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SECRETARY OF THE AIR FORCE**

**AIR FORCE INSTRUCTION 11 -2HC-130  
VOLUME 1**



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***Flying Operations***

***HC-130--AIRCREW TRAINING***

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This volume implements AFD 11-2, *Aircraft Rules and Procedures*; AFD 11-4, *Aviation Service*; and AFI 11-202V1, *Aircrew Training*. It establishes the minimum Air Force standards for qualifying and training personnel performing duties in the HC-130 and rescue MC-130 aircraft. This publication applies to all HC-130 and rescue MC-130 active duty, AFRC and ANG units. Unless specifically noted otherwise, any reference to HC-130 aircraft and training listed in this volume applies to rescue MC-130 units as well. MAJCOMs/DRUs/FOAs will coordinate proposed MAJCOM/DRU/FOA-level supplements to this volume through ACC/A3JT prior to certification and approval. Field units below MAJCOM/DRU/FOA level will coordinate supplements to this publication with their parent MAJCOM/DRU/FOA office of primary responsibility prior to publication. Refer recommended changes and questions about this publication to ACC/A3JT using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through the appropriate functional's chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at <https://www.my.af.mil/afrims/afrims/afrims/rims.cfm>. This instruction requires the collection or maintenance of information protected by the Privacy Act of 1974. The authority to collect and maintain the records prescribed in this instruction are 37 USC 301a, *Incentive Pay*; Public Law 92-204 (Appropriations Act for 1973), Section 715; Public Law 93-570 (Appropriations Act for 1974); Public Law 93-294 (Aviation Career Incentive Act of 1974); DOD Instruction 7730.57, *Aviation Career Incentive Act of 1974 and Required Annual Report*; AFI 11-401, *Flight Management*; and E.O. 9397, "Numbering System for Federal Accounts Relating to Individual Persons, as amended by Executive Order 13478, Amendments to Executive Order 9397 Relating

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**SUMMARY OF CHANGES**

This entire publication has been substantially revised and should be reviewed in its entirety. Major changes and revisions include the following: **Chapter 1** has been significantly reorganized. Ready Aircrew Program information in **paragraph 1.6** has been updated. Provisions for AETC use of the RAP tasking Program have been updated throughout the document. In unit training time criteria has been added in **Table 1.1** Waiver authority in **paragraph 1.20** has been revised. Redundant information governed by other AFIs and directives has been removed from and replaced with applicable references. Differences training guidance, contained in **Chapter 2**, has been significantly updated. **Chapter 3** has been reorganized to include mission certification information. Ground and flight training currencies have been added back into **Chapter 4**. Guidance on specialized training in **Chapter 5** has been completely revised with emphasis on the mobility pilot development program. All flying training sortie/event descriptions and criteria have been revised and placed in **Attachments 3**. Guidance for development of simulator and systems refresher courses has been incorporated into **Attachments 4** through **8**.

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## Chapter 1

### GENERAL GUIDANCE

**1.1. Purpose.** This volume provides training guidance and policy for use with operational procedures specified in applicable flying and operations publications.

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

**1.3. Key Words Explained.**

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

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

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

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

1.3.5. For the purpose of this instruction, “Mission copilot” refers to MPD-trained pilots who have not completed formal upgrade to mission pilot. See [Chapter 5](#).

**1.4. Responsibilities.**

1.4.1. HQ ACC/A3 is designated as the responsible agency for this instruction IAW AFPD 11-2. **As the lead command, ACC/A3 will:**

1.4.1.1. Chair semiannual ACC Realistic Training Review Boards (RTRBs) to review ground and flying training requirement/programs for Combat Air Force (CAF) units. RTRB participants will include applicable ACC component representatives. MAJCOM/A3s with major weapons systems for which ACC is lead command will be invited to send representatives and/or inputs.

1.4.1.2. Process all change requests.

1.4.2. AETC/A2/3 is the focal point for all formal aircrew training management and is responsible for formal school training matters such as curriculum, standardization of training programs, and flying hour management.

**1.4.3. All applicable MAJCOMs will:**

1.4.3.1. Determine training requirements to meet expected unit taskings. This includes making changes or additions to training requirements in this volume at any time via MAJCOM RAP Tasking memorandum (RTM).

1.4.3.2. Review subordinate unit supplemental instructions and training programs as directed by MAJCOM guidance.

**1.4.4. Wings/groups will:**

1.4.4.1. Develop programs to meet training objectives. Provide necessary staff support and assist subordinate units in management of training programs to meet unit needs.

1.4.4.2. Review training programs IAW MAJCOM guidance.

1.4.4.3. Ensure RTM guidance implementation to include Aviation Resource Management Systems (ARMS) training profile updates and squadron dissemination.

1.4.4.4. Determine annual formal aircrew training quota requirements, submit quota requests to MAJCOM/A3T (A3J for ACC), and manage quotas allocated.

1.4.4.5. ACC wings/groups will assist ANG unit training programs as required or requested IAW the applicable unit advisory support program.

**1.4.5. Unit supervision will:**

1.4.5.1. Assist the wing/group in developing unit training programs.

1.4.5.2. Manage unit training programs to ensure compliance with this instruction and applicable Air Force guidance on the training of aircrew members. Ensure adequate training continuity and supervision of assigned and attached crewmembers. As necessary, assign additional requirements based on individual crewmembers experience and proficiency.

1.4.5.3. Review training and evaluation records of newly-assigned crewmembers and those completing formal training to determine training required to achieve BMC or CMR status and to ensure provisions of this instruction are met.

1.4.5.4. Ensure Ready Aircrew Program (RAP) missions are oriented to developing basic combat and tactical employment skills. Provide guidance to ensure only effective RAP missions are logged as RAP sorties.

1.4.5.5. Submit waivers IAW [paragraph 1.20](#)

1.4.5.6. Fill allocated training quotas through appropriate channels. Submit nominees or return quotas to MAJCOM/A3T (A3J for ACC) NLT 30 days prior to class start date.

1.4.5.7. Determine utilization of BMC pilots.

1.4.5.8. If not specifically directed, identify the level of supervision required to accomplish required training.

1.4.5.9. Track and monitor continuation training currencies and requirements for all assigned/attached aircrew members.

1.4.5.10. Review qualifications and monitor training requirements for unit-assigned flight surgeons (FS).

1.4.5.11. Determine how many and which aircrew will carry specialized training certifications and qualifications.

1.4.5.12. Ensure aircrews participate only in sorties, events and tasks for which they are adequately prepared, trained and current.

1.4.5.13. **Training Review Panel.** At a minimum, convene a training review panel (TRP) once per calendar semi-annual period and maintain minutes for a period of two years. Commanders may increase this frequency as required.

1.4.5.13.1. TRP Requirements. The TRP will be chaired by the SQ/CC or a designated representative. Panel members should include representatives from

squadron training, standardization and evaluations, safety and other areas as determined by the commander.

1.4.5.13.2. TRP Format. The TRP should review staff and crewmember management actions necessary to complete squadron flight and ground training programs. Suggested TRP topics include, but are not limited to continuation training and upgrade and status; RAP requirement completion rates; crew position gains/losses; specialized training certification and MPD pilot progression.

1.4.5.14. Initiate, track, review and close out aircrew training folders and forms IAW [Chapter 6](#).

#### 1.4.6. Instructor Responsibilities.

1.4.6.1. Instructors will:

1.4.6.1.1. Be highly knowledgeable in HC-130 TTPs and governing AFIs to provide immediate instruction to any crew position concerning weapon system employment and regulatory guidance.

1.4.6.1.2. Be thoroughly familiar with all courseware and applicable guidance of this instruction for qualification, upgrade, and specialized training they are required to administer.

1.4.6.1.3. Review student training records prior to performing each flight or training session.

1.4.6.1.4. Conduct thorough preflight briefing and post flight critique.

1.4.6.1.5. Ensure all required upgrade training items are completed and signed off only after the student demonstrates the required proficiency level. Complete and sign off all required training items prior to recommending a student for an evaluation or certifying the student in an event.

1.4.6.2. Each instructor aircrew member is responsible for the safe execution of the duties of their respective crew position.

1.4.6.3. Instructor pilots are responsible at all times for the conduct of the flight and safety of the aircraft.

1.4.6.4. All instructors will place special emphasis on the procedures for positive identification of emergency conditions before initiating corrective action. In addition, instructors will place a high emphasis on the procedures for positive exchange of control; these procedures will be thoroughly briefed.

1.4.6.5. Instructors are authorized to teach any event in which they are qualified and current, unless specifically restricted.

#### 1.4.7. Individual crewmembers will:

1.4.7.1. Hand carry all available training records to assist the gaining unit in assessing qualifications and training requirements.

1.4.7.2. Be responsible for completion of training requirements and currencies IAW the guidelines of this instruction.

1.4.7.3. Ensure they only participate in unsupervised ground and flying training activities for which they are fully qualified.

**1.5. Aircrew Training.** Training programs are designed to progress aircrew members from Initial Qualification Training (IQT), then to Mission Qualification Training (MQT), and finally to Continuation Training (CT).

1.5.1. **Formal Schools.** The primary method for accomplishing IQT and MQT is to attend and complete the appropriate formal training course listed in the Education Training Course Announcement (ETCA). *NOTE:* The ETCA serves as a reference for the Air Force, other military services, DOD government agencies, and security assistance programs. The current syllabus of instruction (SOI) must be referenced to determine all course prerequisite requirements. Current formal school SOIs can be found at the AETC Bookstore on the AF Portal.

1.5.2. **Initial Qualification Training.** IQT provides the training necessary to initially qualify or re-qualify aircrew in basic positions and flying duties without regard to a unit's mission. Upon completion of IQT, aircrew members attain Basic Aircraft Qualification (BAQ) status. BAQ is a prerequisite for MQT. See [Chapter 2](#) for additional guidance on IQT.

1.5.2.1. Except for General Officers above the wing level, BAQ is not a long-term qualification status.

1.5.2.2. Aircrew (other than General Officers) who remain in BAQ status for more than six months will be restricted to flying in supervised status until completion of MQT or waived to remain BAQ.

1.5.2.3. MAJCOM/A3 is the waiver authority for any aircrew member (other than General Officers above the wing level) to remain in a long-term BAQ status.

1.5.3. **Mission Qualification Training.** MQT provides the training necessary to initially qualify or re-qualify aircrew members in assigned positions to perform the command or unit mission. Aircrew members maintain BAQ status until they complete MQT. Completion of MQT is a pre-requisite for certification as Basic Mission Capable (BMC) or Combat Mission Ready (CMR). See [Chapter 3](#) for additional guidance on MQT and mission certification.

1.5.4. **Specialized Training.** Specialized training is any training in specialized tactics, mission events, or flight responsibilities necessary to carry out the unit's assigned mission and not required by all crewmembers or all crew positions. Specialized training consists of upgrade training, special mission qualifications, and aircrew certifications, as well as any continuation training required to maintain these capabilities. See [Chapter 5](#).

1.5.5. **Continuation Training (CT).** CT is training required to maintain the assigned level of currency and proficiency for qualified aircrew. There are two aspects of CT. The first consists of training in the basic skills required to ensure the safe operation of the aircraft. The second consists of training in specific mission-related skills required to accomplish the unit's assigned mission(s). CT will be conducted IAW [Chapter 4](#) and the RTM.

**1.6. Ready Aircrew Program (RAP).** RAP is a CT program designed to provide a realistic training to meet all designed operational capability (DOC) tasked requirements as well as specific AEF requirements. It provides the minimum required mix of periodic events and sorties

an aircrew must accomplish to sustain mission readiness. MAJCOM/A3 will determine RAP training requirements for subordinate units. RAP training requirements will be implemented via MAJCOM RTM. Following completion of MQT, aircrew will have received training in the basic mission of the HC-130. Aircrew will then be certified BMC or CMR, as required.

#### 1.6.1. CMR Status.

##### 1.6.1.1. CC-Coded Units (Combat Coded)

1.6.1.1.1. All active duty API-1/2/A positions, flying SQ/CC and SQ/DO positions are designated CMR positions.

1.6.1.1.2. OG/CCs may designate other API-6/B positions not assigned to the flying squadron as CMR.

1.6.1.2. (**ANG Only**) Any aircrew member may be designated CMR or BMC at OG/CC discretion.

1.6.1.3. CMR aircrew will maintain all flight and ground currencies and accomplish all RAP designated training which affects CMR status. Failure to accomplish this training results in regression to Non-CMR (N-CMR) status unless waived by appropriate authority.

#### 1.6.2. BMC Status.

##### 1.6.2.1. CC-Coded Units.

1.6.2.1.1. All active duty wing aircrew positions not designated CMR positions, are BMC positions.

1.6.2.1.2. BMC status is assigned to aircrew members who have a primary job performing wing supervision or staff functions that directly support flying operations. These aircrew members are required to provide additional sortie generation capability, either in lieu of or in addition to, the personnel assigned to the flying squadrons. BMC aircrew members maintain qualification in all unit core mission events and may be certified/qualified in specialized training events.

1.6.2.2. **Designated Training (TF-Coded)/ Test (CB-Coded) Aircraft Unit Requirements.** All assigned and attached FTU and test unit aircrew will maintain BMC status. **Chapter 4** details CT requirements to include specific guidance for FTU and test units. **NOTE:** FTU and test aircrew will complete supported MAJCOM CMR requirements just-in-time when tasked to augment operational deployments.

1.6.2.3. BMC aircrew will maintain all flight and ground currencies and accomplish all RAP designated training which affects BMC status. Failure to accomplish this training results in regression to Non-BMC (N-BMC) status unless waived by appropriate authority. **EXCEPTION:** AETC will determine regression requirements for FTU aircrew. See **Chapter 4**.

1.6.2.4. BMC aircrew may participate in any mission for which they are current and qualified, without additional training, as determined by the SQ/CC.

1.6.3. **N-CMR/N-BMC.** Aircrew members that regress to N-CMR/N-BMC status will complete required remediation IAW **Chapter 4**.

1.6.4. **RAP Policy and Management.** RAP is executed IAW this instruction and the current MAJCOM RAP Tasking Memorandum. The RTM may contain updated training requirements and events not yet incorporated into this instruction.

1.6.4.1. **Training Cycle.** The continuation training cycle is defined by the RTM.

1.6.4.2. **The RAP Tasking Memorandum.** Each RAP training level (BMC, CMR) is defined by a total number of RAP requirements, broken down into sortie types and associated events as determined by the MAJCOM and based on whether the aircrew member is designated experienced or non-experienced. The RTM will specify the following for each training level: **EXCEPTION:** AETC developed RTMs may be tailored as required to define CT requirements specific to FTU operations.

1.6.4.2.1. Total RAP sortie requirements for the training cycle.

1.6.4.2.2. Total RAP events requirements for the training cycle. NOTE: Total RAP sorties and events as defined by the RTM are minimums and may not be reduced except by proration, waiver or situations as stipulated by this instruction. The breakout of sortie types, as defined by the RTM, is provided as a guideline to be followed as closely as possible but variances are authorized. SQ/CCs may use variations in sortie types as a basis for end-of-cycle regression.

1.6.4.2.3. 1- and 3-month RAP sortie lookback volume requirements as well as guidance on sorties authorized to count toward RAP lookback.

1.6.4.2.4. Additional training requirements as directed by the MAJCOM.

1.6.5. **RAP Training Reports.** Submit periodic RAP training reports IAW RTM guidance.

1.6.6. **RAP Training Sortie Development.** Design training missions to achieve combat capability in squadron tasked roles, maintain proficiency, and enhance mission accomplishment and safety. An effective RAP training sortie requires accomplishing a tactical mission profile or a building block type sortie. RAP training missions should emphasize either basic combat skills or scenarios that reflect procedures and operations based on employment plans, location, current intelligence, and opposition capabilities. Use of procedures and actions applicable to combat scenarios are desired (e.g., appropriate use of code words, authentication procedures, combat tactics, safe recovery procedures, tactical deception, in-flight reports, threat reactions, Intel briefing/debriefing). Tactical training should include the use of threat simulators and countermeasures, and include participation with other rescue weapon systems and support aircraft to the maximum extent possible.

## 1.7. Sortie Allocation Guidance.

1.7.1. For CC-coded units. The SQ/CC's first priority should be to train all designated aircrew to CMR. Inexperienced API-1/2/A aircrew members should receive sortie allocation priority over experienced aircrew members. Priorities for sortie allocation are as follows: CMR/API-1/2/A, CMR API-6/B, BMC (API-All).

1.7.2. Units should provide attached API 6/8/B/D flyers adequate resources to maintain minimum training requirements. However, API-6/8/B/D flyer support will not come at the expense of the flying squadron's primary mission. If units cannot meet attached flyer requirements, they must request relief IAW AFI 11-401, as supplemented. Units requiring

flying hour adjustments for attached API-8/D and applicable API-6/B flyers must request program changes IAW MAJCOM directives.

**1.8. Aircrew Utilization/Management.** See AFI 11-412, *Aircrew Management*.

**1.9. In-Unit Training Time Limitations (N/A Formal Training Units).** Training conducted in unit will comply with the time limitations annotated in [Table 1.1](#)

**Table 1.1. In-Unit Training Time Limitations.**

Training	Time Limit	Time Limit ARC
Initial Qualification / Mission Qualification	120 days	240 days
Difference Training	45 days	90 days
Requalification	90 days	180 days
CMR Certification (in-unit training leading to CMR status following initial or requalification mission training)	90 days	180 days
Unit Indoctrination / Local Orientation	45 days	90 days
Mission Pilot Upgrade / Instructor Upgrade	60 days	120 days
Pilot Check-Out Course (PCO)	45 days	90 days

1.9.1. Training time starts when the first syllabus of instruction (SOI)-directed training event is begun; or 45-days (90-days ARC) after being attached or assigned to the unit upon completion of the formal school, whichever occurs first. Training time ends with the formal evaluation or certification, as applicable.

1.9.2. Individuals unable to complete training within time limits specified in [Table 1.1](#) may continue training; however, units will notify MAJCOM/A3T (A3J for ACC) and provide a description of the factors contributing to delayed training along with an expected completion date.

**1.10. Formal Training Conducted In Unit (Secondary Method Training).** When attendance at a formal school course is not practical or no quotas exist, units may request a waiver to conduct training in-unit using formal school syllabus and courseware. Any aircrew member who has previously failed to complete a formal course for substandard performance will not be issued a secondary method training waiver for the same course.

