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Flying Operations

MH 53 AIRCREW EVALUATION CRITERIA



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFD 11-2, *Aircraft Rules and Procedures*, and AFD 11-4, *Aviation Service*. It establishes the Aircrew Standardization/Evaluation (Stan/Eval) program that supports AF objectives and is applicable to all MH-53 and TH-53A aircrews. It does not apply to the Air National Guard or Air Force Reserve Command. Multiple qualification is now found in AFI 11-2MH-53, Volume 1, *MH-53 Aircrew Training*.

The Privacy Act of 1974 affects this instruction. The Privacy Act System Number F011 AF XO A, Air Force Operations Resource Management Systems (AFORMS) covers required information. The authority for maintenance of AFORMS is 37 U.S.C. 301a (Incentive Pay), Public Law 92-204, Section 715 (Appropriations Act for 1973), Public Laws 93-570 (Appropriations Act for 1974), 93-294 (Aviation Career Incentive Act of 1974), DoDD 7730.57 (Aviation Career Incentive Act of 1974 and Required Annual Report, February 5, 1976, with Changes 1 and 2), and Executive Order 9497. The Paperwork Reduction Act of 1974 as amended in 1996 affects this instruction.

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1. Objectives. The Aircrew Standardization and Evaluation Program is the commander’s tool to validate mission readiness and the effectiveness of unit flying, to include documentation of individual aircrew member qualification and capabilities.

1.1. General. This instruction establishes requirements for all MH-53 and TH-53A aircrew standardization/evaluation flight evaluations and outlines aircrew standardization/evaluation (stan/eval) grading criteria. Conduct all evaluations in accordance with (IAW) the provisions of Air Force Instruction (AFI) 11-202, Vol. 2, *Aircrew Standardization/Evaluation Program*.

1.2. Applicability. This instruction applies to all MH-53 flying units. Individuals qualified in the MH-53 are also qualified in the TH-53A under provisions of this instruction.

1.3. Distribution. This instruction is distributed to MH-53 units through Air Force publication distribution channels. The office of primary responsibility (OPR) upon specific request and justification makes distribution outside Air Force Special Operations Command (AFSOC) and Air Education Training Command (AETC).

1.4. Revisions. Personnel at all echelons are encouraged to submit proposed changes in accordance with (IAW) AFI 11-215, *Flight Manuals Program (FMP)*, to applicable major commands (MAJCOM). Use AF Form 847, **Recommendation for Change of Publication**.

1.5. Waivers. Submit requests for waivers to this instruction through stan/eval channels to applicable MAJCOM/DOV. Post all waivers to this instruction in the individual's flight evaluation folder (FEF) behind Tab 2. AETC units request waivers through HQ AETC/DOVV.

1.6. Supplements. 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/XOOT, through HQ AFSOC/DOV, for approval. After approved and published, forward one copy to HQ USAF/XOOT. Units below MAJCOM level will forward one copy of each supplement to their MAJCOM OPR for post-publication review.

1.7. Instructor Certified Events. These are events that require certification of training by an instructor or flight examiner. Document certification on the AF Form 1381, **USAF Certification of Aircrew Training**, and file in the individual's FEF behind Tab 1. The squadron commander, stan/eval assigned personnel, or the instructor completing the training will sign the AF Form 1381. Refer to AFI 11-2MH-53, Vol. 1, *MH-53 Aircrew Training* for a current listing of instructor certified events.

1.8. Procedures. Flight examiners will use the evaluation criteria in this volume to conduct all flight and Emergency Procedure Evaluations (EPE). To ensure standard and objective evaluations, flight examiners will be thoroughly familiar with the prescribed evaluation criteria.

1.9. Flight Examiner Role. The flight examiner should not occupy a primary crew position during evaluations to ensure the most objective evaluation. If conditions warrant, the flight examiner may occupy a primary crew position during an evaluation.

EXCEPTION: Student pilot evaluations will have either a qualified instructor pilot or flight examiner at a set of controls.

1.9.1. Prior to the flight, the flight examiner will explain the type, purpose and conduct of the evaluation. The examinee will normally accomplish all mission planning. MAJCOM flight examiners (and unit flight examiners as determined locally) will be furnished a copy of necessary charts, flight logs, target folders, and any additional items they deem necessary.

1.9.2. The flight examiner will thoroughly debrief all significant aspects of the flight. During the critique, the flight examiner will review the examinee's overall rating, specific deviations, area grades assigned (if other than qualified), and any required additional training.

1.9.3. Standards and performance parameters are contained in this instruction.

1.9.4. The flight examiner will base tolerances for in-flight parameters on conditions of smooth air and a stable aircraft. Do not consider momentary deviations from tolerances, provided the

examinee applies prompt corrective action and such deviations do not jeopardize flying safety. The flight examiner will consider cumulative deviations when determining the overall grade.

1.9.5. All evaluations will follow the guidelines set in AFI 11-202, Volume 2. Flight examiner judgment will be the determining factor in arriving at the overall grade.

2. Grading Systems.

NOTE:

Safety consciousness, boldface emergency procedures, judgment, and all instructor areas/subareas are considered critical. If one of these subareas is graded U, then the overall grade for the evaluation will be Q-3.

2.1. Overall Qualification Levels:

2.1.1. Qualification Level 1 (Q-1, Qualified). The aircrew member demonstrated desired performance and knowledge of procedures, equipment and directives within tolerances. This will be awarded when no discrepancies were noted and may be awarded when discrepancies are noted if:

2.1.1.1. The discrepancies resulted in no more than a "Q-" grade being given in any area(s)/subarea(s).

2.1.1.2. In the judgment of the flight examiner, none of the discrepancies preclude awarding of an overall Qualification Level 1.

2.1.1.3. All discrepancies noted during the evaluation were cleared during the debrief of that evaluation.

2.1.1.4. Refer to the tables in section four of this instruction for instructor, basic, qualification, mission, and special mission criteria for sub-area ratings of Qualified for respective crew positions.

2.1.2. Qualification Level 2 (Q-2, Qualified). The aircrew member demonstrated the ability to perform duties safely, but:

2.1.2.1. There were one or more area(s)/subarea(s) where additional training was assigned.

2.1.2.2. In the judgment of the flight examiner, there is justification based on performance in one or several areas/subareas.

2.1.3. Qualification Level 3 (Q-3, Unqualified). The aircrew member demonstrated an unacceptable level of safety, judgment, performance or knowledge.

2.1.3.1. An overall "Q-3" can be awarded if, in the judgment of the flight examiner, there is justification based on performance in one or several areas/subareas.

2.2. Area/Subarea Grades.

2.2.1. Q (Qualified). A "Q" is the desired level of performance. The examinee demonstrated a satisfactory knowledge of all required information, performed aircrew duties within the prescribed tolerances and accomplished the assigned mission.

