bold Face emergencies 100% correct. Response to certain areas of non-Bold Face emergencies or follow-on steps to Bold Face procedures was slow/confused. Used the checklist when appropriate, but slow to locate required data.

A2.2.2.3. U. Incorrect response for Bold Face emergency. Unable to analyze problems or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or contents.

**A2.3. Area B: General.****A2.3.1. Area B-1: Safety (Critical).**

A2.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.

A2.3.1.2. U. Was not aware of or did not comply with all safety factors required for safe operation or mission accomplishment. Did not adequately clear. Operated the aircraft in a dangerous manner.

**A2.3.2. Area B-2: Judgement (Critical).**

A2.3.2.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.

A2.3.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.

**A2.3.3. Area B-3: Flight Discipline (Critical).**

A2.3.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.

A2.3.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

**A2.3.4. Area B-4: Briefings.**

A2.3.4.1. Q. Presented briefing in a professional manner. Briefing was well organized and in a logical sequence. Established objectives for the mission. Effective use of training aids. Concluded briefing in time to allow for element/crew briefing (if applicable) and preflight of personal equipment, aircraft and ordnance. Flight members clearly understood mission requirements. Considered the abilities of all flight members. Briefed corrective action from previous mission and probable problem areas when appropriate.

A2.3.4.2. Q-. Events out of sequence, hard to follow, some redundancy. Did not make effective use of available training aids. Dwelled on non-essential mission items. Limited discussion of techniques. Did not consider all flight members' abilities. Did not identify probable problem areas.

A2.3.4.3. U. Confusing presentation. Did not allow time for element/crew briefing (if applicable) and preflight of personal equipment, aircraft and ordnance. Did not use training aids. Redundant throughout briefing. Lost interest of flight members. Presentation created doubts or confusion. Did not establish objectives for the mission. Omitted major training events or did not discuss techniques. Ignored flight members' abilities and past problem areas.

**A2.3.5. Area B-5: Personal Equipment.**

A2.3.5.1. Q. Thoroughly familiar with personal equipment requirements, usage, and preflight.

A2.3.5.2. Q-. Possessed required personal equipment items and was familiar with most of the preflight and usage procedures.

A2.3.5.3. U. Unfamiliar with required personal equipment preflight and usage.

**A2.3.6. Area B-6: Forms, Reports, Logs.**

A2.3.6.1. Q. Completed or supervised completion of all required forms without significant error.

A2.3.6.2. Q-. Completed or supervised completion of all required forms with some errors or omissions that had to be corrected.

A2.3.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate detracting from recording the mission data.

**A2.3.7. Area B-7: Flight Planning.**

A2.3.7.1. Q. Developed a sound plan to accomplish the mission. Checked all factors applicable to flight in accordance with applicable directives. Aware of alternatives available, if flight cannot be completed as planned. Read and initialed all items in the Flight Crew Information File (FCIF)/Read Files. Prepared at briefing time. Required flight publications are current.

A2.3.7.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of performance capabilities or approved operating procedures/rules in some areas.

A2.3.7.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission. Displayed faulty knowledge of operating data or procedures. Did not review or initial Go/No-Go items. Not prepared at briefing time.

**A2.3.8. Area B-8: Use of Checklists.**

A2.3.8.1. Q. Used current checklist and accomplished all items in proper sequence with no deviations or omissions.

A2.3.8.2. Q-. Only minor deviations from checklist procedures were noted.

A2.3.8.3. U. Failed to use current checklist or deviated from checklist procedures resulting in the mission being compromised.

**A2.3.9. Area B-9: Crew Resource Management.**

A2.3.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.

A2.3.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.

A2.3.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission or safety of flight.

**A2.3.10. Area B-10: Communication Procedures.**

A2.3.10.1. Q. Radio and intra-cockpit communications were concise, accurate and effectively used to direct maneuvers or describe the tactical situation.

A2.3.10.2. Q-. Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, mutual support or mission accomplishment. Extraneous comments presented minor distractions.

A2.3.10.3. U. Radio communications were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

**A2.3.11. Area B-11: Knowledge of Directives.**

A2.3.11.1. Q. Demonstrated thorough knowledge of aircraft systems, limitations and performance characteristics.

A2.3.11.2. Q-. Knowledge of aircraft systems, limitations, and performance characteristics sufficient to perform the mission safely. Demonstrated deficiencies either in depth of knowledge or comprehension.

A2.3.11.3. U. Demonstrated unsatisfactory knowledge of aircraft systems, limitations or performance characteristics.

**A2.4. Area C: Qualification (Fixed Wing).****A2.4.1. Area C-1: Performance Data.**

A2.4.1.1. Q. Accurately computed/reviewed all required takeoff and landing data. Ensured all flight members were prepared. Aware of abort considerations, runway condition, weather, impact of weather on mission accomplishment.

A2.4.1.2. Q. Computed/reviewed required takeoff data with minor omissions or errors which did not detract from mission accomplishment or safety.

A2.4.1.3. U. Major errors or omissions which compromise safety. Faulty or improper knowledge of performance data.

**A2.4.2. Area C-2: Preflight Inspection.**

A2.4.2.1. Q. Established and adhered to station, engine start, taxi and take-off times to assure thorough preflight, check of personal equipment, crew briefing, etc. Accurately determined readiness of aircraft for flight.

A2.4.2.2. Q-. Minor procedural deviations which did not detract from the overall mission.

A2.4.2.3. U. 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.

**A2.4.3. Area C-3: Engine Start.**

A2.4.3.1. Q. Accomplished engine start IAW flight manual procedures and checklists. Used correct hand signals.

A2.4.3.2. Q-. Accomplished engine start with significant omissions or deviations from flight manual checklist procedures that did not affect safety.

A2.4.3.3. U. Omitted required procedures. Deviations to flight manual which could potentially damage aircraft or mission equipment.

**A2.4.4. Area C-4: Taxi.**

A2.4.4.1. Q. Ensured adequate maneuvering space for aircraft. Satisfactorily used power, steering, rudder, or brakes. Taxi speed was adequate for existing conditions. Displayed satisfactory knowledge of marshaling signals.

A2.4.4.2. Q-. Taxi speed was erratic. Taxi was safe but over-controlled and rough when turning or using brakes. Deviations or omissions from flight manual procedures that did not affect safety or mission accomplishment.

A2.4.4.3. U. Taxi speed dangerous to aircraft control or systems. Overused brakes causing hot brakes or tire damage. Intervention required to prevent further damage to aircraft.

**A2.4.5. Area C-5: Takeoff.**

A2.4.5.1. Q. Maintained smooth aircraft control throughout takeoff. Performed takeoff IAW flight manual procedures and techniques.

A2.4.5.2. Q-. Minor flight manual procedural or technique deviations. Control was rough or erratic.

A2.4.5.3. U-. Takeoff potentially dangerous. Exceeded aircraft systems limitations. Raised gear too early/late. Failed to establish proper climb attitude. Over-controlled aircraft resulting in excessive deviations from intended flight path.

**A2.4.6. Area C-6: Climb Procedures.**

A2.4.6.1. Q. Climb was IAW the applicable flight manual.

A2.4.6.2. Q-. Some under or over-control. Flight manual deviations significant but did not affect safety of flight or mission accomplishment.

A2.4.6.3. U. Failed to comply with flight manual procedures. Major deviation affecting safety and mission accomplishment.

**A2.4.7. Area C-7: Traffic Pattern.**

A2.4.7.1. Q. Performed patterns/approaches IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was smooth and positive. Accurately aligned with runway. Maintained proper/briefed airspeed/AOA. Airspeed -5/+10 knots.

A2.4.7.2. Q-. Performed patterns/approaches with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was not consistently smooth, but safe. Alignment with runway varied. Slow to correct to proper/briefed airspeed/AOA/ Airspeed -5/+15 knots.

A2.4.7.3. U. Approaches not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Erratic aircraft control. Large deviations in runway alignment. Exceeded Q- parameters.

**A2.4.8. Area C-8: Full Flap/Partial Flap Landing (Fixed Wing – Fighter/Attack/Trainer, if applicable).**

A2.4.8.1. Applicable to normal VFR approaches. Where runway configuration, arresting cable placement or flight manual limitations require an adjustment to the desired touchdown point, a simulated runway threshold will be identified and the grading criteria applied accordingly. For instrument approaches, the examinee should utilize a normal glide slope from either the decision height or from a point where visual acquisition of the runway environment is made.

A2.4.8.2. Q. Performed landings IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point: 150' to 1000' from the runway threshold (Fighters, Attack, Trainers).

A2.4.8.3. Q-. Performed landings with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point: 0' to 149' or 1001' to 1500' from the runway threshold.

A2.4.8.4. U. Landing not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point exceeded Q- criteria.

**A2.4.9. Area C-8: Full Flap/Partial Flap Landing** (Fixed Wing – Bomber/Tanker/Transport, if applicable).

A2.4.9.1. Where runway configuration, arresting cable placement or flight manual limitations require an adjustment to the desired touchdown point, a simulated runway threshold will be identified and the grading criteria applied accordingly. Flight manual or other regulatory guidance that is more restrictive than the criteria detailed below should be used for touchdown point criteria.

A2.4.9.2. Q. Performed landings IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point: Not more than 3,000' from the threshold or 1/3 of runway, whichever is less, and within stopping distance for runway available.

A2.4.9.3. Q-. Performed landings with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point: Outside of Q criteria but within stopping distance for runway available.

A2.4.9.4. U. Landing not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point not within stopping distance for runway available.

**A2.4.10. Area C-9: No Flap Landing** (Fixed Wing).

A2.4.10.1. Q. Used sound judgment. Configured at the appropriate position/altitude. Flew final based on recommended procedures, airspeed/AOA and glide path. Smooth, positive control of aircraft. Set parameters for ejection if necessary. Touchdown point was IAW criteria detailed in paragraph [A2.4.8](#).

A2.4.10.2. Q-. Safety not compromised. Configured at a position and altitude which allowed for a safe approach. Minor deviations from recommended procedures, airspeed/ AOA and altitudes. Unnecessary maneuvering due to minor errors in planning or judgment. Touchdown point was IAW criteria detailed in paragraph [A2.4.8](#).

A2.4.10.3. U. Major deviations from recommended procedures, airspeed/AOA and altitudes. Required excessive maneuvering due to inadequate planning or judgment. Did not set parameters for ejection if approach was unsuccessful. Touchdown point was IAW criteria detailed in paragraph [A1.4.8](#).

**A2.4.11. Area C-10: Engine Out Pattern/Landing/SFO** : Includes simulated engine out varied flap settings, SFO, as appropriate. In addition to the criteria below, criteria from [A2.4.10](#) also applies to this area if applicable. **C-130 IP/EP Only**: Grade simulated two-engine out approach, conditions/mission permitting.

A2.4.11.1. Q. Complied with all flight manual and operational procedures. Maintained safe maneuvering airspeed/AOA. Flew approach compatible with the situation. Adjusted approach for type emergency simulated.

A2.4.11.2. Q-. Minor procedural errors. Erratic airspeed/ AOA control. Errors did not detract from safe handling of the situation.

A2.4.11.3. U. Did not comply with applicable procedures. Erratic airspeed/AOA control compounded problems associated with the emergency. Flew an approach which was incompatible with the simulated emergency. Did not adjust approach for simulated emergency.

**A2.4.12. Area C-11: Engine Out Go-Around (Fixed Wing, if applicable).**

A2.4.12.1. Q. Initiated and performed go-around promptly in accordance with flight manual and operational procedures and directives.

A2.4.12.2. Q-. Slow to initiate go-around or procedural steps.

A2.4.12.3. U. Did not self-initiate go-around when appropriate or directed. Techniques inappropriate or applied incorrect procedures.

**A2.4.13. Area C-12: Full Stop Landing.**

A2.4.13.1. Q. Landing accomplished IAW flight manual procedures. Aircraft control throughout the landing was smooth and positive using proper braking, steering, and flight control inputs.

A2.4.13.2. Q-. Landing accomplished with significant deviations to established procedures but safety was not affected. Aircraft control to include braking, steering, and flight control inputs was erratic, but safe.

A2.4.13.3. U. Airspeed, alignment, or sink rate limitations exceeded. Landing unsafe, inappropriate control inputs jeopardized safety.

**A2.4.14. Area C-13: After Landing.**

A2.4.14.1. Q. Appropriate after landing checks and aircraft taxi procedures were accomplished.

A2.4.14.2. Q-. Significant deviations or omissions from established procedures but safety and mission effectiveness were not affected.

A2.4.14.3. U. Checks were not accomplished in timely manner. Errors of omission committed without correction.

**A2.4.15. Area C-14: Systems Knowledge.**

A2.4.15.1. Q. Thorough knowledge of aircraft systems, limitations, and performance characteristics.

A2.4.15.2. Q-. Knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.

A2.4.15.3. U. Unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

**A2.4.16. Area C-15: NAS Rules and Procedures.**

A2.4.16.1. Q. Complied with NAS rules/requirements and airspeed restrictions or potential traffic conflicts within NAS. When descending VFR took appropriate precautions to avoid traffic conflicts.

A2.4.16.2. Q-. Same as above but minor deviations detracted from safe accomplishment of the mission.

A2.4.16.3. U. Unfamiliar with NAS rules and procedures. Unaware of potential traffic conflicts. Did not use appropriate risk mitigating tools such as flight following during VFR operations in high traffic areas.