**1.10.1. Waiver Approval Authority.** MAJCOM/A3T (A3J for ACC) is the approval authority to conduct formal qualification training in unit.

1.10.1.1. SOI mission objectives and tasks are the minimum required for formal course qualification training. When the courseware is adapted for local use, modify it only if the training is incompatible with local training conditions (i.e., no simulators). MAJCOM/A3T (A3J for ACC and ACC/A3G for NGB) is the waiver authority to deviate from the formal requirements of qualification training conducted locally.

1.10.1.2. Maintain in-unit waiver approval in the individual's AF Form 4022, *Aircrew Training Folder*.

1.10.2. Formal School Courseware Requests. For secondary method training, the waiver authority will include the appropriate formal school as an addressee on all correspondence and will request that the formal school forward applicable courseware to the aircrew member's unit of assignment. Courseware includes but is not limited to; the course syllabus of instruction (SOI), briefings, computer based training (CBT) modules, instructor guides, training guides and student grade sheets. This information may be web-based or available through other digital mediums. The unit training office will verify currency of the courseware obtained.

1.10.2.1. Use formal school courseware received for training only the individual referenced in the waiver.

1.10.2.2. If the course includes an end of course exam, substitute a locally developed exam. Passing score is 85 percent.

1.10.3. When a formal school course is authorized to be conducted in unit, the gaining MAJCOM assumes responsibility for providing this training locally. In addition to the guidance found in **Chapters 2, 3 and 5**, the following applies to SMT:

1.10.3.1. Training will be completed within the time limits specified by **paragraph 1.9**

1.10.3.2. Ground and Flying Training Requirements. Training sequence and event prerequisites will be IAW the formal course SOI. **NOTE:** For formal courses conducted in unit, the SQ/CC conducting training is the approval authority for sequence of training waivers. All SOI caveats and restrictions associated with Sequence of training waivers apply.

**1.11. Active Duty Service Commitments (N/A ARC).** Formal training conducted may incur an active duty service commitment IAW AFI 36-2107, *Active Duty Service Commitments (ADSC)*.

1.11.1. Units will ensure crewmembers who are directed to attend an education or formal training course, whether via Permanent Change of Station (PCS), TDY or Permanent Change of Assignment (PCA), process through the Military Personnel Flight (MPF) for ADSC counseling and completion of the AF Form 63 or other required ADSC acknowledgment before entering an ADSC-incurring event.

1.11.2. For SMT, units will coordinate with the servicing MPF to ensure individuals acknowledge any ADSC required and that the ADSC is properly processed once training is completed.

**1.12. Training Documentation, Records and Reports.**

1.12.1. Units will maintain individual training records IAW **Chapter 6** and the following:

1.12.1.1. AFI 11-202V1, *Aircrew Training*.

1.12.1.2. AFI 11-401, *Flight Management*.

1.12.1.3. *Air Force Records Disposition Schedule (AF RDS)*

1.12.1.4. AFI 11-421, *Aviation Resource Management*

1.12.1.5. Applicable MAJCOM directives.

1.12.2. **Career Enlisted Aviators (CEA) Training Documentation.** All enlisted aircrew qualifications are separate and distinct from skill level qualification. When AF Form 8, **Certificate of Aircrew Qualification**, is completed for the applicable flight evaluation, then that crewmember is qualified to perform all duties assigned to that crew qualification regardless of skill level. Aircrew instructor qualifications and flight examiner certifications are also separate and distinct from OJT trainer or certifier designation and are reflected in the AFSC by use of “K” prefix (aircrew instructor) and “Q” prefix (aircrew standardization and evaluation flight examiner). IAW Career Field Education and Training Plans (CFETP), personnel in Air Force Specialty Code (AFSC) 1AXXX are exempt from maintaining the AF Form 623, **On-the-job Training Record**.

1.12.3. **Permanent Training Folders (PTF).** Units will maintain a permanent training folder for each crewmember and ensure folders are forwarded to gaining units when individuals PCS. Gaining unit commanders may elect to keep records of past training programs. MAJCOMs may define the minimum requirements for PTFs. If specific MAJCOM guidance does not exist, the minimum requirements are as follows: **NOTE:** IAW **Chapter 6**, MAJCOMs may direct the use of different training documentation systems (e.g. TIMS/GTIMS or other electronic programs), forms and standards. In this case, MAJCOMs will also define PTF format and contents requirements.

1.12.3.1. Section I: Letters of Appointment/Upgrade endorsed by unit CC/DO.

1.12.3.2. Section II: Individual training waivers.

1.12.3.3. Section III: Active Training Programs. This section will contain all open AF Form 4022s and training records for qualification/certification/upgrade programs and additional training.

1.12.3.4. Section IV: Temporary Duty (TDY) Support Section. When scheduled for a flying TDY (not to include a unit deployment), as a minimum include a copy of the individual's current AF Form 1042, AF Form 702 and current ARMS products in this section.

1.12.3.5. Section V: Completed Training Programs. Upon completion of training, an AF Form 4025 will be generated. The original copy will be placed in the completed AF Form 4022 and a facsimile will be placed in Section V of the student's permanent training folder.

1.12.4. **Disposition of Training Records.** Unit training offices will retain all AF Forms 4022 contents for one year following training close out, and then return them to the crewmember.

1.12.5. **Unit Tracking of Training Requirements.** Units will track the following information for all crewmembers (as applicable):

1.12.5.1. Ground training requirements and accomplishments.

1.12.5.2. Requirements and accomplishments of individual RAP sorties, sortie types, and events cumulatively for the training cycle.

1.12.5.3. RAP sortie running totals for determining RTM-defined lookback requirements.

1.12.5.4. Ground and flight training currencies.

1.12.5.5. Airdrop delivery records. IAW AFI 11-231, track all airdrops for navigators. Information maintained will be sufficient to compute event Circular Error Average. This information should be maintained by the squadron tactics office.

**1.13. In-flight Supervision.** The following personnel must be supervised by an instructor from a like crew position when performing aircrew duties. **NOTE:** Direct supervision is required unless noted otherwise.

1.13.1. Non-current crewmembers.

1.13.2. Crewmembers in qualification, requalification, conversion, difference, upgrade or specialized flying training.

1.13.3. Senior officers who have not completed initial qualification.

1.13.4. **Instructor Pilot Requirements.** An instructor pilot (IP) will be in a pilot's seat for:

1.13.4.1. Ground idle touch and go landings.

1.13.4.2. Flight idle touch and go landings when the aircraft commander is not touch and go certified.

1.13.4.3. Simulated emergency flight procedures.

1.13.4.4. Right-seat assault landing training for IP candidates.

1.13.4.5. Maneuvers during which an individual occupies a pilot seat, and is not fully qualified or current in the specific type aircraft (MDS) and mission being flown with the following exceptions:

1.13.4.5.1. IP candidates, under the supervision of a qualified IP (not in a pilot's seat), may occupy a pilot seat with an unqualified pilot except during takeoff, landing, and simulated engine-out training.

1.13.4.5.2. During initial and re-qualification IP evaluations, IP candidates may occupy a pilot's seat when under the supervision of a flight examiner, not in a pilot's seat. Under these conditions, IP candidates may exercise all of the privileges of a fully qualified IP.

1.13.4.6. Other times as required by applicable operational instructions or at the discretion of the instructor pilot.

**1.14. Aircrew Training While DNIF.** Crewmembers whose status is "duty not involving flying" (DNIF) may perform preflights (if annotated on the AF Form 1042) and log ground training events, including simulator training, if the member's physical condition allows. Consult the flight surgeon initiating AF Form 1042, **Medical Recommendation for Flying or Special Operational Duty**, action if the DNIF status includes ground training limitations.

**1.15. Senior Officer Flying.** See AFI 11-202V1 as supplemented.

**1.16. Supervisory Flying.** See AFI 11-401 as supplemented.

**1.17. Intra command and Inter command Transfer of Aircrews.**

1.17.1. Permanent Change of Station Screening. Losing units will screen individual flight and ground training records during unit out-processing. Accomplish this screening in sufficient time to correct discrepancies prior to PCS. See AFI 11-421, *Aviation Resource management*, for specific requirements.

1.17.2. Aircrew certifications may be accepted at the discretion of the gaining unit commander.

**1.18. Initial Cadre for Change of Aircraft Equipment or Capability.** When possible, qualified personnel in other units operating like equipment or the sourced contractors will provide initial cadre training. Initial cadre for approved/validated new capabilities will be designated by the OG/CC unless specified otherwise by other governing directive or MAJCOM guidance.

**1.19. Test Units.** Designated test units (CB-coded) may supplement the requirements of this volume as dictated by their individual mission and test requirements. Test units may develop syllabi to upgrade operational test aircrew in support of specific test plans. These syllabi will be approved by the OG/CC.

**1.20. Waiver Authority.** Unless otherwise specified, AF/A3O-A is the waiver authority for this instruction. EXCEPTION: MAJCOM/A3 is the waiver authority for individual aircrew requirements, but may not approve blanket or group (two or more aircrew) waivers.

1.20.1. The OG/CCs may:

1.20.1.1. Extend MDS-specific ground training currencies listed in RTM and **Chapter 4** up to three months, on an individual basis. Non-MDS specific events will be waived IAW the applicable reference directive.

1.20.1.2. Extend all flying training currencies listed in RTM and **Chapter 4** up to three months unless otherwise noted.

1.20.2. Units will maintain a log of waivers for one year. As a minimum, track the following information:

1.20.2.1. Waiver type.

1.20.2.2. Approval authority.

1.20.2.3. Approval date.

1.20.2.4. Waiver number.

1.20.2.5. Waiver expiration date.

1.20.2.6. Copy of signed waiver.

1.20.3. Waiver Format and Routing. Request waivers through applicable command channels to MAJCOM/A3 (or equivalent). As applicable, MAJCOM/A3s will forward requests to AF/A3O-A, with an info copy to AF/A3O-AT. Waiver authority for supplemental guidance will be as specified in the supplement and approved through higher-level coordination authority. **Attachment 10** contains an example waiver template that may be used in lieu of specific MAJCOM guidance.

## Chapter 2

### INITIAL QUALIFICATION TRAINING

**2.1. General.** This chapter specifies minimum training requirements for initial qualification, requalification, senior officer courses, conversion and difference training. The primary method of initial qualification and requalification training is to attend and complete the appropriate formal training course listed in the ETCA. When attendance is not practical or no quotas exist, units will request a waiver to conduct in-unit qualification training IAW [paragraph 1.10](#)

**2.2. Formal Training Course Prerequisites:** Complete formal training prerequisites in accordance with AFI 11-202V1, the ETCA and the formal course syllabus of instruction.

**2.3. Ground Training Requirements.** Complete ground training requirements in accordance with AFI 11-202V1 and the formal course syllabus.

**2.4. Flying Training Requirements.** Complete flying training requirements in accordance with AFI 11-202V1 and the formal course syllabus.

**2.5. Conversion Training.** Conversion training will be conducted IAW AFI 11-202V1.

**2.6. BAQ Difference Training.** For aircraft and instrument qualification purposes, the AC-130H, AC-130U, C-130E/H, C-130H1/2, C-130H3, EC-130E/H, HC-130P/N, MC-130E, MC-130H, MC-130P, MC-130W and WC-130H are considered to be different series aircraft in the same MDS. See [Table 2.1](#) for authorized differences qualification training. Any training not authorized by this table is considered transition training and must be completed using a formal school course. **EXCEPTION:** Transition from the AFSOC MC-130P to HC-130 requires only BAQ differences training, completion of unit/Theater Indoctrination Training and any required special mission qualifications or instructor certifications. Special mission qualifications and instructor certifications common between the HC-130 and MC-130 do not require re-accomplishment.

2.6.1. Units will conduct differences training in accordance with a MAJCOM approved syllabus or training plan.

2.6.2. Document differences qualification training as “(MDS) Differences Training” on the AF Form 4348, **USAF Aircrew Certifications** or MAJCOM approved equivalent. The SQ/CC or appropriate ARC Ops Supervisor will certify the training.

2.6.3. Aircrew certifications common between the HC-130, MC-130 and C-130 may be transferred when qualifying through differences training (i.e. Touch and Go certification).

**Table 2.1. Authorized BAQ Differences Training.**

Current MDS Qualified in:	Authorized BAQ Differences Training by Crew Position:		
	HC-130H <sup>(1)</sup>	HC-130P/N	MC-130P
HC-130H <sup>(1)</sup>	N/A	All	All
HC-130P/N	All	N/A	All
MC-130P	All	All	N/A

<b>MC-130E</b>	F, L, K	F, L, K	F, L, K
<b>MC-130H</b>	F, L	F, L	F, L
<b>MC130W</b>	All	All	All
<b>AC-130H/U</b>	P,N,F,L	P,N,F,L	P,N,F,L
<b>C-130<sup>(2)</sup></b>	P, N, F, L	P, N, F, L	P, N, F, L
<p>P= Pilot, N= Navigator, F= Flight Engineer, L= Loadmaster, K= Airborne Mission System Specialist</p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>1. HC-130H refers to HC-130 H2 variants.</li> <li>2. Includes C-130E/H, C-130H1/2, C-130H3, EC-130E/H and WC-130H.</li> </ol>			

**2.7. Requalification.** Criteria resulting in loss of MDS qualification and requalification requirements are IAW AFI 11-202V1. **NOTE:** **Chapter 4** defines flying training events which result in a loss of qualification for loss of currency exceeding six months.

**2.8. Multiple Qualification.** See AFI 11-202V1 as supplemented.

2.8.1. AETC instructors at the 550 SOS are considered qualified in both the HC/MC-130 RQS and SOF missions once they have completed differences training.

## Chapter 3

### MISSION QUALIFICATION TRAINING

**3.1. General.** This chapter establishes minimum criteria and training requirements for MQT and mission certification (assignment of BMC or CMR status). The primary method of mission qualification training is to attend and complete the appropriate formal training course listed in the ETCA. Completion of the appropriate formal course satisfies all MQT requirements. When attendance is not practical or no quotas exist, units may request a waiver to conduct in-unit MQT using formal school courseware IAW [paragraph 1.10](#)

**3.2. Formal Training Course Prerequisites.** Complete formal training prerequisites IAW the formal course syllabus of instruction.

**3.2.1. Mobility Pilot Development (MPD).** IAW AFI 11-2HC-130V2, *HC-130 Aircrew Evaluation Criteria*, MPD trained pilots will fly all MQT and initial mission evaluation sorties from the right seat and will be coded as mission copilots in the crew position block on the AF Form 8.

**3.2.2. Prior Qualified Pilots (PQP).** Pilots cross flowing from first assignment instructor pilot (FAIP) duty, operational support aircraft (OSA) or other MDS, may complete MQT as a mission pilot (left seat training) or mission copilot (right seat training) IAW [Table 3.1](#).

**Table 3.1. PQP MQT Flying Time Prerequisites.**

Total Flying Time	Qualification Seat AF Form 8
0-999	MC
> 800 (FAIP/OSA)	MP
> 1,000	MP
<i>NOTE: At unit commanders' discretion, any PQP candidate can be trained as a MC for MQT</i>	

**3.3. Ground Training Requirements.** Complete ground training requirements IAW the formal course syllabus of instruction.

**3.4. Flying Training requirements.** Complete flying training requirements in accordance with the formal course syllabus of instruction and the following:

**3.4.1.** High winds or non-availability of parachutists may cause loadmasters to complete the FTU mission qualification course without conducting actual personnel airdrops. In these cases, use standard airdrop training bundles (SATB) during flight training. If actual personnel airdrops were not accomplished during formal training, the FTU will issue a restricted AF Form 8 IAW AFI 11-2HC-130V2. Accomplish final certification for personnel airdrop in-unit under the supervision of an instructor or flight examiner loadmaster on an actual static line personnel airdrop. Loadmasters will not be certified CMR until final certification for personnel airdrops is completed.

**3.4.2. Maximum Effort Takeoff and Landing Training.** During mission qualification, conduct maximum effort takeoff and landing training on a landing zone (or painted landing zone) of 3,000 feet or longer. Maximum effort takeoffs should be performed from the main runway when it is available (i.e., safe and practical to taxi from the landing zone).

3.4.3. **Units North of the 60 Parallel.** When MQT is conducted in unit, crewmembers in units north of the 60 N parallel who are scheduled to complete MQT during the summer months (May through August), have until 31 October to complete the required night/NVG training events. The mission qualification evaluation for these crewmembers may be administered before completing night training events.

3.4.4. Conduct flight evaluation IAW AFI 11-HC-130V2.

**3.5. Mission Certification.** Mission qualification is a prerequisite for mission certification or recertification, as required. The SQ/CC will certify crewmembers as BMC or CMR upon completion of all required training.

3.5.1. **Basic Mission Capable Certification.** Mission qualified aircrew will complete the following requirements prior to BMC certification.

3.5.1.1. Ground Training Requirements. Complete all applicable ground training IAW **Tables 4.2** through **Table 4.5** and the RTM. Training missions may be flown before completing all items listed, provided all grounding events are accomplished.

3.5.1.2. Flying Training Requirements. Complete all applicable flying training affecting BMC status IAW **Tables 4.6** through **Tables 4.10** and the RTM. After completing all required flying training requirements and prior to completing all ground training events, SQ/CCs may allow crewmembers to fly unsupervised on missions not requiring provided remaining ground training items do not mandate instructor supervision and do not affect mission accomplishment.

3.5.2. **Combat Mission Ready (CMR) Certification.** Certification as CMR requires the following:

3.5.3.1. A 1-month lookback at the CMR sortie rate. See RTM.

3.5.3.2. Qualification and/or certification in any specialized training required for CMR status. See **Chapter 5**.

3.5.3.3. Completion of all CMR-related ground training IAW **Tables 4.2** through **Table 4.5** Individual must be current for all events which affect CMR status.

3.5.3.4. Completion of all CMR-related flying training IAW **Tables 4.6** and **Tables 4.10** Individual must be current for all events which affect CMR status.

## Chapter 4

### CONTINUATION TRAINING

**4.1. General Requirements.** This chapter and the MAJCOM Rap Tasking Memorandum define the minimum ground and flying training requirements for BAQ, BMC and CMR crewmembers.

**4.2. Aircrew Experience.** Aircrew will be designated as experienced upon meeting the PAA hour requirements in [Table 4.1](#). Aircrew members that do not meet the PAA hours threshold are defined as inexperienced. Mission copilots are considered inexperienced for any required reporting or tracking purposes.

