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*Flying Operations*

**C-130 AIRCREW EVALUATION CRITERIA**

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This instruction implements Air Force Policy Directive (AFPD) 11-2, *Aircraft Rules and Procedures*. It establishes evaluation criteria for the operation of C-130 (includes 109 AW, LC-130 and 403 AW, WC-130) aircraft to safely and successfully accomplish their worldwide mobility missions. It applies to all Air Force personnel operating the C-130 combat delivery aircraft including Air Force Reserve Command (AFRC) and Air National Guard (ANG) units. It is used in conjunction with AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, and the appropriate MAJCOM supplement. 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. Send comments and suggested improvements to this instruction on AF IMT 847, **Recommendation for Change of Publication**, through channels to HQ AMC/A37V, 402 Scott Drive Unit 3A1, Scott AFB IL, 62225-5302 according to AFI 11-215, *Flight Manual Procedures*, and MAJCOM Supplement.

This publication requires the collection and or maintenance of information protected by the Privacy Act (PA) of 1974. The authorities to collect and or maintain the records prescribed in this publication are *Title 37 United States Code*, Section 301a and Executive Order 9397, *NUMBERING SYSTEM FOR FEDERAL ACCOUNTS RELATING TO INDIVIDUAL PERSONS*, November 22, 1943. Forms affected by the PA have an appropriate PA statement. System of records notice FO11 AF XO A Aviation Resource Management System (ARMS) (December 26, 2002, 67 FR 78777) applies. The Paperwork Reduction Act of 1974 as amended in 1996 affects this instruction. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFD 37-1, *Information Management*, and AFMAN 37-123, *Management of Records*, and disposed of in accordance with the Air Force *Records Disposition Schedule (RDS)*, located at <https://webrims.amc.af.mil>.

**(440AW)** This supplement implements and extends the guidance of Air Force Instruction (AFI) 11-2C-130 Volume 2, Air Force Instruction 11-2C-130 Volume 2, 22 February 2006. It prescribes 440 Airlift Wing (AW) procedures to be used in conjunction with the basic publication and applicable higher headquarters publications. The AFI is published word-for-word without editorial review. Supplementary material is indicated by “**(Added- 440AW)**” in bold face type. This supplement applies to all aircrew personnel assigned and attached for flying to the 440<sup>th</sup> Airlift Wing, Pope Field, NC. Refer recommended changes and questions about this publication to 440 OG/OGV using the AF IMT 847, Recommendation for Change of Publication; route AF IMT 847s through the appropriate chain of command to 440 OG/OGV. Waiver authority for this supplement is 440 OG/CC. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gess-af61a/afirms/afirms/>(440AW).

**SUMMARY OF CHANGES**

This interim change implements new guidelines and policies that correct the OPR’s mailing and email address, clarifies and implements new guidance concerning pilot evaluations, qualifications and associated documentation, mandates navigators accomplish a Time-Over-Target in flight, and allows navigators to complete Qualification evaluations and the qualification portion of a combined evaluation in the simulator. A margin bar indicates newly revised material.

**(440AW)** This revision is a major rewrite that redefines unit baseline qualification, implements new guidelines/policies concerning pilot, navigator, engineer, and loadmaster evaluations, qualifications, and associated documentation. This supplement has been reworded and renumbered to comply with AFI 11-2C-130V2. **440 OG/OGV SharePoint address:** <https://eim.afrc.af.mil/sites/440aw/440 OG/440 OGV/SitePages/Home.aspx>.

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## Chapter 1

### GENERAL INFORMATION

**1.1. General.** This instruction provides flight examiners and aircrews with procedures and evaluation criteria/tolerances to be used during flight evaluations according to AFI 11-202 Volume 2, *Aircrew Standardization/Evaluation Program*. Specific areas for evaluation are prescribed to ensure an accurate assessment of the proficiency and capabilities of aircrews. Flight examiners use this AFI when conducting aircrew evaluations. Instructors use this AFI when preparing aircrews for qualification.

**1.2. Applicability.** This AFI is applicable to all individuals operating C-130 aircraft. Copies should be available to all C-130 aircrew members.

**1.3. Key Words and Definitions.**

1.3.1. “Will” and “Shall” indicate a mandatory requirement.

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

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

1.3.4. “Note” indicates operating procedures, techniques, etc., considered essential to emphasize.

**1.4. Deviations and Waivers.** Do not deviate from the policies and guidance in this AFI under normal circumstances, except for safety or when necessary to protect the crew or aircraft from a situation not covered by this AFI and immediate action is required. Report deviations or exceptions without waiver through channels to MAJCOM standardization/evaluation. MAJCOM standardization/evaluation will notify lead command for follow-on action, if necessary.

1.4.1. Waiver authority for this AFI is MAJCOM/DO IAW AFI 11-202, Volume 2.

1.4.2. MAJCOM/DOs forward a copy of approved long-term waivers to this AFI to lead command for follow-on action, if required.

**1.5. Supplements.** MAJCOMs and units may supplement this instruction to clarify policies, procedures, and unique mission requirements. Comply with AFI 33-360, Volume 1, *Air Force Content Management Program--Publications*, guidance regarding publication supplements. Comply with AFD 11-2, *Aircraft Rules and Procedures*, for supplement coordination

1.5.1. MAJCOM and unit supplements will not be less restrictive than this instruction.

1.5.2. MAJCOM Supplements. Forward MAJCOM/DO-approved supplements, with attached AF IMT 673, *Request to Issue Publication*, to lead command (HQ AMC/A3) for review. HQ AMC/A3 will provide a recommendation and forward to HQ USAF/XOOT for approval (according to AFD 11-2, *Aircraft Rules and Procedures*). Use the following OPR’s address: HQ AMC/A3V, 402 Scott Dr., Unit 3A1, Scott AFB IL, 62225-5302. Electronic copies may be sent via e-mail to HQ AMC/A3V’s tactical branch organizational box at AMC/A3VX (AMC/[A3VX@scott.af.mil](mailto:A3VX@scott.af.mil)). When supplements are published, notify or send a final copy to HQ USAF/XOOT and lead command (HQ AMC/A3V).

1.5.3. If necessary, request and include approved long-term waivers to this AFI (including, approval authority, date, and expiration date) in the appropriate MAJCOM supplement.

1.5.4. Air Force Reserve Command (AFRC)/Air National Guard (ANG) will coordinate command supplements with the gaining active duty MAJCOM and the active duty NAF with stan/eval oversight responsibility prior to publication/revision.

1.5.5. Unit Supplements. Units will coordinate their supplement with the next higher Numbered Air Force (NAF)/MAJCOM, as applicable, prior to publication. AFRC/ANG units will provide a copy of their supplement to the gaining MAJCOM and the active duty NAF with stan/eval oversight. All units will send one copy of their supplement, within 30 days of posting, to the parent MAJCOM Standardization/Evaluation OPR (HQ AMC/A3V for AMC, ANG, and AFRC units).

**1.6. Requisition and Distribution Procedures.** Unit commanders may provide copies to aircrew members and associated support personnel.

1.6.1. **(Added-440AW)** An electronic copy of this publication is available to the 440 OG Aircrew members on the 440 OG/OGV SharePoint.

**1.7. Improvement Recommendations.** Send comments and suggested improvements to this instruction on AF IMT 847, **Recommendation for Change of Publication**, through channels to HQ AMC/A3V, 402 Scott Drive Unit 3A1, Scott AFB IL, 62225-5302 according to AFI 11-215, *Flight Manual Procedures*, and MAJCOM Supplement.

**1.8. Evaluations.** This instruction establishes standardized instrument, qualification, mission, and instructor evaluation criteria. It also establishes the areas and sub-areas necessary for the successful completion of evaluations, and which required areas/sub areas will be considered critical or non-critical.

**1.9. Evaluation Requirements.** Accomplish all flight evaluations In Accordance With (IAW) this paragraph and **Chapter 2**, **Chapter 3**, **Chapter 4**, and **Chapter 5** of this instruction. Complete the following evaluations at 17-month intervals according to AFI 11-202V2, and the appropriate MAJCOM supplement. **Exception:** Formal Course Evaluations may fly Qualification/Instrument evaluations IAW syllabus mission profile guidelines or on a mission profile developed from syllabus training objectives. All Formal Course Mission evaluations shall be IAW this AFI and AFI 11-202V2. Unless otherwise noted, all items on the AF IMT 3862 (**Attachment 2-Attachment 5**) should be accomplished in order to complete the evaluation.

1.9.1. Instrument (INSTM) Evaluation. All C-130 pilots will successfully complete a periodic instrument evaluation. The flight phase will evaluate pilot performance and application of instrument procedures and maneuvers. Weapon System Trainers (WSTs) with a C or greater certification may be used to accomplish this evaluation. The ground phase includes requisite open-book written instrument examination IAW AFMAN 11-210, *Instrument Refresher Course Program*.

1.9.2. Qualification (QUAL) Evaluation. All C-130 crewmembers will successfully complete a periodic qualification evaluation. The flight phase will evaluate aircrew performance and the application of flight manual procedures and maneuvers. Weapon System Trainers (WSTs) with a C or greater certification may be used to accomplish this

evaluation. The ground phase includes the following requisites: open-book and closed-book examinations, Boldface examination, and an Emergency Procedures Evaluation (EPE). Navigators are also required to complete an open-book written instrument examination IAW AFMAN 11-210, Instrument Refresher Course Program.

1.9.3. Mission (MSN) Evaluations. All mission qualified C-130 crewmembers will successfully complete a periodic mission evaluation. The MSN evaluation may be accomplished in conjunction with INSTM and/or QUAL evaluations (e.g., INSTM/QUAL/MSN or QUAL/MSN). Mission evaluation profiles should be as realistic as possible and relate to real-world applications. Flight events should correlate to the crew member's highest capabilities. The ground phase includes the following requisites: open-book examination, tactics open-book examination, boldface examination, and an emergency procedures evaluation (EPE).

1.9.3.1. Unit baseline qualifications. Units will establish in their local guidance the baseline qualifications that crewmembers must hold to be considered Mission Ready in their unit's mission. Mission evaluation profiles will be built to sample these qualifications. See **Chapter 2**, **Chapter 3**, **Chapter 4** and **Chapter 5** of this instruction for required items that must be evaluated. Any crewmember that maintains a qualification level below this baseline will have restrictions listed on their "MSN" AF IMT 8. For example, "RESTRICTIONS: Will not perform airdrop operations."

1.9.3.1.1. (**Added-440AW**) Baseline qualification for mission ready status includes NVG airland/airdrop/assault/SKE certification.

1.9.3.2. For units/aircrew with an airdrop requirement, mission evaluations for all crew positions should include an actual airdrop load, if possible. For units/aircrew with a NVG requirement, MSN evaluations for all crew positions should be at night utilizing NVGs if scheduling permits.

1.9.4. Instructor (INSTR) Evaluations. To initially qualify as an instructor in the C-130, crewmembers will successfully complete an initial instructor qualification course and evaluation. Subsequently, aircrew members designated as instructors will be evaluated on their ability to instruct during all periodic evaluations. Crewmembers may use their initial instructor evaluation to satisfy the requirements of a periodic evaluation provided all evaluation requirements for the periodic evaluation are met.

1.9.5. SPOT Evaluations. See AFI 11-202V2.

1.9.6. Re-qualification (RQ). Use the prefix RQ IAW AFI 11-202V2.

1.9.7. Emergency Procedures Evaluations (EPE). Use AFI 11-202V2 and the following: Evaluate an aircrew member's knowledge of emergency procedures and aircraft systems for all initial, re-qualification, and periodic QUAL and MSN evaluations. The EPE will include areas commensurate with the examinee's graduated training (e.g., initial, line, instructor, or evaluator). See specific crew position chapters of this AFI for EPE requirements.

1.9.7.1. Group Standardization and Evaluation office (OG/OGV) will develop and maintain a list of EPE program requirements (topics, special interest, etc.). OG/OGV will also develop an EPE guide for each crew position detailing the evaluation areas and conduct of the EPE. EPEs shall emphasize emergency procedures and systems

knowledge. Examiners may use one continuous scenario throughout the EPE, or use different scenarios as required to ensure appropriate areas are evaluated.

1.9.7.1.1. **(Added-440AW)** All Evaluators should utilize 440 OG crew-specific EPE Program guide. All 440 OG-crew specific EPE requirements and EPE guides are listed on the OGV SharePoint. AMC, AFRC and unit Special Interest Items (SIIs) will be included in all EPEs when applicable.

1.9.7.2. Simulated emergencies will not be evaluated during critical phases of flight (low level flight and airdrop). This does not preclude simulated emergencies being performed in the traffic pattern. If available, conduct an EPE in a simulator, Weapon System Trainer (WST) or Aircrew Training Device (ATD). If not available, the EPE will be verbally evaluated.

1.9.7.3. Examinees may use publications that are normally available in-flight. The examinee must recite, perform, or write all Boldface items.

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

1.9.7.4.1. **(Added-440AW)** 440 OG evaluators awarding unqualified EPE grades will notify the crewmember's respective SQ/CC, DO, and section chief as soon as possible after the EPE. Crewmember's SQ/CC, DO or section chief will then be given the opportunity to attend the debrief if available.

**1.10. Grading Policies.** See AFI 11-202V2, Chapter 5, *Grading Policies*, and the following.

1.10.1. When in-flight evaluation of a required area is not possible, the area may be verbally evaluated or evaluated in an ATD unless otherwise noted in this AFI. Flight examiners will make every effort to evaluate all required areas in-flight before resorting to this provision. If an alternate method is used to complete the evaluation, document in the Additional Comments portion of the AF IMT 8. Use of this provision must be approved by the examinee's commander. The commander's signature on the AF IMT 8 acknowledges this provision has been approved.

**1.11. Grading System.** See AFI 11-202V2, Chapter 5, *Grading System*, and the following.

1.11.1. Critical Areas. Critical areas require adequate accomplishment by the aircrew member in order to successfully achieve the mission objectives. If an aircrew member receives an unqualified grade in any critical area, the overall grade for the evaluation will also be unqualified. Critical areas are identified by "(Critical)" in the area title and shading of the Q- block on the AF IMT 3862, Flight Evaluation Worksheet. See examples at [Attachment 3](#), [Attachment 4](#), [Attachment 5](#), and [Attachment 6](#).

1.11.2. Crew Resource Management (CRM). If CRM is downgraded during the evaluation, the evaluator will also complete an AF IMT 4031, *CRM Skills Criteria Training/Evaluation*. The completed IMT will be forwarded to OG/OGV, for inclusion in quarterly trends, and wing training so that the data can be passed to the MAJCOM CRM program manager.

## 1.12. Conduct of Evaluations.

1.12.1. Flight examiners will pre-brief the examinee on the conduct, purpose, requirements of the evaluation, and all applicable evaluation criteria. Flight examiners will then evaluate the examinee in each graded area/sub area.

1.12.1. **(440AW)** 440 OG evaluators should refer to their 440 OG crew-specific Flight Examiner guide for the conduct of evaluations to include pre and post-mission briefings. Crew-specific 440 OG Flight Examiner guides are located on the OGV SharePoint.

1.12.1.1. Flight examiners will normally not evaluate personnel they have primarily trained, recommended for upgrade, or who write their effectiveness/performance reports.

1.12.2. Unless otherwise specified, flight examiners may conduct the evaluation in any seat or position that best enables them to observe the examinee's performance. Simulator/ATS contractors will not be in the seat during evaluations in the WST/ATD.

1.12.3. Evaluators will note discrepancies and deviations from prescribed tolerances and performance criteria during the evaluation. They will compare the examinee's performance with the tolerances provided in the grading criteria and assign an appropriate grade for each area.

1.12.3.1. 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.

1.12.3.1.1. **(Added-440AW)** The examiner may instruct the examinee in areas not taught in training, if required for mission completion or after intervention, if the examiner deems necessary for safety of flight during the mission. During the pre-brief, the examiner will clearly define when instructor and evaluator duties will begin and end.

1.12.3.2. The judgment of the flight examiner, guidance provided in AFI 11-202V2, and this instruction will be the determining factors in assigning an overall qualification level on the AF IMT 8. 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/sub area grades assigned, and any additional training required.

1.12.3.3. In the event of unsatisfactory performance, the flight examiner will determine additional training requirements. Required additional training will not be accomplished on the same flight. **EXCEPTION:** Required additional training on the same flight is allowed when unique situations presenting valuable training opportunities (e.g. thunderstorm avoidance, crosswind landings, etc.) exist. This option requires flight examiner discretion and judicious application. When used, the examinee must be informed when the additional training begins and ends.

1.12.4. The simulator/ATD may be used to accomplish additional training and re-checks. Areas for additional training and rechecks should be limited to those areas/sub areas that can be realistically accomplished in a simulator.

1.12.5. Rechecks will normally be administered by a flight examiner other than the one who administered the original evaluation.

**1.13. Unsatisfactory Performance.** See AFI 11-202V2, Chapter 5 and the following.

1.13.1. Conduct a thorough post-mission debriefing to the examinee and applicable aircrew members on all aspects of the evaluation.

1.13.2. Immediately correct breaches of flying safety or flight discipline during an evaluation (this applies to all crewmembers). If the situation occurs, the flight examiner will also debrief an appropriate unit supervisor and if appropriate, document the deviation on an AF IMT 8.

1.13.3. Notify the examinee's squadron commander/operations officer and flight commander, if available, whenever less than Qualification Level "Q-1" performance is observed.

1.13.4. When an examinee jeopardizes safety of flight, the flight examiner may assume the duties of that aircrew member, if warranted. This does not mean the flight examiner must assume the examinee's position any time unsatisfactory performance is observed.