2.2.2. Q- (Qualified). A “Q-” indicates the examinee is qualified to perform the assigned area tasks, but requires debriefing or additional training as determined by the flight examiner. Minor deviations from established standards did not jeopardize mission accomplishment or flight safety.

2.2.3. U (Unqualified). Assign a “U” area grade for any breach of flight discipline or deviations from prescribed procedures that adversely affected mission accomplishment or compromised flight safety.

3. Aircrew Written Examinations.

3.1. Testing. Provide examinations IAW AFI 11-202, Volume 2 and section 4 of this instruction.

4. Evaluations.

NOTE:

Conduct flight evaluations using the specific crew position profiles below. Apply criteria using [Table 1.](#) through [Table 19.](#) For all mission evaluations, Flight Examiners will ensure that the profile includes adequate events to thoroughly measure knowledge of specific employment procedures to include tactical defensive measures and current special interest items. Crew Resource Management (CRM) skills will be evaluated on all evaluations. Include the seven CRM skills areas: Mission Planning, Situational Awareness, Crew Coordination/Flight Integrity, Communication, Risk Management/Decision Making, Task Management, and Debriefing. Evaluators should reference AF Form 4031, CRM Skills Criteria Training/Evaluation and AFI 11-290 Cockpit/Crew Resource Management Training Program for further clarification.

4.1. Pilot Evaluations - Requirements. Pilot flight evaluations are divided into positions, types and categories as defined below. All AF Form 8s, **Certificate of Aircrew Qualification**, will indicate the applicable crew position, type(s) and category(ies) of the administered evaluation.

4.1.1. Crew Positions: The crew position is either Co-pilot, Pilot, Instructor Pilot or Evaluator Pilot.

4.1.1.1. Co-pilots: Copilots will be evaluated to the same subarea standards as pilots, except crew coordination will not include duties and responsibilities expected of an aircraft commander. Mission co-pilots will be evaluated flying both lead and wing formation positions but are not required to perform "flight lead" duties. They must demonstrate the same lead aircraft control and wingmen considerations expected of a pilot.

4.1.1.2. Pilot: Pilots are aircraft commanders. They are evaluated to the specific standards outlined in [Table 2.-Table 6.](#) Pilots will be evaluated as aircraft commanders and flight lead. This implies they have command of the aircraft, crew, and formation and retain a higher degree of situational awareness than is expected of a co-pilot. During initial upgrade to aircraft commander, unit commanders may elect to upgrade pilots to wing qualification only. If pilots are not upgraded to lead qualification, a restriction will be annotated in the AF Form 8. Subsequent upgrade to lead qualification requires an initial lead evaluation. During initial or recurring evaluations, evaluate lead-qualified pilots both as lead and wing. Evaluate wing-qualified pilots as wingmen only.

4.1.1.3. Instructor: Instructor pilots must meet criteria as outlined in paragraph [4.3.](#) of this instruction.

4.1.1.4. Evaluator: Evaluator pilots follow the guidance in paragraph 4.4. of this instruction.

4.1.2. Evaluation Types: Pilot evaluation types are: Instrument, Qualification, Mission, , Instructor, No Notice and Spot.

4.1.2.1. Instrument (INSTM): Instrument evaluations will include subareas listed as "General" (Table 2.) and "Instrument" (Table 4.). Instrument evaluations may be accomplished in the TH-53A/MH-53 aircraft or simulator (if administered by an Air Force flight examiner). If the TH-53A aircraft/simulator is used, use of Global Positioning System (GPS) for enroute navigation and approach backup, and the function of the "IMU/Comp" and "Norm/DI" switches should be verbally evaluated. The instrument examination is a requisite (prerequisite for initial evaluations). Complete the Instrument Refresher Course (IRC) prior to taking the instrument examination. The instrument and qualification flight evaluations may be combined.

4.1.2.2. Qualification (QUAL): Qualification evaluations will include subareas listed under "General" (Table 2.) and "Qualification" (Table 3.). Qualification evaluations may be administered in the MH-53 or TH-53A aircraft. Qualification Open and Closed Book examinations (or Formal School End of Course examinations), Boldface examination, and EPE are requisites (prerequisites for initial evaluations).

4.1.2.3. Mission (MSN): Mission evaluations will include subareas under "General" (Table 2.) and "Mission" (Table 5.). Mission evaluations will be accomplished in the MH-53 aircraft at night. An EPE and Mission Open and Closed Book examinations (or Formal School End of Course examinations) are requisites (prerequisites for initial evaluations).

EXCEPTIONS: Threat Identification/Countermeasures may be evaluated in the MH-53 simulator.

NOTE: Recurring helicopter air refueling evaluations are not required as long as currency is maintained.

4.1.2.3.1. Night Water Operations: Night Water Operations (NWO) is the only pilot special mission event listed in the unit capabilities chart in AFI 11-2MH53, Volume 1. Evaluations for this special mission event will cover specific, applicable, subareas listed under "General" (Table 2.) and "Special Mission" (Table 6.). Initial night water operations evaluations may be conducted separately or in conjunction with a mission evaluation. Log initial night water operations evaluations as "INIT MSN" evaluations in the "flight phase" block of the AF Form 8, **Certificate of Aircrew Qualification** . Log this evaluation as "INIT MSN (NWO)" in the AF Form 942. After the initial Night Water Operations qualification, night water operations will be evaluated as part of the recurring Mission evaluation, and will be logged as a single line entry on the flight phase block as "MSN". Failure to evaluate Night Water Operations will result in an incomplete MSN evaluation, or require that a restriction be annotated on the AF Form 8. Explanations clarifying the type and circumstances of these evaluations will be placed in the "comments" block of the AF Form 8. There are no requisites for evaluating special mission events.

4.1.3. Evaluation Categories. Evaluation categories are; initial, requalification, recurring, simulator and no-notice. The category will be annotated in the flight phase block of the AF Form 8 except for recurring evaluations. Absence of a category implies the evaluation was recurring. For initial evaluations, accomplish all subareas by actual demonstration.

4.2. Nonrated Aircrew Member Evaluation Requirements. Non-rated aircrew flight evaluations are divided into crew positions, types and categories as defined below. All AF Forms 8 will indicate the applicable crew position, type(s) and category(ies) of the administered evaluation.

4.2.1. Crew Positions: Non-rated crew positions are Flight Engineer, Aerial Gunner, Direct Support Operator, Instructor, and Flight Examiner.

4.2.1.1. Flight Engineer (FE): FEs are evaluated to the standards in **Table 7.-Table 12.** FEs will be fully mission qualified. Any qualification less than fully mission qualified will be noted as a restriction on the AF Form 8.

4.2.1.2. Aerial Gunner (AG): AGs are evaluated to the standards in **Table 13.-Table 17.** AG's will be fully mission qualified. Any qualification less than fully mission qualified will be noted as a restriction on the AF Form 8. Qualification and mission evaluations may be combined into a single eval and logged as QUAL/MSN.