**Table 4.1. Experienced Crewmember PAA Hour Requirements.**

CREW POSITION	C-130 <sup>1,4</sup>	PAA <sup>2,4</sup>	TOTAL <sup>3,4</sup>
Pilot <sup>5</sup>		400	1200
or	800	200	1200
Navigator		400	500
or	400	200	600
Flight Engineer		300	1000
Loadmaster		300	1000
Radio Operator		300	500

**NOTES:**

1. Flying time any type C-130.
2. All C-130 hours since assigned to an HC-130 unit. ‘Other’ flight time will not be used in calculating an individual’s PAA hours.
3. Total fixed-wing flying time (includes SUPT). ‘Other’ flight time in excess of 100 hours will not be used in calculating an individual’s Total hours.
4. Hours logged in the HC-130, MC-130P and C-130E/H1/2/3 WST accomplishing formal or continuation events may be counted as “hours” when determining experience level. Approved WST hours will not exceed 20% of the total required hours from any of the listed categories.
5. Experience criteria only applicable to qualified mission pilots. PAA total [for experience calculations] will only use time logged as MP.

**4.3. Local Unit Indoctrination/Local Orientation.** Each newly assigned aircrew member will complete a local unit indoctrination/local orientation program prior to performing unsupervised primary aircrew duties.

- 4.3.1. This training will prepare aircrew members for unit’s local operations. Each unit will publish guidance outlining specific ground and flight requirements. This training will

familiarize aircrew with the local flying area and available mission support facilities, introduce any area-unique procedures, and include a minimum of one day and one night local sortie. **EXCEPTON:** ARC unit commanders may waive the night sortie requirement.

4.3.2. This training is optional for HQ MAJCOM and NAF personnel conducting inspections and evaluations when accompanied by unit assigned and locally indoctrinated personnel.

4.3.3. **MP Qualified PQPs Awaiting AC Certification.** Enter MP qualified PQPs awaiting AC certification into a unit training program designed to provide rescue mission experience and prepare them to fly as aircraft commanders on a crew aircraft. Use the local unit indoctrination/ local orientation program to ensure PQPs are adequately trained in right seat systems and responsibilities.

#### 4.4. Crediting Training Requirements.

4.4.1. Flying training events accomplished during formal training will use the course completion date (successful evaluation date) to establish the due dates for all subsequent currency and requirements. Use actual dates for ground training. Certification events trained to a 3 RPL during formal training will use the date of the checkride as the initial accomplishment date.

4.4.2. Training requirements may be completed on any sortie if the accrediting criteria of this instruction are met. Sorties and events that are compatible may be credited on the same flight.

4.4.3. Aircrew members will not log continuation training requirements for events in which they are unqualified.

4.4.4. Training events accomplished on an evaluation or an instructor certification (that event) may be credited toward the individual's volume requirements.

4.4.5. Crediting Events Conducted in Aircrew Training Devices (ATD). Credit events conducted in ATDs IAW MAJCOM RAP Tasking Memorandum.

4.4.6. Aircrew members who are unqualified in the aircraft will not log continuation training requirements.

4.4.7. Instructor navigators, flight engineers, loadmasters and airborne mission system specialist may log 50 percent of their events while actively instructing students.

**4.5. Ground Training.** Ground training will be accomplished IAW **Tables 4.2** through **4.5** and the RTM. These tables reference training governed by other directives. Where discrepancies exist, the reference directive takes precedence. Waiver authority for ground training events is specified IAW the governing directive.

4.5.1. Ground training tables in this instruction do not include Ancillary training required by AFI 36-2201V1, *Training Development, Delivery, and Evaluation*. This includes Total Force Awareness Training and Expeditionary Skills Training which will be tracked at unit level.

4.5.2. Failure to Complete Ground Training Events. Failure to accomplish these requirements may affect BMC/CMR status and require additional training. See **paragraph 4.11**. Overdue training should be accomplished at the earliest opportunity. The following applies when crewmembers exceed due dates for ground training events:

4.5.2.1. **Grounding Events.** Failure to maintain currency for events listed in **Table 4.2** will result in crewmembers being placed in grounded status. Crewmembers will not perform flight duties until the grounding item is satisfied.

4.5.2.2. **Training Status Events.** Failure to maintain currency for events listed in **Table 4.3** will result in crewmembers being placed in supervised status. Crewmembers will not fly without instructor supervision until the supervised status item is satisfied.

4.5.2.3. **Mission Status Events.** Failure to maintain currency for events listed in **Table 4.4** will affect BMC/CMR status as annotated. **NOTE:** Test unit aircrew will maintain applicable events in this table as determined by the SQ/CC.

4.5.2.4. Miscellaneous and Awareness Events.

**Table 4.5.** lists required ground training events which do not affect BMC/CMR status or result in training/grounding status due to loss of currency.

**Table 4.2. Ground Training [Grounding Events].**

Event	Governing Directive	Crew Position	Affects BAQ/BMC	Affects CMR	Frequency	Notes
Flight Physical	AFI 11-202V1 AFI 44-170	All	Y	Y	Annual IAW AFI 44-170	
Physiological Training	AFI 11-202V1 AFI 11-403	All	Y	Y	5 y	
Aircrew Flight Equipment Familiarization [LL01]	AFI 11-301V1	All	Y	Y	PCS	
Local Area Survival Training, [SS01]	AFI 16-1301	All	Y	Y	PCS	
Emergency Parachuting Training, [SS06]	AFI 16-1301	All	Y	Y	36 m	
Emergency Egress Training [LL03]	AFI 11-301V1	All	Y	Y	36 m	
CRM Refresher [GA06]	AFI 11-202V1 AFI 11-290	All	Y	Y	24 m	
SEPT [GS03]	AFI 11-2HC-130V1	All	N	N	Monthly	

**Table 4.3. Ground Training [Training Status Events].**

Event	Governing Directive	Crew Position	Affects BAQ/BMC/MR	Affects CMR	Frequency	Notes
Hot Refueling/FAR	AFI 11-235 AFI 11-2HC-	P, FE,LM,	N	N	12 m	<i>1</i>

Event	Governing Directive	Crew Position	Affects BAQ/BMC/MR	Affects CMR	Frequency	Notes
P Refresher [GS69]	130V1	AMSS				
Instrument Refresher Course [GS05]	AFMAN 11-210, AFI 11-202V1	P, N	Y	Y	IAW AFMAN 11-210	
Pyrotechnic Training [GA36]	AFI 91-202	LM, AMSS	Y	Y	12 m	2
Unit Indoc/Local Orientation [GA50]	AFI 11-202V1 AFI 11-2HC-130V1	All	Y	Y	PCS	

**Table 4.4. Ground Training [Mission Status Events].**

Event	Governing Directive	Crew Position	Affects BMC	Affects CMR	Frequency	Notes
Aircrew Chemical Defense Training (ACDT) [LL04]	AFI 11-301V1	All	N	Y	24 m	3
Aircrew Flight Equipment Training [LL06]	AFI 11-301V1	All	Y	Y	24 m	
Communications Procedures [AG06]	AFI 11-2HC-130V1	P, N, AMSS	Y	Y	12 m	
Combat Survival Training [SS02]	AFI 16-1301	All	N	Y	36 m	
Conduct After Capture [SS03]	AFI 16-1301	All	N	Y	36 m	8
Laser Safety Training [GA25]	AFOSH 48-139, AFI 11-2HC-130V1	All	Y	Y	12 m	
Night Vision Goggle Refresher [VV11]	AFI 11-202V1, AFI 11-2HC-130V1	All	Y	Y	24 m	4

Intelligence Training [IE15]	AFI 14-105, AFI 11-2HC-130V1	All	N	Y	12 m	
ISOPREP [IE05]	AFI 14-105	All	N	Y	6 m	
Small Arms Training (M-9) [GA43]	AFI 31-207, AFI 36-2226	All	N	Y	IAW Arming Group	5,6
Small Arms Training (M-16 or equivalent) [GA41, GA42]	AFI 31-207, AFI 36-2226	All	N	Y	IAW Arming Group	5,7
Verification Planning Exercise [GS52]	AFI 11-2HC-130V1	All	N	Y	24 m	3
Water Survival Training [SS05]	AFI 16-1301	All	Y	Y	36 m	
Tactics Continuation Training [GA59]	AFI 11-2HC-130V1	All	N	Y	12m	3
Pilot/FE Sim Refresher [SQ20]	AFI 11-2HC-130V1	P,FE	Y	Y	17 m	3
Nav Sim Refresher [SQ21]	AFI 11-2HC-130V1	N	Y	Y	17 m	3
FE System Refresher [GS65]	AFI 11-2HC-130V1	F	Y	Y	17 m	3
AMSS Refresher [GS66]	AFI 11-2HC-130V1	AMSS	Y	Y	17 m	3
LM Refresher [GS67]	AFI 11-2HC-130V1	LM	Y	Y	17 m	3

**Table 4.5. Ground Training [Miscellaneous and Awareness Events].**

Event	Governing Directive	Crew Position	Frequency	Notes
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Aircraft Anti-Hijack [GA03]	AFI 13-207	All	24 m	
Contingency SERE Indoc [SS07]	AFI 16-1301	All	Per COCOM guidance	
Flying Safety Training [GS57]	AFI 91-202	All	Quarterly	
Marshaling Exam [GA07]	AFI 11-218	P, FE, LM	w/in 30 Days of PCS to a flying unit & then every 36 m	
MOST [SQ22]	AFI 11-2HC-130V1	P, N, FE	17 m	
Theater Indoctrination [GA33]	AFI 11-202V1 AFI 11-2HC-130V1	All	IAW para 4.5.3.14.	
Use of Force Training [GA17]	AFI 31-207	All	12 m	
VTRAT [GS68]	AFI 11-2HC-130V1	P, FE, LM, AMSS	17 m	

**Figure 4.1. Amplifying Notes for Ground Training Tables.**

**A** = Annual IAW reference directive    **PCS** = Prior to first flight of each assignment

**Note 1** – Applicable to certified crewmembers only. Crewmembers overdue are in training status for the affected event only.

**Note 2** – AMSS training is only required if unit utilizes the crew position to assist in pyrotechnic ops. Crewmembers overdue are in training status for pyrotechnic operations only (i.e. rescue flares and smokes).

**Note 3** – OG/CC may extend the due date for this event for up to 3 months or for the duration of an exercise, contingency, or operational mission. See [Chapter 1](#).

**Note 4** – Crewmember will not log NVG currencies if overdue for this event.

**Note 5** – Unit commanders will determine additional proficiency requirements, such as formal off-site weapons training or home station weapons training through use of authorized proficiency munitions. When additional weapons are carried onboard the aircraft, the unit commander will designate in writing which crew positions will maintain qualification in those weapons. All personnel will fire wearing individual combat equipment, including unit issued holsters, magazine pouches, helmet, individual body armor, and survival vest. **EXCEPTION:** ARC group commanders may set arming groups as required for mission needs.

**Note 6** - For AFRC, Loadmasters and Flight Engineers responsible for air operations security and will re-qualify in small arms every 12 months IAW AFI 31-207 and AFI 36-2226. All other AFRC crewmembers will qualify every 24 months to meet unit DOC taskings.

**Note 7** – If not required by mission tasking, SQ/CC may waive requirement for officer aircrew positions.

**Note 8** – Wartime, Government Detention & Hostage Survival refresher will be taught during Conduct after Capture training.

4.5.3. **Ground Training Events.** The following paragraphs provide definitions and criteria for ground training events governed or amplified by this instruction.

4.5.3.1. **Aircrew Tactics Continuation Training [GA59].** Units will establish a tactics academic program to accomplish initial and CT requirements. Tactics Continuation Training will normally be conducted in conjunction with Intelligence Training [IE15].

4.5.3.1.1. Training will be administered using lessons/courseware developed by the unit tactics shop and designed to prepare crewmembers to operate more effectively in the combat rescue environment. Training will be based on tactical employment information found in AFTTP 3-1.HC-130, AFTTP 3-3.HC-130 and AFI 11-2HC-130V3, as well as any other tactics documents pertaining to the execution of the unit's mission. Academics should be tailored to theater-specific mission requirements and unit METLs.

4.5.3.1.2. Units may use adapted courseware from the AMC Combat Operations SIPRNET website [www.amc.scott.af.smil.mil/hosted\\_orgs/dok/](http://www.amc.scott.af.smil.mil/hosted_orgs/dok/) or AFSOC equivalent.

4.5.3.1.3. To complete training, aircrew must pass an examination with a minimum score of 85 percent.

4.5.3.2. **Aircraft Anti-Hijacking Training [GA03].** Units will establish a program to provide crewmembers with training on US Air Force policy and guidance on preventing and resisting aircraft piracy (hijacking). The training will consist of a review of AFI 13-207, *Preventing and Resisting Aircraft Piracy (Hijacking)*, applicable FAA guidance, and local procedures. AMC ATS-developed CBTs may be used to provide required training.

4.5.3.3. **Communications Procedures [AG06].** Units will establish local training programs and conduct initial and annual training. Training will include a review of equipment operation, procedures, and requirements applicable to peacetime and wartime communications operations. Minimum requirements by applicable crew position are as follows:

4.5.3.3.1. For AMSS. Code loading devices; equipment operation, HAVE QUICK, Flight Information Handbook (FIH), KY-58, SECURE VOICE Radio, COMSEC user requirements (Reference AFI 33-201, Volume 2 Communication Security (COMSEC) User Requirements), and Authentication/operational codes (IAW AFKAO-5, *Instructional Guide for Operations Codes*).

4.5.3.3.2. For pilots and Navigators. IFF/SIF codes and procedures and safe passage requirements. Contact ACC/A3JT for a complete listing of classified references.

4.5.3.4. **Crew Resource Management (CRM) Refresher [GA06].** CRM refresher training will be conducted IAW AFI 11-290, *Cockpit/Crew Resource Management Training Program* and applicable supplements. When possible, it should be tailored to the unit mission and build on the principles of crew coordination, communications skills, decision making and leadership, learned during initial CRM training courses. Additionally, principles will be considered during upgrade and continuation training flight briefings and debriefings under the crew coordination category. Application of CRM principles relating to recent like-MDS aircraft mishaps will be briefed and discussed during flight safety meetings. Wings or groups are responsible for monitoring their unit-level CRM programs. CRM courses taught as part of a simulator refresher course satisfy this requirement.

4.5.3.5. **Fire Extinguisher Training [GA08].** Training is required upon arriving PCS to a new flying unit. This training will familiarize crewmembers in the use of the type of fire extinguishers onboard their assigned aircraft and should be hands-on whenever possible.

4.5.3.6. **Hot Refueling/Forward Air Refueling Point (FARP) Refresher [GS69].** Required academic continuation training for Hot Refueling and/or FARP certified crewmembers. MAJCOMs will establish training program to satisfy requirements of AFI 11-235, *Forward Area Refueling Point Operations*, AFI 11-2HC-130V3, AFTTP 3-3.HC-130 and applicable technical order guidance.

4.5.3.7. **Instrument Refresher Course (IRC) [GS05].** All pilots will complete the IRC IAW AFI 11-202V1 and AFMAN 11-210 *Instrument Refresher Course (IRC) Program*. Navigators will also complete the IRC.

4.5.3.8. **Intelligence Training [IE15].** The aircrew intelligence training program is an integral part of individual and unit tactics academic training. Tacticians will coordinate with intelligence personnel to support this training requirement. Due to the related content, Aircrew Intelligence Training will normally be conducted in conjunction with Tactics Continuation Training [GA59]. The content of this training will be determined by the unit tactics office but should include threat briefings, country studies and related topics. It will also include the following minimum items:

4.5.3.8.1. Collection and Reporting (C&R). C&R training will enable crewmembers to initiate aircrew-originated reports (In-flight Report, Communication Instructions Reporting Vital Intelligence Sighting, etc.) and will familiarize them with the information requirements of the intelligence-generated Mission Report and Intelligence Report.

4.5.3.8.2. Current Intelligence. Current Intelligence will cover significant military/political developments (including threat updates) in the unit's areas of interest.

4.5.3.9. **Laser Safety Training-Refresher [GA25].** Training consists of a formal safety briefing covering all spectrums of laser energy IAW AFOSH standards. Training will be

conducted using MAJCOM-developed courseware/briefings. Non-eye safe lasers will only be used by trained crewmembers.

4.5.3.10. **NVG Refresher Training [GA19]**. NVG qualified crewmembers will accomplish NVG refresher training IAW MAJCOM-developed courseware. When such products are not available, units may develop an NVG refresher training program based on a review of initial NVG academic courseware. At least some portion of the training must be completed through a guided lecture/discussion. See AFI 11-202V1 for additional guidance on course content and instructor requirements.

4.5.3.11. **Pilot/FE, Navigator and AMSS Simulator Refresher [SQ20/21, GS66]**. Simulator Refresher Training should be provided by an ATS contractor. Curriculum will be developed IAW guidelines of **Attachments 4, 5 and 6**. **NOTE:** For AFRC units only, Navigator Refresher training may be accomplished in unit at the discretion of the SQ/CC.

4.5.3.11.1. Simulator refresher training is not required for aircrew members who will not be flying the HC-130 aircraft beyond 4 months after their due date.

4.5.3.11.2. Satisfactory completion of a formal MQT or requalification course, which included simulator instruction, will establish currency for periodic simulator refresher training. Mission pilot upgrade and instructor upgrade courses, which include simulator instruction, satisfy the periodic training requirement. Mission copilots may accomplish emergency procedures simulator scenarios from either seat at the discretion of the aircraft commander.

4.5.3.11.3. Mission Oriented Simulator Training (MOST). This training is designed to train crew coordination, communications, decision making, leadership, and management skills through the planned use of full mission simulation. Aircrew members will fly a structured tactical scenario in a realistic mission environment. MOST training should be accomplished during simulator refresher training. Satisfactory completion of formal school qualification, requalification, or upgrade course which includes simulator instruction satisfies the MOST requirements. OG/CCs may waive this requirement if a mission simulator is unavailable.

4.5.3.12. **Systems Refresher [GS65/67]**. System Refresher training should be provided by an Aircrew Training System (ATS) contractor. ARC units may conduct refresher classes for those individuals unable to attend an ATS course.

4.5.3.12.1. Flight Engineers System Refresher [GS65]. This periodic ground-training course is designed to increase FE's technical knowledge of aircraft systems and understanding of operational procedures. FE System Refresher and Simulator refresher should offset each other so the FE is attending one or the other every eight to ten months. Curriculum will be developed IAW guidelines of **Attachment 7**.