**A2.5. Section C: Qualification (Helicopter Pilot).****A2.5.1. Area C-1: Performance Data.**

A2.5.1.1. Q. Accurately computed/reviewed all required takeoff and landing data. Ensured all flight members were prepared. Individual was aware of abort considerations, runway condition, weather, impact of weather on mission accomplishment.

A2.5.1.2. Q-. Computed/reviewed required takeoff data with minor omissions or errors, which did not detract from mission accomplishment or safety.

A2.5.1.3. U. Major errors or omissions which compromise safety. Individual demonstrated faulty or improper knowledge of performance data.

**A2.5.2. Area C-2: Preflight Inspection.**

A2.5.2.1. Q. Established and adhered to station, engine start, taxi and take-off times to assure thorough preflight, check of personal equipment, crew briefing, etc. Accurately determined readiness of aircraft for flight.

A2.5.2.2. Q-. Minor procedural deviations, which did not detract from the overall mission.

A2.5.2.3. U. Individual committed 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.

**A2.5.3. Area C-3: Engine Start.**

A2.5.3.1. Q. Accomplished engine start IAW flight manual procedures and checklists. Used correct hand signals.

A2.5.3.2. Q-. Accomplished engine start with significant omissions or deviations from flight manual checklist procedures that did not affect safety.

A2.5.3.3. U. Omitted required procedures. Individual committed deviations to flight manual, which could potentially damage aircraft or mission equipment.

**A2.5.4. Area C-4: Taxi.**

A2.5.4.1. Q. Ensured adequate maneuvering space for aircraft. Satisfactorily used power, steering, rudder, or brakes. Taxi speed was adequate for existing conditions. Displayed satisfactory knowledge of marshaling signals.

A2.5.4.2. Q-. Taxi speed was erratic. Taxi was safe but over-controlled and rough when turning or using brakes. Deviations or omissions from flight manual procedures that did not affect safety or mission accomplishment.

A2.5.4.3. U. Taxi speed dangerous to aircraft control or systems. Overused brakes causing hot brakes or tire damage. Intervention required to prevent further damage to aircraft.

**A2.5.5. Area C-5: Takeoff.**

A2.5.5.1. Q. Maintained smooth aircraft control throughout takeoff. Performed takeoff IAW flight manual procedures and techniques.

A2.5.5.2. Q-. Minor flight manual procedural or technique deviations. Control was rough or erratic.

A2.5.5.3. U-. Individual performed a potentially dangerous takeoff. Exceeded aircraft systems limitations. Raised gear too early/late. Failed to establish proper climb attitude. Over-controlled aircraft resulting in excessive deviations from intended flight path.

**A2.5.6. Area C-6: Climb Procedures.**

A2.5.6.1. Q. Climb was IAW the applicable flight manual.

A2.5.6.2. Q-. Some under or over-control. Flight manual deviations significant but did not affect safety of flight or mission accomplishment.

A2.5.6.3. U. Failed to comply with flight manual procedures. Major deviation affecting safety and mission accomplishment.

**A2.5.7. Area C-7: Traffic Pattern.**

A2.5.7.1. Q. Performed patterns/approaches IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was smooth and positive. Accurately aligned with runway. Maintained proper/briefed airspeed/AOA. Airspeed +/-10 knots. Altitude +/- 50 feet.

A2.5.7.2. Q-. Performed patterns/approaches with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was not consistently smooth, but safe. Alignment with runway varied. Slow to correct to proper/briefed airspeed/AOA. Airspeed +/-20 knots. Altitude +/- 100 feet.

A2.5.7.3. U. Approaches not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Erratic aircraft control. Individual committed large deviations in runway alignment. Exceeded Q- parameters.

**A2.5.8. Area C-8: Hovering Maneuvers.**

A2.5.8.1. Q. Examinee demonstrated precise, smooth control while following all procedures and directives. Accurately anticipates wind correction requirements and applies accordingly.

A2.5.8.2. Q-. Hovering altitude, speed, and direction erratic. Was safe, but over-controlled and/or rough.

A2.5.8.3. U. Unable to maintain altitude, speed, or direction. Control inputs inappropriate for wind conditions. Unsafe control inputs caused major deviations.

**A2.5.9. Area C-9: Autorotation – Straight-In.**

A2.5.9.1. Q. Smooth, positive control of airspeed and rotor RPM throughout the maneuver. Flare and recovery were precise, allowing for a smooth power-on recovery IAW flight manual procedure.

A2.5.9.2. Q-. Minor deviation from flight manual procedures, but did not compromise safety of flight. Slow in recognizing and controlling airspeed, rotor RPM, and throttle inputs.

A2.5.9.3. U. Major deviations from flight manual procedures. Rough, imprecise control caused unsafe airspeed, altitude, and rotor RPM deviations.

**A2.5.10. Area C-10: Autorotation – Turning.**

A2.5.10.1. Q. Smooth, positive control of airspeed and rotor RPM throughout the maneuver. Flare and recovery were precise, allowing for a smooth power-on recovery IAW flight manual procedure.

A2.5.10.2. Q-. Minor deviation from flight manual procedures, but did not compromise safety of flight. Slow in recognizing and controlling airspeed, rotor RPM, and throttle inputs.

A2.5.10.3. U. Major deviations from flight manual procedures. Rough, imprecise control caused unsafe airspeed, altitude, and rotor RPM deviations.

**A2.5.11. Area C-11: Approach/Landing.**

A2.5.11.1. Q. Approach flown IAW flight manual procedures. Aircraft control was positive, alignment with the intended touchdown area was maintained. Airspeed and altitude maintained +/- 10 KIAS, +/- 50 feet. Maintained 90 KIAS and 500 feet AGL on downwind, and 70 KIAS and 300 feet AGL on base leg. Conducted level turn to final. Cleared the aircraft.

A2.5.11.2. Q-. Approach and/or aircraft control rough and erratic. Deviations to flight manual guidelines significant but did not affect safety or mission accomplishment. Airspeed and altitude maintained +/- 20 KIAS, +/- 100 feet.

A2.5.11.3. U. Approaches procedurally unsafe. Major airspeed, heading, and altitude deviations resulting in failure to accomplish a safe landing. Did not clear the aircraft. Exceeded Q- criteria.

**A2.5.12. Area C-12: Remote Ops/Site Evaluation.**

A2.5.12.1. Q. Familiar with procedures and able to execute appropriate maneuvers IAW the flight manual. Examinee was thoroughly aware of power requirements and limitations. Effectively assessed landing risk. Evaluated and communicated landing area obstacles, size, and topography, winds and turbulence.

A2.5.12.2. Q-. Missed minor factors pertinent to the approach. Evaluation not tailored to the situation or excessively detailed and time consuming. Confused or disorganized communication with crew.

A2.5.12.3. U. Major deviations from Q criteria. Errors or omissions precluded safe and effective maneuvers/effectiveness. Failed to consider pertinent details. Examinee was unable to clearly communicate with crew.

**A2.5.13. Area C-13: After Landing.**

A2.5.13.1. Q. Appropriate after landing checks and aircraft taxi procedures were accomplished.

A2.5.13.2. Q-. Significant deviations or omissions from established procedures but safety and mission effectiveness were not affected.

A2.5.13.3. U. Checks were not accomplished in timely manner. Errors of omission committed without correction.

**A2.5.14. Area C-14: Systems Knowledge.**

A2.5.14.1. Q. Examinee possessed a thorough knowledge of aircraft systems, limitations, and performance characteristics.

A2.5.14.2. Q-. Examinee possessed knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.

A2.5.14.3. U. Examinee was unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

**A2.5.15. Area C-15: Boldface Emergencies.**

A2.5.15.1. Q. Properly analyzed the situation without undue delay and demonstrated adequate knowledge of procedures to effectively handle the emergency. Boldface/Critical Action Procedures (CAPs) required by applicable flight manuals were accomplished without omission and in the proper sequence. Unnecessary procedures did not preclude satisfactory control of the emergency or further complicate the situation. Effective and timely use made of other crewmembers, the flight manual, and checklist. Positive control of the aircraft existed at all times.

A2.5.15.2. U. Examinee committed incorrect response(s) to Boldface/CAPs. Unable to analyze problems or take corrective action. Did not use checklist, flight manual, or other crewmembers even though it was a procedural requirement. Did not maintain positive control of the aircraft at all times.

**A2.5.16. Area C-16: Non-Critical Emergencies.**

A2.5.16.1. Q. Demonstrated satisfactory knowledge of non-critical emergency procedures. Properly analyzed the situation and demonstrated or explained the appropriate procedures as outlined in the flight manual. Examinee was thoroughly familiar with flight manual and checklist arrangement and contents.

A2.5.16.2. Q-. Examinee response to presented situation was slow or confused. Slow to use checklist, flight manual, and other crewmembers when appropriate. Slow to locate required data in checklist or flight manual.

A2.5.16.3. U. Unable to analyze the problem and formulate a solution. Examinee was unfamiliar with checklists and flight manual data. Failed to utilize crewmembers when appropriate.

**A2.5.17. Area C-17: NAS Rules and Procedures.**

A2.5.17.1. Q. Complied with NAS rules/requirements and airspeed restrictions or potential traffic conflicts within NAS. When descending VFR took appropriate precautions to avoid traffic conflicts.

A2.5.17.2. Q-. Same as above but minor deviations detracted from safe accomplishment of the mission.

A2.5.17.3. U. Unfamiliar with NAS rules and procedures. Unaware of potential traffic conflicts. Did not use appropriate risk mitigating tools such as flight following during VFR operations in high traffic areas.

## **A2.6. Section D: Instrument.**

### **A2.6.1. Area D-1: Instrument Takeoff.**

A2.6.1.1. Q. Maintained smooth aircraft control throughout takeoff. Performed takeoff IAW flight manual procedures and AFMAN 11-217.

A2.6.1.2. Q-. Minor procedural deviations. Control was rough or erratic.

A2.6.1.3. U-. Examinee executed a potentially dangerous takeoff. Exceeded aircraft systems limitations. Raised gear too early/late. Failed to establish proper climb attitude. Over controlled aircraft resulting in excessive deviations from intended flight path.

### **A2.6.2. Area D-2: Instrument Departure.**

A2.6.2.1. Q. Performed departure as published/directed and complied with all restrictions.

A2.6.2.2. Q-. Minor deviations in airspeed and navigation occurred during completion of departure.

A2.6.2.3. U. Failed to comply with published/directed departure instructions.

### **A2.6.3. Area D-3: Climb/Level off.**

A2.6.3.1. Q. Climb IAW flight manual. Accomplished required checks. Leveled off smoothly. Promptly established proper cruise airspeed.

A2.6.3.2. Q-. Climb airspeed deviations. Level-off was erratic. Slow in establishing proper cruise airspeed.

A2.6.3.3. U. Level-off was grossly erratic. Exceeded Q- limits. Excessive delay or failed to establish proper cruise airspeed. Failed to reset altimeter, as required.

### **A2.6.4. Area D-4: Unusual Attitudes (May be evaluated during EPE).**

A2.6.4.1. Q. Smooth, positive recovery to level flight with correct recovery procedures.

A2.6.4.2. Q-. Slow to analyze attitude, or erratic in recovery to level flight. Correct recovery procedures used.

A2.6.4.3. U. Unable to determine attitude. Improper recovery procedures were used.

### **A2.6.5. Area D-5: Holding.**

A2.6.5.1. Q. Examinee entered Holding and used procedures IAW applicable directives. Made appropriate wind drift and timing adjustments. Leg timing +/- 15 seconds, TACAN +/- 2 nm.

A2.6.5.2. Q-. Examinee had difficulty in entering the holding pattern and/or establishing correct inbound leg time. Inadequate wind drift correction prevented expeditious inbound course interception; course intercepted prior to holding fix. Leg timing +/- 20 seconds, TACAN +/- 3 nm.

A2.6.5.3. U. Unable to determine direction of turn or timing criteria. Disoriented; unable to intercept inbound course prior to holding fix. Exceeded Q- timing and TACAN criteria.

**A2.6.6. Area D-6: Descent/Arrival:**

A2.6.6.1. Q. Performed descent as directed, complied with all restrictions. Planned ahead for altitude restrictions.

A2.6.6.2. Q-. Performed descent as directed with minor deviations. Difficulty achieving altitude restrictions. Slow to respond to controller instructions.

A2.6.6.3. U. Examinee performed descent with major deviations. Ignored controller instructions. Violated altitude restrictions.

**A2.6.7. Area D-7: Instrument Traffic Pattern.**

A2.6.7.1. Q. Performed procedures as published or directed and IAW flight manual. Examinee executed smooth and timely response to controller instruction.

A2.6.7.2. Q-. Examinee performed procedures with minor deviations. Slow to respond to controller instruction.

A2.6.7.3. U. Examinee performed procedures with major deviations/ erratic corrections. Failed to comply with controller instruction.

**A2.6.8. Area D-8: Precision Approach (ILS/MLS)**

A2.6.8.1. Q. Examinee performed procedures as published and IAW applicable flight manual. Smooth and timely corrections to azimuth and glide slope. Complied with decision height and position would have permitted a safe landing. Maintained proper/briefed AOA. Approach was within the following parameters:

A2.6.8.1.1. Airspeed +10/-5 kts. (N/A Helicopters; use general airspeed criteria)

A2.6.8.1.2. Glide Slope/Azimuth within one dot.

A2.6.8.1.3. Initiated missed approach (if applicable) at decision height, +50/-0 ft.

A2.6.8.2. Q-. Examinee 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 AOA. Approach exceeded Q parameters but was within the following parameters:

A2.6.8.2.1. Airspeed +15/-5 kts. (N/A Helicopters; use general airspeed criteria)

A2.6.8.2.2. Glide Slope within one dot low/two dots high.

