# BY ORDER OF THE SECRETARY OF THE AIR FORCE

AIR FORCE MANUAL 11-2FT VOLUME 2



#### 21 MARCH 2019

Incorporating Change 1, 26 APRIL 2021 Certified Current, 26 APRIL 2021 Flying Operations

> FLIGHT TEST AIRCREW EVALUATION CRITERIA

## COMPLIANCE WITH THIS PUBLICATIONS IS MANDATORY

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(Maj Gen Scott F. Smith)

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This manual implements Air Force Policy Directives (AFPD) 11-2, Aircrew Operations; Air Force Instruction (AFI) 11-202V2, Aircrew Standardization/Evaluation Program, and is consistent with policy in AFPD 11-4, Aviation Service. The purpose of this publication is to provide evaluation criteria for flight test aircrew to be used during required evaluations. It applies to all Air Force Material Command (AFMC) units and AFMC gained flying units and personnel. This publication does not apply to the Air National Guard or Air Force Reserve units and members except those under AFMC operational control. Field units below MAJCOM level will forward copies of their proposed supplements to this publication to AFMC/A3V for review and approval prior to publication. The authorities to waive wing/unit level requirements in this publication are identified with a tier ("T-0, T-1, T-2, T-3") number following the compliance statement. Submit requests for waivers through the chain of command to the appropriate tier waiver approval authority, or alternately, to the requestor's commander for non-tiered compliance items (See paragraph 1.2). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, Recommendation for Change of Publication; route AF Forms 847 from the field through the appropriate functional chain of command. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction 33-322, Records Management and Information Governance Program, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. This Manual requires the collection and or maintenance of information protected by the Privacy Act of 1974 authorized by Title 5 United

States Code (USC) Section 552a, Records maintained on individuals; 37 USC § 334, Special aviation incentive pay and bonus authorities for officers; AFPD 11-2; AFPD 11-4; Department of Defense Instruction (DoDI) 7730.67, Aviation Incentive Pays and Bonus Program; and Executive Order 13478, Amendments to Executive Order 9397 Relating to Federal Agency Use of Social Security Numbers. The applicable SORN F011 AF XO A, Aviation Resource Management Systems is available at: <a href="http://dpclo.defense.gov/Privacy/SORNs.aspx">http://dpclo.defense.gov/Privacy/SORNs.aspx</a>. Vigilance must be taken to protect Personally Identifiable Information when submitting or sending nominations, application or other documents to Department of Defense agencies through government Internet, software applications, systems, e-mail, postal, faxing or scanning. Refer to the following policies for additional guidance: AFI 33-332, Air Force Civil Liberties Program and Department of Defense 5400.11-R, Department of Defense Privacy Program. Forms containing Personally Identifiable Information require Privacy Act Statements. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force. Compliance with the attachments in this publication is mandatory.

#### **SUMMARY OF CHANGES**

This interim change amends the events required for a pilot instrument evaluation. See **paragraph 4.2** and sub-paragraphs for new guidance. Removed references to MQ-1 aircraft. A margin bar () indicates newly revised material.

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#### **OVERVIEW**

- **1.1. General.** AFMC/A3V is the OPR for the three-volume set of Flight Test (FT) manuals containing attachments for each weapon system flown in AFMC. These publications are numbered AFMAN 11-2FT Volume 1 *Flight Test Aircrew Training*, Volume 2 *Flight Test Aircrew Evaluation Criteria*, and Volume 3 *Flight Test Operations Procedures*, and contain the training, evaluation criteria, and operations procedures, respectively, for each weapon system. AFMC uses these instructions in lieu of AFMAN 11-2 Mission Design Series (MDS)-Specific Volumes for flying operations in accordance with AFI 11-200 *Aircrew Training, Standardization/Evaluation, and General Operations Structure*. In the absence of published guidance, coordinate with HQ AFMC/A3V for approval of locally developed guidelines. These guidelines should be consistent with similar guidance specified in the appropriate AFMAN 11-2MDS-Specific volumes.
  - 1.1.1. All evaluations are conducted in accordance with the provisions of AFI 11-202, Volume 2 *Aircrew Standardization and Evaluation Program* and this instruction. Information gathering documents are established as forms in accordance with AFI 33-360, Publications and Forms Management.
- **1.2. Recommended Changes/Waivers.** Submit waiver requests to AFMC/A3V to forward through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the publication OPR for non-tiered items. Use the AFMC Form 73 for all waivers internal to AFMC. There are no implied waivers at T-3 or any other level in this publication. All guidance that may be considered for waivers are designated with appropriate tier levels. Submit suggested improvements to this instruction on Air Force Form 847, *Recommendation for Change of Publication*, to AFMC/A3V. AF/A3T is approval authority for interim changes/revisions to this instruction.

## **ROLES AND RESPONSIBILITIES**

#### 2.1. Procedures:

- 2.1.1. AFMC/A3V establishes grading criteria to be used for all aircrew evaluations.
- 2.1.2. Standardization/Evaluation Flight Examiners (SEFE) use the evaluation criteria contained in **Attachment 2** through **Attachment 8** for conducting all flight evaluations and paragraph for all emergency procedures evaluations. To ensure standard and objective evaluations, SEFEs must be thoroughly familiar with the prescribed evaluation criteria. (**T-1**) If guidance published in this volume is not sufficient or does not apply (for example; U-2), follow lead MAJCOM guidance.
- 2.1.3. Unless otherwise specified, the examinee or SEFE may fly in any flight position (to include chase) which best allows the SEFE to conduct a thorough evaluation. If dual qualified, the SEFE may administer the evaluation from the chase position in a similar mission and category aircraft (e.g., F-15, F-16, F-22). The SEFE may administer the evaluation from the rear cockpit of an aircraft they are not qualified in. The Evaluator logs evaluator time. Use the remarks section of the Air Force Form 4327, *ARMS Flight Authorization* and Air Force Technical Order (AFTO) Form 781, *ARMS Aircrew/Mission Flight Data Document* to explain.
- 2.1.4. The SEFE has to brief the examinee on the purpose of the evaluation and how it will be conducted prior to flight. The examinee has to accomplish required flight planning in accordance with the flight position during the evaluation. Flight Examiners are furnished a copy of necessary mission data and mission materials.
- 2.1.5. The SEFE has to thoroughly debrief all aspects of the flight. This debrief has to include the examinee's overall rating, specific deviations, area grades assigned (if other than qualified) and any required additional training.

#### **PROCEDURES**

- **3.1. Grading Instructions.** This manual and its attachments contain the standards and criteria for conducting evaluations in AFMC aircraft. These standards when applied with SEFE judgement are the determining factor in awarding subarea and overall evaluation grades.
  - 3.1.1. 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. Consider cumulative deviations when determining the overall grade.
  - 3.1.2. 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. (T-1)
  - 3.1.3. Assign an overall unqualified grade if the examinee receives an unqualified grade in any critical area.
  - 3.1.4. The following general criteria apply during all phases of flight except as noted for specific events and on instrument final approaches:

Table 3.1. General Criteria.

		Fixed Wing Pilot	Rotary Pilot	Navigator/Weapon Systems Officer	Unmanned Aerial Systems (UAS) Pilot (1)
Q	Altitude	+/- 200 Feet	+/- 200 Feet	+/- 200 Feet	+/- 200 Feet
	Airspeed	+/- 5%	+/- 10 Knots	+/- 5%	+10 / -5 KIAS
			Indicated		
			Airspeed (KIAS)		
	Course	+/- 5 degrees/3	+/- 5 degrees/3	+/- 5 degrees/3 NM	+/-20 degrees/1.5
		Nautical Miles	NM (Whichever	(Whichever is	NM Whichever
		(NM)	is greater)	greater	is greater
		(Whichever is			
		greater)	/ 2277	/ 2 ) 17 /	37 . A 11 11
	Tactical Air	+/- 2 NM	+/- 2 NM	+/- 2 NM	Not Applicable
	Navigation				(N/A)
	(TACAN)				
	Arc				
Q-	Altitude	+/- 300 Feet	+/- 300 Feet	+/- 250 Feet	+/- 300 Feet
	Airspeed	+/- 10%	+/- 20 KIAS	+/- 10%	+15 / -7 KIAS
	Course	+/- 10 degrees/5	+/- 10 degrees/5	+/- 10 degrees/5 NM	+/-30 degrees/3
		NM (Whichever	NM (Whichever	(Whichever is	NM Whichever
		is greater)	is greater)	greater)	is greater
	TACAN Arc	+/- 3 NM	+/- 3 NM	+/- 3 NM	N/A

U		Exceeded Q-	Exceeded Q-	Exceeded Q-	Exceeded Q-		
		Tolerances	Tolerance's	Tolerance's	Tolerance's		
Not	<b>Note 1:</b> This table is not applicable to RQ-4 evaluations.						

- **3.2. Emergency Procedures Evaluation (EPE).** Aircrew have to be administered EPEs. Use an Aircrew Training Device (ATD) to perform EPEs (when available and properly configured) to the maximum extent possible. If an ATD is not used, the EPE has to 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 has to be an oral evaluation.
  - 3.2.1. The following items, as applicable, have to be included on all emergency procedures evaluations:
    - 3.2.1.1. Aircraft General Knowledge.
    - 3.2.1.2. Emergency Procedures (EP). Evaluate a minimum of two emergency procedures per phase of flight (i.e., pre-takeoff, takeoff, cruise and landing). EPs executed in the aircraft may be used to fulfill one of the two requirements. All Bold Face/Critical Action Procedures (CAPS) have to be evaluated (if applicable).
    - 3.2.1.3. Crew Resource Management (CRM).
    - 3.2.1.4. Unusual attitude recoveries are evaluated in accordance with AFMAN 11-217 V1, Instrument Flight Procedures, during all EPEs. If performed in an ATD, this fulfills the requirement for Unusual Attitude Recoveries on Pilot Instrument/Qualification evaluations.
  - 3.2.2. Include the following items on EPEs as a requisite for the instrument and/or qualification evaluation (if applicable):
    - 3.2.2.1. Evaluate use of standby/emergency instruments.
    - 3.2.2.2. Alternate/Divert Airfields. Evaluate a minimum of one approach at an alternate/divert airfield mission & conditions permitting. An alternate/divert airfield is defined as an airfield other than the base/airfield of assignment.
    - 3.2.2.3. Evaluate loss of visual references in close proximity to the runway (low visibility landings) including use of night vision devices during takeoff/landing, if authorized.
    - 3.2.2.4. Evaluate transition to instruments in a spatial disorientation incident.
  - 3.2.3. 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).
  - 3.2.4. Examinees receiving an overall unqualified grade are 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 are 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 indicates if the additional training is to be accomplished before the flight evaluation. Accomplish additional training and re-evaluations in accordance with AFI 11-202, V2.
  - 3.2.5. Use the following criteria to grade individual items on EPE's:

- 3.2.5.1. Q: Performance is correct. Quickly recognizes and corrects errors.
- 3.2.5.2. Q-: Performance is safe, with limited proficiency. Makes errors of omission or commission.
- 3.2.5.3. U: Performance is unsafe or indicates lack of knowledge or ability.