4.5.3.12.2. Loadmaster Systems Refresher Training [GS67]. This periodic ground-training course is designed to improve standardization and provide increased knowledge of LM specific duties, emergency procedures and responsibilities. Curriculum will be developed IAW guidelines of **Attachment 8**. **NOTE:** For AFRC units only, LM System Refresher may be accomplished in unit at the discretion of the SQ/CC.

#### 4.5.3.13. Situational Emergency Procedures Training (SEPT) [GS03].

4.5.3.13.1. This unit-developed training is not an evaluation, but a review of abnormal/emergency procedures and aircraft systems operations/limitations during realistic scenarios. One aircrew member should present a situation while others discuss actions necessary to cope with the malfunction and carry it to a logical conclusion. Critical action/Boldface procedures (if applicable) and special interest items should be emphasized. Incorporate the following elements into squadron SEPT training programs:

4.5.3.13.1.1. SQ/CC/DO involvement in the selection of a monthly SEPT topic.

4.5.3.13.1.2. SEPT scenarios developed using C-130 mishaps/incidents as baseline cases.

4.5.3.13.1.3. Discussion of one EP during SEPT sessions covering various phases of flight.

4.5.3.13.2. SEPT training will be accomplished each calendar month and prior to the aircrew members first flight of the month.

4.5.3.13.3. Completion of an Emergency Procedures Evaluation (EPE) satisfies the monthly SEPT requirement.

4.5.3.14. **Theater Indoctrination (TI) Training [GA33].** Units will develop a program to ensure personnel are trained for theater-specific flight operations prior to a contingency deployment. As a minimum, this training will include a thorough review of theater-unique instrument requirements and procedures, the use of non-DoD instrument approach procedures, required instrumentation for specific approaches, geography, terrain, climatology, command and control procedures, Aviation Unit Prep Messages, theater resources and their disposition, rules of engagement, LOAC, local area procedures (e.g. SPINS, ACO, reporting instructions, etc), host nation agreements, current force protection environment, and current intelligence/threat assessment. TI training should be completed no earlier than 60 days prior to deployment.

4.5.3.15. **Verification Planning Exercise (VPE) [GS52].** Initial and refresher VPEs provides training to update crewmembers on their squadron's wartime mission and allow them the opportunity to apply the tactical knowledge they have gained. It consists of an in-depth combat rescue mission planning scenario, normally completed with a full crew complement. Initial Verification Training is required prior to CMR certification. BMC pilots will participate in verification training as determined by the SQ/CC.

4.5.3.15.1. VPEs should provide crews the opportunity to exercise local mission planning support processes such as intelligence, weather, rules of engagement and legal (Judge Advocate) mission considerations. Tailor VPEs to prepare aircrew to support a specific OPLAN/CONPLAN/AEF or other rotational tasking. Refer to the Verification Planning Exercise Guide in [Attachment 2](#) for specific guidelines on developing a verification planning exercise.

4.5.3.15.2. Crewmembers who participate in a unit contingency deployment, exercise mission, or complete theater indoctrination training may receive credit for continuation verification training at SQ/CC discretion.

4.5.3.16. **Visual Threat Recognition and Avoidance Trainer (VTRAT) Training [GS68].** VTRAT training is designed to introduce or refresh crewmembers in the basics of aircraft threat engagement recognition and avoidance. The VTRAT simulation displays realistic visual characteristics of anti-aircraft weaponry such as missile fly-out and AAA rate-of-fire, as seen from the scanner's viewpoint in the aircraft. Training should be provided by an ATS contractor and is normally accomplished during simulator refresher training.

4.5.3.16.1. Training will include:

4.5.3.16.2. Group/individual academics on threat recognition, calls and avoidance maneuvers IAW AFTTP 3-1.HC-130 and AFTTP 3-3.HC-130.

4.5.3.16.3. Following academics, individuals will receive ~30 mins of individual simulator time on the VTRAT.

**4.6. Flying Training.** Aircrew will accomplish flying training requirements IAW **Table 4.6** through **Table 4.10** and as specified by the RTM. BAQ-only aircrew will maintain currency in events noted as BAQ in applicable flying training tables.

4.6.1. **Attachment 3** contains definitions and criteria for continuation flying training events.

4.6.2. Failure to accomplish flying training requirements may affect BMC/CMR status and require additional training as mandated by this chapter.

4.6.3. **Designated Test Unit Flying Requirements.** Aircrew assigned/attached to designated test units will accomplish the applicable BMC flying training requirements with the following exceptions:

4.6.3.1. Approved test plan missions apply to the total RAP sortie requirements for the training cycle. Log these events as Commanders Option sorties.

4.6.3.2. RTM-defined RAP sortie lookback rates should be adhered to within the constraints of resource availability; however, lookback regression will not be applied.

4.6.3.3. SQ/CCs will direct additional sorties if spin-up and test missions provide insufficient pilot continuation and/or proficiency training.

4.6.3.4. SQ/CCs may direct additional ground training necessary to accomplish special unit requirements, such as test preparation.

4.6.4. **MAJCOM/NAF API-8/D Aircrews.** HHQ flying personnel maintaining BMC status are exempt from specialized training programs within authorized mission areas and are not required to meet monthly lookback sortie requirements IAW the RTM.

4.6.5. **Pilot Seat Assignment.** The following defines the allowed cockpit seat assignment depending on training and pilot qualification. AFI 11-2HC-130V3 further defines takeoff and landing policy for HC-130 pilots.

4.6.5.1. **Mission Copilots (Dual Seat Progression; maintain left seat basic qualification).** See **Chapter 5** for additional guidance on mobility pilot development.

4.6.5.1.1. For BAQ events, MCs may accomplish pilot-flying/pilot-not-flying events from the right seat with an aircraft commander in the other seat. MCs may accomplish pilot-flying/pilot-not-flying events from the left seat when an aircraft

commander who has a minimum of 100 hours since certification occupies the right seat. Local Proficiency Sorties logged for currency will be flown from the left seat. Additional local proficiency sorties may be flown from either the seat at the discretion of the SQ/CC.

4.6.5.1.2. For mission events other than maximum effort events, MCs may accomplish mission pilot-flying/pilot-not-flying events from either seat with an aircraft commander in the other seat.

4.6.5.1.3. For maximum effort events, MCs are restricted to pilot-not-flying duties from the right seat. Stage 2 mission copilots with greater than 400 hours, under the direct supervision of an IP in the right seat, may perform maximum effort operations from the left seat for familiarization and aptitude in preparation for formal mission pilot upgrade.

**4.6.5.2. Mission Copilots (Legacy Progression; maintain right seat basic qualification).**

4.6.5.2.1. MCs may accomplish pilot-flying/pilot-not-flying events from the right seat with an aircraft commander in the other seat.

4.6.5.2.2. For maximum effort events, MCs are restricted to pilot-not-flying duties from the right seat.

4.6.5.2.3. MCs, certified as mission pilot upgrade candidates, may fly BAQ and mission events from the left seat under the direct supervision of an instructor pilot.

4.6.5.3. Aircraft Commanders. Aircraft commanders may accomplish pilot-flying/pilot-not-flying events from either seat with the exception of assault events. Aircraft commanders may not accomplish right-seat pilot-flying assault events unless under direct IP supervision. Certified Aircraft Commanders may fly in either seat with a mission copilot IAW guidance above.

4.6.5.4. IPs may fly and supervise any student in either seat for any pilot-flying/pilot-not-flying events for which they are qualified/certified and current.

4.6.5.5. MP qualified PQPs awaiting AC certification may complete BAQ events in either seat. Emphasis should be on left seat flying. Local Proficiency Sorties should be flown in the left seat. PQPs may fly in the left seat for airland missions when an aircraft commander who has a minimum of 100 hours since certification occupies the right seat **EXCEPTION:** No Maximum Efforts. Mission events may be completed while performing copilot duties in the right seat or in the left seat when an aircraft commander with 100 hours since certification occupies the right seat.

Table 4.6. Pilot Flying Training Requirements.

Sortie/Event (See Notes 1,2)	ARMS Identifier	Currency E/I (See Note 3)	Currency Affects BMC/CMR	Notes
Combat Skills Sortie	SR30			4
Mission Sortie	SR41			4
CSARTF Sortie	SR82			4
Commander's Option Sortie	SR99			4
Basic Sortie	SX23	60	Y	5,6,7,8
Local Proficiency Sortie	SX10	180	Y	6,7,8
Tactical Simulator (Sim) Sortie	SQ57			4,14
Instrument Simulator Sortie	SQ58			4,14
Takeoff	TO00	60	Y	6,7,8
Precision Approach	AP01/AP06	60		6,7,8
Non-Precision Approach	AP02/AP05	60		6,7,8
Circling Approach	AP30	180		6
NDB Approach	AP82	180		
Landing	LD00	60	Y	6,7,8
Night Landing (unaided)	LD02	90/60	Y	6,8
Self-Contained Approach	AP83	120/90	Y	9
Tactical Recovery	RB99	180	CMR (MP) only	10
Tactical Airdrop	RB78	120/90		
Night Tactical Airdrop	RB79	120/90	Y	9
CDS	AD04	180	Y	9,11
MCAD	AD19	180		10
IMC MCAD	AD20	180		10
PADS Airdrop Event	AD17	180		10
HAAR	AR60	150/120		
NVG HAAR	AR61	150/120	Y	9
Hot Refueling	AR42	180		10
FARP	AR58	180		10
Max Effort Takeoff	TO26	90/60	Y	9
Max Effort Landing	LD35	90/60	Y	9
Max Effort Landing Night	LD36	90/60	Y	9
NVG Mod Contour	RB89	150/120		
NVG Mod Contour (Mtn)	RB90	120/90	Y	9
Unfamiliar Route	RC01			4
NVG Takeoff	TO27	90/60	Y	10
NVG Landing	LD33	90/60	Y (MP only)	9,10
NVG Go-around	LD34	180		10
Threat Event	RB65			4
Flare	MF49/RA60			4
Chaff	MF50/RA41			4
CDTQT	ME17	24 m	CMR only	3

Table 4.7. Navigator Flying Training Requirements.

Sortie/Event (See Notes 1,2)	ARMS Identifier	Currency E/I (See Note 3)	Currency Affects BMC/CMR	Notes
Combat Skills Sortie	SR30			4
Mission Sortie	SR41			4
CSARTF Sortie	SR82			4
Commander's Option Sortie	SR99			4
Basic Sortie	SX23	60	Y	5,6,7,8
Nav (Cat 1) Sortie	SX19	180	Y	5,6
Tactical Simulator Sortie	SQ57			4,14
Self-Contained Approach	AP83	120/90	Y	9
Tactical Airdrop	RB78	120/90		
Night Tactical Airdrop	RB79	120/90	Y	9
HALO	AD13	180	CMR only	10
MCAD	AD19	180		10
IMC MCAD	AD20	180		10
PADS Operator Event	AD18	180		10
HAAR	AR60	120/90	Y	9
NVG Mod Contour	RB89	150/120		
NVG Mod Contour (Mtn)	RB90	120/90	Y	9
Unfamiliar Route	RC01			4
Threat Event	RB65			4
Flare	MF49/RA60		CMR only	4
Chaff	MF50/RA41		CMR only	4
Search Pattern	RB66			4
CDTQT	ME17	24 m	CMR only	

**Table 4.8. Flight Engineer Flying Training Requirements.**

<b>Sortie/Event</b> <i>(See Notes 1,2)</i>	<b>ARMS Identifier</b>	<b>Currency E/I</b> <i>(See Note 3)</i>	<b>Currency Affects BMC/CMR</b>	<b>Notes</b>
Combat Skills Sortie	SR30			4
Mission Sortie	SR41			4
CSARTF Sortie	SR82			4
Commander Option Sortie	SR99			4
Basic Sortie	SX23	60	Y	5,6,7,8
Tactical Simulator Sortie	SQ57			4,14
HAAR	AR60	120/90		
NVG HAAR	AR61	120/90	Y	9
Hot Refueling	AR42	180		10
FARP	AR58	180		10
NVG Mod Contour	RB89	150/120	Y	
NVG Mod Contour (Mtn)	RB90	150/120	Y	9
NVG Landing	LD33	90/60	Y	9
Threat Event	RB65			4
Flare Event	MF49/RA60			4
Infil/Exfil	RC37	180	Y	
CDTQT	ME17	24 m	CMR only	

**Table 4.9. Loadmaster Flying Training Requirements.**

<b>Sortie/Event</b> <i>(See Notes 1,2)</i>	<b>ARMS Identifier</b>	<b>Currency E/I</b> <i>(See Note 3)</i>	<b>Currency Affects BMC/CMR</b>	<b>Notes</b>
Combat Skills Sortie	SR30			4
Mission Sortie	SR41			4
CSARTF Sortie	SR82			4
Commander Option Sortie	SR99			4
Basic Sortie	SX23	60	Y	5,6,7,8
CDS Manual Cut	AD24	180	Y	9,11
CDS Static Line Retriever cut	AD25	180		11
MA-1/2 Kit Deployment	AD21	180		
Para-bundle Airdrop	RB51	180		
Freefall-bundle Airdrop	AD23	180		
Trail Line Drop	AD26			4
Ramp Bundle	AD22	150/120	Y	9
Personnel Airdrop	AD06	180	Y	9
HAAR	AR60	120/90		
NVG HAAR	AR61	120/90	Y	9
Hot Refueling	AR42	180		10
FARP	AR58	180		10
Threat Event	RB65			4
Flare Event	MF49/RA60			4
Illumination Flares	RB03	180		
Infil/Exfil w 4-wheeled vehicle	RC38	180	Y	10
CDTQT	ME17	24 m	CMR only	

**Table 4.10. AMSS Flying Training Requirements.**

Sortie/Event (See Notes 1,2)	ARMS Identifier	Currency E/I (See Note 3)	Currency Affects BMC/CMR	Notes
Combat Skills Sortie	SR30			4
Mission Sortie	SR41			4
CSARTF Sortie	SR82			4
Commander Option Sortie	SR99			4
Basic Sortie	SX23	60	Y	5,6,7,8
Tactical Simulator Sortie	SQ57			4,14
FARP	AR58	180		10
NVG Mod Contour	RB89	150/120	Y	
Threat Event	RB65		Y	4
Flare Event	MF49/RA60		CMR only	4
Encode/Decode	CE56/RA57	120	Y	12
Authenticate	RA35	120	Y	12
Secure Voice	RB67	120	Y	12
Have Quick	RA87	120	Y	12
BFT/HAVE CSAR	RA26			13
QUICKDRAW	RB98			13
CDTQT	ME17	24 m	CMR only	

**Figure 4.2. Amplifying Notes for Flying Training Tables.**

<p>E = Experienced I = Inexperienced</p> <p><b>Note 1</b> – Volume requirements are IAW MAJCOM RTM</p> <p><b>Note 2</b> – Events may be dual logged IAW <a href="#">Attachment 3</a> guidance.</p> <p><b>Note 3</b> – All currency in expressed in days except CDTQT. m = months.</p> <p><b>Note 4</b> – Volume only requirement for noted event/sortie unless currency mandated by MAJCOM.</p> <p><b>Note 5</b> – Currency expires at the end of the month.</p> <p><b>Note 6</b> – BAQ currency requirement.</p> <p><b>Note 7</b> – Loss of currency in this event results in loss of currency in the aircraft. Individual will fly in supervised status until currency is regained.</p> <p><b>Note 8</b> – Loss of currency in these events for greater than six months results in loss of BAQ.</p> <p><b>Note 9</b> – Loss of currency in these events for greater than six months results in a loss of mission qualification. <b>EXCEPTION:</b> Loss of currency in NVG landings [LD33] does not affect mission qualification for MCs. Loss of currency in CDS events [AD04, AD24, and AD25] does not affect mission qualification for ARC crews.</p> <p><b>Note 10</b> – Event requires certification/special qualification for some or all crew positions. Currency requirement only applies to certified/qualified crewmembers in units which maintain this specialized training. For clarification, this note only applies to MCs for the following</p>
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events: TO27, LD33 and LD34.

**Note 11** – AFRC and ANG will determine if subordinate units maintain qualification in CDS.

**Note 12** – When circumstances preclude in-flight execution of this event, event may be accomplished in a stationary aircraft providing all other event criteria are met (Authenticate and Encode/Decode events may be accomplished via tabletop discussion).

**Note 13** – Due to limited availability of equipment/resources, MAJCOMs will determine currency requirements for this event. This responsibility may be further delegated to the unit level and restricted to just-in-time, deployment spin-up training.

**Note 14** – Applies to units with homestation simulator only.

**4.7. Recurrency Training.** Training is required whenever an aircrew member does not meet a currency requirement of this instruction.

4.7.1. Loss of Currency. Failure to maintain currency IAW **Tables 4.5** through **Table 4.9**, or as outlined in RTM, results in a loss of currency for that event, unless specifically noted otherwise.

4.7.1.1. Unless specifically noted otherwise, crewmembers are non-current the day after event currency expires.

4.7.1.2. Place individuals delinquent in one or more flying training currency events in supervised training status for the event. Loss of currency prohibits an individual from accomplishing unsupervised in-flight duties in the non-current event(s). **EXCEPTION:** Loss of currency in certain BAQ events, noted in the flying training tables, result in the loss of aircraft currency. Individual will fly in supervised status until recurrent.

4.7.1.3. To regain currency, delinquent events must be demonstrated to the satisfaction of an instructor. The SQ/CC may direct additional training as required.

4.7.2. Loss of currency in flying training events annotated as affecting BMC/CMR may require regression to N-BMC/N-CMR IAW **paragraph 4.11**

**4.7.3. Loss of currency exceeding 6-months.**

4.7.3.1. Loss of currency for certain BAQ events in excess of six months results in the loss of BAQ. See **Table 4.6** through **Table 4.10** and associated Note 8.

4.7.3.2. Loss of currency for certain mission events in excess of six months results in loss of mission qualification. See **Table 4.6** through **Table 4.10** and associated Note 9.

**4.7.4. Currency for Training North of the 60 Degree Parallel.** Aircrew members assigned to units north of the 60-degree parallel handle night/NVG currency as follows:

4.7.4.1. Only day sortie/event currencies from 1 April to 30 September need be maintained. Consider all experienced crew members current for night sorties/ events on 1 October providing day currencies have been maintained. Inexperienced aircrew members regain night currency by demonstrating proficiency in delinquent sorties/events to an instructor.