**1.14. Use of AF IMT 3862, Flight Evaluation Worksheet.** Units may overprint AF IMT 3862, (see [Attachment 2](#), [Attachment 3](#), [Attachment 4](#), [Attachment 5](#) and [Attachment 6](#)) and use it as an evaluation worksheet. Copy each title, area number and text (in the order illustrated), and shading to the appropriate blocks. Units may add special interest items and/or local evaluation requirements. All items on the AF IMT 3862 are expected to be evaluated unless they are not part of the unit's baseline or otherwise noted. Use the worksheet to ensure all required areas are evaluated. Record positive and negative trend information and/or aircrew member's performance using the "T" column if desired (this information is necessary when transcribing the flight information into the Patriot Excalibur (PEX) Stan/Eval module or other MAJCOM approved module). The AF IMT 3862 or draft copy of the AF IMT 8, signed by the flight examiner, will serve as the temporary evaluation certificate. File the certificate in the aircrew member's Flight Evaluation Folder (FEF) immediately after the flight evaluation as a temporary record of the evaluation results. Maintain until the finished AF IMT 8 is added to the FEF, then dispose of properly.

1.14.1. **(Added-440AW)** The crew-specific 440 OG overprints to the AF Form 3862 are available on the OGV SharePoint.

**1.15. Aircrew Testing.** See specific testing requirements in AFI 11-202V2 Chapter 6 and the following.

1.15.1. Open-Book Exam. An open-book examination is a requisite for the QUAL and MSN evaluations. The open book QUAL exam will consist of a minimum of 60 questions. The open book MSN exam will consist of a minimum of 40 questions, at least 25% of which will come from tactical doctrine documents related to C-130 combat operations (Air Force Tactics, Techniques and Procedures (AFTTP)). If a combined examination is created for combination evaluations (QUAL/MSN), it will have the appropriate number of questions for each portion (i.e. the QUAL/MSN open book will have at least 100 questions).

1.15.2. Tactics Open-Book (TACTICS) Exam. The open book tactics exam will consist of a minimum of 25 questions out of the AFTTP 3-1 series of publications (e.g. 3-1.1, 3-1.2, 3-1.25). This test will be administered by the Group/Wing tactics office (OGV may administer the test if appropriately equipped).

1.15.2.1. **(Added-440AW)** The Tactics Exam will be IAW the 440 OG/OGV and the 440 OSS/OSK MOU.

1.15.3. Closed-Book Exam. A closed-book exam is a requisite for all QUAL or combined QUAL/MSN evaluations. The exam will consist of a minimum of 20 questions from the Master Question File (MQF). The closed book exam will contain mission/tactical questions for crew members that are MSN qualified. Complete a Boldface exam in conjunction with the closed-book exam.

1.15.4. Instructor Open-Book Exam. For periodic INSTR exams, a portion of the open-book exam will include instructor questions. A separate (unique) INSTR open-book exam is not required. For initial instructor (INIT INSTR) evaluations, a different/separate open-book exam will be administered (in addition to the open-book exam if the INIT INSTR evaluation will count as a full-periodic evaluation). The INIT INSTR open-book examination will have a minimum of 20 questions and may be derived from AFMAN 36-2236, *Guidebook for Air Force Instructors*, AFI 11-2C-130V1, 2, and 3, and flight/instruct or related sources. Questions should include scenario-driven instructor questions.

1.15.4.1. Subsequent (periodic) and re-qualification (RQ) INSTR Examinations. A portion of the open-book examination will include instructor questions. A separate (unique) INSTR open-book examination is not required.

**1.16. Typical C-130 Evaluation Profile(s).** The unit (OG/CC or OG/OGV) will determine the evaluation profiles suitable for aircrew evaluations based on units' mission baseline requirements. All items on the AF IMT 3862 are expected to be evaluated unless they are not part of the unit's baseline or otherwise noted.

1.16.1. **(Added-440AW) 440 OG Typical Evaluation Profiles.** Flight Examiners should use the evaluation profiles listed in the crew-specific 440 OG Flight Examiner Guide, available on the OGV SharePoint.

**1.17. Multiple C-130 Model Certification.** Accomplish difference training IAW AFI 11-2C-130V1, C-130 Aircrew Training. A periodic evaluation may be accomplished in any C-130 aircraft model in which the individual is certified. Attempt to accomplish requisite testing in the same aircraft model in which the flight evaluation is flown, or expected to be flown.

**1.18. (Added-440AW) Formation Lead (Flight Lead) Upgrade Checkout.** Lead upgrade will culminate in a Lead *Checkout*, administered by an evaluator, to complete the training folder. This sortie will not constitute a formal evaluation, nor produce an AF IMT 8. The evaluator may perform a supplemental evaluation to assess the lead upgrade program during this sortie. This *Checkout* is intended to challenge the student, provide accurate assessment on his/her performance under pressure, and most importantly provide one last sortie worth of valuable training. If the evaluator feels that more training is needed then the additional training recommendations will be documented on the AF IMT 4022 in the training folder. Those items will be accomplished, as a minimum, before another *Checkout* sortie is accomplished. A guide and profile for this *Checkout* sortie is in the *440 OG Flight Examiner Guide* (Pilots and Navigators). **Pilot or navigator periodic checkrides should not be conducted on the same aircraft while conducting lead Checkouts.**

1.18.1. **(Added-440AW)** Within 6-months of completion of the *Checkout*, every effort should be made to perform a No-Notice SPOT check on the individual performing to

standards in the General and Flight Leadership sub-areas. In addition the evaluator may perform a supplemental eval to evaluate the upgrade program. In the event the crewmember completes formal Instructor School within 6-months of the lead *Checkout*, then this No-Notice Assessment should occur within 6-months of graduation of that course. In this case, the evaluation will cover the before stated items, and will also cover Instructor areas to assess the schoolhouse product.

## Chapter 2

### PILOT EVALUATIONS

**2.1. General.** This chapter standardizes initial, periodic, and re-qualification evaluations, including requirements for instrument/qualification, mission, and instructor evaluations.

2.1.1. Combined evaluations (i.e. INSTM/QUAL/MSN) are the desired method of evaluation. The combined evaluation allows greater flexibility, allows the evaluator to see the full spectrum of the pilot's capabilities, and it reduces the number of overall evaluations each unit must accomplish. Events that are accomplished during one portion of the evaluation are not required to be evaluated again (e.g. if a non-precision approach is flown during the SKE recovery, it does not have to be re-accomplished during the instrument phase of the check ride).

2.1.2. Flight examiners will not intentionally fail any equipment during flight evaluations, but may deny the use of systems not affecting safety of flight.

2.1.3. Under no circumstances will a flight examiner allow the aircraft to slow below one engine-out Vmca or exceed aircraft limitations specified in the flight manual, regardless of tolerances listed for specific areas.

2.1.4. 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.

2.1.5. Evaluator pilots may conduct evaluations when scheduled as primary aircrew members.

2.1.5.1. **(Added-440AW)** During non-instructor INSTM/QUAL check rides, ensure that the non-examinee is an instructor pilot. This restriction does not apply to no-notice evaluations. Pilot flight examiners should not perform primary flight duties (will not for lead checkouts) when administering flight evaluations. Examiners will assume the duties associated with the crew position they are flying (if primary). In this case, examiners will provide appropriate crew coordination inputs for the crew position they occupy.

2.1.6. The baseline qualification for C-130 Mobility Pilot Development (MPD)/Flight Pilots (FPQ and FPH) is INSTM/QUAL/MSN as described below.

2.1.6.1. Flight Pilots (FPH) under the revised MPD syllabus are qualified to perform INSTM/QUAL pilot duties in the left and right seat and MSN pilot duties in the right seat only.

2.1.6.2. Flight Pilots (FPQ) trained under the legacy MPD syllabus are restricted to those maneuvers included in the revised syllabus (FPH) as in 2.1.6.1. above.

2.1.6.3. Flight Pilots (FPC) trained under the traditional syllabus (non-MPD) are restricted to right seat duties for INSTM/QUAL/MSN phases of flight. Designation as FP for FPC coded pilots is not authorization to perform emergency maneuvers. See AFI 11-2C-130V3 for further guidance.

**2.2. Instrument/Qualification Evaluations (Initial, Periodic and Requalification).** C-130 instrument evaluations will be accomplished concurrently with qualification evaluations. Include all areas (unless otherwise noted) under GENERAL, INSTRUMENT, and QUALIFICATION. Conduct the evaluation in-flight or in a WST (Level C certification or better).

2.2.1. Accomplish a minimum of one precision and one non-precision approach. Instrument/ Qualification evaluations should include approaches to airfields other than home station or deployed locations.

2.2.2. Flight Pilot. (FPC)

2.2.2.1. From the right seat, evaluate appropriate areas in this chapter and as illustrated on the evaluation worksheet at [Attachment 2/3](#). Designate crew position as FP with restrictions on the AF Form 8.

2.2.2.2. The AF Form 8 will note the restriction “Not qualified to perform left seat flying duties unsupervised” on all evaluations not leading towards Aircraft Commander upgrade.

2.2.3. Flight Pilot. (FPQ/FPH)

2.2.3.1. From the left seat, evaluate appropriate areas in this chapter as illustrated on the evaluation worksheet at [Attachment 2/3](#). Designate crew position as FP on the AF Form 8.

2.2.3.2. Flight Pilots do not require a separate INIT INSTM/QUAL evaluation when transitioning to Aircraft Commander. The skill set is identical for both positions. If an INSTM/QUAL evaluation is administered in conjunction with the INIT MSN evaluation leading to Aircraft Commander Certification document the INSTM/QUAL and INIT MSN on separate blocks in the flight phase section of the AF Form 8 and designate crew position as MP on the AF Form 8.

2.2.4. Aircraft Commander.

2.2.4.1. From the left seat, evaluate appropriate areas in this chapter as illustrated on the evaluation worksheet at [Attachment 2/3](#). Designate crew position as MP on the AF Form 8.

2.2.5. Instructor Pilot.

2.2.5.1. From the left or right seat evaluate appropriate areas in this chapter as illustrated on the evaluation worksheet at [Attachment 2/3](#). Designate crew position as IP on the AF Form 8. See 2.5 for further guidance.

**2.3. Mission Evaluations (Initial, Periodic, and Requalification).** Include all areas under GENERAL and applicable areas under MISSION listed on the evaluation worksheet at [Attachment 2/3](#). Units and/or aircrew with a mission evaluation requirement (regardless of the type of mission being flown) will be evaluated on Area 47 (Defensive Systems/Tactics) and Area 48 (Threat Avoidance).

2.3.1. For units with Station Keeping Equipment (SKE) or the Adverse Weather Aerial Delivery System (AWADS) airdrop mission, a visual low-level route or SKE/AWADS route to an airdrop and recovery must be flown to complete the evaluation. Alternate the type of route/airdrop/recovery flown on subsequent periodic MSN evaluations at a minimum. Unit

policy may be more restrictive requiring both types be flown. Regardless, failure to accomplish the proper events will result in loss of MSN qualification for affected individuals.

#### 2.3.1.1. DELETED

2.3.1.1. (440AW) All 440 OG pilot MSN evaluations should be scheduled to occur at night using NVG's. Evaluators will verbally evaluate NVG Usage/Limitations if not observed. Planned profiles should include both a SKE and a visual route. AWADS certified pilots will be evaluated on AWADS procedures during the SKE airdrop. 440 OGV and staff examiners (if able) will check examinee FEFs prior to administering MSN evaluations to determine if a specific profile is required. Do not allow individuals to go overdue evaluations simply for the sake of scheduling a night mission or accomplishing both the SKE and Visual portions if the examinee has shown due diligence in scheduling and completing their evaluation on time. Evaluators will decide if enough has been observed to call an evaluation complete if a portion of the mission is cancelled due to circumstances beyond the examinee's control. Verbally evaluate portions of mission evaluations only as a last resort.

#### 2.3.1.2. DELETED

#### 2.3.1.3. DELETED

#### 2.3.1.4. DELETED

#### 2.3.1.5. DELETED

2.3.2. SKE/AWADS evaluations must be planned and briefed as a 2-ship (minimum) but may be flown single-ship (at the discretion of the evaluator).

2.3.3. A visual tactical arrival will be flown and will consist of a high or low altitude tactical arrival. The low altitude tactical arrival may be made at the end of the penetration approach.

2.3.4. The max-effort portion will consist of a tactical/max-effort takeoff and tactical/max-effort landing and should be accomplished at the end of the tactical approach. Landings will be performed on an actual landing zone if available. If not available, a larger runway with landing zone markings (IAW AFI 13-217, *Drop Zone and Landing Zone Operations*) and clearly identifiable touchdown zone may be used. One go-around is permitted, provided the aircraft does not touch down short of the zone. As a minimum, thoroughly debrief Flight Pilots on pilot-not-flying duties during tactical/max-effort procedures.

2.3.4.1. Airland Mission Pilots that maintain tactical/max-effort qualification will fly an IFR or VFR high altitude route (minimum of 20 minutes long and greater than 5000' AGL) to a TOA at an airfield. The arrival will consist of either a high altitude tactical arrival followed by a tactical/max-effort landing or penetration decent to a low altitude tactical arrival followed by a tactical/max-effort landing.

2.3.5. Pilots that do not meet unit baseline mission requirement (such as, Basic Mission Capable (BMC) crewmembers) will note appropriate restrictions the AF Form 8 (i.e. Airdrop, formation, SKE/AWADS, etc.). See [Chapter 1](#) for further baseline guidance.

#### 2.3.6. Flight Pilot. (FPC/FPQ/FPH)

2.3.6.1. From the right seat evaluate all applicable Mission areas in this chapter as illustrated on the evaluation worksheet at [Attachment 2/3](#). The mission evaluation will

focus on pilot monitoring duties. Pilot flying duties may be evaluated on Areas 38/39 and Areas 47/48. Designate as FP with restrictions as needed on the AF Form 8. The evaluation may be flown in the lead (preferred) or wing position.

2.3.6.2. Annotate Flight Pilots' (FPQ) AF Form 8 with the following restriction: "Not authorized to perform max-effort PF duties".

2.3.6.3. All pilots not previously certified as an aircraft commander in a C-130 will receive an initial mission evaluation (INIT MSN) prior to aircraft commander certification. Conduct the INIT MSN evaluation IAW para 2.3.7. and designate crew position as MP on the AF Form 8. **NOTE:** The Operational Mission Evaluation no longer exists. An Operational Mission Checkout will now be administered as part of the Pilot Checkout Program. See AFI 11-2C-130 Volume 1 for further guidance.

2.3.6.3.1. (**Added-440AW**) The Aircraft Commander Candidate's "Operational Mission Checkout" (OMC), will be administered in accordance with AFI 11-2C-130V1. In addition, during the (OMC), the instructor/evaluator may perform a supplemental evaluation to evaluate the in-unit PCO upgrade program.

### 2.3.7. Aircraft Commander.

2.3.7.1. From the left seat, evaluate appropriate areas in this chapter as illustrated on the evaluation worksheet at **Attachment 2/3**. Designate crew position as MP on the AF Form 8.

2.3.7.2. Non-Lead. The route should be flown in the wing position.

2.3.7.3. Element Lead. Accomplish the route in the element lead (preferred) or flight lead position.

2.3.7.4. Flight Lead. Accomplish the route in the flight lead (preferred) or element lead position. The flight lead pilot should also participate in the mission commander duties.

2.3.7.4.1. (**Added-440AW**) Lead pilots, when not selected as mission commander, will aid in mission planning prior to mission execution, and will act as deputy mission commander if possible.

2.3.8. Instructor Pilot. From the left or right seat evaluate appropriate areas in this chapter as illustrated on the evaluation worksheet at **Attachment 2/3**. Designate crew position as IP on the AF Form 8. See 2.5 for further guidance.

**2.4. LC-130 Evaluations.** Conduct the evaluation during actual missions or under simulated mission conditions. A ski mission profile includes a ski airborne radar approach (ARA), ski landing and ski take-off. For single-ship VFR airdrop qualified pilots, evaluation of the airdrop mission will be at the discretion of the 109AW OG/CC.

**2.5. Instructor Evaluations (Initial, Periodic, and Requalification).** Flight examiners will place particular emphasis on the examinee's ability to recognize student difficulties and provide timely, effective corrective action. Instructor pilots should be able to brief, observe, assess, and debrief the student's overall performance. The evaluator will state which instructional abilities were evaluated in the comments section of the AF Form 8. List a minimum of two areas instructed by the examinee. Conduct initial or requalification instructor evaluations with a qualified pilot occupying the other seat. For the initial instructor evaluation the examinee will

occupy the right seat. On recurring or RQ evaluations the instructor examinee may occupy either seat.

2.5.1. During periodic QUAL evaluations, instructors will initiate a simulated aircraft malfunction requiring a simulated engine shutdown, simulated engine-out approach and go-around. The instructor will be evaluated on his ability to ensure safe simulated engine-out operations.

2.5.2. If airdrop mission qualified, all INIT and RQ instructor evaluations require the examinee to instruct a SKE or visual low-level route and airdrop.

2.5.3. All instructor areas/sub areas are required instructor evaluation items.

## **2.6. DELETED.**

## **2.7. Emergency Procedures Evaluation (EPE).**

2.7.1. The EPE should cover a cross section of aircraft systems emergencies such as bleed air, fuel, oil, electrical, engines, avionics, hydraulics, self-contained navigation system (SCNS)/inertial navigation system (INS), and propellers. Examinees should be able to demonstrate an understanding of aircraft systems beyond the actual steps required for an emergency procedure. A WST may be used to conduct the EPE. Include the following items on EPEs:

2.7.1.1. All Boldface procedures.

2.7.1.2. Take-off and Landing Data (TOLD) definitions, take-off procedures and emergencies for Qual and Mission evaluations. Mission evaluations will also include maximum effort TOLD definitions, take-off procedures and emergencies (as applicable).