# **EVALUATION REQUIREMENTS**

#### 4.1. General.

- 4.1.1. All evaluations follow the guidelines set in AFI 11-202, V2. The procedures outlined in this chapter apply to all flying units. All evaluations are flight evaluations. (T-2). Waivers to administer evaluations in a simulator are considered on a case by case basis. Exception: Non-rated aircrew evaluations may be administered on the ground.
- 4.1.2. Required evaluation areas are contained in worksheets available on Center Operations On Line (COOL). When it is impossible to evaluate a required area in flight, it has to 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 Section D of the AF Form 8, Certificate of Aircrew Qualification. If the SEFE determines the required item cannot be adequately evaluated by an alternate method, an additional flight is required by the examinee to complete the evaluation.
- 4.1.3. 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. Digital TO's (EFB) are approved for use by individual aircrew members. Common access publications may be used to fulfill this requirement. Demonstrate accessibility to all required publications. See AFI 11-215 *USAF Flight Manuals Program* for detailed guidance. Declare one variant (e.g. C-130H) as the primary weapon system for units that fly multiple variants of a Mission Design Series (MDS) (e.g. AC-130H, MC-130H, HC-130P, C-130E). Issue individual publications based on this determination.
- **4.2. Instrument Evaluation.** This evaluation has to include approaches at airfields other than the base of assignment if possible. (**T-2**). The intent of an instrument evaluation and instrument rating is to certify that the pilot is capable of executing any procedure or approach that is compatible with the aircraft flown. MQ-9 pilots are required to take an instrument check utilizing their assigned aircraft and follow the Minimum In-Flight Events per **Attachment 5**, **paragraph A5.6**. (**T-2**). RQ-4 pilots are required to take an instrument check utilizing the RQ-4 or ATD and follow the Minimum In-Flight Events per **Attachment 5**, **paragraph A5.7**. (**T-2**).
  - 4.2.1. The minimum ground phase requisite is the instrument examination.
  - 4.2.2. Minimum In-Flight Events.
    - 4.2.2.1. Precision Approach. One Instrument Landing System (ILS)/Microwave Landing System (MLS); Precision Approach Radar (PAR); or Area Navigation (RNAV) Localizer performance with Vertical Guidance (LPV)) approach fulfills this requirement. Any aircraft compatible precision approach type (ILS/MLS, PAR, or Global Positioning System [GPS] based) not executed during the flight evaluation has to be evaluated via the ground evaluation.
    - 4.2.2.2. Non-precision Approach. Two Non-precision approaches are required. (**T-2**). Any ground based navigation aid (TAC/VOR/NDB/LOC) or RNAV (LNAV, LNAV/VNAV, or LP) approach may be flown. Aircraft that are not RNAV certified may

- execute at least one non-precision approach in flight and may evaluate the second non-precision approach via the ground evaluation.
- 4.2.2.3. Holding. Desired but not required for fighter/trainer/attack aircraft. If performed, it has to be evaluated in accordance with **Attachment 2**. **(T-2)**. Required for all other capable aircraft. **(T-2)**.
- 4.2.2.4. Penetration Descent. This event only applies to aircraft listed in AFI 11-202 V2, AFMC Supplement, **Table 5.1** "High Altitude Penetration Descent aircraft."
- 4.2.2.5. Circling Approach. Desired but not required for fighter/trainer/attack or rotary wing aircraft. If performed, it has to be evaluated in accordance with **Attachment 2**. (**T-2**). Required for all other capable aircraft. (**T-2**).
- 4.2.2.6. RNAV certified aircraft. At least one of the three instrument approaches will be GPS based. (**T-2**). **Note**: See AFMC/A3V SharePoint for aircraft RNAV certification lists (N/A if the pilot has not completed RNAV approach training).
- 4.2.2.7. One instrument approach will be flown using degraded instrument operations (N/A for UH-1). (T-2). In the absence of flight manual guidance, the unit or flight examiner may determine allowable degraded operation execution methods. For example, degraded operations may include but are not limited to: the use of standby instruments; heads down displays for HUD equipped aircraft; flight director off, or as defined in the aircraft flight manual. The use of vision restricting devices is not authorized per AFMAN 11-202 Vol 3. (T-2). Do not disable primary flight displays. (T-2).
- 4.2.3. Unusual Attitudes. May be evaluated during EPEs. If evaluated in-flight, have to be performed with a SEFE in the aircraft. Do not perform unusual attitude recoveries in single seat aircraft. Unusual attitudes are verbally evaluated for cargo and cargo type (such as E-8) aircraft.
- **4.3. Qualification Evaluation.** A mission flown to demonstrate basic aircraft qualification. No instrument approaches or procedures (holding, instrument penetration) are required.
  - 4.3.1. Minimum ground phase requisites are closed and open book examinations, EPE, and a Bold Face/CAPS written exam. Answers contain all Bold Face/CAPS items in proper sequence. Abbreviations are allowed.
  - 4.3.2. Navigators and Weapon Systems Officers with a set of flight controls or flight instruments at their crew position have to complete the instrument exam as a requisite for the qualification evaluation.
  - 4.3.3. Minimum In-Flight events. (Pilot)
    - 4.3.3.1. All full flap and partial flap landings are required. Touch and Go landings are required if certified.
    - 4.3.3.2. Emergency pattern work (engine(s) out landing, engine(s) out go-around, landing, Simulated Flame Out (SFO)) as applicable to aircraft systems and configurations in accordance with AFI 11-2FT V3.
    - 4.3.3.3. Visual Flight Rules (VFR) traffic patterns. This event may be graded during a circling approach when weather is below VFR pattern minimums.

- 4.3.4. Pilots and Weapon System Officers (WSO)/navigators have to be evaluated on compliance with National Airspace System (NAS) rules and procedures. Particularly, evaluate compliance with minimum safe maneuvering airspeeds below 10,000 feet MSL using criteria in **Table 3.1**, as well as using all means available to ensure safe operations (e.g., Flight following during VFR operations). Mission planning has to 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.
- 4.3.5. Electronic Warfare Officer grading criteria may be supplemented and published in the unit supplement to this Instruction.
- 4.3.6. Navigator/CSO/Weapon Systems Officer (WSO)/Electronic Warfare Officer (EWO): Qualification is gained by completion of QUAL evaluation which consists of Master Question File (MQF) closed book exam, unit developed open book exam, Instrument Refresher Course (IRC), instrument exam, boldface/CAPS, EPE, and flight evaluation. The closed book exam is derived from the full pilot MQF (applicable blocks/Mission Design Series (MDS) flight qual) in aircraft for which an MDS specific CSO MQF is not available. See AFMAN 11-2FT V1 for Nav/WSO/EWO qualification for the C-12, F-16, and T-38.
- 4.3.7. Career Enlisted Aviator (CEA): Qualification is gained by completion of QUAL evaluation which consists of MQF closed book exam and unit developed open book exam, boldface/CAPS, EPE, and flight evaluation.
- **4.4. Mission Evaluation.** The requirement for a mission evaluation for AFMC aircrews is not required according to the provisions of AFI 11-202V2. However, evaluators should attempt to include mission type events on a qualification evaluation. Mission type events include any Phase II area such as: Basic Fighter Maneuver (BFM); safety chase; CAPS; flight test techniques; formation; basic weapons deliveries; and functional checks. If mission events are evaluated, use the mission section of the evaluation sheets and evaluate relative to the four listed areas.

#### 4.5. Instructor Evaluation.

- 4.5.1. Initial Instructor and Instructor Requalification (RQ) evaluations are conducted in accordance with AFI 11-202, V2, Chapter 5. All instructor candidates receive an EPE as a prerequisite for initial and RQ instructor evaluations. Using unit EPE guides, initial instructor candidates have to demonstrate the ability to provide emergency procedures instruction. This is a one-time check which verifies the candidate's ability to instruct in various phases of the unit's mission and aircraft. Flight evaluations have to include a thorough evaluation of the examinee's instructor knowledge and ability. Specific profiles and/or events are determined by the SEFE. Initial and Requalification Instructor Evaluations include the applicable portions of the following Areas as listed in the attachments: General; Ground; Qualification; and Instructor.
- 4.5.2. All subsequent periodic evaluations (for example, Instrument, Qualification, Mission) have to include instructor portions during the evaluations.
- 4.5.3. Rear Cockpit (RCP) landing evaluation. An RCP landing evaluation is required for all initial and RQ instructor evaluations for applicable fighter/attack and trainer aircraft (T-38 and T-6). RCP (SPOT) evaluations for acceptance of instructor qualification expire on the same date as the current qualification evaluation. The RCP evaluation should include an overhead

and emergency pattern(s). If a second sortie is needed to complete the RCP landing portion of the evaluation, see AFI 11-202 V2 for guidance on additional sortie documentation.

- **4.6. Spot Evaluation.** Spot evaluations are conducted in accordance with AFI 11-202, Volume 2. A SPOT evaluation is an evaluation not intended to satisfy the requirements of a periodic (i.e., INSTM, QUAL, MSN, INSTR) evaluation. A SPOT evaluation 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 are documented as SPOT evaluations.
- **4.7. Evaluation Instructions.** Each crew position has specific Area C requirements and evaluation criteria. 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).

JOSEPH T. GUASTELLA Jr., Lt Gen, USAF Deputy Chief of Staff, Operations

#### **Attachment 1**

## GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

## References

AFMAN 11-202v3, Flight Operations, 10 June 2020

DELETE Air Force Manual 33-363, Management of Records, 1 Mar 2008

Privacy Act of 1974 authorized by Title 5 United States Code, Section 552a, as amended

Title 37 United States Code, Section 334

Department of Defense Instruction 7730.67

Executive Order 13478

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

AFI 33-332, Air Force Civil Liberties Program

Department of Defense 5400.11-R, Department of Defense Privacy Program

AFI 33-332, Air Force Civil Liberties Program, 10 March 2020

AFPD 11-2, Aircrew Operations, 31 Jan 2019

AFPD 11-4, Aviation Service, 1 Sep 2004

AFI 11-2FTV1, Flight Test Aircrew Training, 28 Feb 2017

AFI 11-200 Aircrew Training, Standardization/Evaluation, and General Operations Structure.

AFI 11-202V2, Aircrew Standardization/Evaluation Program, 6 Dec 2018

AFI 11-202V3, General Flight Rules, 10 Aug 2016

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

AFMAN 11-217V1, Instrument Flight Procedures, 22 Oct 2010

AFI 33-360 Publications and Forms Management, 1 Dec 2015

DELETE AFI 11-202V3, General Flight Rules, 10 Aug 2016

DELETE AFI 33-332, Air Force Civil Liberties Program

AFMAN 33-363, Management of Records, 1 Mar 2008

NOTE: 1. The entire Air Force Tactics, Techniques and Procedures (AFTTP) 3-1 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.

# Adopted Forms

AF Form 8, Certificate of Aircrew Qualification

AF Form 847, Recommendation for Change of Publication

AF Force Form 4327, ARMS Flight Authorization

AFTO Form 781, ARMS Aircrew/Mission Flight Data Document

AFMC Form 73, AFMC Flight Operations Waiver Request

# Abbreviations and Acronyms

AFI—Air Force Instruction

**AFMAN**—Air Force Manual

AFMC—Air Force Materiel Command

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

**AOA**—Angle of Attack

**APU**—auxiliary power unit

**ASR**—Airport Surveillance Report

ATC—Air Traffic Control

ATD—aircrew training device

**BFM**—Basic Fighter Maneuver

**BF**—Bold Face

**CAPS**—Critical Action Procedures

**COMSEC**—Communications Security

**COOL**—Center Operations on Line

**CPT**—cockpit procedures trainer

**CRM**—Crew Resource Management

**DH**—decision height

**DR**—dead reckoning

**DSO**—Defensive Systems Officer

**EFB**—Electronic Flight Bag

**EP**—Evaluator Pilot/emergency procedure

**EPE**—Emergency Procedures Evaluation

**ETA**—Expected Time of Arrival

**EWO**—Electronic Warfare Officer

FCIF—Flight Crew Information File

**FLIP**—Flight Information Publications

**GPS**—Global Positioning System

HF—high frequency

ICAO—International Civil Aviation Organization

IFR—Instrument Flight Rules

**ILS**—Instrument Landing System

IRC—Instrument Refresher Course

**KIAS**—knots indicated airspeed

**MAJCOM**—Major Command

MAP—Missed Approach Point

MDS—Mission Design Series

**MDA**—Minimum Descent Altitude

**MQF**—Master Question File

MSA—Minimum Safe Altitude

MSL—mean sea level

**N/A**—Not Applicable

NM—nautical miles

**NOTAM**—Notice to Airman

**OPR**—Office of Primary Responsibility

**OSO**—Offensive Systems Officer

PAR—Precision Approach Radar

**RCP**—Rear Cockpit

**RPM**—revolutions per minute

**SAR**—synthetic aperture radar

**SD**—Senior Director

SEFE—Standardization/Evaluation Flight Examiner

SFO—simulated flame out

STAN/EVAL—Standardization & Evaluation

**TACAN**—Tactical Air Navigation

**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**

**Bold Face**—Critical items are presented in boldface type and must be committed to memory

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

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

**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.).

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

**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."

**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".

#### **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. Required evaluation areas are contained in worksheets available on COOL.
- A2.1.2. If published guidance is not sufficient or does not apply, with concurrence from AFMC/A3V, follow lead MAJCOM criteria.

## A2.2. Area A: Ground Phase.

- A2.2.1. **Area A-1:** Publications.
  - A2.2.1.1. Digital TO's (Electronic Flight Bag (EFB)) are approved for use by individual aircrew members. EFBs may be restricted within individual weapon systems.
  - 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 applicable directives.

- A2.3.11.2. Q-. Minor errors in knowledge of applicable directives. Demonstrated deficiencies either in depth of knowledge or comprehension.
- A2.3.11.3. U. Demonstrated unsatisfactory knowledge of applicable directives.

