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Flying Operations

KC-10 AIRCREW EVALUATION CRITERIA

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This manual implements Air Force Policy Directive (AFPD) 11-2, *Aircrew Operations*. It establishes evaluation criteria for the operation of KC-10 aircraft to accomplish their worldwide mobility missions safely and successfully. This is a specialized publication intended for use by personnel who have graduated from technical training related to this publication. It is used in conjunction with Air Force Manual (AFMAN) 11-202V2, *Aircrew Standardization and Evaluation Program* and the appropriate MAJCOM supplements. This Air Force Manual applies to all civilian employees and uniformed members of the Regular Air Force and Air Force Reserve who operate or maintain KC-10 aircraft. This publication does not apply to the United States Space Force. Ensure all records generated as a result of processes prescribed in this publication adhere to AFI 33-322, *Records Management and Information Governance Program,* and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Air Force (AF) Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through MAJCOM publications/forms managers. This publication may be supplemented at any level, but all direct supplements must be routed to the OPR of this publication for coordination prior to certification and approval. The authorities to waive wing/unit level requirements in this publication are identified with a tier ("T-0, T-1, T-2, and T-3") number following the compliance statement. See Department of the Air Force Instruction (DAFI) 33-360, *Publications and Forms*

Management, for a description of the authorities associated with the tier numbers. 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. 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 internal attachments of this publication are mandatory.

SUMMARY OF CHANGES

This interim change revises AFMAN 11-2KC-10V2 through multiple changes to pilot evaluations, modifications to boom operator mission evaluations, changes to Crew Resource Management evaluation criteria, and corrections to **Attachment 1**.

Chapter 1—GENERAL INFORMATION **4**

1.1. General. 4
1.2. Roles and Responsibilities. 4
1.3. Applicability. 4
1.4. Key Words and Definitions. 4
1.5. Deviations and Waivers. 4
1.6. Supplements and Local Procedures. 4
1.7. Requisition and Distribution Procedures. 5
1.8. Improvement Recommendations. 5
1.9. Evaluations. 5
1.10. Evaluation Requirements. 5
1.11. Grading Policies. 7
1.12. Grading System. 7
1.13. Unsatisfactory Performance. 7
1.14. Conduct of Evaluations. 7
1.15. Use of AF FORM 3862, Flight Evaluation Worksheet. 8
1.16. Aircrew Testing. 8
1.17. Typical KC-10 Evaluation Profile. 9
1.18. Electronic Flight Bag (EFB). 9

Chapter 2—PILOT EVALUATIONS **10**

2.1. General. 10
2.2. Instrument Evaluations. 10
2.3. Qualification Evaluations. 10

2.4. MSN Evaluations. 12
2.5. INSTR Evaluation (Initial, Periodic, or RQ). 12
2.6. EPE. 12
2.7. Additional Information. 12
2.8. Pilot Grading Criteria. 13
Table 2.1. General Pilot Tolerances. 16
Table 2.2. Landing Tolerances. 18
Table 2.3. Instrument Tolerances. 21
Table 2.4. Precision Approach Tolerances. 23
Table 2.5. Non-Precision Approach Tolerances. 24
Chapter 3—FLIGHT ENGINEER EVALUATIONS 28
3.1. General. 28
3.2. QUAL Evaluations. 28
3.3. MSN Evaluations. 29
3.4. INSTR Evaluations (Initial, Periodic, and RQ). 29
3.5. EPE. 30
3.6. Additional Information. 31
3.7. Flight Engineer Grading Criteria. 31
Chapter 4—BOOM OPERATOR EVALUATIONS 39
4.1. General. 39
4.2. QUAL Evaluations. 39
4.3. MSN Evaluations. 39
4.4. INSTR Evaluations. 40
4.5. EPE. 40
4.6. Additional Information. 40
4.7. Boom Operator Grading Criteria. 40
Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION 47
Attachment 2—FLIGHT EVALUATION WORKSHEET EXAMPLES 53

Chapter 1

GENERAL INFORMATION

1.1. General. This AFMAN provides flight examiners and aircrews with procedures and evaluation criteria/tolerances to be used during aircrew evaluations as specified in AFI 11-202V2. Specific areas for evaluation are prescribed to ensure an accurate assessment of the proficiency and capabilities of aircrews.

1.2. Roles and Responsibilities. Air Mobility Command (AMC) is designated OPR for this manual. Evaluators use this AFMAN when conducting aircrew evaluations. Instructors use this AFMAN when preparing aircrews for qualification.

1.3. Applicability. This is a specialized publication intended for use by Airmen who have graduated from technical training related to this publication. It establishes evaluation criteria for the operation of KC-10 aircraft to accomplish their worldwide mobility missions safely and successfully. Copies should be available to all KC-10 aircrew members.

1.4. Key Words and Definitions.

1.4.1. "Will" and "Shall" indicate a mandatory requirement.

1.4.2. "Should" is normally used to indicate a preferred, but not mandatory, method of accomplishment.

1.4.3. "May" indicates an acceptable or suggested means of accomplishment.

1.4.4. "Note" indicates operating procedures, techniques, etc., which are considered essential to emphasize (as defined in Flight Manuals).

1.5. Deviations and Waivers. Do not deviate from the policies and guidance in this AFMAN under normal circumstances, except for safety or when necessary to protect the crew or aircraft from a situation not covered by this AFMAN and immediate action is required. **(T-1).** Report deviations or exceptions without waiver through channels to MAJCOM standardization/evaluation function who in turn, notifies lead command for follow-on action, if necessary. **(T-1).**

1.5.1. For compliance items labeled T-1 or T-2, in accordance with AFI 33-360, **Table 1.1**, AF/A3 concurs if a MAJCOM Commander decides to delegate waiver authority to their MAJCOM A3. **(T-1).** Waivers will be requested from the parent MAJCOM Stan/Eval through appropriate channels. **(T-1).** Waiver authority for supplemental guidance will be as specified in the supplement and approved through the higher level coordination authority. **(T-1).**

1.5.2. MAJCOM/A3s forward a copy of approved long-term waivers to this manual to lead command for follow-on action, if required. **(T-1).**

1.6. Supplements and Local Procedures. This AFMAN is a basic directive. Each user MAJCOM may supplement this AFMAN according to AFI 11-200. MAJCOMs may specify unique evaluation items in their appropriate supplement. Units may supplement this AFMAN or place unit specific information in an Operating Instruction (OI). Supplements and local procedures will not be less restrictive than the provisions of this AFMAN or the appropriate flight manual. **(T-1).**

1.6.1. Supplement Coordination Process. Forward Air Mobility Command, Air Operations Branch (AMC/A3)-approved supplements, with attached AF Form 673, *Request to Issue Publication*, to AMC/A3 for review. **(T-1).** AMC/A3 will provide a recommendation and forward to AF/A3O-AI for approval (IAW AFI 11-2). Use the following OPR's address: AMC/A3VK, 402 Scott Dr., Scott AFB IL, 62225-5302. **(T-2).** When supplements are published, send a final copy to AMC/A3V. **(T-1).**

1.6.2. If necessary, request and include approved long-term waivers to this AFMAN (including, approval authority, date, and expiration date) in the appropriate MAJCOM supplement. **(T-1).**

1.6.3. Local Procedures Coordination. Units send a copy of the local supplement or OI to AMC/A3V and parent MAJCOM Standardization/Evaluation for coordination and approval. **(T-2).** When local supplements are published, notify or send a final copy to AMC/A3V, parent MAJCOM, and appropriate Numbered Air Force (NAF), if applicable. **(T-2).**

1.7. Requisition and Distribution Procedures. Order this AFMAN through the servicing publications distribution office (PDO). Unit commanders may provide copies for all aircrew members and associated support personnel.

1.8. Improvement Recommendations. Send comments and suggested improvements to this manual on an AF Form 847 through channels to AMC/A3VK, 402 Scott Drive, Scott AFB IL, 62225-5302 or post to the AMC 847 Program SharePoint **https://cs2.eis.af.mil/sites/12679/AMC%20847%20Program/847%20Document%20Library/Forms/AllItems.aspx** IAW procedures in AFI 11-215, *USAF Flight Manuals Program (FMP)* and MAJCOM Supplement. **(T-2).**

1.9. Evaluations. This manual establishes standardized instrument, qualification, mission, and instructor (INSTM, QUAL, MSN, INSTR) evaluation criteria. It also establishes the areas/subareas necessary for the successful completion of evaluations and which required areas/subareas will be considered critical and/or non-critical.

1.10. Evaluation Requirements. Accomplish evaluations concurrently, whenever practical. **(T-1).** Crew Resource Management (CRM) skills will be evaluated on all evaluations. **(T-1).** KC-10 aircrew members will complete the following evaluations, at 17-month frequency IAW AFI 11-202V2, and the appropriate MAJCOM supplement:

1.10.1. Instrument (INSTM) Evaluation. All KC-10 pilots will successfully complete a periodic instrument evaluation including the requisite instrument refresher course (IRC) open-book written examination according to AFMAN 11-210, *Instrument Refresher Program (IRP),* and an aircrew training device (ATD) /flight evaluation. **(T-1).**

1.10.2. Qualification (QUAL) Evaluation. All KC-10 aircrew members will successfully complete a periodic QUAL evaluation including the requisite open-book, closed-book, boldface written examinations, emergency procedures evaluation (EPE), and an ATD/flight evaluation. **(T-1).**

1.10.2.1. The KC-10 Weapon System Trainer (WST) and Boom Operator Trainer (BOT) will be used in conjunction with all QUAL, EPE, and, if applicable, the INSTM evaluations. **(T-1).** Evaluations will only be performed in approved simulator (SIM) and must be conducted by an Air Force flight examiner (not contractors). **(T-1).** Evaluations

will only consist of areas/sub areas that can be realistically accomplished and are ATD-creditable per AFMAN 11-2KC-10V1, *KC-10 Aircrew Training.* **(T-1).**

1.10.2.1.1. For SIM evaluations, all crewmembers not receiving an evaluation will be qualified in their designated crew position. **(T-3)**

1.10.2.1.2. Aircraft Training System (ATS) contractor instructors will not seat-fill during any SIM evaluation. **(T-2)**

1.10.3. Mission (MSN) Evaluations. All KC-10 crew members will complete a mission evaluation. **(T-2).** Pilots and flight engineers complete all tasks required in the performance of normal operational and training sorties upon successfully completing a MSN evaluation. Boom operators will successfully complete a periodic mission evaluation. **(T-2).**

1.10.4. Instructor (INSTR) Evaluations. To initially qualify as an instructor in the KC-10, crewmembers will successfully complete an initial instructor qualification course and evaluation. **(T-2).** Subsequently, aircrew members designated as instructors will be evaluated on their ability to instruct during all periodic evaluations. **(T-2).** Crewmembers may use the initial (INIT) INSTR evaluation to satisfy the requirements of the periodic QUAL and MSN evaluations. Refer to the specific aircrew chapter for requirements.

1.10.5. EPE. IAW AFI 11-202V2, a verbal evaluation, flight, ATD or SIM will be used to accomplish the EPE. **(T-3)**

1.10.5.1. Units may develop and maintain a list of EPE program requirements (topics, special interest, etc.) in local supplement or OI. The EPE should include areas commensurate with the examinee's graduated training (e.g. initial, line, instructor, evaluator) or as specified in AFI 11-202V2 and MAJCOM Supplement.

1.10.5.2. Examinees may use publications that are normally available in-flight. The examinee must be able to recite all Boldface items from memory and provide the initial steps of selected emergency procedures that would not allow time for reference. **(T-2)**

1.10.5.3. Examinees receiving an overall EPE grade of "3" (unqualified) will be placed in supervised status until recommended additional training and re-evaluation are completed. **(T-2)** Examinees receiving an overall EPE grade of "3" because of unsatisfactory Boldface procedures will not be permitted to fly in their aircrew position until a successful re-evaluation is accomplished. **(T-2)** Accomplish additional training IAW AFI 11-202V2.

1.10.6. SPOT Evaluations. A SPOT evaluation is an evaluation not intended to satisfy the requirements of a periodic (i.e., INSTM, QUAL, MSN, or INSTR) evaluation. SPOT evaluations have no specific requisites or requirements unless specified in MAJCOM supplements or this AFMAN. SPOT evaluations do not require an EPE. See AFI 11-202V2 for options available to convert a SPOT evaluation to meet requirements of a periodic evaluation.

1.10.7. Evaluation Prefixes. Use AFI 11-202V2 evaluation prefixes for AF Form 8, *Certificate of Aircrew Qualification*, and AF Form 942, *Record of Evaluation.*

1.10.7.1. For a re-qualification (RQ) evaluation that results from a failed periodic or SPOT evaluation, include all areas under GENERAL and any sub-area graded "U". **NOTE:** evaluations intended to re-qualify a crewmember after a failed SPOT evaluation will be documented as "RQ SPOT" unless the examination is intended to re-align a periodic evaluation.

1.10.7.2. Conduct RQ evaluations for a loss of currency, expired periodic evaluation, or commander-directed downgrade IAW AFI 11-202V2.

1.10.7.3. Difference Evaluations. The phrase "difference" is used to describe the evaluation of one or more areas to meet QUAL requirements. Normally, a difference evaluation will include areas that are different between aircraft models, systems, or operations not previously qualified to operate. A difference evaluation does not have expiration date established because the evaluation does not satisfy the requirements for the "full" periodic evaluation. See specific crewmember's chapters in this manual for difference evaluation requirements.

1.10.7.3.1. For administrative purposes, annotate AF Form 8, flight phase as a SPOT evaluation (according to AFI 11-202V2) and **paragraph 1.10.6** above.

1.11. Grading Policies.

1.11.1. The overall qualification level awarded an evaluation is based on performance during both the flight and ground phases. This grade should be awarded only after all evaluation requirements have been completed and given due consideration.

1.11.2. To receive a qualified grade on an evaluation, the aircrew member must satisfy the criteria set forth for that evaluation and demonstrate ability to operate the aircraft and/or equipment safely and effectively during all phases of the evaluation. **(T-1)**

1.11.3. Use the grading criteria in this manual and AFI 11-202V2 to grade areas/subareas accomplished during an evaluation.

1.11.3.1. The flight examiner may grade any area/subarea accomplished during an evaluation if performance in that area/subarea impacts the specific evaluation accomplished or flight safety.

1.11.4. When in-flight evaluation of a required area is not possible, the area may be verbally evaluated or evaluated in an ATD. Flight examiners will make every effort to evaluate all required areas in-flight before resorting to this provision. See AFMAN 11-202V2 AMC Supplement and the appropriate chapter for areas prohibited from verbal/ATD evaluation.

1.12. Grading System. Refer to AFI 11-202V2.

1.13. Unsatisfactory Performance. Refer to AFI 11-202V2.

1.14. Conduct of Evaluations.

1.14.1. Flight examiners will pre-brief the examinee on the conduct, purpose, requirements of the evaluation, and all applicable evaluation criteria. **(T-3)** Flight examiners will then evaluate the examinee in each graded area/subarea. **(T-3)**

1.14.1.1. Flight examiners should not evaluate personnel they have primarily trained or have recommended for upgrade/evaluation. Flight examiners will not evaluate personnel assigned as their primary rater on Enlisted/Officer Performance Reports. **(T-3)**

1.14.2. With concurrence of Pilot-In-Command (PIC), flight examiners may conduct the evaluation in any crew position/seat which will best enable the flight examiner to observe the examinee's performance. Status of aircraft equipment and other crewmembers' primary duties should be considered.

1.14.3. Note discrepancies and deviations from prescribed tolerances and performance criteria during the evaluation. Compare the examinee's performance with the tolerances provided in the grading criteria and assign an appropriate grade for each area.

1.14.3.1. An evaluation will not be changed to a training mission to avoid documenting substandard performance, nor will a training mission be changed to an evaluation.