2.7.1.3. Airdrop emergency procedures, defensive system operation (representative of unit's aircraft), lookout doctrine, threat calls and threat pre-emptive/reactive counter-tactics for all mission evaluations (as applicable).

## **2.8. Pilot Grading Criteria.**

### **2.8.1. General. Area 1. Directives/Publications/Personal and Professional Equipment.**

**Q** Possessed an adequate knowledge of all applicable aircraft publications and procedures and understood how to apply both to enhance mission accomplishment. Publications were current and properly posted. Had all required personal/professional equipment. Displayed satisfactory knowledge of the care and use of such equipment. Required equipment inspections were current.

**Q-** Possessed a limited knowledge of directives but could locate information in appropriate publications. Publications were current but improperly posted.

**U** Unaware of established procedures and/or could not locate them in the appropriate publication in a timely manner. Publications were not current. Did not have required personal/professional equipment. Required equipment inspections were overdue or equipment was unserviceable.

### **Area 2. Mission Preparation/Planning/Performance.**

**Q** Checked all factors applicable to flight such as weather, notices to airmen (NOTAM), alternate air- fields, airfield suitability, fuel requirements, charts, etc. Adequate knowledge of performance capabilities and operating data. Attended required briefings.

**Q-** Made minor errors or omissions in checking all factors that could have detracted from mission effectiveness. Limited knowledge of performance capabilities or approved operating procedures/ rules. Late for required briefings.

**U** Made major errors or omissions that would have prevented an effective mission. Unsatisfactory knowledge of performance capabilities and/or operating data. Performance calculations exceeded Q- limits. Failed to attend required briefings.

### **Area 3. Briefings.**

**Q** Contributed to the briefing content to ensure it included all applicable information. Briefings effectively organized and presented in a logical sequence. Covered all pertinent items. Effectively used available briefing aids.

**Q-** Allowed omission of items pertinent but not critical to the mission. Briefings lacked continuity or contained unnecessary repetition. Some difficulty communicating clearly. Did not make effective use of available briefing aids. Dwelled on non-essential items.

**U** Failed to conduct/attend required briefings. Failed to use briefing aids. Omitted essential items or did not correct erroneous information that could affect mission accomplishment. Demonstrated lack of knowledge of subject. Briefing poorly organized and not presented in a logical sequence, resulting in confusion. Presented erroneous information that would affect safe/effective mission accomplishment.

### **Area 4. Use of Checklist.**

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

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

**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.

### **Area 5. Safety Consciousness. (Critical)**

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

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

### **Area 6. Flight Discipline. (Critical)**

**Q** Exhibited strict flight and crew discipline. Prepared and completed mission in compliance with existing instructions and directives.

**U** Failed to exhibit strict flight and crew discipline. Failed to comply with existing instructions and directives which did or could have jeopardized safety or mission success.

**Area 7. Crew Coordination/Management/Crew Resource Management (CRM).** Refer to AF IMT 4031, CRM Skills Criteria Training/Evaluation Form as a reference.

**Q** Effectively coordinated with other aircrew members throughout the assigned mission. Demonstrated operational knowledge of other crewmembers' duties and responsibilities.

**Q-** Crew coordination skills detracted from mission accomplishment. Demonstrated limited knowledge of other crewmembers' duties and responsibilities.

**U** Poor crew coordination or unsatisfactory knowledge of other crewmember duties and responsibilities negatively affected mission accomplishment or safety of flight.

**Area 8. Communication/IFF/SIF Procedures.**

**Q** Complete knowledge of and compliance with correct communication/IFF/SIF procedures. Transmissions were concise with proper terminology. Thoroughly familiar with and operated correctly, HAVE QUICK, IFF, and secure voice equipment.

**Q-** Occasional deviations from procedures 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.

**U** Incorrect procedures or poor performance caused confusion and jeopardized mission accomplishment. Omitted numerous radio/interphone calls. Displayed poor knowledge of HAVE QUICK, IFF, and secure voice equipment.

**Area 9. Life Support Systems/Egress.**

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

**Q-** Limited knowledge of location and use of life support systems and equipment. Unsure of the proper operating procedures used to operate some of the aircraft egress devices.

**U** Displayed unsatisfactory knowledge of location and use of life support systems and equipment. Unsatisfactory knowledge of aircraft egress procedures.

**Area 10. Knowledge/Completion of Forms.**

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

**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.

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

**Area 11. Airmanship/Situational Awareness. (Critical)**

**Q** Maintained situational awareness and exercised sound judgment throughout the mission. Conducted the flight with a sense of understanding and comprehension. Prioritized tasks properly.

**U** Lacked situational awareness. Faulty judgment resulted in decisions that had negative mission impact. Lacks the skills to prioritize tasks. Unaware of significant events that impacted the mission.

**Area 12. Boldface. (Critical)**

**Q** Correct, timely responses in the proper sequence. Coordinated proper crew actions.

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

**Area 13. Emergency Procedures.**

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

**Q-** Operated within prescribed limits but was slow to analyze problems or apply proper corrective actions. Did not effectively use, omitted, or deviated in use of checklist and/or available aids.

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

**Area 14. Systems Operations/Knowledge/Limitations.**

**Q** Demonstrated a complete knowledge of aircraft systems and operating limitations both with and without reference to the flight manual and/or available aids.

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

**U** Unsatisfactory systems knowledge. Unable to demonstrate or explain the procedures for aircraft systems operations with or without reference to the flight manual and/or available aids.

**Area 15. Basic Aircraft Control.**

**NOTES:**

1. Use the following criteria as general tolerances for airspeed, altitude, and heading/course. May be used for any flight portion of the evaluation.
2. 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.
3. This criteria does not apply to landings. See specific landing area for landing tolerances.

**Q** Maintained positive aircraft control. Experienced minor deviations but corrected in a timely manner. Meets the following tolerances:

*Airspeed: +10/-5 KIAS*

*Altitude: +/-100 feet*

*Heading/Course: +/-5 degrees*

**Q-** Frequent deviations in airspeed altitude or heading, but does not compromise flight safety. Slow to correct deviations. Exceeds Q criteria but does not exceed:

*Airspeed: +15/-5 KIAS*

*Altitude: +/-200 feet*

*Heading/Course: +/-10 degrees*

**U** Exceeded Q- criteria.

### 2.8.2. **Qualification. Area 16. Ground Operations/Taxi.**

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

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

**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.

### **Area 17. Takeoff.**

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

**Q-** Minor deviations from published procedures without affecting safety of flight. Aircraft control was safe but not consistently smooth and positive. Hesitant in application of procedures or corrections.

**U** Takeoff was potentially dangerous. Exceeded aircraft/systems limitations. Failed to establish proper climb attitude. Excessive deviation from intended flight path. Violated flight manual procedures. Exceeded Q- criteria.

### **Area 18. Radar Ops/Weather Avoidance/Windshear.**

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

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

**U** Unable to demonstrate proper use of weather radar (if equipped). Failed to update radar/weather analysis when critical. 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.

**Area 19. Fuel Conservation.**

**Q** Possessed a high level of knowledge of all applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied fuel conservation procedures during the mission.

**Q-** Possessed some knowledge of applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied some fuel conservation procedures, but missed several opportunities to apply fuel conservation procedures during the mission.

**U** Unaware of fuel conservation procedures. Failed to apply any fuel conservation procedures during the mission.

**Area 20. VFR Pattern. (Weather & traffic permitting, verbally evaluate if not observed)**

**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.

**Q-** Performed traffic pattern and turn to final/final approach with minor deviations to procedures. 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.

**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.

**Area 21. Landings. (Includes Full Flap, Partial Flap, No-Flap (FP, MP, and IP only), and Touch/ Stop-and-Go landings)**

**Sub Area 21A. Full Flap Landing. (100%)**

**Sub Area 21B. Partial Flap Landing. (50%)**

**Sub Area 21C. No Flap Landing. (FP, MP, and IP Only)**

**Sub Area 21D. Touch/Stop and Go Landing.**

**NOTES:**

1. Specific items to evaluate include threshold altitude/airspeed, runway alignment, flare, touchdown speed, and landing in a crab.
2. Airspeed tolerances apply to computed threshold speed.

**Q** Performed landings as published/directed IAW flight manual and met the following criteria:

*Airspeed: +/-5 KIAS*

*Touchdown Zone: 1000-2000 feet*

*Centerline: +/-15 feet left or right*

**Q-** Performed landings with minor deviation to procedures as published/directed. Landed in a slight crab. Exceeded Q criteria but not the following:

*Airspeed: +10/-5 KIAS*

*Touchdown Zone: Threshold-3000 feet*

*Centerline: +/-25 feet left or right*

**U** Landing not performed as published/directed. Exceeded Q- criteria.

#### **Area 22. Landing Roll/Braking/Propeller Reversing.**

**Q** Performed as published/directed IAW flight manual. Braking action and propeller reversing commensurate with landing conditions.

**Q-** Performed landing roll with minor deviation to procedures. Braking action and propeller reversing not accomplished commensurate with landing conditions but did not jeopardize safety. Braking or propeller reversing action not applied smoothly.

**U** Landing roll not performed as published/directed. Braking or propeller reversing accomplished in an unsafe manner. Exceeded Q- criteria.

#### **Area 23. All Engine Go-Around. (Not Required if Area 24 or 34 is Accomplished)**

**Q** Initiated and performed go-around promptly and IAW flight manual and directives. Applied smooth control inputs. Acquired and maintained a positive climb.

**Q-** Slow or hesitant to initiate go-around. Slightly over controlled the aircraft. Minor deviations did not affect mission accomplishment or compromise safety.

**U** Did not initiate go-around when appropriate or directed. Major deviations or misapplication of procedures could have led to an unsafe condition.

#### **Area 24. Engine Out Landing. (FP/MP/IP Only) Use Area 21 criteria.**

#### **Area 25. Engine Out Go-Around. (FP/MP/IP Only)**

**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.

**Q-** Errors were made which did not affect safety. Aircraft control was not consistently smooth and positive. Rudder and aileron inputs were in the correct direction with some over/under control.

**U** Rudder and/or aileron inputs were incorrect. Failed to perform the maneuver IAW the flight manual and current directives. Exceeded Q- criteria.

#### **2.8.3. Instrument. NOTES:**

1. Use the following criteria as general tolerances for airspeed, altitude, and heading/course.
2. Airspeed tolerances apply when a specific airspeed has been assigned by Air Traffic Control or prescribed in the flight manual.
3. This criteria does not apply to landings. See specific landing area for landing tolerances.

**Q** Meets the following tolerances:

*Airspeed: +10/-5 KIAS*

*Altitude: +/-100 feet*

*Heading/Course: +/-5 degrees*

**Q-** Exceeds Q criteria but does not exceed:

*Airspeed: +15/-5 KIAS*

*Altitude: +/-200 feet*

*Heading/Course: +/-10 degrees*

**U** Exceeded Q- criteria.

**Area 26. Instrument Departure/Standard Instrument Departure (SID). (Verbally evaluate if not observed)**

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

**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.

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

**Area 27. En Route Navigation/SCNS.**

**Q** Able 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.

**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.

**U** Major errors in procedures/use of navigation equipment. Could not establish position. Failed to recognize checkpoints or adjust for position deviations from course. Did not remain within the confines of assigned airspace. Exceeded Q- criteria.

**Area 28. Holding or Procedure Turn.**

**Q** Performed entry and holding/procedure turn IAW published procedures and directives.

**Q-** Performed entry and holding procedures with minor deviations.

**U** Holding/procedure turn was not IAW flight manual, directives, or published procedures.

**Area 29. Use of NAVAIDs.**

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

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

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

**Area 30. Descent/Arrival.**

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

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

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

**Area 31. Precision Approaches. (Includes PAR, ILS, and Precision MLS)**

**NOTES:**

1. Use the following criteria as general tolerances for airspeed, altitude, heading, glide slope, and azimuth.

2. Airspeed tolerances are based on computed approach speed.

**Q** Meets the following tolerances:

*Airspeed: +10/-5 KIAS*

*Altitude: Initiated missed approach at decision height +50/-0 feet*

*Heading: +/-5 degrees of controller's instructions (PAR)*

*Glide Slope: Within one dot (ILS/MLS)*

*Azimuth: Within one dot (ILS/MLS)*

**Q-** Exceeds Q criteria but does not exceed:

*Airspeed: +15/-5*

*Altitude: Initiated missed approach at decision height +100/-0 feet*

*Heading: +/-10 degrees of controller's instructions (PAR)*

*Glide Slope: Within one dot low, two dots high (ILS/MLS), after runway was in sight examinee momentarily deviated below glidepath but corrected for a safe landing ("duck-under").*

*Azimuth: Within two dots (ILS/MLS)*

**U** Exceeded Q- criteria.

**Sub Area 31A. PAR.**

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

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

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

**Sub Area 31B. ILS.**

**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.

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

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

**Sub Area 31C. MLS. (Precision)** Use same criteria as Sub Area 31B.

**Area 32. Non-Precision Approaches. (Includes NDB, Localizer (LOC), VOR, ASR, TACAN, Azimuth Only MLS, and ARA)**

**Sub Area 32A. NDB.**

**Sub Area 32B. LOC/VOR.**

**Sub Area 32C. ASR.**

**Sub Area 32D. TACAN.**

**Sub Area 32E. Azimuth Only MLS.**

**Sub Area 32F. ARA.**

**NOTES:**

1. Use the following description and criteria as general tolerances for airspeed, altitude at MDA, heading, course, timing, and distance with all engines operating.
2. Airspeed tolerances are based on computed approach speed.

**Q** Approach was IAW published procedures. Used appropriate descent rate to arrive at MDA at or before VDP. Position would have permitted a safe landing. Smooth and timely response to controller's/navigator's instructions (ASR/ARA).

*Airspeed: +10/-5 KIAS*

*MDA: +100/-0 feet*

*Course: +/-5 degrees at MAP (NDB, VOR, TAC), less than one dot deflection (LOC, MLS)*

*Timing: Computed/adjusted timing to determine MAP within 10 seconds (when required)*

*Distance: Determined MAP within +/-0.5 NM*

**Q-** Performed approach with minor deviations. Arrived at MDA at or before the MAP, but past the VDP. Position would have permitted a safe landing. Slow to respond to controller's instructions and make corrections (ASR). Exceeded Q criteria but does not exceed:

*Airspeed: +15/-5 KIAS*

*MDA: +150/-50 feet*

*Course: +/-10 degrees at MAP (NDB, VOR, TAC), within 2 dots (LOC, MLS)*

*Timing: Computed/adjusted timing to determine MAP within 20 seconds (when required).*

*Distance: Determined MAP within +1/-0.5 NM*

**U** Approach not IAW 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.

### **Area 33. Circling Approach. (Weather & traffic permitting)**

**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.

*Airspeed +10/-5 KIAS*

*Altitude +100/-0 feet*

**Q-** Deviated from established procedures but was not unsafe. Slow to comply with controller's instructions. Attained runway alignment but occasionally required excessive bank angles or maneuvering.

*Airspeed +15/-5 KIAS*

*Altitude +150/-50 feet*

**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.

### **Area 34. Missed Approach. (Not Required if Area 23 or 25 is Accomplished)**

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

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

**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. Exceeded Q- criteria.

#### 2.8.4. **Mission. Area 35. Pre-Takeoff.**

**Q** Established and adhered to station, start engine, taxi, and take-off times to assure thorough pre-flight, check of personal equipment, crew/passenger briefings, etc. Accurately determined readiness of aircraft for flight. Performed all checks prior to takeoff. Taxi was as briefed (if applicable).

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

**U** Omitted checklist items. Failed to accurately determine readiness of aircraft for flight. Crew errors directly contributed to a late takeoff that degraded the mission or made it non-effective. Taxi not as briefed due to pilot error that contributed to late takeoff or confusion in the formation.

#### **Area 36. Takeoff.**

**NOTE:** Use Area 17. Takeoff. criteria and the following for formation takeoffs. For single ship takeoffs, use Area 17. Takeoff. criteria only.

**Q** Maintained smooth control. Properly briefed crew on appropriate abort calls. Followed established procedures.

**Q-** Minor deviations to established procedures. Inputs/corrections slow when encountering vortices.

**U** Safe execution of the takeoff jeopardized by improper procedures. Did not use appropriate side of runway (N/A for feed-on method).

#### **Area 37. Departure/Assembly.**

**NOTE:** Use Area 26 criteria and the following:

##### **Lead Criteria.**

**Q** Flown IAW flight manual directives, published procedures, or as pre-briefed. Smooth on controls. Good wingman consideration.

**Q-** Minor deviations in directives, procedures or as briefed. Aircraft control was safe but not consistently smooth and positive. Inconsistent wingman consideration made it difficult for wingmen to maintain position.

**U** Departure not IAW flight manual directives, published procedures, or as pre-briefed. Rough on the controls. No wingman consideration.

##### **Wingman Criteria.**

**Q** Smooth on controls. Maintained position with only momentary deviations. Maintained good separation and complied with leader's instructions. Smooth, timely rejoin.

**Q-** Minor deviations to published procedures. Over controlled the aircraft to the extent that formation position was somewhat inconsistent. Slow to respond to leader's instructions. Slow to rejoin.

**U** Procedures not IAW flight manual directives or published procedures. Rough on the controls. Abrupt position corrections. Did not maintain safe separation or formation position. Failed to comply with leader's instructions. Unsafe rejoin.

### **Area 38. En route Formation Procedures.**

#### **Lead/Element Lead Criteria.**

**Q** Positive control of formation/element. Established appropriate formations. Smooth on controls and considered wingmen. Planned ahead and made timely decisions. Ensured wingmen flew proper position. Did not rush flight command indicator (FCI) test. Identified and complied with SKE system fault code requirements.