#### A2.3.12. **Area B-12:** Fuel Conservation

- A2.3.12.1. Q. Possessed a high level of knowledge of all applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied fuel conservation procedures during mission planning and through-out the mission execution.
- A2.3.12.2. Q-. Possessed some knowledge of applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied some fuel conservation procedures, but failed to apply fuel conservation procedures during mission planning or during some phases of the mission.
- A2.3.12.3. U. Unaware of fuel conservation procedures. Failed to apply any fuel conservation procedures in any area of the mission.

# **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 in accordance with 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.** (May be completed on a touch-and –go landing if certified)
  - A2.4.5.1. Q. Maintained smooth aircraft control throughout takeoff. Performed takeoff in accordance with 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 in accordance with 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 in accordance with 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/Angle of Attack (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 in accordance with 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 (Fighter/Attack/Trainer, if applicable).
  - A2.4.8.1. Applicable to normal VFR approaches. Identify a simulated runway threshold if runway configuration, arresting cable placement or flight manual limitations require an

- adjustment to the desired touchdown point and grade 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 in accordance with 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 in accordance with 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 (Bomber/Tanker/Transport, if applicable).
  - A2.4.9.1. Identify a simulated runway threshold if runway configuration, arresting cable placement or flight manual limitations require an adjustment to the desired touchdown point and grade 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 in accordance with 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 in accordance with 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.

- 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 (Bomber/Tanker/Transport) was in accordance with criteria detailed in **paragraph A2.4.8.** Touchdown point (Fighter/Attack/Trainer) was 150-1500 ft and within stopping distance for the runway available.
- 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 (Bomber/Tanker/Transport) was in accordance with criteria detailed in paragraph A2.4.8. Touchdown point (Fighter/Attack/Trainer) was outside of Q criteria, but within stopping distance for the runway available.

- 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 not in accordance with criteria detailed in **paragraph A2.4.8.** (Bomber/Tanker/Transport) or **A2.4.9** (Fighter/Attack/Trainer).
- 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. Touchdown point was according to applicable guidance and permitted safe stopping in the available runway.
  - A2.4.11.2. Q-. Minor procedural errors. Erratic airspeed/ AOA control. Errors did not detract from safe handling of the situation. Touchdown point was outside of Q criteria but, permitted safe stopping in the available runway.
  - 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. Touchdown point did not permit safe stopping in the available runway.
- A2.4.12. **Area C-11:** Engine Out Go-Around (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. O-. 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: Landing.** (Criteria applies to RCP landings)
  - A2.4.13.1. Full Stop Landing (Required for MP/MC, if profile permits for IP)
    - A2.4.13.1.1. Q. Landing accomplished in accordance with flight manual procedures. Aircraft control throughout the landing was smooth and positive using proper braking, steering, and flight control inputs. Touched down in the desired touchdown zone with accurate runway alignment.
    - A2.4.13.1.2. Q-. Landing accomplished in accordance with procedures outlined in the flight manual, operational procedures, and local directives with deviations, omissions, and/or errors, which did not jeopardize safety of flight. Aircraft control to include braking, steering, and flight control inputs was erratic, but safe. Aircraft control was rough however, runway alignment was accomplished and the aircraft touched down within the first 3000' of the runway (or as briefed).
    - A2.4.13.1.3. U. Landing not performed in accordance with procedures outlined in the flight manual, operational procedures and local directives. Failed to touchdown within the first 3000' of the runway (or as briefed). Excessive deviations in runway

- alignment. Airspeed, alignment, or sink rate limitations exceeded. Landing unsafe, inappropriate control inputs jeopardized safety.
- A2.4.13.2. Touch and Go Landing (T/GO) (Required for T/GO certified MP and all IP)
  - A2.4.13.2.1. Q. Landing accomplished in accordance with flight manual, operational procedures, and local directives. Aircraft control was smooth and positive. Touched down in the desired touchdown zone with accurate runway alignment.
  - A2.4.13.2.2. Q-. Landing accomplished in accordance with procedures outlined in the flight manual, operational procedures, and local directives with deviations, omissions, and/or errors, which did not jeopardize safety of flight. Aircraft control/ flight control inputs was erratic, but safe. Aircraft control was rough however, runway alignment was accomplished and the aircraft touched down within the first 3000' of the runway (or as briefed).
  - A2.4.13.2.3. U. Landing not performed in accordance with procedures outlined in the flight manual, operational procedures and local directives. Failed to touchdown within the first 3000' of the runway (or as briefed). Excessive deviations in runway alignment. Airspeed, alignment, or sink rate limitations exceeded. Landing unsafe, inappropriate control inputs jeopardized safety.
- 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:** National Airspace System (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.
- A2.4.17. **Additional Emergency Pattern Work Grading Criteria.** Use his section in conjunction with aircraft specific criteria for emergency pattern not found elsewhere within this document. Reference applicable flight manual, operational procedures and local directives for the applicable emergency pattern to be evaluated.
  - A2.4.17.1. Q. Maintained smooth aircraft control throughout the maneuver. Performed pattern/approach in accordance with procedures and techniques outlined in the flight manual, operational procedures and local directives. Accurately aligned with runway. Maintained proper/briefed airspeed/AOA. Touchdown point within the desired / briefed touchdown zone.
  - A2.4.17.2. Q-. Performed pattern/approach with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives, but safe. Control was rough or erratic. Alignment with runway varied. Slow to correct to proper/briefed airspeed/AOA. Touchdown point safe but not within the designated / briefed touchdown zone.
  - A2.4.17.3. U. Potentially dangerous. Pattern/approach not performed in accordance with procedures and techniques outlined in the flight manual, operational procedures and local directives. Over-controlled aircraft resulting in excessive deviations from intended flight path. Large deviations in runway alignment. Unable to complete maneuver.
- **A2.5. Section C:** Qualification (Rotary Wing 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, landing zone 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 in accordance with 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, cyclic steering, pedals, 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 in accordance with 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 in accordance with 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 in accordance with 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/approach angle. 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/approach angle. Airspeed +/-20 knots. Altitude +/- 100 feet.
- A2.5.7.3. U. Approaches not performed in accordance with 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 Revolutions per Minute (RPM) throughout the maneuver. Flare and recovery were precise, allowing for a smooth power-on recovery in accordance with 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 in accordance with 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 in accordance with flight manual procedures. Aircraft control was positive, alignment with the intended touchdown area was maintained. Airspeed and altitude maintained +/- 10 KIAS, +/- 50 feet. 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 in accordance with 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, airspeed restrictions, and potential traffic conflicts. 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 in accordance with flight manual procedures and AFMAN 11-217V1.
- 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 in accordance with 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 in accordance with applicable directives. Made appropriate wind drift and timing adjustments. Leg timing  $\pm$ 15 seconds, TACAN  $\pm$ 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  $\pm$ 0 seconds, TACAN  $\pm$ 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 in accordance with 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/RNAV(LPV))

A2.6.8.1. Q. Examinee performed procedures as published and in accordance with 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 would not have permitted a safe landing.

# A2.6.9. Area D-9: Precision Approach (PAR).

- A2.6.9.1. Q. Examinee performed procedures as directed and in accordance with 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:** Circling

- A2.6.11.1. Q. Examinee executed circling approach as published/directed. Completed all procedures in accordance with applicable flight manual.
- A2.6.11.2. Q-. Examine executed circling approach with minor deviations. Slow to comply with published procedures, controller's instructions or flight manual procedures.
- A2.6.11.3. U. Examinee executed circling approach with major deviations or did not comply with applicable directives.

## A2.6.12. **Area D-12:** Missed Approach/Climb Out.

- A2.6.12.1. Q. Examinee executed missed-approach/climb-out as published/directed. Completed all procedures in accordance with applicable flight manual.
- A2.6.12.2. Q-. Examinee executed missed approach/climb-out with minor deviations. Slow to comply with published procedures, controller's instructions or flight manual procedures.
- A2.6.12.3. 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. Fly a portion of the mission in the chase position for instructor evaluations when the IP normally instructs from a chase aircraft.
  - 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 in accordance with 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**

# WEAPON SYSTEM OFFICER (WSO)/NAVIGATOR/OFFENSIVE SYSTEMS OFFICER (OSO)/ELECTRONIC WARFARE OFFICER (EWO)/DEFENSIVE SYSTEMS OFFICER (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. Required evaluation areas are contained in worksheets available on COOL.
- A3.1.2. Evaluate events in Section 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. EFBs may be restricted within individual weapon systems.
- 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 Visual Flight Rules (VFR)/Instrument Flight Rules (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 applicable directives.
- A3.3.11.2. Q-. Minor errors in knowledge of applicable directives. Demonstrated deficiencies either in depth of knowledge or comprehension.
- A3.3.11.3. U. Demonstrated unsatisfactory knowledge of applicable directives.

#### A3.3.12. Area B-12: Fuel Conservation

- A3.3.12.1. Q. Possessed a high level of knowledge of all applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied fuel conservation procedures during mission planning and through-out the mission execution.
- A3.3.12.2. Q-. Possessed some knowledge of applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied some fuel conservation procedures, but failed to apply fuel conservation procedures during mission planning or during some phases of the mission.
- A3.3.12.3. U. Unaware of fuel conservation procedures. Failed to apply any fuel conservation procedures in any area of the mission.

## **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 Air Traffic Control (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.
- A3.4.1.3. U. Major error(s) or omission(s) that would preclude safe/effective mission accomplishment.

## A3.4.2. Area C-1: Pre-takeoff, Departure, Level Off (WSO/NAV/CSO/OSO).

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.
- 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 Navigational Aids (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/CSO/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/CSO/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/CSO/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.
- 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.
- 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 Flight Information Publications (FLIP) 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.

## A3.4.10. Area C-8: Systems Knowledge.

- A3.4.10.1. Q. Thorough knowledge of aircraft systems, limitations, and performance characteristics.
- A3.4.10.2. Q-. Knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.
- A3.4.10.3. U. Unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

#### 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 upgrade candidate. Did not provide corrective action where necessary. Did not plan ahead or anticipate upgrade candidate 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 inflight. 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.
- 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

#### CAREER ENLISTED AVIATOR (CEA) AIRCREW GRADING CRITERIA

- **A4.1.** General Grading Standards. This chapter contains the criteria for administering initial qualification, qualification, requalification, and instructor enlisted aircrew evaluations.
  - A4.1.1. The grading criteria in this attachment are divided into four sections: Ground, General, Qualification and Instructor. Use all sections for criteria applicable to the events performed on the evaluation.
  - 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. Flight manual procedures that are more restrictive take precedence.
  - A4.1.3. If published guidance is not sufficient or is not applicable, with concurrence from AFMC/A3V, either follow lead MAJCOM criteria or develop local guidelines in accordance with **paragraph 1.1.**

#### 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.
- A4.2.1.2. Q. Assigned flight publications were current, complete, and available/usable for any of the unit taskings.
- A4.2.1.3. Q-. Assigned flight publications contained some deviations, omissions, and/or errors; however, they contained everything necessary to effectively accomplish the mission and did not compromise safety.
- A4.2.1.4. U. Contained major deviations, omissions, and/or errors or discrepancies which compromised safety.

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

- A4.2.2.1. Q. Displayed correct, immediate response to Bold Face emergency scenarios. Effectively used checklist(s) for non-Bold Face procedures.
- A4.2.2.2. Q-. Displayed correct, immediate response to Bold Face emergency scenarios. Response to non-Bold Face emergencies or follow-on steps to Bold Face procedures was slow and/or confused. Used the checklist(s) when appropriate, but slow to locate required data. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.2.2.3. U. Incorrect and/or unacceptably slow response to Bold Face emergency scenarios. Unable to analyze problems or take corrective action. Did not use checklist(s) or lacks acceptable familiarity with its arrangement or contents. Performance and/or knowledge were unacceptable.

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

## A4.3.2. Area B-2: Judgment (Critical).

- A4.3.2.1. Q. Formed opinions objectively, authoritatively and wisely, leading to timely and correct decisions positively affecting the outcome of the assigned mission.
- A4.3.2.2. U. Decisions, or lack thereof, were slow and/or incorrect which resulted in the potential or actual failure to accomplish the assigned mission.