4.2.1.3. Direct Support Operator (DSO): DSOs are evaluated to the standards provided in **Table 18.-Table 19.** All DSOs will demonstrate knowledge and proficiency in pre-mission planning, preflight, in-flight, and post-mission operations. Additionally, all DSOs will demonstrate the proper procedures and proficiency in operating SILENT SHIELD equipment, demonstrate proper crew coordination procedures, and maintain positive control of all classified material.

4.2.1.4. Instructor: Instructors must meet criteria as outlined in paragraph **4.3.** of this instruction and **Table 1.**

4.2.1.5. Flight Examiner: Evaluators follow the guidance as outlined in paragraph **4.4.** of this instruction.

4.2.2. Evaluation Types: Non-rated evaluation types are Qualification, Mission, Instructor and Spot.

4.2.2.1. Qualification. All rotary wing flight engineers require an initial qualification evaluation. Aerial gunners require a qualification/mission evaluation. When possible, complete recurring qualification evaluations in conjunction with recurring mission evaluations. Non-rated aircrew members who do not maintain mission ready/basic mission capable status require a qualification evaluation in lieu of a mission evaluation.

4.2.2.1.1. FEs: In addition to the BOLD FACE requirements, all FE's will perform the following by actual demonstration: one simulated single engine malfunction and AFCS off approach and landing.

4.2.2.2. Mission. FEs and AGs require an initial night mission evaluation.

4.2.2.2.1. FEs: If the mission evaluation is combined with the qualification evaluation, a separate EPE is not required for the mission evaluation.

4.2.2.2.2. FEs and AGs qualified in more than one gun system may be evaluated on either system. Verbally evaluate the system not evaluated by performance. Do not verbally evaluate the same system on subsequent evaluations.

4.2.2.3. Evaluating Special Mission events for Nonrated Aircrew Members:

4.2.2.3.1. AFI 11-2 MH-53, Volume 1, identifies special mission subareas applicable to a

specific helicopter or mission. Evaluate all special mission subareas by actual demonstration. Log initial special mission evaluations as "INIT MSN" evaluations in the "flight phase" block of the AF Form 8, and as INIT MSN (NWO) on the AF Form 942. Explanations clarifying the type and circumstances of these evaluations will be placed in the "comments" block of the AF Form 8.

4.2.2.3.2. Unit commanders determine the number of enlisted crewmembers who will maintain special mission qualification and may use them prior to special mission qualification provided they are initial mission qualified. Do not schedule those personnel on flights where a possible special mission requirement exists.

4.2.2.3.3. Although evaluations may be administered concurrently, they are only valid if the basic aircraft qualification is satisfactorily completed.

4.2.2.3.4. Initial evaluation of alternate insertion and extraction maneuvers will be by actual demonstration. Live deployment or recovery will not be required if accomplished during upgrade training.

4.2.2.3.5. Recurring evaluations of air refueling, cargo sling, formation, and night vision goggles (NVG) water operations are not required if currency is maintained.

4.2.2.3.6. Subareas evaluated while the examinee is using NVGs need not be accomplished for day evaluations.

4.2.2.3.7. Mission qualified flight engineers do not require mountainous terrain for recurring terrain following (TF) evaluations provided currency is maintained.

4.2.3. Evaluation Categories. Evaluation categories are initial, requalification, recurring, simulator and no-notice. The category will be annotated in the flight phase block of the AF Form 8 except for recurring evaluations. Absence of a category implies the evaluation was recurring.

4.2.3.1. DSOs who accomplish requalification mission evaluations on a single airframe are recertified on all fixed/rotary wing airframes on which the crewmember flies. Additional qualification for subsequent airframes will be instructor-certified events documented on the AF Form 1381.

4.2.3.2. DSO Recurring Evaluations. Administer evaluations on any mission where the examinee can demonstrate capabilities listed in the initial qualification. Recurring evaluations conducted on a single airframe will constitute recertification on all fixed/rotary wing airframes on which the crewmember flies.

4.3. Instructor Evaluation Requirements.

4.3.1. Instructor candidates must be qualified in all subareas they will instruct and are expected to meet the standards outlined in [Table 1](#). Instructor candidates will be evaluated on instructor performance during a representative sample of maneuvers. Instructors should have a solid understanding of systems, procedures, and techniques. There are no requisites for initial or recurring Instructor Evaluations.

4.3.2. Except at formal schools, the flight examiner should not act as student. The flight examiner may act as student during maneuvers that are considered high risk.

4.3.3. Instructor pilot candidates must demonstrate each type of landing applicable to the aircraft from the instructor position and their instructional ability during a representative sample of emergency and instrument procedures, mission maneuvers, and all special missions they will instruct. Pilots must be aircraft commander qualified in a special mission prior to an instructor qualification/certification in that mission.

4.3.4. For non-rated crewmembers, accomplish the initial instructor evaluation on a mission that permits accomplishment of all required instructor subareas.

4.3.5. Recurring instructor evaluations are not required, but qualified instructors should be evaluated to instructor standards for a sample of maneuvers during all recurring evaluations. A student is not required and documentation is not required unless the instructor's ability is found to be deficient.

4.3.6. A requalification instructor evaluation is required if a previously qualified instructor has been administratively downgraded or has not performed flying duties in the MDS for more than 6 months. If required, the requalification instructor evaluation may be combined with the basic requalification evaluation.

4.4. Flight Examiners: The flight examiner position is a certification, not a qualification. Refer to MAJCOM supplements to AFI 11-202, Volume 2 for specific guidance.

4.4.1. Flight examiners must meet the same criteria as instructors. Additionally, they must have an expert knowledge of all applicable instructions and should set exemplary standards during evaluations.

4.4.2. Flight examiners will be trained and certified IAW AFI 11-202, Volume 2 (including MAJCOM supplements). Flight examiners must be instructor qualified in a given event prior to acting as a Flight Examiner in that event. Certified Flight examiners who subsequently add special mission instructor or other instructor qualifications are automatically certified to evaluate these new qualifications.

4.5. Multiple Qualification Evaluation Requirements : For AFSOC units, refer to AFI 11-202, Volume 2 AFSOC Supplement 1 for crew positions, evaluation requirements, and approval authority for multiple qualifications.

4.6. Verbal Evaluation of Subareas. Applicable evaluation forms show the subareas that need to be evaluated for specific evaluations. Make every effort to evaluate all subareas through actual performance. When this is impossible, evaluate the subareas verbally. The unit chief of stan/eval and the flight examiner decide if the evaluation is complete. For pilot evaluations, do not verbally evaluate takeoff, coupled approaches and landings. Verbal evaluation of subareas on consecutive evaluations should not be accomplished.