**Q-** Minor deviations to published procedures. Limited flight management. Aircraft control was safe but not consistently smooth and positive. Inconsistent maneuvering made it difficult for wingmen to maintain position. Did not always plan ahead and/or hesitant in making decisions. Rushed or occasionally missed FCIs causing potential wingman confusion. Slow to identify or comply with SKE system fault code requirements.

**U** Procedures not IAW flight manual, directives or published procedures. Did not establish appropriate formations. Rough on the controls. Erratic maneuvering caused wingmen to breakout or over- run formation. Little consideration for wingmen. Indecisive. Failed to ensure wingmen maintained proper position. Placed formation/wingmen in unsafe position or circumstances. Consistently missed FCIs. Did not identify or failed to comply with SKE system fault code requirements.

#### **Wingman Criteria.**

**Q** Maintained position with only momentary deviations. Smooth and immediate position corrections. Maintained safe separation and complied with leader's instructions. Smooth timely rejoin. Identified and complied with FCIs and SKE system fault code requirements.

**Q-** Minor deviations to published procedures. Slow to comply with leader's instructions. Varied position considerably. Over controlled. Slow to rejoin. Occasionally missed or slow to respond to FCIs or SKE system fault code requirements.

**U** Procedures not IAW flight manual, directives or published procedures. Did not comply with leader's instructions. Unable to maintain formation position. Abrupt position corrections. Did not maintain safe separation. Unsafe rejoin. Did not identify or comply with FCIs or SKE system fault code requirements.

**Area 39. En-route Navigation.** Use Area 27 criteria.

### **Area 40. Slowdown.**

**Q** Thorough knowledge of slowdown procedures. Complied with all published/briefed procedures.

**Q-** Limited knowledge of slowdown procedures. Minor deviations did not affect mission accomplishment or formation integrity.

U Unsatisfactory knowledge of slowdown procedures. Major deviations adversely affected mission accomplishment or formation integrity.

**Area 41. DZ Alignment.**

Q Correctly identified the DZ and made appropriate corrections to fine-tune track. Track was IAW mission plan or as updated by crew.

Airspeed +/-5 knots

Altitude +50/-0 feet

Q- Identified the DZ late despite clear marking and sufficient landmarks. Alignment was satisfactory but tended to angle.

Airspeed +10/-5 knots

Altitude +100/-50 feet

U Unable to identify DZ due to poor technique or pilot error. Did not fly proper alignment, or unaware of alignment error. Mission not accomplished due to poor DZ acquisition, alignment or deviation from procedures, caused by pilot error or omission. Did not recognize a no-drop situation. Exceeded Q- criteria.

**Area 42. Airdrop Procedures.**

Q Meets the following tolerances:

Airspeed +/-5 KIAS

Altitude +50/-0 feet

Q- Exceeds Q criteria but does not exceed:

Airspeed +10/-5 KIAS

Altitude +100/-50 feet

U Did not recognize a no-drop situation. Exceeded Q- criteria.

**Area 43. Escape.**

Q Escape and recovery executed IAW published or briefed procedures.

Q- Minor errors in escape and/or recovery procedures that did not affect mission accomplishment.

U Major deviations from procedures that negatively affected mission accomplishment, formation integrity, or flight safety.

**Area 44. Formation Recovery.**

Q (Visual) Rolled out on final in position to intercept glide path to touchdown. (SKE) Aircraft in position to fly a normal glidepath to touchdown at the decision height (DH)/missed approach point (MAP).

Q- (Visual) Rolled out on final high or drug-in but able to make a normal landing. Slow to recognize need for an unplanned go-around. Slow to initiate unplanned go-around.

Unplanned go-around due to poor pilot procedure or technique. (SKE) Slow to identify the need for an unplanned go-around. Slow to initiate an unplanned go-around.

U (Visual) Rolled out on final in position requiring go-around due to poor pilot procedure or technique. Did not initiate unplanned go-around when required. (SKE) Missed Approach/Go-Around required due to poor pilot procedures or technique. Did not identify need for an unplanned go-around. Did not initiate an unplanned go-around when required.

#### **Area 45. Formation Landing.**

**NOTE:** Use Area 21 criteria and the following:

**Q** Held formation position throughout landing. Followed briefed procedures for reversing and braking.

**Q-** Aircraft approach separation exceeded 9,000 feet for SKE or 30 seconds for visual landings. Long landing interval did not cause following aircraft to execute go-around/missed approach.

**U** Attempted to touchdown with aircraft approach separation less than 5,000 feet (SKE) or 15 seconds (visual) spacing from the previous aircraft. Long landing interval caused following aircraft to execute go-around/missed approach. Did not follow briefed reversing and braking procedures.

#### **Area 46. Flight Leadership. (Flight and Element Lead)**

**Q** Demonstrated satisfactory knowledge of threat analysis and route construction. Applied appropriate tactics to avoid the threat and minimize exposure. Correctly planned the route of flight, with emphasis on obstruction clearance. Made timely and appropriate inputs to target/crew study. Thoroughly coordinated mission with other agencies, if applicable. Relayed all flight commands consistent with procedures, briefings, and threat. Passed information to formation aircraft in a timely manner. Provided positive guidance in leading the formation. Stayed abreast of time status and worked with crew to determine corrective action. Able to verbalize corrective action for gaining or losing time.

**Q-** Minor errors in route construction, threat analysis, or tactics selection. Unfamiliar with appropriate tactic for a given scenario. Minor errors in providing signals, or signals not given appropriately for type formation or threat. Flight profile inconsistent but did not jeopardize safety of follower aircraft. Provided minimal leadership in the conduct of the flight. Limited ability to make TOT adjustments.

**U** Made major errors in threat analysis or route construction. Could not safely fly planned profile. Unable to locate classified threat parameters. Did not contact appropriate agencies. Poor planning resulted in an unsuccessful mission. Did not pass critical information to other aircraft in-flight. Mission unsuccessful as a result of examinee's lack of performance, and/or leadership. Exceeded TOT criteria due to poor procedures or technique; made no attempt to maintain or recover TOT.

#### **Area 47. Defensive Systems/Tactics.**

**Q** Demonstrated satisfactory knowledge of defensive systems/tactics. Applied appropriate tactics to avoid the threat and minimize exposure. Made timely and appropriate inputs to crew during mission.

**Q-** Minor errors in threat analysis or tactics selection. Limited knowledge of appropriate tactic for a given scenario. Did not make timely inputs to crew during mission.

**U** Unsatisfactory defensive systems/tactics knowledge. Major errors in threat analysis or tactics selection would have resulted in an unsuccessful mission.

**Area 48. Threat Avoidance.**

**Q** Able to plot threats in-flight and formulate a plan of action to avoid lethal range of given threat system. Executed the proper evasive maneuver when given an immediate threat. Aware of appropriate tactics to avoid threats and exposure.

**Q-** Made minor errors in plotting and avoiding the lethal range of a given threat system. Minor errors in threat analysis or tactics selection.

**U** Unable to plot a given threat. Did not avoid lethal range of given threat system. Did not execute an effective evasive maneuver when given an immediate threat. Not aware of appropriate tactics for specific threats or terrain.

**Area 49. High/Low Altitude Tactical Arrival.**

**Q** Followed procedures as briefed. Correctly calculated initial descent point based on the altitude at which the approach began. Smooth positive control throughout the recovery. Aircraft in position to intercept glidepath to intended touchdown point. Constantly cleared area of intended flight.

**Q-** Performed recovery with minor deviations to published procedures. Aircraft control was not consistently positive and smooth. Over/under-shot final approach slightly but was able to intercept glidepath to intended touchdown point.

**U** Recovery not performed IAW flight manual directives or published procedures. Displayed erratic aircraft control. Over/under-shot final approach requiring a go-around or potentially unsafe maneuvering to intercept final. Did not clear area of intended flight.

**Area 50. NVG Usage/Limitations. (Verbally evaluate if not observed)**

**Q** Correctly described the use/limitations of night vision goggles (NVGs). Proper pre-flight, handling, and use of NVGs during the flight.

**Q-** Made minor omissions or deviations in describing the use/limitations of NVGs. Did not properly pre-flight, handle, or use NVGs during the flight, but caused no serious damage to equipment. Mission success not negatively affected.

**U** Procedures for using NVGs were incorrect. Caused damage to equipment. Mission unsuccessful as a result of improper NVG usage.

**Area 51. NVG Landing. (Verbally evaluate if not observed) Use Area 21 criteria.**

**Area 52. Max Effort Procedures.**

**Q** Displayed satisfactory knowledge of max-effort procedures. Could describe and apply terms such as acceleration check speed, minimum field length for maximum effort takeoff, three-engine Vmca, etc. Thoroughly analyzed departure/landing runway and surrounding terrain. Reviewed all applicable TOLD and thoroughly briefed crew.

**Q-** Minor deviations in knowledge or published procedures. Minor errors in describing or applying above terms. Minor errors or omissions in TOLD or crew briefing.

**U** Procedures not IAW flight manual directives or published procedures. Unable to analyze assault zone constraints or verbalize concerns posed by terrain or other factors. Could not describe or apply above terms. Major errors in TOLD review or crew briefing. Unsatisfactory knowledge of max-effort procedures.

**Area 53. Max Effort Takeoff.**

**Q** Maintained smooth positive control throughout departure roll and takeoff. Climbed on speed and decreased angle of attack as required once clear of obstacle.

**Q-** Control inputs were safe but not consistently smooth and positive. Minor deviations from published/briefed procedures did not jeopardize safety.

**U** Takeoff not IAW with flight manual directives or published procedures. Did not use Vmca when conditions permitted. Raised flaps too quickly in relation to airspeed. Performance of maneuver jeopardized safety.

**Area 54. Max Effort Landing.**

**Q** Maintained smooth approach path. Maintained constant aim point or made positive corrections. Touched down on centerline within the zone (defined as the first 500 feet of usable runway) without excessive bouncing or crab. Maintained runway centerline during roll out.

Airspeed +/- 5 knots

**Q-** Minor deviations to published procedures. Aim point wandered or corrections were not smooth or timely. Landed in zone but with some bounce or crab. Touchdown was no more than 10 feet from centerline.

Airspeed +10/-5 knots

**U** Touchdown short of the landing zone. Touchdown beyond the landing zone and did not execute a go-around. Exceeded Q- criteria.

**Area 55. Time of Arrival (TOA) Control. (Airland/Assault only crews)**

**Q** Meets the following tolerances:

+/- 5 minutes

**Q-** Meets the following tolerances

+/- 7 minutes

**U** Exceeded Q- criteria.

**Area 56. Ski ARA. (LC-130 only)**

**Q** Made smooth and timely corrections. Maintained positive aircraft control throughout the approach.

**Q-** Performed procedures with minor deviations. Slow to make corrections. Aircraft control was not consistently smooth and positive.

U ARA not IAW flight manual, directives, or published procedures. Made erratic corrections. Jeopardized safety.

**Area 57. Ski Landing. (LC-130 only)**

Q Performed the ski landing as directed. Maintained positive aircraft control throughout the landing. Touchdown was within the first one-third of the skiway.

Q- Performed procedure with minor deviations. Slow to make corrections. Aircraft control was not consistently smooth and positive. Touchdown was within the first one-third of the skiway.

U Landing not IAW flight manual, directives, or published procedures. Made erratic corrections throughout the maneuver. Touchdown was not within the first one-third of the skiway. Jeopardized safety.

**Area 58. Ski Takeoff. (LC-130 only)**

Q Performed the takeoff as directed. Maintained awareness of prevailing wind and surface conditions. Exercised good judgment in use of available ski surface.

Q- Performed procedure with minor deviations. Made slightly erratic or inappropriate corrections throughout the takeoff. Limited awareness of wind and/or surface conditions resulted in a less than optimum takeoff.

U Takeoff not IAW flight manual, directives, or published procedures. Made erratic or inappropriate corrections throughout the takeoff. Lack of awareness of wind and/or surface conditions jeopardized safety.

2.8.4. (440AW) **Area 46. Flight Leadership (Flight and Element Lead)** *Note:* Weather permitting, lead pilots will be graded on their planning, briefing, and use of tactical formation maneuvering (TFM) in response to the threat.

2.8.5. **Instructor. Area 59. Instructor Ability.**

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.

Q- Accomplished the above tasks with minor discrepancies that did not affect safety or adversely affect student progress.

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.

**Area 60. Instructor Demonstration.**

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

Q- Minor discrepancies in the above criteria did not affect safety or adversely affect student progress.

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.

**Area 61. Student Briefing/Critique.**

Q Briefings were well organized, accurate, and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrated the ability during the critique 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.

Q- Briefings were adequate but lacked clarity. Student critique was accurate but lacked the depth needed to maximize the learning opportunity. Briefing was complete with only minor discrepancies overlooked or omitted.

U Briefings were unsatisfactory 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.

**Area 62. Knowledge of Training Forms.**

Q All required forms were accomplished on time and IAW applicable directives. Demonstrated satisfactory knowledge of forms/publications required for mission accomplishment. Training documentation was concise and readable.

Q- Displayed limited knowledge of forms/publications. Required forms were completed with some delay and IAW applicable directives. Minor errors or omissions in training documentation.

U Knowledge of mission required forms/publications was inadequate. Did not accomplish required forms. Omitted or incorrectly documented significant training information.

## Chapter 3

### NAVIGATOR EVALUATIONS

**3.1. General.** This chapter standardizes initial, periodic, and re-qualification evaluations, including requirements for qualification, mission, and instructor evaluations.

3.1.1. Flight examiners will not intentionally fail any equipment during flight evaluations, but may deny the use of systems not affecting safety of flight.

**3.2. Qualification Evaluations (Initial, Periodic and Re-qualification).** On a Category I or II route of no less than 1.5 hours, the examinee must demonstrate proficiency in navigation procedures. All General and Qualification areas/sub areas are required qualification evaluation items unless otherwise specified in [Attachment 3](#). In addition, navigators will take the open-book written instrument examination IAW AFMAN 11-210, Instrument Refresher Course Program. This will be documented on the ground phase portion of the AF IMT 8.

3.2.1. Simulator Evaluations. Navigators may accomplish initial or periodic qualification evaluations or the qualification portion of a combined QUAL/MSN evaluation in an Operational Flight Trainer (OFT), Weapon System Trainer (WST), or Satellite Navigation Station (SNS).

3.2.1.1. Basic Qualified Navigators must accomplish, at a minimum, every other Qual evaluation in the aircraft.

3.2.1.2. **(Added-440AW)** The 440 OG navigator basic qualification profile should be at least a 2-hour category 1 sortie, preferably over water. The examinee may use CFPS, ACFP, or manually complete an AF 4116 to plan the mission. If a computer flight plan is used, the examinee may be asked to demonstrate proficiency by manually flight planning a route portion up through the level off line. In-flight log work will include one manually substantiated DR, in-flight fuel management, a TAS check on both the SCNS and TAS gauge, and standby compass deviation computation.

3.2.2. Airborne Radar Approach (ARA). The ARA is considered part of a navigator's basic qualification. It will, however, be evaluated on both the qualification and mission evaluation (only one required if doing a combination evaluation). State that an ARA was evaluated in the comments section of the AF IMT 8. A navigator graded U in the ARA area may not fly unsupervised on any flight until successful re-accomplishment. The ARA may not be verbally debriefed.

3.2.3. Grid Navigation. After initial Grid certification, evaluate Grid procedures on all periodic qualification evaluations. State, "Grid procedures were evaluated," in the comments section of the AF IMT 8. At the discretion of the flight examiner, a navigator graded U in the Grid area may continue to fly unsupervised on non-Grid missions.

**3.3. Mission Evaluations (Initial, Periodic, and Re-qualification).** Units/aircrew with an airdrop requirement will conduct mission evaluations on an airdrop sortie. Units/aircrew without an airdrop requirement will conduct mission evaluations on a sortie reflecting the unit's/individual's primary mission. All General and Mission areas/sub areas are required evaluation items unless otherwise specified in [Attachment 3](#).

3.3.1. The airdrop profile will (as a minimum) consist of a visual low-level route or a SKE/AWADS route, flown to an airdrop and a TOT. A TOT must be accomplished during flight and will not be verbally debriefed. Type of route flown will be alternated on recurring mission evaluations, i.e. if a visual route is flown this time then an AWADS/SKE route must be flown next time. The navigator will be unqualified in the C-130 mission if he/she goes for greater than two evaluation cycles without accomplishing both of these events. The evaluator and examinee will ensure the correct profile to be evaluated prior to flight. Units may require both types to be flown.

3.3.1.1. Non-Lead Navigator. Visual route: Accomplish an unfamiliar visual tactical low-level route in the lead position or single ship. Formal school student evaluations may consider any low-level route unfamiliar. SKE route: Normally accomplish in the wing position.

3.3.1.2. Lead Navigator. The lead navigator should participate in the mission commander duties. Visual route: Accomplish an unfamiliar visual tactical low-level route in the lead position or single ship. SKE/AWADS route: Accomplish the SKE/AWADS route in SKE/AWADS lead or SKE/AWADS element lead position. The SKE/AWADS portion must be planned and briefed as a 2-ship (minimum) but may be flown single ship (at the discretion of the evaluator).

**NOTES:**

An unfamiliar route is defined as a route not flown by the examinee in the previous six months. Run-in should be at least 15 degrees different from normal run-in heading.

Visual routes should be NVG routes.

3.3.1.2.1. **(Added-440AW)** Lead navigators, when not selected as mission commander, will aid in mission planning prior to mission execution, and will act as deputy mission commander if possible.