# 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. Complied with rules and instructions.
- A4.3.3.2. U. Failed to exhibit strict flight or crew discipline. Violated and/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 presented in a logical sequence. Effectively used training aids, if applicable. Concluded briefing in allotted time, if applicable. Crew members clearly understood briefing. Briefed corrective action from previous mission and potential problem areas, when appropriate.
- A4.3.4.2. Q-. Presentation was out of sequence, hard to follow, contained some redundancy. Did not make effective use of available training aids, if applicable. Dwelled on non-essential items. Briefed longer than allotted time, if applicable. Crew members had to ask for clarification due to briefing inconsistencies or errors. Did not identify potential problem areas from previous mission, when appropriate. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.4.3. U. Confusing presentation. Required items not briefed. Did not use training aids, if applicable. Presentation created doubts or confusion for crew members. Ignored past problem areas. Performance and/or knowledge were unacceptable.

# A4.3.5. Area B-5: Personal/Professional Equipment.

- A4.3.5.1. Q. Possessed required personal/professional equipment items and was thoroughly familiar with equipment requirements, preflight and use.
- A4.3.5.2. Q-. Possessed required personal/professional equipment items and was familiar with most of the requirements, preflight and use. Deviations/lack of knowledge did not affect personal and/or flight safety. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.

A4.3.5.3. U. Did not possess required personal/professional equipment items. Unfamiliar with required personal/professional equipment requirements, preflight and use. Performance and/or knowledge were unacceptable.

# A4.3.6. Area B-6: Forms, Reports, Logs.

- A4.3.6.1. Q. Completed all required preflight and postflight forms and documentation with only minor error(s) that did not prevent accurate data recording.
- A4.3.6.2. Q-. Completed all required preflight and postflight forms and documentation with some errors or omissions that had to be corrected but did not prevent accurate data recording. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.6.3. U. Forms were incomplete and/or improperly filled out. Knowledge of form(s) completion was unacceptable. Errors and/or omissions prevented accurate data recording. Performance and/or knowledge were unacceptable.

### 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 signed off/initialed all items in the Flight Crew Information File (FCIF)/Read Files. Completely prepared at briefing time.
- A4.3.7.2. Q-. Checked all factors applicable to flight in accordance with applicable directives. Aware of mission and alternate mission requirements and planned accordingly; however, made minor errors and/or omissions that did not detract from safety and/or mission effectiveness. Read and signed off/initialed all items in the Flight Crew Information File (FCIF)/Read Files. Demonstrated limited knowledge of performance capabilities or approved operating procedures/ rules in some areas. Not completely prepared at briefing time. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.7.3. U. Made major errors and/or omissions that had the potential to prevent a safe or effective mission. Knowledge of operating data or procedures was unacceptable. Did not review or initial FCIF items. Not prepared at briefing time. Performance and/or knowledge were unacceptable.

#### 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 safe and/or 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 and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- 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

safe and/or efficient conduct of the mission. Performance and/or knowledge were unacceptable.

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

- A4.3.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Provided/followed clear, concise instructions.
- A4.3.9.2. Q-. Coordinated effectively with other crewmembers/mission personnel; however, some instructions were not clear and/or concise causing some confusion and detracting from the overall efficient conduct of the mission. Performance met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not provide/follow clear and concise instructions resulting in the unsafe and/or inefficient conduct of the mission. Performance was unacceptable. Safety was or had the potential to be compromised.

#### 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 enhance situational awareness, mutual support and/or mission accomplishment.
- A4.3.10.2. Q-. Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, mutual support and/or mission accomplishment. Extraneous comments presented minor distractions. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.10.3. U. Radio and intra-cockpit communications were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness and/or mission accomplishment. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

# A4.3.11. Area B-11: Fuel Conservation (Boom Operator, Flight Engineer, Special Missions Aviator and Loadmaster).

- A4.3.11.1. Q. Possessed a high level of knowledge of all applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied fuel conservation procedures during mission planning and throughout the mission.
- A4.3.11.2. Q-. Possessed some knowledge of applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied some fuel conservation procedures, but failed to apply fuel conservation procedures during mission planning or during some phases of the mission. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.11.3. U. Unaware of fuel conservation procedures. Failed to apply any fuel conservation procedures during mission planning or any phase of the mission. Performance and/or knowledge were unacceptable.

## 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: Anti-Hijacking/Aircraft Security.
- A4.4.10. Area C-10: Border Clearance.
- A4.4.11. Area C-11: Predeparture, In-flight and Post-Mission Duties/Checklists.
- A4.4.12. Area C-12: Scanner Duties.
- A4.4.13. Area C-13: Engine Running Onload/Offload.
- A4.4.14. The following criteria must be used in determining a grade for execution of applicable aircraft procedures (A4.4.1-A4.4.13) as prescribed in the flight manual, checklist, supplementary/partial manuals and other governing directives.
  - A4.4.14.1. Q. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished without omissions or deviations which detracted from the overall efficient/effective conduct of the mission and/or safety.
  - A4.4.14.2. Q-. Procedures required by the flight manual, checklist, and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required. Safety was not compromised.
  - A4.4.14.3. U. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished with major omissions, deviations, or errors which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

# A4.4.15. Area C-14: Weight and Balance.

- A4.4.15.1. Q. Checked or verified all factors applicable to the flight. Ensured the crew was aware of special requirements/equipment necessary for the flight. Completed DD Form 365-4 accurately/legibly with only minor errors/omissions that did not affect mission effectiveness or safety. Errors in takeoff or landing gross weight and percent of MAC did not exceed established Q tolerances. Did not exceed aircraft gross weight takeoff or CG limitations for takeoff or landing.
- A4.4.15.2. Q-. Checked or verified all factors applicable to the flight. Ensured the crew was aware of special requirements/equipment necessary for the flight. Completed DD

- Form 365-4 accurately/legibly with errors/omissions that affected mission effectiveness. Safety was not compromised. Errors in takeoff or landing gross weight and percent of MAC exceeded established tolerances. Did not exceed aircraft gross weight takeoff or CG limitations for takeoff or landing. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.4.15.3. U. Major errors or omissions that had an adverse effect on mission effectiveness and/or safety. Errors in takeoff or landing gross weight and percent of MAC exceeded established tolerances. Exceeded aircraft gross weight takeoff or CG limitations for takeoff or landing. Performance and/or knowledge were unacceptable.
- A4.4.16. Area C-15: Oxygen.
- A4.4.17. Area C-16: Ramp and Door.
- A4.4.18. Area C-17: Hydraulics/Electrical.
- A4.4.19. Area C-18: APU/External Power.
- A4.4.20. Area C-19: Aircraft Loading Limitations.
- A4.4.21. Area C-20: Restraint Rail/Roller Conveyor.
- 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 (A4.4.16-A4.4.22) as prescribed in the flight manual, checklist, supplementary/partial manuals, and other governing directives. This includes the individual's knowledge and analysis of equipment malfunctions/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 and/or safety.
  - A4.4.23.2. Q-. Demonstrated and/or explained system/equipment operation, component location and limitations with only minor discrepancies which detracted from mission effectiveness. Safety was not compromised. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
  - A4.4.23.3. U. Demonstrated and/or explained system/equipment operation, component location and limitations with major discrepancies which detracted from mission effectiveness. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

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

- A4.5.1. Area C-1: Preflight.
- A4.5.2. Area C-2: Predeparture, In-flight and Post-Mission Duties/Checklists.
- A4.5.3. The following criteria must be used in determining a grade for execution of applicable aircraft procedures (A4.5.1-A4.5.2) as prescribed in the flight manual, checklist, supplementary/partial manuals and other governing directives.

- A4.5.3.1. Q. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished without omissions or deviations which detracted from the overall efficient/effective conduct of the mission and/or safety.
- A4.5.3.2. Q-. Procedures required by the flight manual, checklist, and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required. Safety was not compromised.
- A4.5.3.3. U. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished with major omissions, deviations, or errors which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

# A4.5.4. Area C-3: Normal Refueling Procedures.

- A4.5.4.1. Q. Demonstrated a satisfactory knowledge of procedures and equipment. Complied with directives. Coordinated with tanker and receiver pilots. Boom control was smooth and contacts were effective. Monitored receiver closely and gave corrections as necessary. Used proper procedures and techniques that would not jeopardize mission or safety.
- A4.5.4.2. Q-. Same as above except for minor deviations which did not or would not jeopardize safety or mission effectiveness. Boom control was slightly erratic resulting in contacts being delayed.
- A4.5.4.3. U. Failed to accomplished required checks. Boom control was erratic, and/or technique used in attempting contacts resulted in delays to such extent that fuel could not be offloaded within the time available. Inadequate knowledge, procedures, or techniques jeopardized safety of flight.

# A4.5.5. Area C-4: Mission Systems.

#### A4.5.6. Area C-5: Emergency Equipment.

- A4.5.6.1. The following criteria must be used in determining a grade for operation of applicable aircraft equipment (A4.5.5-A4.5.6) as prescribed in the flight manual, checklist, supplementary/partial manuals, and other governing directives. This includes the individual's knowledge and analysis of equipment malfunctions/corrective action.
- A4.5.6.2. Q. Demonstrated and/or verbally explained system/equipment operation, component location and limitations with only minor discrepancies which did not detract from mission effectiveness and/or safety.
- A4.5.6.3. Q-. Demonstrated and/or explained system/equipment operation, component location and limitations with only minor discrepancies which detracted from mission effectiveness. Safety was not compromised. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.5.6.4. U. Demonstrated and/or explained system/equipment operation, component location and limitations with major discrepancies which detracted from mission

effectiveness. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

# A4.6. Area C: Qualification (Flight Engineer/Special Missions Aviator).

- A4.6.1. Area C-1: Preflight.
- A4.6.2. Area C-2: Predeparture, In-flight and Post-Mission Duties/Checklists.
- A4.6.3. The following criteria must be used in determining a grade for execution of applicable aircraft procedures (A4.6.1-A4.6.2) as prescribed in the flight manual, checklist, supplementary/partial manuals and other governing directives.
  - A4.6.3.1. Q. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished without omissions or deviations which detracted from the overall efficient/effective conduct of the mission and/or safety.
  - A4.6.3.2. Q-. Procedures required by the flight manual, checklist, and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required. Safety was not compromised.
  - A4.6.3.3. U. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished with major omissions, deviations, or errors which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

## A4.6.4. Area C- 3: Takeoff and Landing Data (TOLD).

- A4.6.4.1. Q. Skilled and knowledgeable in aircraft performance. Checked or verified and applied all factors applicable to the flight. All data completed and/or transcribed accurately/legibly with only minor errors/omissions that did not affect mission effectiveness or safety. All computations were within established Q criteria.
- A4.6.4.2. Q-. Demonstrated limited knowledge and/or ability during completion of TOLD. Checked or verified and applied all factors applicable to the flight. All data completed and/or transcribed accurately/legibly; however, errors/omissions negatively impacted or had the potential to impact mission effectiveness. Safety was not compromised. All computations were within established Q- criteria. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.6.4.3. U. Demonstrated unsatisfactory knowledge and/or ability during completion of TOLD or failed to compute TOLD card. Major errors or omissions had an adverse effect on mission effectiveness and/or safety. Did not meet Q- criteria.

## A4.6.5. Area C-4: Weight and Balance.

A4.6.5.1. Q. Checked or verified all factors applicable to the flight. Ensured the crew was aware of special requirements/equipment necessary for the flight. Completed DD Form 365-4 accurately/legibly with only minor errors/omissions that did not affect mission effectiveness or safety. Errors in takeoff or landing gross weight and percent of MAC did

not exceed established Q tolerances. Did not exceed aircraft gross weight takeoff or CG limitations for takeoff or landing.

A4.6.5.2. Q-. Checked or verified all factors applicable to the flight. Ensured the crew was aware of special requirements/equipment necessary for the flight. Completed DD Form 365-4 accurately/legibly with errors/omissions that affected mission effectiveness. Safety was not compromised. Errors in takeoff or landing gross weight and percent of MAC exceeded established tolerances. Did not exceed aircraft gross weight takeoff or CG limitations for takeoff or landing. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.

A4.6.5.3. U. Major errors or omissions that had an adverse effect on mission effectiveness and/or safety. Errors in takeoff or landing gross weight and percent of MAC exceeded established tolerances. Exceeded aircraft gross weight takeoff or CG limitations for takeoff or landing. Performance and/or knowledge were unacceptable.

A4.6.6. Area C-5: Engines/Auxiliary Power Unit.

A4.6.7. Area C-6: Fuel.

A4.6.8. Area C-7: Electrical.

A4.6.9. Area C-8: Hydraulics.

