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SECRETARY OF THE AIR FORCE**

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VOLUME 2**



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Flying Operations

HH-60 AIRCREW EVALUATION CRITERIA

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This volume implements AFPD 11-2, *Aircrew Operations*; AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, and AFI 11-202V2, *Aircrew Standardization/Evaluation Program*. It applies to all HH-60 units to include Air National Guard and Air Force Reserve units. MAJCOMs/DRUs/FOAs are to forward proposed MAJCOM/DRU/FOA-level supplements to this volume to HQ USAF/A3O-AI, through HQ ACC/A3TV, for approval prior to publication. Copies of MAJCOM/DRU/FOA-level supplements, after approved and published, will be provided by the issuing MAJCOM/DRU/FOA to HQ USAF/A3O-AI, HQ ACC/A3TV, and user MAJCOM/DRU/FOA offices of primary responsibility. Field units below MAJCOM/DRU/FOA level will forward copies of their supplements to this publication to their parent MAJCOM/DRU/FOA office of primary responsibility for post publication review. **Note:** The terms Direct Reporting Unit (DRU) and Field Operating Agency (FOA) as used in this paragraph refer only to those DRUs/FOAs that report directly to HQ USAF. Keep supplements current by complying with AFI 33-360, *Publications and Forms Management*. Submit changes/recommendations to this publication on an AF Form 847 through Stan/Eval channels to ACC/A3TV. Requests for waivers must be submitted through the chain of command to the appropriate Tier waiver approval authority IAW 33-360 (see paragraph 1.4.2.). The Privacy Act of 1974 applies to certain information gathered pursuant to this volume. System of Record Notices F011 AF XO A, Aviation Resource Management Systems (ARMS) covers required information applies and is available at <http://privacy.defense.gov/notices/usaf/>. The authority for maintenance of the system is 37 U.S.C. 301a, Incentive pay: Pub.L. 92-204, Appropriations Act for 1972, Section

715; Pub.L. 93-238, Appropriations Act for 1974, Section 715; Pub.L. 93-294, Aviation Career Incentive Act of 1974; DoD Directive 7730.57, *Aviation Career Incentive Act and Required Annual Report*; AFI 11-401, *Aviation Management*; AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*; AFI 11-421, *Aviation Resource Management*; and E.O. 9397 (SSN) as amended by Executive Order 13478, Amendments to Executive Order 9397 Relating to Federal Agency Use of Social Security Numbers, November 18, 2008. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management System (AFRIMS). Ensure all prescribed or adopted forms adhere to disposition and retention instructions IAW AFI 33-364.

SUMMARY OF CHANGES

This interim change revises AFI 11-2HH-60V2 by (1) deleting the terms FQSMA and PQSMA (HH-60 Special Missions Aviation (AFSC 1A9XX) aircrew crew qualifications are to be described as Flight Engineer (MF) and Aerial Gunner (MG) in order to align with AFI 11-401, Table A2.3 and T.O. 1H-60(H)G-1), (2) clarifying MF and MG HAAR evaluation criteria, (3) updating MF and MG Gunnery evaluation criteria, (4) deleting reference to AETC/A3Z, (5) updating **Table 2.1**, **Table 3.1**, and **Table 4.1** to reflect Instructor requirements during periodic evaluations, (6) adjusting definitions of Pilot qualifications for FP, MC, & MP, (7) removing reference to GAU-21 and (8) expanding guidance on RQ INSTR evaluations. A margin bar (|) indicates newly revised material.

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Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

Chapter 1

GENERAL GUIDANCE

1.1. Purpose. This instruction establishes requirements for all HH-60 Standardization/Evaluation (Stan/Eval) flight evaluations and outlines aircrew Stan/Eval grading criteria. Conduct all evaluations in accordance with the provisions of AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, and MAJCOM supplements.

1.2. Applicability. Policy and requirements established in this AFI apply to Air Force civilian and military personnel to include the Air Force Reserve and Air National Guard.

1.3. Abbreviations, Acronyms, and Terms. See [Attachment 1](#).

1.4. Administration.

1.4.1. **Changes/Revisions.** Submit changes/recommendations to this publication on an AF Form 847 through Stan/Eval channels to ACC/A3TV.

1.4.2. **Waivers.** Waiver authority for this publication is delegated to MAJCOM/A3 or equivalent in accordance with Table 1.1 of AFI 33-360 Publication and Forms Management. Forward waiver requests through appropriate channels to the applicable MAJCOM/A3 or equivalent for approval. HQ USAF/A3O is the waiver authority for basic Stan/Eval policy as contained in AFI 11-202V2. Post all waivers IAW AFI 11-202V2 and AFI 33-360.

1.4.3. **Supplements/Interim Changes (ICs).** HQ USAF/A3 approves all interim changes to this instruction. Units are encouraged to supplement this instruction with standard evaluation profiles that best fit the unit's mission, equipment, and location. MAJCOMs will forward a copy of MAJCOM supplements to HQ USAF/A3O-AI, through MAJCOM Stan/Eval, for coordination. Units below MAJCOM level will forward one copy of each supplement to their MAJCOM OPR for pre-publication review.

1.5. Roles and Responsibilities.

1.5.1. Headquarters, Air Combat Command (ACC).

1.5.1.1. ACC Director of Air and Space Operations (A3) is designated as the responsible agency for this volume IAW AFD 11-2, Aircrew Operations, and will process all change requests.

1.5.1.2. Provide applicable guidance and oversight IAW AFI 11-202V2.

1.5.2. **MAJCOMs, NAFs, Wings/Groups.** Provide applicable guidance and oversight IAW AFI 11-202V2. (T-2).

1.6. Evaluation Procedures. (T-2).

1.6.1. Flight Examiners (FEs) will use the evaluation criteria contained in each crew position chapter for conducting all flight and emergency procedures evaluations (EPEs).

1.6.2. Prior to the aircrew briefings, the FE will brief the examinee on specific evaluation areas, purpose and conduct of the evaluation, and, if applicable, will inform the Aircraft Commander of special requirements. The examinee will accomplish appropriate flight

planning/mission preparation. FEs will be furnished copies of mission materials to include necessary maps, flight logs, etc.

1.6.3. Unless specified, the examinee or FE may fly in any seat (within their crew qualification), to include the cabin, that will best enable the FE to conduct a thorough evaluation. **Exception:** Student pilot evaluations will have either a qualified instructor pilot or flight examiner at a set of controls.

1.6.4. Units may use the AF Form 4038, HH-60 Evaluation Worksheet, to aid in administering flight evaluations and EPEs.

1.6.5. During an actual emergency, the FE will determine when to terminate an evaluation.

1.6.6. The FE will thoroughly debrief all aspects of the evaluation. This debrief will include the overall rating, specific deviations, area grades assigned (if other than qualified), and required additional training (if applicable).

1.7. Grading Systems. (T-2).

1.7.1. Grading instructions and performance criteria are contained in AFI 11-202V2 and crew position chapters in this instruction.

1.7.2. Critical grading areas have been established for all flight evaluations IAW AFI 11-202V2. Critical areas are defined as those core areas, which if not performed to the "Qualified" level, could result in loss of life or damage to equipment.

1.7.3. Boldface procedures, crew/flight discipline, situational awareness, safety/judgment/airmanship are considered critical. If one of these areas is graded U, then the overall grade for the evaluation will be Q-3. **Note:** boldface is required for all crew positions.

1.7.4. Areas not applicable to the unit or mission need not be performed; however, all areas performed will be graded.

1.7.5. Do not consider momentary deviations from tolerances, provided the examinee applies prompt corrective action and such deviations do not jeopardize flying safety. The FE will consider cumulative deviations when determining the overall grade. However, a grade of Q-3 shall not be given based on unsubstantiated FE opinion.

1.7.6. When grading criteria specifies that airspeed be evaluated and the flight manual lists only a minimum/maximum/recommended airspeed for that area, the examinee will brief the desired airspeed.

1.7.7. The FE will compare examinee performance for each required area accomplished during the evaluation with the evaluation criteria provided in each crew position chapter and assign an appropriate grade. Derive the overall flight evaluation grade from the area grades based on observed events and tasks IAW this publication.

1.7.8. FEs will use the grading criteria in this volume to determine individual area grades. FE judgment must be exercised when the wording of areas is subjective and when specific situations are not covered. FE judgment will be the determining factor in arriving at the overall grade.

1.8. Ground Phase Requisites. (T-2).

1.8.1. QUAL (P/MF), QUAL/MSN(MG): Open Book exam, Closed Book exam, Boldface/Critical Action Procedures (CAPs) exam, Emergency Procedures Evaluation (EPE), and a flight publication check. **Note:** MG crewmembers that have completed an FF QUAL (INIT or PERIODIC) will maintain MG QUAL/MSN evaluation requirements until completion of an MF INIT MSN evaluation.

1.8.2. INSTM (Pilots): Instrument exam.

1.8.3. MSN (P/MF): Emergency Procedures Evaluation (EPE), Boldface/Critical Action Procedures (CAPs) examination, and a flight publication check.

1.8.4. **Aircrew Examinations.** Manage and conduct examinations IAW AFI 11-202V2 and MAJCOM Supplements. Minimum number of test questions are:

1.8.4.1. QUAL Open Book (Pilot/MF)--40 questions.

1.8.4.2. QUAL Closed Book (Pilot/MF)--40 questions.

1.8.4.3. QUAL/MSN Open Book (MG)--40 questions.

1.8.4.4. QUAL/MSN Closed Book (MG)--40 questions.

1.8.4.5. INSTM Exam (Pilots): IAW AFI 11-202V2 and AFMAN 11-210, *Instrument Refresher Program*--50 questions.

1.8.4.6. Semi-Annual Test (All): IAW AFI 11-202V2.

1.8.5. **Publications Check.** The following publications will be checked for currency and proper posting during all flight evaluations:

1.8.5.1. T.O. 1H-60(H)G-1CL-1, *Pilot's Checklist* (All)

1.8.5.2. AFI 11-2HH-60V3, CL-1, *HH-60 Crew Briefing Guide/Checklists* (All)

1.8.5.3. T.O. 1H-60(H)G-1CL-2, *Gunner/Hoist Operator's Checklist* (MF/MG)

1.8.5.4. Access to local in-flight guide (P)

1.8.5.5. Any additional publication specified in the unit supplement to AFI 11-202V2 (All)

1.8.6. **Emergency Procedures Evaluation (EPE).** EPEs may be performed individually, as a crew in a simulator/aircrew training device (ATD), or verbally, but will not be performed in flight. The FE will assign an overall grade (1, 2, or 3) IAW the standards established in this instruction.

1.8.6.1. EPEs should be scenario driven with an emphasis on emergency procedures, special interest items and systems knowledge. FEs may use one continuous scenario throughout the EPE or different scenarios for each emergency procedure.

1.8.6.2. Examinees may use publications that are normally available in flight and must recall boldface items from memory.

1.8.6.3. Include the following items on all EPEs:

1.8.6.3.1. General aircraft knowledge to include system knowledge, limitations, and capabilities.

1.8.6.3.2. Discuss a minimum of two emergencies per phase of the mission (ground operations, takeoff, cruise, and terminal operations/landings).

1.8.6.3.3. Crew coordination and risk management.

1.8.6.4. Mission EPEs should be tailored to unit tasking and current special interest items and will include the following items:

1.8.6.4.1. Mission equipment malfunctions and emergencies (hoist, weapons, etc.).

1.8.6.4.2. Evasive action/threat reaction.

1.8.6.5. Pilot and co-pilot INSTM/QUAL EPEs will include the following items:

1.8.6.5.1. Procedures and publications required to proceed to alternate/divert airfields.

1.8.6.5.2. Unusual attitude recoveries. This also fulfills Area 30 (Unusual Attitudes) if accomplished in a simulator.

1.8.7. **Boldface Exam.** IAW AFI 11-202V2 and MAJCOM Supplements.

1.9. Evaluations. (T-2). Conduct flight evaluations IAW AFI 11-202V2, MAJCOM/Local supplements, and guidance contained in this instruction.

1.9.1. **General.**

1.9.1.1. Evaluations administered during exercises or non-contingency deployments are encouraged. Evaluations administered to maintain mission qualification status during contingency/combat deployments will be given a last resort.

1.9.1.2. Examinees will be evaluated in the position of their highest qualification. If briefed, and at the FEs discretion, portions may be flown in another position, but the emphasis is to have examinees evaluated at their highest qualification level.

1.9.2. Mission Evaluations. MSN evaluation profiles/scenarios will be based on unit Designed Operational Capability (DOC) taskings. Evaluation profiles will be designed to evaluate the training/flight position/special qualifications as well as basic airmanship of the examinee and will normally be flown using unit formations and tactics.

1.9.2.1. Initial (INIT) and Requalification (REQUAL) MSN evaluations will be accomplished at night utilizing NVGs.

1.9.2.2. Periodic MSN evaluations will be accomplished at night utilizing NVGs. **Exception:** SQ/CC may approve a current and qualified aircrew member to accomplish a Periodic MSN evaluation during the day. The subsequent MSN evaluation will be conducted at night and the AF Form 8, *Certificate of Aircrew Certification*, will be documented to capture reasons for the deviation in the additional comments of the examiner's remarks section.

1.9.2.3. Formation will be evaluated on all INIT, REQUAL, and periodic evaluations. **Exception:** SQ/CC may approve a deviation for periodic evaluations only. The subsequent evaluation will include formation and the AF Form 8 will be documented to capture reasons for the deviation in the additional comments of the examiner's remarks section.

1.9.2.4. All aircrew will complete a MSN (QUAL/MSN for MG) evaluation prior to being designated as Basic Mission Capable (BMC) or Combat Mission Ready (CMR).

1.9.2.5. Helicopter Air-to-Air Refueling (HAAR) will be evaluated on all INIT and REQUAL MSN evaluations. ARC only: Note 2 of **Tables 3.1** and **Table 4.1** apply.

1.9.2.6. Gunnery will be evaluated on all INIT, REQUAL, and periodic evaluations. Blank ammunition may be used to satisfy periodic evaluation requirements.

1.9.2.7. For CMR aircrew to complete an evaluation, all areas in the crew position event tables (**Table 2.1**, **Table 3.1**, and **Table 4.1**), annotated with an "R" must be accomplished. BMC aircrew will only be evaluated on those missions routinely performed and in those areas which they are qualified to perform unsupervised. Only those areas in which the examinee is qualified/certified may be evaluated.

1.9.3. Formal Course Evaluations. (T-2).

1.9.3.1. Conduct evaluations IAW syllabus mission profile guidelines, or on a mission profile developed from syllabus training objectives. Formal course guidelines may be modified based on local operating considerations or FE judgment. Grading will be IAW performance criteria established in this instruction. Pilot and copilot INIT or REQUAL evaluations will have a qualified instructor or FE in a seat with a set of controls.

1.9.3.2. If required, HAAR and gunnery operations may be evaluated in conjunction with the last formal training unit (FTU) training flight. The unit commander or operations officer must pre-approve this method. The FE will make it clear to the student when the training period ends and when the evaluation begins. These evaluations will be documented on the same AF Form 8 as the INIT MSN evaluation.

1.10. Instructor Evaluation. (T-2). Instructor evaluations do not have prerequisites and will be conducted IAW AFI 11-202V2, **Table 2.1**, **Table 3.1**, and **Table 4.1** of this AFI, and the following:

1.10.1. REQUAL Instructor evaluations may be combined with REQUAL QUAL, MSN, or QUAL/MSN evaluations.

1.10.2. SQ/CC approval is required to conduct an INIT INSTR evaluation with a periodic evaluation.

1.10.3. Units may request that periodic evaluations be accomplished at the FTU after an instructor upgrade training course is complete. The periodic evaluation may be accomplished provided a cross-command evaluation request is submitted and approved prior to the evaluation. Route requests through OGV to MAJCOM A3V/A3TV for coordination with AETC/A3V. INIT INSTR evaluations at the FTU must be successfully completed prior to administering the periodic evaluation. (T-2).

1.10.4. Instructor candidates must be current and qualified on events which they will be evaluated during the INIT/INSTR evaluation.

1.10.5. Instructor candidates will be evaluated on instructor performance at a minimum on areas/sub-areas listed in **Table 2.1**, **Table 3.1**, and **Table 4.1** of this AFI.

1.10.6. SQ/CCs may designate and qualify instructors as instrument and/or basic qualified only.

1.11. Flight Examiners.

1.11.1. Evaluators must be current in a given event prior to acting as an evaluator in the event. (T-2).

1.11.2. Evaluators who subsequently add other certifications are automatically certified to evaluate these new certification events.

1.12. Alternate Evaluation of Sub-Areas. (T-2).

1.12.1. For initial and requalification evaluations, all required items must be performed by actual demonstration.

1.12.2. For periodic evaluations, when it is impossible or impractical to evaluate a required area in flight, the FE may elect to evaluate the area(s) by an alternate method (simulator, procedural trainer, or verbal examination). Document why required area(s) were not evaluated in flight and the alternate method of evaluation used in the additional comments paragraph of the examiner's remarks section of the AF Form 8. If, in the FE's judgment, a required item cannot be adequately evaluated, complete the evaluation on an additional flight.

1.12.3. The unit Chief of Stan/Eval, FE, or SQ/CC will decide if the evaluation is complete.

1.13. Evaluation Documentation. (T-2). AF Form 8 documentation will be IAW AFI 11-202V2, MAJCOM/Local supplements and the following:

1.13.1. For qualification and evaluation purposes of Special Missions Aviation (AFSC 1A9XX) aircrew, crew designations are as follows: FF/MF/IF/EF for HH-60 Flight Engineers and MG/IG/EG for HH-60 Aerial Gunners.

1.13.1.1. HH-60 Aerial Gunners (MG) become HH-60 Flight Engineers (MF) upon completion of training that results in INIT QUAL and INIT MSN evaluations. MG crew members who complete the FF INIT QUAL evaluation will be designated as "HH-60/FF" on the AF Form 8. MG crew members who complete the MF INIT MSN evaluation will be designated as "HH-60/MF" on the AF Form 8. (T-2).