3.3.1.3. **(Added-440AW)** All 440 OG navigator mission evaluations should be scheduled to occur at night using NVG's. Evaluators will verbally evaluate NVG Usage/Limitations if not observed. Planned profiles should include both SKE and a visual route. AWADS certified navigators will be evaluated on AWADS procedures during the SKE airdrop. 440 OGV and staff examiners (if able) will check examinee FEFs prior to administering MSN evaluations to determine if a specific profile is required. Do not allow individuals to go overdue evaluations simply for the sake of scheduling a night mission or accomplishing both the SKE and Visual portions if the examinee has shown due diligence in scheduling and completing their evaluation on time. Evaluators will decide if enough has been observed to call an evaluation complete if a portion of the mission is cancelled due to circumstances beyond the examinee's control. Verbally evaluate portions of mission evaluations only as a last resort.

3.3.2. Combined QUAL/MSN Evaluation. The QUAL/MSN evaluation is not mandatory for mission qualified navigators, but may be used to reduce the number of evaluations given during a 17-month cycle, while focusing on the most essential areas of the navigation process. The QUAL/MSN evaluation will consist of an airland planning portion (to include applicable open/closed book tests/IRC/EPE/Boldface requisites) and the traditional low-level mission planning followed by the mission evaluation. An ARA will be flown. The airland

planning will be completed prior to the mission flight evaluation. The evaluator will present an overwater planning scenario based on a realistic operational mission scenario that will drive the airland mission planning. Evaluators will examine airland mission planning to include all applicable navigation procedures (route selection, flight in formation, publication review, flight plan, chart preparation, weather consideration, preflight fuel planning, equal time point computation, coast in/out procedures, deviation checks, aircraft position fixes, log work, dead reckoning, fuel management, departure and arrival).

3.3.2.1. The low-level mission planning will be completed prior to the mission evaluation. The flying phase of the mission will remain as currently defined.

3.3.2.2. During the airland/mission planning phases and flight debrief, the evaluator may ask the examinee to demonstrate navigation procedures pertaining to airland and/or mission planning.

3.3.2.3. **(Added-440AW)** The 440 OG navigator QUAL/MSN profiles will include everything in the MSN profile, plus everything required in the QUAL profile planning portion in paragraph 3.2 above. To complete the QUAL portion, as a minimum, evaluators will ask examinees to demonstrate an in-flight fuel computation, a TAS check, a standby compass deviation computation, a manual DR log entry, and a VOR/DME or TACAN fix. Evaluators may ask the examinee to demonstrate other items they feel they need to see at their discretion.

**3.4. LC-130 Evaluations.** Conduct the evaluation during actual missions or under simulated mission conditions. A ski mission profile includes a ski ARA, ski landing and ski takeoff. For single-ship VFR air- drop qualified navigators, evaluation of the airdrop mission will be at the discretion of the 109AW OG/ CC.

**3.5. Instructor Evaluations (Initial, Periodic, and Re-qualification).** Flight examiners will place particular emphasis on the examinee's ability to recognize student difficulties and provide timely, effective corrective action. State that instructional abilities were evaluated in the comments section of the AF IMT 8. List a minimum of two areas instructed by the examinee.

3.5.1. If airdrop mission qualified, all initial and re-qualification instructor evaluations require the examinee to instruct a SKE (SKE/AWADS if applicable) or visual low-level route and airdrop.

3.5.2. All instructor areas/sub areas are required instructor evaluation items on all flight evaluations.

**3.6. Emergency Procedures Evaluation (EPE).**

3.6.1. The EPE on qualification evaluations should cover the following areas: Emergency signals, SCNS/INS; ground emergencies; in-flight emergencies (fuselage fire/smoke and fumes elimination, in-flight door warning, rapid decompression, bailout procedures); landing emergencies (landing gear retracted, ditching).

3.6.2. On mission evaluations the EPE should cover airdrop emergency procedures, defensive system operation, threat interpretation and evasive action.

**3.7. Boldface.**

3.7.1. Boldface will be accomplished in conjunction with all recurring evaluations.

### 3.8. Navigator Grading Criteria.

#### 3.8.1. General.

**Q** Possessed an adequate level of knowledge of all applicable aircraft publications and procedures and understood how to apply both to enhance mission accomplishment. Publications were current and properly posted. Had all required personal/ professional equipment. Displayed satisfactory knowledge of the care and use of such equipment. Required equipment inspections were current.

**Q-** Possessed limited knowledge of directives but could locate information in appropriate publications. Publications were current but improperly posted.

**U** Unaware of established procedures and/or could not locate them in the appropriate publication in a timely manner. Publications were not current. Did not have required personal/professional equipment. Required equipment inspections were overdue or equipment was unserviceable.

#### Area 2. Mission Preparation/Planning/Performance.

**Q** Checked all factors applicable to flight such as: weather, NOTAMs, alternate airfields, airfield suitability, fuel requirements, charts, etc. Adequate knowledge of performance capabilities and operating data. Attended required briefings.

**Q-** Made minor errors or omissions in checking all factors that could have detracted from mission effectiveness. Limited knowledge of performance capabilities or approved operating procedures/ rules. Late for required briefings.

**U** Made major errors or omissions that would have prevented a safe or effective mission. Unsatisfactory knowledge of performance capabilities and/or operating data. Performance calculations exceeded Q- limits. Failed to attend required briefings.

#### Area 3. Briefings. (If Observed)

**Q** Contributed to the briefing content to ensure it included all applicable information. Briefings effectively organized and presented in a logical sequence. Covered all pertinent items. Effectively used available briefing aids.

**Q-** Allowed omission of items pertinent but not critical to the mission. Briefings lacked continuity or contained unnecessary repetition. Some difficulty communicating clearly. Did not make effective use of available briefing aids. Dwelled on non-essential items.

**U** Failed to conduct/attend required briefings. Failed to use briefing aids. Omitted essential items or did not correct erroneous information that could affect mission accomplishment. Demonstrated lack of knowledge of subject. Briefing poorly organized and not presented in a logical sequence, resulting in confusion. Presented erroneous information that would affect safe/effective mission accomplishment.

#### Area 4. Use of Checklist.

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

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

**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.

**Area 5. Safety Consciousness. (Critical)**

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

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

**Area 6. Flight Discipline. (Critical)**

**Q** Exhibited strict flight and crew discipline. Prepared and completed mission in compliance with existing instructions and directives.

**U** Failed to exhibit strict flight and crew discipline. Failed to comply with existing instructions and directives which did or could have jeopardized safety or mission success.

**Area 7. Crew Coordination/Management/CRM. Refer to AF IMT 4031, CRM Skills Criteria Training/Evaluation IMT as a reference.**

**Q** Effectively coordinated with other aircrew members throughout the assigned mission. Demonstrated operational knowledge of other crewmembers' duties and responsibilities.

**Q-** Crew coordination skills detracted from mission accomplishment. Demonstrated limited knowledge of other crewmembers' duties and responsibilities.

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

**Area 8. Communication Procedures.**

**Q** Complete knowledge of, and compliance with, correct communications procedures. Makes radio and interphone transmissions concise with proper terminology.

**Q-** Occasional deviations from procedures required re-transmissions or resetting codes. Slow in initiating or missed several required radio/interphone calls. Transmissions contained extraneous matter, were not in proper sequence, or used non-standard terminology.

**U** Incorrect procedures or poor performance caused confusion and jeopardized mission accomplishment. Omitted numerous radio/interphone calls.

**Area 9. Life Support Systems/Egress.**

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

**Q-** Limited knowledge of location and use of life support systems and equipment. Unsure of the proper operating procedures used to operate some of the aircraft egress devices.

U Displayed unsatisfactory knowledge of location and use of life support systems and equipment. Unsatisfactory knowledge of aircraft egress procedures.

**Area 10. Knowledge/Completion of Forms.**

Q All required forms and/or flight plans were complete, accurate, readable, accomplished on time and IAW applicable directives. Provided an accurate, timely debrief of significant events to applicable agencies (Intel, Maintenance, etc.)

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.

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

**Area 11. Airmanship/Situational Awareness. (Critical)**

Q Maintained situational awareness and exercised sound judgment throughout the mission. Conducted the flight with a sense of understanding and comprehension. Prioritized tasks properly.

U Lacked situational awareness. Faulty judgment resulted in decisions that had negative mission impact. Lacks the skills to prioritize tasks. Unaware of significant events that impacted the mission.

**Area 12. Boldface. (Critical)**

Q Correct, timely responses in the proper sequence. Maintained aircraft control. Coordinated proper crew actions.

U Incorrect sequence, unsatisfactory response, or unsatisfactory performance of corrective actions.

**Area 13. Emergency Procedures (If Observed).**

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

Q- Operated within prescribed limits but was slow to analyze problems or apply proper corrective actions. Did not effectively use, omitted, or deviated in use of checklist and/or available aids.

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

**3.8.2. Qualification. Area 14. Flight Plan/Charts.**

Q Constructed a flight plan (either manually or using certified computer flight planning programs) in its entirety with time errors not exceeding 5 minutes of total time to destination. Demonstrated manual flight planning procedures if a computer flight plan was used. Selected current navigation charts of a proper scale and type of the mission profile. Charts constructed IAW current directives. Plotting errors did not exceed 5 NMs.

**Q-** Made minor errors or omissions that would not have adversely affected mission accomplishment. Time errors did not exceed 10 minutes. Plotting errors did not exceed 10 NMs.

**U** Flight plan was not completed. Could not demonstrate manual flight planning procedures, or computer flight plan was not reviewed. Navigator flight plan contained major errors/omissions. Selected an improper or obsolete chart. Exceeded Q- criteria.

#### **Area 15. Fuel Planning.**

**Q** Knowledgeable with the type and use of data contained in the fuel planning regulation. "En route fuel" computation errors did not exceed 3%. Correctly computed other time and fuel analysis items. Correctly computed an ETP, when required. Correctly constructed a range control chart (optional).

**Q-** Displayed limited knowledge of fuel planning procedures. "En route fuel" computation errors did not exceed 5%. Other fuel computations and/or ETP computed with minor mathematical errors or omissions that did not adversely affect mission accomplishment. If constructed, the range control chart had minor errors or omissions.

**U** Displayed inadequate knowledge of the fuel planning regulation. Fuel computations and/or ETP were not completed or contained major errors or omissions. If constructed, range control chart had major errors and omissions. Exceeded Q- criteria.

#### **Area 16. Departure.**

**Q** Monitored headings, airspeeds, altitudes and aircraft position throughout departure. Used a SID and/or appropriate scale departure area chart. Provided headings, estimated times of arrival (ETAs), and other required information in a timely manner. Monitored appropriate radios and clearances to ensure crew compliance. Provided updated information when the clearance caused a change in the planned departure.

**Q-** Monitored aircraft position, but slow to provide headings, ETAs or other required information. Performance did not degrade mission accomplishment nor compromise flight safety.

**U** Did not monitor departure headings, airspeeds or altitudes. Unaware of aircraft position and unable to provide updated information when required. Did not use a SID and/or an appropriate scale departure area chart. Allowed major deviations that degraded mission accomplishment or compromised safety.

#### **Area 17. Radio Navigation.**

**Q** Accurately tuned, identified, read and interpreted readings of TACAN, VOR or NDBs. Consistently selected stations that afforded the best LOPs. Position accuracy within 4 NMs.

**Q-** Better use of radio aids could have enhanced navigation. Displayed weakness in fixing or plotting procedures. Position accuracy did not exceed 8 NMs.

**U** Unable to accurately tune and identify radio aids. Did not understand VOR/TACAN/NDB bearing procedures or was unable to obtain position by means of radio aids. Position error exceeded Q- criteria.

#### **Area 18. Radar Navigation/Weather Avoidance.**

**Q** Demonstrated thorough knowledge and understanding of radar equipment. Used correct procedures for radar operation and weather avoidance procedures. Radar position error did not exceed 5 NMs. Maintained proper distance from adverse weather.

**Q-** Demonstrated adequate knowledge of equipment, but occasionally used improper operating procedures. Had difficulty identifying radar returns. Did not update radar/weather analysis during worsening weather conditions. Radar position error did not exceed 10 NMs. Weather avoidance was safe with minor deviations from prescribed procedures. Did not update radar/weather analysis during worsening weather conditions.

**U** Displayed unsatisfactory knowledge of radar equipment. Used improper operating procedures that were potentially harmful to system components. Failed to correctly interpret scope returns. Displayed unsatisfactory knowledge of weather avoidance procedures. Radar position error exceeded Q- criteria.

#### **Area 19. Navigation Systems.**

**NOTE:** All references to navigation systems refer to actual systems onboard unit aircraft (i.e., INS, SCNS, or GPS).

**Q** Thorough knowledge of onboard navigation system operating procedures. Effectively used navigation systems to direct the aircraft and update system as required.

**Q-** Had only a basic knowledge of onboard navigation systems. Made minor errors in operation/ interpretation of navigation system data. More selective updating could have increased system effectiveness.

**U** Displayed inadequate knowledge of onboard navigation system procedures. Improper operation procedures could have resulted in damage to equipment or affected mission accomplishment. Failed to update or correctly interpret navigation system data.

#### **Area 20. Deviation Check. (If Applicable)**

**NOTE:** Dual INU aircraft must record and crosscheck all available sources of heading information.

**Q** Correctly computed compass deviation within 2 degrees of actual.

**Q-** Minor errors in readings or computations. Computation is within 3 degrees of actual.

**U** Did not accomplish deviation check or exceeded Q- criteria.

#### **Area 21. True Airspeed (TAS) Check. (If Applicable)**

**Q** TAS check accomplished on time and error did not exceed 5 knots.

**Q-** Minor errors in readings or computations. Error did not exceed 10 knots. Completed TAS check late.

**U** Did not accomplish TAS check. Exceeded Q- criteria.

#### **Area 22. Dead Reckoning/Rating of Navigational Computers.**

**Q** Effective use of DR/Rating of Navigational Computers during aircraft positioning. Computed and plotted positions within 10 NMs, selecting the most reliable information.

**Q-** Occasionally did not identify the navigational computer providing the most reliable information or used improper DR procedures resulting in erroneous estimated times of arrival (ETAs) or headings. Computed or plotted position error did not exceed 15 NMs.

**U** Unable to use DR/Rate Navigational Computers effectively. Computed or plotted position error exceeded Q- criteria.

**Area 23. Grid/Celestial Navigation. (If Applicable)**

**Q** Thorough knowledge of grid/celestial concepts and procedures. Complied with all published procedures unique to grid/celestial navigation.

**Q-** Limited knowledge of grid/celestial concepts and procedures. Minor deviations from published procedures.

**U** Unsatisfactory knowledge of grid/celestial concepts or procedures. Major deviations from published grid/celestial procedures.

**Area 24. Course and ETA Tolerance.**

**Q** Remained within 10 NMs of course centerline. ETAs/revised ETAs (RETAs) within 2 minutes of actual times of arrival (ATAs). Accurately determined course deviation for weather.

**Q-** Remained within 15 NMs of course centerline. ETAs/RETAs within 3 minutes of ATAs.

**U** Exceeded Q- criteria and/or the flight examiner had to alter aircraft heading to remain within course tolerance, clear special use airspace, or correctly deviate around weather.

**Area 25. Fuel Management/Range Control.**

**Q** Maintained fuel management/range control IAW directives. Kept pilot advised of fuel status.

**Q-** Adequate fuel management/range control with minor computation errors noted. Did not adequately update the pilot on fuel status.

**U** Failed to demonstrate an understanding of fuel management/range control procedures. Fuel computations not accomplished or contained significant errors. Failed to inform pilot of fuel status.

**Area 26. Descent, Approach, and Landing.**

**Q** Monitored aircraft position, approach instructions and primary approach navigation aids. Furnished headings, ETAs and other information to the pilot as required. Thoroughly understood approach and missed approach procedures. Ensured terrain clearance during approach by use of all available aids and area chart.

**Q-** Monitored aircraft position but did not fully understand approach instructions/procedures. Slow to provide headings, ETAs or other appropriate information.

**U** Failed to monitor aircraft position. Did not ensure terrain clearance during the approach. Area chart not available or used.

**Area 27. Emergency Equipment.**

**Q** Displayed thorough knowledge of location and use of emergency equipment.

**Q-** Limited knowledge of location and use of emergency equipment.

**U** Displayed unsatisfactory knowledge of emergency equipment.

**Area 28. Airborne Radar Approach (ARA).**

**Q** Complied with all published procedures. Successfully directed the aircraft to ARA minimums so that a safe landing could be made. Used proper terminology; instructions were clear and concise during the entire approach.

**Q-** Briefing was incomplete or deviated from established procedures. Required excessive course corrections on final approach, but directed the aircraft to a point where a safe landing could be made.

**U** Unsatisfactory knowledge of ARA procedures. Unable to direct the aircraft to a point from which a safe landing could be made.

**3.8.3. Mission. Area 29. Flight Plan/Airdrop Data/Charts.**

**Q** Completed flight plans in entirety with total time error not exceeding 2 minutes. Computed air release point (CARP) data completed in entirety with negligible errors. Charts completed IAW current directives. Plotting errors did not exceed 1 NM.

**Q-** Minor errors or omissions that would not have adversely affected mission accomplishment. Total time error did not exceed 4 minutes. Plotting errors did not exceed 2 NMs.

**U** Flight plan and CARP data were not completed or contained major errors/omissions. Selected an improper or obsolete chart. Plotting errors exceeded Q- criteria.

**Area 30. Briefings/Advisories.**

**Q** Contributed to the briefing content to ensure it included all applicable information. Briefings effectively organized and presented in a logical sequence. Covered all pertinent items. Effectively used available briefing aids. In-flight briefings/ advisories provided clear and concise information in a timely manner.

**Q-** Allowed omission of items pertinent but not critical to the mission. Briefings lacked continuity or contained unnecessary repetition. Some difficulty communicating clearly. Did not make effective use of available briefing aids. Dwelled on non-essential items. In-flight briefings/advisories contained minor errors or omitted non-critical information.