A4.6.10. Area C-9: Flight Controls.

A4.6.11. Area C-10: Air Conditioning/Pressurization.

A4.6.12. Area C-11: Anti-ice/De-ice.

A4.6.13. Area C-12: Windows/Doors/Hatches.

A4.6.14. Area C-13: Radar.

A4.6.15. Area C-14: Oxygen.

A4.6.16. Area C-15: Fire Protection/Detection.

A4.6.17. Area C-16: Radios/Communications.

A4.6.18. Area C-17: Instruments/Lighting.

A4.6.19. Area C-18: Miscellaneous Equipment.

A4.6.20. Area C-19: Emergency Equipment.

A4.6.21. The following criteria must be used in determining a grade for operation of applicable aircraft systems and equipment (A4.6.6-A4.6.20) as prescribed in the flight manual, checklist, supplementary/partial manuals, and other governing directives. This includes the individual's knowledge and analysis of equipment malfunctions/corrective action.

A4.6.21.1. Q. Demonstrated and/or verbally explained system/equipment operation, component location and limitations with only minor discrepancies which did not detract from mission effectiveness and/or safety.

A4.6.21.2. Q-. Demonstrated and/or explained system/equipment operation, component location and limitations with only minor discrepancies which detracted from mission

effectiveness. Safety was not compromised. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.

A4.6.21.3. U. Demonstrated and/or explained system/equipment operation, component location and limitations with major discrepancies which detracted from mission effectiveness. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

# A4.6.22. Area C-20: Emergency Procedures/Boldface (RW SMA Only)

- A4.6.22.1. Q. Properly analyzed/identified or confirmed the situation without undue delay and demonstrated adequate knowledge of procedures to effectively assist in the emergency. Boldface/Critical Action Procedures (CAPs) required by applicable flight manuals were confirmed 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 the flight manual and checklist. Provided correct and constructive inputs to the crew during the handling of emergency procedures.
- A4.6.22.2. Q-. Minor confusion or incorrect checklist identification attempted but corrected. Caused minor delays in crew's response to emergency that did not impact safety or the successful handling of the situation. Provided incomplete, confusing, or misleading inputs to the crew during the handling of the emergency procedure which did not impact safety or successful handling of the situation.
- A4.6.22.3. U. Examinee provided incorrect response(s) to Boldface/CAPs. Unable to analyze problems or identify the correct checklist. Did not use checklist or flight manual or did not complete a checklist even though it was a procedural requirement. Did not maintain external scan or lost situational awareness of aircraft parameters. Provided incorrect crew inputs that made the situation significantly worse.

# A4.6.23. Area C-21: Remote Ops/Site Evaluation (RW SMA Only).

- A4.6.23.1. Q. Familiar with procedures and able to execute appropriate procedures in accordance with the flight manual. Examinee was thoroughly aware of power requirements and limitations. Effectively assessed landing risk and contributed to remote site evaluation.
- A4.6.23.2. Q-. Missed minor factors pertinent to the approach. Was not prepared for landing in timely manner or delayed execution of the approach unnecessarily. Confused or disorganized communication with crew.
- A4.6.23.3. 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.

# A4.7. Area C: Qualification (Mission Systems Specialist, 1A3/1A8) (Airborne Maintenance Technician (AMT)/Scanner EC-130H)

- A4.7.1. Area C-1: Aircraft/Mission System Preflight.
- A4.7.2. Area C-2: Mission System Operations.
- A4.7.3. Area C-3: Mission Execution.
- A4.7.4. Area C-4: Anti-Hijacking/Aircraft Security.

- A4.7.5. Areas C-5 through C-10 applies to AMT/Scanner only.
- A4.7.6. Area C-5: Predeparture, In-flight and Post-Mission Duties/Checklists.
- A4.7.7. Area C-6: Malfunction Analysis/In flight Repair.
- A4.7.8. Area C-7: System Shutdown/Descent.
- A4.7.9. Area C-8: COMSEC/Security Procedures (Critical).
- A4.7.10. Area C-9: Passenger Handling.
- A4.7.11. Area C-10: Scanner Duties.
- A4.7.12. Area C-11: Debriefing.
- A4.7.13. The following criteria must be used in determining a grade for execution of applicable aircraft procedures (A4.7.1-A4.7.4 and A4.7.6-A4.7.12) as prescribed in the flight manual, checklist, supplementary/partial manuals and other governing directives.
  - A4.7.13.1. Q. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished without omissions or deviations which detracted from the overall efficient/effective conduct of the mission and/or safety.
  - A4.7.13.2. Q-. Procedures required by the flight manual, checklist, and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required. Safety was not compromised.
  - A4.7.13.3. U. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished with major omissions, deviations, or errors which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.
- A4.7.14. Area C-12: General Aircraft Systems (Non-PME) (AMT/Scanner Only).
- A4.7.15. Area C-13: Prime Mission Equipment (PME) (AMT/Scanner Only).
- A4.7.16. Area C-14: Emergency Equipment.
- A4.7.17. The following criteria must be used in determining a grade for operation of applicable aircraft systems and equipment (A4.7.14-A4.7.16) as prescribed in the flight manual, checklist, supplementary/partial manuals, and other governing directives. This includes the individual's knowledge and analysis of equipment malfunctions/corrective action.
  - 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 and/or safety.
  - A4.7.17.2. Q-. Demonstrated and/or explained system/equipment operation, component location and limitations with only minor discrepancies which detracted from mission effectiveness. Safety was not compromised. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.

A4.7.17.3. U. Demonstrated and/or explained system/equipment operation, component location and limitations with major discrepancies which detracted from mission effectiveness. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

# A4.8. Area D: Instructor (All crew positions).

## A4.8.1. Area D-1: Instructional Ability.

- A4.8.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions.
- A4.8.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instruction.
- A4.8.1.3. U. Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

# A4.8.2. Area D-2: Briefing/Debriefing.

- A4.8.2.1. 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.
- A4.8.2.2. Q-. Minor errors or omissions in briefings, critique, and/or training documents that did not affect student progress.
- A4.8.2.3. 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.

### A4.8.3. Area D-3: Demonstration and Performance.

- A4.8.3.1. Q. Effectively demonstrated procedure and techniques on the ground and inflight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
- A4.8.3.2. Q-. Minor discrepancies in the —Q.II criteria that did not affect safety or adversely affect student progress.
- A4.8.3.3. U. Did not demonstrate correct procedure or technique. Examinee demonstrated insufficient knowledge about aircraft systems, procedures, and/or proper source material.

#### **Attachment 5**

# UAS PERSONNEL EVALUATION CRITERIA PILOT (ALL), RQ-4 AND MQ1/9 SENSOR OPERATOR

# A5.1. General Grading Standards (PILOT).

- A5.1.1. The grading criteria in this attachment are divided into six sections: Ground Phase, General, Qualification, Instrument, Instructor, and Mission. Use all sections for criteria applicable to the events performed on the evaluation. Required evaluation areas are contained in worksheets available on COOL.
- 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.
  - 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. A clear lack of judgment hampered or precluded mission accomplishment. Allowed a dangerous situation to develop without taking proper corrective action or notifying other crew members.

#### 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 a timely manner for the circumstances given and the mission profile. 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 effective.
- A5.3.10.2. Q- Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, mutual support or mission accomplishment.
- 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 applicable directives.
  - A5.3.11.2. Q-. Minor errors in knowledge of applicable directives. Demonstrated deficiencies either in depth of knowledge or comprehension.
  - A5.3.11.3. U. Demonstrated unsatisfactory knowledge of applicable directives.

#### A5.3.12. **Area B-12:** Fuel Conservation

- A5.3.12.1. Q. Possessed a high level of knowledge of all applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied fuel conservation procedures during mission planning and through-out the mission execution.
- A5.3.12.2. Q-. Possessed some knowledge of applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied some fuel conservation procedures, but failed to apply fuel conservation procedures during mission planning or during some phases of the mission.
- A5.3.12.3. U. Unaware of fuel conservation procedures. Failed to apply any fuel conservation procedures in any area of the mission.
- **A5.4. Section C:** Qualification (MQ-9 "Reaper" Pilot and YQ-11 "Avenger" Pilot).
  - A5.4.1. **Area C-1:** Performance Data.
    - A5.4.1.1. Q. Accurately computed/reviewed all required takeoff and landing data. Aware of abort considerations and runway condition.
    - 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. Accurately determined readiness of aircraft for flight. Used proper T.O. checklist to conduct preflight. Properly determined aircraft and GCS forms were in order and properly signed.
    - 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 in accordance with 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 in accordance with flight manual procedures.
- 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 in accordance with 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 in accordance with procedures outlined in the flight manual, operational procedures and local directives. Aircraft control was smooth and positive. Accurately aligned with runway. Maintained proper/briefed airspeed/AOA. Airspeed -5/+10 knots.
- A5.4.7.2. Q-. Performed patterns/approaches with minor deviations to procedures outlined in the flight manual, operational procedures and local directives. Aircraft control was not consistently smooth, but safe. Alignment with runway varied. Slow to correct to proper/briefed airspeed/AOA/ Airspeed -5/+15 knots.
- A5.4.7.3. U. Approaches not performed in accordance with procedures 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 in accordance with 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 in accordance with 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 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.
  - A5.4.10.1. Q. Performed landings in accordance with procedures 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 in accordance with procedures outlined in the flight manual, operational procedures and local directives with minor deviations, omissions, and/or errors which did not jeopardize safety of flight. Aircraft control was rough; however, accomplished runway alignment.
  - A5.4.10.3. U. Landing not performed in accordance with procedures 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.
  - 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.
- 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 in accordance with 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 in accordance with 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. Preformed 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:** Instrument. (MQ-9 "Reaper" Pilot and YQ-11 "Avenger" Pilot)

- A5.6.1. **Area D-1 Instrument Patterns (Downwind/Base Leg).** Note: Instrument Patterns will only be accomplished by launch and recovery qualified aircrew.
  - A5.6.1.1. Q. Performed procedures as published or directed and in accordance with flight manual. Smooth and timely response to controller instruction.
  - A5.6.1.2. Q-. Performed procedures with minor deviations. Slow to respond to controller instruction

- A5.6.1.3. U. Performed procedures with major deviations/erratic corrections. Failed to comply with controller instruction.
- A5.6.2. **Area D-2 Precision Approach (PAR or Visual-Assisted by GLS ).** Note: Instrument Patterns will only be accomplished by launch and recovery qualified aircrew.
  - A5.6.2.1. Q. Performed procedures as directed and in accordance with applicable flight manual. Smooth and timely response to controller instruction. Complied with decision height. Position permitted a safe landing. Maintained proper/briefed airspeed. Maintained glide path with only minor deviations. Airspeed within +10/-5 KIAS. Heading within 5 degrees of controller instruction (PAR). Glide Slope/Azimuth within one dot.
  - A5.6.2.2. Q-. Performed procedures with minor deviations. Slow to respond to controller's instructions. Position permitted a safe landing. Slow to correct to proper/briefed airspeed. Improper glide path control. Airspeed within +15/-7 KIAS. Heading within 10 degrees of controller instruction (PAR). Glide Slope within one dot low or two dots high/Azimuth within two dots of centerline. Initiated missed approach (if applicable) at decision height, +50/-25 ft.
  - A5.6.2.3. U. Performed procedures with major deviations. Erratic corrections. Did not respond to controller instruction. Exceeded Q-limits. Did not comply with decision height and/or position did not permit a safe landing. Erratic glide path control.
- A5.6.3. **Area D-3 Missed Approach/Climb Out.** Note: Missed Approach/Climb Out will only be accomplished by launch and recovery qualified aircrew.
  - A5.6.3.1. Q. Executed missed approach/climb out as published/directed. Completed all procedures in accordance with applicable flight manual.
  - A5.6.3.2. Q-. Executed missed approach/climb out with minor deviations. Slow to comply with published procedures, controller instructions or flight manual procedures.
  - A5.6.3.3. U. Executed missed approach/climb out with major deviations, or did not comply with applicable directives

## A5.6.4. Area D-4 – Instrument Cross Check.

- A5.6.4.1. Q. Effective instrument cross-check. Smooth and positive aircraft control throughout flight.
- A5.6.4.2. Q-. Slow instrument cross-check. Aircraft control occasionally abrupt to compensate for recognition of errors.
- A5.6.4.3. U. Inadequate instrument cross-check. Erratic aircraft control. Exceeded Q-limits.