1.13.1.2. IG qualification and EG certification will not transfer with MF qualification and will be maintained as follows:

1.13.1.2.1. MF crew members with a current HH-60/IG AF Form 8 will continue to receive IG evaluations until upgraded to IF. The MF and IG evaluations may be documented on a single AF Form 8 provided the evaluations are combined or occur within a timeframe that meets AF Form 8 completion requirements of AFI 11-202V2 and MAJCOM supplements. **Note:** This guidance only applies to IG evaluations conducted with MF MSN evaluations.

1.13.1.2.2. If the combined method is used, document the AF Form 8 as follows: list both crew positions in the ACFT/CREW POSITION block: "HH-60 IG/MF". Document the ELIGIBILITY PERIOD block utilizing two lines: "QUAL/MSN (IG) and MSN (MF)", and list the associated period for each evaluation IAW AFI 11-202V2 and MAJCOM supplements. List both evaluations in the MISSION/CHECK block of the AF Form 8: "QUAL/MSN (IG) and MSN (MF)". Use prefixes IAW AFI 11-202V2 and MAJCOM supplements.

1.13.2. HH-60 AF Form 8 mission descriptions will be of sufficient content to verify that the required areas for the evaluation were completed. The examples below are provided as a guide and are not all inclusive.

1.13.2.1. QUAL evaluation example: This INSTM/QUAL evaluation was performed in the XXX local VFR and IFR patterns at XXX. Sortie consisted of normal transition maneuvers and simulated emergency procedures to include XXX and autorotations. Examinee performed a precision ILS approach to XXX followed by a non-precision XXX approach to XXX. Instructional abilities were demonstrated through all phases of flight to include XXX. The examinee performed all required maneuvers in a XXX manner IAW AFI 11-2HH-60V2 Table XX. The XX RQS/CC was debriefed on the results of this evaluation.

1.13.2.2. MSN evaluation example: This MSN evaluation was performed in the XXX area, XXX gun range, and XXX HAAR track. Sortie consisted of NVG low-level, NVG formation, evasive maneuvers that consisted of (MIF, ADA, radar threat), and terminal area operations with the following AIEs: hoist, rope ladder, fast rope, rappel. Instructional abilities were demonstrated through all phases of flight to include XXX. The examinee performed all required maneuvers in a XXX manner IAW AFI 11-2HH-60V2, Table XX. The XX RQS/CC was debriefed on the results of this evaluation. **Note:** Mission descriptions include the weapon system evaluated for HH-60 Flight Engineers and Aerial Gunners.

1.13.3. "RQ INSTR" will not be used for loss of qualification due to expiration of required periodic evaluation or loss of currency. Only annotate RQ INSTR if requalification is required due to a failure of instructor area(s). For all other RQ evaluations, annotate as RQ QUAL, RQ INSTM or RQ MSN as well as the appropriate acft/crew position (ex. HH-60/IP or HH-60/IF) in each respective section of the AF Form 8. **(T-2)**.

Chapter 2

PILOT EVALUATIONS

2.1. Crew Positions. (T-2). Evaluation standards will be administered in accordance with the individual's crew position as listed below:

2.1.1. **Mission Pilot (MP).** Pilots that have successfully completed an evaluation of General, Instrument/Qualification (INSTM/QUAL) and Mission (MSN) requirements of **Table 2.1** to (P) criteria.

2.1.2. **Mission Copilot (MC).** Pilots that have successfully completed an evaluation of General, Instrument/Qualification (INSTM/QUAL) and Mission (MSN) requirements of **Table 2.1** to (CP) criteria.

2.1.3. **First Pilot (FP).** Pilots that have successfully completed an evaluation of General and Instrument/Qualification (INSTM/QUAL) requirements of **Table 2.1** to (P) criteria but have only completed the Mission (MSN) requirements to (CP) criteria. With few exceptions, this position is not intended to be used as a permanent qualification.

2.1.4. **Instructor Pilots (IP):**

2.1.4.1. IPs will be evaluated IAW para **1.10**

2.1.4.2. IPs will be evaluated to instructor sub-area criteria in **Table 2.1** and para **2.1.1**

2.1.5. Evaluator Pilot (EP) objectivity evaluations will be IAW AFI 11-202V2 and MAJCOM supplements.

2.2. Evaluation Event Requirements. (T-2). Refer to **Table 2.1** for required events.

2.2.1. **Instrument/Qualification Evaluations.** INSTM evaluations are normally conducted concurrently with QUAL evaluations IAW instrument flight rules. QUAL profiles require demonstrated proficiency in transition maneuvers and in-flight emergency procedures. **Note:** The INSTM portion of the INSTM/QUAL evaluation may be administered in a MAJCOM-approved H-60 flight simulator.

2.2.2. **Pilot Mission Evaluations.** Administer evaluations based on examinee's qualification and experience level as well as certifications listed in AFI 11-2HH-60V1, *HH-60 Aircrew Training*.

2.2.3. **Instructor Pilot Evaluations.**

2.2.3.1. To ensure maximum training effectiveness between instructor examinee and student, the FE should administer INIT INSTR evaluations from the cabin provided a qualified instructor is at a set of controls and acting as the "student". Evaluations are administered from the most appropriate position based on FE discretion.

2.2.3.2. Instructor candidates will accomplish an INIT INSTR INSTM/QUAL and an INIT INSTR MSN evaluation. Events certified after the initial instructor evaluation do not require additional instructor evaluations. **Exception:** Night Water Operations certification will not carry over when a pilot becomes instructor qualified. Certification as a Night Water Instructor Pilot is required IAW AFI 11-2HH-60V1.

2.3. Pilot/Copilot Evaluated Event Requirements Table. (T-2). Reference [Table 2.1](#)

Table 2.1. Pilot/Copilot Evaluation Event Requirements.

PILOT/COPILOT	Instm/Qual	Mission	Initial Instructor
GENERAL			
1. Knowledge of Directives and Forms	R	R	R
2. Publications Check	R	R	R
3. Mission Planning/Weight and Balance/TOLD	R	R	R
4. Energy Management	R	R	R
5. Briefings	R	R	R
6. Systems Knowledge	R	R	R
7. Use of Checklists	R	R	R
10. Preflight/Aircraft Run-Up	R	R	R
11. ATC Procedures	R	R	R
12. Crew Coordination	R	R	R
13. Crew Resource Management	R	R	R
14. Crew/Flight Discipline (CRITICAL)	R	R	R
15. Situational Awareness (CRITICAL)	R	R	R
16. Safety, Judgment, Airmanship (CRITICAL)	R	R	R
17. Boldface Emergencies (CRITICAL)	R	R	R
18. After Landing/Engine Shutdown/Post-Flight	R	R	R
20. Debriefing	R	R	R
QUALIFICATION	Instm/Qual	Mission	Initial Instructor
21. Hovering Maneuvers	R		R
22. Takeoff	R		R
23. Autorotations	R		R
24. Simulated Single Engine Approach/Landing	R		R
25. AFCS/Boost Off	R		R
26. Stabilator Malfunctions	R		R
27. DEC Malfunctions	R		R
28. Traffic Patterns	R		R
29. Approaches and Landings	R		R
INSTRUMENTS			
30. Unusual Attitudes	(2)		(2)
31. Instrument Departure/Climb/Level-Off	R		R
32. Navigation Use of NAVAIDS	R		R
33. Holding Procedures	(3)		
34. Non-Precision Approach	R		R
35. Precision Approaches	R		R
A. ILS			
B. PAR			
36. Missed Approach/Climb-Out	R		
MISSION	Instm/Qual	Mission	Initial Instructor

37. Mission Planning		R	R
38. Mission Execution		R	R
39. Tactical Employment Procedures		R	R
40. Terrain/Flight Navigation		R	R
41. Formation		(1)	R
42. Threat ID/Countermeasure Procedures		R	R
43. Terminal Area Operations		R	R
44. AIE Operations		R	
45. Helicopter Air-to-Air Refueling		(3)	R
INSTRUCTOR	Instm/Qual	Mission	Initial Instructor
47. Briefings/Debriefings/Critiques	R	R	R
48. Demo-Performance	R	R	R
49. Instructor Knowledge	R	R	R
50. Instructional Ability	R	R	R
51. Training Documentation Procedures			R
Note 1. Required for INIT/REQUAL, and periodic (see para 1.9.2.3.).			
Note 2. Will not be evaluated in actual IMC conditions. If INSTM evaluation is conducted in IMC conditions, Unusual Attitudes will be verbally evaluated and annotated on AF Form 8.			
Note 3. Required for INIT and RQ evaluations.			

2.4. Pilot Flight Evaluation Criteria. (T-2).

2.4.1. **General.** This section contains evaluation criteria for conducting HH-60 pilot flight evaluations. This criterion serves as a grading guide for evaluators. If a crew position is listed, then that criterion is applicable only to that crew position. The absence of a crew position indicates that the criterion is applicable to all crew positions.

2.4.2. Evaluation Objectives:

2.4.2.1. **Initial, Requalification, and Periodic QUAL Evaluations.** The examinee must satisfactorily demonstrate the ability to operate the aircraft and aircraft related systems safely and effectively IAW the appropriate flight manual and other operating procedures. Pilots must also demonstrate the ability to operate the aircraft under instrument flight conditions IAW applicable procedures.

2.4.2.2. **Initial, Requalification, and Periodic MSN Evaluations.** The examinee must satisfactorily demonstrate the ability to perform the mission and operate the aircraft and aircraft related systems safely and effectively. Mission sub-areas of [Table 2.1](#) require a reasonable level of simulated threats and intelligence inputs.

2.5. General Phase.

2.5.1. Area 1--Knowledge of Directives/Forms:

2.5.1.1. **Q.** Knowledgeable of all applicable directives: both higher headquarters (HHQ) and local. Familiar with proper forms completion.

2.5.1.2. **Q-** Knowledge of capabilities, approved operating procedures, and rules are marginal in some areas but did not impact safe/effective mission accomplishment. Minor errors in forms completion.

2.5.1.3. **U.** Major errors or omissions in knowledge of operating capabilities or procedures that would preclude safe/effective mission accomplishment. Major errors in forms completion. Regulations/directives were intentionally violated.

2.5.2. Area 2--Publications Check: Conduct a thorough review of publications IAW para **1.8.5**

2.5.2.1. **Q.** Publications are current, contain all supplements/changes, and are properly posted.

2.5.2.2. **Q-** Publications contain deficiencies which would not impact flight safety or mission accomplishment.

2.5.2.3. **U.** Publications are outdated and/or contain deficiencies which would impact flight safety or mission accomplishment.

2.5.3. Area 3--Mission Planning/Weight and Balance/Takeoff and Landing Data (TOLD) (Take-off, In-flight, Landing):

2.5.3.1. **Q. (P)** Developed a sound plan to accomplish the mission. Checked all factors applicable to flight (i.e., weather, NOTAMs, alternate landing sites, flight logs, weight and balance, performance data, fuel requirements, maps, airspace, etc.) IAW applicable directives. Ensured the crew was aware of special requirements/equipment necessary for the flight.

2.5.3.2. **Q-. (P)** Same as above except for minor errors or omissions that could degrade mission effectiveness.

2.5.3.3. **U. (P)** Major errors or omissions that would preclude safe and effective mission accomplishment.

2.5.3.4. **Q. (MC)** Assisted the pilot as requested in developing a sound plan to accomplish the mission. Assisted the pilot as requested in checking all factors applicable to flight (i.e., weather, NOTAMs, alternate landing sites, flight logs, weight and balance, performance data, fuel requirements, maps, airspace, etc.) IAW applicable directives.

2.5.3.5. **Q-. (MC)** Same as above except for minor errors or omissions that could degrade mission effectiveness.

2.5.3.6. **U. (MC)** Major errors or omissions that would preclude safe and effective mission accomplishment.

2.5.4. Area 4--Energy Management:

2.5.4.1. **Q.** Satisfactory knowledge of Energy Maneuverability (EM) charts. During aircraft maneuvering, airspeeds and bank angles were consistent with EM chart data. Onset of blade stall was either avoided or quickly recognized and corrected when encountered in-flight.

2.5.4.2. **Q-** Knowledge of EM charts marginal in some areas and some aircraft maneuvers performed in a manner inconsistent with charts, but did not affect

safe/effective accomplishment of mission. Onset of blade stall recognized but repeatedly encountered.

2.5.4.3. **U.** Unfamiliar with EM charts. Major deviations from charts during aircraft maneuvering which impacted the safe/effective accomplishment of the mission. Onset of blade stall not recognized.

2.5.5. **Area 5--Briefings:**

2.5.5.1. **Q. Briefer.** Well organized and professionally presented in a logical sequence. Effective use of training aids. Presented the required events and allowed for an effective discussion for accomplishing the mission. Concluded the briefing in time to allow for a thorough preflight of personal equipment, aircraft, and mission equipment. Considered the abilities/limitations of all crew and flight members. Passengers were thoroughly and professionally briefed IAW applicable regulations and directives. Inflight briefings completed at the appropriate time to enhance mission effectiveness.

2.5.5.2. **Q-. Briefer.** Events were out of sequence, redundant, and difficult to understand. Did not effectively use training aids. Focused on nonessential items and omitted minor details. Did not consider all crew/flight members' abilities. Poor time management. Passenger briefing lacked sufficient information. In-flight briefings incomplete, questions not completely resolved, or timing did not provide crew adequate time to prepare for event.

2.5.5.3. **U. Briefer.** Disorganized sequence. Presentation omitted major details that caused confusion. Did not allow sufficient time for preflight of personal equipment, aircraft, and mission equipment. Ignored crew and flight members' abilities, limitations, and/or questions. Passengers were not briefed. Omitted inflight briefings or failed to address questions, or timing prevents crew from performing event.

2.5.5.4. **Q. Receiver.** Actively participated and provided input when required. Fully understood the briefing and followed instructions.

2.5.5.5. **Q-. Receiver.** Did not fully understand duties and lack of action/input created minor problems that did not affect safe mission accomplishment.

2.5.5.6. **U. Receiver.** Late or missed the briefing. Not prepared or did not actively participate when requested. Did not fully understand duties, and lack of action/input created problems that impacted safe mission accomplishment.

2.5.6. **Area 6--Systems Knowledge:**

2.5.6.1. **Q.** Demonstrated a thorough knowledge of applicable aircraft and aircraft related systems and limitations. Ensured satisfactory operation within limits.

2.5.6.2. **Q-.** Limited knowledge of systems, procedures, and operational limits.

2.5.6.3. **U.** Demonstrated an unsatisfactory knowledge of systems, procedures, or operating limits. Operated the aircraft or systems outside applicable limits.

2.5.7. **Area 7--Use of Checklists:**

2.5.7.1. **Q.** Effectively used the appropriate checklists with accurate and timely responses. Familiar with checklists and contents.

2.5.7.2. **Q-**. Used the appropriate checklists, but was slow to respond and/or had difficulty locating proper procedures.

2.5.7.3. **U**. Failed to use the proper checklists or was not adequately familiar with their contents.

2.5.8. Area 10--Preflight/Aircraft Run-Up:

2.5.8.1. **Q. (P)** Established and adhered to station, engine start, and taxi times. Ensured a thorough preflight, check of personal equipment, etc. Fully aware of aircraft readiness and proper configuration for the mission. Thorough knowledge of the information contained in the aircraft forms and correctly determined aircraft status. Performed all procedures prior to takeoff IAW applicable directives.

2.5.8.2. **Q-. (P)** Same as above except for minor procedural deviations which did not degrade mission effectiveness.

2.5.8.3. **U. (P)** Major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight or proper configuration to perform the mission.

2.5.8.4. **Q. (MC)** Adhered to station, engine start, and taxi times. Assisted the pilot, as directed, in ensuring a thorough preflight, check of personal equipment, and aircraft run-up.

2.5.8.5. **Q-. (MC)** Same as above except for minor procedural deviations which did not degrade mission effectiveness.

2.5.8.6. **U. (MC)** Major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight or proper configuration to perform the mission.

2.5.9. Area 11--ATC Procedures:

2.5.9.1. **Q.** Promptly complied with all controlling agency instructions and reporting requirements. Obtained the proper clearance from the controlling agency. Complied with all national airspace requirements.

2.5.9.2. **Q-**. Slow to comply with controlling agency instructions or unsure of the reporting requirements.

2.5.9.3. **U.** Failed to comply with controlling agency instructions or accepted a clearance for which they could not comply. Entered controlled airspace without proper clearance.

2.5.10. Area 12--Crew Coordination:

2.5.10.1. **Q.** Coordinated and communicated effectively with other crew members to the maximum extent possible. Recognized and corrected communication errors.

2.5.10.2. **Q-**. Minor unrecognized or uncorrected errors in crew coordination occurred which did not affect safe/effective mission accomplishment.

2.5.10.3. **U.** Improperly or ineffectively coordinated or communicated with other crew members causing delays or confusion which did, or could have, adversely affected safety or mission accomplishment.

2.5.11. Area 13--Crew Resource Management:

2.5.11.1. **Q.** Managed resources and duties effectively to minimize task saturation, channelized attention, and distractions among crew members. Met requirements IAW AFI 11-290, *Cockpit/Crew Resource Management Training Program* and AF Form 4031, *CRM Skills Criteria Training/Evaluation*.

2.5.11.2. **Q-.** Minor errors in managing resources and duties which did not affect safe/effective mission accomplishment.

2.5.11.3. **U.** Improperly or ineffectively managed resources and/or duties which caused task saturation, channelized attention, and distractions among crew members which impacted safety or mission accomplishment.

2.5.12. Area 14--Crew/Flight Discipline (Critical):

2.5.12.1. **Q.** Demonstrated strict, professional aircrew discipline throughout all phases of the mission. Promoted effective coordination and communication with other crew members.

2.5.12.2. **U.** Failed to exhibit strict aircrew discipline. Intentionally violated rules or regulations. Improperly or ineffectively coordinated or communicated with the other crew members causing delays or confusion which did, or could have, adversely affected safety or mission accomplishment.