A2.6.8.2.3. Azimuth within two dots.

A2.6.8.2.4. Initiated missed approach (if applicable) at decision height, +100/-0 ft.

A2.6.8.3. U. Examinee performed procedures with major deviations. Examinee made erratic corrections. Exceeded Q- limits. Did not comply with decision height or position at Decision Height (DH) would not have permitted a safe landing.

**A2.6.9. Area D-9: Precision Approach (PAR, if available).**

**Note.** Both an ILS/MLS and PAR must be evaluated if facilities are available. If facilities are not available, the evaluation can be completed if one precision and one non-precision approach are evaluated.

A2.6.9.1. Q. Examinee performed procedures as directed and IAW applicable flight manual. Examinee performed smooth and timely responses to controller instruction. Complied with decision height. Position would have permitted a safe landing. Maintained proper/briefed AOA. Maintained glide path with only minor deviations. Approach was flown within the following parameters:

A2.6.9.1.1. Airspeed +10/-5 kts. (N/A Helicopters; use general airspeed criteria)

A2.6.9.1.2. Heading within 5 degrees of controller instruction.

A2.6.9.1.3. Initiated missed approach (if applicable) at decision height, +50/-0 ft.

A2.6.9.2. Q-. Examinee performed procedures with minor deviations. Slow to respond to controller's instructions. Position would have permitted a safe landing. Slow to correct to proper/ briefed AOA. Improper glide path control. Approach was flown outside of Q standards but within the following parameters:

A2.6.9.2.1. Airspeed N/A Helicopters; use general airspeed criteria

A2.6.9.2.2. Heading within 10 degrees of controller instruction.

A2.6.9.2.3. Initiated missed approach (if applicable) at decision height, +100/-0 ft.

A2.6.9.3. U. Examinee performed procedures with major deviations. Examinee made erratic corrections. Did not respond to controller instruction. Exceeded Q- limits. Did not comply with decision height and/or position would not have permitted a safe landing. Erratic glide path control.

#### A2.6.10. Area D-10: Non-Precision Approach.

A2.6.10.1. Q. Examinee adhered to all published/directed procedures and restrictions. Used appropriate descent rate to arrive at Minimum Descent Altitude (MDA) at or before Visual Descent Point (VDP)/ Missed Approach Point (MAP). Position would have permitted a safe landing. Maintained proper/briefed AOA. Approach was flown within the following parameters:

A2.6.10.1.1. Airspeed +10/-5 kts. (N/A Helicopters; use general airspeed criteria)

A2.6.10.1.2. Heading +5 degrees (ASR).

A2.6.10.1.3. Course +5 degrees at MAP.

A2.6.10.1.4. Localizer course guidance less than one dot deflection.

A2.6.10.1.5. Minimum Descent Altitude +100/-0 feet.

A2.6.10.2. Q-. Examinee 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. Approach was flown outside of Q parameters, but within the following parameters:

A2.6.10.2.1. Airspeed +15/-5 kts. (N/A Helicopters; use general airspeed criteria)

A2.6.10.2.2. Heading +10 degrees (ASR).

A2.6.10.2.3. Course +10 degrees at MAP.

A2.6.10.2.4. Localizer course guidance within two dots deflection.

A2.6.10.2.5. Minimum Descent Altitude +150/-50 feet.

A2.6.10.3. U. Examinee 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.

**A2.6.11. Area D-11: Missed Approach/Climb Out.**

A2.6.11.1. Q. Examinee executed missed-approach/climb-out as published/directed. Completed all procedures IAW applicable flight manual.

A2.6.11.2. Q-. Examinee executed missed approach/climb-out with minor deviations. Slow to comply with published procedures, controller's instructions or flight manual procedures.

A2.6.11.3. U. Examinee executed missed-approach/climb-out with major deviations, or did not comply with applicable directives.

**A2.7. Section E: Instructor.**

**A2.7.1. Area E-1: Instructional Ability.**

A2.7.1.1. Q. Examinee demonstrated excellent instructor/evaluator ability. Clearly defined all mission requirements and any required additional training/corrective action. Instruction/evaluation was accurate, effective and timely. Was completely aware of aircraft/mission situation at all times.

A2.7.1.2. Q-. Examinee had problems with communication or analysis which degraded effectiveness of instruction/evaluation.

A2.7.1.3. U. Examinee 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.

**A2.7.2. Area E-2: Briefing/Debriefing.**

A2.7.2.1. Q. Examinee conducted a well-organized briefing and debriefing which analyzed mission requirements, identified significant discrepancies and presented the correct procedure. Adequately briefed and instructed the student on specific mission requirements. Did not overwhelm the upgrading aircrew with a long and detailed discussion of minor discrepancies.

A2.7.2.2. Q-. Examinee conducted an acceptable debriefing. Omitted some items that were important to completing the student's mission. Analyzed most significant discrepancies and presented the correct procedures with minor deviations or omissions.

A2.7.2.3. U. Examinee failed to instruct required mission items. Examinee was unable to analyze deviations and present corrections. Did not notice or debrief major deviations. Mission non-effective for planning and instruction reasons.

**A2.7.3. Area E-3: Demonstration and Performance.** For instructor evaluations where the IP normally instructs from a chase aircraft, the examinee will fly a portion of the mission in the chase position..

A2.7.3.1. Q. Examinee performed required maneuvers within prescribed parameters. Provided concise, meaningful in-flight commentary. Demonstrated excellent instructor proficiency.

A2.7.3.2. Q-. Examinee performed required maneuvers with minor deviations from prescribed parameters. In-flight commentary was sometimes unclear.

A2.7.3.3. U. Examinee was unable to properly perform required maneuvers. Made major procedural errors. Did not provide in-flight commentary. Demonstrated below-average instructor proficiency.

**A2.7.4. Area E-4: Conduct of the Mission.**

A2.7.4.1. Q. Examinee executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.

A2.7.4.2. Q-. Examinee made untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not effectively used to the extent specific mission objectives were not achieved.

A2.7.4.3. U. Examinee's unacceptable or unsafe decisions compromised safety. Undisciplined actions violated training rules repeatedly.

**A2.7.5. Area E-5: Touch and Go Landings (Fixed Wing).**

A2.7.5.1. Q. Examinee demonstrated thorough knowledge of safety emergency contingencies during touch and go landings. Performed maneuver IAW established procedures accomplishing all checklist items in a timely manner.

A2.7.5.2. Q-. Examinee made minor deviations or omissions from established procedures but safety and mission accomplishment not affected. Limited knowledge of safety/emergency contingencies during touch and go landings.

A2.7.5.3. U. Examinee improperly configured the aircraft for landing or procedures compromised safety. Examinee was unprepared for contingencies.

**A2.8. Section F: Mission.**

**A2.8.1. Area F-1: Knowledge.**

A2.8.1.1. Q. Examinee was fully knowledgeable in mission requirements, test plan directives, aircraft limitations, and partial flight manual. Examinee effectively coordinated with other crew members and project personnel.

A2.8.1.2. Q-. Examinee demonstrated a limited knowledge of mission requirements, test plan directives, aircraft limitations, or the partial flight manual which degraded a portion of the mission objective or CRM.

A2.8.1.3. U. Examinee had inadequate knowledge of mission requirements, test plan directive, aircraft limitations, and partial flight manual. Did not effectively use resources. Directly affected successful mission accomplishment.

**A2.8.2. Area F-2: Planning.**

A2.8.2.1. Q. Examinee considered all factors necessary for mission accomplishment to include weather, mission profile, airspace utilization/restrictions, and proper documentation.

A2.8.2.2. Q-. Examinee made limited consideration of all factors necessary for mission accomplishment. However, did not affect mission objective directly, but may have contributed toward lack of effective CRM.

A2.8.2.3. U. Examinee did not consider all factors necessary for mission accomplishment. Lack of consideration contributed negatively towards successful mission completion.

**A2.8.3. Area F-3: Execution.**

A2.8.3.1. Q. Examinee accomplished major mission objectives in a timely and skillful manner.

A2.8.3.2. Q-. Examinee committed errors or omission, which did not render mission ineffective, but indicated a definite need for additional training.

A2.8.3.3. U. Examinee's improper execution of duties negatively impacted mission accomplishment.

**A2.8.4. Area F-4: Security (Critical).**

A2.8.4.1. Q. Examinee maintained adequate security of mission information and material throughout preflight, flight, and post flight.

A2.8.4.2. U. Examinee used inadequate security procedures, which would lead to the compromise of mission information and/or material.

**Attachment 3****WSO/NAVIGATOR/OSO/EWO/DSO EVALUATION CRITERIA****A3.1. General Grading Standards.**

A3.1.1. The grading criteria in this attachment are divided into five sections: Ground Phase, General, Qualification, Instructor, and Mission. Use all sections for criteria applicable to the events performed on the evaluation. These areas match the graded areas for WSO/Navigator/OSO/EWO/DSOs found on forms specified in AFMC Supplement to AFI 11-202V2

A3.1.2. Evaluate events in Area C with respect to aircraft equipment and normal duties as it pertains to the applicable crew position.

**A3.2. Section A: Ground Phase.****A3.2.1. Area A-1: Publications.**

A3.2.1.1. Digital TO's are approved for use by individual aircrew members. Maintain one CD per individual. Maintain a disk with all applicable supplements, changes, errata, etc. Maintain a summary file/list of affected paragraphs/pages/topics that have been amended. The summary file does not reprint the amendment, it is used as a tool to identify areas that have been affected.

A3.2.1.2. Q. Assigned flight publications were current, complete, and usable for any of the unit's tasking.

A3.2.1.3. Q-. Assigned flight publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.

A3.2.1.4. U. Contained major deviations, omissions, and/or errors which compromise safety of flight.

**A3.2.2. Area A-2: Emergency Procedures Evaluation.**

A3.2.2.1. Q. Displayed correct, immediate response to Bold Face and non-Bold Face emergency situations. Effectively used checklist.

A3.2.2.2. Q-. Response to Bold Face emergencies 100% correct. Response to certain areas of non-Bold Face emergencies or follow-on steps to Bold Face procedures was slow/confused. Used the checklist when appropriate, but slow to locate required data.

A3.2.2.3. U. Incorrect response for Bold Face emergency. Unable to analyze problems or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or contents.

**A3.3. Section B: General.****A3.3.1. Area B-1: Safety (Critical):**

A3.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment. A3.3.1.2. U. Was not aware of or did not comply with all safety factors required for safe operation or mission accomplishment. Did not adequately clear. Operated aircraft equipment in a dangerous manner.

**A3.3.2. Area B-2: Judgement (Critical):**

A3.3.2.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.

A3.3.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.

**A3.3.3. Area B-3: Flight Discipline (Critical).**

A3.3.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.

A3.3.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

**A3.3.4. Area B-4: Briefings.**

A3.3.4.1. Q. Well organized and presented in a logical sequence. Concluded briefing in time to allow for element/crew briefing (if applicable) and preflight of personal equipment, aircraft and ordnance. Presented briefing in a professional manner. Effective use of training/visual aids. Flight members clearly understood mission requirements. Established objectives for the mission. Presented all training events and effective technique discussion for accomplishing the mission. Considered the abilities of all flight members. Briefed corrective action from previous mission and probable problem areas when appropriate.

A3.3.4.2. Q-. Events out of sequence, hard to follow, some redundancy. Did not make effective use of available training/visual aids. Dwelled on non-essential mission items. Omitted some minor training events. Limited discussion of techniques. Did not consider all flight members' abilities. Did not identify probable problem areas.

A3.3.4.3. U. Confusing presentation. Did not allow time for element/crew briefing (if applicable) and preflight of personal equipment, aircraft and ordnance. Did not use training aids. Redundant throughout briefing. Lost interest of flight members. Presentation created doubts or confusion. Did not establish objectives for the mission. Omitted major training events or did not discuss techniques. Ignored flight members' abilities and past problem areas.

**A3.3.5. Area B-5: Personal Equipment.**

A3.3.5.1. Q. Thoroughly familiar with personal equipment requirements, usage, and preflight.

A3.3.5.2. Q-. Possessed required personal equipment items and was familiar with most of the preflight and usage procedures.

A3.3.5.3. U. Unfamiliar with required personal equipment preflight and usage.

**A3.3.6. Area B-6: Forms, Reports, Logs.**

A3.3.6.1. Q. Completed or supervised completion of all required preflight and post flight forms and documentation without significant error.

A3.3.6.2. Q-. Completed or supervised completion of all required preflight and post flight forms and documentation with some errors or omissions that had to be corrected.

A3.3.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate detracting from recording the mission data.

**A3.3.7. Area B-7: Flight Planning.**

A3.3.7.1. Q. Developed a sound plan to accomplish the mission. Checked all factors applicable to flight in accordance with applicable directives. Had thorough understanding of computerized mission planning software and was able to produce accurate, complete mission materials. Considered NAS rules and requirements such as VFR/IFR and IFR/VFR transition, airspeed restrictions and potential traffic conflicts. Developed contingencies to mitigate potential risks. Produced an effective alternate mission if available, when primary mission cannot be completed as planned. Read and initialed for all items in the Flight Crew Information File (FCIF)/Read Files. Prepared at briefing time.

A3.3.7.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of performance capabilities or approved operating procedures/ rules in some areas.

A3.3.7.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission. Displayed faulty knowledge of operating data or procedures. Did not review or initial Go/No-Go items. Not prepared at briefing time.