### **A5.7. Section D:** Instrument (RQ-4 "Global hawk" Pilot)

#### A5.7.1. Area D-1 – Instrument Departure.

A5.7.1.1. Q. Complied with all restrictions or controlling agency instructions. Made all required reports. Applied course or heading corrections promptly. Effectively monitored air vehicle control, performance, and departure position.

- A5.7.1.2. Q-. Minor deviations in navigation occurred during departure. Slow to comply with controlling agency instructions or unsure or reporting requirements. Slow to apply course or heading corrections. Minor deviations in monitoring air vehicle control, performance, and departure position.
- A5.7.1.3. U. Failed to comply with published or directed departure or with controlling agency instructions. Accepted inaccurate clearance. Failed to monitor air vehicle control and performance. Unable to identify air vehicle position on departure routing.

# A5.7.2. Area D-2 – Cruise and Navigation.

- A5.7.2.1. Q. Demonstrated satisfactory capability to navigate using all available means. Used appropriate navigation procedures. Complied with clearance instructions. Aware or position at all times. Remained within confines of assigned airspace.
- A5.7.2.2. Q-. Minor errors in procedures and use of navigation equipment. Slow to comply with clearance instructions. Has some difficulty in establishing exact position and course.
- A5.7.2.3. U. Major errors in procedures and use of navigation equipment. Could not establish position. Failed to recognize checkpoints or adjust for deviations in time and course. Did not remain within confines of assigned airspace.

#### A5.7.3. **Area D-3 – Holding.**

- A5.7.3.1. Q. Performed entry and holding in accordance with ATC instructions. Understood all aspects of the RQ-4 "suspend" command and the holding pattern flown by the air vehicle after a "suspend" command is used.
- A5.7.3.2. Q-. Performed entry and holding procedures with minor deviations. Unclear on some aspects of the "suspend" command and the holding pattern flown by the air vehicle after a "suspend" command is used.
- A5.7.3.3. U. Holding was not in accordance with ATC instructions. Unable to effectively or safely hold the air vehicle. Did not understand the "suspend" command and the holding pattern flown by the air vehicle after a "suspend" command is used.

#### A5.7.4. Area D-4 – Instrument Penetration (Enroute Descent to IAF).

- A5.7.4.1. Q. Performed the penetration (enroute descent) as published or directed and in accordance with flight manuals. Complied with all restrictions and with mission plan constraints. Complied with ATC instructions and procedures. Effectively monitored air vehicle control, performance, and position orientation within vehicle limitations.
- A5.7.4.2. Q-. Performed the penetration (enroute descent) with minor deviations in procedures and monitoring air vehicle control, performance, and position. Complied with all restrictions.
- A5.7.4.3. U. Performed the penetration (enroute descent) with major deviations in procedures and monitoring air vehicle control, performance, and position. Unable to maintain position orientation or ATC assigned airspace.

#### A5.7.5. Area D-5 – Instrument Approach.

- A5.7.5.1. Q. Performed approach in accordance with procedures outlined in the flight manual, operations procedures, and local directives. Maintained basic control and position orientation within air vehicle performance limitations. Complied with ATC instructions and procedures. Complied with mission plan approach and flight manual standards.
- A5.7.5.2. Q-. Performed approach with minor deviations to procedures outlined in the flight manual, operations procedures, and local directives.
- A5.7.5.3. U. Approach not performed in accordance with procedures outlined in the flight manual, operations procedures, and local directives. Unable to maintain position orientation or ATC assigned airspace. Unsafe inputs jeopardized safety.

# A5.7.6. Area D-6 – Missed Approach and Climb Out.

- A5.7.6.1. Q. Executed Contingency 4 in accordance with published procedures and directives. Understood the Contingency 4 logic and accurately predicted air vehicle programmed actions. Complied with ATC instructions.
- A5.7.6.2. Q-. Executed Contingency 4 with minor to published procedures. Slow to comply with published procedures, ATC instructions, or flight manual procedures. Unclear on minor aspects of Contingency 4 logic.
- A5.7.6.3. U. Executed Contingency 4 with major deviations or did not comply with applicable directives. Did not anticipate or understand Contingency 4 logic or incorrectly predicted programmed actions of the air vehicle. Did not comply with ATC instructions.

#### **A5.8. Section E:** Instructor.

# A5.8.1. **Area E-1:** Instructional Ability.

- A5.8.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary.
- A5.8.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instructions.
- A5.8.1.3. U. Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

# A5.8.2. Area E-2: Briefing/Debriefing.

- A5.8.2.1. 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.
- A5.8.2.2. Q-. Minor errors or omissions in briefing, critique, and/or training documents that did not affect student progress.
- A5.8.2.3. 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.

# A5.8.3. **Area E-3:** Demonstration and Performance.

- A5.8.3.1. Q. Effectively demonstrated procedures and techniques on the ground and inflight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
- A5.8.3.2. Q-. Minor discrepancies in the above criteria that did not affect safety or adversely affect student performance.
- A5.8.3.3. U. Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

#### A5.8.4. **Area E-4:** Conduct of the Mission.

- A5.8.4.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
- A5.8.4.2. 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.
- A5.8.4.3. U. Mission execution prevented accomplishment of a major portion of the mission. Undisciplined actions violated training rules repeatedly.

# **A5.9. Section F:** Mission (If applicable).

## A5.9.1. **Area F-1:** Knowledge.

- A5.9.1.1. Q. Fully knowledgeable in mission requirements, test plan directives, aircraft limitations, and partial flight manual. Effectively coordinated with other crew members and project personnel.
- A5.9.1.2. 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.
- A5.9.1.3. 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.

### A5.9.2. Area F-2: Planning.

- A5.9.2.1. Q. Considered all factors necessary for mission accomplishment to include weather, mission profile, airspace utilization/restrictions, and proper documentation.
- A5.9.2.2. 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.
- A5.9.2.3. U. Did not consider all factors necessary for mission accomplishment. Lack of consideration contributed negatively towards successful mission completion.

#### A5.9.3. Area F-3: Execution.

- A5.9.3.1. Q. Accomplished major mission objectives in a timely and skillful manner.
- A5.9.3.2. Q-. Errors or omission were made which did not render mission ineffective, but indicated a definite need for additional training.
- A5.9.3.3. U. Improper execution of duties negatively impacted mission accomplishment.

# A5.9.4. **Area F-4:** Security (Critical).

- A5.9.4.1. Q. Adequate security of mission information and material was maintained throughout preflight, flight, and post flight.
- A5.9.4.2. U. Inadequate security procedures were carried out which would lead to the compromise of mission information and/or material.

# A5.10. General Grading Standards (RQ-4 Sensor Operator (SO)).

- A5.10.1. 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.
- A5.10.2. 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. Flight manual procedures that are more restrictive take precedence.

#### **A5.11. Area A:** Ground Phase.

#### A5.11.1. Area A-1: Publications.

- A5.11.1.1. Digital TO's are approved for use by individual aircrew members.
- A5.11.1.2. Q. Assigned flight publications were current, complete, and usable for any of the unit's tasking.
- A5.11.1.3. 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.
- A5.11.1.4. U. Contained major deviations, omissions, and/or errors which compromise safety of flight

#### A5.11.2. **Area A-2:** Emergency Procedures Evaluation.

- A5.11.2.1. Q. Displayed correct, immediate response to Bold Face and non-Bold Face emergency situations. Effectively used checklist.
- A5.11.2.2. 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.
- A5.11.2.3. 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.

#### A5.12. Area B: General.

#### A5.12.1. **Area B-1:** Safety (Critical):

- A5.12.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.
- A5.12.1.2. 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.

# A5.12.2. **Area B-2:** Judgement (Critical):

- A5.12.2.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
- A5.12.2.2. 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.

# A5.12.3. **Area B-3:** Flight Discipline (Critical).

- A5.12.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.
- A5.12.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

# A5.12.4. Area B-4: Briefings.

- A5.12.4.1. 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.
- A5.12.4.2. 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.
- A5.12.4.3. 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.

# A5.12.5. Area B-5: Personal Equipment.

- A5.12.5.1. Q. Thoroughly familiar with personal equipment requirements, usage, and preflight.
- A5.12.5.2. Q-. Possessed required personal equipment items and was familiar with most of the preflight and usage procedures.
- A5.12.5.3. U. Unfamiliar with required personal equipment preflight and usage.

## A5.12.6. Area B-6: Forms, Reports, Logs (As Applicable).

A5.12.6.1. Q. Completed or supervised completion of all required preflight and post flight forms and documentation without significant error.

- A5.12.6.2. 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.
- A5.12.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate detracting from recording the mission data.

# A5.12.7. **Area B-7:** Mission/Flight Planning.

- A5.12.7.1. 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.
- A5.12.7.2. 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.
- A5.12.7.3. 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.

#### A5.12.8. Area B-8: Use of Checklists/Test Cards.

- A5.12.8.1. 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.
- A5.12.8.2. 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.
- A5.12.8.3. 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.

#### A5.12.9. Area B-9: Crew Coordination.

- A5.12.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.
- A5.12.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.
- A5.12.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

#### A5.12.10. Area B-10: Communication Procedures.

A5.12.10.1. Q. Radio and intra-cockpit communications were concise, accurate and effectively used to direct maneuvers or describe the tactical situation.

- A5.12.10.2. 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.
- A5.12.10.3. 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.
- A5.12.11. **Area B-11:** Knowledge of Directives/Mission Systems.
  - A5.12.11.1. Q. Demonstrated thorough knowledge of aircraft systems, limitations and performance characteristics.
  - A5.12.11.2. Q-. Knowledge of aircraft systems, limitations, and performance characteristics sufficient to perform the mission safely. Demonstrated deficiencies either in depth of knowledge or comprehension.
  - A5.12.11.3. U. Demonstrated unsatisfactory knowledge of aircraft systems, limitations or performance characteristics.

## A5.13. Area C Qualification.

- A5.13.1. **Area C-1 (SO) Air Vehicle Launch:** Includes all activity from Ground Control Station (GCS) configuration up to and including established climb configuration.
  - A5.13.1.1. Q. Accomplished procedures and checklists required by the flight manual, governing directives and published unit procedures without omissions or errors. Copied the clearance, and if applicable, coordinated with the pilots on the procedures to be followed.
  - A5.13.1.2. Q-. Deviations from published standards occurred, detracting from overall mission efficiency or deviations, omissions, or errors occurred which unnecessarily delayed takeoff without rendering the mission ineffective.
  - A5.13.1.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety .

## A5.13.2. Area C-2 (SO)—Inflight Checks and Planning

- A5.13.2.1. Q. Effectively performed in-flight checks as required including changing profile by adding or deleting collections. Used current checklist and accomplished all items in proper sequence with no deviations or omissions. Effectively adapted to dynamic mission plan changes. Demonstrated ability to adjust collection profile to comply with time and fuel limitations, area weather conditions, and mission constraints and objectives.
- A5.13.2.2. Q-. In-flight checks, checklist use, and collection management included minor deviations which did not compromise safety, or significantly detract from the mission.
- A5.13.2.3. U. Did not perform in-flight checks or adapt to changing mission requirements. Used incorrect checklist, omitted checklist items or did not complete a required checklist. Unable to re-plan in-flight or adapt to changing mission requirements. Consistently unable to maintain situational awareness. Action or inaction compromised safety and successful mission accomplishment.

## A5.13.3. Area C-3(SO) --Link Procedures.

- A5.13.3.1. Q. Understood and executed proper communication links protocols for effective air vehicle control, sensor/payload management, and mission accomplishment.
- A5.13.3.2. Q-. Minor errors or omissions occurred in establishing and maintaining communications links, but did not significantly detract from air vehicle control, sensor/payload management, and mission accomplishment.
- A5.13.3.3. U. Incomplete understanding of the communications links led to ineffective or improper use. Mission effectiveness was negatively impacted.

# A5.13.4. Area C-4 – Sensor System Trouble Shooting (SO):

- A5.13.4.1. Q. Correctly performed sensor trouble shooting and mission planner set-up procedures in accordance with checklist. Correctly initiated situational awareness displays. Properly verified and performed sensor trouble shooting sequence. Effectively performed initial sensor calibrations and verified sensor operation within parameters.
- A5.13.4.2. Q-. Missed minor set-up procedures with no significant impact to sensor operation or mission effectiveness.
- A5.13.4.3. U. Failed to successfully complete sensor trouble shooting or initiate situational awareness displays. Failed to verify the performed sensor trouble shooting sequence or perform initial sensor calibrations.