2.5.13. Area 15--Situational Awareness (Critical):

2.5.13.1. **Q.** Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension even as the environment or situation changed. Ensured all aspects of the mission were accomplished with regard to the safety of crew, passengers, ground personnel, and aircraft.

2.5.13.2. **U.** Decisions, or lack thereof, resulted in the failure to accomplish the assigned mission. Demonstrated poor judgment to the extent safety could have been compromised. Lacked understanding/comprehension of events occurring in and around the aircraft/flight.

2.5.14. Area 16--Safety/Judgment/Airmanship (Critical):

2.5.14.1. **Q.** Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment. Sound judgment enhanced mission accomplishment and was evident in the decision-making process.

2.5.14.2. **U.** Was not aware of, or did not comply with, all safety factors required for the safe operation of the aircraft or mission accomplishment. A clear lack of judgment hampered or precluded mission accomplishment. Did not adequately clear the aircraft. Allowed a dangerous situation to develop without taking proper corrective action.

2.5.15. Area 17--Boldface Emergencies (Critical): (Note: may be evaluated in flight or in a static aircraft.)

2.5.15.1. **Q.** Correct and immediate response. Satisfactory performance of the corrective action. The crewmember pointed without hesitation to, and knew the function

of, all switches and controls required for all critical action emergency procedures for his/her crew position.

2.5.15.2. **U.** Incorrect sequence, unsatisfactory/untimely response, or unsatisfactory performance of the corrective action. The crewmember could not, without hesitation, identify or explain the function of all switches and controls required for all critical action emergency procedures for his/her crew position.

2.5.16. Area 18--After Landing/Engine Shutdown/Post-Flight:

2.5.16.1. **Q. (P)** Safely maneuvered the helicopter to the appropriate parking location in accordance with the flight manual and applicable directives. Performed proper aircraft and equipment postflight and/or reconfiguration. Correctly determined the condition and status of the aircraft after shutdown. Completed all applicable aircraft forms correctly and briefed maintenance personnel as required.

2.5.16.2. **Q-. (P)** Same as above except for minor deviations or omissions.

2.5.16.3. **U. (P)** Major deviations or omissions during hover and/or ground operations including postflight procedures which could have jeopardized safety. Failed to perform the aircraft and equipment postflight and/or reconfiguration. Failed to complete the aircraft forms or brief maintenance personnel as required.

2.5.16.4. **Q. (MC)** Assisted in accomplishment of appropriate actions during post mission hover and/or ground operations and assigned postflight procedures in accordance with the flight manual and applicable directives. Performed proper aircraft and equipment postflight and/or reconfiguration.

2.5.16.5. **Q-. (MC)** Same as above except for minor deviations or omissions.

2.5.16.6. **U. (MC)** Major deviations or omissions during the After Landing checklist, aircraft taxi, engine shutdown, or post flight procedures which could have jeopardized safety. Failed to perform the aircraft and equipment postflight and/or reconfiguration. Failed to complete the aircraft forms or brief maintenance personnel as required.

2.5.17. Area 20--Debriefing:

2.5.17.1. **Q. Briefer.** Thoroughly debriefed the mission or actively participated in the debriefing. Discussed mission accomplishment and debriefed noteworthy (positive or negative) mission events. Provided instruction as appropriate for all crew members to improve performance on future sorties.

2.5.17.2. **Q-. Briefer.** Incomplete debriefing. Did not actively participate in the debriefing or thoroughly discuss the mission, deviations, or corrective guidance.

2.5.17.3. **U. Briefer.** Did not debrief mission, deviations, or offer corrective guidance.

2.5.17.4. **Q. Receiver.** Actively participated and provided input when required. Fully understood the briefing.

2.5.17.5. **Q-. Receiver.** Did not fully understand discussion, interfered with mission reconstruction and/or others' participation or learning.

2.5.17.6. **U. Receiver.** Late or missed the debriefing. Not prepared or did not actively participate when requested. Did not fully understand lessons learned, counterproductive during discussions, or impeded others' participation or learning.

2.6. Qualification Phase:

2.6.1. Area 21--Hovering Maneuvers (As determined by FE: Precision Hover, 360 Degree Turns, Sideward and Backward Flight):

2.6.1.1. **Q.** Performed hovering maneuvers IAW procedures outlined in the flight manual and other published directives. Aircraft control was smooth and positive. Maintained altitude/position/ground track, as applicable. Cleared the area.

2.6.1.2. **Q-.** Same as Q except for minor deviations in altitude/position/ground track which did not compromise safety. Cleared the area.

2.6.1.3. **U.** Performance not IAW procedures outlined in the flight manual and other published directives. Aircraft control/position/ground track/altitude was erratic. Performance was unsafe. Failed to clear the area.

2.6.2. Area 22--Takeoff (All will be performed: Normal, Marginal Power, Maximum Performance):

2.6.2.1. **Q.** Smooth, positive aircraft control throughout the takeoff. Maintained the proper power setting (+/-5% Q) and heading (to maintain ground track). Performed the takeoff IAW flight manual and other published directives. Performed the departure as published/directed and complied with all restrictions. Visually cleared the area.

2.6.2.2. **Q-.** Minor flight manual procedural deviations. Some under- or over-control on lift-off. Maintained the proper power setting (+/-10% Q) and heading (significant deviations from briefed or erratic ground track). Performed the departure as published/directed and complied with all restrictions/published directives. Visually cleared the area.

2.6.2.3. **U.** Lift-off was potentially dangerous. Exceeded aircraft/systems limitations. Failed to establish proper aircraft attitude. Over-controlled the aircraft resulting in excessive deviations and unsafe flight path. Failed to comply with the published/directed departure instructions or exceeded the limits of Q-. Level off was erratic and exceeded above limits. Failed to establish the proper cruise airspeed. Failed to adequately clear the area.

2.6.3. Area 23--Autorotations (Both will be performed: Straight Ahead and Low Altitude):

2.6.3.1. **Q.** Airspeeds, altitudes, and procedures were IAW the flight manual and other published directives. Controlled the rotor revolutions per minute (RPM) throughout maneuver. Would have landed safely and within the desired area. Able to terminate no lower than 15 feet with no more than 30 knots ground speed.

2.6.3.2. **Q-.** Same as Q except for deviations which would not have compromised safety.

2.6.3.3. **U.** Major deviations from the procedures outlined in the flight manual and other published directives. Failed to control rotor RPM. Would not have landed safely or within the desired area. Failed to maintain proper aircraft control.

2.6.4. Area 24--Simulated Single Engine Approach/Landing:

2.6.4.1. **Q.** Called for and completed the appropriate checklist in a timely manner. Performed the approach and landing IAW procedures outlined in the flight manual and other published directives. Aircraft control was smooth and positive. Touchdown was within the desired area. Aware of minimum safe single engine airspeed and the existing power available/required.

2.6.4.2. **Q-.** Same as Q except for deviations which did not compromise safety.

2.6.4.3. **U.** Called for incorrect checklist and/or did not complete the checklist in a timely manner. Performance was not IAW procedures outlined in the flight manual or other directives. Aircraft control was erratic/unsafe. Failed to touchdown within the desired area. Unaware of minimum safe single engine airspeed and/or existing power available/required.

2.6.5. Area 25--AFCS/Boost Off:

2.6.5.1. **Q.** Called for and completed the proper checklist in a timely manner. Pattern, approach, and landing accomplished IAW the procedures outlined in the flight manual and other published directives. Aircraft control was smooth and positive.

2.6.5.2. **Q-.** Same as Q except for deviations which did not compromise safety.

2.6.5.3. **U.** Called for an incorrect checklist and/or did not complete the checklist in a timely manner. Major deviations to the procedures outlined in the flight manual and other published directives. Aircraft control was erratic/unsafe.

2.6.6. Area 26--Stabilator Malfunctions:

2.6.6.1. **Q.** Called for and completed the proper checklist in a timely manner. Pattern, approach, and landing accomplished IAW the procedures outlined in the flight manual and other published directives. Aircraft control was smooth and positive.

2.6.6.2. **Q-.** Same as Q except for deviations which did not compromise safety.

2.6.6.3. **U.** Called for an incorrect checklist and/or did not complete the checklist in a timely manner. Major deviations to procedures outlined in the flight manual and other published directives. Aircraft control was erratic/unsafe.

2.6.7. Area 27--Digital Electronic Control (DEC) Malfunction:

2.6.7.1. **Q.** Called for and completed the proper checklist in a timely manner. Pattern, approach, and landing accomplished IAW the procedures outlined in the flight manual and other published directives. Controlled engine and rotor RPM in safe operating parameters throughout the maneuver. Aircraft control was smooth and positive. Correctly entered and exited lockout condition, as required.

2.6.7.2. **Q-.** Same as Q except for deviations which did not compromise safety.

2.6.7.3. **U.** Called for an incorrect checklist and/or did not complete the checklist in a timely manner. Major deviations to procedures outlined in the flight manual and other published directives. Consistently failed to control engine and rotor RPM. Erratic/unsafe aircraft control.

2.6.8. Area 28--Traffic Patterns:

2.6.8.1. **Q.** Performed traffic patterns IAW the procedures outlined in the flight manual, operating procedures, and local directives. Aircraft control was positive and smooth. Constantly cleared the area of intended flight.

2.6.8.1.1. **Altitude.** +/-100 feet

2.6.8.1.2. **Airspeed.** +/-10 KIAS

2.6.8.1.3. **Ground Track.** +/-5 degrees

2.6.8.2. **Q-.** Performed traffic patterns with minor deviations to the procedures outlined in the flight manual, operating procedures, and local directives. Aircraft control was not consistently smooth, but safe. Constantly cleared the area of intended flight.

2.6.8.2.1. **Altitude.** +/-150 feet

2.6.8.2.2. **Airspeed.** +/-15 KIAS

2.6.8.2.3. **Ground Track.** +/-10 degrees

2.6.8.3. **U.** Traffic patterns were not performed IAW the procedures outlined in the flight manual, operational procedures, and local directives. Erratic aircraft control. Exceeded the Q- parameters.

2.6.9. Area 29--Approaches/Landings (All will be performed: Normal/Shallow/Steep):

2.6.9.1. **Q.** Performed the approaches and landings IAW the procedures outlined in the flight manual and published directives. Aircraft control was smooth and positive. Started the final descent on the desired approach angle. Demonstrated satisfactory control to maintain/correct to the desired rate of descent and approach angle. Touchdown/termination was within the desired area.

2.6.9.1.1. **Entry Airspeed.** +/-5 knots

2.6.9.1.2. **Entry Altitude.** +/-50 feet

2.6.9.2. **Q-.** Same as Q except for minor deviations to procedures outlined in the flight manual and published directives.

2.6.9.2.1. **Entry Airspeed.** +/-10 knots

2.6.9.2.2. **Entry Altitude.** +/-100 feet

2.6.9.3. **U.** Major deviations to the procedures outlined in the flight manual and published directives. Aircraft control was erratic/unsafe. Consistently overshot/undershot final. Failed to recognize/maintain the correct or desired rate of descent and approach angle. Failed to touchdown or terminate within the desired area. Exceeded the limits of Q-.

2.7. Instrument Phase:**2.7.1. Area 30--Unusual Attitudes:**

2.7.1.1. **Q.** Smooth, positive recovery to level flight using the correct recovery procedures. Demonstrated a satisfactory knowledge of procedures.

2.7.1.2. **Q-**. Slow to analyze or erratic in recovery to level flight. Correct recovery procedures used.

2.7.1.3. **U**. Unable to determine attitude or used improper recovery procedures. Inadequate knowledge of proper procedures.

2.7.2. Area 31--Instrument Departure/Climb/Level Off:

2.7.2.1. **Q**. Smooth, positive aircraft control throughout the takeoff. Performed in accordance with flight manual procedures. Performed the departure as published/directed and complied with all restrictions. Crossing/intermediate altitudes were +/-200 feet. Maintained course/heading and recognized deviations of +/-5 degrees or less and applied corrections promptly. Leveled off smoothly at the specified altitude within +/-200 feet. Promptly established the proper cruise airspeed. Visually cleared the area.

2.7.2.2. **Q-**. Minor flight manual procedural deviations. Some under- or over-control on lift-off. Performed the departure as published/directed and complied with all restrictions. Crossing/intermediate altitudes were +/-300 feet. Maintained course/heading and recognized deviations of +/-10 degrees or less and applied corrections promptly. Level off was erratic, maintained altitude within +/-300 feet. Slow in establishing the proper cruise airspeed. Visually cleared the area.

2.7.2.3. **U**. Lift off was potentially dangerous. Exceeded aircraft/systems limitations. Failed to establish the proper aircraft attitude. Over-controlled the aircraft resulting in excessive deviations from the intended flight path. Failed to comply with the published/directed departure instructions or exceeded the limits of Q-. Level off was erratic, or exceeded the limits of Q-. Excessive delay or failed to establish the proper cruise airspeed. Failed to adequately clear the area.

2.7.3. Area 32--Navigation/Use of Navigation Aids (NAVAIDS):

2.7.3.1. **Q**. Demonstrated a satisfactory capability to navigate. Used appropriate navigation procedures. Ensured NAVAIDS were properly tuned, identified, monitored, and selected. Complied with clearance instructions. Aware of position at all times.

2.7.3.1.1. **Course.** +/-half dot

2.7.3.1.2. **Altitude.** +/-200 feet

2.7.3.1.3. **Airspeed.** +/-5 KIAS

2.7.3.2. **Q-**. Minor errors in the procedures/use of navigation equipment. Some deviations in tuning, identifying, monitoring, and selecting NAVAIDS. Slow to comply with clearance instructions. Had some difficulty in establishing exact position.

2.7.3.2.1. **Course.** +/-1 dot

2.7.3.2.2. **Altitude.** +/- 300 feet

2.7.3.2.3. **Airspeed.** +/-10 KIAS

2.7.3.3. **U**. Major errors in the procedures/use of navigation equipment. Could not establish position. Failed to recognize checkpoints or adjust for deviations in time and course. Exceeded the parameters for Q-.

2.7.4. Area 33--Holding Procedures:

2.7.4.1. **Q.** Entry and holding procedures were IAW applicable directives. Holding pattern limits were exceeded by not more than:

2.7.4.1.1. **Timed.** + 10 seconds (after established in the pattern)

2.7.4.1.2. **DME.** +/-0.5 mile

2.7.4.1.3. **Heading/Course.** +/-1/2 dot (after established in the pattern)

2.7.4.1.4. **Altitude.** +/-200 feet

2.7.4.1.5. **Airspeed.** +/-10 KIAS

2.7.4.2. **Q-.** Entry and holding procedures were IAW applicable directives. Holding pattern limits were exceeded by not more than:

2.7.4.2.1. **Timed.** + 20 seconds (after established in the pattern)

2.7.4.2.2. **DME.** +/-1 mile

2.7.4.2.3. **Heading/Course.** +/-1 dot (after established in the pattern)

2.7.4.2.4. **Altitude.** +/-300 feet

2.7.4.2.5. **Airspeed.** +/-15 KIAS

2.7.4.3. **U.** Entry and/or holding procedures were not IAW applicable directives. Exceeded the criteria for Q-.

2.7.5. Area 34--Non-Precision Approach:

2.7.5.1. **Q.** Performed the approach/pattern as published/directed and IAW the flight manual and other directives. Complied with all clearances and restrictions. Made smooth/timely corrections. Position at the missed approach point (MAP) would have permitted a safe landing.

2.7.5.1.1. **Altitude.** +/-100 feet

2.7.5.1.2. **Airspeed.** +/-5 KIAS

2.7.5.1.3. **Heading/Course.** +/-5 degrees

2.7.5.1.4. **TACAN ARC.** +/-0.5 mile

2.7.5.1.5. **Minimum Descent Altitude (MDA).** -0/+100 feet

2.7.5.2. **Q-.** Performed the procedures with minor deviations. Slow to make corrections. Position at the MAP would have permitted a safe landing.

2.7.5.2.1. **Altitude.** +/-150 feet

2.7.5.2.2. **Airspeed.** +/-10 KIAS

2.7.5.2.3. **Heading/Course.** +/-10 degrees

2.7.5.2.4. **TACAN ARC.** +/-1 mile

2.7.5.2.5. **Minimum Descent Altitude (MDA).** -50/+150 feet

2.7.5.3. **U.** Performed the procedures with major deviations. Erratic corrections were made. Exceeded the limits of Q-. Maintained steady state flight below MDA. Position at the MAP would not have permitted a safe landing.

2.7.6. Area 35--Precision Approach:

2.7.6.1. A. ILS.

2.7.6.1.1. **Q.** Performed the approach/pattern as published/directed and IAW the flight manual and other directives. Complied with all clearances and restrictions. Made smooth and timely corrections to azimuth and glide slope. Complied with the decision altitude (DA) and the position at DA would have permitted a safe landing.

2.7.6.1.1.1. **Airspeed.** +/-5 KIAS

2.7.6.1.1.2. **Heading/Course.** +/-5 degrees

2.7.6.1.1.3. **Glide Slope/Azimuth.** Within 1 dot

2.7.6.1.2. **Q-.** Performed the procedures with minor deviations. Slow to make corrections or initiate procedures. Position at the DA would have permitted a safe landing.

2.7.6.1.2.1. **Airspeed.** +/-10 KIAS

2.7.6.1.2.2. **Heading/Course.** +/-10 degrees

2.7.6.1.2.3. **Glide Slope.** Within one dot low/two dots high

2.7.6.1.2.4. **Azimuth.** Within two dots

2.7.6.1.3. **U.** Performed the procedures with major deviations. Erratic corrections were made. Exceeded the limits of Q-. Did not comply with the DA or the position at DA would not have permitted a safe landing.

2.7.6.2. B. PAR:

2.7.6.2.1. **Q.** Performed the approach/pattern as published/directed and IAW the flight manual and other directives. Made smooth and timely corrections to the controller's instructions. Complied with the DA and the position at DA would have permitted a safe landing.

2.7.6.2.1.1. **Airspeed.** +/-5 KIAS

2.7.6.2.1.2. **Heading/Course.** Within 5 degrees of controller's instructions

2.7.6.2.2. **Q-.** Performed the procedures with minor deviations. Slow to make corrections or initiate procedures. Position at the DA would have permitted a safe landing.