4.7. Emergency Procedures Evaluation. For EPE contents, refer to applicable crewmember grading criteria in the tables of this regulation. All aircrew members are responsible for understanding and applying proper emergency action procedures applicable to their crew position. EPEs may be performed in-flight, in an ATD, or verbally. The flight examiner will assign an overall EPE/ATD grade (1, 2, or 3) in the Qualification Ground Phase block of the AF Form 8, regardless whether all or a portion of the EPE was performed in-flight.

NOTE:

The following tables identify criteria for an evaluation to be considered Q-1. Refer to section two and paragraphs 4.1., 4.2., and 4.3. of this regulation for further grading guidance.

Table 1. "Instructor" MH-53 Evaluation Criteria for Sub-Area Ratings of "Q" .

INSTRUCTOR	CRITERIA
1. Instructional Knowledge/ Abilities	Demonstrate a complete understanding of all required publications, technical orders, and governing directives. Ensure student understands all requirements and is thoroughly prepared to perform all tasks for mission accomplishment. Demonstrate ability to thoroughly and professionally conduct required training. Explain procedures and techniques in a clear, logical manner. Review requirements/records and then accomplish required training in a professional, orderly manner IAW the syllabus of instruction. Communicate procedures and techniques in a logical, understandable format, both on the ground and in-flight. Explain why common restrictions and procedures exist. Correctly analyze student abilities, making timely inputs as required to enhance training without adversely affecting student's accomplishment of required duties. Ensure instruction does not overly restrict accomplishment of other mission requirements. Continuously evaluate the student and focus training as required. Do not allow the student to exceed aircraft or regulatory limits. Only "Q" or "U" will be awarded.
2. Demonstration of Maneuvers and Tasks	Demonstrate maneuvers or tasks consistent with criteria listed in directives/ instructions for a given maneuver or task. Communicate how the maneuver or task is accomplished to meet desired parameters. Only "Q" or "U" will be awarded.
3. Briefing/Critique	Communicate significant errors and outstanding accomplishments verbally and in writing (if required for training records). Provide a professional atmosphere conducive to learning. Communicate to the student the overall training sortie grade (if required) and what is expected of the student to improve. Complete all required forms. Only "Q" or "U" will be awarded.
4. Forms Completion	Complete training records IAW directives. Understand grading policies and procedures. Only "Q" or "U" will be awarded.

Table 2. "General" MH-53 Pilot Evaluation Criteria for Sub-Area Ratings of "Q".

GENERAL	CRITERIA
1. Knowledge of Directives and Forms	Thoroughly familiar with all publications issued for the crew position plus Flight Information Publication (FLIP) documents. Answer any question with reference to applicable publications. Know performance limitations, warnings, operating procedures, and operational prohibitions. For mission profiles, be thoroughly familiar with all applicable employment publications.
2. Mission Planning, Performance Data (Note 1)	Prepare for flight with all required documentation and briefings required by AFIs. Be familiar with military and civilian Notice to Airman (NOTAM), weather, and flight plan procedures. Understand and interpret Takeoff and Landing Data (TOLD) data and weight and balance information. Prepare navigation logs, charts and "frag" sheets appropriate for scheduled mission. Coordinate all mission information into concise briefings to include weather, tasking, defensive maneuvers, support missions (include air refueling information), emergency procedures, training requirements, and Risk Management Matrix review.
3. Preflight, Visual Inspection	Demonstrate working knowledge of the aircraft forms. Perform walk-around inspection and ensure aircraft is safe for flight in concert with Flight Engineer preflight.
4. Use of Checklists	Call for and execute all required checklists in accordance with Technical Orders (T.O.) and operations instructions.
5. Safety Consciousness	Only "Q" or "U" will be awarded. Maintain situational awareness and execute mission so as to avoid unnecessary risk. Instructors and flight examiners should maintain situational awareness of the other pilots actions and performance.
6. Judgment	Only "Q" or "U" will be awarded. Make decisions regarding performance of tasks so as to provide best chance of efficient mission accomplishment without undue risk to aircraft or crew.
7. Crew Coordination	Maintain situational awareness of, and react appropriately to crew inputs. Communicate with crew so they understand pilot intentions and requirements to effect safe, efficient mission accomplishment.
8. Briefings, Debriefings	Provide organized, professional briefings and debriefings in accordance with directives during preflight, in flight and post flight periods in a timely manner. Communicate critical information to crew(s), passengers and customers. Maximize crew understanding of mission requirements. Provide atmosphere conducive to crew inputs as required. Copilots should not be expected to be in charge of all briefing requirements.

GENERAL	CRITERIA
9. Communications, ATC Procedures	Communicate using concise, professional radio discipline while ensuring all required communications be made to air traffic control (ATC) and command and control agencies. Is familiar with required communications procedures for any airspace used on the mission. Understand standard ATC directions and execute them accordingly.
10. Life Support Equipment	Preflight survival vest, LPU, HEEDs bottles, body armor and chemical gear as required for the mission. Be familiar with survival vest contents and the operation of all components. Understand how to use the raft, LPUs, and HEEDs operationally. Will ensure appropriate serviceable protective clothing, life support, survival, and dash 21 equipment for the entire mission is on board the aircraft.
11. Currency of Publications	All required publications listed in Attachment 2 are current and posted.
12. Aircraft Control	Aircraft maintains desired flight path during all phases of flight. Control inputs are smooth and predictable without undue oscillations about desired settings of pitch, roll, yaw or speed. Maneuvering does not exceed T.O. limitations.

Note 1. For IDAS/MATT certified pilots, accomplish appropriate computer based mission planning to include route preparation and threat degradation. Perform data load to the appropriate transfer medium (DTM, Floppy Disk, DMU).

Table 3. "Qualification" MH-53 Pilot Evaluation Criteria for Sub-Area Ratings of "Q".

QUALIFICATION	CRITERIA
13. Cockpit Familiarity	Familiar with function and location of all cockpit switches, gauges and caution lights (non-mission qualified pilots need only be familiar with equipment required for qualification and instrument activity).
14. Engine Start, Rotor Engagement	Properly monitor engine start and rotor engagement in accordance with checklists. Recognize abnormalities during sequence and react accordingly. Know T.O. limits for all procedures.
15. Taxiing	Safe taxi operations clearing obstacles by required distances. Follow standard marshaling signals. Maintain rotor blast awareness.
16. Takeoff, Climb, Level Off 17. Traffic Pattern, Approach, Landing	Smooth, controlled aircraft movement. Meet parameters outlined in AFI 11-2MH-53, Vol. 3 or as briefed for specific maneuvers. Fly primarily with visual references.
18. Hovering Maneuvers	Maintain stationary hover over desired area. Execute hovering maneuvers IAW AFI 11-2MH-53, Vol. 3. Ensure tail is clear of all obstacles.
19. Bold Face Emergencies (required through ground evaluation)	Only "Q" or "U" will be awarded. Requires reciting proper actions in correct sequence, not necessarily a verbatim response. Must be able to recognize, discuss and take to a logical conclusion selected emergency procedures (both BOLDFACE and Non-BOLDFACE emergency procedures).
20. Simulated Emergencies	Recognize abnormal aircraft condition and react appropriately to effect safe, timely termination of emergency IAW directives. Single-engine failure or engine fire in flight and Automatic Flight Control System (AFCS) malfunctions will be evaluated. Instructors must know required parameters for initiating maneuvers and must ensure there is no confusion between actual and simulated malfunctions.
21. Systems Knowledge, Malfunctions	Familiar with basic aircraft systems and the ramifications of system failure or malfunction. Recognize common indications of system failure or pending failure.
22. Autorotations (Straight Ahead and Turning)	Execute in accordance with T.O. and AFI 11-2MH-53, Vol. 3. Should terminate maneuver over prebriefed, hard, and flat surface. Emphasis should be placed on rotor control and application of proper flare procedure based on flight and aircraft conditions. Both straight ahead and turning autorotations will be evaluated. Evaluate autorotations from a 500 foot AGL entry altitude.