4.7.4.2. NVG Currency does not need to be maintained from 1 April through 30 September, however to remain BMC/CMR currency must be regained by 31 October. To regain currency, the most appropriate instructors, as selected by the SQ/CC will fly an NVG route. Other non-current crew members will regain currency by demonstrating proficiency to an instructor.

**4.8. Requalification Training.** Crewmembers requiring requalification will accomplish training IAW AFI 11-202V1, AFI 11-202V2, AFI 11-2HC-130V2 and this instruction.

**4.9. Multiple Series C-130 Certifications.**

4.9.1. (N/A AETC) Rescue MC-130P qualified aircrew may fly RAP events in HC-130H/N/P aircraft (and vice versa) without additional waiver or additional currencies provided differences training is accomplished IAW [Chapter 2](#).

4.9.2. MAJCOMs will define authorized RAP events/sorties that may be accomplished on C130E/H and demodified EC130/WC130H BAI. Differences training will be conducted IAW [Chapter 2](#).

**4.10. Other Training Categories.**

4.10.1. **Flight Surgeon Continuation Flying Requirements.** AFI 11-202V1 establishes flight surgeon continuation flying requirements. Ground Training requirements are the same as Flight Test Engineers located in [Table 4.11](#)

4.10.2. **Flight Test Engineers (FTE).** The flight test engineer is an authorized aircrew composition for all ACC aircraft IAW AFI 65-503, Table 36-1, *Authorized Aircrew Composition-Active Forces*. Any ACC, AFMC or ARC flight test engineer assigned/attached to a dedicated test organization, on Aeronautical Orders and authorized to fly on HC-130 aircraft (documented on AF Form 480) is permitted to fly on any HC-130 aircraft during designated flight test sorties and any spin up and familiarization flights required for test plan development.

4.10.2.1. For operational units supporting testing requirements, the OG/CC will approve FTE to fly on unit aircraft and designate the HARMS office to track currency requirements. Duration of approval is at the discretion of the OG/CC and based on testing support requirements. Approval should be documented as a memorandum for record maintained by the HARMS office.

4.10.2.2. The FTE will accomplish and maintain ground currencies IAW the [Table 4.11](#)

4.10.2.3. There are no flight currency requirements for FTEs.

**Table 4.11. Flight Test Engineer Requirements.**

Event	Currency	Reference Directive	Grounding	Notes
Initial CRM	N/A	AFI 11-290	Yes	1,2,3
Flight Physical	12 m	AFI 48-123	Yes	1,3
Physiological Refresher	60 m	AFI 11-403	Yes	1,3
LS Familiarization	PCS	AFI 11-301V1	Yes	1,3

Training [LL01]		AFI 11-2HC-130V1		
Local Area Survival Training [SS01]	PCS	AFI 13-1601	Yes	1,3
Emergency Egress Training [LL03]	36 m	AFI 11-301V1 AFI 11-2HC-130V1	Yes	1,3
Aircrew Flight Equip Training [LL06]	24 m	AFI 11-301V1 AFI 11-2HC-130V1	No	1,3
Emergency Parachute Training [SS06]	36 m	AFI 16-1301	Yes	1,3

**NOTES:**

m – months

1. Waiver authority for the ground training specified is IAW the reference directive.
2. Flight Test Engineer only requires initial CRM
3. Required prior to first flight

**4.11. N-BMC/N-CMR Regression.** Aircrew may be regressed to N-BMC or N-CMR for one or more of the reasons listed in the following paragraphs. **EXCEPTION:** AETC will determine regression policy and guidance for FTU aircrew.

4.11.1. While N-BMC/N-CMR, the SQ/CC will determine missions the aircrew may perform and supervision required.

4.11.2. Units will track regression of all aircrew using unit certification document or approved unit developed product.

4.11.3. **Regression for loss of currency.** Currency status for the purpose of tracking and reporting regression will be determined by units on the first duty day of each month.

4.11.3.1. Aircrew delinquent for a ground training event affecting BMC/CMR status will be regressed to N-BMC/N-CMR. Crewmembers will accomplish the required ground training IAW governing directive prior to recertification.

4.11.3.2. Loss of Flying Training Currency. Loss of currency in a flight training sortie/event affecting BMC/CMR status will result in regression to N-BMC/N-CMR. Crewmembers will regain currency in delinquent sortie/event prior to being recertified as CMR. **NOTE:** N-BMC/N-CMR crewmembers may fly unsupervised on CONUS and OCONUS missions if delinquent events are not flown, are not required for mission accomplishment, and do not result in loss in aircraft currency or qualification. OG/CC approval is required for other than local, routine or non-contingency missions.

4.11.4. **Regression for Failure to Meet RAP Lookback.** 1-month and 3-month RAP Lookback sortie requirements (rates) will be defined in the RTM. Both 1-month and 3-month sortie lookback totals will be calculated on the first duty day of each month for both BMC and CMR aircrew. Only designated RAP sorties and contingency operations sorties may be used to determine lookback.

4.11.4.1. **Failure to Meet 1-Month Lookback.** If a BMC/CMR aircrew member does not meet their 1-month RAP lookback requirements, a review will be made of their 3-month RAP lookback requirements. If the 3-month lookback has been met, aircrew may, at SQ/CC discretion, remain in CMR status.

4.11.4.2. **Failure to Meet 3-Month Lookback.** If an aircrew member fails to meet the 3-month lookback requirement, SQ/CCs may either place the crewmember in probation status for one month or regress the crewmember to N-CMR/N-BMC.

4.11.4.2.1. **Probation.** Place aircrew in probation status for 1 month (30 days). If SQ/CC chooses probation, the aircrew member will reestablish a 1-month lookback at the end of the probation period to remain BMC/CMR. Failure to establish a 1-month lookback at the end of the probation period will result in regression to N-BMC/N-CMR. Probation status will be documented in the individual's training folder.

4.11.4.2.2. **CMR/BMC crewmembers regressed to N-CMR/N-BMC** must complete a SQ/CC-approved recertification program. At a minimum this program will consist of RAP sorties equaling 1/2 of the required monthly RAP sortie rate. Upon completion of the program, crewmembers must then meet a 1-month lookback prior to recertification as CMR/BMC. Missions and events accomplished during the recertification program apply toward monthly and training-cycle RAP requirements.

4.11.4.3. For aircrew members who do not meet lookback requirements throughout the training cycle, the SQ/CC may elect to initiate the following actions:

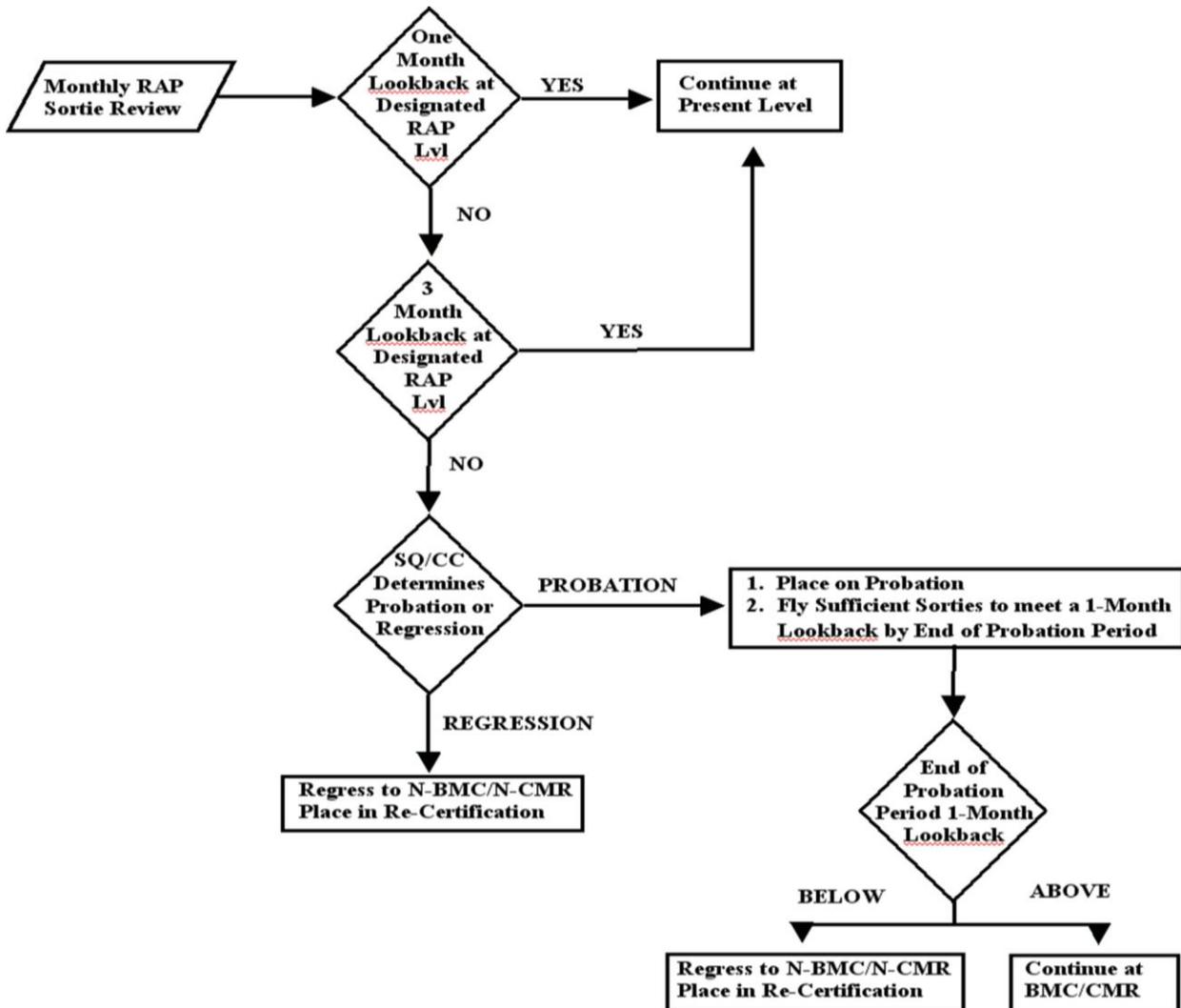
4.11.4.3.1. Place aircrew member in commander directed training program to regain CMR status.

4.11.4.3.2. Remove the aircrew member from a CMR manning position.

4.11.4.3.3. Remove the aircrew member from active flying status.

4.11.4.4. Lookback computations for new aircrew members begin following completion of MQT. New aircrew members who have been mission certified for less than 3 months will meet 1-month lookback to maintain status until a 3-month lookback is established. SQ/CCs may apply probation rules if a new aircrew member fails to meet 1-month lookback while establishing 3-month lookback.

Figure 4.3. Lookback Regression Flow Chart.



4.11.5. **Regression for failure of a Periodic Evaluation.** Aircrew members who fail a periodic evaluation will be regress to N-CMR or N-BMC, as applicable. Requalification is required prior to recertification as BMC or CMR.

4.11.6. **Regression for Failure to Meet End-of-Training-Cycle Requirements.** Aircrew who fail to complete RTM-defined, end-of-cycle sortie and/or event requirements may require additional training depending on the type and magnitude of the deficiency. In all cases, report training shortfalls IAW RTM guidance.

4.11.6.1. Refer to [paragraph 4.12](#) to determine if proration can be applied.

4.11.6.2. End-of-Cycle training requirements are based on the aircrew member's experience level on the last day of the current training cycle.

4.11.6.3. **Failure to Meet End-of-Cycle Total RAP Sortie Requirements.**

4.11.6.3.1. Aircrew failing to meet end-of-cycle total RAP sortie requirements may continue at CMR/BMC if both 1- and 3-month RAP lookback requirements are met and sortie deficiencies are deemed insignificant by the SQ/CC.

4.11.6.3.2. If the SQ/CC determines the sortie deficiency is significant or lookback is not met, the crew member will be regressed to N-CMR/N-BMC. To regain CMR/BMC status, aircrew must complete a SQ/CC approved recertification program. **NOTE:** Sortie type breakout, as defined by the *RTM*, is provided as a guideline. This should normally be followed as closely as possible, but variances are authorized. SQ/CCs may use variations in sortie types as a basis for end-of-cycle regression. If the SQ/CC determines sortie type deficiency is significant, aircrew may be regressed to N-CMR/N-BMC. Prior to CMR/BMC recertification, aircrew will complete all deficient sortie types and any additional training as determined by the SQ/CC. These sorties may count towards total requirements for the new training cycle.

4.11.6.4. **Failure to Meet End-of-Cycle RAP Event Requirements.** Aircrew failing to meet end-of-cycle RAP event requirements will be regressed to N-BMC/N-CMR. Prior to CMR/BMC recertification, aircrew must complete all deficient events and any additional training as determined by the SQ/CC. Remedial events may count towards total requirements for the new training cycle.

**4.12. Proration of End-of-Cycle Requirements.** At the end of the training cycle, the SQ/CC may prorate training requirements for DNIF status, emergency leaves, non-flying TDY/exercises, combat/contingency deployments, (ANG, AFRC: and/or mandatory training required for civilian employment) preclude training for a portion of the training cycle. Normal annual leave will not be considered as non-availability. Extended bad weather that precludes the unit from flying for more than 15 consecutive days may be considered as non-availability. The following guidelines apply:

4.12.1. Proration will not be used to mask training or planning deficiencies.

4.12.2. Proration is based on cumulative days of non-availability for flying during the training cycle. Use **Table 4.12** to determine the number of months to be prorated based on cumulative calendar days of non-availability.

4.12.3. If IQT or MQT is completed after the start of the training cycle, prorated training requirements for availability following completion of formal training.

4.12.4. **Proration Formula.** Use the following formula to determine prorated training requirements: number of months available times the sortie/event volume divided by the number of months in the training period. Round prorated fractions of less than 0.5 to the next lower whole number. Do not prorate below one.

**Table 4.12. Proration Allowance.**

CUMULATIVE DAYS OF TRAINING NON-AVAILABILITY	MONTHS OF PRORATION ALLOWED
0 - 15	0
16 - 45	1
46 - 75	2
76 - 105	3

106 - 135	4
136 - 165	5
166 - 195	6
196 - 225	7
226 - 255	8
256 - 285	9
286 - 315	10
316 - 345	11
over 346	12

#### 4.12.5. Contingency Operations.

4.12.5.1. CMR aircrews TDY/deployed in support of actual flying contingency operations may be reported as CMR throughout the TDY/deployment.

4.12.5.2. -(ARC only) Individuals deployed for more than a seven-day period may apply one month portion of RAP sorties and events.

4.12.5.3. All sorties flown during contingency operations will be logged as contingency operations sorties. Normally, these sorties and the events logged on them do not count toward total RAP requirements for the training cycle, but may be used for lookback and to update currencies. Upon returning from contingency operations, units will prorate training requirements based on the period of non-availability. Proration is authorized for the deployment preparation and recovery time where home station flying is reduced by the MAJCOM.

4.12.5.4. ERQS/CCs may authorize contingency sorties that provided valid training to be logged toward total RAP requirements for the training cycle.

4.12.5.4.1. Events accomplished on these sorties will count toward total RAP event requirements for the training cycle.

4.12.5.4.2. Upon return from contingency operations, calculate the sorties/events to be prorated for the entire deployment, and then subtract the authorized number of contingency RAP sorties/events. The difference is the allowable sortie/event proration. Negative numbers equate to zero. The home station SQ/CC is the final approval authority for authorizing deployed accomplishments to be logged toward total RAP requirements for the training cycle.

## Chapter 5

## UPGRADE/SPECIALIZED TRAINING

**5.1. General.** This chapter establishes minimum criteria and training requirements for specialized training.

**5.2. Formal School Nominations (N/A Formal Training Units).** For upgrade training, units will send nominations to MAJCOM office of primary responsibility through Group training. Include the individual's ARMS flying history report. See [Attachment 9](#) for example nomination template.

**Table 5.1. Upgrade Prerequisites.**

From	To	Prerequisites (See Note 1,2,3,4)	Tasks and Events Required (See Note 5)	Notes
UNQ	FP (MPD)	UPT Graduate	C-130 E/H PIQ course	
UNQ	FP (PQP)	1000 total flying hours (800 FAIP/OSA)	C-130E/H PIQ course, then HC130-MP-IQ course	
FP (MPD)	MC	PIQ course Graduate	HC130-MP-IQ course	
MC (Dual Seat Progression)	MP	<b>Total flying hours – PAA</b> 1300 – 300, or 900 – 700	C-130E/H Pilot Check Out course, then HC130-MP-UQ course	6, 11
MC (legacy Progression)	MP	<b>Total flying hours – PAA</b> 1300 – 300, or 1000 – 800	C-130E/H Pilot Upgrade course, then HC130-MP-UQ course	7
MP	IP	<b>Total flying hours - PAA</b> ≥ 2000 – 200 since AC cert, or ≥ 1500 – 300 since AC cert	HC130-IP-UQ course	
UNQ	FN	UNT Graduate	C-130 E/H NIQ course	
FN	MN	C-130 E/H NIQ course	HC130-MN-IQ course	
MN	IN	<b>Total flying hours – PAA</b> ≥2000 – 200 or ≥1000 – 400	HC130-IN-UQ course	
UNQ	FF	Basic FE Course	C-130 E/H FIQ course	
FF	MF	C-130 E/H FIQ course	HC130-MF-IQ course	
MF	IF	<b>Total flying hours – PAA</b> ≥1500 – 200, or <1500 – 400	HC130-IF-UQ course	8
UNQ	FL	Basic LM Course	C-130E/H LIQ course	
FL	ML	C-130E/H LIQ course	HC130-ML-IQ course	
ML	IL	<b>Total flying hours – PAA</b> ≥1500 – 200, or <1500 – 400	HC130-IL-UQ course	9
UNQ	MK	N/A	HC130-MK-IQ course	
MK	IK	<b>Total flying hours – PAA</b> ≥1000 – 200, or <1000 – 400 PAA	HC130-IK-UQ course	10

**NOTES:**

1. Primary Aerospace Vehicle Authorized (PAA) hours include all C-130 hours since assigned to an HC-130 unit. 'Other' flight time will not be used in calculating an individual's PAA hours. 'Other' flight time in excess of 100 hours will not be used in calculating an individual's Total hours.
2. Hours logged in the HC-130, MC-130P and C-130E/H1/2/3 WST accomplishing formal or continuation events may be credited toward PAA and Total hours requirements. Approved WST hours will not exceed 20% of the total required hours from any of the listed categories.
3. The prerequisites are defined by total flying time and PAA time. For example, an HC-130 flight engineer upgrading to instructor who has 1500 or more total hours, requires 200 PAA hours. If the individual has less than 1500 total hours, then he/she would require a minimum of 400 PAA hours for upgrade.
4. OG/CC or equivalent may waive 10 percent of the total and PAA hours required for upgrade in all crew positions. A copy of the waiver must be filed in the individual's training record. Students will provide the formal school registrar with a copy of this waiver.
5. See ETCA for determining appropriate C-130E/H initial qualification courses: pilot initial qualification (PIQ), navigator initial qualification (NIQ), flight engineer initial qualification (FIQ), and loadmaster initial qualification (LIQ).
6. The C-130E/H pilot upgrade course C130EPRA2LP (basic and single ship mission) may be attended in lieu of the PCO course if capacity does not exist or at the discretion of the SQ/CC.
7. The C-130E Pilot Upgrade course is C-130EPRA2LP (basic and single ship mission).
8. MF will have a X1A151 primary AFSC (or higher); X1A171 is desired.
9. ML will have a X1A251 primary AFSC (or higher); X1A271 is desired.
10. MK will have a X1A351 primary AFSC (or higher); X1A371 is desired.
11. Once PCO course requirements are integrated into the HC130-MP-UQ syllabus, the HC130-MP-UQ course will be the only task/event upgrade requirement for mission copilots under dual seat progression.