2.7.6.2.2.1. **Airspeed.** +/-10 KIAS

2.7.6.2.2.2. **Heading/Course.** Within 10 degrees of controller's instructions

2.7.6.2.3. **U.** Performed the procedures with major deviations. Erratic corrections were made. Exceeded the limits of Q-. Did not respond properly to the controller's instructions. Did not comply with the DA and/or the position at DA would not have permitted a safe landing.

2.7.7. Area 36--Missed Approach/Climb Out:

2.7.7.1. **Q.** Executed the missed approach/climb out as published/directed. Completed all procedures IAW the flight manual and other directives.

2.7.7.1.1. **Level Off Altitude.** +/-200 feet

2.7.7.1.2. **Maneuvering Airspeed.** +/-5 KIAS

2.7.7.1.3. **Heading/Course.** +/-5 degrees

2.7.7.2. **Q-.** Executed the missed approach/climb out with minor deviations. Slow to comply with the published procedures/directives, controller's instructions, or flight manual.

2.7.7.2.1. **Level Off Altitude.** +/-300 feet

2.7.7.2.2. **Maneuvering Airspeed.** +/-10 KIAS

2.7.7.2.3. **Heading/Course.** +/-10 degrees

2.7.7.3. **U.** Executed the missed approach with major deviations. Failed to comply with the published procedures/directives, controller's instructions, or flight manual. Exceeded the limits of Q-.

2.8. Mission Phase:**2.8.1. Area 37--Mission Planning:**

2.8.1.1. **Q. (P)** Applied the appropriate tactics to the mission scenario. Followed guidance contained in AFTTPs, SPINS, ATO, and CONOPS. Displayed good judgment. Exhausted all possible options to mitigate the threat to the lowest possible level. Thoroughly planned all aspects of the mission using the crew concept. Updated the intelligence situation prior to the briefing.

2.8.1.2. **Q-. (P)** Marginally planned all aspects of the mission. Partial application of the approved guidance to the scenario given. Possessed a limited knowledge of approved tactical guidance. Limited utilization of planning resources (i.e., intelligence, crew expertise, etc).

2.8.1.3. **U. (P)** Mission planning was based upon unapproved/unrealistic tactics. No plan to degrade the threat to the lowest level possible. Did not utilize crew inputs/considerations. Ignored numerous aspects of the mission. Possessed a poor knowledge of approved tactical guidance. Failed to update the intelligence situation prior to the briefing.

2.8.1.4. **Q. (MC)** Adequately assisted the pilot in planning the mission. Actively involved in the mission planning process. Familiar with and able to locate information contained in the appropriate tactical guidance. Assisted the pilot in updating the intelligence situation prior to the briefing.

2.8.1.5. **Q-. (MC)** Provided marginal assistance in the mission planning process. Limited knowledge of the location of approved tactical guidance.

2.8.1.6. **U. (MC)** Did not assist the pilot in mission planning. Not actively involved in the planning process. Unfamiliar with the information contained in approved tactical guidance publications. Failed to update the intelligence situation prior to the briefing.

2.8.2. Area 38--Mission Execution:

2.8.2.1. **Q. (P)** Successful execution of the mission plan. Enhanced others' ability to contribute to mission completion. Adhered to the mission plan until the tactical situation required otherwise. Accomplished planned mission objectives.

2.8.2.2. **Q-. (P)** Poor execution of the mission plan. Slow to adjust to changes in the tactical situation. Abandoned the mission plan. Did not interfere with others' ability to contribute to mission completion.

2.8.2.3. **U. (P)** Did not execute mission plan. Unable to adjust to changes in the tactical situation. Detracted from others' ability to contribute to mission completion.

2.8.2.4. **Q. (MC)** Effectively performed required duties in support of mission tasks.

2.8.2.5. **Q-. (MC)** Marginal performance of required duties.

2.8.2.6. **U. (MC)** Poor performance of required duties. Unable to accomplish required tasks.

2.8.3. Area 39--HH-60 Tactical Employment Procedures:

2.8.3.1. **Q. (P)** Planned and applied tactics consistent with AFTTPs, special instructions (SPINS), air tasking orders (ATO), concept of operations (CONOPS), other directives, and good judgment. Developed a tactical plan and successfully completed it to the maximum extent possible. Adjusted to the tactical situation.

2.8.3.2. **Q-. (P)** Knowledge of tactics was adequate, but the mission plan contained minor deviations from good tactical considerations. Slow to make adjustments to the tactical situation.

2.8.3.3. **U. (P)** Did not develop a tactical plan for the mission. Tactics used were ineffective in countering the threat and/or accomplishing the mission.

2.8.3.4. **Q. (MC)** Possessed knowledge of tactical considerations commensurate with experience and was able to assist the pilot in executing the tactical plan.

2.8.3.5. **Q-. (MC)** Possessed a limited knowledge of tactical considerations and was unable to assist the pilot in executing the tactical plan.

2.8.3.6. **U. (MC)** Did not employ the briefed tactical plan for the mission. Tactics used were ineffective in countering the threat and/or accomplishing the mission. Interfered with the pilot in executing the tactical plan.

2.8.4. Area 40--Terrain/Flight Navigation:

2.8.4.1. **Q. (P)** Could accurately determine position when map reading. Recognized all check/turn points. Remained within 1 NM of planned course unless deviating for unanticipated obstacles/threats, and stayed within range/area boundaries. Altitude, route of flight, and use of supporting assets reflected consideration of enemy threats. Demonstrated the capability to quickly adjust for deviations in timing and course. If the

scenario required a Time On Target (TOT), the examinee arrived at the target within +/- 30 seconds of the TOT.

2.8.4.2. **Q-. (P)** Slow to determine the position when map reading. Slow to recognize check/turn points. Remained within 2 NM of planned course unless deviating for unanticipated obstacles/threats, and stayed within range/area boundaries. Altitude, route of flight, and use of supporting assets contributed to limited/preventable exposure to enemy threats. Slow to recognize and adjust for deviations in timing and course. If a TOT was required, the examinee arrived at the target within +/-1 minute of the TOT.

2.8.4.3. **U. (P)** Could not establish position. Failed to recognize check/turn points or adjust for deviations in timing and course. Exceeded the parameters for Q-. Flew outside the established range/area boundaries. Altitude, route of flight, and/or use of supporting assets resulted in dangerous/unnecessary exposure to enemy threats.

2.8.4.4. **Q. (MC)** Able to determine position when map reading. Able to recognize all check/turn points. Remained within 1 NM of planned course unless deviating for unanticipated obstacles/threats, and stayed within range/area boundaries. Altitude, route of flight, and use of supporting assets reflected consideration of enemy threats. Recognized and adjusted for deviations in timing and course. If a TOT was required, the examinee arrived at the target within +/-1 minute of the TOT. Informed the crew of route progress using leg and threat briefs.

2.8.4.5. **Q-. (MC)** Slow to determine position when map reading. Slow to recognize check/turn points. Remained within 2 NM of planned course unless deviating for obstacles/threats and stayed within the range/area boundaries. Altitude, route of flight, and use of supporting assets contributed to limited/preventable exposure to enemy threats. Slow to recognize and adjust for deviations in timing and course. If a TOT was required, the examinee arrived at the target within +/-1.5 minutes of the TOT. Leg and/or threat briefs were delayed, incomplete, or inaccurate.

2.8.4.6. **U. (MC)** Could not establish position. Failed to recognize check/turn points or adjust for deviations in timing and course. Exceeded the parameters for Q-. Flew outside the established range/area boundaries. Altitude, route of flight, and/or use of supporting assets resulted in dangerous/unnecessary exposure to enemy threats. Leg and/or threat briefs detracted from crew SA with regards to route or mission progress.

2.8.5. **Area 41--Formation:**

2.8.5.1. **Formation Lead**

2.8.5.1.1. **Q. (P)** Established appropriate formations. Effectively directed the flight to accomplish mission objectives. Good situational awareness and wingman consideration. Positive control of the flight/element. Smooth on the controls. Planned ahead and made timely decisions. Complied with established procedures.

2.8.5.1.2. **Q-. (P)** Adequate flight management. Fair situational awareness and wingman consideration. Control inputs were not unsafe, but made it difficult for wingman to maintain position. Did not always plan ahead and/or hesitant in making decisions. Minor deviations in established procedures.

2.8.5.1.3. **U. (P)** Did not establish the appropriate formations. Poor situational awareness and wingman consideration. Rough on the controls. Major deviations in established procedures. Indecisive.

2.8.5.1.4. **Q. (MC)** Smooth on the controls with minor deviations. Good situational awareness and usually considered wingman. Usually planned ahead and made timely decisions. Complied with established procedures.

2.8.5.1.5. **Q-. (MC)** Adequate flight management as directed by pilot/flight lead. Fair situational awareness and wingman consideration. Control inputs were not unsafe, but made it difficult for wingman to maintain position. Did not always plan ahead and/or hesitant in making decisions. Minor deviations in established procedures.

2.8.5.1.6. **U. (MC)** Did not establish the directed formations. Poor situational awareness and wingman consideration. Rough on the controls. Major deviations in established procedures. Indecisive.

2.8.5.2. **Formation Wingman:**

2.8.5.2.1. **Q. (P)** Maintained position with only momentary deviations. Made smooth and immediate position corrections. Maintained safe separation and complied with established procedures. Smooth, timely join-up. Good situational awareness.

2.8.5.2.2. **Q-. (P)** Varied position, but within limits. Minor over-controlling. Minor procedural deviations. Slow join-up. Fair situational awareness.

2.8.5.2.3. **U. (P)** Unable to maintain a formation position. Abrupt position corrections. Significant over-controlling requiring assistance from other pilot. Did not maintain safe separation. Unsafe join-up or formation procedures. Poor situational awareness.

2.8.5.2.4. **Q. (MC)** Maintained position with only minor deviations. Made position corrections as necessary or when directed by the pilot/flight lead. Maintained safe separation and complied with procedures. Positive join-up. Good situational awareness.

2.8.5.2.5. **Q-. (MC)** Varied position considerably, but within limits. Over-controlled. Minor procedural deviations. Slow join-up. Fair situational awareness.

2.8.5.2.6. **U. (MC)** Unable to maintain a formation position. Abrupt position corrections. Significant over-controlling requiring assistance from other pilot. Did not maintain safe separation. Unsafe join-up or formation procedures. Poor situational awareness.

2.8.6. **Area 42--Threat Identification/Countermeasure Procedures:**

2.8.6.1. **Q.** Threat reactions were timely and correct IAW TTPs. Accomplished appropriate countermeasures and performed maneuvers to counter the threat within safe operating parameters.

2.8.6.2. **Q-.** Threat reactions were slow or inconsistent with TTPs. Slow to accomplish appropriate countermeasures or perform maneuvers to counter threat. Temporarily exceeded operating limits.

2.8.6.3. **U.** Failed to take the appropriate evasive action or activate the appropriate countermeasures. Exceeded the aircraft limitations during evasive maneuvering. Improper threat call and/or clearing/scanning procedures. Flew back through the threat area after completion of the evasive maneuver. Did not place the helicopter in a position to apply suppressive fire, if appropriate.

2.8.7. **Area 43--Terminal Area Operations:**

2.8.7.1. **Q.** Performance IAW the procedures outlined in current HH-60 AFTTP, flight manual, operational manuals, and other published directives. Aircraft control was smooth and positive. Thoroughly aware of power and EM requirements/limitations and the appropriate site restrictions. Proper consideration and use of terrain features and wind conditions. Performed a thorough site evaluation. Appropriate approach path/angle used for the given terrain features, wind, and landing zone (LZ) conditions. Rate of descent during the approach was within limits. If acting as the non-flying pilot, closely monitored the aircraft systems/instruments and aircraft flight path/position. Assisted the flying pilot as briefed/required.

2.8.7.2. **Q-.** Same as Q except for minor deviations which did not affect safety/mission accomplishment.

2.8.7.3. **U.** Major deviations to the procedures outlined in current HH-60 AFTTP, the flight manual, operational manuals, and/or other published directives. Aircraft control was erratic/unsafe. Failed to consider power and EM requirements/limitations, site training restrictions, terrain features, or wind conditions. Failed to perform a thorough site evaluation. If acting as the non-flying pilot, failed to monitor aircraft systems/instruments and/or aircraft flight path/position. Did not assist the pilot flying as briefed/required.

2.8.8. **Area 44--AIE Operations:**

2.8.8.1. **Q. (P)** Performance was IAW the procedures outlined in the flight manual and other published directives. Aircraft control was smooth and positive during the reconnaissance, approach, hover, and takeoff. Thoroughly aware of the power requirements/limitations. Proper consideration and use of the terrain features and wind conditions. Displayed the proper consideration of the AIE device length versus the altitude of deployment. Minor drift tendencies were promptly corrected. Good situational awareness. If acting as the non-flying pilot, closely monitored and called out aircraft systems/instruments and aircraft flight path/position. Assisted the pilot flying as briefed/required.

2.8.8.1.1. **Maintain Hover Altitude.** +/-10% of selected altitude

2.8.8.1.2. **Maintain Heading.** +/-10 degrees

2.8.8.2. **Q-. (P)** Same as Q except for minor deviations which did not affect safety/mission accomplishment. Drifting during the hover did not jeopardize safety, but prevented the operation from being promptly accomplished.

2.8.8.2.1. **Maintain Hover Altitude.** +/-15% of selected altitude

2.8.8.2.2. **Maintain Heading.** +/-15 degrees

2.8.8.3. **U. (P)** Major deviations to the procedures outlined in the flight manual, and other published directives. Aircraft control was erratic/unsafe. Failed to consider power requirements/limitations, device length versus deployment altitude, use of terrain features, and wind conditions. Poor situational awareness. If acting as the non-flying pilot, failed to monitor and call out aircraft systems/instruments and/or aircraft flight path/position. Did not assist the pilot flying as briefed/required. Exceeded the parameters of Q-.

2.8.8.4. **Q. (MC)** Performance was IAW the procedures outlined in the flight manual and other published directives with minor deviations. Aware of the power requirements/limitations. Displayed adequate consideration and use of the terrain features and wind conditions. Displayed the proper consideration of the AIE device length versus the altitude of deployment. Minor drift tendencies were promptly corrected. Good situational awareness. If acting as the non-flying pilot, closely monitored and called out aircraft systems/instruments and aircraft flight path/position. Assisted the pilot flying as briefed/required.

2.8.8.4.1. **Maintain Hover Altitude.** +/-15% of selected altitude

2.8.8.4.2. **Maintain Heading.** +/-15 degrees

2.8.8.5. **Q-. (MC)** Same as Q except for deviations which did not affect safety/mission accomplishment. Drifting during the hover did not jeopardize safety, but prevented the operation from being promptly accomplished.

2.8.8.5.1. **Maintain Hover Altitude.** +/-20% of selected altitude

2.8.8.5.2. **Maintain Heading.** +/-20 degrees

2.8.8.6. **U. (MC)** Major deviations to the procedures outlined in the flight manual and other published directives. Aircraft control was erratic/unsafe. Failed to consider power requirements/limitations, device length versus deployment altitude, use of terrain features, and wind conditions. Poor situational awareness. If acting as the non-flying pilot, failed to monitor and call out aircraft systems/instruments and/or aircraft flight path/position. Did not assist the pilot flying as briefed/required. Exceeded the parameters of Q-.

2.8.9. Area 45--Helicopter Air-to-Air Refueling:

2.8.9.1. **Q. (P and Plug-Certified MC)** Performance IAW the procedures outlined in the flight manual and other published directives. Aircraft control was smooth and positive during the rendezvous, join-up, contact, disconnect and crossover. Contacts were accomplished in a safe/timely fashion with controlled misses (if applicable). When not flying, closely monitored fuel management, aircraft systems/instruments, and lighting. Assisted the pilot flying as briefed/required.

2.8.9.1.1. **Join-up Airspeed.** +/-10 KIAS

2.8.9.1.2. **Join-up Altitude (Receiver High).** +100 feet/-50

2.8.9.1.3. **Join-up Altitude (Receiver Low).** -100 feet/+50

2.8.9.2. **Q-. (P and Plug-Certified MC)** Same as Q except for minor deviations which did not affect safety/mission accomplishment.

2.8.9.2.1. **Join-up Airspeed.** +/-15 KIAS

2.8.9.2.2. **Join-up Altitude (Receiver High).** +150 feet/-50

2.8.9.2.3. **Join-up Altitude (Receiver Low).** -150 feet/+50

2.8.9.3. **U. (P and Plug-Certified MC)** Major deviations to the procedures outlined in the flight manual and other published directives. Aircraft control was erratic/unsafe. Unable to perform contacts and/or misses were dangerous. When not flying, failed to monitor fuel management, aircraft systems/instruments, and/or aircraft flight path/position. Did not assist the pilot flying as briefed/required. Exceeded the parameters of Q-.

2.8.9.4. **Q. (Non-plug Certified MC)** Able to maintain the observation position (or the wingman position) and perform a crossover with only minor deviations. When not flying, closely monitored fuel management, aircraft systems/instruments, and lighting. Assisted the pilot flying as briefed/required.

2.8.9.4.1. **Join-up Airspeed.** +/-10 KIAS

2.8.9.4.2. **Join-up Altitude (Receiver High).** +125 feet/-50

2.8.9.4.3. **Join-up Altitude (Receiver Low).** -125 feet/+50

2.8.9.5. **Q-. (Non-plug Certified MC)** Same as Q except for minor deviations which did not affect safety/mission accomplishment.

2.8.9.5.1. **Join-up Airspeed.** +/-15 KIAS

2.8.9.5.2. **Join-up Altitude (Receiver High).** +175 feet/-50

2.8.9.5.3. **Join-up Altitude (Receiver Low).** -175 feet/+50

2.8.9.6. **U. (Non-plug Certified MC)** Major deviations to the procedures outlined in the flight manual and other published directives. When not flying, failed to monitor fuel management, aircraft systems/instruments, and/or aircraft flight path/position. Did not assist the pilot flying as briefed/required. Exceeded the parameters of Q-.