**A3.3.8. Area B-8: Use of Checklists.**

A3.3.8.1. Q. Used current checklist and accomplished all items in proper sequence with no deviations or omissions.

A3.3.8.2. Q-. Only minor deviations from checklist procedures were noted.

A3.3.8.3. U. Failed to use current checklist or deviated from checklist procedures resulting in the mission being compromised.

**A3.3.9. Area B-9: Crew Resource Management.**

A3.3.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.

A3.3.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.

A3.3.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

**A3.3.10. Area B-10: Communication Procedures.**

A3.3.10.1. Q. Radio and intra-cockpit communications were concise, accurate and effectively used to direct maneuvers or describe the tactical situation.

A3.3.10.2. 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.

A3.3.10.3. U. Radio communications over primary/secondary radios were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

**A3.3.11. Area B-11: Knowledge of Directives.**

A3.3.11.1. Q. Demonstrated thorough knowledge of aircraft systems, limitations and performance characteristics.

A3.3.11.2. Q-. Knowledge of aircraft systems, limitations, and performance characteristics sufficient to perform the mission safely. Demonstrated deficiencies either in depth of knowledge or comprehension.

A3.3.11.3. U. Demonstrated unsatisfactory knowledge of aircraft systems, limitations or performance characteristics.

**A3.4. Section C: Qualification.****A3.4.1. Area C-1: Pre-takeoff, Departure, Level Off (WSO/NAV/OSO).**

A3.4.1.1. Q. Completed checklist items in accordance with applicable flight manual. Accurately copied clearance and understood ATC instructions. Ensured compliance with NAS rules and procedures. Monitored aircraft position throughout departure and provided headings and ETAs as required. Ensured safe terrain clearance. Accomplished calibration checks and position fixing/system updates as required for the mission or by the evaluator.

A3.4.1.2. Q-. Same as above, except made minor error(s) or omissions(s) that did not detract from safety or mission accomplishment. Deficiencies indicated a definite need for study and/or additional training.

A3.4.1.3. U. Major error(s) or omission(s) that would preclude safe/effective mission accomplishment.

**A3.4.2. Area C-1: Pretakeoff, Departure, and Level-Off. (EWO/DSO).**

A3.4.2.1. Q. Adhered to station, start, engine, taxi, and takeoff times to assure thorough preflight, check of personal equipment, crew briefing, etc. Performed all checks and procedures through level-off in accordance with approved checklists and applicable directives.

A3.4.2.2. Q-. Same as above, except procedural deviations which did not detract from mission effectiveness but indicated a definite need for study and/or additional training.

A3.4.2.3. U. Omitted major item(s) of the appropriate checklist. Major deviations in procedures which would preclude safe mission accomplishment. Errors directly contributed to mission degradation or made it ineffective.

**A3.4.3. Area C-2: Navigation (WSO).**

A3.4.3.1. 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. Notified pilot of airspeed restrictions or potential traffic conflicts within NAS.

A3.4.3.2. Q-. Minor errors in procedures/use of navigation equipment. Some deviations in tuning, identifying, and monitoring NAVAIDs. Slow to comply with clearance instructions. Had some difficulty in establishing exact position and course.

A3.4.3.3. U. Major errors in procedures/use of 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.

**A3.4.4. Area C-2: Navigation (NAV/OSO).**

A3.4.4.1. Q. Procedures required by the flight manual and governing directives were accomplished with no more than minor discrepancies that did not adversely affect the mission. Demonstrated satisfactory capability to navigate using DR procedures. At no time allowed the airplane to deviate more than 6 nautical miles from the planned/replanned course or to deviate outside ATC assigned/protective lateral airspace. ETAs (if applicable) were revised as necessary and were accurate within 3 minutes. Notified pilot of airspeed restrictions or potential traffic conflicts within NAS.

A3.4.4.2. Q-. Procedures required by the flight manual and governing directives were accomplished with deviations, omissions, or errors which indicated a definite need for study and/or additional training. Slow to recognize airplane course deviation, but at no time allowed the airplane to deviate more than 10 nautical miles from the planned/replanned course. ETAs were not accurate within 3 minutes when reporting procedures did not apply. Information obtained was not always accurate and complete, but was sufficient to allow reconstruction of the mission. Performance was the minimum acceptable.

A3.4.4.3. U. Not up to standards of Qualified with Training. Allowed the airplane to deviate outside of the ATC assigned/perspective lateral airspace. ETAs were not accurate within 3 minutes when reporting procedures apply.

**A3.4.5. Area C-3: Instrument Interpretation (Navigator/OSO/WSO/DSO).**

A3.4.5.1. Q. Demonstrated satisfactory knowledge of basic instrument procedures, penetration, and approach procedures. Can quickly analyze flight instruments, determine aircraft attitude, and is knowledgeable of required action to correct the aircraft to level flight. Effectively monitored energy levels to ensure parameters were not exceeded.

A3.4.5.2. Q-. Limited knowledge of instrument procedures. Slow to recognize aircraft attitudes and corrective actions required, but did determine proper corrections within a safe time period.

A3.4.5.3. U. Faulty or insufficient knowledge of instrument procedures. Unable to properly interpret instruments or recognize aircraft attitude.

**A3.4.6. Area C-4: Fuel Management (WSO/NAV/OSO). (IF APPLICABLE).**

A3.4.6.1. Q. Fuel planning and enroute fuel management procedures required by the flight manual and governing directives were accomplished with no more than minor discrepancies that did not adversely affect the safety or effectiveness of the mission.

A3.4.6.2. Q-. Knowledge of procedures required by the flight manual and governing directives was marginal. Deficiencies indicated a definite need for study and/or additional training.

A3.4.6.3. U. Not up to standards of Qualified with Training.

**A3.4.7. Area C-5: Equipment Operation.**

A3.4.7.1. Q. Equipment was operated in accordance with prescribed procedures and with no more than minor deviations or omissions. Satisfactory results were obtained consistent with existing

conditions. Equipment malfunctions were properly analyzed and corrected when possible for satisfactory equipment capability. Equipment crosschecks and data collection were effectively integrated with flight navigation.

A3.4.7.2. Q-. Equipment was not operated in accordance with prescribed procedures, but the mission was not adversely affected and equipment could not have been damaged. Variations and omissions in prescribed procedures, erroneous data insertion, or faulty techniques indicated a definite need for study and/or additional training.

A3.4.7.3. U. Unfamiliar with equipment operations, damaged or destroyed equipment. Mission accomplishment compromised.

#### **A3.4.8. Area C-6: Descent and Landing.**

A3.4.8.1. Q. Procedures required by the flight manual, checklists, and governing directives were accomplished with no more than minor deviations, omissions, or errors that did not effect the mission. Monitored aircraft position throughout arrival and provided heading and altitude as required. Ensured safe terrain clearance. Understood approach control instructions. Appropriate FLIP publications were correctly used.

A3.4.8.2. Q-. Procedures required by the flight manual, checklist, and governing directives were accomplished with deviations, omissions, or errors which indicated a definite need for study and/or additional training. Performance or knowledge was the minimum acceptable.

A3.4.8.3. U. Lack of knowledge and situational awareness caused major deviations to safety and mission accomplishment.

#### **A3.4.9. Area C-7: Post flight.**

A3.4.9.1. Q. Checklists, forms, and reports were accomplished with no more than minor deviations, omissions, or errors that did not adversely affect their intent.

A3.4.9.2. Q-. Checklists, forms, and reports were accomplished in a manner that indicated a definite need for study and/or additional training. Performance or knowledge was the minimum acceptable.

A3.4.9.3. U. Failed to accomplish post flight duties, forms were unacceptable, post flight reports improperly filled out.

### **A3.5. Area D: Instructor.**

#### **A3.5.1. Area D-1: Instructional Ability.**

A3.5.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary.

A3.5.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instructions.

A3.5.1.3. U. Inability to effectively communicate with the upgradee. Did not provide corrective action where necessary. Did not plan ahead or anticipate upgradee problems.

**A3.5.2. Area D-2: Briefing/Debriefing.**

A3.5.2.1. Q. Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Excellent ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents in accordance with prescribed directives. Training syllabi reflected actual performance of student relative to standard. Briefed the student's requirements for the next mission.

A3.5.2.2. Q-. Minor errors or omissions in briefing, critique, and/or training documents that did not affect students progress.

A3.5.2.3. U. Briefings were marginal or non-existent. Did not review student's training folder or past performance. Failed to adequately critique the student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete briefing of student's training requirements/objectives for mission.

**A3.5.3. Area D-3: Demonstration and Performance**

A3.5.3.1. Q. Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.

A3.5.3.2. Q-. Minor discrepancies in the above criteria that did not affect safety or adversely affect student performance.

A3.5.3.3. U. Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

**A3.5.4. Area D-4: Conduct of the Mission**

A3.5.4.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.

A3.5.4.2. Q-. Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not effectively used to the extent specific mission objectives were not achieved.

A3.5.4.3. U. Mission execution prevented accomplishment of a major portion of the mission. Undisciplined actions violated training rules repeatedly.

**A3.6. Area E: Mission.****A3.6.1. Area E-1: Knowledge.**

A3.6.1.1. Q. Fully knowledgeable in mission requirements, test plan directives, aircraft limitations, and partial flight manual. Effectively coordinated with other crew members and project personnel.

A3.6.1.2. Q-. Demonstrated a limited knowledge of mission requirements, test plan directives, aircraft limitations, or the partial flight manual which degraded a portion of the mission objective or CRM.

A3.6.1.3. U. Inadequate knowledge of mission requirements, test plan directive, aircraft limitations, and partial flight manual. Did not effectively use resources. Directly affected successful mission accomplishment.

**A3.6.2. Area E-2: Planning.**

A3.6.2.1. Q. Considered all factors necessary for mission accomplishment to include weather, mission profile, airspace utilization/restrictions, and proper documentation.

A3.6.2.2. Q-. Limited consideration of all factors necessary for mission accomplishment. However, did not affect mission objective directly, but may have contributed toward lack of effective CRM.

A3.6.2.3. U. Did not consider all factors necessary for mission accomplishment. Lack of consideration contributed negatively towards successful mission completion.

**A3.6.3. Area E-3: Execution.**

A3.6.3.1. Q. Accomplished major mission objectives in a timely and skillful manner.

A3.6.3.2. Q-. Errors or omission were made which did not render mission ineffective, but indicated a definite need for additional training.

A3.6.3.3. U. Improper execution of duties negatively impacted mission accomplishment.

**A3.6.4. Area E-4: Security (Critical).**

A3.6.4.1. Q. Adequate security of mission information and material was maintained throughout preflight, flight, and post flight.

A3.6.4.2. U. Inadequate security procedures were carried out which would lead to the compromise of mission information and/or material.

## Attachment 4

### ENLISTED AIRCREW GRADING CRITERIA

**A4.1. General Grading Standards.** This chapter contains the criteria for administering initial qualification, qualification, requalification, and instructor enlisted aircrew evaluations. Evaluation criteria consists of four sections: Ground, General, Qualification, and Instructor.

A4.1.1. The grading criteria in this attachment are divided into four sections: Ground Phase, General, Qualification, and Instructor. Use all sections for criteria applicable to the events performed on the evaluation. These areas match the graded areas for enlisted aircrew found on forms specified in AFMC Supplement to AFI 11-202V2.

A4.1.2. Grading criteria for every situation could not possibly be covered in this attachment. The evaluator's experience and good judgment are relied upon to provide a sensible analysis of the applicable items evaluated. Where more restrictive flight manual procedures are established they will take precedence.

#### **A4.2. Area A: Ground Phase.**

##### **A4.2.1. Area A-1: Publications.**

A4.2.1.1. Digital TO's are approved for use by individual aircrew members. Maintain one CD per individual. Maintain a disk with all applicable supplements, changes, errata, etc. Maintain a summary file/list of affected paragraphs/pages/topics that have been amended. The summary file does not reprint the amendment, it is used as a tool to identify areas that have been affected.

A4.2.1.2. Q. Assigned flight publications were current, complete, and usable for any of the unit's tasking.

A4.2.1.3. Q-. Assigned flight publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.

A4.2.1.4. U. Contained major deviations, omissions, and/or errors which compromise safety of flight

##### **A4.2.2. Area A-2: Emergency Procedures Evaluation.**

A4.2.2.1. Q. Displayed correct, immediate response to Bold Face and non-Bold Face emergency situations. Effectively used checklist.

A4.2.2.2. Q-. Response to Bold Face emergencies 100% correct. Response to certain areas of non-Bold Face emergencies or follow-on steps to Bold Face procedures was slow/confused. Used the checklist when appropriate, but slow to locate required data.

A4.2.2.3. U. Incorrect response for Bold Face emergency. Unable to analyze problems or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or contents.

#### **A4.3. Area B: General.**

##### **A4.3.1. Area B-1: Safety (Critical):**

A4.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.

A4.3.1.2. U. Was not aware of or did not comply with all safety factors required for safe operation or mission accomplishment. Did not adequately clear. Operated the aircraft in a dangerous manner.

**A4.3.2. Area B-2: Judgement (Critical):**

A4.3.2.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.

A4.3.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.

**A4.3.3. Area B-3: Flight Discipline (Critical).**

A4.3.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.

A4.3.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

**A4.3.4. Area B-4: Briefings.**

A4.3.4.1. Q. Presented briefing in a professional manner. Briefing was well organized and in a logical sequence. Effective use of training aids. Concluded briefing in allotted time. Flight members clearly understood briefing. Briefed corrective action from previous mission and probable problem areas when appropriate.