**U** Failed to conduct required briefings. Failed to use briefing aids. Omitted essential items or did not correct erroneous information that could affect mission accomplishment. Demonstrated lack of knowledge of subject. Briefing poorly organized and not presented in a logical sequence, resulting in confusion. Presented erroneous information that would affect safe/effective mission accomplishment. Did not provide required in-flight briefings/advisories.

**Area 31. Navigation Procedures.**

**Q** Remained within 3 NMs of course centerline and was certain of aircraft position (Exceptions to course centerline tolerance: Threat avoidance, weather deviation, air traffic control assigned headings, time control, etc.). Thorough knowledge of en route time status in

relation to objective area. Complied with all altitude restrictions. Airspeed control contributed to reliable dead reckoning (DR). Adhered to all airspace restrictions.

**Q-** Uncertain of exact aircraft position due to marginal navigational procedures. Flew 3 to 5 NMs from course without the above exceptions. Better awareness of required timing events or en route time status could have avoided unplanned maneuvering or prevented degraded DR.

**U** Exceeded 5 NMs during en route navigation without the above exceptions. Unable to maintain position awareness throughout most of the route. Unable to accurately assess required timing or unaware of mission time status, jeopardizing formation integrity or mission accomplishment. Violated airspace restrictions. Poor airspeed control resulted in numerous or extreme airspeed adjustment. Descended below minimum altitude restrictions.

### **Area 32. Defensive Systems/Tactics.**

**Q** Demonstrated satisfactory knowledge of defensive systems/tactics. Applied appropriate tactics to avoid the threat and minimize exposure. Made timely and appropriate inputs to crew during mission.

**Q-** Minor errors in threat analysis or tactics selection. Limited knowledge of appropriate tactics for a given scenario. Did not make timely inputs to crew during mission.

**U** Unsatisfactory defensive systems/tactics knowledge. Major errors in threat analysis or tactics selection would have resulted in an unsuccessful mission.

### **Area 33. Threat Avoidance.**

**Q** Able to plot threats in-flight and formulate a plan of action to avoid lethal range of given threat system. Executed the proper evasive maneuver when given an immediate threat. Aware of appropriate tactics to avoid threats and exposure.

**Q-** Made minor errors in plotting and avoiding the lethal range of a given threat system. Minor errors in threat analysis or tactics selection.

**U** Unable to plot a given threat. Did not avoid lethal range of given threat system. Did not execute an effective evasive maneuver when given an immediate threat. Not aware of appropriate tactics for specific threats or terrain.

### **Area 34. Timing.**

**Q** Timing for departure and post-drop was within five seconds of planned and timing for en route turns and drop timing was within two seconds.

**Q-** Timing for departure or post-drop was within 10 seconds of planned, and timing for en route turns and drop timing was within five seconds. Minor errors did not affect formation performance or integrity.

**U** Unsatisfactory timing negatively affected formation performance or integrity, and timing for en route turns and drop timing was greater than five seconds. Exceeded Q- criteria.

### **Area 35. SKE/AWADS Procedures.**

**Q** Thorough knowledge of SKE/AWADS components and procedures. Able to properly place cursor on selected OAPs. Correctly passed SKE information in a timely manner. SKE delay turn/drop timing within 2 seconds.

**Q-** Limited knowledge of SKE/AWADS components and procedures; however, mission not adversely affected. Passed/interpreted SKE information incorrectly or late but did not adversely affect formation integrity. SKE delay turn/drop timing error greater than 2 but no more than 5 seconds. Errors did not impact formation integrity or jeopardize airdrop load safety.

**U** Failed to pass or interpret SKE information correctly. Exceeded Q- criteria.

### **Area 36. In-flight Airdrop Computation.**

**Q** CARP properly reevaluated in-flight, correct CARP data set up in SCNS and integrated in crosschecks

**Q-** CARP not properly reevaluated or SCNS data not crosschecked, but drop successful

**U** CARP not reevaluated in-flight leading to a no-drop, unsuccessful drop, or negatively affected the airdrop; No CARP data put in SCNS

### **Area 37. Slowdown.**

**Q** Thorough knowledge of slowdown procedures. Complied with all published/briefed procedures.

**Q-** Limited knowledge of slowdown procedures. Minor deviations did not affect mission accomplishment or formation integrity.

**U** Unsatisfactory knowledge of slowdown procedures. Major deviations adversely affected mission accomplishment or formation integrity.

### **Area 38. DZ/LZ Acquisition.**

**Q** Timely identification of the DZ/LZ allowed for a smooth approach to the objective area.

**Q-** Late identification of the DZ/LZ caused an abrupt change in procedures or course into the objective area, but did not affect mission accomplishment.

**U** Did not identify the DZ/LZ or late identification negatively affected mission accomplishment.

### **Area 39. DZ Alignment.**

**Q** Directed the aircraft to an optimum DZ alignment (+/- 10° of drift killed axis) from slowdown through escape. Clearly communicated desired aircraft position to the crew.

**Q-** Slow in establishing or maintaining effective DZ alignment (11° - 15° of drift killed axis), but did not adversely impact mission accomplishment or formation integrity.

**U** Failed to establish effective DZ alignment which resulted in an unsuccessful airdrop/no-drop condition or adversely affected the formation. Exceeded Q- criteria.

### **Area 40. Time Over Target. (Critical) Airdrop Criteria.**

**Q** Meets the following tolerances:

+/-60 seconds (Visual)

+/- 90 seconds (SKE)

U Exceeded Q criteria.

**On Orbit Criteria.**

Q Meets the following tolerance:

+/- 90 seconds

U Exceeded Q criteria.

**Area 41. Airdrop Accuracy. (Critical)**

Q Within the following Circular Error (CE). Wingmen airdrops must meet these criteria after adjustment off lead's drop score:

HE, Personnel, SATB, door/ramp bundles, or wedge: 300 meters. For airdrops above 800' AGL, add 15 meters for each 100' above 800' to a maximum total CE of 600 meters.

CDS: 200 meters. For airdrops above 600' AGL, add 20 meters for each 100' above 600' to a maximum total CE of 400 meters.

For night visual airdrops, add 50 meters to allowable CE not to exceed the above maximums.

U Exceeded Q criteria.

**Area 42. Escape.**

Q Escape and recovery executed IAW published or briefed procedures.

Q- Minor errors in escape and/or recovery procedures that did not affect mission accomplishment.

U Major deviations from procedures that negatively affected mission accomplishment, formation integrity, or flight safety.

**Area 43. NVG Usage/Limitations. (If Observed)**

Q Correctly described the use/limitations of night vision goggles (NVGs). Properly pre-flighted, handled, and used NVGs during the flight.

Q- Made minor omissions or deviations in describing the use/limitations of NVGs. Did not properly preflight, handle, or use NVGs during the flight, but caused no serious damage to equipment. Mission success not negatively affected.

U Procedures for using NVGs were incorrect. Caused damage to equipment. Mission unsuccessful as a result of improper NVG usage.

**Area 44. Airborne Radar Approach (ARA).** Use Area 28 Criteria.

**Area 45. Flight Leadership. (Flight and Element Lead)**

Q Demonstrated satisfactory knowledge of threat analysis and route construction. Applied appropriate tactics to avoid the threat and minimize exposure. Correctly planned the route of flight, with emphasis on obstruction clearance. Made timely and appropriate inputs to

target/crew study. Thoroughly coordinated mission with other agencies, if applicable. Relayed all flight commands consistent with procedures, briefings, and threat. Passed information to formation aircraft in a timely manner. Provided positive guidance in leading the formation. Stayed abreast of time status and worked with crew to determine corrective action. Able to verbalize corrective action for gaining or losing time.

**Q-** Minor errors in route construction, threat analysis, or tactics selection. Unfamiliar with appropriate tactic for a given scenario. Minor errors in providing signals, or signals not given appropriately for type formation or threat. Flight profile inconsistent but did not jeopardize safety of follower aircraft. Provided minimal leadership in the conduct of the flight. Limited ability to make TOT adjustments.

**U** Made major errors in threat analysis or route construction. Could not safely fly planned profile. Unable to locate classified threat parameters. Did not contact appropriate agencies. Poor planning resulted in an unsuccessful mission. Did not pass critical information to other aircraft in-flight. Mission unsuccessful as a result of examinee's lack of performance, and/or leadership. Exceeded TOT criteria due to poor procedures or technique; made no attempt to maintain or recover TOT.

#### **Area 46. Ski ARA Radar Procedures.**

**Q** Demonstrated thorough knowledge and understanding of equipment and Ski radar procedures. Maintained good target (skiway) presentation throughout the approach.

**Q-** Demonstrated adequate knowledge of equipment, but deviated slightly from standard operating procedures. Some difficulty identifying skiway environmental returns.

**U** Displayed unsatisfactory knowledge of equipment of used potentially unsafe Ski radar procedures. Failed to properly identify and interpret skiway environmental returns.

#### **Area 47. Ski ARA Alignment.**

**Q** Aligned aircraft on a heading that paralleled or converged on centerline that allowed the copilot to identify lead-in flags and direct the aircraft to a safe landing.

**Q-** Slightly erratic course corrections were required on final approach, but aircraft alignment permitted the copilot to identify lead-in flags and direct the aircraft to a safe landing.

**U** Examinee was unable to align the aircraft to a point where a safe landing could be made.

#### **3.8.4. Instructor. Area 48. Instructor Ability.**

**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.

**Q-** Accomplished the above tasks with minor discrepancies that did not affect safety or adversely affect student progress.

**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.

**Area 49. Instructor Demonstration.**

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

**Q-** Minor discrepancies in the above criteria did not affect safety or adversely affect student progress.

**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.

**Area 50. Student Briefing/Critique.**

**Q** Briefings were well organized, accurate, and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrated the ability during the critique 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.

**Q-** Briefings were adequate but lacked clarity. Student critique was accurate but lacked the depth needed to maximize the learning opportunity. Briefing was complete with only minor discrepancies overlooked or omitted.

**U** Briefings were unsatisfactory 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.

**Area 51. Knowledge of Training Forms.**

**Q** All required forms were accomplished on time and IAW applicable directives. Demonstrated satisfactory knowledge of forms/publications required for mission accomplishment. Training documentation was concise and readable.

**Q-** Displayed limited knowledge of forms/publications. Required forms were completed with some delay and IAW applicable directives. Minor errors or omissions in training documentation.

**U** Knowledge of mission required forms/publications was inadequate. Did not accomplish required forms. Omitted or incorrectly documented significant training information.

## Chapter 4

### FLIGHT ENGINEER EVALUATIONS

**4.1. General.** This chapter standardizes initial, recurring, and re-qualification evaluations, including requirements for qualification, mission, and instructor evaluations.

4.1.1. Flight examiners will not intentionally fail any equipment during flight evaluations, but may deny the use of systems not affecting safety of flight.

4.1.2. Under no circumstances will a flight examiner allow the aircraft to slow below one engine-out V<sub>mca</sub> or exceed aircraft limitations specified in the flight manual, regardless of tolerances listed for specific areas.

**4.2. Qualification Evaluations (Initial, Periodic and Re-qualification).** Accomplish qualification evaluations on any flight profile except Functional Check Flights and Acceptance Check Flights. All General, Qualification, Flight Phase, and Systems Operations/Knowledge/Limitations areas/subareas are required qualification evaluation items unless otherwise specified in [Attachment 4](#). All of Areas, 33 through 57, may be covered during the Emergency Procedures Evaluation.

**4.3. Mission Evaluations (Initial, Periodic and Re-qualification).** Conduct initial, periodic, and re-qualification mission evaluations on a flight that requires tactical checklists to be accomplished. Profile should be scheduled and planned to include all mission qualifications held. Example: An engineer with NVG qualifications should fly a profile using NVG procedures. Minimum requirement for a mission eval will normally include a low-level, airdrop, and max effort take-off and landing. Verbally debrief mission items not accomplished in-flight. If the mission evaluation is conducted independently of the qualification evaluation, another EPE must be conducted and annotated in the ground phase section of the mission AF IMT 8. EPE for the mission evaluation should be directed towards emergency procedures encountered/associated with a tactical mission; however, airdrop emergency procedures, defensive systems operation, lookout doctrine/threat calls, and threat pre-emptive/reactive counter-tactics will be verbally evaluated. All General and Mission areas/sub areas are required mission evaluation items unless otherwise specified in [Attachment 4](#).

4.3.1. **(Added-440AW)** All 440 OG flight engineers should receive combined QUAL/MSN evaluations on tactical formation missions at night.

**4.4. LC-130 Evaluations.** 109AW mission evaluations will be at the discretion of the OG/CC. Mission evaluation items may be verbally debriefed with 109AW OG/CC approval.

**4.5. Instructor Evaluations (Initial, Periodic and Re-qualification).** Flight examiners will place particular emphasis on the examinee's ability to recognize student difficulties and provide timely, effective corrective action. All Instructor areas/sub areas are required instructor evaluation items. State that instructional ability was evaluated in the comments section of the AF IMT 8. List a minimum of two areas instructed by the examinee.

**4.6. Emergency Procedures Evaluation (EPE).** The EPE should cover a cross section of aircraft systems emergencies such as bleed air, fuel, oil, electrical, engines, hydraulics and propellers. Include applicable Boldface procedures. Examinees should be able to demonstrate

an understanding of aircraft systems, beyond the actual steps required for an emergency procedure. EPE for mission evaluations will include airdrop emergency procedures, defensive systems operation (representative of unit's aircraft), lookout doctrine, threat calls, and threat pre-emptive/reactive countertactics.

4.6.1. Take-off and Landing Data (TOLD) definitions, take-off procedures and emergencies for Qual and Mission evaluations. Mission evaluations will also include maximum effort TOLD definitions, take-off procedures and emergencies.

#### **4.7. Flight Engineer Grading Criteria.**

##### **4.7.1. General. Area 1. Directives/Publications/Personal and Professional Equipment.**

**Q** Possessed a working knowledge of all applicable aircraft publications and procedures and understood how to apply both to enhance mission accomplishment. Publications were current and properly posted. Had all required personal/professional equipment. Displayed satisfactory knowledge of the care and use of such equipment. Required equipment inspections were current.

**Q-** Possessed a limited knowledge of directives but could locate information in appropriate publications. Publications were current but improperly posted.

**U** Unaware of established procedures and/or could not locate them in the appropriate publication in a timely manner. Publications were not current. Did not have required personal/professional equipment. Required equipment inspections were overdue or equipment was unserviceable.

##### **Area 2. Mission Preparation/Planning.**

**Q** Thorough knowledge of Tactical/Contingency/Evasion Plans and other mission preparation/planning items. Attended required briefings. Complied with all directives prior to flight.

**Q-** Limited knowledge of Tactical/Contingency/Evasion Plans, etc., as applicable. Did not fully comply with directives, but did not detract from mission effectiveness. Late for required briefings.

**U** Unsatisfactory knowledge of Tactical/Contingency/Evasion Plans, etc., as applicable. Did not comply with directives which detracted from mission effectiveness. Failed to attend required briefings.

##### **Area 3. Briefings. (If Observed)**

**Q** Contributed to the briefing to ensure it included all pertinent items and applicable information. Briefings were effectively organized and presented in a logical sequence.

**Q-** Allowed omission of items pertinent but not critical to the mission. Briefings lacked continuity or contained unnecessary repetition. Some difficulty communicating clearly.

**U** Failed to conduct required briefings. Omitted essential items or did not correct erroneous information that could affect mission accomplishment. Demonstrated lack of knowledge of subject. Briefing poorly organized and not presented in a logical sequence, resulting in confusion. Presented erroneous information that would affect safe/effective mission accomplishment.

**Area 4. Use of Checklist.**

**Q** Consistently used the correct checklist and gave the correct response at the appropriate time throughout the mission.

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

**U** Used 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.

**Area 5. Safety Consciousness. (Critical)**

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

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

**Area 6. Flight Discipline. (Critical)**

**Q** Exhibited strict flight and crew discipline. Prepared and completed mission in compliance with existing instructions and directives.

**U** Failed to exhibit strict flight and crew discipline. Failed to comply with existing instructions and directives which did or could have jeopardized mission success.

**Area 7. Crew Coordination/Management/CRM. Refer to AF IMT 4031, CRM Skills Criteria Training/Evaluation Form as a reference.**

**Q** Effectively coordinated with other aircrew members throughout the assigned mission. Demonstrated satisfactory knowledge of other crewmembers' duties and responsibilities.

**Q-** Crew coordination skills detracted from mission accomplishment. Demonstrated limited knowledge of other crewmembers' duties and responsibilities.

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

**Area 8. Communication Procedures.**

**Q** Complete knowledge of, and compliance with, correct communications procedures. Makes radio/interphone transmissions concise with proper terminology.

**Q-** Occasional deviations from procedures that required re-transmissions. Slow in initiating or missed several required radio/interphone calls. Transmissions contained extraneous matter, were not in proper sequence, or used non-standard terminology.

**U** Incorrect procedures or poor performance caused confusion and jeopardized mission accomplishment. Omitted numerous radio/interphone calls.

**Area 9. Life Support Systems/Egress.**

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

**Q-** Limited knowledge of location and use of life support systems and equipment. Unsure of the proper operating procedures used to operate some of the aircraft egress devices.

**U** Displayed unsatisfactory knowledge of location and use of life support systems and equipment. Unsatisfactory knowledge of aircraft egress procedures.

**Area 10. Knowledge/Completion of Forms.**

**Q** All required forms were complete, accurate, readable, accomplished on time and IAW applicable directives. Provided an accurate, timely debrief of significant events to applicable agencies (Intelligence, Maintenance, etc.)

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

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

**Area 11. Airmanship/Situational Awareness. (Critical)**

**Q** Maintained situational awareness and exercised sound judgment throughout the mission. Conducted the flight with a sense of understanding and comprehension. Prioritized tasks properly.