2.9. Instructor Phase. The following areas are applicable to initial instructor qualification and periodic instructor evaluations.

2.9.1. Area 47--Instructor Briefings/Debriefings/Critique:

2.9.1.1. **Q.** Briefings/debriefings were well organized, accurate, and thorough. Clearly defined the mission's objectives. Ability to reconstruct the flight, offers mission analysis, and provides corrective guidance where appropriate. Pre-briefed the student's next mission.

2.9.1.2. **Q-.** Minor errors or omissions in briefings and/or debrief that did not affect safety or mission effectiveness. Occasionally unclear in analysis of events or procedures.

2.9.1.3. **U.** Briefings were ineffective or non-existent. Major errors or omissions in briefings/debriefings. Analysis of events or procedures was incomplete, inaccurate, or confusing. Failed to define the mission's objectives. Vague or nonexistent pre-briefing of the student's next mission.

2.9.2. Area 48--Demonstration of Performance:

2.9.2.1. **Q.** Effectively demonstrated procedures and techniques (more than one if required by student actions) on the ground and in flight within prescribed parameters. Provided concise, meaningful commentary.

2.9.2.2. **Q-.** Demonstrated procedures and techniques (fewer than two) with minor deviations from prescribed parameters. Commentary was sometimes unclear.

2.9.2.3. **U.** Did not demonstrate correct procedures or techniques. Did not provide commentary or commentary was consistently unclear.

2.9.3. Area 49--Instructor Knowledge:

2.9.3.1. **Q.** Demonstrated a thorough knowledge of all applicable aircraft procedures, requirements, systems/performance characteristics, techniques, and missions to be performed. Demonstrated a thorough knowledge of all applicable publications and regulations.

2.9.3.2. **Q-.** Demonstrated minor errors in the above areas that did not affect safety or mission accomplishment.

2.9.3.3. **U.** Failed to demonstrate an adequate knowledge of aircraft procedures, requirements, systems/performance characteristics, techniques, and missions performed. Knowledge of publications and/or regulations was inadequate. Lack of knowledge in certain areas seriously detracted from instructor effectiveness.

2.9.4. Area 50--Instructional Ability:

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

2.9.4.2. **Q-.** Accomplished the above tasks with minor discrepancies that did not affect safety or mission accomplishment.

2.9.4.3. **U.** Demonstrated an inability to effectively communicate and provide timely feedback. Did not provide corrective actions when necessary. Did not plan ahead or anticipate student problems. Did not identify unsafe maneuvers/situations in a timely manner.

2.9.5. Area 51--Training Documentation Procedures:

2.9.5.1. **Q.** Demonstrated an accurate review and completion of the appropriate training/evaluation records. Accurately assessed and documented student performance. Comments were clear and pertinent.

2.9.5.2. **Q-.** Demonstrated minor errors or omissions in the review and completion of training/evaluation records that did not adversely affect effectiveness of the mission. Comments were incomplete or slightly unclear.

2.9.5.3. **U.** Did not review and/or complete the required forms or records. Comments were invalid and/or unclear. Did not accurately assess or document the student's performance.

Chapter 3

FULLY QUALIFIED SPECIAL MISSION AVIATOR (MF) EVALUATIONS

3.1. Crew Positions. (T-2). Evaluation standards will be administered in accordance with the individual's crew position as listed below: Reference **Chapter 4** for requirements of MGs that are transitioning to the MF position.

3.1.1. **Basic Qualified Flight Engineer (BF).** Flight Engineers that have only completed the qualification (QUAL) requirements of **Table 3.1** Normally, this position is not intended to be used as a permanent qualification.

3.1.2. **Mission Qualified Flight Engineer (MF).** Flight Engineers that have completed both the Qualification (QUAL) and Mission (MSN) requirements of **Table 3.1** MFs will be evaluated in all required areas unless indicated otherwise. **(T-2).**

3.1.3. **Instructor Flight Engineer (IF).** Flight Engineers that have completed the Initial Instructor requirements of **Table 3.1**

3.2. Evaluation Event Requirements. (T-2). Refer to **Table 3.1** for required events.

3.2.1. **Initial/Periodic Qualification Evaluations.** Qualification profiles require demonstrated proficiency in contact maneuvers and in-flight emergency procedures listed in **Table 3.1** Evaluations may be accomplished with the examinee on the left or right side of the aircraft.

3.2.2. **Initial/Periodic Mission Evaluations.** Mission evaluations may be conducted concurrently with QUAL evaluations as long as the required items in **Table 3.1** are completed. Evaluations may be accomplished with the examinee on the left or right side of the aircraft.

3.2.3. **Initial/Periodic Instructor Evaluations.**

3.2.3.1. Instructor flight evaluations should be conducted on instructional missions with a student. When students are not available or mission/crew composition requirements prevent the inclusion of students, another qualified crewmember or the evaluator will serve as the "student" (e.g., a crewmember currently in training, a qualified crewmember, or the evaluator). The "student" will perform those duties prescribed by the instructor/evaluator for the mission being accomplished. The instructor candidate will monitor all phases of flight from an advantageous position and be prepared to demonstrate or explain any area or procedure. **(T-2).**

3.2.3.2. Events certified after the initial instructor evaluation do not require additional instructor certification.

3.2.4. **Alternate Insertion and Extraction (AIE) and Gunnery.** Any current and qualified evaluator flight engineer/aerial gunner (EF/EG) may evaluate "like items" such as AIEs and gunnery. Hoists will only be evaluated by an EF. See AFI 11-2HH-60V1 for a list of like items. **(T-2).**

3.2.4.1. Once trained and evaluated on one gun system (M-240, GAU-18, GAU-2 or other fielded weapon), training and certification on additional systems will be in accordance with AFI 11-2HH-60V1. **(T-2).**

3.2.4.2. During periodic evaluations, flight engineers may be evaluated on any gun system in which they are qualified. If possible, do not evaluate the same gun system on two consecutive evaluation cycles. The system not evaluated by actual demonstration will be evaluated verbally. **(T-2).**

3.2.4.3. **AIE/Hoist Evaluation Requirements.** Live AIEs are required for INIT MSN evaluations. Live AIEs are encouraged, but are not required, for requalification or periodic evaluations. AIE and hoist operations will be evaluated using actual equipment for each event. **Note:** Failure to complete live AIE requirements will be documented on the AF Form 8 IAW AFI 11-202V2. The restriction may be lifted upon certification IAW AFI 11-2HH-60V1.

3.2.4.3.1. INIT/RQ evals. Accomplish one of each event: fast rope, rappel, rope ladder, and a hoist insertion or extraction.

3.2.4.3.2. Periodic evals. Accomplish one hoist insertion or extraction and one additional AIE.

3.2.4.3.3. MG-qualified crewmembers are only required to complete a live hoist during the MF INIT MSN evaluation. Previously live certified MG-qualified crewmembers are considered live certified in other AIE operations.

3.3. Flight Engineer (MF) Evaluated Event Requirement Table. (T-2) FF, MF and IF evaluation requirements are listed in [Table 3.1](#)

Table 3.1. Flight Engineer (MF) Evaluation Event Requirements.

Flight Engineer (MF)	Qual	Mission	Initial Instructor
GENERAL			
1. Knowledge of Directives and Forms	R	R	R
2. Publications Check	R	R	R
3. Mission Planning/Weight and Balance/TOLD	R	R	R
4. Energy Management	R	R	R
5. Briefings	R	R	R
6. Systems Knowledge	R	R	R
7. Use of Checklists	R	R	R
8. Ground Handling/Support Equipment	(1)		
9. Internal Cargo Loading/Off-Loading	R	R	
10. Preflight/Aircraft Run-Up	R	R	R
12. Crew Coordination	R	R	R
13. Crew Resource Management	R	R	R
14. Crew/Flight Discipline (CRITICAL)	R	R	R
15. Situational Awareness (CRITICAL)	R	R	R
16. Safety, Judgment, Airmanship (CRITICAL)	R	R	R
17. Boldface Emergencies (CRITICAL)	R	R	R
18. After Landing/Engine Shutdown/Post-Flight	R	R	R

19. Aircraft Servicing	(1)		
20. Debriefing	R	R	R
QUALIFICATION	Qual	Mission	Initial Instructor
21. Hovering Maneuvers	R		R
22. Takeoff	R		R
23. Autorotations	R		
24. Simulated Single Engine Approach/Landing	R		
25. AFCS/Boost Off	R		
26. Stabilator Malfunctions	R		
27. DEC Malfunctions	R		
28. Traffic Patterns	R		R
29. Approaches and Landings	R		R
MISSION	Qual	Mission	Initial Instructor
37. Mission Planning		R	R
38. Mission Execution		R	R
39. Tactical Employment Procedures		R	R
40. Terrain/Flight Navigation		R	R
41. Formation		(3)	R
42. Threat ID/Countermeasure Procedures		R	R
43. Terminal Area Operations		R	R
44. AIE Operations		R	R
45. Helicopter Air-to-Air Refueling		(2)	
46. Gunnery		R	R
INSTRUCTOR	Qual	Mission	Initial Instructor
47. Briefings/Debriefings/Critiques	R	R	R
48. Demo-Performance	R	R	R
49. Instructor Knowledge	R	R	R
50. Instructional Ability	R	R	R
51. Training Documentation Procedures			R
Note 1. Required on Initial/Requal Evaluations. AFRC will incorporate as mandatory requirement for QUAL evals.			
Note 2. Required for Initial/Requal Evaluations. N/A for ARC units if requal is within six months of qual lapse.			
Note 3. Required for INIT, REQUAL, and PERIODIC evaluations (see para 1.9.2.3). N/A for ARC units if requal is within six months of qual lapse.			

3.4. Flight Engineer (FF/MF/IF) Flight Evaluation Criteria. (T-2).

3.4.1. **General.** This section contains evaluation criteria for conducting HH-60 Flight Engineer (MF) flight evaluations. Evaluations may be administered in the left or right seat IAW [para 3.2](#), as long as all evaluation requirements are met. This criterion serves as a grading guide for evaluators.

3.4.2. Evaluation Objectives:

3.4.2.1. **Initial, Requalification, and Periodic QUAL Evaluations.** The examinee must satisfactorily demonstrate the ability to operate the aircraft and systems safely and effectively IAW the appropriate flight manual and other operating procedures.

3.4.2.2. **Initial, Requalification, and Periodic MSN Evaluations.** The examinee must satisfactorily demonstrate the ability to perform the mission and operate the aircraft and systems safely and effectively. Tactical portions of mission evaluations require a reasonable level of simulated threats and intelligence inputs.

3.5. General Phase:

3.5.1. Area 1--Knowledge of Directives/Forms:

3.5.1.1. **Q.** Knowledgeable of all applicable directives, both HHQ and local. Familiar with proper forms completion.

3.5.1.2. **Q-.** Knowledge of capabilities, approved operating procedures, and rules are marginal in some areas but did not impact safe/effective mission accomplishment. Minor errors in forms completion.

3.5.1.3. **U.** Major errors or omissions in knowledge of operating capabilities or procedures that would preclude safe/effective mission accomplishment. Major errors in forms completion. Regulations/directives were intentionally violated.

3.5.2. Area 2--Publications Check: Conduct a thorough review of publications required by paragraph para [1.8.5](#)

3.5.2.1. **Q.** Publications are current, contain all supplements/changes, and are properly posted.

3.5.2.2. **Q-.** Publications contain deficiencies which would not impact flight safety or mission accomplishment.

3.5.2.3. **U.** Publications are outdated and/or contain deficiencies which would impact flight safety or mission accomplishment.

3.5.3. Area 3--Mission Planning/Weight and Balance/Takeoff and Landing Data (TOLD) (Take-off, In-flight, Landing):

3.5.3.1. **Q.** Checked all factors applicable to the flight. Ensured the crew was aware of special requirements/equipment necessary for the flight. Had a satisfactory knowledge of weight and balance. Computed the DD Form 365-4 and TOLD within the following specified tolerances and in a timely manner:

3.5.3.1.1. **Weight.** +/-200 pounds

3.5.3.1.2. **Center of Gravity.** +/-0.5 inches

3.5.3.1.3. **Power Available/Required.** +/-2 percent

3.5.3.1.4. **Maximum Endurance Airspeed.** + 0/- 2 knots

3.5.3.1.5. **Minimum/Maximum Safe Single Engine Airspeed.** + 2/- 2 knots

3.5.3.1.6. **VNE/VH.** +0/- 5 knots

3.5.3.1.7. **Onset of Blade Stall.** +/-2 degrees

3.5.3.2. **Q-**. Same as above except for minor errors or omissions that could degrade mission effectiveness. Computed the DD Form 365-4 and TOLD within the following specified tolerances and in a timely manner:

3.5.3.2.1. **Weight.** +/-300 pounds

3.5.3.2.2. **Center of Gravity.** +/-0.7 inches

3.5.3.2.3. **Power Available/Required.** +/-3 percent

3.5.3.2.4. **Maximum Endurance Airspeed.** + 2/- 4 knots

3.5.3.2.5. **Minimum/Maximum Safe Single Engine Airspeed.** + 4/- 4 knots

3.5.3.2.6. **VNE/VH.** +2/- 7 knots

3.5.3.2.7. **Onset of Blade Stall.** +/-5 degrees

3.5.3.3. **U.** Major errors or omissions that would preclude safe and effective mission accomplishment. Exceeded the limits of Q-.

3.5.4. **Area 4--Energy Management:**

3.5.4.1. **Q.** Satisfactory knowledge of Energy Maneuverability (EM) charts. Monitored aircraft flight parameters during maneuvering. Gave clear and concise indications of climbs, descents, and approach to blade stall.

3.5.4.2. **Q-**. Same as above except minor deviations occurred which did not affect safe/effective mission accomplishment.

3.5.4.3. **U.** Unsatisfactory knowledge of EM charts. Failed to monitor aircraft flight parameters. Did not give indications of climbs, descents, or approach to blade stall.

3.5.5. **Area 5--Briefings:**

3.5.5.1. **Q. Briefer.** Well organized and professionally presented in a logical sequence. Effective use of training aids. Presented the required events and allowed for an effective discussion for accomplishing the mission. Concluded the briefing in time to allow for a thorough preflight of personal equipment, aircraft, and mission equipment. Considered the abilities/limitations of all crew and flight members. Passengers were thoroughly and professionally briefed IAW applicable regulations and directives.

3.5.5.2. **Q-. Briefer.** Events were out of sequence, redundant, and difficult to understand. Did not effectively use training aids. Focused on nonessential items and omitted minor details. Did not consider all crew/flight members' abilities. Poor time management. Passenger briefing lacked sufficient information.

3.5.5.3. **U. Briefer.** Disorganized sequence. Presentation omitted major details that caused confusion. Did not allow sufficient time for preflight of personal equipment, aircraft, and mission equipment. Ignored crew and flight members' abilities, limitations, and/or questions. Passengers were not briefed.

3.5.5.4. **Q. Receiver.** Actively participated and provided input when required. Fully understood the briefing and followed instructions.

3.5.5.5. **Q-. Receiver.** Did not fully understand duties and lack of action/input created minor problems that did not affect safe mission accomplishment.

3.5.5.6. **U. Receiver.** Late or missed the briefing. Not prepared or did not actively participate when requested. Did not fully understand duties, and lack of action/input created problems that impacted safe mission accomplishment.

3.5.6. Area 6--Systems Knowledge:

3.5.6.1. **Q.** Demonstrated a thorough knowledge of applicable aircraft systems and limitations. Ensured satisfactory operation within limits.

3.5.6.2. **Q-.** Limited knowledge of systems, procedures and operational limits.

3.5.6.3. **U.** Demonstrated an unsatisfactory knowledge of systems, procedures, or operating limits. Operated the aircraft or systems outside applicable limits.

3.5.7. Area 7--Use of Checklists:

3.5.7.1. **Q.** Effectively used the appropriate checklists with accurate and timely responses. Familiar with checklists and contents.

3.5.7.2. **Q-.** Used the appropriate checklists, but was slow to respond and/or had difficulty locating proper procedures.

3.5.7.3. **U.** Failed to use the proper checklists or was not adequately familiar with their contents.

3.5.8. Area 8--Ground Handling/Support Equipment:

3.5.8.1. **Q.** Familiar with the necessary ground handling/support equipment and knowledgeable of its safe operations.

3.5.8.2. **Q-.** Demonstrated a need for additional training in some ground handling and support equipment areas.

3.5.8.3. **U.** Displayed an unacceptable level of knowledge in the operation of necessary ground handling and support equipment.

3.5.9. Area 9--Internal Cargo Loading/Off-Loading:

3.5.9.1. **Q.** Satisfactorily loaded/off-loaded the aircraft IAW the flight manual and other applicable directives. Satisfactory knowledge of restraint equipment/requirements, weight limitations, and safety precautions.

3.5.9.2. **Q-.** Same as above except for minor deviations which did not affect safe/effective mission accomplishment.

3.5.9.3. **U.** Major deviations which would affect safe/effective mission accomplishment. Unsatisfactory knowledge of restraint equipment/requirements, weight limitations, and safety precautions.

3.5.10. Area 10--Preflight/Aircraft Run-Up:

3.5.10.1. **Q.** Accomplished all required aircraft/equipment inspections IAW the flight manual and applicable directives in a timely manner. Correctly configured the aircraft for the assigned mission. Had a thorough knowledge of information contained in the aircraft forms and correctly determined aircraft status. Adhered to station times and used all appropriate checklists correctly.

3.5.10.2. **Q-**. Same as above except for minor procedural deviations which did not degrade mission effectiveness.

3.5.10.3. **U**. Did not use the checklist or omitted major item(s). Major deviations in procedures which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight or proper configuration to perform the mission.

3.5.11. Area 12--Crew Coordination:

3.5.11.1. **Q**. Coordinated and communicated effectively with other crew members.

3.5.11.2. **Q-**. Minor errors in crew coordination occurred which did not affect safe/effective mission accomplishment.