# A5.13.5. Area C-5 – Sensor Operations (SO):

- A5.13.5.1. Q. Successfully displayed waypoints and/or created auto-tracks. Successfully tasked electro-optical (EO), infrared (IR), synthetic aperture radar (SAR), and/or moving target indicator (MTI) scenes to the pre-planned and/or auto-track waypoints. Continually monitored sensor parameters and completed actions to optimize sensor performance when required. Imaged all desired targets for optimal coverage and resolution. Appropriately ran Time-sensitive Target (TST) and/or Ad Hoc checklist. Performed correct actions to successfully recover from sensor anomalies.
- A5.13.5.2. Q-. Minor misapplications in EO, IR, SAR, and MTI sensor operations. Sensor optimization operations were not consistently verified or corrected. Slow to perform basic sensor operation functions. Recognized and corrected target acquisition attempts. Minor deviations on TST and/or Ad Hoc checklist. Require excessive time to recover from sensor anomalies. Minor impact to mission effectiveness
- A5.13.5.3. U. Failed to effectively conduct EO, IR, SAR, and MTI sensor operations. Did not recognize or correct target acquisition attempts. Failed to accurately collect TST and/or Ad Hoc targets. Required assistance to perform sensor optimization and/or recover from sensor anomalies. Mission effectiveness seriously impaired.
- A5.13.6. **Area C-6 After Landing (SO):** Required for all initial QUAL evaluations, optional for periodic evaluations.
  - A5.13.6.1. Q. Appropriate after landing checks accomplished in accordance with the flight manual and applicable directives. All required forms, reports, or logs were complete, accurate, readable, accomplished on time and in accordance with applicable directives. Accurate debrief of significant events to applicable agencies.

- A5.13.6.2. Q-. Minor deviations or omissions noted in performance of after landing checks. Minor errors on forms, reports, or logs did not affect conduct of the mission. Incorrect or incomplete reporting of information due to minor errors, omissions, and/or deviations
- A5.13.6.3. U. Major deviations or omissions were made in performance of after landing checks which could have jeopardized safety. Forms, reports, or logs were incomplete, inaccurate, or improperly filled out. Omitted or incorrectly reported significant information due to major errors, omissions, and/or deviations

# A5.14. General Grading Standards (MQ-9 Sensor Operator).

- A5.14.1. 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 enlisted aircrew found on forms specified in AFMC Supplement to AFI 11-202V2.
- A5.14.2. 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. Flight manual procedures that are more restrictive take precedence.

#### **A5.15. Area A:** Ground Phase.

- A5.15.1. Area A-1: Publications.
  - A5.15.1.1. Digital TO's are approved for use by individual aircrew members.
  - A5.15.1.2. Q. Assigned flight publications were current, complete, and usable for any of the unit's tasking.
  - A5.15.1.3. 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.
  - A5.15.1.4. U. Contained major deviations, omissions, and/or errors which compromise safety of flight
- A5.15.2. **Area A-2:** Emergency Procedures Evaluation.
  - A5.15.2.1. Q. Displayed correct, immediate response to Bold Face and non-Bold Face emergency situations. Effectively used checklist.
  - A5.15.2.2. 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.
  - A5.15.2.3. 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.

#### A5.16. Area B: General.

A5.16.1. Area B-1: Safety (Critical):

- A5.16.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.
- A5.16.1.2. U. Not aware of or did not comply with all safety factors required for safe aircraft operation or mission accomplishment. A clear lack of judgment hampered or precluded mission accomplishment. Allowed a dangerous situation to develop without taking proper corrective action or notifying other crew members.

## A5.16.2. **Area B-2:** Judgement (Critical):

- A5.16.2.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
- A5.16.2.2. 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.
- A5.16.3. **Area B-3:** Flight Discipline (Critical).
  - A5.16.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.
  - A5.16.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

## A5.16.4. **Area B-4:** Briefings.

- A5.16.4.1. 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.
- A5.16.4.2. 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.
- A5.16.4.3. 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.

## A5.16.5. **Area B-5:** Personal Equipment.

- A5.16.5.1. Q. Thoroughly familiar with personal equipment requirements, usage, and preflight.
- A5.16.5.2. Q-. Possessed required personal equipment items and was familiar with most of the preflight and usage procedures.
- A5.16.5.3. U. Unfamiliar with required personal equipment preflight and usage.

## A5.16.6. **Area B-6:** Forms, Reports, Logs (As Applicable).

A5.16.6.1. Q. Completed or supervised completion of all required preflight and post flight forms and documentation without significant error.

- A5.16.6.2. 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.
- A5.16.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate detracting from recording the mission data.

# A5.16.7. **Area B-7:** Mission/Flight Planning.

- A5.16.7.1. 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.
- A5.16.7.2. 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.
- A5.16.7.3. 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.

#### A5.16.8. Area B-8: Use of Checklists/Test Cards.

- A5.16.8.1. 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.
- A5.16.8.2. 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.
- A5.16.8.3. 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.

#### A5.16.9. Area B-9: Crew Coordination.

- A5.16.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.
- A5.16.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.
- A5.16.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

#### A5.16.10. Area B-10: Communication Procedures.

A5.16.10.1. Q. Radio and intra-cockpit communications were concise, accurate and effectively used to direct maneuvers or describe the tactical situation.

- A5.16.10.2. 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.
- A5.16.10.3. 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.
- A5.16.11. Area B-11: Knowledge of Directives/Mission Systems.
  - A5.16.11.1. Q. Demonstrated thorough knowledge of aircraft systems, limitations and performance characteristics.
  - A5.16.11.2. Q-. Knowledge of aircraft systems, limitations, and performance characteristics sufficient to perform the mission safely. Demonstrated deficiencies either in depth of knowledge or comprehension.
  - A5.16.11.3. U. Demonstrated unsatisfactory knowledge of aircraft systems, limitations or performance characteristics.

#### A5.17. Area C Qualification.

- A5.17.1. Area C-1 (SO) Air Vehicle Launch (SO): Includes all activity from GCS configuration up to and including established climb configuration.
  - A5.17.1.1. Q. Accomplished procedures and checklists required by the flight manual, governing directives and published unit procedures without omissions or errors. Copied the clearance, and if applicable, coordinated with the pilots on the procedures to be followed.
  - A5.17.1.2. Q-. Deviations from published standards occurred, detracting from overall mission efficiency or deviations, omissions, or errors occurred which unnecessarily delayed takeoff without rendering the mission ineffective.
  - A5.17.1.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety.
- A5.17.2. **Area C-2 (SO)--Payload Operation.** This area includes knowledge and function of the heads-up display, tracker display, and pedestal controls.
  - A5.17.2.1. Q. Demonstrated satisfactory capability to collect imagery using all available sensors. Used appropriate focus, iris, and zoom settings. Satisfactory knowledge of menu buttons. Correctly prioritized multiple tasks. Able to identify target's position at all times
  - A5.17.2.2. Q-. Minor errors in procedures/equipment use in collecting imagery. Slow to focus or zoom. Had some problems locating correct menu buttons. Did not consistently or correctly prioritize multiple tasks. Had some difficulty or could not determine exact position of targets.
  - A5.17.2.3. U. Major errors in procedures/equipment use in collecting imagery. Could not locate target position. Could not focus. Inadvertently selected a critical menu button. Unable to correctly prioritize multiple tasks. Failed communicate or acknowledge workload and task distribution.

## A5.17.3. Area C-3 -- Ku-Band Data Link Operation.

- A5.17.3.1. Q. Demonstrated satisfactory capability to configure and collect stationary and mobile targets using Ku mode. Followed approved checklist/procedures to configure payload rack for Ku operations. Aware of target's position at all times. Correctly prioritized multiple tasks.
- A5.17.3.2. Q-. Minor errors or omissions in using approved checklists/procedures to configure Pilot/ Sensor Operator (PSO) rack for Ku operations. Had some difficulty in establishing exact position of targets or tracking mobile targets. Did not consistently or correctly prioritize multiple tasks.
- A5.17.3.3. 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, unable to maintain mobile target track. Could not focus. Selected a critical menu button. Unable to correctly prioritize multiple tasks. Failed communicate or acknowledge workload and task distribution.
- A5.17.4. **Area C-4 Air Vehicle Recovery (SO)**: This area includes all activity from start of the Descent through the Before Landing checklist. Sensor Operator must observe a full stop or touch and go landing or low approach from the right seat. Required for all initial QUAL evaluations, optional for periodic evaluations.
  - A5.17.4.1. Q. Accomplished procedures and checklists required by the flight manual and governing directives accurately and effectively. Monitored aircraft position and approach instructions and notified pilots of deviation. Monitored Tracker display and ensured terrain clearance. Gathered and cross checked all available data in a timely manner, and appropriately identified contingencies and alternatives.
  - A5.17.4.2. Q-. Accomplished procedures and checklists required by the flight manual and governing directives with minor omissions, deviations or errors. Monitored aircraft position and approach instructions and notified pilots of deviations. Failed to monitor Tracker
  - A5.17.4.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety. Made no effort to effort to gather and cross check available data before identifying any contingencies or alternatives.

#### **A5.18. Section D:** Instructor.

- A5.18.1. **Area D-1:** Instructional Ability.
  - A5.18.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary.
  - A5.18.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instructions.
  - A5.18.1.3. U. Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.
- A5.18.2. **Area D-2:** Briefing/Debriefing.
  - A5.18.2.1. 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.
- A5.18.2.2. Q-. Minor errors or omissions in briefing, critique, and/or training documents that did not affect student progress.
- A5.18.2.3. 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.

#### A5.18.3. **Area D-3:** Demonstration and Performance.

- A5.18.3.1. Q. Effectively demonstrated procedures and techniques on the ground and inflight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
- A5.18.3.2. Q-. Minor discrepancies in the above criteria that did not affect safety or adversely affect student performance.
- A5.18.3.3. U. Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

#### A5.18.4. **Area D-4:** Conduct of the Mission.

- A5.18.4.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
- A5.18.4.2. 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.
- A5.18.4.3. U. Mission execution prevented accomplishment of a major portion of the mission. Undisciplined actions violated training rules repeatedly.

#### **A5.19. Section E:** Mission (If Applicable).

## A5.19.1. Area E-1: Knowledge.

- A5.19.1.1. Q. Fully knowledgeable in mission requirements, test plan directives, aircraft limitations, and partial flight manual. Effectively coordinated with other crew members and project personnel.
- A5.19.1.2. 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.
- A5.19.1.3. 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.

#### A5.19.2. **Area E-2:** Planning.

- A5.19.2.1. Q. Considered all factors necessary for mission accomplishment to include weather, mission profile, airspace utilization/restrictions, and proper documentation.
- A5.19.2.2. 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.
- A5.19.2.3. U. Did not consider all factors necessary for mission accomplishment. Lack of consideration contributed negatively towards successful mission completion.

#### A5.19.3. Area E-3: Execution.

- A5.19.3.1. Q. Accomplished major mission objectives in a timely and skillful manner.
- A5.19.3.2. Q-. Errors or omission were made which did not render mission ineffective, but indicated a definite need for additional training.
- A5.19.3.3. U. Improper execution of duties negatively impacted mission accomplishment.

# A5.19.4. Area E-4: Security (Critical).

- A5.19.4.1. Q. Adequate security of mission information and material was maintained throughout preflight, flight, and post flight.
- A5.19.4.2. 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. Required evaluation areas are contained in worksheets available on COOL.

#### **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.
- 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 logically and professionally. 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.

- A6.3.11.1. Q. Demonstrated thorough knowledge of applicable directives.
- A6.3.11.2. Q-. Minor errors in knowledge of applicable directives. Demonstrated deficiencies either in depth of knowledge or comprehension.
- A6.3.11.3. U. Demonstrated unsatisfactory knowledge of applicable directives.

# 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 is 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.

## A6.4.5. Area C-4: Systems Knowledge.

- A6.4.5.1. Q. Thorough knowledge of aircraft systems, limitations, and performance characteristics.
- A6.4.5.2. Q-. Knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.
- A6.4.5.3. U. Unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

#### 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 inflight. 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.

#### **Attachment 7**

#### ACTIVE NON-RATED AIRCREW EVALUATION CRITERIA

## A7.1. General Grading Standards.

A7.1.1. The grading criteria in this attachment are divided into four sections: Ground Phase, General, Qualification. Use all sections for criteria applicable to the events performed on the evaluation. Required evaluation areas are contained in worksheets available on COOL.