1.14.3.2. The judgment of the flight examiner, guidance provided in AFI 11-202V2, and this manual will be the determining factors in assigning an overall grade. The flight examiner will thoroughly critique all aspects of the flight. During the critique, the flight examiner will review the examinee's overall rating, specific deviations, area/subarea grades assigned, and any additional training required. **(T-3)**

1.14.3.3. In the event of unsatisfactory performance, the flight examiner will recommend additional training requirements. Normally, additional training should not be accomplished on the same flight. **Exception**: Additional training on the same flight is allowed when, in the evaluator's judgment, unique situations presenting valuable training opportunities (e.g. thunderstorm avoidance, crosswind landings) exist. This option requires utmost flight examiner discretion and judicious application. When used, the examinee must be informed of when the additional training begins and ends. **(T-3)**

1.14.3.4. When evaluations are less than Q-1 performance, the flight examiner will debrief the examinee and examinee's commander/supervisor. Notify the squadron commander/operations officer and flight commander/chief, if available. **(T-3)**

1.14.4. The SIM/BOT/Cargo Load Trainer (CLT) may be used to accomplish additional training and re-checks. Areas for additional training and re-checks should be limited to those areas/subareas that can be realistically accomplished in the SIM/BOT/CLT.

1.14.5. Rechecks will be administered by a flight examiner other than the one who administered the original evaluation. **(T-3)**

1.15. Use of AF FORM 3862, *Flight Evaluation Worksheet*. Units (normally the Operations Group Standardization/Evaluation Office (OGV)) will overprint AF Form 3862, using the examples in **Attachment 2** as an evaluation worksheet. **(T-3)** Copy each title, area number and text (in the order illustrated) to the appropriate blocks. Units may add special interest items and/or local evaluation requirements. In-flight, the worksheet may be used to ensure all required areas are evaluated. Record positive and negative trend information and aircrew member's performance. File the signed AF Form 3862 or signed draft copy of the AF Form 8 in the aircrew member's Flight Evaluation Folder (FEF) IAW AFI 11-202V2. Maintain until the completed AF Form 8 is filed in the FEF, and then discard. **(T-3)**

1.16. Aircrew Testing. See specific testing requirements in AFI 11-202V2 and include the following: **(T-3)**

1.16.1. Open Book Exam (AF Form 8 annotation – "Open Book"). The open book examination should normally be administered electronically via command approved software. Open book exams should be completed before the initial flight evaluation and subsequently with periodic flight evaluations. The open book examination will consist of 60-100 questions. Exams will be created from a Secure Question Bank (SQB) and managed by each OGV. A portion of the open-book examination administered to flight instructors will include instructor

(scenario-based) questions. **(T-3)** A separate (unique) INSTR open-book examination is not required for periodic evaluations.

1.16.2. Initial Instructor Open-Book Exam (AF Form 8 annotation – "INIT INSTR Open Book"). The INIT INSTR Open Book exam should normally be administered electronically via command approved software. The exam will be administered one time and should be completed prior to the INIT INSTR flight evaluation. Exams will be created from a SQB and managed by each OGV. The INIT INSTR Open Book exam is requisite for INIT INSTR evaluations only. The examination will have a minimum of 20 questions (including scenario-based questions) from AFMAN 11-2KC-10 volume 1, 2, and 3 and AFI 11-202 volume 1 and 2 (including MAJCOM supplements). **(T-3)**

1.16.3. Closed Book Exam (AF Form 8 annotation – "Closed Book"). The Closed Book examination should normally be administered electronically via command approved software. Closed book exams should be completed before the initial flight evaluation and subsequently with periodic flight evaluations. The closed book exam will be constructed IAW AFI 11-202V2. Complete a Boldface exam in conjunction with the closed book examination. **(T-3)**

1.17. Typical KC-10 Evaluation Profile.

1.17.1. Units should ensure that SIM/BOT/CLT evaluation profiles include areas/subareas that are ATD creditable.

1.17.2. As a minimum, flight evaluation profiles should include areas not ATD creditable. SIM/BOT evaluation profiles will be comprehensive enough to limit verbally evaluating subareas.

1.18. Electronic Flight Bag (EFB). For purposes of evaluation, the EFB is considered the combination of electronic publications (EPUBS) and underlying operating system software and application versions.

Chapter 2

PILOT EVALUATIONS

2.1. General. This chapter standardizes INIT, periodic, RQ evaluations, including the requirements for INSTM, QUAL, MSN, and INSTR evaluations.

2.2. Instrument Evaluations. KC-10 instrument evaluations may be accomplished in the simulator (SIM).

2.3. Qualification Evaluations. QUAL/RQ evaluations should be accomplished and logged in conjunction with MSN and INSTM requirements (e.g. INSTM/QUAL/MSN).

2.3.1. For initial (INIT) or RQ evaluations that conclude a formal training program and periodic evaluations, include all areas under GENERAL, QUALIFICATION, INSTRUMENT, and MISSION.

2.3.2. Evaluate dual-seat qualified pilots on at least one instrument approach and landing in both left and right seats. One approach and landing is required in the actual aircraft. Other approaches and landings may be evaluated in the ATD. These pilots will also be evaluated on taxi operations in the left seat. **(T-2)**

2.3.2.1. Instructor pilots receiving periodic evaluations may be evaluated in either seat, but are still required to comply with **paragraph 2.3.2** Left seat taxi operations are not required for instructor evaluations.

2.3.2.2. Instructor pilots and touch-and-go certified aircraft commanders will be evaluated during the completion of a touch-and-go as either the pilot flying or the pilot monitoring in either the Aircrew Training Device (ATD) or the aircraft. **(T-2)**

2.3.3. When not intended to lead to Aircraft Commander (AC) certification, non-prior major weapons system (MWS) pilots (PIQ) will not be evaluated in receiver air-to-air refueling (AAR), left seat takeoff, left seat approaches, or left seat landings. **(T-2)** Receiver AAR rendezvous, breakaway, and overrun may be evaluated in either seat, if observed. Document crew position for these evaluations as "/FP" on the AF Form 8, *Certificate of Aircrew Qualification*. **(T-2)** PIQ graduates with left seat qualification from previous Formal Training Unit (FTU) syllabi may maintain their left seat qualification at the discretion of the unit. The AF Form 8 Mission Description will clearly indicate whether the "/FP" pilot was evaluated in the right seat only or both seats. **(T-2)** With the recommendation of the SQ/DO, subsequent periodic evaluations may lead to AC certification. These evaluations will include left seat taxi operations as well as an approach and landing from each seat. **(T-2)** Receiver AAR in the left seat will be evaluated and will be documented with "/MP" for crew position. **(T-2)** All pilots must receive an aircraft commander evaluation (documented as "/MP") prior to AC certification. **(T-2)**

2.3.4. SIM Evaluations. Conduct a SIM evaluation in conjunction with all initial (INIT), periodic and requalification (RQ) evaluations. **(T-2)** Use a contractor-developed scenario or a unit Standardization/Evaluation (Stan/Eval) approved and flight examiner-provided scenario. **(T-2)** Unit/flight examiner-provided scenarios must be coordinated with the contractor a minimum of one day before the evaluation to ensure compatibility with ATD software. **(T-2)** Only items listed as ATD creditable training events in AFMAN 11-2KC-10V1, *KC-10 Aircrew*

Training, may be evaluated, except pilots will not be evaluated on visual traffic patterns or receiver air refueling in the ATD. **(T-2)** Additionally, landings and circling approaches will not be evaluated in the ATD during PIQ or Aircraft Commander Initial Qualification (ACIQ). **(T-2)** Evaluation of landings in the ATD for RQ pilots are at the discretion of the evaluator. Evaluate all areas that can be evaluated realistically in the simulator. **(T-2)**

2.3.4.1. Evaluate all pilots in abort procedures, Engine Failure Takeoff Continued (EFTOC), 2-engine approach and missed approach, and a random selection of other abnormal and emergency procedures and Boldface. **(T-3)**

2.3.4.2. Dual-seat qualified pilots may occupy the right seat during a portion of the SIM evaluation, but must demonstrate checklist usage and a random selection of abnormal and emergency procedures from the left seat. **(T-3)**

2.3.4.3. PIQ students are not expected to fulfill the role of an aircraft commander on their INIT QUAL evaluation. Document this evaluation as "/FP" in the crew position, on the AF Form 8.

2.3.4.4. PIQ pilots are required to complete an additional SIM evaluation prior to aircraft commander certification, focusing on aircraft commander roles and responsibilities. Evaluatee will occupy the left seat for this evaluation and must accomplish the requirements listed in **paragraph 2.3.4.1.** Document this evaluation as "/MP" in the crew position, on the same AF Form 8 as the receiver AAR evaluation. **(T-3)**

2.3.4.5. Evaluate ACIQ students in the role of aircraft commander during their initial evaluation. **(T-3)**

2.3.5. Tanker AAR. Initial qualification pilots (PIQ/ACIQ) are required to perform a Tanker Rendezvous and AAR in the SIM (from either the left or right seat). **(T-3)** Initial qualification pilots (PIQ/ACIQ) are required to conduct Tanker AAR during inflight evaluation with a portion autopilot off. **(T-3)** For upgrade, periodic, and RQ evaluations, accomplishment of the event in the SIM or inflight will satisfy evaluation requirements. **(T-3)**

2.3.6. Receiver AAR. Rendezvous or closure from a minimum of 1 nautical mile (NM) is required for INIT and RQ AC evaluations. **(T-3)** Pilots will demonstrate sustained contact. **(T-2)** Evaluate ACs in the left seat. **(T-2)** Evaluate instructors in either seat. **(T-3)**

2.3.7. Senior Staff Evaluations. All Senior Staff Officer initial, periodic and RQ evaluations include (as a minimum) the following required areas:

2.3.7.1. All areas under GENERAL.

2.3.7.2. All areas under QUALIFICATION, except area 19, Engine Out Operations, and area 22, Other Emergency Procedures.

2.3.7.3. All areas under INSTRUMENT, except **Area 32**, Circling Approach.

2.3.7.4. Evaluate Senior Staff Officers in a random selection of Boldface, abort procedures, and Engine Failure Take off Continued (EFTOC). ***NOTE:*** Since Senior Staff Officers do not maintain a MSN QUAL in these areas, they may not occupy a pilot's seat during Tanker AAR or Receiver AAR with passengers aboard. Annotate the appropriate restriction on AF Form 8, Examiners Remarks. Time and training conditions permitting, Senior Officers may elect to be trained, IAW AFMAN 11-2KC-10 Volume 1, and

evaluated in Tanker AAR, Receiver AAR, and right seat landings. If so, no restriction is required, but clearly document that tanker and/or receiver AR was accomplished in the examiner's remarks.

2.4. MSN Evaluations. Evaluate all areas under GENERAL and MISSION. Every attempt must be made to evaluate formation procedures on periodic evaluations in the aircraft. If unable to comply, formation procedures must be verbally evaluated and annotated in the examiner's remarks section. Evaluate tactical procedures only if observed. **(T-3)**

2.4.1. Operational Mission Evaluation (OME). All pilots will complete a one-time OME demonstrating their ability to operate in command of an aircraft performing the unit's primary mission prior to aircraft commander certification. **(T-3)** The following may be used to satisfy this requirement:

2.4.1.1. A combination INSTM/QUAL/MSN evaluation on a local training mission provided the following conditions are met:

2.4.1.1.1. The evaluation is focused on decision making and CRM.

2.4.1.1.2. The following subareas must be evaluated in the actual aircraft: ground operations/taxi, tanker AAR (ACIQ only), and receiver AAR. **(T-2)**

2.4.1.2. A SPOT evaluation given on a 618 AOC (TACC) tasked or locally assigned Dual Role or JA/ATT mission.

2.4.1.3. In all cases document the OME on the Form 8 with the following comment in the additional comments section, "This OME was conducted in conjunction with aircraft commander certification." **(T-3)**

2.5. INSTR Evaluation (Initial, Periodic, or RQ). Flight examiners will place particular emphasis on the examinee's ability to recognize student difficulties and provide timely, effective, corrective action. As a minimum, demonstrate and instruct an instrument/visual approach. Conduct INIT or RQ INSTR evaluations in the aircraft with a qualified pilot occupying the other seat. **(T-3)** The examinee will normally occupy the right seat.

2.5.1. INIT: Include all areas under GENERAL, QUALIFICATION (QUAL), MISSION (MSN), and INSTRUCTOR (INSTR). **Note:** Pilots who desire to realign their QUAL/MSN evaluation during the INIT INSTR evaluation must also demonstrate all required areas/subareas in INSTRUMENT and complete all required written examinations. **(T-3)** Comply with AFMAN 11-202V2 paragraph 5.8.3.1 and 7.3.4.4.2 for realignment accomplished prior to the eligibility period. **(T-2)**

2.5.2. Periodic INSTR evaluations will be administered in conjunction with required INSTM/QUAL/MSN evaluations and require all areas in GENERAL, QUALIFICATION, MISSION, INSTRUMENT, and INSTRUCTOR. **(T-3)**

2.6. EPE. Evaluate a pilot's knowledge of emergency procedures and systems knowledge in the SIM portion of all INSTM/QUAL/MSN evaluations (see **paragraph 1.9.6**).

2.7. Additional Information.

2.7.1. Pilots may conduct evaluations when scheduled as primary aircrew members.

2.7.2. DELETED.

2.7.3. DELETED.

2.7.4. If the flight manual recommends a specific airspeed range for performance of a maneuver, the flight examiner will apply the grading criteria to the upper and lower limits of that range.

2.8. Pilot Grading Criteria.

2.8.1. **GENERAL**

2.8.1.1. **Area 1, Directives and Publications.**

2.8.1.1.1. **(Q)** Possessed a high level of knowledge of all applicable aircraft directives and publications and understood how to apply both to enhance mission accomplishment. Required publications (paper/electronic) were current and properly posted.

2.8.1.1.2. **(Q-)** Unsure of some directives but could locate information in appropriate publications. Required publications (paper/electronic) were current but improperly posted.

2.8.1.1.3. **(U)** Unaware of established directives and/or could not locate them in the appropriate publication in a timely manner. Required publications (paper/electronic) were not current.

2.8.1.2. **Area 2, Mission Preparation/Planning/Performance.**

2.8.1.2.1. **(Q)** Checked all factors applicable to flight such as: weather, NOTAMS, alternate airfields, airfield suitability, fuel requirements, charts, etc. Displayed a high level of knowledge of performance capabilities and operating data. Evaluated data intended for use during takeoff/landing after final adjustments and corrections were made:

2.8.1.2.1.1. *V1, Vr, V2, flap retract, slat retract, Vmm: +/-3 Knots Indicated Airspeed (KIAS)*

2.8.1.2.1.2. *N1 setting: +/-0.3%*

2.8.1.2.1.3. *Critical Field Length (CFL): +/-500 feet and suitable for takeoff/landing*

2.8.1.2.1.4. *Landing speeds: +/-3 KIAS*

2.8.1.2.2. **(Q-)** Made minor errors or omissions in checking all factors that could have detracted from mission effectiveness. Marginal knowledge of performance capabilities and/or operating data.

2.8.1.2.2.1. Performance calculations exceeded Q limits but did not exceed:

2.8.1.2.2.2. *V1, Vr, V2, flap retract, slat retract, Vmm: +/-5 KIAS*

2.8.1.2.2.3. *N1 setting: +/-0.6 %*

2.8.1.2.2.4. *Critical Field Length (CFL): +/-800 feet and suitable for takeoff/landing*

2.8.1.2.2.5. *Landing speeds: +/-5 KIAS*

2.8.1.2.3. **(U)** Made major errors or omissions which would have prevented a safe or effective mission. Unsatisfactory knowledge of performance capabilities and/or operating data. Performance calculations exceeded Q- limits.

2.8.1.3. **Area 3, Use of Checklists.**

2.8.1.3.1. **(Q)** Consistently used and called for the correct checklist and gave the correct response at the appropriate time throughout the mission.

2.8.1.3.2. **(Q-)** Checklist responses were untimely and/or crewmember required continual prompting for correct response.

2.8.1.3.3. **(U)** Used or called for incorrect checklist or consistently omitted checklist items. Unable to identify the correct checklist to use for a given situation. Did not complete checklist prior to event.

2.8.1.4. **Area 4, Safety Consciousness (Critical).**

2.8.1.4.1. **(Q)** Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.

2.8.1.4.2. **(U)** Not aware of or did not comply with all safety factors required for safe aircraft operation or mission accomplishment. Attempted to operate aircraft in a dangerous manner.