**5.3. Mobility Pilot Development and Mission Pilot Upgrade.** Mobility Pilot Development is the initial level of C-130 pilot development for graduates of Specialized Undergraduate Pilot Training (SUPT). During initial qualification training, MPD pilots are trained and evaluated on instrument/qualification responsibilities while flying in the left seat. During MQT, MPD pilots are trained and evaluated on mission responsibilities while flying in the right seat.

5.3.1. Until completion of mission pilot upgrade, MPD pilots will be coded [Flight Authorization Duty Code] as mission copilots IAW AFI 11-401, as supplemented.

5.3.2. MPD pilots are not trained or qualified at the FTU in pilot-flying maximum effort takeoffs/landings and will receive this qualification as part of the Pilot Checkout (PCO) Course [or mission pilot upgrade once PCO course elements are integrated into the SOI]. There is no continuation training requirement for MPD pilots to fly maximum effort events.

5.3.3. MPD pilots may maintain left seat basic qualification at the discretion of the squadron commander. The decision on whether or not the left seat basic qualification is maintained

affects progression and formal training requirements for mission pilot upgrade IAW this chapter.

**5.4. MPD Dual Seat Progression [For MCs maintaining Left Seat Basic Qualification].** For mission copilots who maintain a left seat basic qualification, units should fly mission copilot pilots in both seats to develop skills based on a careful balance between left seat instrument/qualification proficiency and right seat mission experience. The following general guidance is based on a building block approach for MPD development. It is not intended to deny flexibility units for developing MPD pilots in the manner best suited for their mission requirements.

**5.4.1. Unit Indoctrination.** During unit indoctrination, mission copilots should fly all sorties from the right seat to reinforce training conduct in MQT under local operating conditions.

**5.4.2. Stage 1 – Right Seat Mission Phase.** After Unit Indoctrination, MPD pilots can fly sorties/events from either seat IAW the guidelines of [paragraph 4.6.5](#). Supervisors/commanders will evaluate operational risk and mission requirements when planning and conducting missions. In order to gain experience and proficiency, during the first 300 PAA hours, right seat mission duties and left seat instrument/qualification currencies should be emphasized to the maximum extent possible.

**5.4.3. Stage 2 – Dual Seat Mission Phase.** After obtaining a minimum 300 PAA hours, mission copilots may be certified as Stage 2 by the SQ/CC. During Stage 2, units should seek to optimize the mix and volume of training by scheduling MPD pilots for left seat tactical sorties. Ideally, a desired mix is a 60/40 percent split for right seat and left seat mission sorties, respectively. This number is intended as a guide and will be dependent on scheduling restrictions, instructor availability and individual capabilities.

**5.4.4. Stage 3 – Formal Mission Pilot Upgrade.** Mission copilots enter Stage 3 upon beginning formal training for mission pilot upgrade. See [paragraph 5.6](#)

**5.4.5. Stage Progression Tracking.** A MPD training folder should be opened for mission copilots upon entering a dual seat phase. SQ/CCs may elect to initiate a training folder for mission copilots upon assignment to the unit. The AF Form 4000 series [or the equivalent electronic program/standard if authorized by the MAJCOM] will be used. This training folder will be used to document mission copilot status and progression and will remain open until a mission copilot is entered into formal training for mission pilot upgrade. Accomplish training folder documentation IAW this instruction (See [paragraph 6.6](#)) and the following exceptions:

5.4.5.1. This folder is not subject to the in-unit training time limitations listed in **Table 1.1**.

5.4.5.2. Tracking and grading of specific flight maneuvers on AF Form 4024 is not required.

5.4.5.3. Instructor pilots are responsible for providing training documentation and recommendations after all periods of instruction (both left and right seat sorties). Aircraft commanders are responsible for providing documentation and recommendations after off-station missions or as directed by SQ/DO.

5.4.5.4. Unit Training Office will:

5.4.5.4.1. Create standard AF Training Form overprints (if required).

5.4.5.4.2. Ensure IPs and ACs complete required documentation.

5.4.5.4.3. Ensure PTF reviews are completed and manage mission copilot PTFs.

5.4.5.4.4. Review mission copilot progress during the unit Training Review Panel (TRP) process and forward metrics regarding unit MPD status when requested by MAJCOM.

5.4.6. Periodic Evaluations. Mission copilots progressing through stage development will receive left seat instrument/qualification and right seat mission evaluations IAW AFI 11-2HC-130V2.

**5.5. MPD Legacy Progression [For MCs not maintaining Left Seat Basic Qualification].** Copilots who maintain only a right seat basic qualification will fly all BAQ and mission event/sorties from the right seat until identified and certified as a mission pilot upgrade candidate. Mission copilots must have at least 400 hours PAA prior to certification ('Other' Time will not be included as part of this total). Once certified as a mission pilot upgrade candidate, mission copilots will enter a unit-developed program to gain left seat experience and build up aptitude in all mission pilot maneuvers including 3-engine landings, 3-engine go-arounds, windmill taxi starts and maximum effort operations. Formal training for mission pilot upgrade will be accomplished IAW [paragraph 5.6](#)

5.5.1. A formal training folder will be opened for mission pilot upgrade candidates. Instructor pilots are responsible for providing training documentation and recommendations after all periods of left seat instruction. The unit training office will create standard AF Training Form overprints, as required.

5.5.2. Periodic Evaluations. Mission copilots progressing through legacy development will receive right seat instrument/qualification and mission evaluations IAW AFI 11-2HC-130V2.

**5.6. Mission Pilot Upgrade.** Commanders will consider experience, knowledge and judgment when identifying candidates. Nominees must have an in-depth knowledge of systems, procedures, and instructions prior to entry into the upgrade program. Mission pilot upgrade is designed to teach left seat mission qualification, as well as AC duties and responsibilities. See [Table 5.1](#) for flying hour prerequisites. Candidates will also meet all prerequisites listed in the formal school syllabus of instruction.

5.6.1. For mission copilots progressing through Dual Seat development, upgrade to mission pilot requires qualification in maximum effort airland operations, followed by successful completion of the HC-130 Mission Pilot Upgrade course.

5.6.1.1. Qualification in maximum effort airland operations is obtained through the Pilot Checkout (PCO) course. Until this training is incorporated into the HC-130 Mission Pilot Upgrade SOI, mission copilots are authorized to be trained using the AETC PCO syllabus. Due to the limited availability of this course at the C-130E/H schoolhouse, no waiver is required to conduct the AETC PCO course via SMT.

5.6.1.2. After successful completion of the PCO course, mission copilots will complete the HC-130 Mission Pilot Upgrade course. The primary method of mission pilot upgrade

training is to attend and complete the formal training course. When attendance is not practical or no quotas exist, units will request a waiver to conduct in-unit qualification training using formal school courseware IAW **paragraph 1.10 EXCEPTION**: ARC units may conduct mission pilot upgrade via SMT without waiver.

5.6.2. For mission copilots progressing through Legacy development, upgrade to mission pilot requires successful completion of a C-130E/H pilot upgrade course (basic and single ship mission) followed by the HC-130 Mission Pilot Upgrade course. When attendance is not practical or no quotas exist for either of these courses, units will request a waiver to conduct in-unit qualification training using formal school courseware IAW **paragraph 1.10 EXCEPTION**: ARC units may conduct mission pilot upgrade via SMT without waiver.

**5.7. Aircraft Commander Certification.** Pilots will not fly as a pilot-in-command until certified by the SQ/CC as an aircraft commander.

5.7.1. (N/A ARC) Following completion mission pilot upgrade, pilots should be certified as an aircraft commander within 120 days unless extenuating circumstances exist.

5.7.2. Prior Qualified Pilots Certification. PQPs evaluated according to mission pilot standards during MQT will be enter a unit-developed AC certification program and may be certified after attaining a minimum of 100 PAA hours. Waiver authority for this requisite is the OG/CC.

5.7.2.1. This 100 PAA hours may include time from formal school training. **EXCEPTION**: 'Other' time will not be used.

5.7.2.2. PQPs evaluated according to mission copilot standards during MQT, they will upgrade to mission pilot and then be certified as an aircraft commander using the same progression as an MPD-trained pilot.

5.7.3. BAQ-only Aircraft Commanders. Mission copilots [MPD Dual Seat Progression only] who meet mission pilot upgrade hour prerequisites of **Table 5.1** may be certified as a BAQ-only aircraft commanders. Selected individuals will be entered into a unit-developed certification program to ensure they have the experience, knowledge and judgment to act in this capacity.

**5.8. Aircrew Instructor Upgrade.** A sound and practical aircrew instructor program is a prerequisite for effective training, standardization and aircraft mishap prevention. Unit commanders will personally review each instructor candidate's qualifications and select instructors based on their background, experience, maturity, and ability to instruct. The following characteristics must be considered: instructional ability, judgment, personal qualities, technical knowledge, flying experience and tactical experience.

5.8.1. The primary method of initial instructor upgrade is to attend and complete the formal HC-130 instructor training course listed in the ETCA. When attendance is not practical or no quotas exist, units will request a waiver to conduct in-unit qualification training using formal school courseware IAW **paragraph 1.10 EXCEPTION**: Aircrew members previously qualified as an instructor in any USAF aircraft may upgrade in unit without a waiver.

5.8.2. Prerequisites. All initial instructor upgrade candidates must be BMC/CMR in their unit's mission for a minimum of 6 months and meet the flying hour requirements of **Table**

**5.1** Candidates will also meet all prerequisites listed in the ETCA and the formal school syllabus of instruction.

5.8.3. Instructor Requalification. With OG/CC approval, crewmembers previously qualified as USAF aircrew instructors may upgrade in-unit without a secondary method training waiver. OG/CCs should take into consideration the previously qualified instructors' experience with rescue roles, missions and C2. They must meet requirements of **paragraph 5.8.2** Refer to **Table 1.1** for in-unit training time limits.

**5.9. Flight Examiner Certification.** Flight examiners will be selected from the most qualified and competent instructors. Units will certify flight examiners IAW AFI 11-202V2 as supplemented.

**5.10. Special Mission Qualifications (SMQ) and Aircrew Certifications.** SQ/CCs will select appropriately qualified crewmembers to maintain additional special mission qualifications and aircrew certifications. Training for these events is normally conducted in unit following MQT or requalification, but may be taught at the formal school as part of mission qualification training, as applicable. **Table 5.2** provides a comprehensive list of HC-130 SMQs and aircrew certifications.

5.10.1. A flight evaluation is required for special mission qualifications. Conduct evaluations IAW AFI 11-2HC-130V2.

5.10.2. An instructor will sign off aircrew certifications using on the AF Form 4348 or a MAJCOM approved equivalent. **EXCEPTION:** Certain events require SQ/CC certification. See **paragraph 5.12**

5.10.3. Unless specifically noted otherwise in the **paragraph 5.11** and **5.12**, SMQ and aircrew certification training will be conducted IAW an approved MAJCOM syllabus or training plan.

5.10.4. Instructors are authorized to instruct any specialized training in which they are qualified/certified and current.

**5.11. Special Mission Qualification Events Description and Criteria.**

5.11.1. Right Seat NVG Airland Qualification. Qualifies mission copilots to perform non-maximum effort NVG takeoffs and landings. Mission copilots should be qualified concurrently during MQT. SQ/CCs will determine if individuals maintain this SMQ at the operational unit.

**5.12. Aircrew Certification Events Description and Criteria.**

5.12.1. **Forward Air Refueling Point (FARP) Certification.** Certifies mission pilots, flight engineers, loadmasters and AMSS (as required) to conduct FARP operations IAW with current AFI, MAJCOM and technical order guidance.

5.12.2. **Functional Check Flight (FCF) Certification.** Certifies pilots and flight engineers to perform functional check flight duties. FCF pilots and flight engineers will be selected from highly experienced instructors.

5.12.2.1. The OG/CC will determine program training requirements, but at a minimum:

- 5.12.2.1.1. All Candidates will complete a review of applicable technical orders and directives.
- 5.12.2.1.2. Pilot candidate will fly in the copilot position on a minimum of one FCF prior to certification.
- 5.12.2.2. Unit commanders may designate certification requirements for additional crew positions.
- 5.12.2.3. The SQ/CC or appropriate ARC Ops Supervisor will sign off the certification.
- 5.12.3. **High Altitude Aerial Delivery (HAAD) Certification.** Certifies mission navigators in high altitude release point (HARP) airdrops procedures.
  - 5.12.3.1. Use the ATS or MAJCOM approved courseware for academic training.
  - 5.12.3.2. Conduct flight training under the direct supervision of an instructor navigator. Flight training will consist of at least one flight to include an instructor demonstration of a high altitude airdrop followed by the student performing a drop. Airdrops will be completed to the satisfaction of the instructor.
- 5.12.4. **Hot Refueling Certification.** Certifies mission pilots, flight engineers and loadmasters to conduct refueling operations with one or more engines running.
- 5.12.5. **Infiltration/Exfiltration.** Certifies mission loadmasters to conduct covert/overt rapid infiltration and exfiltration of personnel and equipment. Certification training is normally conducted concurrently with MQT. Certification should be accomplished during loadmaster mission qualification/requalification.
- 5.12.6. **Jumpmaster Directed Airdrop (JMD) Certification.** Certifies mission pilots to conduct jumpmaster directed airdrops IAW AFI 11-2HC-130V3 and AFTTP 3-3.HC-130.
  - 5.12.6.1. Academic training will consist of an instructor review of procedures and guidance prior to flight training.
  - 5.12.6.2. Flight training should consist of at least one flight to include an instructor demonstration of a JMD airdrop followed by the student performing flying duties during actual personnel airdrop using JMD procedures. Airdrops will be completed to the satisfaction of the instructor.
- 5.12.7. **Mission Computer Airdrop (MCAD) Certification.** Certifies mission pilots and navigators to conduct mission computer airdrops.
- 5.12.8. **Rescue Airdrop Certification.** Certifies mission pilots and LMs to conduct rescue airdrop operations. Rescue Airdrop events include MA-1/2 kit, parabundle and freefall deployment/delivery. Certification training should be conducted overwater to the maximum extent possible.
  - 5.12.8.1. Pilots. Students will fly a parabundle, freefall and MA-1 pattern and delivery to the satisfaction of the instructor. May be flown using actual kits/equipment or simulated with sea dye, marker smoke, etc.
  - 5.12.8.2. Loadmasters. Students will conduct parabundle, freefall and MA-1rescue drops to the satisfaction of the instructor. Actual equipment/kits should be used to the

maximum extent possible, but certification may be conducted using kits/equipment simulated with sea dye, marker smoke, etc.

5.12.9. **Tactical Recovery Certification.** Certifies pilots to fly tactical recoveries IAW AFI 11-2HC-130V3 and AFTTP 3-3.HC-130. Certification should be accomplished during mission pilot upgrade and during qualification/requalification for PQPs. Mission copilots may be certified at the discretion of the SQ/CC.

5.12.10. **Touch and Go Landings Certification.** When an aircraft commander is a "Touch and Go Landing" certified, flight idle touch-and-goes may be performed when the aircraft commander occupies either seat and a BAQ pilot occupies the other seat. Conduct this one-time training for aircraft commander certified pilots under the direct supervision of an instructor pilot.

5.12.10.1. Aircraft commanders require a minimum of 100 hours pilot in command time since aircraft commander certification prior to touch and go certification.

5.12.10.2. Flight training will consist of students performing flight idle touch-and-go landings and supervising the IP's flight idle touch-and-go landings.

5.12.10.3. The SQ/CC or appropriate ARC Ops Supervisor will sign off the certification.

5.12.11. **Unimproved Landing Certification.** Certifies mission pilots to conduct landings at semi-prepared (unpaved) landing zones using maximum effort procedures.

5.12.11.1. Use the ATS or MAJCOM approved courseware, if available, for academic training.

5.12.11.2. For flight training, maximum effort takeoff and landing pilot flying duties will be completed to the satisfaction of the instructor.

**Table 5.2. Special Qualifications/ Aircrew Certification Events.**

Special Mission Qualifications	Crew Position	Notes
Right Seat NVG Airland	MC	
Aircrew Certification Events (AF Form 4348 nomenclature)	Crew Positions	Notes
MDS Differences Training	All	1
FARP	MP, MF, ML, MK	
FCF	IP, IF	
HAAD	MN	2
Hot Refueling	MP, MF, ML	
JMD	MP	3
MCAD	MP, MN	
Infil/Exfil	ML	4
Rescue Airdrop	MP, ML	
Tactical Recovery	MP, MC	5
Touch and Go Landings	AC	
Unimproved Landing	MP	
<b>NOTES:</b>		

AC = Aircraft Commander	MP = Mission Pilot	MC = Mission Copilot
IP = Instructor Pilot	MN = Mission Navigator	MF = Mission Flight Engineer
IF = Instructor Flight Engineer	ML = Mission Loadmaster	MK = Mission AMSS

1. Required entry for differences qualification training IAW **Chapter 2** and multiple series certification IAW **Chapter 4**.
2. Not required for initial certification to CMR status; however, once certified in event, currency will affect CMR status.
3. MCs may perform pilot flying duties for these events under the direct supervision of a certified mission pilot.
4. Certification required prior to CMR certification for mission loadmasters.
5. Certification required prior to CMR certification for mission aircraft commanders.