Table 4. "Instrument" MH-53 Pilot Evaluation Criteria for Sub-Area Ratings of "Q".

INSTRUMENT (Note 1)	CRITERIA
23. Instrument Departure, Climb, Level Off	Follow required course and maintain constant positive climb in excess of published climb gradient. Level at and maintain required altitude +/- 100 feet.
24. Holding Procedures	Enter and execute holding IAW directives and ATC clearance.
25. Use of NAVAIDs/Navigation	Maintain position awareness using available NAVAIDs and on-board equipment. Maintain safe separation from terrain and restricted airspace as required. Ensure NAVAIDs are correctly identified after tuning. Use NAVAIDs required for course guidance in accordance with directives. Navigate as required by mission and ATC directly or along published routes.
26. Precision Approach (ILS or PAR) (Note 2)	Maintain controlled, stable approach without excessive oscillations through course or glide slope. Arrive stabilized at decision height within 1 dot of course and glide slope or no more than "slightly" off PAR course and glide slope.
27. Non-Precision Approach (VOR, TACAN, Localizer, Localizer Backcourse, ASR) (Note 2)	Maintain controlled, stable approach without excessive oscillations through course. Arrive stabilized at minimum descent altitude within 1 dot of course or no more than "slightly" off ASR course prior to missed approach point.
28. Missed Approach	Execute appropriate procedures without hesitation at missed approach point or when required by ATC or directives. Immediately establish climb IAW criteria in #1 above in this table.

NOTE 1: All instrument maneuvers should be performed solely by reference to instruments rather than outside visual cues, commensurate with actual flight conditions encountered.

EXCEPTION: Takeoffs should transition to instruments below 100 feet and landings should transition to outside references at or above approach minimums.

NOTE 2: Evaluation of radar approaches may be credited toward a precision or non-precision approach. At least one approach will be flown utilizing aircraft navigation systems as primary means of accomplishing approach. Evaluation of both a PAR and ILS is not required.

Table 5. "Mission" MH-53 Pilot Evaluation Criteria for Sub-Area Ratings of "Q".

MISSION	CRITERIA
29. Tactical Profile (Note 1) a. Low Level Navigation	Plan and fly route to minimize risk to aircraft and crew for a given mission. Maintain position awareness while enroute at critical points (e.g., near threats or waypoints). Direct aircraft to desired objective, on time +/- 30 seconds. No hesitation accomplishing common navigation systems tasks (updates, stores, change steering, waypoint entry, etc.).
b. Threat ID and Counter Measures	Terrain mask appropriately for given threats and flight conditions. Employ defensive countermeasures appropriate for a given threat. Be familiar with threat indications visually and on defensive countermeasure equipment. React IAW directives to a given threat to minimize probability of kill from threat and/or impact with terrain.
c. Tactical Approaches, Landings, Takeoffs	Execute tactical approaches, landings and takeoffs that minimize risk for a given threat and flight condition (appropriate altitudes and airspeeds). Perform Alternate Insertion/Extraction (AIE) maneuvers IAW AFI 11-2MH-53, Vol. 3.
30. Air Refueling (Only required if currency is lost).	Perform air-refueling operations IAW directives. Accomplish rendezvous, join-up, precontact, contact and disconnect. Right and Left hose contacts should be accomplished. Fuel transfer should be accomplished.
31. Formation (Note 1) a. Lead	Maintain situational awareness of wingman position. Fly enroute profile that provides wingman obstacle clearance. Direct flight as required flying type formation that minimizes risk while accomplishing the mission. Fly stable approaches that terminate with enough room for the formation to land in position (or as briefed). Minimize high power requirements for wingmen.
b. Wing	Maintain briefed position or as close to position as obstacles allow. Maintain situational awareness of lead's position and be prepared to assume lead duties.
c. Lost Visual	Execute IMC breaks IAW directives without hesitation. Able to perform Visual Meteorological Conditions (VMC) "Lost Visual Contact" procedures IAW directives.

Note 1. For IDAS/MATT certified pilots, demonstrate proficiency in the performance of routine functions required of the pilot. This should include knowledge of and ability to set and change EW and MATT functions as well as manipulate IDAS/MATT specific functions of the ENS CDU. The pilot will be able to configure, select and interpret cockpit displays. **Table 5.** "Mission" MH-53 Pilot Evaluation Criteria for Sub-Area Ratings of "Q" (Continued).

MISSION	CRITERIA
32. PAVE LOW Operations (Note 2) a. RADAR TF/Terrain Avoidance (TA)	Perform RADAR checks as required by T.O. and properly interpret results. Terrain mask appropriately for given threat and flight conditions. Be aware of power available and required for climb gradient selected. Use RADAR and Forward Looking Infrared (FLIR) to maintain maximum situational awareness of terrain. Maintain briefed ground speed +/- 10 knots. React appropriately to climb/dive commands. React immediately to Obstacle Warning indications. React appropriately to TF Fail indications and perform degraded systems operations.
b. Coupled Approach (Note 2)	Execute coupled approach IAW the T.O. React appropriately to winds and power requirements. Stop in a hover no more than 0.1 NM from desired position with no excessive nose high deceleration or hovering in any direction outside a 0.3 NM radius from the desired position. Maintain heading +/- 10 degrees. Be able to take corrective action if the hover coupler should fail while in a hover.
c. System Operation	Execute all common system procedures (initialization, data entry, updates, stores, steering, etc.). IAW the T.O. Use resource management to maintain position and Time on Target (TOT) awareness. Recognize and react to common component failures without compromising mission success.

NOTE 1: Pilots and copilots will fly both wing and lead positions. Copilots do not need to meet aircraft commander standards for flight leadership but must meet aircraft control and wingman consideration criteria.