#### A7.2. Area A: Ground Phase.

- A7.2.1. **Area A-1:** Publications (as assigned/issued).
  - A7.2.1.1. Digital TO's are approved for use by individual aircrew members.
  - A7.2.1.2. Q. Assigned flight publications were current, complete and usable for any of the unit's taskings.
  - A7.2.1.3. 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.
  - A7.2.1.4. U. Assigned flight publications contained deviations, omissions and/or errors compromised safety of flight.

#### A7.3. Area B: General.

# A7.3.1. **Area B-1:** Safety (Critical).

- A7.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.
- A7.3.1.2. 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.

#### A7.3.2. **Area B-2:** Judgment (Critical).

- A7.3.2.1. Q. Executed the assigned mission in a timely efficient manner. Conducted the mission with a sense of understanding and comprehension.
- A7.3.2.2. 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.

#### A7.3.3. **Area B-3:** Briefings (if applicable).

- A7.3.3.1. Q. Well organized and presented in a logical, professional fashion. Crewmembers clearly understood mission requirements.
- A7.3.3.2. Q-. Events out of sequence, hard to follow, some redundancy. Dwelled on non-essential mission items.
- A7.3.3.3. U. Confusing presentation. Redundant throughout the briefing. Lost interest of crewmembers. Presentation created doubts or confusion. Omitted major mission requirements.

- A7.3.4. **Area B-4:** Personal Equipment.
  - A7.3.4.1. Q. Thoroughly familiar with personal equipment requirements, usage and preflight.
  - A7.3.4.2. Q-. Possessed required personal equipment and was familiar with most requirements, usage, and preflight procedures.
  - A7.3.4.3. U. Unfamiliar with personal equipment requirements, usage and preflight.
- A7.3.5. **Area B-5:** Mission Planning (if applicable).
  - A7.3.5.1. 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.
  - A7.3.5.2. 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.
  - A7.3.5.3. 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.
- A7.3.6. **Area B-6:** Use of Checklists (if applicable).
  - A7.3.6.1. Q. Used current checklist and accomplished all items in proper sequence with no deviations or omissions.
  - A7.3.6.2. Q-. Only minor deviations from checklist procedures were noted.
  - A7.3.6.3. U. Failed to use current checklist or deviated from checklist procedures resulting in the mission being compromised.
- A7.3.7. **Area B-7:** Crew Resource Management.
  - A7.3.7.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.
  - A7.3.7.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.
  - A7.3.7.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.
- A7.3.8. Area B-8: Communication Procedures.
  - A7.3.8.1. Q. Operated communication equipment correctly. Radio and ICS communications were concise, accurate and effective.
  - A7.3.8.2. 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.

A7.3.8.3. 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.

# A7.3.9. Area B-9: Knowledge of Directives.

- A7.3.9.1. Q. Demonstrated thorough knowledge of applicable directives.
- A7.3.9.2. Q-. Minor errors in knowledge of applicable directives. Demonstrated deficiencies either in depth of knowledge or comprehension.
- A7.3.9.3. U. Demonstrated unsatisfactory knowledge of applicable directives.

#### A7.4. Area C: Qualification.

# A7.4.1. **Area C-1:** Preflight Inspection (if applicable)

- A7.4.1.1. Q. Completed a thorough preflight, check of personal equipment, crew briefing, etc. Accurately determined readiness of aircraft for flight.
- A7.4.1.2. Q-. Minor procedural deviations which did not detract from the overall mission.
- A7.4.1.3. U. Major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight. Errors directly contributed to a late takeoff which degraded the mission or made it non-effective.

# A7.4.2. **Area C-2:** Emergency Equipment.

- A7.4.2.1. Q. Demonstrated and/or verbally explained system equipment operation, component location, and limitations with only minor discrepancies which did not detract from mission effectiveness.
- A7.4.2.2. Q-. Demonstration and/or explanation of system/equipment adequate but indicated a definite need for additional study and training.
- A7.4.2.3. U. Knowledge of system/ equipment was unacceptable.

#### A7.4.3. **Area C-3:** Emergency Egress.

- A7.4.3.1. Q. Demonstrated and/or verbally explained egress procedures and equipment operation, component location, and limitations with only minor discrepancies which did not detract from mission effectiveness.
- A7.4.3.2. Q-. Demonstration and/or explanation of egress procedures and/or associated equipment adequate but indicated a definite need for additional study and training.
- A7.4.3.3. U. Knowledge of egress procedures and/or associated equipment was unacceptable.

# A7.4.4. **Area C-4:** Mission Execution (if applicable)

- A7.4.4.1. Mission execution may be accomplished in the aircraft or in a support facility (control room)
- A7.4.4.2. 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.

- A7.4.4.3. 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.
- A7.4.4.4. 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.

## A7.4.5. Area C-5: Systems Knowledge.

- A7.4.5.1. Q. Thorough knowledge of aircraft systems, limitations, and performance characteristics.
- A7.4.5.2. Q-. Knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.
- A7.4.5.3. U. Unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

#### **Attachment 8**

#### NON-PILOT TAXI EVALUATION CRITERIA

## **A8.1.** General Grading Standards.

- A8.1.1. Non-Pilot taxi personnel will be engine run qualified in accordance with applicable maintenance standards and procedures. Personnel will complete Marshalling Examination in accordance with AFI 11-218 *Aircraft Operations and Movement On The Ground*. (**T-1**)
- A8.1.2. This evaluation will be administered by a current and qualified evaluator pilot. See AFI 11-202V2 for instructions to complete the AF Form 8 when multiple evaluators are used. **(T-1)**

# A8.2. Area A: Ground Operations.

- A8.2.1. **Area A-1:** Publications (as assigned/issued).
  - A8.2.1.1. Digital TO's are approved for use by taxi personnel.
  - A8.2.1.2. Q. Assigned publications were current, complete and usable for the task.
  - A8.2.1.3. Q-. Assigned publications contained deviations, omissions and/or errors; however, contained everything necessary to effectively accomplish the task and did not compromise safety.
  - A8.2.1.4. U. Assigned flight publications contained deviations, omissions and/or errors compromised safety.

#### A8.3. Area B: General.

#### A8.3.1. **Area B-1:** Safety (Critical).

- A8.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation task accomplishment.
- A8.3.1.2. U. Was not aware of or did not comply with all safety factors required for safe aircraft operation and task accomplishment. Operated aircraft equipment in a dangerous manner.

## A8.3.2. **Area B-2:** Judgment (Critical).

- A8.3.2.1. Q. Executed the assigned task in a timely efficient manner. Conducted the task with a sense of understanding and comprehension.
- A8.3.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned task. Demonstrated poor judgment to the extent that safety could have been compromised.

## A8.3.3. **Area B-3:** Briefings (as applicable).

- A8.3.3.1. Q. Well organized and presented in a logical, professional fashion. Personnel clearly understood mission requirements. Reviewed NOTAMS, radio communications, and airfield restrictions / requirements. Reviewed applicable emergency procedures.
- A8.3.3.2. Q-. Events out of sequence, hard to follow, some redundancy. Dwelled on non-essential mission items.

A8.3.3.3. U. Confusing presentation. Redundant throughout the briefing. Lost interest of taxi personnel. Presentation created doubts or confusion. Omitted major mission requirements.

# A8.3.4. Area B-4: Personal Equipment.

- A8.3.4.1. Q. Thoroughly familiar with personal equipment requirements, usage and preflight.
- A8.3.4.2. Q-. Possessed required personal equipment and was familiar with most requirements, usage, and preflight procedures.
- A8.3.4.3. U. Unfamiliar with personal equipment requirements, usage and preflight.

## A8.3.5. **Area B-5:** Taxi Planning (as applicable).

- A8.3.5.1. Q. Developed a sound plan to accomplish the task. Checked all factors applicable to task in accordance with applicable directives. Aware of alternatives available, if task cannot be completed as planned. Prepared at briefing time.
- A8.3.5.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from task effectiveness. Demonstrated limited knowledge of capabilities or operating procedures/rules in some areas.
- A8.3.5.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective taxi. Displayed faulty knowledge of operating procedures. Not prepared at briefing time.

## A8.3.6. **Area B-6:** Use of Checklists (if applicable).

- A8.3.6.1. Q. Used current checklist and accomplished all items in proper sequence with no deviations or omissions.
- A8.3.6.2. Q. Only minor deviations from checklist procedures were noted.
- A8.3.6.3. U. Failed to use current checklist or deviated from checklist procedures resulting in the mission being compromised.

#### A8.3.7. **Area B-7:** Crew Resource Management.

- A8.3.7.1. Q. Coordinated effectively with other personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.
- A8.3.7.2. Q-. Coordinated satisfactorily with other personnel. Some instructions were not clear and concise.
- A8.3.7.3. U. Failed to coordinate with personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

#### A8.3.8. **Area B-8:** Communication Procedures.

- A8.3.8.1. Q. Operated communication equipment correctly. Radio and ICS communications were concise, accurate and effective.
- A8.3.8.2. Q- Operated communication equipment with delays or errors that did not affect task accomplishment. Minor terminology errors or omissions occurred, but did not

significantly detract from situational awareness, mutual support or task accomplishment. Extraneous comments over primary or secondary radios presented minor distractions.

A8.3.8.3. 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 task accomplishment.

## A8.3.9. Area B-9: Knowledge of Directives.

- A8.3.9.1. Q. Demonstrated thorough knowledge of applicable directives.
- A8.3.9.2. Q-. Minor errors in knowledge of applicable directives. Demonstrated deficiencies either in depth of knowledge or comprehension.
- A8.3.9.3. U. Demonstrated unsatisfactory knowledge of applicable directives.

#### **A8.4. Area C:** Qualification.

# A8.4.1. **Area C-1:** Preflight Inspection (as applicable)

- A8.4.1.1. Q. Completed a thorough preflight, check of personal equipment, crew briefing, etc. Accurately determined readiness of aircraft for flight.
- A8.4.1.2. Q-. Minor procedural deviations which did not detract from the overall mission.
- A8.4.1.3. U. Major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight. Errors directly contributed to a late takeoff which degraded the mission or made it non-effective.

#### A8.4.2. **Area C-2:** Emergency Equipment.

- A8.4.2.1. Q. Demonstrated and/or verbally explained system equipment operation, component location, and limitations with only minor discrepancies which did not detract from mission effectiveness.
- A8.4.2.2. Q-. Demonstration and/or explanation of system/equipment adequate but indicated a definite need for additional study and training.
- A8.4.2.3. U. Knowledge of system/ equipment was unacceptable.

#### A8.4.3. **Area C-3:** Emergency Egress.

- A8.4.3.1. Q. Demonstrated and/or verbally explained egress procedures and equipment operation, component location, and limitations with only minor discrepancies which did not detract from mission effectiveness.
- A8.4.3.2. Q-. Demonstration and/or explanation of egress procedures and/or associated equipment adequate but indicated a definite need for additional study and training.
- A8.4.3.3. U. Knowledge of egress procedures and/or associated equipment was unacceptable.

## A8.4.4. Area C-4: Systems Knowledge.

A8.4.4.1. Q. Thorough knowledge of aircraft systems, limitations, and performance characteristics.

- A8.4.4.2. Q-. Knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.
- A8.4.4.3. U. Unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

#### A8.5. Area D: Engine Start Procedures.

- A8.5.1. Q. Accomplished engine start in accordance with flight manual procedures and checklists. Used correct hand signals.
- A8.5.2. Q- Accomplished engine start with omissions or deviations from flight manual checklists procedures that did not affect safety.
- A8.5.3. U. Omitted required procedures. Deviations to flight manual could potentially damage aircraft or mission equipment

#### A8.6. Area E: Taxi Procedures.

- A8.6.1. Q. Ensured adequate maneuvering space for aircraft. Taxi speed was adequate for existing conditions. Satisfactorily used brakes. Displayed satisfactory knowledge of marshaling signals.
- A8.6.2. Q-. Taxi was erratic in speed, spacing and/or use of brakes. Deviations or omissions from flight manual procedures but did not affect safety or mission accomplishment.
- A8.6.3. U. Failed to advise pilot that taxi speed was dangerous to aircraft control or systems.

## A8.7. Area F: Engine Shutdown Procedures.

- A8.7.1. Q. Accomplished engine shutdown in accordance with flight manual procedures and applicable checklists.
- A8.7.2. Q-. Accomplished engine shutdown with significant omissions or deviations from flight manual checklists procedures that did not affect safety.
- A8.7.3. U. Omitted required procedures. Deviations to flight manual which could potentially damage aircraft or mission equipment.