**U** Lacked situational awareness. Faulty judgment resulted in decisions that had negative mission impact. Lacks the skills to prioritize tasks. Unaware of significant events that impacted the mission.

**Area 12. Boldface. (Critical)**

**Q** Correct and timely responses in the proper sequence.

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

**Area 13. Emergency Procedures.**

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

**Q-** Operated within prescribed limits but was slow to analyze problems or apply proper corrective actions. Did not effectively use, omitted, or deviated in use of checklist and/or available aids.

**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. Area 14. Aircraft Preflight Inspection.**

**NOTE:** Use the following criteria for Areas 14A through 14F.

**Q** Accomplished required inspections in a thorough and proficient manner as outlined in applicable checklists and/or directives without deviations or omissions. Properly checked aircraft systems and components IAW flight manual. Coordinated with ground support personnel. Correctly determined aircraft status.

**Q-** Minor deviations or omissions in the accomplishment of required inspections as outlined in applicable checklists and/or directives. Limited knowledge of proper procedures for checking aircraft systems/components IAW flight manual. Limited coordination with ground support personnel. Difficulty in determining aircraft status.

**U** Failed to accomplish required inspections in a thorough and proficient manner. Major deviations or omissions. Omitted or improperly checked aircraft systems/components IAW flight manual. Did not coordinate with ground support personnel. Unable to determine correct aircraft status. Required assistance to complete inspections or exceeded time allotted causing a mission delay.

**Sub Area 14A. Before Exterior Inspection.**

**Sub Area 14B. Power Off Inspection.**

**Sub Area 14C. Power On Inspection.**

**Sub Area 14D. Exterior Inspection.**

**Sub Area 14E. Interior Inspection.**

**Sub Area 14F. Top of Airplane Inspection.**

**Area 15. Performance/TOLD.**

**Q** Complete knowledge of aircraft performance. Correctly computed performance data using applicable charts and applied the appropriate corrections for existing conditions. Correctly computed the C-130 TOLD card. Required airspeeds were within 2 knots. Required distances were within 200 feet. Predicted take-off torque within 200 in/lbs. Transcribed the correct data to the Mini TOLD Card.

**Q-** Limited knowledge of aircraft performance. Minor errors in the use of applicable performance charts, computing the performance data, or correcting for existing conditions resulted in data exceeding Q criteria. Required airspeeds were within 4 knots and distances within 400 feet. Predicted takeoff torque within 400 in/lbs. Incorrectly transcribed data to Mini TOLD card. Errors did not compromise safety of flight.

**U** Failed to compute TOLD card. Omitted necessary corrections for existing conditions, or errors in computing performance data resulted in airspeeds and/or distances exceeding Q-criteria. Inadequate knowledge of aircraft performance. Did or could have compromised safety of flight.

**4.7.3. Flight Phase. Area 16. Arrival/Departure Procedures.**

**Q** Demonstrated satisfactory knowledge of arrival/departure procedures to include Standard Instrument Departures (SIDs), approach plates, and climb-out procedures.

**Q-** Had difficulty in interpretation of arrival/departure procedures, SIDs, approach plates, or climb-out procedures.

**U** Unsatisfactory knowledge of arrival/departure procedures, SIDs, approach plates, or climb-out procedures.

**Areas 17 Through 32.**

**Q** Accomplished required checklists without errors, omissions, or deviations. Backed up pilots on flight parameters (i.e. altitudes, airspeeds, and clearances). Satisfactorily monitored engine/system indicators. All system usage and configuration was IAW flight manual and applicable directives. Recognized and corrected minor omissions or deviations. Recognized, reported, and properly documented out of limit conditions or malfunctions.

**Q-** Accomplished required checklists with minor errors, omissions, or deviations. Backed up pilots on flight parameters (i.e. altitudes, airspeeds, and clearances) with some deviations. Monitored engine/system indicators with some deviations. Limited knowledge of systems operation and configuration caused deviations from flight manual and applicable directives. Slow to recognize, report, and/or document out of limit conditions or malfunctions.

**U** Failed to accomplish required checklists or made numerous errors, omissions, and deviations. Failed to back up pilots on flight parameters (i.e. altitudes, airspeeds, and clearances). Failed to monitor engine/system indicators. Inadequate knowledge of systems operation and configuration. Allowed limitations to be exceeded which, without correction, would cause damage to equipment.

**Area 17. Cockpit.**

**Area 18. Before Starting.**

**Area 19. Starting Engines.**

**Area 20. Before Taxi.**

**Area 21. Taxi.**

**Area 22. Before Take-off.**

**Area 23. Line-up.**

**Area 24. Take-off.**

**Area 25. After Take-off.**

**Area 26. En-route.**

**Area 27. Descent.**

**Area 28. Before Landing.**

**Area 29. Landing.**

**Area 30. After Landing.**

**Area 31. Engine Shutdown.**

**Area 32. Before Leaving Aircraft.**

**4.7.4. Systems Operations/Knowledge/Limitations. Areas 33 Through 57.**

**NOTE:** Use Area 13 criteria and the following:

**Q** Demonstrated a complete knowledge of aircraft systems and operating limitations both with and without reference to the flight manual and/or available aids.

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

**U** Unsatisfactory systems knowledge. Unable to demonstrate or explain the procedures for aircraft systems operations with or without reference to the flight manual and/or available aids.

**Area 33. Engine.**

**Area 34. Propeller.**

**Area 35. APU or GTC.**

**Area 36. Fire Detection/Extinguishing.**

**Area 37. Oxygen.**

**Area 38. Pneumatics/Bleed Air.**

**Area 39. Pressurization/Depressurization.**

**Area 40. Air Conditioning/Floor Heating.**

**Area 41. Anti-icing/De-icing.**

**Area 42. Flight Controls.**

**Area 43. Flaps.**

**Area 44. Autopilot**

**Area 45. Windows/Hatches/Doors/Ramp.**

**Area 46. Landing Gear.**

**Area 47. Brakes.**

**Area 48. Nose Wheel Steering.**

**Area 49. Hydraulics.**

**Area 50. Fuel.**

**Area 51. Refuel/Defuel.**

**Area 52. Electrical.**

**Area 53. Radios/IFF/SIF.**

**Area 54. Radar.**

**Area 55. Navigation Equipment.**

**Area 56. Cockpit Voice Recorder (CVR)/Digital Flight Data Recorder (DFDR).**

**Area 57. Defensive Systems/Tactics.**

**Area 58. Ground Support Equipment.**

**4.7.5. Mission.**

4.7.5.1. Mission Procedures are written to allow each unit to evaluate their mission specific events. Some units do not have any flight specific mission events for flight engineers. Those flight engineers who do not have flight specific mission events will be verbally evaluated on the unit's mission. Applicable mission requirements will be published in the local unit supplement to this AFI.

**Area 59. Mission Procedures.**

**Q** Fully knowledgeable of unit mission procedures. Performed all associated mission checklists and mission operations IAW directives. Demonstrated satisfactory knowledge of mission events.

**Q-** Limited knowledge of unit mission procedures. Minor deviations, errors, or omissions on mission checklists, but did not adversely affect mission accomplishment.

**U** Inadequate knowledge of unit mission procedures. Made significant errors, deviations, and/or omissions in mission checklists that did or would have adversely affected the safe or timely accomplishment of the mission.

**Area 60. NVG Usage/Limitations. (If Observed)**

**Q** Correctly described the use/limitations of night vision goggles (NVGs). Properly pre-flighted, handled, and used NVGs during the flight.

**Q-** Made minor omissions or deviations in the use/limitations of NVGs. Did not properly pre-flight, handle, or use NVGs during the flight, but caused no serious damage to equipment. Mission success not negatively affected.

**U** Procedures for using NVGs were incorrect. Caused damage to equipment. Mission unsuccessful as a result of improper NVG usage.

**4.7.6. Instructor. Area 61. Instructor Ability.**

**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.

**Q-** Accomplished the above tasks with minor discrepancies that did not affect safety or adversely affect student progress.

**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.

**Area 62. Instructor Demonstration.**

**Q** Effectively demonstrated correct procedures or systems operation. Thorough knowledge of applicable aircraft systems, procedures, publications, and directives.

**Q-** Minor discrepancies in the above criteria did not affect safety or adversely affect student progress.

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

**Area 63. Student Briefing/Critique.**

Q Briefings were well organized, accurate, and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrated the ability during the critique 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.

Q- Briefings were adequate but lacked clarity. Student critique was accurate but lacked the depth needed to maximize the learning opportunity. Briefing was complete with only minor discrepancies overlooked or omitted.

U Briefings were unsatisfactory 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.

**Area 64. Knowledge of Training Forms.**

Q All required forms were accomplished on time and IAW applicable directives. Demonstrated satisfactory knowledge of forms/publications required for mission accomplishment. Training documentation was concise and readable.

Q- Displayed limited knowledge of forms/publications. Required forms were completed with some delay and IAW applicable directives. Minor errors or omissions in training documentation.

U Knowledge of mission required forms/publications was inadequate. Did not accomplish required forms. Omitted or incorrectly documented significant training information.

## Chapter 5

### LOADMASTER EVALUATIONS

**5.1. General.** This chapter standardizes initial, periodic, and re-qualification evaluations, including requirements for qualification, mission, and instructor evaluations.

5.1.1. Flight examiners will not intentionally fail any equipment during flight evaluations, but may deny the use of systems not affecting safety of flight.

**5.2. Qualification Evaluations (Initial, Periodic, and Re-qualification).** For qualification evaluations, the aircraft must be pre-flighted and loaded with a palletized or vehicular load, a mission flown, and then offloaded to complete the evaluation. If a qualification evaluation is combined with a mission evaluation, an airdrop platform/CDS can be used for the qualification evaluation load/offload requirement. If a load is not available for an evaluation, palletized, airdrop platform, or vehicular cargo will be static loaded and offloaded upon completion of the flight portion. All General and Qualification areas/sub areas are required qualification evaluation items unless otherwise specified in [Attachment 5](#).

**5.3. Mission Evaluations (Initial, Periodic and Re-qualification).** Initial and re-qualification (unqualified past two years) mission evaluations will consist of a mass CDS (minimum four containers), or a sequential heavy equipment load. If a mass CDS or sequential heavy equipment load cannot be dropped for the evaluation, a single heavy equipment platform may be airdropped provided sequential heavy equipment and mass CDS airdrop rigging was completed during training. As a minimum for periodic mission evaluations the airdrop must consist of a single CDS container or single heavy equipment platform. Do not conduct two separate mission evaluations on the same flight with only one airdrop load aboard. An airdrop sortie and evaluation may be credited if an unplanned no-drop is called after completion of the Slowdown Checklist provided the no-drop was not due to loadmaster error. All General and Mission areas/sub areas are required mission evaluation items unless otherwise specified in [Attachment 5](#). Document initial personnel restriction when actual personnel is not completed during initial mission training on IMT Form 8. Use the following statement when actual personnel cannot be performed during initial mission training:

**RESTRICTIONS:**

SUPERVISED STATUS for personnel airdrop until an actual static line personnel airdrop is accomplished. Final certification will be accomplished under the supervision of a loadmaster instructor or flight examiner.

Actual personnel airdrop accomplished on \_\_\_\_\_.

5.3.1. **(Added-440AW)** All 440 OG loadmasters should receive combined QUAL/MSN evaluations. The standard profile includes both the QUAL and MSN areas/sub-areas, and is conducted during local tactical training sorties to an actual CDS or Heavy Equipment airdrop. Loadmaster QUAL/MSN or MSN evaluations scheduled during NVG missions will include the use of NVG's. Verbally evaluate NVG Usage/Limitations, hazardous materials, passenger handling and border clearance if not observed on evaluations.

**5.4. LC-130 Evaluations.** 109AW mission evaluations will be at the discretion of the OG/CC. Mission evaluation items may be verbally debriefed with 109AW OG/CC approval.

**5.5. Instructor Evaluations (Initial, Periodic and Re-qualification).** Flight examiners will place particular emphasis on the examinee's ability to recognize student difficulties and provide timely, effective corrective action. All instructor areas/sub areas are required instructor evaluation items. State that instructional abilities were evaluated in the comments section of the AF Form 8. List a minimum of two areas instructed by the examinee.

**5.6. Emergency Procedures Evaluation (EPE).**

5.6.1. The EPE should cover the following areas during a qualification evaluation: Emergency signals, ground emergencies, in-flight emergencies (fuselage fire/smoke and fume elimination, in-flight door warning, rapid decompression, cargo door and ramp failure, cargo jettison, bailout procedures); landing emergencies (landing gear retracted, ditching).

5.6.2. The EPE should cover the following areas during a mission evaluation: Personnel; heavy equipment; CDS/CRRC, and any other mission specific airdrop emergencies.

**5.7. Loadmaster Grading Criteria.**

**5.7.1. General. Area 1. Directives/Publications/Personal and Professional Equipment.**

**Q** Possessed an adequate level of knowledge of all applicable aircraft publications and procedures and understood how to apply both to enhance mission accomplishment. Publications were current and properly posted. Had all required personal/professional equipment. Displayed satisfactory knowledge of the care and use of such equipment. Required equipment inspections were current.

**Q-** Possessed a limited knowledge of directives but could locate information in appropriate publications. Publications were current but improperly posted.

**U** Unaware of established procedures and/or could not locate them in the appropriate publication in a timely manner. Publications were not current. Did not have required personal/professional equipment. Required equipment inspections were overdue or equipment was unserviceable.

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

**Q** Checked all factors applicable to flight such as: itinerary, aircraft configuration, and fuel requirements, airdrop equipment drop sequence, etc. Attended required briefings.

**Q-** Made minor errors or omissions in checking all factors that could have detracted from mission effectiveness. Did not fully comply with directives. Late for required briefings.

**U** Made major errors or omissions, which would have prevented an effective mission. Failed to attend required briefings.

**Area 3. Briefings. (If Observed)**

**Q** Contributed to the briefing content to ensure it included all applicable information. Briefings effectively organized and presented in a logical sequence. Covered all pertinent items.

**Q-** Allowed omission of items pertinent but not critical to the mission. Briefings lacked continuity or contained unnecessary repetition. Some difficulty communicating clearly.

**U** Failed to conduct required briefings. Omitted essential items or did not correct erroneous information that could affect mission accomplishment. Demonstrated lack of knowledge of subject. Briefing poorly organized and not presented in a logical sequence, resulting in confusion. Presented erroneous information that would affect safe/effective mission accomplishment.

#### **Area 4. Use of Checklist.**

**Q** Consistently used the correct checklist and gave the correct response at the appropriate time throughout the mission.

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

**U** Used 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.

#### **Area 5. Safety Consciousness. (Critical)**

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

**U** Not aware of, or did not comply with, all safety factors required for safe aircraft operation or mission accomplishment. Operated aircraft systems or performed duties in a dangerous manner.

#### **Area 6. Flight Discipline. (Critical)**

**Q** Exhibited strict flight and crew discipline. Prepared and completed mission in compliance with existing instructions and directives.

**U** Failed to exhibit strict flight and crew discipline. Failed to comply with existing instructions and directives which did or could have jeopardized safety or mission success.

#### **Area 7. Crew Coordination/Management/CRM. Refer to AF IMT 4031, CRM Skills Criteria**

**Training/Evaluation Form** as a reference.

**Q** Effectively coordinated with other aircrew members throughout the assigned mission. Demonstrated operational knowledge of other crewmembers duties and responsibilities.

**Q-** Crew coordination skills detracted from mission accomplishment. Demonstrated limited knowledge of other crewmembers' duties and responsibilities.

**U** Poor crew coordination or unsatisfactory knowledge of other crewmember duties and responsibilities negatively affected mission accomplishment or safety of flight.

#### **Area 8. Communication Procedures.**

**Q** Complete knowledge of, and compliance with, correct communications procedures. Makes radio and interphone transmissions concise with proper terminology.

**Q-** Occasional deviations from procedures required re-transmissions or resetting codes. Slow in initiating or missed several required radio/interphone calls. Transmissions contained extraneous matter, were not in proper sequence, or used non-standard terminology.

**U** Incorrect procedures or poor performance caused confusion and jeopardized mission accomplishment. Omitted numerous radio/interphone calls.

#### **Area 9. Life Support Systems/Egress.**

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

**Q-** Limited knowledge of location and use of life support systems and equipment. Unsure of the proper operating procedures used to operate some of the aircraft egress devices.

**U** Displayed unsatisfactory knowledge of location and use of life support systems and equipment. Unsatisfactory knowledge of aircraft egress procedures.

#### **Area 10. Knowledge/Completion of Forms.**

**Q** All required forms were complete, accurate, readable, accomplished on time and IAW directives. Provided an accurate, timely debrief of significant events to applicable agencies (Intel, Tactics, Maintenance, etc.).

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

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

#### **Area 11. Airmanship/Situational Awareness. (Critical)**

**Q** Maintained situational awareness and exercised sound judgment throughout the mission. Conducted the flight with a sense of understanding and comprehension. Prioritized tasks properly.

**U** Lacked situational awareness. Faulty judgment resulted in decisions that had negative mission impact. Lacks the skills to prioritize tasks. Unaware of significant events that impacted the mission.

#### **Area 12. Preflight.**

**Q** Completed all systems preflight/inspections IAW tech orders, checklists, and AFIs.

**Q-** Minor deviations from established systems preflight/inspection. Used individual technique instead of established procedure and was unaware of differences.

**U** Failed to preflight critical component or could not conduct a satisfactory preflight/inspection.

#### **Area 13. Emergency Procedures.**

**Q** Correctly analyzed, stated, and understood aircraft/airdrop emergencies and performed required procedures to correct the emergency/malfunction.