A4.3.4.2. Q-. Events out of sequence, hard to follow, some redundancy. Did not make effective use of available training aids. Dwelled on non-essential items. Briefed longer than allotted time. Limited discussion of techniques. Did not identify probable problem areas.

A4.3.4.3. U. Confusing presentation. Did not use training aids. Redundant throughout briefing. Lost interest of flight members. Presentation created doubts or confusion. Omitted major training events or did not discuss techniques. Ignored past problem areas.

**A4.3.5. Area B-5: Personal Equipment.**

A4.3.5.1. Q. Thoroughly familiar with personal equipment requirements, usage, and preflight.

A4.3.5.2. Q-. Possessed required personal equipment items and was familiar with most of the preflight and usage procedures.

A4.3.5.3. U. Unfamiliar with required personal equipment preflight and usage.

**A4.3.6. Area B-6: Forms, Reports, Logs (As Applicable).**

A4.3.6.1. Q. Completed or supervised completion of all required preflight and post flight forms and documentation without significant error.

A4.3.6.2. Q-. Completed or supervised completion of all required preflight and post flight forms and documentation with some errors or omissions that had to be corrected.

A4.3.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate detracting from recording the mission data.

**A4.3.7. Area B-7: Mission/Flight Planning.**

A4.3.7.1. Q. Checked all factors applicable to flight in accordance with applicable directives. Aware of mission and alternate mission requirements and planned accordingly. Read and initialed all items in the Flight Crew Information File (FCIF)/Read Files. Prepared at briefing time.

A4.3.7.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of performance capabilities or approved operating procedures/ rules in some areas.

A4.3.7.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission. Displayed faulty knowledge of operating data or procedures. Did not review or initial FCIF items. Not prepared at briefing time.

**A4.3.8. Area B-8: Use of Checklists/Test Cards.**

A4.3.8.1. Q. Procedures required by the flight manual, checklist and applicable directives were accomplished with no omissions or deviations, which detracted from the overall efficient conduct of the mission.

A4.3.8.2. Q-. Procedures required by the flight manual, checklist and applicable directives were accomplished with omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.

A4.3.8.3. U. Procedures required by the flight manual checklist, and applicable directives were accomplished with major omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was unacceptable.

**A4.3.9. Area B-9: Crew Coordination.**

A4.3.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.

A4.3.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.

A4.3.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

**A4.3.10. Area B-10: Communication Procedures.**

A4.3.10.1. Q. Radio and intra-cockpit communications were concise, accurate and effectively used to direct maneuvers or describe the tactical situation.

A4.3.10.2. 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.

A4.3.10.3. U. Radio communications over primary/secondary radios were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

**A4.3.11. Area B-11: Knowledge of Directives/Mission Systems.**

A4.3.11.1. Q. Demonstrated thorough knowledge of aircraft systems, limitations and performance characteristics.

A4.3.11.2. Q-. Knowledge of aircraft systems, limitations, and performance characteristics sufficient to perform the mission safely. Demonstrated deficiencies either in depth of knowledge or comprehension.

A4.3.11.3. U. Demonstrated unsatisfactory knowledge of aircraft systems, limitations or performance characteristics.

**A4.4. Area C: Qualification (Loadmaster).**

A4.4.1. **Area C-1: Preflight.**

A4.4.2. **Area C-2: Aircraft Configuration.**

A4.4.3. **Area C-3: Load Planning/Inspection.**

A4.4.4. **Area C-4: Hazardous Material.**

A4.4.5. **Area C-5: Onload/Offload Procedures.**

A4.4.6. **Area C-6: Winching Procedures.**

A4.4.7. **Area C-7: Tiedown/Restraint.**

A4.4.8. **Area C-8: Passenger Handling/Briefing.**

A4.4.9. **Area C-9: Weight and Balance.**

A4.4.10. **Area C-10: Anti-Hijacking.**

A4.4.11. **Area C-11: Border Clearance.**

A4.4.12. **Area C-12: Predeparture and In-flight Duties.**

A4.4.13. **Area C-13: Scanner Duties.**

A4.4.14. **Area C-14: Engine Running Onload/Offload.**

A4.4.15. The following criteria must be used in determining a grade for operation of applicable aircraft procedures (**A4.4.1.-A4.4.14.**) as prescribed in the flight manual, supplementary/partial manuals, and other governing directives.

A4.4.15.1. Q. Procedures required by the flight manual, checklist, and applicable directives were accomplished without omissions or deviations which would detract from the overall efficient conduct of the mission.

A4.4.15.2. Q-. Procedures required by the flight manual, checklist, and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient conduct of the mission. Performance or knowledge was the minimum acceptable and indicated a need for additional training.

A4.4.15.3. U. Procedures or checklist items required by the flight manual or applicable directives were accomplished with major omission, deviations, or errors. Performance or knowledge was unacceptable.

A4.4.16. **Area C-15: Post Mission Duties.**

A4.4.17. **Area C-16: Oxygen.**

A4.4.18. **Area C-17: Ramp and Door.**

A4.4.19. **Area C-18: Restraint Rail/Roller Conveyor.**

A4.4.20. **Area C-19: APU/External Power (If Applicable.)**

A4.4.21. **Area C-20: Aircraft Loading Limitations.**

A4.4.22. **Area C-21: Emergency Equipment.**

A4.4.23. The following criteria must be used in determining a grade for operation of applicable aircraft systems and equipment (A4.4.15.-A4.4.21.) as prescribed in the flight manual, supplementary/partial manuals, and other governing directives. This includes the individual's knowledge and analysis of equipment malfunctions with proper corrective action.

A4.4.23.1. Q. Demonstrated and/or verbally explained system equipment operation, component location, and limitations with only minor discrepancies which did not detract from mission effectiveness.

A4.4.23.2. Q-. Demonstration and/or explanation of system/equipment adequate but indicated a definite need for additional study and training.

A4.4.23.3. U. Knowledge of system/equipment was unacceptable.

#### **A4.5. Area C: Qualification (Boom Operator).**

A4.5.1. **Area C-1: Preflight.**

A4.5.1.1. Q. Examinee reported with a complete and current flight manual and all professional equipment. Complied with command and local directives. No deviations from flight manual were noted. Fully knowledgeable of aircraft weight and balance and pertinent aircraft forms. Accurately completed and recorded aircraft data.

A4.5.1.2. Q-. Made errors when computing weight and balance. No errors great enough to preclude safe mission accomplishment.

A4.5.1.3. U. Made significant errors in computing weight and balance. Not knowledgeable of aircraft forms and aircraft data.

A4.5.2. **Area C-2: Pretakeoff.**

A4.5.2.1. Q. Followed current flight manual procedures with no discrepancies or omissions.

A4.5.2.2. Q-. Deviations from current flight manual procedures were noted.

A4.5.2.3. U. Flight manual not used. Numerous errors jeopardizing safety observed.

A4.5.3. **Area C-3: Takeoff and Climb.**

A4.5.3.1. Q. Coordinated, smooth operation. Followed all procedures as outlined in the flight manual.

A4.5.3.2. Q-. Moderate knowledge of all procedures. Deviations to flight manual procedures were observed.

A4.5.3.3. U. Poor knowledge of procedures. Unaware of flight manual procedures.

**A4.5.4. Area C-4: Preparation for Contact.**

A4.5.4.1. Q. Followed flight manual procedures. Demonstrated complete knowledge of refueling system configuration. Completed all checklist items.

A4.5.4.2. Q-. Followed established procedures with deviations which would not or did not affect the operation.

A4.5.4.3. U. Failed to accomplish required procedures. Unaware or unable to prepare for contact.

**A4.5.5. Area C-5: Normal Refueling Procedures.**

A4.5.5.1. Q. Smooth, positive control of the boom. Adhered to flight manual procedures. Examinee was constantly aware of operating limitations.

A4.5.5.2. Q-. Operation with deviations. Allowed receiver to approach the operating limit, but did not exceed the limit.

A4.5.5.3. U. Unable to operate boom. Damaged receiver aircraft. Unable to deliver fuel to receivers due to operator error.

**A4.5.6. Area C-6: Post Refueling.**

A4.5.6.1. Q. Accomplished all checks according to flight manual procedures.

A4.5.6.2. Q-. Accomplished checks with deviations from established procedures.

A4.5.6.3. U. Failed to accomplish required checks. Omitted required procedures.

**A4.5.7. Area C-7: Descent and Landing.**

A4.5.7.1. Q. Coordinated, smooth operation. Followed all procedures as outlined in the flight manual.

A4.5.7.2. Q-. Deviations of procedures prescribed in the flight manual were noted. Individual requires training to return to qualified standards.

A4.5.7.3. U. Significant deviations from required procedures. Unaware of need to accomplish procedures.

**A4.5.8. Area C-8: Emergency Equipment.**

A4.5.8.1. Q. Demonstrated and/or verbally explained system equipment operation, component location, and limitations with only minor discrepancies which did not detract from mission effectiveness.

A4.5.8.2. Q-. Demonstration and/or explanation of system/equipment adequate but indicated a definite need for additional study and training.

A4.5.8.3. U. Knowledge of system/ equipment was unacceptable.

**A4.6. Area C: Qualification (Flight Engineer).**

**A4.6.1. Area C-1: Exterior inspection.**

**A4.6.2. Area C-2: Interior inspection.**

A4.6.3. **Area C-3: Before start/starting engines checks.**

A4.6.4. **Area C-4: Before taxi/taxi checks.**

A4.6.5. **Area C-5: Engine run-up/before takeoff checks.**

A4.6.6. **Area C-6: Lineup/takeoff.**

A4.6.7. **Area C-7: After takeoff/climb.**

A4.6.8. **Area C-8: Cruise.**

A4.6.9. **Area C-9: Descent and Landing.**

A4.6.10. **Area C-10: After Landing/Post flight.**

A4.6.11. The following criteria will be used to evaluate qualification procedures identified in paragraph [A4.6.1.](#) – [A4.6.10.](#)

A4.6.11.1. Q. Procedure required by the flight manual, checklist, and applicable directions were accomplished with no omissions or deviations which detracted from the overall efficient conduct of the mission.

A4.6.11.2. Q-. Procedures required by the flight manual, checklists, and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient conduct of the mission. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.

A4.6.11.3. U. Procedures or checklist items required by the flight manual or applicable directives were accomplished with major omissions, deviations, or errors. Performance or knowledge was unacceptable.

A4.6.12. **Area C-11: Engines/auxiliary power unit.**

A4.6.13. **Area C-12: Fuel.**

A4.6.14. **Area C-13: Electric.**

A4.6.15. **Area C-14: Hydraulic.**

A4.6.16. **Area C-15: Flight controls.**

A4.6.17. **Area C-16: Air conditioning/pressurization.**

A4.6.18. **Area C-17: Anti-ice/de-ice.**

A4.6.19. **Area C-18: Windows/doors/hatches.**

A4.6.20. **Area C-19: Radar.**

A4.6.21. **Area C-20: Oxygen.**

A4.6.22. **Area C-21: Fire protection/detection.**

A4.6.23. **Area C-22: Radios/communications.**

A4.6.24. **Area C-23: Instruments/lighting.**

A4.6.25. **Area C-24: Miscellaneous equipment.**

A4.6.26. **Area C-25: Emergency equipment.**

A4.6.27. The following criteria will be used to evaluate operation and knowledge of system equipment. This includes general knowledge of use, location, and required operational procedures.

A4.6.27.1. Q. Demonstrated and/or verbally explained system equipment operation, component location, and limitations with only minor discrepancies which did not detract from mission effectiveness.

A4.6.27.2. Q-. Demonstration and/or explanation of system/equipment adequate but indicated a definite need for additional study and training.

A4.6.27.3. U. Knowledge of system/ equipment was unacceptable.

#### **A4.7. Area C: Qualification (Communication Systems Operator)**

##### **A4.7.1. Area C-1: Emergency Equipment**

A4.7.1.1. Q. Demonstrated and/or verbally explained system equipment operation, component location, and limitations with only minor discrepancies, which did not detract from, mission effectiveness.

A4.7.1.2. Q-. Demonstrated and/or explanation of system equipment adequate but indicated a definite need for additional study and training.

A4.7.1.3. U. Knowledge of system/equipment unacceptable.

##### **A4.7.2. Area C-2: Emergency Communication**

A4.7.2.1. Q. Procedures required by the flight manual, checklist, and applicable directives were accomplished with no omissions or deviations which detracted from situation.

A4.7.2.2. Q-. Procedures required by the flight manual, checklists and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient conduct of the situation. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.

A4.7.2.3. U. Procedures or checklist items required by the flight manual or applicable directives were accomplished with major omissions, deviations, or errors. Performance or knowledge was unacceptable.

##### **A4.7.3. Area C-3: Anti-Hijack/Aircraft Security (N/A E-3)**

A4.7.3.1. Q. Procedures required by the checklist, and/or applicable directives were demonstrated and/or verbally explained with no omissions or deviations which detracted from situation.

A4.7.3.2. Q-. Procedures required by the checklists and/or applicable directives were accomplished with omissions or deviations which detracted from the overall efficient conduct of the situation. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.

A4.7.3.3. U. Procedures or checklist items required by applicable directives were accomplished with major omissions, deviations, or errors. Performance or knowledge was unacceptable

##### **A4.7.4. Area C-4: Voice Communication Procedures**

##### **A4.7.5. Area C-5: Data Communication Procedures**

**A4.7.6. Area C-6: SATCOM Communication Procedures**

A4.7.7. The following criteria will be used to evaluate qualification procedures identified in paragraph **A4.7.4.-A4.7.6.**

A4.7.7.1. Q. Established communications, and maintained and monitored communications with all appropriate agencies IAW procedures and directives with no deviations which detracted from mission effectiveness. Identified and troubleshot system problems IAW applicable procedures and directives no distraction to overall mission effectiveness.