3.5.11.3. **U**. Improperly or ineffectively coordinated or communicated with other crew members causing delays or confusion which did, or could have, adversely affected safety or mission accomplishment.

3.5.12. Area 13--Crew Resource Management:

3.5.12.1. **Q**. Managed resources and duties effectively to minimize task saturation, channelized attention, and distractions among crew members. Met requirements IAW AFI 11-290, *Cockpit/Crew Resource Management Training Program* and AF Form 4031, *CRM Skills Criteria Training/Evaluation*.

3.5.12.2. **Q-**. Minor errors in managing resources and duties which did not affect safe/effective mission accomplishment.

3.5.12.3. **U**. Improperly or ineffectively managed resources and/or duties which caused task saturation, channelized attention, and distractions among crew members which impacted safety or mission accomplishment.

3.5.13. Area 14--Crew/Flight Discipline (Critical):

3.5.13.1. **Q**. Demonstrated strict, professional aircrew discipline throughout all phases of the mission. Coordinated and communicated effectively with other crew members.

3.5.13.2. **U**. Failed to exhibit strict aircrew discipline. Intentionally violated rules or regulations. Improperly or ineffectively coordinated or communicated with the other crew members causing delays or confusion which did, or could have, adversely affected safety or mission accomplishment.

3.5.14. Area 15--Situational Awareness (Critical):

3.5.14.1. **Q**. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension even as the environment or situation changed. Ensured all aspects of the mission were accomplished with regard to the safety of crew, passengers, ground personnel, and aircraft.

3.5.14.2. **U**. Decisions, or lack thereof, resulted in the failure to accomplish the assigned mission. Demonstrated poor judgment to the extent safety could have been compromised. Lacked understanding/comprehension of events occurring in and around the aircraft/flight.

3.5.15. Area 16--Safety/Judgment/Airmanship (Critical):

3.5.15.1. **Q.** Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment. Sound judgment enhanced mission accomplishment and was evident in the decision-making process. Adequately cleared the aircraft.

3.5.15.2. **U.** Was not aware of, or did not comply with, all safety factors required for the safe operation of the aircraft or mission accomplishment. A clear lack of judgment hampered or precluded mission accomplishment. Did not adequately clear the aircraft. Allowed a dangerous situation to develop without taking proper corrective action.

3.5.16. Area 17--Boldface Emergencies (Critical): (Note: may be evaluated in flight or in a static aircraft.)

3.5.16.1. **Q.** Correct and immediate response. Satisfactory performance of the corrective action. The crewmember pointed without hesitation to, and knew the function of, all switches and controls required for all critical action emergency procedures for his/her crew position.

3.5.16.2. **U.** Incorrect sequence, unsatisfactory/untimely response, or unsatisfactory performance of the corrective action. The crewmember could not, without hesitation, identify or explain the function of all switches and controls required for all critical action emergency procedures for his/her crew position.

3.5.17. Area 18--After Landing/Engine Shutdown/Post-Flight:

3.5.17.1. **Q.** Accomplished the appropriate after landing, taxi, and shutdown checklists in accordance with the flight manual and applicable directives. Performed proper aircraft and equipment postflight and/or reconfiguration. Correctly determined the condition and status of the aircraft after shutdown. Completed all applicable aircraft forms correctly and briefed maintenance personnel as required.

3.5.17.2. **Q-.** Same as above except for minor deviations or omissions.

3.5.17.3. **U.** Major deviations or omissions during the after landing, aircraft taxi, engine shutdown, or post flight procedures which could have jeopardized safety. Failed to perform the aircraft and equipment postflight and/or reconfiguration. Failed to complete the aircraft forms or brief maintenance personnel as required.

3.5.18. Area 19--Aircraft Servicing:

3.5.18.1. **Q.** Satisfactory knowledge/performance of aircraft servicing. Thoroughly familiar with the proper types of fuels/lubricants and aircraft refueling checklists. Correctly completed the required forms. Adhered to all safety precautions.

3.5.18.2. **Q-.** Same as above except for minor deviations which would not affect safe/effective mission accomplishment.

3.5.18.3. **U.** Unsatisfactory knowledge/performance of aircraft servicing. Unfamiliar with the proper fuels/lubricants. Major deviations in completing the required forms. Failed to take all safety precautions.

3.5.19. Area 20--Debriefing:

3.5.19.1. **Q.** Thoroughly debriefed the mission or actively participated in the debriefing. Discussed mission accomplishment and debriefed deviations. Offered correct guidance as appropriate.

3.5.19.2. **Q-.** Incomplete debriefing. Did not actively participate in the debriefing or thoroughly discuss the mission, deviations, or corrective guidance.

3.5.19.3. **U.** Did not debrief mission, deviations, or offer corrective guidance.

3.6. Qualification Phase:

3.6.1. Area 21--Hovering Maneuvers (As determined by FE: Precision Hover, 360 Degree Turns, Sideward and Backward Flight):

3.6.1.1. **Q.** Provided pilot flying with drift/altitude deviation calls. Provided proper drift correction instructions. Used standard/correct terminology. Cleared the aircraft as briefed/required.

3.6.1.2. **Q-.** Same as Q except for minor deviations.

3.6.1.3. **U.** Did not provide drift/altitude deviation calls. Failed to provide correct drift correction instructions. Did not use standard terminology resulting in confusion. Failed to clear the aircraft as briefed/required.

3.6.2. Area 22--Takeoff (As determined by FE: Normal, Marginal Power, Maximum Performance):

3.6.2.1. **Q.** Accomplished all required checklists. Monitored aircraft systems/instruments and fuel status as required. Cleared the aircraft as required/briefed. Understands take off abort criteria and briefed correct power and/or airspeed.

3.6.2.2. **Q-.** Same as above except for minor deviations which did not degrade safe/effective mission accomplishment.

3.6.2.3. **U.** Major deviations which affected safe/effective mission accomplishment. Failed to monitor aircraft systems/instruments and fuel status. Failed to complete checklists. Did not clear the aircraft. Failed to identify abort point or when aircraft was out of parameters. Failed to brief correct power and/or airspeed.

3.6.3. Area 23--Autorotations (As determined by FE: Straight Ahead or Low Altitude):

3.6.3.1. **Q.** Monitored aircraft systems/instruments as briefed. Gave clear/concise indications of rotor, engine, aircraft parameters, and limits. Effectively incorporated scan during the approach. Understands duties for both training and real-world autorotations.

3.6.3.2. **Q-.** Same as Q except for deviations which would not have compromised safety. Understands duties with minor deficiencies.

3.6.3.3. **U.** Failed to monitor aircraft systems/instruments as briefed. Did not give indications of rotor, engine, aircraft parameters, and limits. Did not attempt to incorporate approach scan. Does not understand duties required during training and real-world autorotations.

3.6.4. Area 24--Simulated Single Engine Approach/Landing:

3.6.4.1. **Q.** Completed checklists and computed single engine performance as required/briefed. Monitored systems/instruments and cleared the aircraft as briefed/required.

3.6.4.2. **Q-.** Same as Q except for deviations which did not compromise safety.

3.6.4.3. **U.** Failed to complete the checklist or did not compute single engine performance as required/briefed. Did not monitor aircraft systems/instruments or assist the pilot as briefed/required.

3.6.5. Area 25--AFCS/Boost Off:

3.6.5.1. **Q.** Completed the checklists correctly and assisted the pilot as briefed/required. Correctly briefed the crew on restrictions/limitations.

3.6.5.2. **Q-.** Same as Q except for deviations which did not compromise safety.

3.6.5.3. **U.** Failed to complete the checklists correctly or did not assist the pilot as briefed/required. Did not brief the crew on restrictions/limitations.

3.6.6. Area 26--Stabilator Malfunctions:

3.6.6.1. **Q.** Completed the checklists correctly and assisted the pilot as briefed/required. Correctly briefed the crew on restrictions/limitations.

3.6.6.2. **Q-.** Same as Q except for deviations which did not compromise safety.

3.6.6.3. **U.** Failed to complete checklists correctly or did not assist the pilot as briefed/required. Did not brief the crew on restrictions/limitations.

3.6.7. Area 27--Digital Electronic Control (DEC) Malfunction:

3.6.7.1. **Q.** Completed the checklists correctly and assisted the pilot as briefed/required. Correctly briefed the crew on restrictions/limitations. Monitored engine instruments.

3.6.7.2. **Q-.** Same as Q except for deviations which did not compromise safety.

3.6.7.3. **U.** Failed to complete checklist correctly or did not assist the pilot as briefed/required. Did not brief the crew on restrictions/limitations. Failed to monitor engine instruments.

3.6.8. Area 28--Traffic Patterns (Prior to Base Turn):

3.6.8.1. **Q.** Completed the required checklists and monitored aircraft systems/instruments. Cleared the aircraft as required/briefed.

3.6.8.2. **Q-.** Same as above except for minor deviations which did not affect safety of flight. Cleared the aircraft.

3.6.8.3. **U.** Major deviations which affected safe/effective mission accomplishment. Did not clear the aircraft or monitor systems/instruments.

3.6.9. Area 29--Approaches/Landings (As determined by FE: Normal/Shallow/Steep): (Base and Final Approach).

3.6.9.1. **Q.** Monitored aircraft systems/instruments and cleared the aircraft as required/briefed.

3.6.9.2. **Q-**. Same as above except for minor deviations which did not affect safety/effective mission accomplishment. Cleared the aircraft as briefed/required.

3.6.9.3. **U**. Major deviations which affected safe/effective mission accomplishment. Did not clear the aircraft as briefed/required.

3.7. Mission Phase:

3.7.1. Area 37--Mission Planning:

3.7.1.1. **Q**. Adequately assisted the pilot in planning the mission. Actively involved in the mission planning process. Familiar with and able to locate information contained in the appropriate tactical guidance. Assisted the pilot in updating the intelligence situation prior to the briefing.

3.7.1.2. **Q-**. Provided marginal assistance in the mission planning process. Limited knowledge of the location of approved tactical guidance.

3.7.1.3. **U**. Did not assist the pilot in mission planning. Not actively involved in the planning process. Unfamiliar with the information contained in approved tactical guidance publications. Failed to update the intelligence situation prior to the briefing.

3.7.2. Area 38--Mission Execution:

3.7.2.1. **Q**. Effectively performed required duties in support of mission tasks.

3.7.2.2. **Q-**. Marginal performance of required duties.

3.7.2.3. **U**. Poor performance of required duties. Unable to accomplish required tasks.

3.7.3. Area 39--HH-60 Tactical Employment Procedures:

3.7.3.1. **Q**. Knowledge of tactics was good. Participated in planning and applied tactics consistent with current HH-60 AFTTPs, SPINS, ATO, CONOPS, and other directives. Worked well with the tactical plan and successfully completed it to the maximum extent possible. Adjusted to the tactical situation.

3.7.3.2. **Q-**. Knowledge of tactics was adequate, but failed to notice/verbalize the mission plan contained minor deviations from good tactical considerations. Slow to make adjustments to the tactical situation.

3.7.3.3. **U**. Knowledge of tactics was poor. Did not participate in the tactical plan for the mission. Failed to notice adjustments were needed. Tactics used were ineffective in countering the threat and/or accomplishing the mission.

3.7.4. Area 40--Terrain Flight/Navigation:

3.7.4.1. **Q**. Assisted the pilot with navigation by identifying navigational cues and clearing the aircraft as briefed/required.

3.7.4.2. **Q-**. Same as above except for minor deviations which did not affect safe/effective mission accomplishment. Cleared the aircraft.

3.7.4.3. **U**. Major deviations which affected safe/effective mission accomplishment. Did not assist with navigation or clearing the aircraft.

3.7.5. Area 41--Formation:

3.7.5.1. **Q.** Provided timely inputs on the wingman's position in the formation. Cleared the aircraft throughout maneuvers. Recognized closure and took proper action to correct. Understood Tactical Formation Maneuvering (TFM) and formation employment procedures.

3.7.5.2. **Q-.** Minor lapses in informing the crew on the wingman's position. Cleared the aircraft throughout maneuvers. Closure recognized, but was slow to verbalize. Displayed some TFM and formation weapons employment knowledge.

3.7.5.3. **U.** Consistently failed to update the crew on the wingman's position. Failed to clear the aircraft throughout maneuvers. Failed to recognize or verbalize closure. Displayed no TFM or formation weapons employment knowledge.

3.7.6. **Area 42--Threat Identification/Countermeasure Procedures:**

3.7.6.1. **Q.** Threat reactions were timely and correct. Performed proper clearing/scanning procedures IAW current HH-60 AFTTPs. Proper use of suppressive fire, if appropriate.

3.7.6.2. **Q-.** Threat reactions were slow or inconsistent. Slow to accomplish proper clearing/scanning procedures IAW current HH-60 AFTTPs. Slow to use suppressive fire, if appropriate.

3.7.6.3. **U.** Failed to verbalize/take the appropriate evasive action or activate the appropriate countermeasures. Failed to clear/scan. Allowed the aircraft limitations to be exceeded during evasive maneuvering. Improper threat call and/or clearing/scanning procedures. Failed to stop the aircraft from flying back through the threat area after completion of the evasive maneuver. Did not use suppressive fire, if appropriate.

3.7.7. **Area 43--Terminal Area Operations:**

3.7.7.1. **Q.** Satisfactory performance IAW current HH-60 AFTTPs, the flight manual, operational manuals, and other applicable directives. Provided clear, concise, and positive direction to the pilot during the reconnaissance, approaches, landings, and departure. Ensured aircraft clearance from obstacles. Computed the required TOLD and was thoroughly aware of the power margin/limitations and the appropriate site restrictions. Knowledgeable of the various types of pyrotechnics and their characteristics.

3.7.7.1.1. **Gross Weight.** +/-200 pounds.

3.7.7.1.2. **Power Available/Required.** +/-2 percent.

3.7.7.1.3. **Min/Max Single Engine Airspeeds.** +/-2 knots.

3.7.7.2. **Q-.** Same as Q except for minor deviations which did not affect safety/mission accomplishment.

3.7.7.2.1. **Gross Weight.** +/-300 pounds.

3.7.7.2.2. **Power Available/Required.** +/-4 percent.

3.7.7.2.3. **Min/Max Single Engine Airspeeds.** +/-4 knots.

3.7.7.3. **U.** Major deviations to the procedures outlined in current HH-60 AFTTPs the flight manual, operational manuals, and other directives. Failed to compute TOLD or was unaware of the power requirements/limitations and site restrictions. TOLD computations exceeded the parameters of Q-. Failed to provide clear, concise, and positive direction/inputs to the pilot flying. Did not ensure adequate clearance from obstacles. Poor knowledge or improper use of pyrotechnics.

3.7.8. Area 44--AIE Operations:

3.7.8.1. **Q.** Performed IAW the procedures outlined in the flight manual, operational manual, and other published directives. Aware of/computed power requirements/limitations. Good knowledge of all cable/hoist limitations (i.e., shock loading, birdcaging, kinks). Provided clear and concise direction during the approach, pickup, and departure. Advised the pilot flying promptly of drift tendencies. Continued to adequately scan during the AIE procedures. Equipment malfunctions were dealt with effectively while maintaining situational awareness and crew coordination.

3.7.8.2. **Q-.** Same as Q except for minor deviations which did not affect safety/mission accomplishment. Slow to advise the pilot flying of drift tendencies and slow to scan the area around the aircraft.

3.7.8.3. **U.** Major deviations to the procedures outlined in the flight manual and other published directives which affected safe/effective mission accomplishment. Unaware of the proper AIE methods or the emergency procedures associated with the method used. Unaware of computed power requirements/limitations. Poor knowledge of cable/hoist limitations (i.e., shock loading, birdcaging, kinks). Failed to advise the pilot flying of drift tendencies and failed to scan the area around the aircraft. Equipment preparation was not accomplished in a timely manner or IAW published directives. Did not correct equipment malfunctions and failed to maintain situational awareness and crew coordination.

3.7.9. Area 45--Helicopter Air-to-Air Refueling:

3.7.9.1. **Q.** Read correct checklists for each phase of flight. Used effective, clear, and concise voice procedures during the rendezvous, join-up, contact, disconnect, and crossover. Maintained effective scan and recognized all light signals. Closely monitored fuel management, aircraft systems/instruments, and lighting. Assisted the crew as briefed/required.

3.7.9.2. **Q-.** Minor deviations while reading checklists for each phase of flight. Minor deviations with voice procedures and had momentary lapses with scan. Did not recognize/know all light signals and failed to closely monitor systems/instruments and lighting. Assistance lacking.

3.7.9.3. **U.** Failed to read correct checklists for each phase of flight. Voice procedures inadequate. Ineffective scan and failed to recognize/know any light signals. Failed to monitor fuel management, aircraft systems/instruments, and lighting. Did not assist the crew as briefed/required.

3.7.10. Area 46--Gunnery (Note: if blank ammunition is used, target acquisition is not required):

3.7.10.1. **Q.** Demonstrated the ability to preflight, arm, acquire, effectively engage the target, and dearm the weapon. Able to identify and clear weapons malfunctions in a timely manner IAW the appropriate operating manuals. Kept crew advised of other aircraft/team/survivor/target during employment. Safety was never compromised.

3.7.10.2. **Q-.** Minor deviations in preflight procedures. Minor procedure errors and/or was slow to arm/de-arm the weapon. Target acquisition was slow or limited in its effectiveness. Slow to identify and/or clear weapons malfunctions IAW the appropriate operating manuals. Safety was never compromised. Slow to advise crew of other aircraft/team/survivor/target during employment.

3.7.10.3. **U.** Unable to preflight, arm, acquire, engage the target, or dearm the weapon. Major errors in procedures. Target acquisition was ineffective. Unable to identify and/or clear weapons malfunctions. Failed to advise crew of other aircraft/team/survivor/target during employment. Compromised safety.

3.8. Instructor Phase. The following areas are applicable to initial instructor upgrade and periodic instructor evaluations.