2.8.1.5. **Area 5, Judgment/Compliance (Critical).**

2.8.1.5.1. **(Q)** Prepared and completed mission in compliance with existing regulations and directives. Demonstrated knowledge of operating procedures and restrictions and where to find them in the correct publications.

2.8.1.5.2. **(U)** Unaware of established procedures and/or could not locate them in the appropriate publication in a timely manner. Failed to comply with a procedure that could have jeopardized safety or mission success.

2.8.1.6. **Area 6, Crew Resource Management (CRM)/Threat and Error Management (TEM).** See AFI 11-290, *Cockpit/Crew Resource Management Program*, applicable MAJCOM Supplement, and Air Mobility Command (AMC) Form 4031, *CRM/TEM Skills Criteria Training/Evaluation* for additional requirements when substandard CRM/TEM performance is observed during an evaluation.

2.8.1.6.1. **(Q)** Proactively applied appropriate/established CRM skills and TEM concepts throughout the flight/mission. Ensured safe/effective mission accomplishment by anticipating, recognizing and mitigating relevant threats. Identified and mitigated own and other crewmembers' errors via the proper use of monitoring/crosschecking procedures and through the employment of applicable and established verbalize, verify and monitor (VVM) practices/procedures.

2.8.1.6.2. **(Q-)** Reactively and inconsistently, or inadequately applied appropriate/established CRM skills and TEM concepts but did not allow those deficiencies to detract from mission accomplishment and/or flight safety. Unreliably and/or inadequately anticipated, identified or mitigated relevant threats and/or own or other crewmembers' inconsequential errors.

2.8.1.6.3. **(U)** Did not apply appropriate/established CRM skills and TEM concepts to ensure safe/effective mission accomplishment. Failed to anticipate, identify or mitigate relevant threats and/or own or other crewmembers' consequential errors.

2.8.1.7. **Area 7, Communication Procedures.**

2.8.1.7.1. **(Q)** Complete knowledge of and compliance with correct communications procedures. Transmissions concise with proper terminology. Complied with and acknowledged all required instructions. Familiar with, and correctly operated HAVE QUICK, IFF, and secure voice equipment.

2.8.1.7.2. **(Q-)** Occasional deviations from procedures that required re-transmissions or resetting codes. Slow in initiating or missed several required radio calls. Transmissions contained extraneous matter, were not in proper sequence, or used non-standard terminology. Displayed limited knowledge of HAVE QUICK, IFF, and secure voice equipment.

2.8.1.7.3. **(U)** Incorrect procedures or poor performance caused confusion and jeopardized mission accomplishment. Omitted numerous radio calls. Displayed inadequate knowledge of or inability to operate HAVE QUICK, IFF, and secure voice equipment.

2.8.1.8. **Area 8, Aircrew Flight Equipment Systems/Egress.**

2.8.1.8.1. **(Q)** Displayed thorough knowledge of location and use of aircrew flight equipment systems. Demonstrated and emphasized the proper operating procedures used to operate aircraft egress devices such as doors, windows, slide rafts, and escape ropes.

2.8.1.8.2. **(Q-)** Limited knowledge of location and use of aircrew flight equipment systems. Unsure of the proper operating procedures used to operate some of the aircraft egress devices.

2.8.1.8.3. **(U)** Displayed unsatisfactory knowledge of location and use of aircrew flight equipment systems. Unable to properly operate aircraft egress devices or egress the aircraft.

2.8.1.9. **Area 9, Knowledge/Completion of Forms.**

2.8.1.9.1. **(Q)** All required forms and/or flight plans were complete, accurate, readable, accomplished on time and IAW applicable directives. Related an accurate debrief of significant events to applicable agencies (intelligence, maintenance, etc.).

2.8.1.9.2. **(Q-)** Minor errors on forms and/or flight plans did not affect conduct of the mission. Incorrectly or incompletely reported some information due to minor errors, omissions, and/or deviations.

2.8.1.9.3. **(U)** Did not accomplish required forms and/or flight plans. Omitted or incorrectly reported significant information due to major errors, omissions, and/or deviations.

2.8.1.10. **Area 10, Airmanship/Situational Awareness (Critical).**

2.8.1.10.1. **(Q)** Executed the assigned mission in a timely, efficient manner. Demonstrated strict professional flight and crew discipline throughout all phases of flight. Conducted the flight with a sense of understanding and comprehension.

2.8.1.10.2. **(U)** Decisions, or lack thereof, resulted in failure to accomplish the assigned mission. Failed to exhibit strict flight and crew discipline.

2.8.2. **QUALIFICATION.** Use the criteria in **Table 2.1** as general tolerances for airspeed, altitude, and heading/course unless specifically noted in another subarea.

Table 2.1. General Pilot Tolerances.

Q	Altitude	+/- 100 feet
	Airspeed	+ 10 / -5 kts
	Heading/Course	+/- 5 degrees
Q-	Altitude	+/- 200 feet
	Airspeed	+ 15 / -5 kts
	Heading/Course	+/- 10 degrees
U		Exceeds Q- Criteria
NOTE 1: Airspeed tolerances apply when a specific airspeed has been assigned by Air Traffic Control or prescribed in the flight manual. Airspeed "minus" tolerances are based on minimum maneuvering speed for aircraft configuration. ***NOTE 2:*** Add 50 feet (when practical) and 2 degrees to "all engines operating" criteria for "operations with an engine out" criteria.		

2.8.2.1. **Area 11, Ground Operations/Taxi.**

2.8.2.1.1. **(Q)** Established and adhered to station, start engine, taxi and take-off time to ensure thorough preflight, check of personal equipment, crew/passenger briefings, etc. Accurately determined readiness of aircraft for flight. Completed all systems pre-flight/post-flight inspections in accordance with the flight manual. Conducted taxi operations according to flight manuals, AFMAN 11-218, *Aircraft Operations and Movement on the Ground* and local procedures.

2.8.2.1.2. **(Q-)** Same as above except for minor procedural deviations that did not detract from mission effectiveness.

2.8.2.1.3. **(U)** Crew errors directly contributed to a late takeoff that degraded the mission. Failed to accurately determine readiness for flight. Failed to preflight/post-flight a critical component or could not conduct a satisfactory preflight/post-flight inspection. Violated flight manual procedures and/or jeopardized safe taxi operations.

2.8.2.2. **Area 12, Takeoff.**

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

2.8.2.2.2. **(Q-)** Minor deviations from published procedures without affecting safety of flight. Control was rough or erratic. Hesitant in application of procedures/corrections.

2.8.2.2.3. **(U)** Takeoff was potentially dangerous. Exceeded aircraft/systems limitations. Failed to establish proper climb attitude. Excessive deviation from intended flight path.

2.8.2.3. **Area 13, Radar Operations/Weather Avoidance/Windshear.**

2.8.2.3.1. **(Q)** Effectively demonstrated procedures for operating weather radar. Updated weather radar/analysis throughout the mission. Highly knowledgeable of windshear detection and avoidance equipment. Used all available sources to determine if and/or to what degree severe weather conditions exist. Complied with all weather separation and windshear avoidance procedures.

2.8.2.3.2. **(Q-)** Minor deviations observed when operating weather radar. Did not update radar/weather analysis during worsening weather conditions. Limited knowledge of windshear detection and avoidance equipment.

2.8.2.3.3. **(U)** Unable to demonstrate proper use of weather radar. Failed to update radar/weather analysis during the mission. Displayed unsatisfactory knowledge of windshear detection and avoidance equipment. Failed to comply with weather separation or windshear avoidance directives that could have jeopardized safety or mission success.

2.8.2.4. **Area 14, Fuel Conservation.**

2.8.2.4.1. **(Q)** Possessed a high level of knowledge of all applicable aircraft publications and directives and understood how to apply both to enhance fuel conservation and fuel planning. Successfully applied fuel conservation procedures in all areas of the mission.

2.8.2.4.2. **(Q-)** Possessed some knowledge of applicable aircraft publications and directives and understood how to apply both to enhance fuel conservation and fuel planning. Successfully applied some fuel conservation procedures, but failed to apply fuel conservation procedures in all areas of the mission.

2.8.2.4.3. **(U)** Unaware of fuel conservation procedures. Unable to fuel plan. Failed to apply any fuel conservation procedures in the mission.

2.8.2.5. **Area 15, VFR Pattern.**

2.8.2.5.1. **(Q)** Performed traffic pattern and turn to final/final approach IAW published procedures. Aircraft control was smooth and positive. Constantly cleared area of intended flight.

2.8.2.5.2. **(Q-)** Performed traffic pattern and turn to final/final approach with minor deviations to procedures as published/directed. Aircraft control was safe but not consistently smooth and positive. Over/under shot final approach, but was able to intercept normal glide path. Adequately cleared area of intended flight.

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

2.8.2.6. **Area 16, Landings.**

2.8.2.6.1. Reference **Table 2.2** for grading criteria specific to landings.

2.8.2.6.2. Specific items to evaluate include aim point, threshold altitude/airspeed, sink rate, runway alignment, flare, touchdown, landing in crab and adherence to stabilized approach criteria in accordance with AFMAN 11-202V3, *Flight Operations,* AMC Supplement.

2.8.2.6.3. Airspeed tolerances apply to computed threshold speed.

2.8.2.6.4. Add 5 KIAS to all engines operating criteria for operations with an engine out criteria.

Table 2.2. Landing Tolerances.

Q	Performed landings in accordance with procedures as published/directed.	
	Airspeed	+10 / -0 Knots indicated airspeed (KIAS)
	Touchdown Zone	800-3000 feet
	Centerline	+/- 15 feet left or right
Q-	Performed landings with minor deviation to procedures as published/directed. Landed in a slight crab.	
	Airspeed	+10 / -5 KIAS
	Touchdown Zone	500-3000 feet
	Centerline	+/- 25 feet left or right
U	Landing not performed as published/directed. Exceeded Q- criteria	

2.8.2.7. **Area 17, Landing Roll/Braking/Reverse Thrust.**

2.8.2.7.1. **(Q)** Performed as published/directed IAW flight manual. Braking action and reverse thrust actuation prompt and smooth.

2.8.2.7.2. **(Q-)** Performed landings with minor deviation to procedures as published/directed. Braking action and reverse thrust actuation unnecessarily delayed or not smooth.

2.8.2.7.3. **(U)** Landing not performed as published/directed. Braking or reverse thrust actuated prior to touchdown. Exceeded Q- criteria.

2.8.2.8. **Area 18, All Engine Go-Around (GA).** Required in-flight, only if a GA or engine-out GA was not evaluated in the SIM (not required if **Area 20** is accomplished).

2.8.2.8.1. **(Q)** Initiated and performed GA promptly and according to flight manual and directives. Applied smooth control inputs. Acquired and maintained a positive climb.

2.8.2.8.2. **(Q-)** Slow or hesitant to initiate GA. Slightly over-controlled the aircraft. Minor deviations did not affect mission accomplishment or compromise safety.

2.8.2.8.3. **(U)** Did not initiate GA when appropriate or directed. Major deviations or misapplication of procedures could have led to an unsafe condition.

2.8.2.9. **Area 19, Engine Out Operations.** Use approach criteria for the type of approach being flown and the following:

2.8.2.9.1. **(Q)** Proper control inputs were used to correct asymmetric condition. Aircraft was properly trimmed. Proper consideration was given to maneuvering the aircraft with regard to the "dead" engine. Maintained criteria in **Table 2.1 (Note 2)**.

2.8.2.9.2. **(Q-)** Minor deviations in aircraft control allowed the aircraft to occasionally fly uncoordinated flight. Momentarily deviated from criteria in **Table 2.1 (Note 2)**.

2.8.2.9.3. **(U)** Aircraft was not properly trimmed. Aircraft control was erratic and consistently resulted in uncoordinated flight. Maneuvering the aircraft with regard to the engine out condition was potentially unsafe. Exceeded Q-criteria in **Table 2.1 (Note 2)**.

2.8.2.10. **Area 20, Engine Out GA/Engine Fail Takeoff Continued.**

2.8.2.10.1. **(Q)** Performed all required procedures IAW the flight manual and directives. Applied smooth, positive, and coordinated control inputs. Rudder and aileron inputs were in correct direction.

2.8.2.10.2. **(Q-)** Procedural errors were made which did not affect safety. Aircraft control was not consistently smooth and positive. Rudder and aileron inputs were in correct direction but some over/under control.

2.8.2.10.3. **(U)** Procedural errors were made which affected safety. Rudder and/or aileron inputs were incorrect.

2.8.2.11. **Area 21, Boldface Emergency Procedures (Critical).**

2.8.2.11.1. **(Q)** Correct, immediate responses. Maintained aircraft control. Coordinated proper crew actions.

2.8.2.11.2. **(U)** Incorrect sequence, unsatisfactory response, or unsatisfactory performance of corrective actions.

2.8.2.12. **Area 22, Other Observed Emergency Procedures.**

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

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

2.8.2.12.3. **(U)** Attempted to exceed limitations. Unable or failed to analyze problem or take proper corrective action. Did not use checklists or available aids effectively.

2.8.2.13. **Area 23, Systems Operations/Knowledge/Limitations.**

2.8.2.13.1. **(Q)** Demonstrated/explained a complete knowledge of aircraft systems operations/limitations and proper procedural use of systems.

2.8.2.13.2. **(Q-)** Marginal knowledge of aircraft systems operations and limitations in some areas. Used individual technique instead of established procedure and was unaware of differences.

2.8.2.13.3. **(U)** Unsatisfactory systems knowledge. Unable to demonstrate/explain the procedures for aircraft system operations.

2.8.2.14. **Area 24, Automation Management.**

2.8.2.14.1. **(Q)** Adhered to and demonstrated appropriate knowledge of published guidance regarding the operation of automated aircraft flight systems, Pilot Flying (PF)/Pilot Monitoring (PM) flight automation responsibilities and VVM procedures as they relate to flight automation. Proficiently programmed, reviewed/verified, and operated automated flight systems at suitable levels to enhance situational awareness and/or to reduce pilot workload. Either did not make flight automation errors or quickly identified and mitigated those errors.

2.8.2.14.2. **(Q-)** Demonstrated limited knowledge of published guidance for the operation of automated flight systems, PF / PM flight automation responsibilities and VVM procedures as they relate to flight automation. Inconsistently or inadequately programmed, reviewed/verified or operated aircraft automated flight systems at suitable levels to enhance situational awareness and/or to reduce pilot workload. Made but did not identify or mitigate inconsequential flight automation errors.

2.8.2.14.3. **(U)** Did not follow published guidance for the operation of automated flight systems, causing detriment to mission/flight accomplishment. Did not adequately employ PF, PM, and/or VVM guidance regarding the usage of flight automation systems or adequately program, review/verify and/or operate automated aircraft systems at suitable levels. Made but did not identify or mitigate consequential flight automation errors.

2.8.2.15. **Area 25, Pilot Monitoring.**

2.8.2.15.1. **(Q)** Effectively monitored and supported/advised the PF and intervened, when appropriate, if the PF was not adequately controlling the aircraft flight path. Complied with applicable flight policies and procedures and made required flight callouts. Remained vigilant to identify, communicate, and mitigate events/distractions that may have adversely affected flight path management. Monitored energy and flight path performance and was alert for erroneous/conflicting aircraft control and navigational information. Effectively addressed aircraft system failures or unexpected aircraft flight guidance and aircraft system outcomes.

2.8.2.15.2. **(Q-)** Did not fully support/advise the PF regarding the aircraft flight path. Slow to intervene if the PF was not adequately controlling the aircraft flight path. Flight policies/procedures were not fully applied and required flight callouts were inconsistent. Flight path/energy management awareness, communication, and/or vigilance was sporadic but did not adversely affect flight safety. Intermittently addressed aircraft system failures or unexpected aircraft flight guidance and aircraft system outcomes.

2.8.2.15.3. **(U)** Failed to support/advise the PF regarding the aircraft flight path. Did not intervene when the PF was not adequately controlling the aircraft flight path. Application of flight policies/procedures was insufficient and required callouts were not made. Flight path/energy management awareness, communication, and/or vigilance was insufficient or jeopardized flight safety. Failed to address aircraft system failures or unexpected aircraft flight guidance and aircraft system outcomes.