## Chapter 6

### AIRCREW TRAINING RECORDS

**6.1. General Information.** This attachment provides guidelines on proper training documentation when using standard hardcopy AF training forms. Instructions are provided for AF Form 4022, *Aircrew Training Folder*, AF Form 4023, *Aircrew Training Progress Report*, AF Form 4024, *Aircrew Training Accomplishment Report*, and AF Form 4025, *Aircrew Summary/Close-out Report*, and aircrew training guides. **NOTE:** MAJCOMS may direct the use of different training documentation systems (e.g. TIMS/GTIMS or other electronic programs), forms and standards. In this case, the guidance in this chapter does not imply the need for duplicate training documentation and MAJCOM-specific guidance takes precedence.

6.1.1. Initiate a training folder, AF Form 4022 (or MAJCOM equivalent), for formal training (either at formal school or in-unit), mission qualification, special mission qualification or certification training, in-unit upgrade program to the next higher crew qualification, qualification or re-qualification training (either at formal school or in-unit), or for any corrective action or additional training (unless otherwise noted in this instruction).

6.1.1.1. The unit operations officer may waive the training folder requirement if corrective action or additional training is limited. If initiated, the instructor or flight examiner who evaluated the aircrew member's performance will enter comments pertinent to the training deficiency on AF Form 4023. Use the existing training folder for end-of-course evaluations that result in additional training.

6.1.1.2. At the unit commander's discretion, training folders for an individual undergoing more than one training program in a short period of time may combine all training into one AF Form 4022.

6.1.2. Access to Training Records. Squadrons will maintain the training folders for their personnel in a location readily accessible to instructors and supervisory personnel. The trainee may review his or her folder at any time.

6.1.3. Instructor Procedures. The instructor or trainer will review the training folder, to include AF Forms 4023 and 4024 or the training guide, prior to all training periods. Those areas not previously accomplished or those, in which crewmembers require additional training, will be noted for possible inclusion during the current training period.

6.1.4. Training Folder Review. Operations officers will review active training folders quarterly, and flight commanders or squadron training representatives will conduct a monthly review. Monthly and quarterly reviews will be annotated on AF Form 4023 or in the training guide.

6.1.5. Completion of Training. Upon completion of training, an AF Form 4025 will be generated. The original will be placed in the completed AF Form 4022 and a facsimile will be placed in Section V of the student's permanent training folder.

6.1.5.1. Disposition of Training Records. All squadron training offices will retain all AF Form 4022s contents until one year after training close out and then return them to the crewmember. No unit will insert AF Forms 4022, 4023, 4024, 4025 or training guides

into FEFs. Refer to the *Air Force Records Disposition Schedule (RDS)* located at <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm> for further guidance.

6.1.5.2. Transfer of FTU Training Records. Formal schools will send AF Form 4022 (or MAJCOM equivalent) with all training records to the trainee's gaining unit. Squadron commanders will review formal school training records and enter appropriate comments on the training guide progress record or AF Form 4023.

6.1.6. For purposes of training documentation, "classroom only" training conducted at the unit should be identified as Academic Training (AT). Ground Training (GT) will be considered all academic training conducted outside the classroom. Academic training conducted while performing flying duties will be documented as Flying Training.

6.1.7. AF Form 4022 Aircrew Training Folder Closure. The Training Folder is considered closed upon successful completion of the final event required by the training program. Final training events include flight evaluation; instructor validation of training (i.e. "sign-off" flight); and/or Squadron Commander Certification.

**6.2. Instructions for AF Form 4022.** This form is a folder constructed of cardstock paper. The inside covers have tables for documenting training. AF Forms 4023, 4024, and 4025 and additional information (waivers, memorandums, etc.) will be attached through the centered holes of the folder. Training guides will be placed inside the folder. The AF Form 4022 is available through the Air Force Publications web site at <http://www.e-publishing.af.mil>. Comply with the following when documenting aircrew training on the form. **NOTE:** Formal school instructors using ATS courseware are not required to complete the following sections of the AF Form 4022: ground training summary, written evaluations, and flying training summary if this information is tracked by other means and sent to the gaining unit with AF Form 4022.

6.2.1. Trainee Information (cover): Provides trainee and course information.

6.2.1.1. Name and grade. Self-explanatory.

6.2.1.2. Crew position. Self-explanatory (For aircrew members in an upgrade program, enter the crew position to which they are upgrading).

6.2.1.3. Unit of assignment. Self-explanatory.

6.2.1.4. Type of training. Enter formal course title or, for special mission qualification, enter type, e.g. JMD. For other types of training, enter a descriptive identifier.

6.2.1.5. Class number. Enter formal school class number; otherwise, leave blank.

6.2.1.6. Course number: Enter only the ETCA formal course number (otherwise, leave blank).

6.2.2. Ground Training Summary (inside left). This section provides a chronological record of ground training events. Record non-flying training events. Entries are required for CTD, SIM, OFT, PTT, CPT, WST, GT. Entries are required for in unit academic instruction conducted according to formal school courseware. Classroom academic training will be identified as AT. Units will not record academic training on the AF Form 4022 summary (even though it appears on the AF Form 4022 as a training period designator).

6.2.2.1. Date. Self-explanatory.

6.2.2.2. Training period. Enter sequentially numbered training period designators, e.g. "CPT-1," "WST-2," "GT-3," etc., or specific course identifier.

6.2.2.3. Status. Enter incomplete (INC) and the reason, e.g. "INC-MX" (maintenance) or "INC-PRO" (trainee proficiency) when an additional training period, over those remaining, will be required to accomplish the lost training events originally scheduled for that training period; otherwise, leave blank.

6.2.2.4. Instructor or trainer (qualification). Enter the name of the instructor or trainer and aircrew qualification, e.g. aircraft commander (AC), and instructor pilot (IP).

6.2.2.5. Training time. Self-explanatory. Do not include time normally associated with pre-briefing and debriefing.

6.2.3. Training Period Designators. Codes to describe training periods. Formal training schools may use more descriptive designators if required.

6.2.4. Written Evaluations. If applicable and desired, record data for the in-flight evaluation required to complete the training program.

6.2.4.1. Date. Enter the date the written evaluation was satisfactorily completed.

6.2.4.2. Type. Enter the AFI 11-2MDSV2 description or other appropriate identifier.

6.2.4.3. Grade. Enter according to AFI 11-2MDSV2.

6.2.5. Performance Evaluation Summary. Record data on required evaluations including re-evaluations (if applicable).

6.2.5.1. Date recommended. Enter the date recommended for a performance evaluation (CPT, WST, or flight).

6.2.5.2. Type evaluation. Enter AFI 11-2MDSV2 evaluation description or other appropriate identifier.

6.2.5.3. Instructor (qualification). Enter the name and aircrew qualification of the instructor recommending the student for an evaluation.

6.2.5.4. Operations review. With the initials of the reviewer, indicate a records review has been accomplished following recommendation for an evaluation. **NOTE:** Flight commanders or supervisors will accomplish reviews during formal training courses. Squadron commanders or operations officers are required to accomplish reviews prior to flight evaluations.

6.2.5.5. Date evaluated. Enter the date the evaluation was completed.

6.2.5.6. Evaluator. Self-explanatory.

6.2.5.7. Grade. Enter according to AFI 11-2MDSV2.

6.2.6. Flying Training Summary. This section provides a chronological record of flying training sorties. Log all sorties scheduled even if canceled by external factors such as weather (WX) or maintenance (MX).

6.2.6.1. Date. Self-explanatory. On operational missions, enter inclusive dates, e.g., 28 Jul - 7 Aug 08.

6.2.6.2. Training period. Enter sequentially numbered training period designators, e.g. "S-1," "AD-1," "O-2," etc.

6.2.6.3. Status. Enter "INC" and reasons, "WX," "MX," or "OPS," or "PRO" when an additional training flight, over those remaining, will be required to accomplish lost training events originally scheduled for that period (INC-WX); otherwise, leave blank.

6.2.6.4. Instructor (qualification). Enter the name and aircrew qualification of the instructor.

6.2.6.5. Mission time. Enter the total flight-time of the training or operational mission in the top half of the block. If documentation of seat-time is required, enter the flight-time the trainee was actually in the seat in the lower half of the block.

6.2.6.6. Cumulative time. Use this block to enter the individual's total cumulative flight-time in the specific training course. Enter total cumulative flight-time in the top half of the block and, if required, the total cumulative seat-time in the lower half of the block.

6.2.7. Performance and Knowledge Standards (For use with AF Form 4024, see [paragraph 6.4.11](#)).

6.2.8. Grading Codes (For use with AF Form 4024, see [paragraph 6.4.8](#)).

**6.3. Instructions for the AF Form 4023.** This form provides a narrative description of training missions and is also used for documenting operations review of training progress. File AF Forms 4023 on the left side of the AF Form 4022 in order with the most recent flight on top. **NOTE:** The AF Form 4023 may be used for ATS and formal school courses at their discretion. If additional forms are needed, see AFI 33-360 for guidance.

6.3.1. Training Period and Date (Item 1). Training period is either; ground, simulator, or flight, i.e. AT-1, GT-1, SIM-3, S-4, etc. Also, annotate the date the training occurred.

6.3.2. AT, GT, FLY, and ATD (Items 2, 4, and 6). Annotate time allocated for training and keep a running total (Items 3, 5 and 7) by adding previous totals to current training period time. Classroom academic training periods will be annotated as AT and tabulated under the ground training block.

6.3.3. Total Training Time (Item 8). Keep a running total of all training time (add Items 3, 5, and 7). **NOTE:** Formal school instructors are not required to record the time on the Form 4023 if the time is tracked by other means.

6.3.4. Remarks and Recommendations (Item 9). Describe the mission scenario. Local overprints are authorized. Comments will elaborate on trainee strengths and weaknesses, identify problem areas, record unusual circumstances, and indicate student progress. Recommendations will be specific and include tasks requiring further training and the type of training required. If more space is required for annotating remarks, draw vertical arrows through sortie information heading section (Items 1 through 8) of following block or form and continue remarks.

6.3.5. Instructor Block (Item 10). Instructors will print and sign their name and annotate their rank and crew qualification.

6.3.6. Students Block (Item 11). Students will print and sign their name.

6.3.7. Reviewer Block (Item 12). For monthly and quarterly reviews, squadron commanders, operations officers, or flight commanders will print and sign their name and indicate their position. Flight commanders may use their initials in the review block after reviewing individual AF Form 4023 entries.

6.3.7.1. Operations Review. In addition to reviewing all AF Form 4023 entries, the flight commander or squadron training representative will conduct a monthly review of active status AF IMT 4022s. The squadron commander or operations officer will review active status AF IMT 4022s at least once each quarter. Document reviews on an AF IMT 4023. The reviewer will annotate "monthly review" or "quarterly review," as applicable, in the training period block. Write comments concerning the trainee's progress, status, or recommendations in the mission profile, comments, and recommendations block.

6.3.7.2. Monthly reviews are not required for formal school courses except in documented cases of unsatisfactory progress. ATS personnel will review the students' records and ensure all required training is completed prior to entering flight training. If problems are encountered during the flying phase, the squadron will conduct reviews necessary to document unsatisfactory progress.

6.3.8. AF IMT 4023 will be completed and reviewed by the student prior to his or her next training period.

**6.4. Instructions for the AF Form 4024.** This form tracks, for each sortie, individual event and task accomplishment and grades. Units will overprint event and task listings, total number of repetitions required, and the required proficiency level (RPL) for each event and task. Simulator, ground training, and flight training events may be combined on a single Form 4024 provided they are separated and labeled in the Training Event/Task Listing column. Maintain AF Form 4024s on the right side of AF Form 4022. **NOTE:** The AF Form 4024 may be used for ATS and formal school courses at their discretion. If additional forms are needed, see AFI 33-360 for guidance.

6.4.1. Name. Self-explanatory.

6.4.2. Crew Position. Self-explanatory.

6.4.3. Course or Phase of Training. Enter the AFCAT 36-2223 formal course identifier, e.g. C5P. For special mission qualification, enter the type and identify the method of training, e.g. WST training, flying training, etc.

6.4.4. Sortie. Enter sortie number e.g., S-1, S-2, CPT-1, etc.

6.4.5. Date.

6.4.6. Training Event and Task Listing. Reflects the tasks and subtasks in the training program that require specific student performance or knowledge proficiency standards.

6.4.7. Number Accomplished. Reflects the number of times an event was accomplished on that sortie.

6.4.8. Grade. Enter a "B", "F", "P", "S", or "U" as appropriate.

6.4.8.1. "B"—Briefing item only.

6.4.8.2. "F"—Familiarization item; proficiency is not required. The operations group commander or equivalent operations function will determine whether "F" items are completed by briefing, demonstration, observation, or actual accomplishment.

6.4.8.3. "P" – Proficient; aircrew member has achieved the required proficiency level.

6.4.8.4. "S" – Satisfactory; aircrew member has not achieved the required proficiency level but progress is satisfactory.

6.4.8.5. "U" – Unsatisfactory; aircrew member was previously proficient, but has regressed or progress is unsatisfactory.

6.4.9. Total Number Required. Indicates the total repetitions of an event or task required by the course syllabus.

6.4.10. Total Number Accomplished. Total of the number of repetitions actually accomplished.

6.4.11. Required Proficiency Level (RPL). RPL for the specific event and task. Each event and task will have a performance standard designated for the required proficiency level the crewmember will achieve. In addition, each event and task may have (optional) a knowledge standard designated and used in the same manner as a performance standard. The standards for specific events are either listed in the applicable master task list (MTL) and evaluation standards document (ESD) for each weapon system or identified in this instruction. For those weapons systems that do not have any RPL listing, all events will have an RPL of "3" for performance and "C" for knowledge (if knowledge standards are used in addition to performance standards). **EXCEPTION:** One-time events required for familiarization and not listed in the MTL and ESD or specific weapon system instruction will not have performance and knowledge standard assigned. Performance and knowledge standards are listed in [Table 6.1](#)

6.4.11.1. Regression. Once a crewmember has received "P" for an event, the only subsequent grade allowed for that event is either "P" or "U". Regression occurs when a maneuver is graded "U" after having achieved "P" in the same task. Regression from a "P" to a "U" requires an explanation in the student's training folder (AF Form 4023). The overall grade is at the instructor's discretion. For regression, the student will re-obtain proficiency prior to the end of the block of training in order to be recommended for a checkride (when applicable) or certification (when applicable).

6.4.11.2. Proficiency Advance. In order to recommend a crewmember for a checkride (when applicable) or certification (associated with completion of training), the final grade for each event will meet the Required Proficiency Level (RPL) and the total number accomplished will normally meet or exceed the Total Number Required. **EXCEPTION:** Highly proficient crewmembers may be "proficiency advanced" and the total number accomplished may be less than the Total Number Required.

**Table 6.1. Event and Task Performance Standards.**

Code	Performance is:	Definition:
1	Extremely Limited	Individual can do most activities only after being told or shown how.
2	Partially Proficient	Individual can do most of the behaviors, but not necessarily to the

		desired levels of speed, accuracy, and safety.
3	Proficient	Individual can do and show others how to do the behavior in an activity at the minimum acceptable levels of speed, accuracy, and safety without the assistance of an instructor. For copilots, proficiency may involve actual aircraft control or copilot duties only. For instructors, proficiency includes the ability to demonstrate, instruct, and supervise ground and flight activity.
4	Highly Proficient	Individual can do behaviors in an activity at the highest level of speed, accuracy and safety.
<b>Event and Task Knowledge Standard</b>		
<b>Code</b>	<b>Knowledge of:</b>	<b>Definition:</b>
A	Facts and Nomenclature	Individual can identify basic facts and terms about the subject and when used with a performance code, can state nomenclature, simple facts, or procedures involved in an activity.
B	Principles and Procedures	Individual can explain relationship of basic facts and state general principles about the subject and when used with a performance code, can determine step-by-step procedures for sets of activities
C	Analysis, and Operating Principles	Individual can analyze facts and principles and draw conclusions about the subject and when used with a performance code, can describe why and when each activity must be done and tell others how to accomplish activities
D	Evaluation and Complete Theory	Individual can evaluate conditions and create new rules or concepts about the subject and when used with a performance code, can inspect, weigh, and design solutions related to the theory involved with activities.

### 6.5. Instructions for the AF Form 4025, *Aircrew Summary and Close-Out Report*.

6.5.1. For each formal training program, a summary and close-out report will be generated detailing the individual's strengths, weaknesses, overall performance, and other pertinent information. Unit training offices are responsible for completing the report and ensuring all required signatures are obtained. At formal schools, the instructor will accomplish the AF Form 4025 and the Sq/CC/DO's signature is optional.

6.5.2. Sq/CCs, operations officers and flight commanders will ensure the comments on this form do not reflect personal opinions or biases. All comments will be supported by information contained in the AF Forms 4023, 4024, or training guides as applicable.

### 6.6. MPD Training Folder.

#### 6.6.1. AF Form 4022

6.6.1.1. Ground training will be annotated on the inside front cover of the form. Use descriptive identifiers on the inside cover of the 4022.

6.6.1.2. Overprints for ground training are authorized and, if used, will be placed on the left side of the AF Form 4022. Overprints or locally developed tracking sheets may include more but not less information than is required by the AF Form 4022.

6.6.1.3. Sorties will be annotated on a Mobility Pilot Flight Training Summary. This form will be kept on the right side of the AF Form 4022 and will be used in lieu of the Flying Training Summary section on the inside right cover of the AF Form 4022. See [Figure 6.1](#) for a sample format.

6.6.2. AF Form 4023.

6.6.2.1. Complete this form or a unit developed overprint for all left seat sorties, off-station missions, or anytime that AC, IP or SQ/DO considers that a write-up is warranted. For multiple-leg missions or deployments, one write-up may be made covering the entire mission.

6.6.2.2. Comments will elaborate on trainee strengths and weaknesses, identify problem areas, record unusual circumstances, and indicate student progress. The Remarks/Recommendations section should include training completed and any other performance based information.