A4.7.7.2. Q-. Established communications, and maintained and monitored communications with all appropriate agencies IAW procedures and directives with omissions or deviations which detracted from mission effectiveness. Identified and troubleshot system problems IAW applicable procedures and directives with omissions or deviations which distracted from overall mission effectiveness.

A4.7.7.3. U. Procedures required by applicable directives were accomplished with major omissions, deviations, or errors. Performance or knowledge was unacceptable.

**A4.7.8. Area C-7: (Critical) COMSEC Procedures**

A4.7.8.1. Q. Demonstrated thorough knowledge of COMSEC requirements and procedures IAW applicable directives and procedures. Demonstrated responsible handling of classified information and/or equipment.

A4.7.8.2. U. Procedures required by applicable directives were accomplished with major omissions, deviations, or errors. Performance or knowledge was unacceptable.

**A4.7.9. Area C-8: ARC 210 UHF/VHF Radio Equipment (N/A E-3)****A4.7.10. Area C-9: HF Radio Equipment (N/A E-3)****A4.7.11. Area C-10: SATCOM Communication Equipment (N/A E-3)****A4.7.12. Area C-11: Facsimile Equipment (N/A E-3)****A4.7.13. Area C-12: KY-58 Communication Equipment (N/A E-3)****A4.7.14. Area C-13: KITIC Equipment (N/A E-3)****A4.7.15. Area C-14: STU-IIIIR (N/A E-3)****A4.7.16. Area C-15: GPS (N/A E-3)**

A4.7.17. The following criteria will be used to evaluate qualification procedures identified in paragraph **A4.7.9.-A4.7.16.**

A4.7.17.1. Q. Demonstrated and/or verbally explained system equipment operation, component location, and limitations with only minor discrepancies which did not detract from mission effectiveness.

A4.7.17.2. Q-. Demonstrated and/or explanation of system equipment adequate but indicated a definite need for additional study and training.

A4.7.17.3. U. Knowledge of system/equipment unacceptable.

**A4.7.18. Area C-16: Post-flight Procedures**

A4.7.18.1. Q. Procedures required by the checklist, and/or applicable directives were demonstrated and/or verbally explained with no omissions or deviations which detracted from mission completion.

A4.7.18.2. Q-. Procedures required by the checklists and/or applicable directives were accomplished with omissions or deviations which detracted from the overall efficient conduct of the mission. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.

A4.7.18.3. U. Procedures or checklist items required by applicable directives were accomplished with major omissions, deviations, or errors. Performance or knowledge was unacceptable

**A4.8. Area C Qualification (RQ-1 Sensor/Payload Operator)**

**A4.8.1. Area C-1 (SO)--Payload Operation.** This area includes the head-up display, tracker display, and pedestal controls.

A4.8.1.1. Q. Demonstrated satisfactory capability to collect targets using all available sensors. Used appropriate focus, iris, and zoom settings. Knowledge of menu buttons. Proper cross mux procedures. Aware of target's position at all times.

A4.8.1.2. Q-. Minor errors in procedures/equipment use in collecting targets. Slow to focus or zoom. Had some problems locating correct menu buttons. Slow to comply cross mux procedures. Had some difficulty or could not maintain on exact position of targets.

A4.8.1.3. U. Major errors in procedures/equipment use in collecting targets. Could not locate target position. Unable to cross mux. Could not focus. Selected a critical menu button.

**A4.8.2. Area C-2 (SO)--Data Exploitation Mission Planning and Communications (DEMPC) Operation .**

A4.8.2.1. Q. Demonstrated satisfactory capability to plan a mission and send to the Pilot/Sensor Operator (PSO) racks. Used mission monitor to track aircraft location and payload position. Can capture and annotate images for further dissemination. Demonstrated satisfactory capability to collect targets using Synthetic Aperture Radar (SAR) Mode 1.

A4.8.2.2. Q-. Minor errors in planning a mission and send to the PSO racks. Seldom used mission monitor to track aircraft location and payload position. Captured and annotated some images for further dissemination. Minor errors in procedures/use in collecting targets using SAR Mode 1.

A4.8.2.3. U. Could not fly planned mission. Never used mission monitor to track aircraft location and payload position. Did not capture or annotate any images for further dissemination. Major errors in procedures/use in collecting targets using SAR Mode 1.

**A4.8.3. Area C-3 (SO)--SAR Workstation Operation.**

A4.8.3.1. Q. Demonstrated satisfactory capability to capture SAR targets and knowledge of SAR menu buttons. Can configure workstation to record and capture SAR imagery. Aware of target's position at all times.

A4.8.3.2. Q-. Minor errors in capturing SAR targets. Minor errors in configuring workstation to record and capture SAR imagery. Had some difficulty in establishing exact position of targets.

A4.8.3.3. U Did not capture SAR targets. Could not configure workstation to record and capture SAR imagery.

**A4.8.4. Area C-4 --Ku-Band Data Link Operation.**

A4.8.4.1. Q. Demonstrated satisfactory capability to configure and collect targets using Ku mode. Followed approved checklist/procedures to configure payload rack for Ku operations. Used appropriate focus, iris, and zoom settings. Knowledge of menu buttons. Aware of target's position at all times.

A4.8.4.2. Q-. Minor errors in procedures/equipment use in configuring and/or collecting targets. Minor errors or omissions in using approved checklists/procedures to configure payload rack for Ku operations. Slow to focus or zoom. Had some problems locating correct menu buttons. Had some difficulty in establishing exact position of targets.

A4.8.4.3. U. Major errors in procedures/equipment use in configuring and/or collecting targets. Failed to use approved checklist/procedures to configure payload rack for Ku operations. Could not establish target position. Could not focus. Selected a critical menu button.

**A4.9. Area C: Qualification (Airborne Operations Technician/Air Battle Management Specialist)**

**A4.9.1. Area C-1: Preflight Inspection**

**A4.9.2. Area C-2: Console Operations and Displays**

**A4.9.3. Area C-3: Mission Execution**

A4.9.4. The following criteria will be used to evaluate qualification procedures identified in paragraph [A4.9.1.](#) – [A4.9.3.](#)

A4.9.4.1. Q. Procedures required by the flight manual, checklist and applicable directives were accomplished with no omissions or deviations, which detracted from the overall efficient conduct of the mission.

A4.9.4.2. Q-. Procedures required by the flight manual, checklist and applicable directives were accomplished with omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.

A4.9.4.3. U. Procedures required by the flight manual, checklist, and applicable directives were accomplished with major omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was unacceptable.

**A4.10. Area C: Qualification (Communications System Technician/Computer Display Maintenance Technician)**

**A4.10.1. Area C-1: Preflight Inspection**

**A4.10.2. Area C-2: Console Operations and Displays**

**A4.10.3. Area C-3: Malfunction Analysis/In-flight Repair**

**A4.10.4. Area C-4: Communication Systems (N/A E-3)**

**A4.10.5. Area C-6: Mission Execution**

A4.10.6. The following criteria will be used to evaluate qualification procedures identified in paragraph [A4.10.1.](#) – [A4.10.5.](#)

A4.10.6.1. Q. Procedures required by the flight manual, checklist and applicable directives were accomplished with no omissions or deviations, which detracted from the overall efficient conduct of the mission.

A4.10.6.2. Q-. Procedures required by the flight manual, checklist and applicable directives were accomplished with omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.

A4.10.6.3. U. Procedures required by the flight manual, checklist and applicable directives were accomplished with major omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was unacceptable.

**A4.10.7. Area C-8: (Critical) COMSEC Procedures (N/A E-3)**

A4.10.7.1. Q. Demonstrated thorough knowledge of COMSEC requirements and procedures IAW applicable directives and procedures. Demonstrated responsible handling of classified information and/or equipment.

A4.10.7.2. U. Procedures required by applicable directives were accomplished with major omissions, deviations, or errors. Performance or knowledge was unacceptable.

**A4.11. Area C: Qualification (Airborne Radar Technician) (E-8 Only)**

**A4.11.1. Area C-1: Preflight Inspection**

**A4.11.2. Area C-2: Console Operations and Displays**

**A4.11.3. Area C-3: Malfunction Analysis /In-flight Repair**

**A4.11.4. Area C-4: Mission Execution**

A4.11.4.1. The following criteria will be used to evaluate qualification procedures identified in paragraph [A4.11.1.](#) – [A4.11.4.](#)

A4.11.4.2. Q. Procedures required by the flight manual, checklist and applicable directives were accomplished with no omissions or deviations, which detracted from the overall efficient conduct of the mission.

A4.11.4.3. Q-. Procedures required by the flight manual, checklist and applicable directives were accomplished with omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.

A4.11.4.4. U. Procedures required by the flight manual checklist, and applicable directives were accomplished with major omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was unacceptable.

**A4.12. Area D: Instructor (All crew positions).**

**A4.12.1. Area D-1: Instructional Ability.**

A4.12.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions.

A4.12.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instruction.

A4.12.1.3. U. Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

#### **A4.12.2. Area D-2: Briefing/Debriefing.**

A4.12.2.1. Q. Briefings were well organized, accurate, and thorough. Reviewed student's present level of training and defined mission events to be performed. Excellent ability during critique to reconstruct the flight, and provide corrective guidance where appropriate. Completed all training documents in accordance with prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Briefed the student's requirements for next mission.

A4.12.2.2. Q-. Minor errors or omissions in briefings, critique, and/or training documents that did not affect student progress.

A4.12.2.3. U. Briefings were marginal or nonexistent. Did not review student's training folder or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies.

#### **A4.12.3. Area D-3: Demonstration and Performance.**

A4.12.3.1. Q. Effectively demonstrated procedure and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.

A4.12.3.2. Q-. Minor discrepancies in the "Q." criteria that did not affect safety or adversely affect student progress.

A4.12.3.3. U. Did not demonstrate correct procedure or technique. Examinee demonstrated insufficient knowledge about aircraft systems, procedures, and/or proper source material.

#### **A4.13. Area E: Taxi (C-135 Speckled Trout Flight Engineer).**

A4.13.1. This portion of the flight engineer qualification evaluation will be administered by a current and qualified evaluator pilot. See AFI 11-202 Volume 2 for instructions to complete the AF Form 8 when multiple evaluators are used.

##### **A4.13.2. Area E-1: Engine start procedures**

A4.13.2.1. Q. Accomplished engine start IAW flight manual procedures and checklists. Used correct hand signals.

A4.13.2.2. Q-, Accomplished engine start with omissions or deviations from flight manual checklists procedures that did not affect safety.

A4.13.2.3. U. Omitted required procedures. Deviations to flight manual could potentially damage aircraft or mission equipment

**A4.13.3. Area E-2: Taxi procedures.**

A4.13.3.1. Q. Ensured adequate maneuvering space for aircraft. Taxi speed was adequate for existing conditions. Satisfactorily used brakes. Displayed satisfactory knowledge of marshaling signals.

A4.13.3.2. Q-. Failed to advise pilot that taxi speed was erratic. Deviations or omissions from flight manual procedures but did not affect safety or mission accomplishment.

A4.13.3.3. U. Failed to advise pilot that taxi speed was dangerous to aircraft control or systems.

**A4.13.4. Area E-3: Engine shutdown procedures.**

A4.13.4.1. Q. Accomplished engine shutdown IAW flight manual procedures and applicable checklists.

A4.13.4.2. Q-. Accomplished engine shutdown with significant omissions or deviations from flight manual checklists procedures that did not affect safety.

A4.13.4.3. U. Omitted required procedures. Deviations to flight manual which could potentially damage aircraft or mission equipment.

## Attachment 5

### RPA PILOT EVALUATION CRITERIA

#### A5.1. General Grading Standards.

A5.1.1. The grading criteria in this attachment are divided into five sections: Ground Phase, General, Qualification, Instructor, and Mission. Use all sections for criteria applicable to the events performed on the evaluation. These sections match the sections of the RPA Pilot flight evaluation worksheet specified in the AFMC Supplement to AFI 11-20V2.

**NOTE:** Sensor operator criteria for the RQ-1A are in [Attachment 4](#).

A5.1.2. Evaluate events in Section C with respect to aircraft equipment and normal duties as it pertains to the applicable crew position.

#### A5.2. Section A: Ground Phase.

##### A5.2.1. Area A-1: Publications.

A5.2.1.1. Digital TO's are approved for use by individual aircrew members. Maintain one CD per individual. Maintain a disk with all applicable supplements, changes, errata, etc. Maintain a summary file/list of affected paragraphs/pages/topics that have been amended. The summary file does not reprint the amendment, it is used as a tool to identify areas that have been affected.

A5.2.1.2. Q. Assigned flight publications were current, complete, and usable for any of the unit's tasking.

A5.2.1.3. Q-. Assigned flight publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.

A5.2.1.4. U. Contained major deviations, omissions, and/or errors which compromise safety of flight.

##### A5.2.2. Area A-2: Emergency Procedures Evaluation.

A5.2.2.1. Q. Displayed correct, immediate response to Boldface and non-Boldface emergency situations. Effectively used checklist.

A5.2.2.2. Q-. Response to Boldface emergencies 100% correct. Response to certain areas of non-Boldface emergencies or follow-on steps to Boldface procedures was slow/confused. Used the checklist when appropriate, but slow to locate required data.