NOTE 2: Hover Couplers and a sample of TF/TA operations should be evaluated solely by reference to instruments. Do not verbally evaluate hover coupler operations.

Table 6. "Special Mission" MH-53 Pilot Evaluation Criteria for Sub-Area Ratings of "Q".

SPECIAL MISSION	CRITERIA
33. Night Water Operations (Required on recurring MSN evals only if qualified)	Perform transition from stabilized final approach altitude and GS to prebriefed location and parameters. Maintain stable platform at briefed altitude and ground speed but no higher than 10 feet AWL and no faster than 10 KGS. Maintain heading 10 degrees and make appropriate corrections to aircraft drift. Accomplish appropriate -1 checklists.

Table 7. "General" MH-53 Flight Engineer Evaluation Criteria for Sub-Area Ratings of "Q".

GENERAL	CRITERIA
1. Knowledge/Currency of Pubs/ Directives	Thoroughly familiar with all publications issued for the crew position. Answer any question with reference to applicable publications. Know performance limitations, warnings, operating procedures, and operational prohibitions. For mission profiles, be thoroughly familiar with all applicable employment publications.
2. Mission Planning (Note 1)	Prepare for flight with all required documentation and briefings required by AFIs. Compute TOLD data and weight and balance information (computer generated weight and balance is not authorized during recurring evaluations). Prepare and brief emergency procedure of the day during crew briefing. Be prepared to give range briefing and threat of the day briefing if directed to do so.
3. Preflight	Accomplish preflight IAW applicable directives, checklists, and T.O.s.
4. Use of checklist	Use strict checklist discipline to perform aircraft, systems and weapon preflight, and all phases of aircraft operations IAW with T.O. and operations instructions. Must be familiar with notes, warnings and cautions without direct reference to T.O.s.
5. Passenger Briefing	Ensures that passengers/team members are briefed on emergency procedures, location and use of emergency equipment, time warnings, and hand signals.
6. APP/ Start/Shutdown	Complete appropriate checklist(s) IAW T.O.s and AFIs.
7. Engine Start/Run/Shutdown	Preflight, load and align navigation and associated equipment. Perform engine start IAW T.O. Dash 1 procedures. Perform hover and power checks without exceeding any aircraft limits.
8. Use of Hand Signals	Safe taxi operations clearing obstacles by required distances. Relay standard marshaling signals to pilot. Perform hover and power checks without exceeding any aircraft limits.

GENERAL	CRITERIA
9. Fuel Management	Familiar with basic fuel systems and the ramifications of component failure. Recognize common indications of component failure or pending failure. Determine if aircraft can safely fly given mission without various system components functioning.
10. Crew Coordination	Maintain situational awareness of, and react appropriately to crew inputs. Communicate with pilot so he understands what each crew position's intentions and requirements are to effect safe, efficient mission accomplishment.
11. Safety/Judgment	Only "Q" or "U" will be awarded. Maintain situation awareness and execute mission so as to avoid unnecessary risk. Instructors and flight examiners should maintain situation awareness of the other flight engineer's actions and performance.
12. After Landing/Engine Shutdown	Complete appropriate checklist(s) IAW T.O.s and AFIs.
13. Postflight/Securing Aircraft	Complete appropriate inspections IAW appropriate T.O.s and AFI's.
14. Ground Handling 15. Aircraft Refuel 16. Aircraft Configuration/ Special Equipment 17. Cargo Loading /Tiedown	Should be thoroughly familiar with servicing to include oils and hydraulic fluid, refueling towing and tie down procedures. Configure aircraft for special craft/personnel deployments when maintenance personnel are not available.

Note 1. For IDAS/MATT certified engineers, accomplish data load from appropriate transfer medium (DTM, Floppy Disk, DMU).

Table 8. "Emergency Procedures" MH-53 Flight Engineer Evaluation Criteria for Sub-Area Ratings of "Q".

EMERGENCY PROCEDURE	CRITERIA
18. Bold Face Emergencies (required through ground evaluation)	Only "Q" or "U" will be awarded. Requires reciting proper actions in correct sequence, not necessarily a verbatim response. Must be able to recognize, discuss and take to a logical conclusion selected emergency procedures (both BOLDFACE and Non-BOLDFACE emergency procedures).
19. Other Emergencies	Recognize abnormal aircraft operation and react appropriately to effect safe, timely termination of emergency in accordance with directives. Instructors must know required parameters for initiating maneuvers and must ensure there is no confusion between actual and simulated malfunctions.
20. Survival/Emergency Equipment	Preflight survival vest, LPU, HEEDs bottles, body armor and chemical gear as required for the mission. Be familiar with survival vest contents and the operation of all components. Understand how to use the raft, LPUs, and HEEDs operationally. Be familiar with emergency equipment and cargo compartment systems. Operate/Monitor aircraft emergency exits, demonstrate the correct procedures to open all aircraft exits.

Table 9. "Systems Knowledge/Operations" MH-53 Flight Engineer Evaluation Criteria for Sub-Area Ratings of "Q".

SYSTEM KNOWLEDGE	CRITERIA
21-39. Systems Knowledge/Operations	Know basic aircraft systems/limitations and the ramifications of component failure. Recognize common indications of component failure or pending failure. Determine if aircraft can safely fly given mission without various system components functioning.

Table 10. "Qualification" MH-53 Flight Engineer Evaluation Criteria for Sub-Area Ratings of "Q".

QUALIFICATION	CRITERIA
40. AFCS Off	Reconfigure AFCS panel and troubleshoot possible causes
41. Single Engine	Analyze specific causes, recite and perform proper Bold Face
42. Autorotation (Note 1)	Know parameters and monitor instruments to prevent overspeed

Note 1: One actual autorotation will be evaluated for Initial Qual and Requal evaluations. Table

Table 11. "Mission" MH-53 Flight Engineer Evaluation Criteria for Sub-Area Ratings of "Q".

MISSION	CRITERIA
43. Mission Profile	See the following subarea criteria.
a. Low Level Navigation/Use of NAVAIDs	Maintain position awareness using available NAVAIDs and on-board equipment. Maintain safe separation from terrain and restricted airspace as required. Ensure NAVAIDs are correctly tuned. Navigate as required by mission to avoid enemy detection.
b. Navigation System Operation	Demonstrate working knowledge of all navigation equipment and its use IAW applicable directives and T.O.s.
c. Threat Identification/Counter Measures	Make timely, clear, and correct threat identification.
d. Alternate Insertion/Extraction	Perform hoist, fast rope, rope ladder during NVG operations. During recurring evaluations only one has to be demonstrated if examinee is current and qualified in all mission events.
44. Tactical Approaches	Keep aircraft clear of obstructions during confined area operations
45. Use of Pyrotechnics	Demonstrate working knowledge of associated equipment IAW applicable directives and T.O.s.
46. Gunnery	Preflight weapon, arm, deliver rounds on target, dearm weapon IAW directives.
47. Min Light Comm Out Air Refuel	Navigate to arrive at Air Refueling Control Time (ARCT) within limits of appropriate instructions. Take on appropriate fuel load to complete mission while not exceeding T.O. limits.
48. PAVE LOW Operations	Back up pilot during TF operations on all phases of flight including airspeed, terrain clearance and systems operation. Know what systems are required for TF/TA operations.