2.8.3. **INSTRUMENT.** Use the criteria in **Table 2.3** as general tolerances for airspeed, level-off altitude, and heading/course with all engines operating:

Table 2.3. Instrument Tolerances.

Q	Level-off Altitude	+/- 100 feet
	Airspeed	+ 10 / -5 kts
	Heading/Course	+/- 5 degrees
Q-	Level-off Altitude	+/- 200 feet
	Airspeed	+ 15 / -5 kts
	Heading/Course	+/- 10 degrees
U		Exceeds Q- Criteria
NOTE 1: Airspeed tolerances apply when a specific airspeed has been assigned by Air Traffic Control or prescribed in the flight manual. Airspeed "minus" tolerances are based on minimum maneuvering speed for aircraft configuration. NOTE 2: Add 5 KIAS, 50 feet (when practical), and 2 degrees to all engines operating criteria for operations with an engine out criteria.		

2.8.3.1. **Area 26, Instrument Departure/Standard Instrument Departure (SID).**

2.8.3.1.1. **(Q)** Complied with all restrictions or controlling agency instructions. Made all required reports. Applied course/heading corrections promptly. Demonstrated smooth, positive control.

2.8.3.1.2. **(Q-)** Minor deviations in navigation occurred during departure. Slow to comply with controlling agency instructions or unsure of reporting requirements. Slow to apply course/heading corrections. Aircraft control was not consistently smooth and positive.

2.8.3.1.3. **(U)** Failed to comply with published/directed departure, or controlling agency instructions. Accepted an inaccurate clearance. Aircraft control was erratic.

2.8.3.2. **Area 27, Enroute Navigation/Flight Management System (FMS).**

2.8.3.2.1. **(Q)** Satisfactory capability to navigate using all available means. Used appropriate navigation procedures. Complied with clearance instructions. Aware of position at all times. Remained within the confines of assigned airspace.

2.8.3.2.1.1. TACAN/VOR-DME Arc: +/-2 NM

2.8.3.2.2. **(Q-)** Minor errors in procedures/use of navigation equipment. Slow to comply with clearance instructions. Had some difficulty in establishing exact position and course. Slow to adjust for deviations in time and course.

2.8.3.2.2.1. Exceeded Q criteria but not: TACAN/VOR-DME Arc: +/-4 NM

2.8.3.2.3. **(U)** Major errors in procedures/use of navigation equipment. Could not establish position. Failed to recognize checkpoints or adjust for deviations in time and course. Did not remain with the confines of assigned airspace.

2.8.3.2.3.1. Exceeded Q- criteria.

2.8.3.3. **Area 28, Holding.**

2.8.3.3.1. **(Q)** Performed entry and holding IAW published procedures and directives and:

2.8.3.3.1.1. Timing +/- 15 seconds.

2.8.3.3.1.2. Distance +/ 2 DME or NM.

2.8.3.3.1.3. EAC: +/- 2 minutes (if assigned).

2.8.3.3.2. **(Q-)** Performed entry and holding procedures with minor deviations. Exceeded Q criteria but within:

2.8.3.3.2.1. Timing +/- 20 seconds.

2.8.3.3.2.2. Distance +/- 3 DME or NM.

2.8.3.3.3. **(U)** Holding was not IAW flight manual, directives, or published procedures. Exceeded Q- criteria.

2.8.3.4. **Area 29, Use of Navigational Aids (NAVAIDs).**

2.8.3.4.1. **(Q)** Ensured NAVAIDs were properly tuned, identified, and monitored.

2.8.3.4.2. **(Q-)** Some deviations in tuning, identifying, and monitoring NAVAIDs.

2.8.3.4.3. **(U)** Did not ensure NAVAIDs were tuned, identified, and monitored.

2.8.3.5. **Area 30, Descent/Arrival.**

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

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

2.8.3.5.3. **(U)** Performed descent with major deviations. Did not accomplish required checks. Erratic corrections. Exceeded flight manual limitations.

2.8.3.6. **Area 31, Precision Approaches.** Includes subareas Precision Approach Radar (PAR) and Instrument Landing System (ILS). Use the criteria in **Table 2.4** as general tolerances for airspeed, altitude, heading, glide slope, and azimuth.

Table 2.4. Precision Approach Tolerances.

Q	Altitude	Decision Altitude (DA) crossing +50 / -10 feet
	Airspeed	+ 10 / -5 knots (kts)
	Heading (PAR)	+/- 5 degrees
	Azimuth (ILS)	Within 1 dot
	Glideslope (ILS)	Within 1 dot
Q-	Altitude	DA crossing +100 / -10 feet
	Airspeed	+ 15 / -5 kts
	Heading (PAR)	+/- 10 degrees
	Azimuth (ILS)	Within 2 dots
	Glideslope (ILS)	Within 2 dots high or 1 dot low
U		Exceeds Q- Criteria
NOTE: Airspeed tolerances are based on computed approach speed.		
NOTE: Add 5 KIAS, 50 feet (when practical), and 2 degrees to all engines operating criteria for operations with an engine out.		

2.8.3.7. **Subarea 31A, PAR (If observed).**

2.8.3.7.1. **(Q)** Approach was IAW published procedures. Smooth and timely response to controller's instructions. Established initial glide path and maintained with only minor deviations. Complied with decision height. Position would have permitted a safe landing. Elevation did not consistently exceed slightly above or slightly below glide path.

2.8.3.7.2. **(Q-)** Performed approach with minor deviations. Slow to respond to controller's instructions and make corrections. Improper glide path control. Complied with decision height. Position would have permitted a safe landing. Elevation did not exceed well above or well below glide path.

2.8.3.7.2. **(U)** Approach not IAW flight manual, directives, or published procedures. Erratic corrections. Did not respond to controller's instructions. Did not comply with decision height and/or position would not have permitted a safe landing. Erratic glide path control. Exceeded Q- criteria.

2.8.3.8. **Subarea 31B, Instrument Landing System (ILS).**

2.8.3.8.1. **(Q)** Approach was IAW published procedures. Smooth and timely corrections to azimuth and glide slope. Complied with decision height. Position would have permitted a safe landing. Maintained glide path with only minor deviations.

2.8.3.8.2. **(Q-)** Performed approach with minor deviations. Slow to make corrections. Slow to comply with decision height. Position would have permitted a safe landing. Improper glide path control.

2.8.3.8.3. **(U)** Approach not IAW flight manual, directives, or published procedures. Erratic corrections. Did not comply with decision height and/or position at decision height would not have permitted a safe landing. Exceeded Q- criteria.

2.8.3.9. **Area 32, Non-Precision Approaches.** Includes subareas non-directional beacon (NDB), localizer (LOC)/very high frequency (VHF) omnidirectional range (VOR), approach surveillance radar (ASR), tactical air navigation (TACAN), and area navigation (RNAV). Use **Table 2.5** criteria as general tolerances for airspeed, altitude at Minimum Descent Altitude (MDA), heading, course, timing, and distance with all engines operating.

Table 2.5. Non-Precision Approach Tolerances.

Q	MDA	+100 / -0 feet
	Airspeed	+ 10 / -5 kts
	Course (NDB, VOR, TACAN)	+/- 5 degrees
	Azimuth (LOC, RNAV)	Within 1 dot
	Timing	Computed/adjusted timing to determine MAP within 20 seconds (when required).
Q-	MDA	+150 / -50 feet
	Airspeed	+ 15 / -5 kts
	Course (NDB, VOR, TACAN)	+/- 10 degrees
	Azimuth (LOC, RNAV)	Within 2 dots
	Timing	Computed/adjusted timing to determine MAP within 30 seconds (when required).
	Minor procedural deviations detracted from performance but did not jeopardize safe flight.	
U	Approach not accomplished in accordance with published procedures. Maintained steady-state flight below the MDA, even though the -50 foot limit was not exceeded. Position would not have permitted a safe landing. Failed to compute or adjust timing to determine MAP (when required). Exceeded Q- criteria.	
NOTE 1: Airspeed tolerances are based on computed approach speed. NOTE 2: Add 5 KIAS, 50 feet (when practical), and 2 degrees to all engines operating criteria for operations with an engine out criteria.		

2.8.3.10. **Area 33, Circling Approach (If available, otherwise verbally evaluated). Note:** Not required for Senior Officers.

2.8.3.10.1. **(Q)** Properly identified aircraft category for the approach and remained within the lateral limits for that category. Complied with controller's instructions. Attained runway alignment without excessive bank angles. Did not descend from the MDA until in a position to place the aircraft on a normal glide path or execute a normal landing.

2.8.3.10.2. **(Q-)** Slow to identify aircraft category for the approach and remained within the lateral limits for that category. Slow to comply with controller's instructions.

Attained runway alignment but occasionally required excessive bank angles or maneuvering.

2.8.3.10.3. **(U)** Did not properly identify aircraft category or exceeded the lateral limits of circling airspace. Did not comply with controller's instructions. Excessive maneuvering to attain runway alignment was potentially unsafe. Descended from the MDA before the aircraft was in a position for a normal glide path or landing. Exceeded Q- criteria.

2.8.3.11. **Area 34, Missed Approach.**

2.8.3.11.1. **(Q)** Executed missed approach IAW published procedures. Complied with controller's instructions. Applied smooth control inputs.

2.8.3.11.2. **(Q-)** Executed missed approach with minor deviations to published procedures. Slow to comply with controller's instructions. Slightly over controlled the aircraft.

2.8.3.11.3. **(U)** Did not execute missed approach IAW flight manual, directives, or published procedures. Did not comply with controller's instructions. Deviation or misapplications of procedures could have led to an unsafe condition.

2.8.4. **MISSION**

2.8.4.1. **Area 35, Formation.** Includes subareas: Lead, Departure, Join-up, End-Route, Breakup, and Position Changes. **Note:** Not applicable for initial PIQ/ACIQ.

2.8.4.1.1. **(Q)** Performed maneuver consistent with published guidance. Aircraft control was smooth and positive. Constantly cleared area of intended flight.

2.8.4.1.2. **(Q-)** Maneuver performed in a manner consistent with published guidance. Aircraft control was safe but not consistently smooth and positive. Adequately cleared area of intended flight.

2.8.4.1.3. **(U)** Maneuver performed in a manner inconsistent with published guidance. Displayed erratic aircraft control. Did not clear area of intended flight.

2.8.4.2. **Area 36, Tactical Maneuvers (If observed).**

2.8.4.2.1. **(Q)** Performed maneuver consistent with published guidance. Aircraft control was smooth and positive. Constantly cleared area of intended flight.

2.8.4.2.2. **(Q-)** Maneuver performed in a manner consistent with published guidance. Aircraft control was safe but not consistently smooth and positive. Adequately cleared area of intended flight.

2.8.4.2.3. **(U)** Maneuver performed in a manner inconsistent with published guidance. Displayed erratic aircraft control. Did not clear area of intended flight.

2.8.4.3. **Area 37, Tanker AAR.** Includes subareas rendezvous, platform control, breakaway, and overrun procedures.

2.8.4.3.1. **(Q)** Aircraft control was smooth and positive. Performed all checklists and complied with procedures outline in the flight manual and other governing directives. Met the following criteria:

2.8.4.3.1.1. Airspeed: +10 / -5 KIAS

2.8.4.3.1.2. Altitude: +/- 200 feet

2.8.4.3.1.3. Heading/Course: +/- 5 degrees

2.8.4.3.2. **(Q-)** Aircraft control was not always smooth and positive, but was adequate. Accomplished procedures required by the flight manual, checklists, and other governing directives with deviation/omissions which did not affect safety of flight. Exceeded Q criteria but does not exceed: ***NOTE:*** When refueling with autopilot off, add 100 feet, 5 KIAS, and 5 degrees to all tolerances.

2.8.4.3.2.1. Airspeed: +15 / -5 KIAS

2.8.4.3.2.2. Altitude: +/- 300 feet

2.8.4.3.2.3. Heading/Course: +/- 10 degrees

2.8.4.3.3. **(U)** Had deviations/omissions that affected flight safety and/or the successful completion of AAR. Exceeded Q- limits.

2.8.4.4. **Area 38, Receiver AAR.** Includes subareas rendezvous, closure, AAR position/control, breakaway, and overrun procedures.

2.8.4.4.1. **(Q)** Established and maintained proper refueling position. Aircraft control was positive and smooth. Demonstrated a complete knowledge of rendezvous and closure procedures. Performed all procedures in accordance with applicable checklists and other governing directives.

2.8.4.4.1.1. Deleted.

2.8.4.4.2. **(Q-)** Slow to recognize and apply needed corrections to establish and maintain proper refueling position. Aircraft control was not always positive and smooth, but was adequate. Accomplished rendezvous and closure with deviations and/or missions which did not affect safety of flight or the successful completion of AAR. Performed all procedures in accordance with applicable checklists and other governing directives with only minor omissions or deviations. Exceeded Q criteria but did not exceed:

2.8.4.4.2.1. Deleted.

2.8.4.4.3. **(U)** Erratic or dangerous in the pre-contact/refueling position. Had deviations/omissions that affected safety of flight and/or successful completion of AAR. Did not perform all procedures in accordance with applicable checklists and other governing directives or omitted major items. Exceeded Q- limits.

2.8.5. **INSTRUCTOR**

2.8.5.1. **Area 39, Instructor Ability (Critical).** Includes subareas demonstration of maneuvers and student briefing/critique.

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

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

2.8.5.2. **Subarea 39A, Demonstration of Maneuvers (Critical).** Limited inadvertent disconnects are permissible during a boom limits demonstration (if accomplished) and will not be counted against the examinee. **(T-3)**

2.8.5.2.1. **(Q)** Effectively demonstrated correct procedures systems operation, or flight maneuver. Thorough knowledge of applicable aircraft systems, procedures, publications, and directives.

2.8.5.2.2. **(U)** Ineffective or incorrect demonstration of procedures, systems operation, or flight maneuvers. Insufficient depth of knowledge about applicable aircraft systems, procedures, and/or proper source material.

2.8.5.3. **Subarea 39B, Student Briefing/Critique (Critical).**

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

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

Chapter 3

FLIGHT ENGINEER EVALUATIONS

3.1. General. This chapter standardizes initial, periodic and RQ evaluations, including the requirements for QUAL, MSN and INSTR evaluations.

3.2. QUAL Evaluations.

3.2.1. For initial, periodic or RQ/QUAL evaluations, include all areas under GENERAL and QUALIFICATION/MISSION.

3.2.2. Requisites (Open Book, Closed Book, Boldface and EPE) will be administered with all QUAL evaluations, and annotated on the associated QUAL AF Form 8. **(T-2)**

3.2.3. Initial QUAL and Formal Course RQ QUAL Evaluations. Normally administered on a local mission after completion of initial qualification Phase 1A/B training or equivalent. Used to validate formal qualification training programs, and to evaluate basic examinee knowledge of flight engineer duties, KC-10 operating procedures, preflight, performance, aircraft systems, flight planning, fuel requirements, Tanker/Receiver AAR, and abnormal and emergency procedures.

3.2.3.1. Formal course initial QUAL/RQ evaluations will not be administered concurrently with the MSN evaluation (see **paragraph 3.3**). **(T-2)**

3.2.3.2. Annotate Crew Position as FF on the AF Form 8.

3.2.4. Periodic QUAL and In-House RQ QUAL Evaluations. Should be administered on an operational mission with a minimum of two legs. May be accomplished on a local mission during forecast periods of limited operational mission availability. ***NOTE:*** The local mission option will not be used for scheduling convenience, examiner availability or solely to meet training time limits IAW AFMAN 11-2KC-10V1. **(T-3)**

3.2.4.1. Periodic QUAL or in-house RQ QUAL evaluations will be administered concurrently with the MSN evaluation. Dual log as QUAL/MSN or RQ QUAL/MSN on the AF Form 8.