3.8.1. Area 47--Instructor Briefings/Debriefings/Critique:

3.8.1.1. **Q.** Briefings/debriefings were well organized, accurate, and thorough. Clearly defined the mission's objectives. Ability to reconstruct the flight, offers mission analysis, and provides corrective guidance where appropriate. Pre-briefed the student's next mission.

3.8.1.2. **Q-.** Minor errors or omissions in briefings and/or debrief that did not affect safety or mission effectiveness. Occasionally unclear in analysis of events or procedures.

3.8.1.3. **U.** Briefings were marginal or non-existent. Major errors or omissions in briefings/debriefings. Analysis of events or procedures was incomplete, inaccurate, or confusing. Failed to define the mission's objectives. Vague or nonexistent pre-briefing of the student's next mission.

3.8.2. Area 48--Demonstration of Performance:

3.8.2.1. **Q.** Effectively demonstrated procedures and techniques on the ground and in flight, within prescribed parameters. Provided concise, meaningful commentary.

3.8.2.2. **Q-.** Demonstrated procedures and techniques with minor deviations from prescribed parameters. Commentary was sometimes unclear.

3.8.2.3. **U.** Did not demonstrate correct procedures or techniques. Did not provide commentary or commentary was consistently unclear.

3.8.3. Area 49--Instructor Knowledge:

3.8.3.1. **Q.** Demonstrated a thorough knowledge of all applicable aircraft procedures, requirements, systems/performance characteristics, techniques, and missions to be performed. Demonstrated a thorough knowledge of all applicable publications and regulations.

3.8.3.2. **Q-.** Demonstrated minor errors in the above areas that did not affect safety or mission accomplishment.

3.8.3.3. **U.** Failed to demonstrate an adequate knowledge of aircraft procedures, requirements, systems/performance characteristics, techniques, and missions performed. Knowledge of publications and/or regulations was inadequate. Lack of knowledge in certain areas seriously detracted from instructor effectiveness.

3.8.4. Area 50--Instructional Ability:

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

3.8.4.2. **Q-.** Accomplished the above tasks with minor discrepancies that did not affect safety or mission accomplishment.

3.8.4.3. **U.** Demonstrated an inability to effectively communicate and provide timely feedback. Did not provide corrective actions when necessary. Did not plan ahead or anticipate student problems. Did not identify unsafe maneuvers/situations in a timely manner.

3.8.5. Area 51--Training Documentation Procedures:

3.8.5.1. **Q.** Demonstrated an accurate review and completion of the appropriate training/evaluation records. Accurately assessed and documented student performance. Comments were clear and pertinent.

3.8.5.2. **Q-.** Demonstrated minor errors or omissions in the review and completion of training/evaluation records that did not adversely affect effectiveness of the mission. Comments were incomplete or slightly unclear.

3.8.5.3. **U.** Did not review and/or complete the required forms or records. Comments were invalid and/or unclear. Did not accurately assess or document the student's performance.

Chapter 4

PARTIALLY QUALIFIED SPECIAL MISSION AVIATOR (MG) EVALUATIONS

4.1. Crew Positions. (T-2). Evaluation standards will be administered in accordance with the individual's crew position as listed below:

4.1.1. Aerial Gunner (MG). Aerial Gunners that have completed the Qualification/Mission (QUAL/MSN) requirements of **Table 4.1** MGs will be evaluated in all required areas unless indicated otherwise. **(T-2).**

4.1.1.1. MG crew members that complete both the FF INIT QUAL and MF INIT MSN evaluations are considered Flight Engineers and will be evaluated using MF evaluation criteria in **Chapter 3** for subsequent periodic evaluations. **(T-2).**

4.1.1.2. Crew members that have only completed the FF INIT QUAL evaluation will continue to receive a MG QUAL/MSN evaluation until completion of the MF INIT MSN evaluation.

4.1.2. Instructor Aerial Gunner (IG): Aerial Gunners that have completed the Initial Instructor requirements of **Table 4.1** **Note:** IG or EG crew members that complete an FF QUAL and/or MF MSN evaluation will not lose IG qualification or EG certification. These individuals will continue to receive an IG evaluation in addition to any FF or MF evaluation requirements until upgraded to IF. Reference **para 1.13** for documentation requirements. **(T-2).**

4.2. Evaluation Event Requirements. (T-2). Refer to **Table 4.1** for required events.

4.2.1. Initial/Periodic Qualification/Mission Evaluations. MGs receive a combined QUAL/MSN evaluation that includes items from the general, qualification, and mission phases of flight. Evaluations may be accomplished with the examinee on the left or right side of the aircraft.

4.2.2. Initial/Periodic Instructor Evaluations.

4.2.2.1. Instructor flight evaluations should be conducted on instructional missions with a student. When students are not available or mission/crew composition requirements prevent the inclusion of students, another qualified crewmember or the evaluator will serve as the "student" (e.g., a crewmember currently in training, a qualified crewmember, or the evaluator). The "student" will perform those duties prescribed by the instructor/evaluator for the mission being accomplished. The instructor candidate will monitor all phases of flight from an advantageous position and be prepared to demonstrate or explain any area or procedure. **(T-2).**

4.2.2.2. Events certified after the initial instructor evaluation do not require additional instructor evaluation.

4.2.3. Alternate Insertion and Extraction (AIE) and Gunnery. Any current and qualified EF/EG evaluator may evaluate MGs on "like items" such as AIEs and gunnery. See AFI 11-2HH-60V1 for a list of like items.

4.2.3.1. Once trained and evaluated on one weapon system (M-240, GAU-18, GAU-2 or other fielded weapon), training and certification on additional systems will be in accordance AFI 11-2HH-60V1. **(T-2).**

4.2.3.2. During periodic evaluations, aerial gunners may be evaluated on any gun system in which they are qualified. If possible, do not evaluate the same gun system on two consecutive evaluation cycles. The system not evaluated by actual demonstration will be evaluated verbally. **(T-2).**

4.2.3.3. AIE Evaluation Requirements. Live AIEs are required for INIT QUAL/MSN evaluations. Live AIEs are encouraged, but are not required for requalification or periodic evaluations. AIEs will be evaluated using actual equipment for each event. **Note:** Failure to complete live AIE requirements will be documented on the AF Form 8 IAW AFI 11-202V2. The restriction may be lifted upon certification IAW AFI 11-2HH-60V1.

4.2.3.3.1. INIT/RQ evals. Accomplish one of each event: fast rope, rappel, and rope ladder.

4.2.3.3.2. Periodic evals. Accomplish one AIE insertion and one AIE extraction.

4.3. Aerial Gunner (MG) Evaluated Event Requirement Table. (T-2). MG and IG evaluation requirements are listed in [Table 4.1](#)

Table 4.1. Aerial Gunner (MG) Evaluated Event Requirements.

Aerial Gunner (MG)	Qual/Mission	Initial Instructor
1. Knowledge of Directives and Forms	R	R
2. Publications Check	R	R
3. Mission Planning/Weight and Balance/TOLD	R	R
4. Energy Management	R	R
5. Briefings	R	R
6. Systems Knowledge	R	R
7. Use of Checklists	R	R
8. Ground Handling/Support Equipment	(1)	
9. Internal Cargo Loading/Off-Loading	R	
10. Preflight/Aircraft Run-Up	R	
12. Crew Coordination	R	R
13. Crew Resource Management	R	R
14. Crew/Flight Discipline (CRITICAL)	R	R
15. Situational Awareness (CRITICAL)	R	R
16. Safety, Judgment, Airmanship (CRITICAL)	R	R
17. Boldface Emergencies (CRITICAL)	R	R
18. After Landing/Engine Shutdown/Post-Flight	R	R
19. Aircraft Servicing	(1)	
20. Debriefing	R	R
QUAL/MISSION	Qual/Mission	Initial Instructor
37. Mission Planning	R	R
38. Mission Execution	R	R

39. Tactical Employment Procedures	R	R
40. Terrain/Flight Navigation	R	R
41. Formation	(3)	R
42. Threat ID/Countermeasure Procedures	R	R
43. Terminal Area Operations	R	R
44. AIE Operations	R	R
45. Helicopter Air-to-Air Refueling	(2)	
46. Gunnery	R	R
INSTRUCTOR	Qual/Mission	Initial Instructor
47. Briefings/Debriefings/Critiques	R	R
48. Demo-Performance	R	R
49. Instructor Knowledge	R	R
50. Instructional Ability	R	R
51. Training Documentation Procedures		R
Note 1. Required on Initial/Requal Evaluations.		
Note 2. Required for Initial/Requal Evaluations. N/A for ARC units if requal is within six months of qual lapse.		
Note 3. Required for INIT, REQUAL, and PERIODIC evaluations (see para 1.9.2.3). N/A for ARC units if requal is within six months of qual lapse.		

4.4. Aerial Gunner (MG/IG) Flight Evaluation Criteria. (T-2).

4.4.1. **General.** This section contains evaluation criteria for conducting HH-60 Aerial Gunner (MG/IG) flight evaluations. Evaluations can be administered in the left or right seat as long as all evaluation requirements are met. This criterion serves as the grading guide for evaluators.

4.4.2. **Evaluation Objectives: Initial, Requalification, and Periodic QUAL/MSN Evaluations.** The examinee must satisfactorily demonstrate the ability to operate the aircraft and systems safely and effectively IAW the appropriate flight manual and other operating procedures. Tactical portions of mission evaluations require a reasonable level of simulated threats and intelligence inputs.

4.5. General Phase:

4.5.1. Area 1--Knowledge of Directives/Forms:

4.5.1.1. **Q.** Knowledgeable of all applicable directives; both HHQ and local. Familiar with proper forms completion.

4.5.1.2. **Q-.** Knowledge of capabilities, approved operating procedures, and rules are marginal in some areas but did not impact safe/effective mission accomplishment. Minor errors in forms completion.

4.5.1.3. **U.** Major errors or omissions in knowledge of operating capabilities or procedures that would preclude safe/effective mission accomplishment. Major errors in forms completion. Regulations/directives were intentionally violated.

4.5.2. **Area 2--Publications Check:** Conduct a thorough review of publications required by para [1.8.5](#)

4.5.2.1. **Q.** Publications are current, contain all supplements/changes, and are properly posted.

4.5.2.2. **Q-.** Publications contain deficiencies which would not impact flight safety or mission accomplishment.

4.5.2.3. **U.** Publications are outdated and/or contain deficiencies which would impact flight safety or mission accomplishment.

4.5.3. Area 3--Mission Planning/Weight and Balance/Takeoff and Landing Data (TOLD) (Take-off, In-flight, Landing):

4.5.3.1. **Q.** Checked all factors applicable to the flight. Ensured the crew was aware of special requirements/equipment necessary for the flight.

4.5.3.2. **Q-.** Same as above except for minor errors or omissions that could degrade mission effectiveness.

4.5.3.3. **U.** Major errors or omissions that would preclude safe and effective mission accomplishment.

4.5.4. Area 4--Energy Management:

4.5.4.1. **Q.** Monitored aircraft flight parameters during maneuvering. Gave clear and concise indications of climbs, descents, and approach to blade stall.

4.5.4.2. **Q-.** Same as above except minor deviations occurred which did not affect safe/effective mission accomplishment.

4.5.4.3. **U.** Failed to monitor aircraft flight parameters. Did not give indications of climbs, descents, or approach to blade stall.

4.5.5. Area 5--Briefings:

4.5.5.1. **Q. Briefer.** Well organized and professionally presented in a logical sequence. Effective use of training aids. Presented the required events and allowed for an effective discussion for accomplishing the mission. Concluded the briefing in time to allow for a thorough preflight of personal equipment, aircraft, and mission equipment. Considered the abilities/limitations of all crew and flight members. Passengers were thoroughly and professionally briefed IAW applicable regulations and directives.

4.5.5.2. **Q-. Briefer.** Events were out of sequence, redundant, and difficult to understand. Did not effectively use training aids. Focused on nonessential items and omitted minor details. Did not consider all crew/flight members' abilities. Poor time management. Passenger briefing lacked sufficient information.

4.5.5.3. **U. Briefer.** Disorganized sequence. Presentation omitted major details that caused confusion. Did not allow sufficient time for preflight of personal equipment, aircraft, and mission equipment. Ignored crew and flight members' abilities, limitations, and/or questions. Passengers were not briefed.

4.5.5.4. **Q. Receiver.** Actively participated and provided input when required. Fully understood the briefing and followed instructions.

4.5.5.5. **Q-. Receiver.** Did not fully understand duties and lack of action/input created minor problems that did not affect safe mission accomplishment.

4.5.5.6. **U. Receiver.** Late or missed the briefing. Not prepared or did not actively participate when requested. Did not fully understand duties, and lack of action/input created problems that impacted safe mission accomplishment.

4.5.6. Area 6--Systems Knowledge:

4.5.6.1. **Q.** Demonstrated a thorough knowledge of applicable aircraft systems and limitations. Ensured satisfactory operation within limits.

4.5.6.2. **Q-.** Limited knowledge of systems, procedures, and operational limits.

4.5.6.3. **U.** Demonstrated an unsatisfactory knowledge of systems, procedures, or operating limits. Operated the aircraft or systems outside applicable limits.

4.5.7. Area 7--Use of Checklists:

4.5.7.1. **Q.** Effectively used the appropriate checklists with accurate and timely responses. Familiar with checklists and contents.

4.5.7.2. **Q-.** Used the appropriate checklists, but was slow to respond and/or had difficulty locating proper procedures.

4.5.7.3. **U.** Failed to use the proper checklists or was not adequately familiar with their contents.

4.5.8. Area 8--Ground Handling/Support Equipment:

4.5.8.1. **Q.** Familiar with the necessary ground handling/support equipment and knowledgeable of its safe operations.

4.5.8.2. **Q-.** Demonstrated a need for additional training in some ground handling and support equipment areas.

4.5.8.3. **U.** Displayed an unacceptable level of knowledge in the operation of necessary ground handling and support equipment.

4.5.9. Area 9--Internal Cargo Loading/Off-Loading:

4.5.9.1. **Q.** Satisfactorily loaded/off-loaded the aircraft IAW the flight manual and other applicable directives. Satisfactory knowledge of restraint equipment/requirements, weight limitations, and safety precautions.

4.5.9.2. **Q-.** Same as above except for minor deviations which did not affect safe/effective mission accomplishment.

4.5.9.3. **U.** Major deviations which would affect safe/effective mission accomplishment. Unsatisfactory knowledge of restraint equipment/requirements, weight limitations, and safety precautions.

4.5.10. Area 10--Preflight/Aircraft Run-Up:

4.5.10.1. **Q.** Accomplished all required aircraft and equipment inspections IAW the flight manual and applicable directives in a timely manner. Correctly configured the

aircraft for the assigned mission. Adhered to station times and used all appropriate checklists correctly.

4.5.10.2. **Q-**. Same as above except for minor procedural deviations which did not degrade mission effectiveness.

4.5.10.3. **U**. Did not use the checklist or omitted major item(s). Major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight or proper configuration to perform the mission.

4.5.11. Area 12--Crew Coordination:

4.5.11.1. **Q**. Coordinated and communicated effectively with other crew members.

4.5.11.2. **Q-**. Minor errors in crew coordination occurred which did not affect safe/effective mission accomplishment.

4.5.11.3. **U**. Improperly or ineffectively coordinated or communicated with other crew members causing delays or confusion which did, or could have, adversely affected safety or mission accomplishment.

4.5.12. Area 13--Crew Resource Management:

4.5.12.1. **Q**. Managed resources and duties effectively to minimize task saturation, channelized attention, and distractions among crew members. Met requirements IAW AFI 11-290, *Cockpit/Crew Resource Management Training Program* and AF Form 4031, *CRM Skills Criteria Training/Evaluation*.

4.5.12.2. **Q-**. Minor errors in managing resources and duties which did not affect safe/effective mission accomplishment.

4.5.12.3. **U**. Improperly or ineffectively managed resources and/or duties which caused task saturation, channelized attention, and distractions among crew members which could impact safety or mission accomplishment.

4.5.13. Area 14--Crew/Flight Discipline (Critical):

4.5.13.1. **Q**. Demonstrated strict, professional aircrew discipline throughout all phases of the mission. Coordinated and communicated effectively with other crew members.

4.5.13.2. **U**. Failed to exhibit strict aircrew discipline. Intentionally violated rules or regulations. Improperly or ineffectively coordinated or communicated with the other crew members causing delays or confusion which did, or could have, adversely affected safety or mission accomplishment.

4.5.14. Area 15--Situational Awareness (Critical):

4.5.14.1. **Q**. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension even as the environment or situation changed. Ensured all aspects of the mission were accomplished with regard to the safety of crew, passengers, ground personnel, and aircraft.

4.5.14.2. **U**. Decisions, or lack thereof, resulted in the failure to accomplish the assigned mission. Demonstrated poor judgment to the extent safety could have been

compromised. Lacked understanding/comprehension of events occurring in and around the aircraft/flight.

4.5.15. Area 16--Safety/Judgment/Airmanship (Critical):

4.5.15.1. **Q.** Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment. Sound judgment enhanced mission accomplishment and was evident in the decision-making process.

4.5.15.2. **U.** Was not aware of, or did not comply with, all safety factors required for the safe operation of the aircraft or mission accomplishment. A clear lack of judgment hampered or precluded mission accomplishment. Did not adequately clear the aircraft. Allowed a dangerous situation to develop without taking proper corrective action.

4.5.16. Area 17--Boldface Emergencies (Critical): (Note: may be evaluated in flight or in a static aircraft.)

4.5.16.1. **Q.** Correct and immediate response. Satisfactory performance of the corrective action. The crewmember pointed without hesitation to, and knew the function of, all switches and controls required for all critical action emergency procedures for his/her crew position.

4.5.16.2. **U.** Incorrect sequence, unsatisfactory/untimely response, or unsatisfactory performance of the corrective action. The crewmember could not, without hesitation, identify or explain the function of all switches and controls required for all critical action emergency procedures for his/her crew position.

4.5.17. Area 18--After Landing/Engine Shutdown/Post-Flight:

4.5.17.1. **Q.** Assisted in accomplishment of appropriate after landing, taxi, and shutdown checklists/procedures in accordance with the flight manual and applicable directives. Performed proper aircraft and equipment postflight and/or reconfiguration.