Table 12. "Special Mission" MH-53 Flight Engineer Evaluation Criteria for Sub-Area Ratings of "Q".

SPECIAL MISSION	CRITERIA
49. Cargo Sling	Perform IAW AFI 11-2MH-53, Vol. 3.
50. Night Water Operations	Perform IAW AFI 11-2MH53, Vol. 3

Table 13. "General" MH-53 Helicopter Aerial Gunner Evaluation Criteria for Sub-Area Ratings of "Q".

GENERAL	CRITERIA
1. Safety/Judgment	Only "Q" or "U" will be awarded. Maintain situational awareness and execute mission so as to avoid unnecessary risk. Instructors and flight examiners should maintain situational awareness of the other gunners actions and performance.

GENERAL	CRITERIA
2. Currency of Publications	All required publications listed in Attachment 2 are current and posted.
3. Knowledge of Directives	Thoroughly familiar with all publications issued for the crew position. Answer any question with reference to applicable publications. Know performance limitations, warnings, operating procedures, and operational prohibitions.
4. Mission Planning	Prepare for flight, attend all briefings required by AFIs. Perform ordnance delivery, threat of the day, equipment, and/or Search and Rescue (SAR) briefings as assigned.
5. Passenger Briefing	Ensures that passengers/team members are briefed on emergency procedures, location and use of emergency equipment, time warnings, and hand signals.
6. Use of Checklist	Execute all required checklists in accordance with T.O.s and operation instructions.
7. Aircraft Config/Special Equip	Will have the required professional equipment for each mission. Ensures that aircraft is properly configured and that all mission equipment is inspected and configured IAW directives.
8. Cargo Loading/Tiedown	Cargo is loaded and securely tied down.
9. Aircraft Start/Launch	Assists the crew in start up and launch of the aircraft. Monitors for leaks or abnormalities.
10. Aircraft Refueling	When applicable, assists the engineer in ground refueling. Be familiar with refueling operations IAW with directives.
11. Postflight/Securing Aircraft	Assists the crew in postflight/securing aircraft.
12. Scanning	Keep the aircraft clear of all obstacles IAW directives.
13. Crew Coordination	Maintain situational awareness of, and react appropriately to crew inputs. Communicate with crew so they understand gunner intentions and requirements to effect safe, efficient mission accomplishment. Be familiar with required communications procedures.
14. Use of Hand Signals	Be familiar with proper hand signals and able to direct aircraft during hoist, controlling team, and marshaling aircraft.

Table 14. "Emergency Procedures" MH-53 Helicopter Aerial Gunner Evaluation Criteria for Sub-Area Ratings of "Q".

EMERGENCY PROCEDURES (Note 1)	CRITERIA
15. Weapons Emergencies	Only "Q" or "U" will be awarded. Can resolve emergencies safely without endangering himself or the crew.
16. Other Emergencies (Egress)	Communicate to crew/passengers signals to egress.
17. Survival/Emergency Equipment	Preflight survival vest, LPU, HEEDs bottles, body armor and chemical gear as required for the mission. Be familiar with survival vest contents and the operation of all components. Understand how to use the raft, LPUs, and HEEDs operationally. Be familiar with emergency equipment and cargo compartment systems. Operate/Monitor aircraft emergency exits, demonstrate the correct procedures to open all aircraft exits.

Note 1: Events will be accomplish at night using night vision goggles.

Table 15. "Qualification" MH-53 Helicopter Aerial Gunner Evaluation Criteria for Sub-Area Ratings of "Q".

QUALIFICATION	CRITERIA
18. Aircraft Systems/Equipment Limitations	Only "Q" or "U" will be awarded. Be thoroughly familiar with aircraft and systems limitations.
19. Aircraft Weapon Systems	Be knowledgeable of all aircraft weapons and defensive systems.
20. Chaff/Flare systems (H-53/H-60)	Preflight, ARM, SAFE, and postflight chaff/flares.
21. Door/Ramp/Window	Operate door, ramp controls, and windows.
22. Hoist	Knowledgeable of hoist capabilities and limitations.

Table 16. "Mission" MH-53 Helicopter Aerial Gunner Evaluation Criteria for Sub-Area Ratings of "Q".

MISSION (Note 1)	CRITERIA
32. NVG Tactical Profile	While utilizing NVGs, conduct Low Level Navigation, Approaches to Landing, and Takeoffs. Demonstrate knowledge of aircraft defensive systems/tactics through question and answer or performance.
33. Alternate Insertion/Extraction (One Actual)	Actual deployment of an AIE device. Use precise voice to maintain hover and keep the crew advised of team progress.
34. Ramp infil/exfil (H-53)	Conduct actual ramp operation.
35. Alternate Loading/Cabin Configuration	Configure cabin for alternate loading. Cargo tiedown straps or aircraft seat belts may be used to restrain personnel.
36. Pyro/Munitions Loading/Handling	Verbally/visually identify type of pyro and able to operate/deploy safely. Load ammunition IAW directives.
37. Gunnery (Target Acquisition)	Preflight weapon, arm, deliver rounds on target, dearm weapon IAW directives.
38. Formation/Light Signals	Knowledgeable of aircraft lights. Verbally explain or pass light signal to another aircraft and identify return light signal.
39. Min Light Comm Out Air Refueling/Light Signals (H-53/HH-60)	Knowledgeable of aircraft light signals between tanker and receiver.

Note 1: Events will be accomplish at night using night vision goggles.

Table 17. "Special Mission" MH-53 Helicopter Aerial Gunner Evaluation Criteria for Sub-Area Ratings of "Q".

SPECIAL MISSION	CRITERIA
40. Night Water Operations (Helo Cast, Low and Slow)	Conduct NVG Night Water operations during Low and Slow approach to Helo Cast and/or swimmer deployment or rope ladder extraction.

Table 18. "General" MH-53 DSO Evaluation Criteria for Sub-Area Ratings of "Q".