3.2.4.1.1. Align the QUAL and MSN evaluations during the first recurring checkride. Accomplish this periodic evaluation during the eligibility period for the individual's QUAL. ***EXAMPLE:*** INIT QUAL date completed 1 Jun 14 (expires Nov 15); INIT MSN date completed 15 Aug 14 (expires Jan 16). Accomplish the aligned/combined QUAL/MSN evaluation no later than Nov 15 (during the Jun-Nov 15 eligibility period for the QUAL evaluation).

3.2.5. Tanker and Receiver AAR should be evaluated inflight for all initial and RQ evaluations.

3.2.6. SIM QUAL Evaluations. Administer a SIM evaluation for all initial (INIT SIM QUAL), periodic (SIM QUAL) and re-qualification (RQ SIM QUAL) evaluations (see **paragraph 3.5**). **(T-3)** Evaluate all Grading Areas that can be evaluated realistically.

3.2.6.1. Use a contractor-developed scenario, or a unit Standardization/Evaluation approved scenario provided by the flight examiner. **(T-3)** Unit or flight examiner-provided

scenarios should be coordinated with the contractor a minimum of one day before the evaluation to ensure compatibility with ATD software, and a logical flow of the evaluation profile.

3.2.6.1.1. Evaluations administered using refresher training SIM scenarios should be carefully reviewed to ensure the minimum requirements are observed (see **paragraph 3.5.1**). Pre-coordinate scenario alterations with the contractor.

3.2.6.2. A minimum 2-hour SIM evaluation period is required. **(T-2)**

3.3. MSN Evaluations.

3.3.1. For initial, periodic or RQ MSN evaluations, include all areas under GENERAL and QUAL/MSN. **(T-2)**

3.3.2. Requisite exams, Boldface and EPE are not required on MSN evaluations. Do not annotate these requisites on the INIT MSN AF Form 8. ***NOTE:*** Annotate all requisites on aligned/combined QUAL/MSN AF Forms 8. **(T-2)**

3.3.3. INIT MSN and Formal Course RQ MSN Evaluations. Administered upon completion of Phase II initial QUAL/RQ training to validate unit mission certification training (MCT), and to verify examinee knowledge and application of the following: KC-10 airlift/fighter deployment operations, pre-mission actions, worldwide mission planning factors, enroute airfield considerations, departure planning/procedures, computer flight plan, fuel planning/management and conservation, divert planning, inflight mission laptop/software use, maximum allowable cabin load (ACL), and alert start.

3.3.3.1. Evaluations will be administered on an operational mission with a minimum of two legs. **(T-3)** Evaluate proficiency by direct observation of evaluatee performance, supplemented by a comprehensive ground evaluation of areas not covered by the operational mission.

3.3.3.2. Annotate Crew Position as MF on the AF Form 8.

3.4. INSTR Evaluations (Initial, Periodic, and RQ). Flight examiners will place particular emphasis on the examinee's ability to communicate and instruct, to recognize student difficulties, and to provide timely, effective corrective action. For all INSTR evaluations include all areas in GENERAL, QUALIFICATION/MISSION, and INSTRUCTOR. **(T-3)**

3.4.1. INIT/RQ INSTR Evaluations (flight and SIM). Should be administered with the examinee performing instructor duties to a student occupying the flight engineer position.

3.4.1.1. If a student flight engineer is not available, flight examiners (or another qualified flight engineer) may act as student for the purpose of evaluating instructor ability.

3.4.1.2. Document initial instructor evaluations as INIT INSTR and INIT INSTR SIM on the AF Form 8. Document RQ instructor evaluations as RQ INSTR and RQ INSTR SIM. **(T-2)**

3.4.2. Recurring INSTR Evaluations (flight and SIM). Should be administered in conjunction with the QUAL/MSN evaluation. To satisfy the QUAL/MSN evaluation requirements, the examinee will occupy the flight engineer position and perform all associated primary duties. **(T-2)**

3.4.2.1. In this case, the method used to evaluate instructor ability is at the flight examiner's discretion, and should be based on the experience level of the examinee:

3.4.2.1.1. In-flight or ground instruction of a student is preferred.

3.4.2.1.2. Instructor ability may be evaluated by other means, if mission requirements or student availability dictate (i.e. flight examiner or another qualified crewmember acting as student, a detailed systems/procedure briefing, etc.)

3.4.2.2. Document recurring INSTR evaluations as QUAL/MSN and SIM QUAL/MSN on AF Form 8. The INSTR prefix will not be used; however, ensure at a minimum, the Mission Description for the flight includes comments addressing specific areas in which instructional ability was demonstrated. **(T-2)** Demonstrating instructor ability is not required in the SIM. Annotate Crew Position as IF.

3.4.3. Realigning Evaluations. Flight engineers desiring to realign their QUAL/MSN evaluation during their INIT INSTR evaluation must demonstrate all items under QUALIFICATION/MISSION, and complete all required requisite written examinations. **(T-2)**

3.4.3.1. The examinee should be in their QUAL/MSN eligibility period to realign. If not, the QUAL/MSN evaluation may be initiated prior to (not after) the eligibility period. Out-of-the Eligibility Period criteria in AFI 11-202V2 apply.

3.4.3.2. For realigning evaluations, a minimum of one 4-hour SIM evaluation period is required. During the 4-hour SIM period, 2 hours will be scheduled to evaluate the examinee performing primary duties (occupying the Flight Engineer position), and 2 hours to evaluate instructor duties (see **paragraph 3.4.1**). **(T-2)**

3.4.3.3. Realigning flight evaluations must be completed on two separate sorties. **(T-2)** One sortie will be used to evaluate the examinee performing primary duties while occupying the Flight Engineer position, and one sortie will be used to evaluate the examinee's instructor ability (see **paragraph 3.4.1**).

3.4.3.4. Document the realigned INIT INSTR and QUAL/MSN evaluations on two separate AF Forms 8 when possible. ***NOTE:*** The dates for the INIT INSTR SIM and SIM QUAL/MSN events may be the same on both AF Forms 8, if realigned IAW **paragraph 3.4.3.2.**

3.5. EPE. Evaluates examinee knowledge of emergency procedures and systems knowledge during the SIM portion of all qualification (SIM QUAL, INIT SIM QUAL, RQ SIM QUAL) evaluations (see **paragraph 1.10.6**).

3.5.1. Evaluate all flight engineers in abort procedures, a random selection of Abnormal and Emergency Procedures, Boldface, and Tanker/Receiver AAR. **(T-2)** Particular emphasis will be placed on crew coordination, Crew Resource Management, checklist discipline and systems operation/knowledge/limits.

3.5.1.1. For recurring evals, tanker/receiver AAR may be evaluated in flight or SIM.

3.5.2. The EPE should cover a cross section of aircraft systems, to comprehensively assess examinee knowledge and application.

3.6. Additional Information.

3.6.1. Flight engineer examiners will not administer evaluations when scheduled as primary aircrew members for the mission leg (or subsequent legs) being flown.

3.6.2. Examiners on DNIF status may administer SIM and ground evaluations, provided they are able to safely egress the ATD or static aircraft.

3.6.3. Examiners will not perform instructor and evaluator duties concurrently, and will not administer an evaluation to a non-current examinee (N/A for examinees in upgrade training).

3.6.4. Flight examiners conducting an evaluation may be administered a N/N SPOT by a senior pyramid evaluator. Document Crew Position as EF on the AF Form 8. Ensure the Mission Description includes comments addressing specific areas in which evaluator abilities were demonstrated. ***NOTE:*** This type of N/N SPOT will not be credited towards a QUAL/MSN evaluation.

3.7. Flight Engineer Grading Criteria.

3.7.1. **GENERAL**

3.7.1.1. **Area 1, Directives and Publications.**

3.7.1.1.1. **(Q)** Possessed a high level of knowledge of all applicable aircraft directives and publications and understood how to apply both to enhance mission accomplishment. Required publications (paper/electronic) were current and properly posted.

3.7.1.1.2. **(Q-)** Unsure of some directives but could locate information in appropriate publications. Required publications (paper/electronic) were current but improperly posted.

3.7.1.1.3. **(U)** Unaware of established directives and/or could not locate them in the appropriate publication in a timely manner. Required publications (paper/electronic) were not current.

3.7.1.2. **Area 2, Mission Preparation/Planning.**

3.7.1.2.1. **(Q)** Reviewed all applicable mission factors including Flight Crew Information File (FCIF), weather, NOTAMS, airfield suitability, flight plan usage/verification, fuel requirements, departure planning, MTOGW. Displayed a high level of knowledge of aircraft performance and takeoff/landing capabilities. Attended all required briefings. Accurately calculated required mission fuel within +5,000 lbs.

3.7.1.2.2. **(Q-)** Same as above, but with minor omissions/deviations, which did not detract from safety or mission effectiveness. Calculated required mission fuel greater than +5,000 lbs, but less than +7,000 lbs necessary to complete the assigned mission.

3.7.1.2.3. **(U)** Did not review applicable mission factors, and/or made major omissions/deviations that compromised mission safety or effectiveness. Unsatisfactory knowledge of departure planning, aircraft performance capability, or mission fuel requirements. FCIF was not reviewed or initialed. Did not attend required briefings. Calculated required mission fuel greater than +7,000 lbs necessary to complete the assigned mission.

3.7.1.3. **Area 3, Use of Checklists.**

3.7.1.3.1. **(Q)** Procedures and checklist items required by the flight manual and applicable directives were accomplished in a thorough, timely and proficient manner.

3.7.1.3.2. **(Q-)** Procedures and checklist items required by the flight manual or applicable directives were accomplished with omission, deviation or error, or in a manner that detracted from the overall efficient conduct of the mission.

3.7.1.3.3. **(U)** Procedures or checklist items required by the flight manual or applicable directives were accomplished with omission, deviation or error. Performed in a manner which did, or could have adversely affected the successful accomplishment of the mission.

3.7.1.4. **Area 4, Safety Consciousness (Critical).**

3.7.1.4.1. **(Q)** Aware of, and complied with all safety factors required for safe aircraft operation and mission accomplishment.

3.7.1.4.2. **(U)** Not aware of, or did not comply with all safety factors required for safe aircraft operation or mission accomplishment. Attempted to operate aircraft or equipment in a dangerous manner.

3.7.1.5. **Area 5, Judgment/Compliance (Critical).**

3.7.1.5.1. **(Q)** Executed the mission in compliance with existing regulations and directives. Demonstrated knowledge of operating procedures and restrictions, and where to reference them in the appropriate publication or directive. Demonstrated sound/timely judgment and decision-making skills that contributed to or enhanced mission accomplishment.

3.7.1.5.2. **(U)** Did not execute the mission in compliance with existing regulations and directives. Unaware of established procedures and/or could not locate them in the appropriate publication or directive in a timely manner. Failed to demonstrate sound/timely judgment and decision-making skills, or failed to comply with a procedure that could have jeopardized safety or mission success.

3.7.1.6. **Area 6, Crew Resource Management/Threat and Error Management.** In accordance with AFI 11-290, applicable MAJCOM Supplement and AMC Form 4031.

3.7.1.6.1. **(Q)** Proactively applied appropriate/established CRM skills and TEM concepts throughout the flight/mission. Ensured safe/effective mission accomplishment by anticipating, recognizing, and mitigating relevant threats. Identified and mitigated own and other crewmembers' errors via the proper use of monitoring/crosschecking procedures and through the employment of applicable and established VVM practices/procedures.

3.7.1.6.2. **(Q-)** Reactively and inconsistently, or inadequately applied appropriate/established CRM skills and TEM concepts but did not allow those deficiencies to detract from mission accomplishment and/or flight safety. Unreliably and/or inadequately anticipated, identified, or mitigated relevant threats and/or own or other crewmembers' inconsequential errors.

3.7.1.6.3. **(U)** Did not apply appropriate/established CRM skills and TEM concepts to ensure safe/effective mission accomplishment. Failed to anticipate, identify or mitigate relevant threats and/or own or other crewmembers' consequential errors.

3.7.1.7. **Area 7, Communication Procedures.**

3.7.1.7.1. **(Q)** Demonstrated a thorough knowledge of communication procedures. Accomplished required calls and acknowledgements with standard terminology. Consistently backed up pilots with all ATC transmissions and mission essential radio calls. Demonstrated satisfactory use of UHF, VHF, and HF radios.

3.7.1.7.2. **(Q-)** Occasional deviation or omissions from required procedures, acknowledgements, or terminology. Occasional backup of ATC transmissions and mission essential radio calls. Limited operational knowledge of communication equipment.

3.7.1.7.3. **(U)** Poor crew coordination and/or unsatisfactory knowledge of other crewmembers' duties and responsibilities. Poor CRM negatively affected mission accomplishment or safety of flight.

3.7.1.8. **Area 8, Aircrew Flight Equipment/Egress.**

3.7.1.8.1. **(Q)** Displayed thorough knowledge of location and use of aircrew flight equipment systems and emergency equipment. Demonstrated proper procedures to operate aircraft egress devices such as doors, windows, hatches, slide rafts and escape ropes.

3.7.1.8.2. **(Q-)** Limited knowledge of location and use of aircrew flight equipment systems and emergency equipment. Unsure of proper procedures to operate some of the aircraft egress devices.

3.7.1.8.3. **(U)** Displayed unsatisfactory knowledge of location and use of aircrew flight equipment systems and emergency equipment. Unable to properly operate aircraft egress devices.

3.7.1.9. **Area 9, Knowledge/Completion of Forms.**

3.7.1.9.1. **(Q)** All required forms were complete, accurate, legible, and accomplished on time and IAW applicable directives. Documented and/or reported all significant mission events and discrepancies to applicable agencies (Safety, Maintenance, etc.).

3.7.1.9.2. **(Q-)** Minor errors on forms that did not affect the mission. Inaccurately or incompletely documented and/or debriefed significant mission events and discrepancies.

3.7.1.9.3. **(U)** Major errors or omissions, or did not accomplish required forms. Documentation not performed in a timely manner, or IAW applicable directives. Omitted, incorrectly documented, or failed to report significant mission information to applicable agencies.

3.7.1.10. **Area 10, Airmanship/Situational Awareness (Critical).**

3.7.1.10.1. **(Q)** Executed the assigned mission in a timely, efficient manner. Demonstrated strict, professional flight and crew discipline throughout all phases of flight. Conducted the flight with a sense of understanding and comprehension.

3.7.1.10.2. **(U)** Poor understanding of mission objectives, and/or inappropriate decision-making resulted in failure to accomplish the assigned mission. Failed to exhibit strict flight and crew discipline.

3.7.2. **QUALIFICATION/MISSION**

3.7.2.1. **Area 11, Preflight.**

3.7.2.1.1. **(Q)** Timely, accurate completion of all pre-flight checks and procedures IAW the flight manual, without deviation or omission. Proper coordination with maintenance and crew when required. Ensured readiness of aircraft for flight.

3.7.2.1.2. **(Q-)** Same as above, except for minor deviations that did not detract from safety, or directly contribute to a late take-off.

3.7.2.1.3. **(U)** Failed to pre-flight a critical component or system, and/or pre-flight checks not IAW the flight manual. Errors, deviations or omissions directly contributed to a late take-off, or detracted from safety or mission effectiveness.

3.7.2.2. **Area 12, Ground Operations.**

3.7.2.2.1. **(Q)** Ensured safe ground and taxi operations IAW flight manuals, AFI 11-218, *Aircraft Operations and Movement on the Ground*, and local procedures. Ensured compliance with ground taxi instructions. Promptly reported any deviations to the pilot. Demonstrated vigilance and discipline in congested taxi/parking areas and on the runway.

3.7.2.2.2. **(Q-)** Same as above, except for minor deviations that did not detract from mission safety, timeliness or effectiveness.

3.7.2.2.3. **(U)** Did not ensure safe ground and taxi operations IAW flight manuals, AFI 11-218, and local procedures. Did not ensure compliance with ground taxi instructions. Did not report deviations to the pilot, which detracted from mission safety, timeliness or effectiveness. Did not demonstrate vigilance and discipline in congested taxi/parking areas and on the runway.

3.7.2.3. **Area 13, Performance.**

3.7.2.3.1. **(Q)** Demonstrated a sound level of aircraft performance knowledge, comprehension and ability. Computation deviations less than Q- tolerances, and accurately applied correct takeoff conditions, runway factors, and aircraft configuration deviations. All TOLD computations were timely and accurate.