A5.2.2.3. U. Incorrect response for Boldface emergency. Unable to analyze problems or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or contents.

#### A5.3. Section B: General.

##### A5.3.1. Area B-1: Safety (Critical).

A5.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.

A5.3.1.2. U. Was not aware of or did not comply with all safety factors required for safe operation or mission accomplishment. Did not adequately clear. Operated aircraft equipment in a dangerous manner.

**A5.3.2. Area B-2: Judgement (Critical).**

A5.3.2.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.

A5.3.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.

**A5.3.3. Area B-3: Flight Discipline (Critical).**

A5.3.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.

A5.3.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

**A5.3.4. Area B-4: Briefings.**

A5.3.4.1. Q. Well organized and presented in a logical sequence. Concluded briefing in time to allow for element/crew briefing (if applicable) and preflight of personal equipment, aircraft and ordnance. Presented briefing in a professional manner. Effective use of training/visual aids. Flight members clearly understood mission requirements. Established objectives for the mission. Presented all training events and effective technique discussion for accomplishing the mission. Considered the abilities of all flight members. Briefed corrective action from previous mission and probable problem areas when appropriate.

A5.3.4.2. Q-. Events out of sequence, hard to follow, some redundancy. Did not make effective use of available training/visual aids. Dwelled on non-essential mission items. Omitted some minor training events. Limited discussion of techniques. Did not consider all flight members' abilities. Did not identify probable problem areas.

A5.3.4.3. U. Confusing presentation. Did not allow time for element/crew briefing (if applicable) and preflight of personal equipment, aircraft and ordnance. Did not use training aids. Redundant throughout briefing. Lost interest of flight members. Presentation created doubts or confusion. Did not establish objectives for the mission. Omitted major training events or did not discuss techniques. Ignored flight members' abilities and past problem areas.

**A5.3.5. Area B-5: Personal Equipment.**

A5.3.5.1. Q. Thoroughly familiar with personal equipment requirements, usage, and preflight.

A5.3.5.2. Q-. Possessed required personal equipment items and was familiar with most of the preflight and usage procedures.

A5.3.5.3. U. Unfamiliar with required personal equipment preflight and usage.

**A5.3.6. Area B-6: Forms, Reports, Logs.**

A5.3.6.1. Q. Completed or supervised completion of all required preflight and post flight forms and documentation without significant error.

A5.3.6.2. Q-. Completed or supervised completion of all required preflight and post flight forms and documentation with some errors or omissions that had to be corrected.

A5.3.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate detracting from recording the mission data.

**A5.3.7. Area B-7: Flight Planning (If applicable).**

A5.3.7.1. Q. Developed a sound plan to accomplish the mission. Checked all factors applicable to flight in accordance with applicable directives. Considered NAS rules and requirements such as VFR/IFR and IFR/VFR transition, airspeed restrictions and potential traffic conflicts. Developed contingencies to mitigate potential risks. Aware of alternatives available, if flight cannot be completed as planned. Read and initialed for all items in the Flight Crew Information File (FCIF)/Read Files. Prepared at briefing time.

A5.3.7.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of performance capabilities or approved operating procedures/ rules in some areas.

A5.3.7.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission. Displayed faulty knowledge of operating data or procedures. Did not review or initial Go/No-Go items. Not prepared at briefing time.

**A5.3.8. Area B-8: Use of Checklists.**

A5.3.8.1. Q. Used current checklist and accomplished all items in proper sequence with no deviations or omissions.

A5.3.8.2. Q-. Only minor deviations from checklist procedures were noted.

A5.3.8.3. U. Failed to use current checklist or deviated from checklist procedures resulting in the mission being compromised.

**A5.3.9. Area B-9: Crew Resource Management.**

A5.3.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.

A5.3.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.

A5.3.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

**A5.3.10. Area B-10: Communication Procedures.**

A5.3.10.1. Q. Radio and intra-cockpit communications were concise, accurate and effectively used to direct maneuvers or describe the tactical situation.

A5.3.10.2. 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.

A5.3.10.3. U. Radio communications over primary/secondary radios were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

**A5.3.11. Area B-11: Knowledge of Directives.**

A5.3.11.1. Q. Demonstrated thorough knowledge of aircraft systems, limitations and performance characteristics.

A5.3.11.2. Q-. Knowledge of aircraft systems, limitations, and performance characteristics sufficient to perform the mission safely. Demonstrated deficiencies either in depth of knowledge or comprehension.

A5.3.11.3. U. Demonstrated unsatisfactory knowledge of aircraft systems, limitations or performance characteristics.

**A5.4. Section C: Qualification (R/MQ-1/9 “Predator” Pilot).****A5.4.1. Area C-1: Performance Data.**

A5.4.1.1. Q. Accurately computed/reviewed all required takeoff and landing data. Ensured all flight members were prepared. Aware of abort considerations, runway condition, weather, impact of weather on mission accomplishment.

A5.4.1.2. Q. Computed/reviewed required takeoff data with minor omissions or errors which did not detract from mission accomplishment or safety.

A5.4.1.3. U. Major errors or omissions which compromise safety. Faulty or improper knowledge of performance data.

**A5.4.2. Area C-2: Preflight Inspection.**

A5.4.2.1. Q. Established and adhered to station, engine start, taxi and take-off times to assure thorough preflight, check of personal equipment, crew briefing, etc. Accurately determined readiness of aircraft for flight.

A5.4.2.2. Q-. Minor procedural deviations which did not detract from the overall mission.

A5.4.2.3. U. 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.

**A5.4.3. Area C-3: Engine Start.**

A5.4.3.1. Q. Accomplished engine start IAW flight manual procedures and checklists.

A5.4.3.2. Q-. Accomplished engine start with significant omissions or deviations from flight manual checklist procedures that did not affect safety.

A5.4.3.3. U. Omitted required procedures. Deviations to flight manual which could potentially damage aircraft or mission equipment.

**A5.4.4. Area C-4: Taxi.**

A5.4.4.1. Q. Ensured adequate maneuvering space for aircraft. Satisfactorily used power, steering, or brakes. Taxi speed was adequate for existing conditions. Displayed satisfactory knowledge of marshaling signals.

A5.4.4.2. Q-. Taxi speed was erratic. Taxi was safe but over-controlled and rough when turning or using brakes. Deviations or omissions from flight manual procedures that did not affect safety or mission accomplishment.

A5.4.4.3. U. Taxi speed dangerous to aircraft control or systems. Overused brakes causing hot brakes or tire damage. Intervention required to prevent further damage to aircraft.

**A5.4.5. Area C-5: Takeoff.**

A5.4.5.1. Q. Maintained smooth aircraft control throughout takeoff. Performed takeoff IAW flight manual procedures and techniques.

A5.4.5.2. Q-. Minor flight manual procedural or technique deviations. Control was rough or erratic.

A5.4.5.3. U-. Takeoff potentially dangerous. Exceeded aircraft systems limitations. Raised gear too early/late. Failed to establish proper climb attitude. Over-controlled aircraft resulting in excessive deviations from intended flight path.

**A5.4.6. Area C-6: Climb Procedures.**

A5.4.6.1. Q. Climb was IAW the applicable flight manual.

A5.4.6.2. Q-. Some under or over-control. Flight manual deviations significant but did not affect safety of flight or mission accomplishment.

A5.4.6.3. U. Failed to comply with flight manual procedures. Major deviation affecting safety and mission accomplishment.

**A5.4.7. Area C-7: Traffic Pattern.**

A5.4.7.1. Q. Performed patterns/approaches IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was smooth and positive. Accurately aligned with runway. Maintained proper/briefed airspeed/AOA. Airspeed -5/+10 knots.

A5.4.7.2. Q-. Performed patterns/approaches with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was not consistently smooth, but safe. Alignment with runway varied. Slow to correct to proper/briefed airspeed/AOA/ Airspeed -5/+15 knots.

A5.4.7.3. U. Approaches not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Erratic aircraft control. Large deviations in runway alignment. Exceeded Q- parameters.

**A5.4.8. Area C-8--Go-Around:**

A5.4.8.1. Q. Initiated and performed go-around promptly IAW flight manual and operational procedures and directives.

A5.4.8.2. Q-. Slow to initiate go-around or procedural steps.

A5.4.8.3. U. Did not self-initiate go-around when appropriate. Techniques unsafe or applied incorrect procedures. Erratic aircraft control. Large deviations in runway alignment.

**A5.4.9. Area C-9--Engine-Out Traffic Pattern.** Evaluate actions taken in response to actual or simulated emergencies that occur during the flight check (in-flight or on the ground) until the flight examiner declares the evaluation of the emergency procedure terminated.

A5.4.9.1. Q. Performed emergency procedures IAW applicable directives. Used sound judgment. Configured at the appropriate position/altitude. Smooth positive control of aircraft. Able to prioritize actions to safely recover the aircraft. Maintained aircraft control within appropriate standards.

A5.4.9.2. Q-. Performed emergency procedures with minor deviations, omissions, and/or errors from applicable directives. Configured at a position and altitude, which allowed for a safe approach. Minor deviations from recommended procedures and altitudes/unnecessary maneuvering due to minor errors in planning or judgment; however, did not jeopardize the safe recovery of the aircraft.

A5.4.9.3. U. Judgment unsafe. Did not comply with applicable procedures. Erratic airspeed control compounded problems associated with the emergency. Performed emergency procedures with major deviations, omissions, and/or errors from recommended procedures and altitudes. Required excessive maneuvering due to inadequate planning or judgment. Unable to safely recover the aircraft.

**A5.4.10. Area C-10 Landing :** Applicable to normal VFR approaches. Where runway configuration, arresting cable placement or flight manual limitations require an adjustment to the desired touchdown point, identify a simulated runway threshold and the grading criteria applied accordingly.

A5.4.10.1. Q. Performed landings IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was smooth and positive. Accurate runway alignment.

A5.4.10.2. Q-. Performed landings IAW procedures and techniques 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, accomplished runway alignment.

A5.4.10.3. U. Landing not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Exceeded Q- criteria.

**A5.4.11. Area C-11: After Landing.**

A5.4.11.1. Q. Appropriate after landing checks and aircraft taxi procedures were accomplished.

A5.4.11.2. Q-. Significant deviations or omissions from established procedures but safety and mission effectiveness were not affected.

A5.4.11.3. U. Checks were not accomplished in timely manner. Errors of omission committed without correction.

**A5.4.12. Area C-12: Systems Knowledge.**

A5.4.12.1. Q. Thorough knowledge of aircraft systems, limitations, and performance characteristics.

A5.4.12.2. Q-. Knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.

A5.4.12.3. U. Unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

**A5.4.13. Area C-13: NAS Rules and Procedures.**

A5.4.13.1. Q. Complied with NAS rules/requirements and airspeed restrictions or potential traffic conflicts within NAS. When descending VFR took appropriate precautions to avoid traffic conflicts.

A5.4.13.2. Q-. Same as above but minor deviations detracted from safe accomplishment of the mission.

A5.4.13.3. U. Unfamiliar with NAS rules and procedures. Unaware of potential traffic conflicts. Did not use appropriate risk mitigating tools such as flight following during VFR operations in high traffic areas.

**A5.5. Section C: Qualification (RQ-4A “Global Hawk” Pilot).**

A5.5.1. The Global Hawk qualification evaluation may be accomplished in the simulator.

**A5.5.2. Area C-1: Performance Data.**

A5.5.2.1. Q. Accurately computed/reviewed all required takeoff and landing data. Ensured all flight members were prepared. Aware of abort considerations, runway condition, weather, impact of weather on mission accomplishment.

A5.5.2.2. Q-. Computed/reviewed required takeoff data with minor omissions or errors which did not detract from mission accomplishment or safety.

A5.5.2.3. U. Major errors or omissions which compromise safety. Faulty or improper knowledge of performance data.

**A5.5.3. Area C-2: Preflight Inspection.**

A5.5.3.1. Q. Established and adhered to station, engine start, taxi and take-off times to assure thorough preflight, check of personal equipment, crew briefing, etc. Accurately determined readiness of aircraft for flight.

A5.5.3.2. Q-. Minor procedural deviations which did not detract from the overall mission.

A5.5.3.3. U. 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.

**A5.5.4. Area C-3: Engine Start.**

A5.5.4.1. Q. Accomplished engine start IAW flight manual procedures and checklists.

A5.5.4.2. Q-. Accomplished engine start with significant omissions or deviations from flight manual checklist procedures that did not affect safety.

A5.5.4.3. U. Omitted required procedures. Deviations to flight manual which could potentially damage aircraft or mission equipment.

**A5.5.5. Area C-4: Taxi (Critical).**

A5.5.5.1. Q. Coordinated all checks correctly in accordance with flight manual and local procedures. Operated aircraft safely. Performed takeoff IAW flight manual procedures and techniques.

A5.5.5.2. U. Failed to coordinate with ground crew and safety observer prior to aircraft movement. Failed to adequately monitor taxi route operation. Intervention required to prevent damage to aircraft.

**A5.5.6. Area C-5: Takeoff (Critical).**

A5.5.6.1. Q. Complete all checks correctly in accordance with flight manual and local procedures. Operated aircraft safely. Performed takeoff in accordance with flight manual procedures and techniques.

A5.5.6.2. U. Failed to coordinate with ground crew and safety observer prior to aircraft movement. Takeoff potentially dangerous. Exceeded aircraft systems limitations. Failed to adequately monitor takeoff operation.