4.5.17.2. **Q-.** Same as above except for minor deviations or omissions.

4.5.17.3. **U.** Major deviations or omissions during after landing, aircraft taxi, engine shutdown or post flight procedures which could have jeopardized safety. Failed to perform the aircraft and equipment postflight and/or reconfiguration. Failed to complete the aircraft forms or brief maintenance personnel as required.

4.5.18. Area 19--Aircraft Servicing:

4.5.18.1. **Q.** Satisfactory knowledge/performance of aircraft servicing. Thoroughly familiar with the proper types of fuels/lubricants and aircraft refueling checklists. Correctly completed the required forms. Adhered to all safety precautions.

4.5.18.2. **Q-.** Same as above except for minor deviations which would not affect safe/effective mission accomplishment.

4.5.18.3. **U.** Unsatisfactory knowledge/performance of aircraft servicing. Unfamiliar with the proper fuels/lubricants. Major deviations in completing the required forms. Failed to take all safety precautions.

4.5.19. Area 20--Debriefing:

4.5.19.1. **Q.** Thoroughly debriefed the mission or actively participated in the debriefing. Discussed mission accomplishment and debriefed deviations. Offered correct guidance as appropriate.

4.5.19.2. **Q-.** Incomplete debriefing. Did not actively participate in the debriefing or thoroughly discuss the mission, deviations, or corrective guidance.

4.5.19.3. **U.** Did not debrief mission, deviations, or offer corrective guidance.

4.6. Qual/Mission Phase:

4.6.1. Area 37--Mission Planning:

4.6.1.1. **Q.** Adequately assisted the pilot in planning the mission. Actively involved in the mission planning process. Familiar with, and able to locate information contained in the appropriate tactical guidance. Assisted the pilot in updating the intelligence situation prior to the briefing.

4.6.1.2. **Q-.** Provided marginal assistance in the mission planning process. Limited knowledge of the location of approved tactical guidance.

4.6.1.3. **U.** Did not assist the pilot in mission planning. Not actively involved in the planning process. Unfamiliar with the information contained in approved tactical guidance publications. Failed to update the intelligence situation prior to the briefing.

4.6.2. Area 38--Mission Execution:

4.6.2.1. **Q.** Effectively performed required duties in support of mission tasks.

4.6.2.2. **Q-.** Marginal performance of required duties.

4.6.2.3. **U.** Poor performance of required duties. Unable to accomplish required tasks.

4.6.3. Area 39--HH-60 Tactical Employment Procedures:

4.6.3.1. **Q.** Knowledge of tactics was good. Participated with planning and applied tactics consistent with current HH-60 AFTTPs, other MDS volumes if participating, SPINS, ATO, CONOPS, other directives, and good judgment. Worked well with the tactical plan and successfully completed it to the maximum extent possible. Adjusted to the tactical situation.

4.6.3.2. **Q-.** Knowledge of tactics was adequate, but failed to notice/verbalize the mission plan contained minor deviations from good tactical considerations. Slow to make adjustments to the tactical situation.

4.6.3.3. **U.** Knowledge of tactics was poor. Did not participate with the tactical plan for the mission. Failed to notice adjustments were needed. Tactics used were ineffective in countering the threat and/or accomplishing the mission.

4.6.4. Area 40--Terrain Flight/Navigation:

4.6.4.1. **Q.** Assisted the pilot with navigation by identifying navigational cues and clearing the aircraft as briefed/required.

4.6.4.2. **Q-.** Same as above except for minor deviations which did not affect safe/effective mission accomplishment. Cleared the aircraft.

4.6.4.3. **U.** Major deviations which affected safe/effective mission accomplishment. Did not assist with navigation or clearing the aircraft.

4.6.5. Area 41--Formation:

4.6.5.1. **Q.** Provided timely inputs on the wingman's position in the formation. Cleared the aircraft throughout maneuvers. Recognizes closure. Understands tactical flight maneuvering (TFM) and formation weapons employment.

4.6.5.2. **Q-.** Minor lapses in informing the crew on the wingman's position. Cleared the aircraft throughout maneuvers. Closure recognized, but slow to verbalize. Displays some TFM and formation weapons employment knowledge.

4.6.5.3. **U.** Consistently failed to update the crew on the wingman's position. Failed to clear the aircraft throughout maneuvers. Failed to recognize or verbalize closure. Displays no TFM and formation weapons employment knowledge.

4.6.6. Area 42--Threat Identification/Countermeasure Procedures:

4.6.6.1. **Q.** Threat reactions were timely and correct. Performed proper clearing/scanning procedures IAW current HH-60 AFTTPs. Proper use of suppressive fire, if appropriate.

4.6.6.2. **Q-.** Threat reactions were slow or inconsistent. Slow to accomplish proper clearing/scanning procedures IAW current HH-60 AFTTPs. Slow to use suppressive fire, if appropriate.

4.6.6.3. **U.** Failed to verbalize/take the appropriate evasive action or activate the appropriate countermeasures. Failed to clear/scan. Allowed the aircraft limitations to be exceeded during evasive maneuvering. Improper threat call and/or clearing/scanning procedures. Failed to stop the aircraft from flying back through the threat area after completion of the evasive maneuver. Did not use suppressive fire, if appropriate.

4.6.7. Area 43--Terminal Area Operations:

4.6.7.1. **Q.** Satisfactory performance IAW current HH-60 AFTTPs, the flight manual, operational manuals, and other applicable directives. Provided clear, concise and positive direction to the pilot during the reconnaissance, approaches, landings, and departure. Ensured aircraft clearance from obstacles. Knowledgeable of the various types of pyrotechnics and their characteristics.

4.6.7.2. **Q-.** Same as Q except for minor deviations which did not affect safety/mission accomplishment.

4.6.7.3. **U.** Major deviations to the procedures outlined in current HH-60 AFTTPs, the flight manual, operational manuals, and other directives. Failed to provide clear, concise, and positive direction/inputs to the crew. Did not ensure adequate clearance from obstacles. Poor knowledge or improper use of pyrotechnics.

4.6.8. Area 44--AIE Operations:

4.6.8.1. **Q.** Performed IAW the procedures outlined in the flight manual, operational manual, and other published directives. Provided clear and concise direction during the approach, pickup, and departure. Advised the pilot flying promptly of drift tendencies.

Continued to adequately scan during the AIE procedures. Equipment malfunctions were dealt with effectively while maintaining situational awareness and crew coordination.

4.6.8.2. **Q-**. Same as Q except for minor deviations which did not affect safety/mission accomplishment. Slow to advise the pilot flying of drift tendencies and slow to scan the area around the aircraft.

4.6.8.3. **U**. Major deviations to the procedures outlined in the flight manual and other published directives which affected safe/effective mission accomplishment. Unaware of the proper AIE methods or the emergency procedures associated with the method used. Failed to advise the pilot flying of drift tendencies and failed to scan the area around the aircraft. Equipment preparation was not accomplished in a timely manner or IAW published directives. Did not correct equipment malfunctions and failed to maintain situational awareness/crew coordination.

4.6.9. **Area 45--Helicopter Air-to-Air Refueling:**

4.6.9.1. **Q**. Familiar with checklists for each phase of flight. Read correct checklists for each phase of flight (as required). Used effective, clear, and concise voice procedures during the rendezvous, join-up, contact, disconnect, and crossover. Maintained effective scan and recognized all light signals. Closely monitored fuel management, aircraft systems/instruments, and lighting. Assisted the crew flying as briefed/required.

4.6.9.2. **Q-**. Minor deviations while reading checklists for each phase of flight (as required). Minor deviations with voice procedures and had momentary lapses with scan. Did not recognize/know all light signals and failed to closely monitor systems/instruments. Assistance lacking.

4.6.9.3. **U**. Failed to read correct checklists for each phase of flight (as required). Voice procedures inadequate. Ineffective scan and failed to recognize/know any light signals. Failed to monitor fuel management, aircraft systems/instruments, and lighting. Did not assist the crew as briefed/required.

4.6.10. **Area 46--Gunnery (Note: if blank ammunition is used, target acquisition is not required.):**

4.6.10.1. **Q**. Demonstrated the ability to preflight, arm, acquire, effectively engage the target, and dearm the weapon. Able to identify and clear weapons malfunctions in a timely manner IAW the appropriate operating manuals. Kept crew advised of other aircraft/team/survivor/target during employment. Safety was never compromised.

4.6.10.2. **Q-**. Minor deviations in preflight procedures. Minor procedure errors and/or was slow to arm/de-arm the weapon. Target acquisition was slow or limited in its effectiveness. Slow to identify and/or clear weapons malfunctions IAW the appropriate operating manuals. Safety was never compromised. Slow to advise crew of other aircraft/team/survivor/target during employment.

4.6.10.3. **U**. Unable to preflight, arm, acquire, engage the target, or dearm the weapon. Major errors in procedures. Target acquisition was ineffective. Unable to identify and/or clear weapons malfunctions. Failed to advise crew of other aircraft/team/survivor/target during employment. Compromised safety.

4.7. Instructor Phase. The following areas are applicable to initial instructor upgrade and periodic instructor evaluations.

4.7.1. Area 47--Instructor Briefings/Debriefings/Critique:

4.7.1.1. **Q.** Briefings/debriefings were well organized, accurate, and thorough. Clearly defined the mission's objectives. Ability to reconstruct the flight, offers mission analysis, and provides corrective guidance where appropriate. Pre-briefed the student's next mission.

4.7.1.2. **Q-.** Minor errors or omissions in briefings and/or debrief that did not affect safety or mission effectiveness. Occasionally unclear in analysis of events or procedures.

4.7.1.3. **U.** Briefings were marginal or non-existent. Major errors or omissions in briefings/debriefings. Analysis of events or procedures was incomplete, inaccurate, or confusing. Failed to define the mission's objectives. Vague or nonexistent pre-briefing of the student's next mission.

4.7.2. Area 48--Demonstration of Performance:

4.7.2.1. **Q.** Effectively demonstrated procedures and techniques on the ground and in flight, within prescribed parameters. Provided concise, meaningful commentary.

4.7.2.2. **Q-.** Demonstrated procedures and techniques with minor deviations from prescribed parameters. Commentary was sometimes unclear.

4.7.2.3. **U.** Did not demonstrate correct procedures or techniques. Did not provide commentary or commentary was consistently unclear.

4.7.3. Area 49--Instructor Knowledge:

4.7.3.1. **Q.** Demonstrated a thorough knowledge of all applicable aircraft procedures, requirements, systems/performance characteristics, techniques, and missions to be performed. Demonstrated a thorough knowledge of all applicable publications and regulations.

4.7.3.2. **Q-.** Demonstrated minor errors in the above areas that did not affect safety or mission accomplishment.

4.7.3.3. **U.** Failed to demonstrate an adequate knowledge of aircraft procedures, requirements, systems/performance characteristics, techniques, and missions performed. Knowledge of publications and/or regulations was inadequate. Lack of knowledge in certain areas seriously detracted from instructor effectiveness.

4.7.4. Area 50--Instructional Ability:

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

4.7.4.2. **Q-.** Accomplished the above tasks with minor discrepancies that did not affect safety or mission accomplishment.

4.7.4.3. **U.** Demonstrated an inability to effectively communicate and provide timely feedback. Did not provide corrective actions when necessary. Did not plan ahead or

anticipate student problems. Did not identify unsafe maneuvers/situations in a timely manner.

4.7.5. Area 51--Training Documentation Procedures:

4.7.5.1. **Q.** Demonstrated an accurate review and completion of the appropriate training/evaluation records. Accurately assessed and documented student performance. Comments were clear and pertinent.

4.7.5.2. **Q-.** Demonstrated minor errors or omissions in the review and completion of training/evaluation records that did not adversely affect effectiveness of the mission. Comments were incomplete or slightly unclear.

4.7.5.3. **U.** Did not review and/or complete the required forms or records. Comments were invalid and/or unclear. Did not accurately assess or document the student's performance.

BURTON M. FIELD, Lt Gen, USAF
DCS, Operations, Plans and Requirements

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

AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, 19 Jan 12

AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, 13 Sep 10

AFI 11-215, *USAF Flight Manuals Program (FMP)*, 22 Dec 08

AFI 11-2HH-60V1, *HH-60—Aircrew Training*, 7 May 10

AFI 11-2HH-60V3, *HH-60 Operations Procedures*, 5 Jan 11

AFI 11-290, *Cockpit/Crew Resource Management Training Program*, 15 Oct 12

AFI 11-401, *Aviation Management*, 10 Dec 10

AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Aviation Badges*, 13 Dec 10

AFI 11-421, *Aviation Resource Management*, 13 Dec 10

AFI 33-360, *Publications and Forms Management*, 7 Feb 2013

AFMAN 33-363, *Management of Records*, 1 Mar 08

AFI 33-364, *Records Disposition—Procedures and Responsibilities*, 22 Dec 06

AFMAN 11-210, *Instrument Refresher Program (IRP)*, 3 Feb 05

AFMAN 11-217V1, *Instrument Flight Procedures*, 22 Oct 10

AFMAN 33-363, *Management of Records*, 1 Mar 08

AFPD 11-2, *Aircrew Operations*, 19 Jan 12

AFPD 11-4, *Aviation Service*, 17 Jan 04

AFTTP 3-1.HH-60G, *Combat Aircraft Fundamentals (S) – HH-60 Helicopter*, 28 Oct 11

AFTTP 3-3.HH-60G, *Combat Aircraft Fundamentals (U) - HH-60 Helicopter*, 28 Oct 11

ATP 56(B), *Air to Air Refueling*, 14 Dec 08

DODD 7730.57, *Aviation Incentive Pays and Continuation Bonus Program*, 12 Aug 08

T.O. 1H-60(H)G-1CL-1, *Pilot Flight Crew Checklist*, 30 Jun 10

T.O. 1H-60(H)G-1CL-2, *Gunner/Hoist Operators Flight Crew Checklist*, 30 Jun 10

T.O. 1H-60(H)G-5, *Basic Weight Checklist and Loading Data, USAF Series HH-60G Helicopters*, 16 Aug 02

Prescribed Forms

AF Form 4038, *HH-60 Evaluation Worksheet*

Adopted Forms

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

AF Form 4348, *USAF Aircrew Certifications*

AF Form 8, *Certificate of Aircrew Qualification*

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AC—Aircraft Commander

ACC—Air Combat Command

AF—Air Force

AFI—Air Force Instruction

AFCS—Automatic Flight Control System

AFMAN—Air Force Manual

AFSC—Air Force Specialty Code

AFTTP—Air Force Tactics Techniques and Procedures

AGL—Above Ground Level

AIE—Alternate Insertion or Extraction

ANG—Air National Guard

ARMS—Aviation Resource Management Systems

ATD—Aircrew Training Device

ATO—Air Tasking Order

AWL—Above Water Level

BMC—Basic Mission Capable

CONOPS—Contingency Operations

CMR—Combat Mission Ready

DA—Decision Altitude

DEC—Digital Electronic Control

DME—Distance Measuring Equipment

DO—Director of Operations

DOC—Designed Operational Capability

DoD—Department of Defense

DRU—Direct Reporting Unit

EF—Evaluator Flight Engineer

EG—Evaluator Aerial Gunner

EM—Energy Maneuverability
EP—Emergency Procedure
EPE—Emergency Procedures Evaluation
FCF—Functional Check Flight
FCIF—Flight Crew Information File
FE—Flight Examiner
FF—Basic Qualified Flight Engineer
FL—Flight Lead
FMP—Flight Manuals Program
FOA—Forward Operating Agency
FRIES—Fast Rope Insertion and Extraction System
FP—First Pilot
FTU—Formal Training Unit
HAAR—Helicopter Air-to-Air Refueling
HQ—Headquarters
HHQ—Higher Headquarters
HIT—Health Indicator Check
IAW—In Accordance With
IF—Instructor Flight Engineer
IG—Instructor Aerial Gunner
ILS—Instrument Landing System
IMC—Instrument Meteorological Conditions
INSTM—Instrument
INSTR—Instructor
IP—Instructor Pilot or Initial Point
ITO—Instrument Take Off
KIAS—Knots Indicated Airspeed
LZ—Landing Zone
MAP—Missed Approach Point
MAJCOM—Major Command
MC—Mission Copilot
MDA—Minimum Descent Altitude

MDS—Mission Design Series
MF—Mission Qualified Flight Engineer
MG—Mission Qualified Aerial Gunner
MP—Mission Pilot
MSA—Minimum Safe Altitude
MSN—Mission
N/A—Not Applicable
NAV—Navigation
NAVAIDS—Navigation Aids
NLT—Not Later Than
NM—Nautical Mile
NOTAM—Notice to Airman
NT—Night
NVG—Night Vision Goggles
OPR—Office of Primary Responsibility
P—Pilot
PAR—Precision Approach Radar
Q—Qualified or Torque
QUAL—Qualification
RDS—Records Disposition Schedule
RPM—Revolutions Per Minute
SA—Situational Awareness
SMA—DELETE
SOI—Syllabus of Instruction
SPINS—Special Instructions
SQ/CC—Squadron Commander
T-2—Tier 2
TACAN—Tactical Air Navigation
TFM—Tactical Flight Maneuvering
T.O.—Technical Order
TOLD—Takeoff and Landing Data
TOT—Time On Target

USAF—United States Air Force

Terms

Certification—The process of endorsing an individual to perform a specific event (i.e. NVG Water Operations, Cargo Sling, Flight Lead).

Eligibility Period—The 6-month period prior to the expiration date of an evaluation.

Emergency Procedures Evaluation (EPE)—A flight, aircrew training device, or verbal evaluation used to evaluate emergency procedures and systems knowledge.

Evaluation Profile—Defines the required items of an evaluation to include a scenario.

Initial Evaluation—The first evaluation of any type for a crew position in an MDS (i.e., INIT QUAL/INSTM, INIT MSN, INIT INSTR).

MSN Evaluation—Qualifies an individual to perform the unit's operational mission.

Tier 2 (T-2)—DELETE