3.7.2.3.2. **(Q-)** Marginal aircraft performance knowledge, comprehension and/or ability. Computation deviations as follows:

3.7.2.3.2.1. Take-Off Gross Weight (TOGW): > 3,000 lbs, but < 5,000 lbs.

3.7.2.3.2.2. Computed MTOGW: > 5,000, but < 7,000.

3.7.2.3.2.3. Assumed Temperature: > 2 degrees, but < 5 Degrees.

3.7.2.3.2.4. Center of Gravity (CG): > 1.0%, but < 2%.

3.7.2.3.2.5. Take-Off Speeds: > 3KTS, but < 6KTS.

3.7.2.3.2.6. Landing Speeds: > 3KTS, but < 6KTS.

3.7.2.3.2.7. Landing Distances: > 400FT, but < 600FT.

3.7.2.3.2.8. Take-Off N1 Setting: >0.5%, but < 1.0%.

3.7.2.3.3. **(U)** Computation deviations exceeding the tolerances above. Demonstrated unsatisfactory aircraft performance knowledge, comprehension and/or ability. Untimely and/or inaccurate TOLD computations resulted in mission delay.

3.7.2.4. **Area 14, Takeoff and Departure Monitor.**

3.7.2.4.1. **(Q)** Monitored engine instruments and FMS wind readout. Applied smooth take-off power to within +\-2.0% of TRC or manual N1 setting. Aware of, and adhered to all engine operating limitations. Monitored aircraft departure, ensured compliance with ATC instructions, and was able to locate aircraft position using instruments and the SID. Aware of OEI or Special Departure Procedure. Performed all other duties IAW the flight manual

3.7.2.4.2. **(Q-)** Same as above, except take-off N1 exceeded 2.0%, but <3.0%. Aware of most engine operating limitations. Difficulty determining aircraft position using instruments and the SID. Performed other duties with minor deviations from the flight manual that did not detract from safety or mission accomplishment.

3.7.2.4.3. **(U)** Did not monitor engine instruments or FMS wind readout. Take-off N1 exceeded +\-3.0%. Unaware of, and/or did not adhere to engine operating limitations. Unable to determine aircraft position during departure, and/or did not ensure compliance with ATC departure instructions. Deviations from flight manual procedures could have detracted from safety or mission accomplishment.

3.7.2.5. **Area 15, In-flight Duties and Responsibilities.**

3.7.2.5.1. **(Q)** Timely completion of all in-flight duties without omission or deviation. Computed performance data for cruise, AAR and flight maneuvers (when required). Monitored systems indicators, and informed pilot of malfunctions and abnormal indications. Monitored and adjusted engine throttles when required. Maintained aircraft CG within limits. Monitored flight progress, and informed the pilot of fuel burn and fuel remaining. Monitored required radios, and provided timely back up of altitudes and airspeeds.

3.7.2.5.2. **(Q-)** Same as above, except for minor deviations that did not detract from safety or mission accomplishment.

3.7.2.5.3. **(U)** Errors directly degraded mission effectiveness or caused delays. Failed to complete in-flight duties in a timely manner. Failed to monitor or detect system malfunctions and/or abnormal indications. Did not monitor and report fuel burn. Failed to monitor flight progress, and/or altitude and airspeed requirements.

3.7.2.6. **Area 16, General Navigation and CDU Operation.**

3.7.2.6.1. **(Q)** Able to determine aircraft position using appropriate instruments, charts, flight plan, and/or CDU/MFD as required. Demonstrated a satisfactory knowledge of remote ranging along the flight plan route, loading CFP winds into the CDU, in-flight fuel analysis, ETP, divert planning, etc.

3.7.2.6.2. **(Q-)** Same as above, except for minor errors and/or untimely completion of procedures that did not detract from mission effectiveness.

3.7.2.6.3. **(U)** Unable to determine aircraft position. Demonstrated a lack of knowledge in general navigation procedures and CDU operation.

3.7.2.7. **Area 17, Fuel Conservation.**

3.7.2.7.1. **(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. Maintained the most fuel efficient CG in all areas of the mission where operational constraints allowed. Informed the pilot of all aircraft performance factors concerning fuel conservation in all areas of the mission.

3.7.2.7.2. **(Q-)** Possessed some knowledge of applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Occasionally maintained the most fuel efficient CG. Informed the pilot of fuel conservation performance factors in most areas of the mission.

3.7.2.7.3. **(U)** Unaware of fuel conservation procedures. Failed to apply any fuel conservation procedures in any area of the mission.

3.7.2.8. **Area 18, Approach Monitor/Landing.**

3.7.2.8.1. **(Q)** Satisfactory knowledge of symbols and other information on the approach plate. Able to determine aircraft position and flight progress during all phases of the approach. Backed up pilots with required calls. Monitored aircraft performance, speeds, configuration, and all ATC instructions. Computed reference ground speed. Performed other duties IAW associated directives and the flight manual (e.g. Touch & Go, Go Around procedures, etc.).

3.7.2.8.2. **(Q-)** Same as above, except had marginal knowledge of information on the approach plate. Had difficulty determining aircraft position and flight progress during the approach. Minor omissions or deviations from flight manual procedures that did not detract from safety.

3.7.2.8.3. **(U)** Unable to interpret information on the approach plate. Unable to determine aircraft position or flight progress. Did not monitor the command radio, ATC instructions, aircraft performance, speeds, or configuration. Major omissions/deviations from flight manual procedures and/or breaches of flight discipline.

3.7.2.9. **Area 19, Systems Operations/ Knowledge/Limitations.**

3.7.2.9.1. **(Q)** Possessed comprehensive knowledge of all aircraft systems operations/limitations, and component location. Demonstrated proper systems operation/configuration IAW the flight manual, and observed all operating limitations.

3.7.2.9.2. **(Q-)** Marginal knowledge of aircraft systems operations and limitations in some areas. Occasionally applied individual technique over flight manual procedure.

3.7.2.9.3. **(U)** Unsatisfactory knowledge of aircraft systems operations/limitations, and component location. Exceeded operating limitations. Operated aircraft system(s) in a manner that could have detracted from safety or mission accomplishment.

3.7.2.10. **Area 20, Boldface Emergency Procedures (Critical).**

3.7.2.10.1. **(Q)** Correct, immediate responses. Proper crew coordinated actions.

3.7.2.10.2. **(U)** Incorrect sequence, unsatisfactory response, or unsatisfactory performance/corrective actions.

3.7.2.11. **Area 21, Other Emergency Procedures.**

3.7.2.11.1. **(Q)** Operated within prescribed limits and correctly diagnosed problems. Demonstrated and/or explained timely, proper corrective action for each type of malfunction. Effective use of abnormal and emergency procedure checklist(s).

3.7.2.11.2. **(Q-)** Operated within prescribed limits but slow to analyze malfunctions or apply proper corrective actions. Minor omissions or deviations from flight manual procedures.

3.7.2.11.3. **(U)** Attempted to and/or exceeded limitations. Unable or failed to analyze problem or take proper corrective action in a timely manner. Did not use appropriate abnormal or emergency procedure checklist(s).

3.7.2.12. **Area 22, Tanker AAR.**

3.7.2.12.1. **(Q)** Maintained aircraft CG and observed fuel system limitations during all phases of AAR. Timely completion of AAR checklists/procedures without omission or deviation. Planned/pre-positioned offloads fuel in a timely manner. Correctly computed airspeeds and performance factors. Monitored appropriate radios. Ensured proper coordination with boom operator/pilots during all refueling operations. Backed up pilots as directed.

3.7.2.12.2. **(Q-)** Same as above except minor deviations from checklist and AAR procedures that did not detract from safety, or result in significant delay of AAR operations.

3.7.2.12.3. **(U)** Unsatisfactory knowledge of fuel system limitations. Did not maintain aircraft CG or observe fuel system limitations. Incorrectly computed required airspeeds and/or performance factors. Untimely completion of procedures caused significant delay in AAR operations, and detracted from mission safety or effectiveness.

3.7.2.13. **Area 23, Receiver AAR.**

3.7.2.13.1. **(Q)** Maintained aircraft CG and observed fuel system limitations during all phases of AAR. Timely completion of AAR checklists/procedures without omission or deviation. Effective fuel management resulted in timely fuel on-load. Correctly computed airspeeds and performance factors. Monitored appropriate radios. Ensured proper coordination with pilots during all refueling operations. Backed up pilots as directed.

3.7.2.13.2. **(Q-)** Same as above except minor deviations from checklist and AAR procedures that did not detract from safety, or result in significant delay of AAR operations.

3.7.2.13.3. **(U)** Unsatisfactory knowledge of fuel system limitations. Did not maintain aircraft CG or observe fuel system limitations. Incorrectly computed required airspeeds and/or performance factors. Untimely completion of procedures caused significant delay in AAR operations, and detracted from mission safety or effectiveness.

3.7.3. **INSTRUCTOR**

3.7.3.1. **Area 24, Instructor Ability (Critical).**

3.7.3.1.1. **(Q)** Demonstrated ability to communicate effectively to the student. Provided appropriate guidance when necessary. Planned ahead and made timely decisions. Identified and corrected potentially unsafe maneuvers/situations.

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

3.7.3.2. **Area 25, Demonstration of Knowledge (Critical).**

3.7.3.2.1. **(Q)** Effectively demonstrated procedures and systems operation. Thorough knowledge of aircraft performance, systems operation/limitations, flight manual procedures, publications, and directives.

3.7.3.2.2. **(U)** Ineffective or incorrect demonstration of procedures or systems operation. Insufficient knowledge of aircraft performance, systems operation/limitations, flight manual procedures, publications, and directives. Knowledge not commensurate with that required of an instructor.

3.7.3.3. **Area 26, Student Briefing/Critique (Critical).**

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

3.7.3.3.2. **(U)** Briefings were marginal or non-existent. Did not review student's past performance and present level of training. Failed to adequately critique student, offer mission analysis, and provide guidance where appropriate. Training grade did not reflect actual performance of student. Overlooked or omitted major discrepancies. Incomplete pre-briefing of the student's next mission, if required.

Chapter 4

BOOM OPERATOR EVALUATIONS

4.1. General. This chapter standardizes initial, periodic, and RQ evaluations, including the requirements for QUAL, MSN, and INSTR evaluations.

4.2. QUAL Evaluations. Closed book test, Open book test, EPE and Boldface will be annotated on qualification AF Form 8. **(T-2)**

4.2.1. Initial: Evaluate all areas under GENERAL and QUALIFICATION. Upon successful completion of the initial QUAL evaluation, the AF Form 8 will indicate Crew Position as "FB." **(T-2)** The examinee is qualified for unsupervised crew duties with a restriction for supervised cargo loading/unloading duties.

4.2.2. Periodic: Evaluate all areas under GENERAL and QUALIFICATION. **(T-2)**

4.2.3. Boom Operator Trainer (BOT) evaluations. Conduct a BOT evaluation in conjunction with all QUAL evaluations. Annotate a BOT evaluation on the qualification form as an EPE. Use a contractor-developed Air Force-approved scenario. All INIT QUAL, RQ, and INIT INSTR QUAL scenarios will be run as written. **(T-2)** For periodic evaluations, the examiner may add up to two abnormal checklists from TO 1C-10(K)A-1 to the BOT evaluation scenario. This allows examiners to evaluate previously identified community trends and procedural performance weaknesses. The evaluator must coordinate and review these evaluator injects with the examinee's KC-10 ATS Instructor to ensure the inputs will not significantly alter the flow of the scenario, inadvertently trigger a premature end to the scenario, or lead the examinee to consider/perform procedures not authorized in current checklists or perform partial steps from multiple checklists. **(T-1)** Once agreed upon by the examiner and KC-10 ATS instructor, the checklist(s) will be injected into the scenario and become a gradable portion of the evaluation. Evaluate the following as a minimum: **(T-2)**

4.2.3.1. BOOM ELEVATOR, RUDDER, OR TELESCOPE FAILURE.

4.2.3.2. FLIGHT CONTROL STICK FAILURE.

4.2.3.3. AAR SIGNAL SYSTEM FAILURE OR MANUAL BOOM LATCHING.

4.2.3.4. TANKER BREAKAWAY.

4.2.3.5. TWO CENTERLINE DROGUE AIR REFUELING ABNORMALS.

4.2.4. A minimum of one boom contact must be accomplished for the QUAL evaluation. **(T-1)**

4.3. MSN Evaluations. Flying or static on-load/off-load satisfies the requirements for an evaluation. To be creditable for evaluation, all training loads shall utilize cargo from the OST/contractor-developed cargo load program. **(T-2)**

4.3.1. INIT/RQ: An INIT/RQ MSN evaluation is administered to boom operators before performing unsupervised cargo loading/unloading duties. Evaluate all areas under GENERAL and MISSION. **(T-2)** INIT MSN Evaluations will be conducted in the CLT. **(T-2)**

4.3.1.1. Upon successful completion of the initial MSN evaluation, complete an AF Form 8 as MSN evaluation with crew position block indication "MB" and annotate in the Aircrew Evaluation block (Section III) as "INIT MSN".

4.3.2. Periodic: Evaluate all areas under GENERAL and MISSION. **(T-2)**

4.3.3. No-Notice Evaluations. No-notice evaluations may be conducted on static cargo loads or flying cargo loads.

4.4. INSTR Evaluations. The flight examiners will place particular emphasis on the examinee's ability to recognize student difficulties and provide timely, effective, corrective action. Flight examiners will exercise sound judgment to ensure the explanations/demonstrations do not distract the examinee's attention or disrupt mission objectives. **(T-3)**

4.4.1. Initial: Conduct the evaluation with the examinee instructing a student boom operator. INIT INSTR evaluation will include areas under GENERAL, QUALIFICATION Area 18, MISSION, and INSTRUCTOR. ***NOTE:*** The INIT INSTR evaluation will re-establish an individual's MSN evaluation eligibility period. If an overall grade is qualification level 3 (Q-3) on areas under GENERAL and/or MISSION, the individual will be graded Q-3 for both evaluations (MSN and INIT INSTR). **(T-2)**

4.4.2. Periodic: Instructor Boom Operators will be evaluated on their ability to instruct on all periodic evaluations. Evaluate all areas under GENERAL, QUALIFICATION, MISSION, and INSTRUCTOR. **(T-2)**

4.5. EPE. Evaluate an aircrew member's knowledge of emergency procedures and systems knowledge during QUAL and MSN evaluations. The EPE should cover a cross section of aircraft systems. Examinees should be able to demonstrate an understanding of aircraft systems in emergency scenarios.

4.6. Additional Information.

4.6.1. The BOT/CLT may be used for additional training and recheck evaluations in area(s) involving normal, abnormal, or emergency procedures.

4.6.1.1. The BOT will not be used for additional training or RQ involving actual contacts or maneuvering of the boom. If a breakaway cannot be evaluated in the BOT because of equipment malfunction, it must be evaluated in-flight or rescheduled. **(T-2)**

4.6.2. Boom operator flight examiners will not conduct evaluations when scheduled as primary aircrew members. **(T-2)**

4.7. Boom Operator Grading Criteria.

4.7.1. **GENERAL**

4.7.1.1. **Area 1, Directives and Publications.**

4.7.1.1.1. **(Q)** Possessed a high level of knowledge of all applicable aircraft directives and publications and understood how to apply both to enhance mission accomplishment. Required publications (paper/electronic) were current and properly posted.

4.7.1.1.2. **(Q-)** Unsure of some directives but could locate information in appropriate publications. Required publications (paper/electronic) were current but improperly posted.

4.7.1.1.3. **(U)** Unaware of established directives and/or could not locate them in the appropriate publication in a timely manner. Required publications (paper/electronic) were not current.

4.7.1.2. **Area 2, Mission Preparation/Planning.**

4.7.1.2.1. **(Q)** Read and initialed for all items in FCIF. Completed/obtained all applicable forms. Complied with all local directives. Attended all required briefings.

4.7.1.2.2. **(Q-)** Same as above except for minor deviations or omissions which did not impair mission effectiveness. Did not fully comply with local directives, but did not detract from safety.