**A5.5.7. Area C-6: Basic Control.**

A5.5.7.1. Q. Monitored basic aircraft control within specified tolerances dictated by the software and mission plan. Promptly reacted to flight deviations as a result of anomalies, contingency reaction triggered by software and aircraft conditions, manual initiated overrides, etc.

A5.5.7.2. Q-. Minor procedural deviations, which did not detract from the overall mission.

A5.5.7.3. U. Failed to anticipate vehicle actions dictated by the software and mission plan. Failed to monitor basic aircraft control. Failed to promptly react to flight deviations.

**A5.5.8. Area C-7: In-flight Planning.**

A5.5.8.1. Q. Effectively performed in-flight planning, including changing profile by adding or deleting route segments or collections. Effectively adapted to dynamic changes in mission plan. Demonstrated ability to adjust mission profile to comply with time/fuel limitations, weather, area limits, mission constraints and objectives.

A5.5.8.2. Q-. In-flight planning included minor deviations, which did not compromise safety, or significantly detract from the mission.

A5.5.8.3. U. Unable to replan in-flight, or adapt to changing mission requirements. Consistently behind the aircraft. Action or inaction compromised safety and successful mission accomplishment.

**A5.5.9. Area C-8: Override Commands**

A5.5.9.1. Q. Concise operation of override commands including Full Override, On-Track, GOTO and Suspend. Successfully recognized actual or potential conflicts, and adjusted aircraft performance to safely avoid these conflicts.

A5.5.9.2. Q-. Operation of override commands included minor deviations which did not compromise safety or significantly detract from successful mission accomplishment.

A5.5.9.3. U. Improper or inappropriate operation of override commands which compromised safety of significantly detracted from successful mission accomplishment.

**A5.5.10. Area C-9: Crosscheck.**

A5.5.10.1. Q. Performed proper crosscheck of aircraft instruments during all phases of flight. Maintained situational awareness as necessary to comply with ATC instructions and mission plan changes.

A5.5.10.2. Q-. Minor deviations in crosscheck which did not compromise safety or significantly detract from successful mission accomplishment.

A5.5.10.3. U. Improper or ineffective crosscheck. Unable to maintain situational awareness. Failed to recognize actual or potential conflicts or system faults.

**A5.5.11. Area C-10: Descent, Approach, and Landing.**

A5.5.11.1. Includes Suspend command holding, enroute descent and GPS aided approach.

A5.5.11.2. Q. Performed correct procedures and maintained pattern to comply with ATC instructions and procedures. Maintained basic control and position orientation within aircraft performance limitations. Complied with mission plan approach and flight manual standards. Appropriate after landing checks and aircraft taxi procedures were accomplished.

A5.5.11.3. Q-. Landing accomplished with significant deviations to established procedures but safety was not affected.

A5.5.11.4. U. Failed to monitor landing and ground operations. Incorrect or inappropriate procedures. Unable to maintain position orientation or ATC assigned airspace. Unsafe control inputs jeopardized safety.

**A5.5.12. Area C-12: NAS Rules and Procedures.**

A5.5.12.1. Q. Complied with NAS rules/requirements and airspeed restrictions or potential traffic conflicts within NAS. .

A5.5.12.2. Q-. Same as above but minor deviations detracted from safe accomplishment of the mission.

A5.5.12.3. U. Unfamiliar with NAS rules and procedures. Unaware of potential traffic conflicts. Did not use appropriate risk mitigating tools.

**A5.6. Section D: Instructor.****A5.6.1. Area D-1: Instructional Ability.**

A5.6.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary.

A5.6.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instructions.

A5.6.1.3. U. Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

**A5.6.2. Area D-2: Briefing/Debriefing.**

A5.6.2.1. Q. Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Excellent ability during critique to

reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents in accordance with prescribed directives. Training syllabi reflected actual performance of student relative to standard. Briefed the student's requirements for the next mission.

A5.6.2.2. Q-. Minor errors or omissions in briefing, critique, and/or training documents that did not affect student progress.

A5.6.2.3. U. Briefings were marginal or non-existent. Did not review student's training folder or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete briefing of student's training requirements/objectives for mission.

#### **A5.6.3. Area D-3: Demonstration and Performance.**

A5.6.3.1. Q. Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.

A5.6.3.2. Q-. Minor discrepancies in the above criteria that did not affect safety or adversely affect student performance.

A5.6.3.3. U. Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

#### **A5.6.4. Area D-4: Conduct of the Mission.**

A5.6.4.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.

A5.6.4.2. Q-. Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not effectively used to the extent specific mission objectives were not achieved.

A5.6.4.3. U. Mission execution prevented accomplishment of a major portion of the mission. Undisciplined actions violated training rules repeatedly.

### **A5.7. Section E: Mission.**

#### **A5.7.1. Area E-1: Knowledge.**

A5.7.1.1. Q. Fully knowledgeable in mission requirements, test plan directives, aircraft limitations, and partial flight manual. Effectively coordinated with other crew members and project personnel.

A5.7.1.2. Q-. Demonstrated a limited knowledge of mission requirements, test plan directives, aircraft limitations, or the partial flight manual which degraded a portion of the mission objective or CRM.

A5.7.1.3. U. Inadequate knowledge of mission requirements, test plan directive, aircraft limitations, and partial flight manual. Did not effectively use resources. Directly affected successful mission accomplishment.

**A5.7.2. Area E-2: Planning.**

A5.7.2.1. Q. Considered all factors necessary for mission accomplishment to include weather, mission profile, airspace utilization/restrictions, and proper documentation.

A5.7.2.2. Q-. Limited consideration of all factors necessary for mission accomplishment. However, did not affect mission objective directly, but may have contributed toward lack of effective CRM.

A5.7.2.3. U. Did not consider all factors necessary for mission accomplishment. Lack of consideration contributed negatively towards successful mission completion.

**A5.7.3. Area E-3: Execution.**

A5.7.3.1. Q. Accomplished major mission objectives in a timely and skillful manner.

A5.7.3.2. Q-. Errors or omission were made which did not render mission ineffective, but indicated a definite need for additional training.

A5.7.3.3. U. Improper execution of duties negatively impacted mission accomplishment.

**A5.7.4. Area E-4: Security (Critical).**

A5.7.4.1. Q. Adequate security of mission information and material was maintained throughout preflight, flight, and post flight.

A5.7.4.2. U. Inadequate security procedures were carried out which would lead to the compromise of mission information and/or material.

**Attachment 6****AIR BATTLE MANAGER/MISSION CREW COMMANDER/AIR SURVEILLANCE OFFICER/  
SENIOR DIRECTOR (ABM/MCC/ASO/SD) EVALUATION CRITERIA****A6.1. General Grading Standards**

A6.1.1. The grading criteria in this attachment are divided into four sections: Ground Phase, General, Qualification and Instructor. Use all sections for criteria applicable to the events performed on the evaluation. These areas match the graded areas for ABMs found on forms specified in AFMC Supplement to AFI 11-202V2.

**A6.2. Area A: Ground Phase****A6.2.1. Area A-1: Publications.**

A6.2.1.1. Digital TO's are approved for use by individual aircrew members. Maintain one CD per individual. Maintain a disk with all applicable supplements, changes, errata, etc. Maintain a summary file/list of affected paragraphs/pages/topics that have been amended. The summary file does not reprint the amendment, it is used as a tool to identify areas that have been affected.

A6.2.1.2. Q. Assigned flight publications were current, complete and usable for any of the unit's taskings.

A6.2.1.3. Q-. Assigned flight publications contained deviations, omissions and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.

A6.2.1.4. U. Assigned flight publications contained deviations, omissions and/or errors compromised safety of flight.

**A6.2.2. Area A-2: Emergency Procedures Evaluation.**

A6.2.2.1. Q. Displayed correct and timely response to emergency situation. Effectively used checklist.

A6.2.2.2. Q-. Response to emergency situation was slow/confused. Used checklist when appropriate, but slow to locate required action.

A6.2.2.3. U. Incorrect response to emergency situation. Unable to analyze problem or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or content.

**A6.3. Area B: General****A6.3.1. Area B-1: Safety ( Critical).**

A6.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.

A6.3.1.2. U. Was not aware of or did not comply with all safety factors required for safe aircraft operation and mission accomplishment. Operated aircraft equipment in a dangerous manner.

**A6.3.2. Area B-2: Judgment (Critical).**

A6.3.2.1. Q. Executed the assigned mission in a timely efficient manner. Conducted the mission with a sense of understanding and comprehension.

A6.3.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.

**A6.3.3. Area B-3: Flight Discipline (Critical).**

A6.3.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.

A6.3.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

**A6.3.4. Area B-4: Briefings.**

A6.3.4.1. Q. Well organized and presented in a logical, professional fashion. Crewmembers clearly understood mission requirements.

A6.3.4.2. Q-. Events out of sequence, hard to follow, some redundancy. Dwelled on non-essential mission items.

A6.3.4.3. U. Confusing presentation. Redundant throughout the briefing. Lost interest of crewmembers. Presentation created doubts or confusion. Omitted major mission requirements.

**A6.3.5. Area B-5: Personal Equipment.**

A6.3.5.1. Q. Thoroughly familiar with personal equipment requirements, usage and preflight.

A6.3.5.2. Q-. Possessed required personal equipment and was familiar with most requirements, usage, and preflight procedures.

A6.3.5.3. U. Unfamiliar with personal equipment requirements, usage and preflight.

**A6.3.6. Area B-6: Forms, Reports, Logs (as applicable).**

A6.3.6.1. Q. Completed or supervised completion of all required forms without significant error.

A6.3.6.2. Q-. Completed or supervised completion of all required forms with some errors or omissions that had to be corrected.

A6.3.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate, detracting from recording the mission data.

**A6.3.7. Area B-7: Mission/Flight Planning.**

A6.3.7.1. Q. Developed a sound plan to accomplish the mission. Checked all factors applicable to mission in accordance with applicable directives. Aware of alternatives available, if mission cannot be completed as planned. Prepared at briefing time.

A6.3.7.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of capabilities or operating procedures/rules in some areas.

A6.3.7.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission. Displayed faulty knowledge of operating procedures. Not prepared at briefing time.

**A6.3.8. Area B-8: Use of Checklists.**

A6.3.8.1. Q. Used current checklist and accomplished all items in proper sequence with no deviations or omissions.

A6.3.8.2. Q. Only minor deviations from checklist procedures were noted.

A6.3.8.3. U. Failed to use current checklist or deviated from checklist procedures resulting in the mission being compromised.

**A6.3.9. Area B-9: Crew Resource Management.**

A6.3.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.

A6.3.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.

A6.3.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

**A6.3.10. Area B-10: Communication Procedures.**

A6.3.10.1. Q. Operated communication equipment correctly. Radio and ICS communications were concise, accurate and effective.

A6.3.10.2. Q- Operated communication equipment with delays or errors that did not affect mission accomplishment. 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.

A6.3.10.3. U. Failed to operate communication equipment correctly. Radio communications over primary/secondary radios were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

**A6.3.11. Area B-11: Knowledge of Directives and Mission Systems.**

A6.3.11.1. Q. Demonstrated thorough knowledge of applicable directives, mission systems, limitations and employment.

A6.3.11.2. Q-. Minor errors in knowledge of applicable directives, mission systems, limitations and employment. Demonstrated deficiencies either in depth of knowledge or comprehension.

A6.3.11.3. U. Demonstrated unsatisfactory knowledge of applicable directives, mission systems, limitations or employment.

**A6.4. Area C: Qualification.****A6.4.1. Area C-1: Preflight Inspection****A6.4.2. Area C-2: Console Operations and Displays****A6.4.3. Area C-3: Mission Execution**

A6.4.4. The following criteria will be used to evaluate qualification procedures identified in paragraph [A6.4.1.](#) – [A6.4.3.](#)

A6.4.4.1. Q. Procedures required by the flight manual, checklist and applicable directives were accomplished with no omissions or deviations, which detracted from the overall efficient conduct of the mission.

A6.4.4.2. Q-. Procedures required by the flight manual, checklist and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient conduct of the mission. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.

A6.4.4.3. U. Procedures required by the flight manual, checklist and applicable directives were accomplished with major omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was unacceptable.

## **A6.5. Area D: Instructor.**

### **A6.5.1. Area D-1: Instructional Ability.**

A6.5.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary.

A6.5.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instructions.

A6.5.1.3. U. Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

### **A6.5.2. Area D-2: Briefing/Debriefing.**

A6.5.2.1. Q. Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Excellent ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents in accordance with prescribed directives. Training syllabi reflected actual performance of student relative to standard. Pre-briefed the student's requirements for the next mission.

A6.5.2.2. Q-. Minor errors or omissions in briefing, critique, and/or training documents that did not affect student progress.

A6.5.2.3. U. Briefings were marginal or non-existent. Did not review student's training folder or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete pre-briefing of student's training requirements/ objectives for mission.

### **A6.5.3. Area D-3: Demonstration and Performance**

A6.5.3.1. Q. Effectively demonstrated procedures and techniques on the ground and in-flight. Demonstrated thorough knowledge of mission systems, procedures and all applicable publications and regulations.

A6.5.3.2. Q-. Minor discrepancies in the above criteria that did not affect safety or adversely affect student performance.

A6.5.3.3. U. Did not demonstrate correct procedure or technique. Insufficient knowledge about mission systems, procedures, and/or proper source material.

**A6.5.4. Area D-4: Conduct of the Mission**

A6.5.4.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.

A6.5.4.2. Q-. Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not effectively used to the extent specific mission objectives were not achieved.

A6.5.4.3. U. Mission execution prevented accomplishment of a major portion of the mission. Undisciplined actions violated training rules repeatedly.