GENERAL	CRITERIA
1. Currency of Publications	All required publications listed in Attachment 2 are current and posted.
2. Knowledge of Directives	Thoroughly familiar with all publications issued for the crew position. Answer any question with reference to applicable publications.
3. Threat Knowledge	Know communication characteristics and procedures associated with ground, naval, air, and paramilitary threats to the aircraft. Know location of threats. Familiar with threat weapon systems capabilities from MCM 3-1.
4. Threat Analysis	Know Communications Surveillance System (CSS) capabilities against threats to the aircraft. Able to prioritize equipment against threats based on location and level of threat to the aircraft.
5. Mission Preparation/ Planning	Should prepare for flight with all documentation required by AFIs. Uses information from all available intelligence sources to assist the crew in threat avoidance during route planning. Familiar with target technical data; loads information into software as applicable. Obtains current Tactical Information Broadcast Service network data and crypto. Coordinate the location of SILENT SHIELD equipment modifications on the aircraft. Coordinate the availability of all required life support equipment.
6. Crew Coordination	Maintain situational awareness of, and react appropriately to, crew inputs. Communicate with crew so they understand intentions and requirements to effect safe, efficient mission accomplishment.
7. Professional Equipment	Preflight survival vest, LPU, HEEDs, body armor and chemical gear as required for the mission. Be familiar with survival vest contents and the operation of all components. Understand how to use the raft and LPUs operationally.
8. Use of Checklist	Call for and execute all required checklists in accordance with T.O.s and operating instructions.

GENERAL	CRITERIA
9. Safety Consciousness	Only "Q" or "U" will be awarded. Maintain situational awareness and execute mission so as to avoid unnecessary risk. Instructors and flight examiners should maintain situational awareness of the other DSOs actions and performance.
10. Emergency Procedures/Equipment	Demonstrate a complete knowledge of the number, location, and use of all emergency equipment. Demonstrate knowledge for recognizing an emergency situation, the appropriate emergency action to be taken, and the proper execution of emergency procedures.
11. Knowledge/Completion of Forms	Demonstrate working knowledge of the type and location of information contained in the aircraft and squadron forms. Insert clear, concise, and unclassified write-ups in a manner that accurately depicts the malfunctions/problems encountered during the mission. Write-ups should include mode of operation, equipment indications, and effect on equipment performance.
12. Control of Mission Materials	Maintains control of classified mission software and crypto. Know procedures to obtain, store, and return classified material.

Table 19. "Qualification" MH-53 DSO Evaluation Criteria for Sub-Area Ratings of "Q".

QUALIFICATION	CRITERIA
14. System Operationa. Communications Surveillance Operation	Able to conduct frequency spectrum scans, discrete frequency searches and manual operations with the CSS. Knows equipment RF, power, and interphone connections. Familiar with trouble shooting techniques affecting readability, power, and software.
b. Tactical Data Receiver Operation	Correctly configures the Tactical Data Receiver communications port, baud rate, and crypto. Able to sign onto appropriate satellite broadcast. Initializes the Tactical Information Broadcast Service TIPOFF software. Knows equipment RF and power connections.
15. Situational Awareness	Demonstrate the ability to maintain constant situational awareness, knowledge of what the crew/aircraft is doing, where the aircraft is, and where it is supposed to be.
16. Threat Reporting	Correctly relays threat-derived information affecting the safety of the aircraft or it's mission to the appropriate crewmember. Should be clear and concise using professional interphone discipline.

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

AFI 11-202 Volume 2, *Aircrew Standardization/ Evaluation Program*

AFI 11-2MH-53, Volume. 1, *MH-53 Aircrew Training*

AFI 11-2MH-53 Volume 3, *MH-53 Operations Procedures*

AFI 11-215, *Flight Manuals Procedures*

Abbreviations and Acronyms

AC—Aircraft Commander

AETC—Air Education Training Command

AFCS—Automated Flight Control System

AFI—Air Force Instruction

AFSOC—Air Force Special Operations Command

AIE—Alternate Insertion Extraction

A/R—Air Refueling

ARCT—Air Refueling Control Team

ATC—Air Traffic Control

CG—Center of Gravity

CRM—Crew Resource Management

CSS—Communications Surveillance System

DSO—Direct Support Operator

EPE—Emergency Procedures Evaluation

ERD—Evaluation Reference Date

FEF—Flight Evaluation Folder

FLIP—Flight Information Publications

FLIR—Forward Looking Infrared

GPS—Global Positioning System

HEEDS—Helicopter Emergency Evacuation Device

IAW—In Accordance With

ILS—Instrument Landing System

IMC—Instrument Meteorological Conditions

IP—Instructor Pilot

IRC—Instrument Refresher Course

LPU—Life Preserver Underarm

MAJCOM—Major Command

MDA—Minimum Descent Altitude

MDS—Mission Design Specialty

NOTAM—Notice to Airmen

NVG—Night Vision Goggle

OFT—Operational Flight Trainer

OPR—Office of Primary Responsibility

PAR—Precision Approach Radar

SAR—Search and Rescue

SCA—Self-Contained Approach

STS—Special Tactics Squadron

TA—Terrain Avoidance

TF—Terrain Following

T.O.—Technical Order

TOT—Time Over Target

TOA—Time Over Area

TOLD—Takeoff and Landing Data

VMC—Visual Meteorological Conditions

WST—Weapons System Trainer

Terms

Deviation—Performing an action not in sequence with current procedures, directives, or regulations. Performing action(s) out of sequence due to unusual or extenuating circumstances is not considered a deviation. In some cases, momentary deviations may be acceptable; however, cumulative momentary deviations will be considered in determining the overall qualification level.

Error—Departure from standard procedures. Performing incorrect actions or recording incorrect information.

Minor—Did not detract from mission accomplishment, adversely affected use of equipment, or violated safety.

"**Will**" and "**must**" -indicate a mandatory requirement.

"**Should**" -indicates a recommended procedure that is required if practical.

"**May**" -indicates an acceptable or suggested means of accomplishment.

Attachment 2

REQUIRED PUBLICATIONS LISTING

Publication	Pilot	Flight Engi- neer	Aerial Gunner	DSO
AFI 11-202 V1	I	I	I	I
AFI 11-202 V2	S	S	S	S
AFI 11-202 V3	X	X	X	X
AFI 11-401	S	S	S	S
AFI 11-2MH-53 V1	I	I	I	I
AFI 11-2MH-53 V2	S	S	S	S
AFI 11-2MH-53 V3	X	X*	X	X
AFI 11-2MH-53 V3 CL-1	X*	X*	X*	X*
AFMAN 11-217 V1	X			
AFMAN 11-217 V2	X			
AFSOCI 11-402	X	I	I	I
AFSOCI 11-408	S	S	S	S
APPLICABLE FCIS	X	X*	X	X
1-1B-40		X		
1-1B-50		X		
1-1C-1	X	X		
1-1C-1-20	X	X*		
1-1C-1-20CL-2	X*	X*		
1H-53(M)J-1	X	X*	X	
1H-53(M)J-1CL-1	X*	X*		
1H-53(M)J-1CL-2		X*	X*	
1H-53(M)J-5		X*		
1H-53(H)B-9		X*		
11W1-13-5-2			X	
11W1-13-3-132			X	
Publications Listing Key				
X = Required / Issued				

I = Instructors
S = Evaluators
* = Required Inflight