4.7.1.2.3. **(U)** FCIF was not reviewed or initialed. Failed to attend required briefings. Failed to obtain/complete all applicable forms, or made major errors or omissions. Did not obtain adequate mission information. Failed to comply with local directives.

4.7.1.3. **Area 3, Use of Checklist.**

4.7.1.3.1. **(Q)** Procedures and checklist items required by flight manual and applicable directives were accomplished in a thorough and proficient manner.

4.7.1.3.2. **(Q-)** Procedures and checklist items required by flight manuals and applicable directives were accomplished with omission, deviation, or error, which detracted from the overall efficient conduct of the mission. Performance was the minimum acceptable.

4.7.1.3.3. **(U)** Procedures or checklist items required by flight manual and applicable directives were accomplished with omission, deviation, or error which did, or could adversely affect the successful accomplishment of the mission or task.

4.7.1.4. **Area 4, Safety Consciousness - (Critical).**

4.7.1.4.1. **(Q)** Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.

4.7.1.4.2. **(U)** Not aware of or did not comply with all safety factors required for safe aircraft operation or mission accomplishment. Operated aircraft or equipment in a dangerous manner.

4.7.1.5. **Area 5, Judgment/Compliance - (Critical).**

4.7.1.5.1. **(Q)** Prepared and completed mission in compliance with existing regulations and directives. Demonstrated knowledge of operating procedures and restrictions.

4.7.1.5.2. **(U)** Unaware of established procedures and/or could not locate them in the appropriate publication in a timely manner. Failed to comply with a procedure that could have jeopardized safety or mission success.

4.7.1.6. **Area 6, Crew Resource Management/Threat and Error Management.** In accordance with AFI 11-290, applicable MAJCOM Supplement and AMC Form 4031.

4.7.1.6.1. **(Q)** Proactively applied appropriate/established CRM skills and TEM concepts throughout the flight/mission. Ensured safe/effective mission accomplishment by anticipating, recognizing, and mitigating relevant threats. Identified and mitigated own and other crewmembers' errors via the proper use of monitoring/crosschecking procedures and through the employment of applicable and established VVM practices/procedures.

4.7.1.6.2. **(Q-)** Reactively and inconsistently, or inadequately applied appropriate/established CRM skills and TEM concepts but did not allow those deficiencies to detract from mission accomplishment and/or flight safety. Unreliably and/or inadequately anticipated, identified or mitigated relevant threats, and/or own or other crewmembers' inconsequential errors.

4.7.1.6.3. **(U)** Did not apply appropriate/established CRM skills and TEM concepts to ensure safe/effective mission accomplishment. Failed to anticipate, identify or mitigate relevant threats and/or own or other crewmembers' consequential errors.

4.7.1.7. **Area 7, Communication Procedures.**

4.7.1.7.1. **(Q)** Displayed a satisfactory knowledge of, and compliance with, correct communication procedures. Transmissions were concise and used proper terminology. Accomplished required calls and acknowledged transmissions in a manner which enhanced mission effectiveness.

4.7.1.7.2. **(Q-)** Displayed adequate communication procedures, but was slow or not concise in making transmissions. Transmissions contained erroneous information or included non-standard terminology. Mission effectiveness was not jeopardized.

4.7.1.7.3. **(U)** Incorrect procedures or poor performance caused confusion and jeopardized mission accomplishment. Omitted required transmissions or transmitted erroneous information.

4.7.1.8. **Area 8, Aircrew Flight Equipment/Egress.**

4.7.1.8.1. **(Q)** Displayed thorough knowledge of location and use of aircrew flight equipment systems. Demonstrated and emphasized the proper operating procedures used to operate aircraft egress devices such as doors, windows, hatches, slide rafts, and escape ropes.

4.7.1.8.2. **(Q-)** Limited knowledge of location and use of aircrew flight equipment systems. Unsure of the proper operating procedures used to operate some of the aircraft egress devices.

4.7.1.8.3. **(U)** Displayed unsatisfactory knowledge of location and use of aircrew flight equipment systems. Unable to properly operate aircraft egress devices.

4.7.1.9. **Area 9, Knowledge/Completion of Forms.**

4.7.1.9.1. **(Q)** All required forms were complete, accurate, readable, accomplished on time and IAW applicable directives. Related an accurate description of significant events to applicable agencies (Safety, Maintenance, etc.).

4.7.1.9.2. **(Q-)** Minor errors on forms that did not affect conduct of the mission. Incorrectly or incompletely reported some information due to minor errors, omissions, and/or deviations.

4.7.1.9.3. **(U)** Did not accomplish required forms. Omitted or incorrectly reported significant information due to major errors, omissions, and/or deviations.

4.7.1.10. **Area 10, Airmanship/Situational Awareness (Critical).**

4.7.1.10.1. **(Q)** Executed the assigned mission in a timely, efficient manner. Demonstrated strict professional flight and crew discipline throughout all phases of flight. Conducted the flight with a sense of understanding and comprehension.

4.7.1.10.2. **(U)** Decisions or lack thereof, resulted in failure to accomplish the assigned mission. Failed to exhibit strict flight and crew discipline.

4.7.1.11. **Area 11, Ground Pre-Flight/Post-Flight Operations.**

4.7.1.11.1. **(Q)** Complied with established station, start engine, taxi, and take-off times to assure thorough preflight, check of personal equipment, crew/passenger briefings, etc. Accurately determined readiness of aircraft for flight. Completed all systems pre- flight/post-flight inspections IAW flight manual.

4.7.1.11.2. **(Q-)** Same as above except for minor procedural deviations that did not detract from mission effectiveness.

4.7.1.11.3. **(U)** Errors directly contributed to a late takeoff that degraded the mission. Failed to accurately determine readiness for flight. Failed to pre-flight/post-flight a critical component or could not conduct a satisfactory pre-flight/post-flight inspection.

4.7.1.12. **Area 12, Systems Operations/ Knowledge/Limitations.**

4.7.1.12.1. **(Q)** Demonstrated/explained a complete knowledge of aircraft systems operations/limitations and proper procedural use of systems with minimal reference to flight manual/available aids.

4.7.1.12.2. **(Q-)** Marginal knowledge of aircraft systems operations and limitations in some areas. Used individual technique instead of established procedure. Required moderate references to flight manual/available aids to differentiate between procedure and technique.

4.7.1.12.3. **(U)** Unsatisfactory systems knowledge. Unable to demonstrate/explain the procedures for aircraft system operations.

4.7.1.13. **Area 13, Abnormal/Emergency Procedures - (if observed).** Boom operators will be graded on their initial response and actions taken to any actual emergency/abnormal conditions that occurs either in-flight or on the ground during the evaluation.

4.7.1.13.1. **(Q)** Operated within prescribed limits and correctly diagnosed problems. Performed/explained proper corrective action for each type of malfunction or abnormal condition. Effectively used available aids.

4.7.1.13.2. **(Q-)** Operated within prescribed limits but slow to analyze problems or apply proper corrective actions. Did not effectively use of checklist and/or available aids.

4.7.1.13.3. **(U)** Exceeded limitations. Unable or failed to analyze problem or take proper corrective action. Did not use checklist and/or available aids.

4.7.2. **QUALIFICATION**

4.7.2.1. **Area 14, AAR (Boom).**

4.7.2.1.1. **(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.

4.7.2.1.2. **(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

4.7.2.1.3. **(U)** Failed to accomplish required checks. Boom control was erratic, and/or technique used in attempting contacts resulted in delays to such extend that fuel could not be offloaded within the time available. Inadequate knowledge, procedures, or techniques jeopardized safety of flight.

4.7.2.2. **Area 15, AAR (Centerline Drogue) - (if observed).**

4.7.2.2.1. **(Q)** Demonstrated a satisfactory knowledge of procedures and equipment. Complied with directives. Coordinated with tanker and receiver pilots. Monitored receiver closely and gave corrections as necessary. Used proper procedures and techniques that would not jeopardize mission or safety.

4.7.2.2.2. **(Q-)** Same as above except for minor deviations which did not or would not jeopardize safety or mission effectiveness.

4.7.2.2.3. **(U)** Failed to accomplish required checks. Inadequate knowledge, procedures, or techniques jeopardized safety of flight.

4.7.2.3. **Area 16, AAR (Wing AAR Pods) - (if observed).**

4.7.2.3.1. **(Q)** Demonstrated a satisfactory knowledge of procedures and equipment. Complied with directives. Coordinated with tanker and receiver pilots. Monitored receiver closely and gave corrections as necessary. Used proper procedures and techniques that would not jeopardize mission or safety.

4.7.2.3.2. **(Q-)** Same as above except for minor deviations which did not or would not jeopardize safety or mission effectiveness.

4.7.2.3.3. **(U)** Failed to accomplish required checks. Inadequate knowledge, procedures, or techniques jeopardized safety of flight.

4.7.2.4. **Area 17, Weight and Balance.** Number of errors will be considered even if no tolerances have been exceeded.

4.7.2.4.1. **(Q)** Weight: Error not in excess of 3000 lbs. or less

4.7.2.4.1.1. CG: Error not in excess of 1 % MAC or less

4.7.2.4.2. **(Q-)** Weight: Error exceeded 3000 lbs, but less than 5000 lbs.

4.7.2.4.2.1. CG: Error exceeded 1 %, but less than 1.5 % MAC

4.7.2.4.3. **(U)** Weight: Error of 5000lb or more

4.7.2.4.3.1. CG: Error of 1.5 % MAC or more

4.7.2.5. **Area 18, BOT.** ***NOTE:*** If a breakaway cannot be evaluated in the BOT it must be evaluated in-flight or rescheduled to evaluate the area. **(T-2)**

4.7.2.5.1. **(Q)** Consistently used the correct checklist. Performed proper corrective action for each type of malfunction or abnormal condition. Effectively coordinated with other crewmembers throughout mission.

4.7.2.5.2. **(Q-)** Checklist responses were untimely, with omission, deviation, or error which detracted from overall efficient conduct of the mission. Crew coordination was adequate to accomplish the mission. Performance was the minimum acceptable.

4.7.2.5.3. **(U)** Used incorrect checklist. Unable to identify the correct checklist to use in a given situation. Procedures or checklist items were accomplished with omission, deviation, or error, which did, or could adversely affect the successful accomplishment of the mission or task. Demonstrated poor crew coordination, which negatively affected mission accomplishment.

4.7.3. **MISSION**

4.7.3.1. **Area 19, Cargo Loading/Unloading.**

4.7.3.1.1. **(Q)** Demonstrated a thorough knowledge of required procedures as outlined in the flight manual and applicable directives. Load planning was accomplished without errors or omissions. Required briefings were clear, concise and accurate. Coordinated with air terminal operation personnel (or equivalent) on cargo loading/unloading matters.

4.7.3.1.2. **(Q-)** Demonstrated a limited knowledge of required procedures as outlined in the flight manual and applicable directives. Procedures were accomplished with errors or deviations which did/would not detract from the cargo loading/unloading operation or mission. Load planning contained minor errors or omissions without exceeding established limits. Required briefings contained minor errors or omissions.

4.7.3.1.3. **(U)** Demonstrated an unsatisfactory knowledge of required procedures as outlined in the flight manuals and applicable manuals. Procedures were not complied with which jeopardized mission accomplishment or the safety of the cargo loading/unloading operation. Required briefings were unclear and/or ineffective causing confusion. Failed to coordinate with air terminal operation personnel (or equivalent) on cargo loading/unloading matters. Load planning contained major errors or omissions and/or exceeded established limits.

4.7.3.2. **Area 20, Passenger Handling - (if not observed, verbal).**

4.7.3.2.1. **(Q)** Demonstrated a thorough knowledge of required passenger handling normal/emergency procedures and equipment as outlined in applicable guidance. Passengers briefing were clear, concise, and accurate.

4.7.3.2.2. **(Q-)** Demonstrated a limited knowledge of required passenger handling, and related emergency procedures and equipment as outlined in applicable guidance. Minor errors or omissions were made in procedures which did/could detract from the overall efficient conduct of the mission or the comfort and control of the passenger. Passenger briefing was accomplished with minor omission or errors.

4.7.3.2.3. **(U)** Demonstrated an unsatisfactory knowledge of required passenger handling or related emergency procedures and equipment as outlined in applicable guidance. Procedures were not complied with which jeopardized passenger safety or control. Passenger briefing was unclear and/or ineffective.

4.7.4. **INSTRUCTOR**

4.7.4.1. **Area 21, Instructor Ability - (Critical).**

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

4.7.4.1.2. **(U)** Unable to effectively communicate or provide timely feedback to the student. Did not provide corrective action when necessary. Did not plan ahead or anticipate student problems. Did not identify unsafe maneuvers/situations in a timely manner. Made no attempt to instruct.

4.7.4.2. **Area 22, Demonstration of Knowledge - (Critical).**

4.7.4.2.1. **(Q)** Effectively demonstrated procedures and techniques. Thorough knowledge of applicable aircraft systems, procedures, publications, and directives.

4.7.4.2.2. **(U)** Did not demonstrate correct procedure or techniques. Insufficient depth of knowledge about applicable aircraft systems, procedures, and/or proper source material.

4.7.4.3. **Area 23, Student Briefing/Critique - (Critical).**

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

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

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

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure,* 21 September 2018

AFMAN 11-202V1, *Aircrew Training*, 26 Sep 2019

AFMAN 11-202V2, *Aircrew Standardization and Evaluation Program,* 30 August 2021

AFMAN 11-202V3, AMC Supplement, *Flight Operations,* 14 June 2021

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AFMAN 11-2KC-10V1, *KC-10 Aircrew Training,* 10 September 2020

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T.O. 1C-10(K)A-1, *KC-10A Flight Manual*, 1 October 2018, Change 1, 1 November 2018

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AFI 11-202 V3 DELETED

AFI 11-202V1 DELETED

AFI 11-202V2 DELETED

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AFMAN 11-2KC-10V1, *KC-10 Aircrew Training,* 1 March 2016

AFMAN 11-2KC-10V3, *KC-10 Operations Procedures*, 30 August 2011

AFI 11-215, *Flight Manuals Program (FMP),* 25 March 2019

AFI 11-218 DELETED

AFI 11-290, *Cockpit/Crew Resource Management Program*, 27 May 2020

AFMAN 11-210, *Instrument Refresher Program (IRP),* 1 September 2017

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

AFI 33-360 DELETED

AFPD 11-2, *Aircrew Operations,* 31 January 2019

AFMAN 33-363, *Management of Records,* 1 March 2008

AFTTP 3-3.KC-10, *Combat Aircraft Fundamentals KC-10,* 2 August 2017

T.O. 1C-10(K)A-1, *KC-10A Flight Manual*, 1 October 2018, Change 2, 1 September 2019