**Q-** Correctly analyzed and understood aircraft/airdrop emergencies but, had difficulty performing/stating required procedures to correct the emergency/malfunction.

**U** Failed to analyze, state, and did not understand aircraft/airdrop emergencies and/or could not perform required procedures to correct the emergency/malfunction.

**Area 14. Boldface. (Critical)**

**Q** Correct and timely responses in the proper sequence.

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

**5.7.2. Qualification. Area 15. Emergency Equipment.**

**Q** Located, inspected, distributed and/or demonstrated the proper use of emergency equipment. Complete knowledge of emergency equipment.

**Q-** Difficulty locating, inspecting, and/or demonstrating the proper use of emergency equipment. Knowledge of equipment is adequate, but needs improvement.

**U** Failed to inspect, distribute and/or demonstrate the proper use of emergency equipment. Unsatisfactory knowledge of emergency equipment.

**Area 16. Aircraft Configuration.**

**Q** Ensured the aircraft was properly configured to accommodate the load. Familiar with various configurations as outlined in applicable instructions/directives and properly stowed configuration items that were not used.

**Q-** Difficulty configuring the aircraft but did not impede loading of aircraft. Limited knowledge of various configurations as outlined in applicable instructions/directives.

**U** Failed to ensure proper aircraft configuration or caused loading delays. Unsatisfactory knowledge of seat and litter configurations. Failed to properly stow configuration items.

**Area 17. Load Planning/Inspection.**

**Q** Accurately planned a load of cargo and/or passengers and met aircraft center of gravity (CG) limits. Inspected cargo for proper preparation and documentation.

**Q-** Difficulty planning cargo load and/or passengers to meet CG limits. Difficulty inspecting cargo for proper preparation and documentation.

**U** Unable to plan a cargo load and/or passengers to meet CG limits. Failed to inspect cargo for proper preparation and documentation.

**Area 18. On/Off Loading Procedures.**

**Q** Correctly on/off loaded cargo safely and in a timely manner.

**Q-** Difficulty on/off loading cargo in the aircraft. Minor deviations occurred but safety was not compromised.

**U** Failed to correctly or safely on/off load cargo. Loading procedures caused undue delay.

**Area 19. Supervisory Ability.**

**Q** Established and maintained control of all personnel during loading operations. Safety was not compromised.

**Q-** Established and maintained control of all personnel, but made minor supervisory errors. Safety was not compromised.

**U** Did not establish or maintain control of all personnel. Safety was compromised.

**Area 20. Tie Down/Restraint.**

**Q** Correctly calculated and applied correct amount of restraint to a given item. Understood and could state the principles of restraint.

**Q-** Difficulty calculating and applying the correct amount of restraint. Did not fully understand the principles of restraint.

**U** Failed to correctly calculate and apply the correct amount of restraint. Did not understand and could not state the principles of restraint.

**Area 21. Winching Procedures.**

**Q** Correctly demonstrated and/or explained winching procedures.

**Q-** Difficulty demonstrating and/or explaining correct winching procedures. Safety was not compromised.

**U** Failed to demonstrate and/or explain correct winching procedures. Safety was compromised.

**Area 22. Hazardous Material. (Verbally evaluate if not observed)**

**Q** Understood hazardous cargo procedures. Could comply with the provisions of AFMAN 24-204, and/or follow the procedures for air movement of hazardous cargo under tactical, contingency or emergency conditions.

**Q-** Understood hazardous cargo procedures, but made minor deviations. Safety was not compromised.

**U** Did not understand or did not comply with hazardous cargo procedures provided in AFMAN

24-204. Compromised safety.

**Area 23. Aircraft Limitations.**

**NOTE:** Limitations may include, but are not limited to: cargo floor, roller, station, compartment, pallet weight, height and nets, loading aids (ground loading ramps, truck loading ramps, bridge plates, pry bars, ramp support and shoring).

**Q** Correctly understood, and could apply the correct limitations associated with the aircraft, on/off loading, and associated equipment.

**Q-** Difficulty applying various limitations. Located correct limitations in the loading manual, if needed.

**U** Could not apply various limitations and/or could not locate correct limitations in the loading manual.

**Area 24. Passenger Handling. (Verbally evaluate if not observed)**

**Q** Correctly briefed and performed passenger handling procedures.

**Q-** Difficulty briefing and/or performing passenger handling procedures.

**U** Failed to brief and/or did not perform proper passenger handling procedures.

**Area 25. Anti-Hijacking/Aircraft Security.**

**Q** Explained proper anti-hijacking/aircraft security procedures.

**Q-** Difficulty accomplishing/explaining proper anti-hijacking/aircraft security procedures.

**U** Could not explain proper anti-hijacking/aircraft security procedures.

**Area 26. Border Clearance. (Verbally evaluate if not observed)**

**Q** Correctly followed MAJCOM guidelines. Completed/explained border clearance requirements IAW current directives.

**Q-** Difficulty accomplishing/explaining border clearance requirements. Minor mistakes degraded effectiveness.

**U** Could not accurately complete forms. Unaware of command guidance, or could not explain requirements.

**Area 27. Weight and Balance.**

**Q** Accurately completed DD Form 365-4. Errors in takeoff or landing gross weights did not exceed +/- 500 lbs. Percent of MAC was within +/- 0.5 percent. Did not exceed aircraft gross takeoff limits. Did not exceed center of gravity limitations for takeoff or landing.

**Q-** Errors on DD Form 365-4 exceeded takeoff or landing gross weights by +/- 501 to 1,000 pounds or percent of MAC limitations by +/- 0.6 to 1.0 percent. Did not exceed aircraft gross takeoff limits. Did not exceed center of gravity limitations for takeoff or landing.

**U** Failed to complete DD Form 365-4 accurately. Takeoff or landing gross weight was in excess of +/- 1,000 pounds or percent of MAC limitations exceeded +/- 1.0 percent. Exceeded aircraft gross takeoff weight/center of gravity limits.

**NOTE:** The method used to complete the Form F (PDA or manually) will be determined by the flight examiner.

**Area 28. Scanner Duties.**

**Q** Periodically performed scanner duties by monitoring aircraft interior and exterior for abnormal conditions.

**Q-** Did not scan in a timely manner to recognize abnormal conditions.

**U** Failed to perform scanner duties. Did not monitor or make periodic checks of the aircraft interior and exterior for abnormal conditions.

**Area 29. Engine Running On-load/Offload.**

**Q** Followed/explained proper procedures for engine running on/off loading operations.

**Q-** Difficulty following/explaining proper procedures for engine running on/off loading operations.

**U** Did not follow/explain proper procedures for engine running on/off loading operations.

**Area 30. Combat Offload.**

**Q** Followed/explained proper procedures for combat offload operations.

**Q-** Difficulty following/explaining proper procedures for combat offload operations.

**U** Did not follow/explain proper procedures for combat offload operations.

**Area 31. Systems Knowledge. (QUAL)**

**NOTE:** As a minimum, evaluate the following areas: Oxygen, Ramp and Door, Dual Rails.

**Q** Displayed satisfactory knowledge of systems, ensuring satisfactory operation within prescribed limits. Explained proper corrective action for each type of malfunction.

**Q-** Difficulty in displaying a satisfactory knowledge of systems. Slow to analyze problems or apply proper corrective actions.

**U** Failed to display a satisfactory knowledge of systems. Unable to analyze problems or apply proper corrective actions.

**5.7.3. Mission. Area 32. Airdrop Rigging Procedures.**

**Q** Correctly rigged and identified key airdrop components.

**Q-** Difficulty rigging and/or identifying key airdrop components.

**U** Failed to rig and/or identify key airdrop components.

**Area 33. Joint Airdrop Inspection.**

**Q** Correctly completed the joint airdrop inspection using applicable inspection form.

**Q-** Difficulty completing the joint airdrop inspection using applicable inspection forms.

**U** Failed to complete the joint airdrop inspection using applicable inspection form.

**Area 34. Airdrop Knowledge.**

**NOTE:** Evaluate the following areas: Personnel, Heavy Equipment, CDS/CRRC, and any other mission specific airdrop event.

**Q** Correctly demonstrated and understood airdrop procedures and airdrop load information.

**Q-** Difficulty demonstrating and/or understanding airdrop procedures and airdrop load information.

**U** Could not demonstrate and/or understand airdrop procedures and airdrop load information.

**Area 35. NVG Usage/Limitations. (Verbally evaluate if not observed)**

**Q** Correctly described the use/limitations of night vision goggles (NVGs). Properly pre-flighted, handled, and used NVGs during the flight.

**Q-** Made minor omissions or deviations in the use/limitations of NVGs. Did not properly preflight, handle, or use NVGs during the flight, but caused no serious damage to equipment. Mission success not negatively affected.

**U** Procedures for using NVGs were incorrect. Caused damage to equipment. Mission unsuccessful as a result of improper NVG usage.

**Area 36. Systems Knowledge. (MSN)**

**NOTE:** As a minimum, evaluate the following areas: Static line retrievers, ADS system, aft anchor cable supports, bomb rack.

**Q** Displayed satisfactory knowledge of systems, ensuring satisfactory operation within prescribed limits. Explained proper corrective action for each type of malfunction.

**Q-** Difficulty in displaying a satisfactory knowledge of systems. Slow to analyze problems or apply proper corrective actions.

**U** Failed to display a satisfactory knowledge of systems. Unable to analyze problems or apply proper corrective actions.

**Area 37. Coordinated Tasks Briefing.**

**Q** Correctly briefed the coordinated tasks IAW current directives.

**Q-** Difficulty briefing the coordinated tasks IAW current directives.

**U** Failed to accomplish the coordinated tasks briefing IAW current directives.

**Area 38. Defensive Systems/Tactics.**

**Q** Demonstrated satisfactory knowledge of defensive systems/tactics. Applied appropriate actions while responding to threat(s). Made timely and appropriate inputs to crew during mission.

**Q-** Minor errors in defensive systems use/threat reaction. Limited knowledge of appropriate actions for a given scenario. Did not make timely inputs to crew during mission.

**U** Unsatisfactory defensive systems knowledge. Major errors in appropriate actions would not have defeated given threat(s).

**5.7.4. Instructor. Area 39. Instructor Ability.**

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

**Q-** Accomplished the above tasks with minor discrepancies that did not affect safety or adversely affect student progress.

**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 actions/situations in a timely manner. Made no attempt to instruct.

**Area 40. Instructor Demonstration.**

**Q** Effectively demonstrated correct procedures or systems operation. Thorough knowledge of applicable aircraft systems, procedures, publications, and directives.

**Q-** Minor discrepancies in the above criteria did not affect safety or adversely affect student progress.

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

**Area 41. Student Briefing/Critique.**

**Q** Briefings were well organized, accurate, and thorough. Reviewed student's present level of training and defined mission events to be performed. Demonstrated the ability during the critique 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.

**Q-** Briefings were adequate but lacked clarity. Student critique was accurate but lacked the depth needed to maximize the learning opportunity. Briefing was complete with only minor discrepancies overlooked or omitted.

**U** Briefings were unsatisfactory 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.

**Area 42. Knowledge of Training Forms.**

**Q** All required forms were accomplished on time and IAW applicable directives. Demonstrated satisfactory knowledge of forms/publications required for mission accomplishment. Training documentation was concise and readable.

**Q-** Displayed limited knowledge of forms/publications. Required forms were completed with some delay and IAW applicable directives. Minor errors or omissions in training documentation.

**U** Knowledge of required mission forms/publications was inadequate. Did not accomplish required forms. Omitted or incorrectly documented significant training information.

## Chapter 6

### FORMS/IMTS PRESCRIBED AND ADOPTED

**6.1. Forms Prescribed.** AF Form 3862, Flight Evaluation Worksheet.

**6.2. IMTs Adopted.** AF IMT 8, **Certificate of Aircrew Qualification**; AF IMT 847, **Recommendation for Change of Publication**; AF IMT 3862, **Flight Evaluation Worksheet**; AF IMT 4031, **CRM Skills Criteria Training/Evaluation**; and DD Form 365-4, **Weight and Balance Clearance Form F**.

6.2.1. Units are permitted to use current AF Forms generated from Stan/Eval modules (i.e. PEX, SEMSPRO, etc) until IMTs are incorporated.

CARROL H. CHANDLER, Lt General, USAF  
DCS/Air & Space Operations

**(440AW)**

NORMAN R. HAM, Brigadier General, USAFR  
Commander

## ATTACHMENT 1

## GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

***References***

AFPD 11-2, *Aircraft Rules and Procedures*

AFI 11-202, Volume 1, *Aircrew Training*

AFI 11-202 Volume 2, *Aircrew Standardization/Evaluation Program*

AFI 11-202 Volume 3, *General Flight Rules*

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

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

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

AFI 11-2C-130V1, *C-130 Aircrew Training*

AFI 11-2C-130V3, *C-130 Operations Procedures*

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

AFI 13-217, *Drop Zone and Landing Zone Operations*

AFJMAN 24-204 I, *Preparing Hazardous Materials for Military Air Shipments*

AFI 33-360, Volume 1, *Air Force Content Management Program--Publications*

AFMAN 36-2236, *Guidebook for Air Force Instructors*

AFPD 37-1, *Air Force Information Management*

AFMAN 37-123, *Management of Records*

*Title 5, United States Code, Section 552a (The Privacy Act)*

*Title 37, United States Code, Section 301a*

Public Law 104-13, *Paperwork Reduction Act of 1995*

Executive Order 9397, *NUMBERING SYSTEM FOR FEDERAL ACCOUNTS RELATING TO INDIVIDUAL PERSONS*

***Abbreviations and Acronyms***

**AC**—Aircraft Commander

**ADS**—Aircraft Defensive System

**AF**—Air Force

**AFB**—Air Force Base

**AFI**—Air Force Instruction

**AFJMAN**—Air Force Joint Manual

**AFMAN**—Air Force Manual

**AFPD**—Air Force Policy Directive  
**AFRC**—Air Force Reserve Command  
**AFTTP**—Air Force Tactics Techniques and Procedures  
**AGL**—Above Ground Level  
**AMC**—Air Mobility Command  
**ANG**—Air National Guard  
**ARA**—Airborne Radar Approach  
**ARMS**—Aviation Resource Management System  
**ASR**—Airport Surveillance Radar  
**ATA**—Actual Time of Arrival  
**ATD**—Aircrew Training Device  
**AW**—Airlift Wing  
**AWADS**—Adverse Weather Aerial Delivery System  
**CARP**—Computed Air Release Point  
**CC**—Commander  
**CDS**—Container Delivery System  
**CE**—Circular Error  
**CG**—Center of Gravity  
**CRM**—Crew Resource Management  
**CRRC**—Combat Rubber Raiding Craft  
**DD**—Department of Defense  
**DH**—Decision Height  
**DO**—Director of Operations  
**DR**—Dead Reckoning  
**DZ**—Drop Zone  
**EPE**—Emergency Procedures Evaluation  
**ETA**—Estimated Time of Arrival  
**ETP**—Equal Time Point  
**FCI**—Flight Command Indicator  
**FEF**—Flight Evaluation Folder  
**FP**—Flight Pilot  
**FMS**—Flight Management System

**FP**—Flight Pilot  
**HE**—Heavy Equipment  
**HQ**—Headquarters  
**IAW**—In Accordance With  
**IFF**—Identification Friend or Foe  
**ILS**—Instrument Landing System  
**IMT**—Information Management Tool  
**INIT**—Initial  
**INS**—Inertial Navigation System  
**INSTM**—Instrument  
**INSTR**—Instructor  
**IP**—Instructor Pilot  
**IRC**—Instrument Refresher Course  
**KIAS**—Knots Indicated Airspeed  
**LOC**—Localizer  
**LOP**—Line of Position  
**LZ**—Landing Zone  
**MAC**—Minimum Altitude Capable  
**MAJCOM**—Major Command  
**MAP**—Missed Approach Point  
**MDA**—Minimum Descent Altitude  
**MLS**—Microwave Landing System  
**MP**—Mission Pilot  
**MQF**—Master Question File  
**MPD**—Mobility Pilot Development  
**MSN**—Mission  
**N/A**—Not Applicable  
**NAVAID**—Navigation Aid  
**NDB**—Non-directional Radio Beacon  
**NM**—Nautical Mile  
**NOTAM**—Notice to Airmen  
**NVG**—Night Vision Goggles

**OAP**—Offset Aim Point  
**OFT**—Operational Flight Trainer  
**OG**—Operations Group  
**OME**—Operational Mission Evaluation  
**PAR**—Precision Approach Radar  
**PEX**—Patriot Excalibur  
**Q**—Qualified  
**Q-**— -Qualified Minus  
**Q-1**—Qualification Level 1  
**Q-2**—Qualification Level 2  
**Q-3**—Qualification Level 3  
**QUAL**—Qualification  
**RETA**—Revised Estimated Time of Arrival  
**RQ**—Re-qualification  
**SATB**—Simulated Airdrop Training Bundle  
**SCNS**—Self Contained Navigation System  
**SID**—Standard Instrument Departure  
**SNS**—Satellite Navigation System  
**SKE**—Station Keeping Equipment  
**T**—Trend  
**TACAN**—Tactical Air Navigation System  
**TAS**—True Airspeed  
**TOLD**—Takeoff and Landing Data  
**TOT**—Time Over Target  
**U**—Unqualified  
**USAF**—United States Air Force  
**VDP**—Visual Descent Point  
**VFR**—Visual Flight Rules  
**Vmca**—Minimum Control Airspeed  
**VOR**—Very High Frequency Omni-directional Radio Beacon  
**WST**—Weapon System Trainer

ATTACHMENT 2

C-130 FLIGHT EVALUATION WORKSHEET

Figure A2.1. C-130 FLIGHT EVALUATION WORKSHEET (FRONT PAGE).

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