Prescribed Forms

None

Adopted Forms

AF Form 8, *Certificate of Aircrew Qualification*

AF Form 673, *Air Force Publication/Form Action Request*

AF Form 942, *Record of Evaluation*

AF Form 847, *Recommendation for Change of Publication*

AF Form 3862, *Flight Evaluation Worksheet*

AF Form 4031, *CRM Skills Criteria Training/Evaluation*

AMC Form 4031, *CRM/TEM Skills Criteria Training/Evaluation*

Abbreviations and Acronyms

(Author)— see first occurrence in this document

AAR—Air-to-Air Refueling

AC—Aircraft Commander

ACIQ—Aircraft Commander Initial Qualification

ACL—Allowable Cabin Load

AF—Air Force

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFR—Air Force Reserve

AFTTP—Air Force Tactics Techniques and Procedures

AMC—Air Mobility Command

ANG—Air National Guard

AR—Air Refueling

ASR—Approach Surveillance Radar

ATC—Air Traffic Control

ATD—Aircrew Training Device

ATS—Aircrew Training System

BOT—Boom Operator Trainer

CDU—Control Display Unit

CFL—Critical Field Length

CFP—Computer Flight Plan

CG—Center of Gravity

CLT—Cargo Load Trainer

CRM—Crew Resource Management

DA—Decision Altitude

DAFI—Department of the Air Force Instruction

DH—Decision Height

DME—Distance Measuring Equipment

DNIF—Duties Not Including Flying

EF—Evaluator Flight Engineer

EFB—Electronic Flight Bag

EFTOC—Engine Failure Takeoff Continued

EPE—Emergency Procedures Evaluation

EPUBS—Electronic Publications

ETP—Equal Time Point

FB—Basic Qualified Boom Operator

FCIF—Flight Crew Information File

FEF—Flight Evaluation Folder

FF—Basic Qualified Flight Engineer

FMS—Flight Management System

FP—Qualified Pilot

FTU—Formal Training Unit

GA—Go-Around

HF—High Frequency

IF—Instructor Flight Engineer

IFF—Identification Friend or Foe

ILS—Instrument Landing System

INIT—Initial

INSTM—Instrument

INSTR—Instructor

IP—Instructor Pilot

IRC—Instrument Refresher Course

IRP—Instrument Refresher Program

JA/ATT—Joint Airborne/Air Transportability Tasking

KIAS—Knots Indicated Airspeed

KTS—Knots

LOC—Localizer

MAC—Mean Aerodynamic Chord

MAJCOM—Major Command

MAP—Missed Approach Point

MB—Mission Qualified Boom Operator

MCT—Mission Certification Training

MF—Mission Qualified Flight Engineer

MFD—Multi-Function Display

MP—Mission Pilot

MSN—Mission

MTOGW—Maximum Takeoff Gross Weight

MWS—Major Weapon System

N/N—No Notice

NAF—Numbered Air Force

NAVAIDs—Navigational Aids

NDB—Non-Directional Beacon

NM—Nautical Mile

NOTAM—Notice to Airmen

OEI—One Engine Inoperative

OGV—Operations Group Standardization/Evaluation

OI—Operating Instruction

OME—Operational Mission Evaluation

OPR—Office of Primary Responsibility

PAR—Precision Approach Radar

PDO—Publications Distribution Office

PF—Pilot Flying

PIC—Pilot in Command

PIQ—Pilot Initial Qualification

PM—Pilot Monitoring

Q-1—Qualification Level 1

QUAL—Qualification Evaluation

RNAV—Area Navigation

RQ—Requalification

SID—Standard Instrument Departure

SIM—Simulator

SQB—Secure Question Bank

Stan/Eval—Standardization/Evaluation

STAR—Standard Terminal Arrival Route

TACAN—Tactical Air Navigation System

TACC—618 AOC

TCH—Threshold Crossing Height

TEM—Threat and Error Management

TOGW—Takeoff Gross Weight

TOLD—Takeoff and Landing Data

TRC—Thrust Rating Computer

U—Unsatisfactory

UHF—Ultra High Frequency

VFR—Visual Flight Rules

VHF—Very High Frequency

VOR—VHF Omnidirectional Range

VVM—Verbalize Verify Monitor

WST—Weapon System Trainer

Terms

Additional Training—Any training recommended by the flight examiner to remedy a discrepancy identified during an evaluation that cannot be remedied during the evaluation debrief.

Areas/Sub-Areas—Specific grading items which can be evaluated on an evaluation.

Author—(see AFI 11-202V2, AMC Supplement, 2 MAR 2011)

Certification—Procedure used to document competency in a particular task. Not interchangeable with qualification, which requires Form 8/8a documentation.

Discrepancy—Substandard performance in a Graded Area/Sub-area. A discrepancy in performance is documented with a grade of Q- or U.

Requisites—Requirements such as examinations, EPEs, Boldface/CAPs, etc., that must be successfully accomplished before an Aircrew Evaluation is considered complete. Requires AF Form 8/8a documentation.

Special Interest Item—Items of emphasis relating to existing procedure(s) designed to mitigate or eliminate specific risks or trends.

Spot—A type of evaluation not intended to satisfy the requirements of a periodic (i.e., INSTM, QUAL, MSN, or INSTR) evaluation.

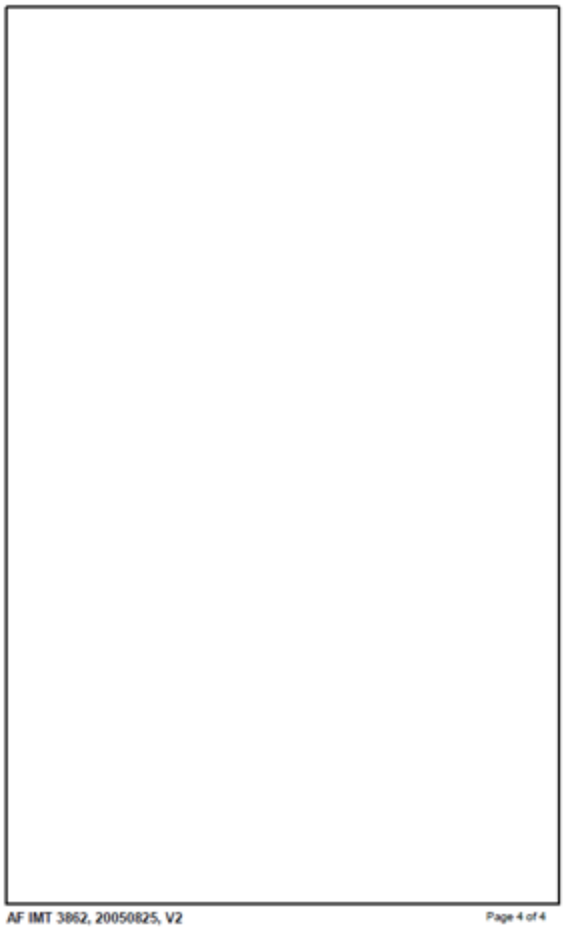
Supervised Status—Crewmember will fly under instructor supervision as designated by the Sq/CC or flight examiner. Usually a result of loss of currency or due to less-than-qualified evaluation.

Tolerances—Range of acceptable deviation from the standard.

Attachment 2

FLIGHT EVALUATION WORKSHEET EXAMPLES

Figure A2.1. AF FORM 3862 (PAGES 1 & 4).



AF IMT 3862, 20050825, V2 Page 4 of 4

FLIGHT EVALUATION WORKSHEET			DATE COMPLETED
NAME (Last, First, Middle Initial)		RANK	SSN
ORGANIZATION/LOCATION		AIRCRAFT/CREW POSITION	ELIGIBILITY PERIOD
QUALIFICATION			
GROUND PHASE			FLIGHT PHASE
EXAMINATION/CHECK	DATE	GRADE	MISSION/CHECK / DATE
QUALIFICATION LEVEL		ADDITIONAL TRAINING	
QUALIFIED / UNQUALIFIED		DUE DATE(s)	DATE ADDITIONAL TRAINING COMPLETED
EXPIRATION OF QUALIFICATION	CERTIFYING OFFICIAL, RANK, ORG	SIGNATURE	DATE
☐ RESTRICTIONS (Explain in Comments on Back)		☐ EXCEPTIONALLY QUALIFIED (Explain in Comments on Back)	
CERTIFICATION			
PRINT NAME/GRADE/ORGANIZATION		SIGNATURE/DATE	
FLIGHT EXAMINER			
REVIEWING OFFICER			
FINAL APPROVING OFFICER			

AF IMT 3862, 20050825, V2 Page 1 of 4

Figure A2.2. KC-10 PILOT EVALUATION WORKSHEET (PAGES 2 & 3).

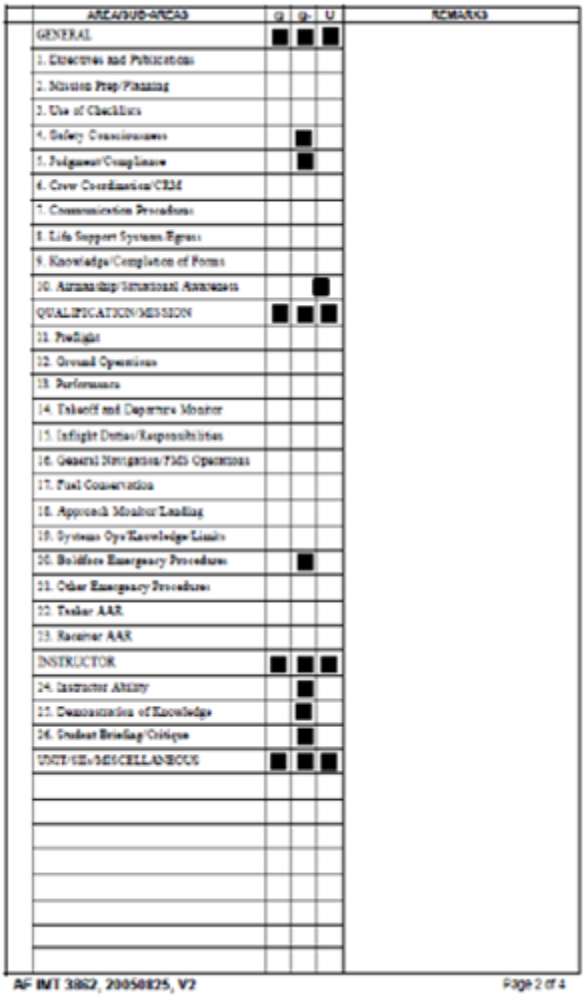
AREA/SUB-AREAS	Q	Q-	U	REMARKS
GENERAL				
1. Directives and Publications				
2. Mission Prep / Planning / Performance				
3. Use of Checklists				
4. Safety Conscienceness (Critical)				
5. Judgement / Compliance (Critical)				
6. CRM / TEM				
7. Communication Procedures				
8. Aircrew Flight Equipment Sys / Egress				
9. Knowledge / Completion of Forms				
10. Airmanship / SA (Critical)				
QUALIFICATION				
11. Ground Operations / Taxi				
12. Takeoff				
13. Rdr Ops / WX Avoidance / Windshear				
14. Fuel Conservation				
15. VFR Pattern				
16. Landings				
17. Landing Roll/Braking/Reverse Thrust				
18. All Engine Go-Around				
19. Engine Out Operations				
20. Engine Out GA / EFTOC				
21. BF Emergency Procedures (Critical)				
22. Other Observed Emer Procedures				
23. System Ops / Knowledge / Limitations				
24. Automation Management				
25. Pilot Monitoring				
INSTRUMENT				
26. Instrument Departure / SID				
27. En Route Navigation / FMS				
28. Holding				
29. Use of NAVAIDs				
30. Descent / Arrival				
31. Precision Approaches				
31A. PAR (if observed)				
31B. ILS				

AF IMT 3862, 20050825, V2 Page 2 of 4

AREA/SUB-AREAS	Q	Q-	U	REMARKS
32. Non-Precision Approaches				
32A. NDB				
32B. Localizer / VOR				
32C. ASR				
32D. TACAN				
32E. RNAV				
33. Circling Approach				
34. Missed Approach				
MISSION				
35. Formation				
35A. Lead				
35B. Departure				
35C. Join-up				
35D. En-route				
35E. Breakup				
35F. Position Changes				
36. Tactical Maneuvers (If Observed)				
37. Tanker AAR				
37A. Rendezvous				
37B. Platform Control				
37C. Breakaway				
37D. Overrun Procedures				
38. Receiver AAR				
38A. Rendezvous				
38B. Closure				
38C. AAR Position/Control				
38D. Breakaway				
38E. Overrun Procedures				
INSTRUCTOR				
39. Instructor Ability (Critical)				
39A. Demo of Maneuvers (Critical)				
39B. Student Briefing/Critique (Critical)				
UNIT/MISCELLANEOUS				

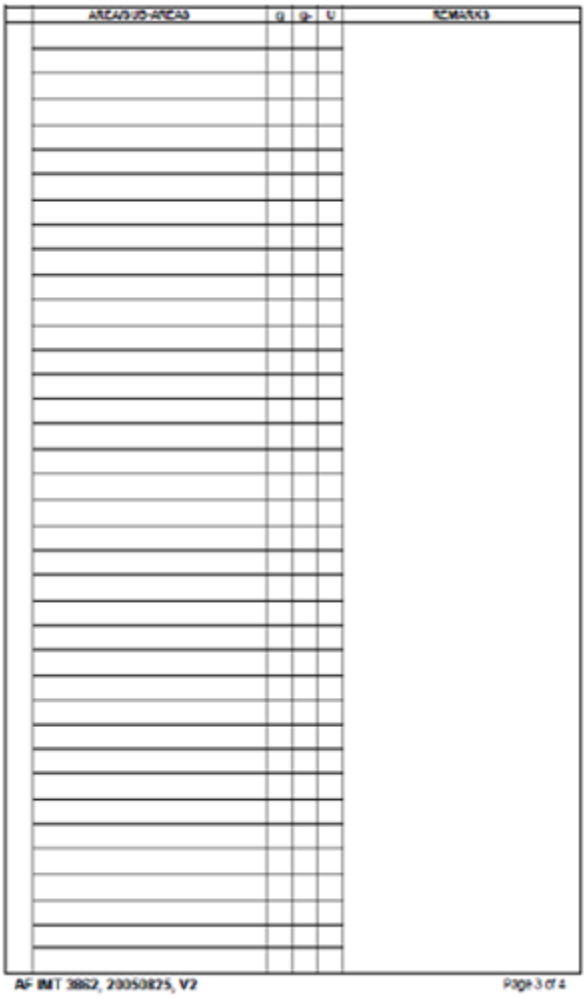
AF IMT 3862, 20050825, V2 Page 3 of 4

Figure A2.3. KC-10 FLIGHT ENGINEER FLIGHT EVALUATION WORKSHEET.



AREA/SUB-AREAS	G	Gr	U	REMARKS
GENERAL	■	■	■	
1. Directives and Publications				
2. Mission Prep/Planning				
3. Use of Checklists				
4. Safety Consciousness		■		
5. Judgment/Compliance		■		
6. Crew Coordination/CRM				
7. Communication Procedures				
8. Life Support System/Egress				
9. Knowledge/Completion of Forms				
10. Airmanship/Situational Awareness			■	
QUALIFICATION/MISSION	■	■	■	
11. Preflight				
12. Ground Operations				
13. Performance				
14. Takeoff and Departure Monitor				
15. Inflight Duties/Responsibilities				
16. General Navigation/FMS Operations				
17. Fuel Conservation				
18. Approach Monitor/Landing				
19. Systems Ops/Knowledge Limits				
20. Boldface Emergency Procedures		■		
21. Other Emergency Procedures				
22. Tanker AAR				
23. Receiver AAR				
INSTRUCTOR	■	■	■	
24. Instructor Ability		■		
25. Demonstration of Knowledge		■		
26. Student Briefing/Critique		■		
UNIT/CE/MISCELLANEOUS	■	■	■	

AF IMT 3882, 20050825, V2 Page 2 of 4



AREA/SUB-AREAS	G	Gr	U	REMARKS

AF IMT 3882, 20050825, V2 Page 3 of 4

Figure A2.4. KC-10 BOOM OPERATOR FLIGHT EVALUATION WORKSHEET.

	AREA/SUB-AREAS	Q	Q-	U	REMARKS
	GENERAL	■	■	■	
	1. Directives and Publications				
	2. Mission Preparation/Planning				
	3. Use of Checklist				
	4. Safety Consciousness		■		
	5. Judgment/Compliance		■		
	6. Crew Coordination/CRM				
	7. Communication Procedures				
	8. Aircrew Flight Equipment/Egress				
	9. Knowledge/Completion of Forms				
	10. Airmanship/Situational Awareness			■	
	11. Ground Operations				
	12. Systems Ops/ Knowledge/Limitations				
	13. Abnormal/Emergency Procedures				
	QUALIFICATION	■	■	■	
	14. AAR (Boom)				
	15. AAR (Centerline Drogue)				
	16. AAR (Wing A/R Pods)				
	17. Weight and Balance				
	18. BOT				
	MISSION	■	■	■	
	19. Cargo Loading/Unloading				
	20. Passenger Handling				
	INSTRUCTOR	■	■	■	
	21. Instructor Ability		■		
	22. Demonstration of Knowledge		■		
	23. Student Briefing/Critique		■		
	UNIT/SIB/MISC				

AF IMT 3862, 20050825, V2 Page 2 of 4

	AREA/SUB-AREAS	Q	Q-	U	REMARKS

AF IMT 3862, 20050825, V2 Page 3 of 4