DCS, Operations, Plans and Requirements

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

ACCI 11-464, *Training Records and Performance Evaluation in Formal Flying Training Programs*, 4 December 2003

AFDD 3-50, *Personnel Recovery Operations*, 17 September 2010

AFI 10-245, *Air Force Antiterrorism Standards*, 30 March 2009

AFI 10-401, *Air Force Operations, Planning and Execution*, 7 December 2006

AFI 10-403, *Deployment Planning and Execution*, 13 January 2008

AFI 10-2501, *Air Force Emergency Management (EM) Program, Planning and Operations*, 24 January 2007

AFI 11-101, *Management Reports on the Flying Hour Program*, 1 November 2002

AFI 11-102, *Flying Hour Program Management*, 5 April 2002

AFI 11-102, ACC SUP 1, *Flying Hour Program Management*, 7 June 2007

AFI 11-202V1, *Aircrew Training*, 22 November 2010

AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, 13 September 2010

AFI 11-202V2, ACC SUP 1, *Aircrew Standardization/Evaluation Program*, 10 December 2007

AFI 11-202V3, *General Flight Rules*, 22 October 2010

AFI 11-212, *Munitions Requirements for Aircrew Training*, 8 April 2009

AFI 11-214, *Air Operations Rules and Procedures*, 22 December 2005

AFI 11-215, *USAF Flight Manual Program*, 22 December 2008

AFI 11-218, *Aircraft Operation and ground Movement*, 11 May 2005

AFI 11-290, *Cockpit/Crew Resource Management Training Program*, 11 April 2001

AFI 11-2HC-130V2, *HC-130 Aircrew Evaluation Criteria*, 1 January 2005, *Interim Change*, 9 April 2007

AFI 11-2HC-130V3, *HC-130 Operational Procedures*, 30 June 2007

AFI 11-301 V1, *Aircrew Flight Equipment (AFE) Program*, 25 February 2009

AFI 11-301 V4 *Aircrew Laser Eye Protection (ALEP)*, 21 February 2008

AFI 11-401, *Aviation Management*, 10 December 2010

AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*, 13 Dec 2010

AFI 11-403, *Aerospace Physiological Training Program*, 20 February 2001

AFI 11-412, *Aircrew Management*, 10 December 2009

AFI 11-421, *Aviation Resource Management*, 13 December 2010

AFI 13-207, *Preventing and Resisting Aircraft Piracy (Hijacking) FOUO*, 21 June 2010

AFI 13-212, *Range Planning and Operations*, 16 November 2007

AFI 13-217, *Drop Zone and Landing Zone Operations*, 10 May 2007

AFI 14-105, *Unit Intelligence Mission and Responsibilities*, 3 June 2002

AFI 14-105 ACC SUP1, *Unit Intelligence Mission and Responsibilities*, 28 January 2003

AFI 16-402, *Aerospace Vehicle Assignment, Distribution, Accounting and Termination*, 1 December 2009

AFI 16-1301, *Survival, Evasion, Resistance, and Escape Program*, 6 September 2006,

AFI 16-1301, ACC SUP 1, *Survival, Evasion, Resistance, and Escape Program*, 23 June 2007

AFI 31-207, *Arming and Use of Force by Air Force Personnel*, 29 January 2009

AFI 33-360, *Publication and Forms Management*, 18 May 2006

AFI 36-507, *Mobilization of Civilian Workforce*, 21 July 1994

AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, 7 March 2006

AFI 36-2107, *Active Duty Service Commitments*, 22 April 2005

AFI 36-2201V5, *Air Force Training Program Career Field Education and Training*, 8 June 2004

AFI 36-2226, *Combat Arms Program*, 24 February 2009

AFI 36-2238, *Self-Aid and Buddy Care Training*, 19 Jan 2006

AFI 36-2251, *Management of Air Force Training Systems*, 5 June 2009

AFI 48-123V1, *Medical Examinations and Standards*, 24 Sep 2009

AFI 51-401, *Training and Reporting to Ensure Compliance with the Law of Armed Conflict*, 19 July 1994

AFI 65-503, Table A36-1, *Authorized Aircrew Composition-Active Forces*

AFI 71-101V2, *Protective Service Matters*, 18 November 2002

AFI 91-202, *The US Air Force Mishap Prevention Program* 1 August 1998

AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Prevention and Health (AFOSH) Program*, 1 June 1996

AFJI 11-204, *Operational Procedures for Aircraft Hazardous Materials*, 11 November 1994

AFMAN 11-210, *Instrument Refresher Program*, 3 February 2005

AFMAN 11-217V1, *Instrument Flight Procedures*, 3 January 2005

AFMAN 11-217V3, *Instrument Flight Procedures*, 23 February 2009

AFMAN 24-204(IP), *Preparing Hazardous Materials for Military Shipments*, 1 September 2009

AFMAN 36-2236, *Guidebook for Air force Instructors*, 12 November 2003

AFOSH Standard 91-100, *Aircraft Flightline- Ground Operations and Activities*, 1m May 1998

AFPAM 10-100, *Airman's Manual*, 1 March 2009  
 AFPD 11-2, *Aircraft Rules and Procedures*, 14 January 2005  
 AFPD 11-3, *Life Support*, 9 April 1993  
 AFPD 11-4, *Aviation Service*, 1 September 2004  
 AFPD 1-25, *Emergency Management*, 126 September 2007  
 AFSOCMAN 11-201, *Hostile Environment Repair Procedures*, 1 May 2005  
 AFTTP 3-1.HC/MC-130, *Tactical Employment*, 1 May 2007  
 AFTTP 3-3.HC/MC-130, *Combat Aircraft Fundamentals*, 1 May 2007  
*Air Force Records Disposition Schedule (AF RDS)*, 2 June 2004  
 AMCH 11-214, *AMC Aircrew Hazardous Materials Handbook*, 15 February 2008  
 CFETP1A1X1, *Flight Engineer*, 1 Nov 2007  
 CFETP1A2X1, *Aircraft Loadmaster*, 1 Nov 2007  
 CFETP1A3X1, *Airborne Mission Systems*, 1 Nov 2007  
 DODD 5500.7, *Standards of Conduct*, 29 November 2007

#### ***Adopted Forms***

AF Form 8, *Certificate of Aircrew Qualification*, 8 Dec 2006  
 AF Form 63, *Active Duty Service Commitment Acknowledgement Statement*, 30 Oct 2010  
 AF Form 623, *Individual Training Record Folder*, 1 Oct 1996  
 AF Form 702, *Individual Physiology Training Record*, 1 Dec 2003  
 AF Form 847, *Recommendation for Change of Publication*, 22 Sep 2009  
 AF Form 1042, *Medical Recommendations for Flying or Special Operational Duty*, 1 Feb 1992  
 AF Form 1522, *ARMS Additional Training Accomplishment Report*, 18 Aug 2003  
 AF Form 4022, *Aircrew Training Folder*, 1 Oct 1997  
 AF Form 4023, *Aircrew Training Progress Report*, 1 Oct 1997  
 AF Form 4024, *Aircrew Training Accomplishment Report*, 1 Oct 1997  
 AF Form 4025, *Aircrew Summary/Close-out Report*, 1 Oct 1997  
 AF Form 4111, *SOF/CSAR Training Record*, 9 Sep 2004  
 AF Form 4324, *Aircraft Assignment/Aircrew Qualification Worksheet*, 27 Aug 2007  
 AF Form 4348, *USAF Aircrew Certifications*, 12 Dec 2006  
 DD Form 1833, *Isolated Personnel Report (ISOPREP)*, 1 May 2008

#### ***Abbreviations and Acronyms***

A—Annual

**AC**—Aircraft Commander  
**AD**—Air Drop  
**AEB**—Aircrew Evaluation Board  
**AF**—Air Force  
**AFE**—Aircrew Flight Equipment  
**AFRC**—Air Force Reserve Component  
**AFSC**—Air Force Specialty Code  
**AFSOC**—Air Force Special Operations Command  
**AGL**—Above Ground Level  
**AMC**—Air Mobility Command  
**AMSS**—Airborne Mission System Specialist  
**ANG**—Air National Guard  
**API**—Aircrew Position Indicator  
**ARC**—Air Reserve Components  
**ARMS**—Aviation Resource Management System  
**ATD**—Aircrew Training Device  
**ATS**—Air Crew Training System  
**BAI**—Backup Aircraft Inventory  
**BAQ**—Basic Aircraft Qualification  
**BMC**—Basic Mission Capable  
**CAF**—Combat Air Forces  
**CARP**—Computed Air Release Point  
**CB**—Test- Coded Aircraft  
**CBT**—Computer Based Training  
**CC**—Commander  
**CC**—Combat-Coded Aircraft  
**CDS**—Container Delivery System  
**CDTQT**—Chemical Defense Task Qualification Training  
**CEA**—Career Enlisted Aviator or Circular Error Average  
**CFT**—Cockpit Familiarization Trainer  
**CMR**—Combat Mission Ready  
**COMSEC**—Communications Security

**CP**—Copilot  
**CPT**—Cockpit Procedures Trainer  
**CRM**—Cockpit Resource Management  
**CRL**—Container Ramp Loads  
**CSAR**—Combat Search and Rescue  
**CT**—Continuation Training  
**CTA**—Chemical Threat Area  
**CW**—Chemical Warfare  
**CWD**—Chemical Warfare Defense  
**DNIF**—Duty Not Involving Flying  
**DOC**—Designed Operational Capability  
**DRU**—Direct Reporting Unit  
**DZ**—Drop Zone  
**EP**—Emergency Procedure  
**ETCA**—Education and Training Course Announcements  
**FAIP**—First Assignment Instructor Pilot  
**FE**—Flight Engineer  
**FEB**—Flying Evaluation Board  
**FEF**—Flight Evaluation Folder  
**FP**—First Pilot  
**FS**—Flight Surgeon  
**FTE**—Flight Test Engineer  
**FTU**—Formal Training Unit  
**HAAR**—Helicopter Air Refueling  
**HARP**—High Altitude Release Point  
**HHQ**—Higher Headquarters  
**IAW**—In Accordance With  
**IFE**—In Flight Emergency  
**ILS**—Instrument Landing System  
**IMC**—Instrument Meteorological Conditions  
**IP**—Instructor Pilot or Initial Point  
**IQT**—Initial Qualification Training

**IRC**—Instrument Refresher Course

**LM**—Loadmaster

**LPS**—Local Proficiency Sortie

**LSGV**—Low Speed Ground Vehicle

**LZ**—Landing Zone

**MAJCOM**—Major Command

**MC**—Mission Copilot

**MCC**—Mission Commander

**MDS**—Mission Design Series

**MOST**—Mission Oriented Simulator Training

**MP**—Mission Pilot

**MPD**—Mobility Pilot Development

**MQT**—Mission Qualification Training

**MTL**—Master Task Listing

**N/A**—Not Applicable

**NAF**—Numbered Air Force

**NAV**—Navigator

**NGB**—National Guard Bureau

**NLT**—Not Later Than

**NVG**—Night Vision Goggle

**OG**—Operations Group

**OPR**—Office of Primary Responsibility

**OPS**—Operations

**OPSEC**—Operations Security

**OSA**—Operational Support Aircraft

**P**—Pilot

**PAA**—Primary Aerospace Vehicle Authorized

**PACAF**—Pacific Air Forces

**PAI**—Primary Aerospace Vehicle Inventory

**PAR**—Precision Approach Radar

**PCS**—Permanent Change of Station

**PFT**—Programmed Flying Training

**PMAI**—Primary Mission Aerospace Vehicle Inventory

**POC**—Point of Contact

**PQP**—Prior Qualified Pilots

**PTF**—Permanent Training Folder

**PTT**—Partial Task Trainer

**QUAL**—Qualification

**RAP**—Ready Aircrew Program

**RPL**—Required Proficiency Level

**SAR**—Search and Rescue

**SATB**—Standard Airdrop Training Bundle

**SCNS**—Self Contained Navigation System

**SEPT**—Situational Emergency Procedure Training

**SERE**—Survival, Evasion, Resistance, and Escape

**SNS**—Satellite Navigation Station

**SOC**—Senior Officers Course

**SOI**—Syllabus of Instruction

**SORTS**—Status of Resources and Training System

**SQ/CC**—Squadron Commander

**SUNT**—Specialized Undergraduate Navigator Training

**SUPT**—Specialized Undergraduate Pilot Training

**TACAN**—Tactical Air Navigation

**TD**—Tactical Deception

**TDY**—Temporary Duty

**TF**—Training-Coded Aircraft

**TO**—Technical Order

**TOT**—Time Over Target

**TRP**—Training Review Panel

**TX**—Transition

**UNQ**—Unqualified

**UQ**—Upgrade Qualification

**USAF**—United States Air Force

**VFR**—Visual Flight Rules

**VMC**—Visual Meteorological Conditions

**WG**—Wing

**WIC**—Weapons Instructor Course

**WS**—Weapons School

**WST**—Weapon System Trainer

**WX**—Weather

### *Terms*

**Academic Training**—A course of instruction that includes but is not limited to classroom instruction related to aircraft systems and operation, flight characteristics and techniques, performance, normal procedures, abnormal and emergency procedures. Academic courses are designed to prepare students for simulator/flight training and normally completed before beginning that training.

**Actual Airdrop**—Aerial delivery of actual personnel or equipment from an aircraft in-flight.

**Aircraft Commander (AC)**—A pilot who has been certified to perform pilot in command duties.

**Aircrew Certification Events**—Specialized training which does not require a flight evaluation. An instructor or SQ/CC must certify an aircrew member has received the required training and attained the required proficiency and knowledge levels. Training will be conducted IAW MAJCOM approved syllabus/training plan or AFI guidance. Instructor certified events are documented on the AF Form 4348 or a MAJCOM approved equivalent.

**Aircrew Training Device (ATD)**—Hands-on training aids that include cockpit procedure trainers (CPT), part task trainers (PTT), weapons systems trainers (WST).

**Aircrew Training System (ATS)**—An integrated qualification, upgrade, and continuation training program for crew members. Civilian contractors conduct most academic and ATD training while the USAF conducts all flight training and evaluations.

**Air Reserve Component (ARC)**—ANG and AFRC units and members, both associate and unit-equipped.

**Ancillary Training**—Universal training, guidance or instruction, regardless of Air Force Specialty Code (AFSC), that contributes to mission accomplishment. It does not include functional, occupational or additional duty training. Ancillary Training is divided into the following four categories: Annual Total Force Awareness Training (TFAT), Selected Force Training, Event Driven Training, and Expeditionary Skills Training (EST). See AFI 36-2201V1.

**Basic Aircraft Qualification (BAQ)**—A status of an aircrew member who has satisfactorily completed training prescribed to maintain the skills necessary to fly the unit aircraft. The member must perform at the minimum frequency necessary to meet the most recent sortie and flight standards set for the weapons system.

**Basic Mission Capable (BMC)**—Status of an aircrew member who has satisfactorily completed mission qualification training, is qualified in some aspect of the unit mission, but does not maintain CMR status.

**Category I Route**—Any route that does not meet the requirements of a category II route.

**Category II Route**—Any route on which the position of the aircraft can be accurately determined by the overhead crossing of a radio aid (NDB, VOR, TACAN) at least once each hour with positive course guidance between such radio aids.

**Certification**—The process of documenting that an individual is trained and qualified to perform in a given capacity.

**Circular Error**—Miss distance of a given point of impact expressed in radial distance from center of target.

**Cockpit Familiarization Trainer (CFT)**—A training device in which the controls, switches, and instruments do not have to respond to trainee inputs. Used for checklist use, normal procedures, and emergency procedures (AFPAM 36-2211, *Guide for Management of Air Force Training Systems*).

**Cockpit Procedures Trainer (CPT)**—A training device in which instruments and displays are activated to respond to trainee inputs. Used for safety of flight, instrument, normal, and emergency procedures (AFPAM 36-2211).

**Combat Mission Ready (CMR)**—A status of an aircrew member who has satisfactorily completed mission qualification training and maintains qualification and proficiency in the command or unit combat mission.

**Container Delivery System (CDS)**—Equipment or materiel rigged and airdropped from the aircraft using roller conveyors and gravity extraction.

**Contingency Operations Sorties**—Sorties flown during in direct support of an operations plan, operations order, disaster, or other contingency tasking.

**Conversion Training**—Training necessary to qualify unit personnel in a different MDS aircraft (generally a new MWS) or mission employment system. The requirement is dependent on unit Designed Mission Capability and qualification training may require an evaluation or AF Form 8.

**Core Mission Events**—A crewmember must be qualified in all core mission events to be considered Mission Ready (CMR) or Basic Mission Capable (BMC). To determine how non-currency in any core mission event affects overall mission qualification, refer to Flying Training Requirements in [Chapter 4](#). Core Mission Events are defined by AFI 11-2HC-130V2.

**Crew Resource Management (CRM)**—Training concept that emphasizes crew effectiveness by enhancing individual and aircrew performance in communication, situational awareness, effective leadership and management, and crew coordination.

**Critical Phases of Flight**—Takeoff, approach, landing and all tactical events.

**Currency**—The minimum training frequency required for an event or sortie.

**Direct Supervision**—An aircrew member is considered under direct supervision when flying with an instructor in the same crew position. For pilots the IP must occupy one of the pilot seats and for other crew positions the instructor must be readily available to assume the primary duties if required.

**Difference Training**—Training necessary to certify an individual in a different series aircraft within the same MDS in which currently qualified.

**Event**—A specific training element, function, task or item.

**Expeditionary Skills Training (EST)**—A category of Ancillary Training. Training directly related to an Airman's ability to survive and operate in a contingency environment. Examples of EST include CBRNE and Self-Aid/Buddy Care. A current list of pre-deployment training is available at AEF Online, [https://aef.afpc.randolph.af.mil/mandatory\\_exped\\_training.aspx](https://aef.afpc.randolph.af.mil/mandatory_exped_training.aspx).

**Flight Examiner**—A crewmember certified IAW AFI 11-202V2 to administer evaluations.

**Flight Surgeon (FS)**—Medical doctor qualified to perform flight surgeon duties and has current aeronautical orders in that Air Force Specialty Code.

**Formal School**—An Air Force unit designated to conduct qualification training; synonymous with Flying Training Unit (FTU).

**Formal School Courseware**—Training materials and programs developed for training crewmembers at formal schools. It includes all student study guides, workbooks, computer-based training lessons, instructor guides, and applicable training forms related to the specific course. Training courses listed in ETCA. Formal courses may be conducted using the secondary method (in-unit) of training IAW the provisions of this instruction.

**Formal Training**—Any ETCA or ATS course leading to certification or qualification.

**Forward Area Arming and Refueling Point (FARP)**—For the purpose of this instruction, ground fuel transfer by HC-130 tanker aircraft to a receiver aircraft, fuel bladder, or fuel vehicle using FARP equipment and checklist.

**Helicopter Air to Air Refueling (HAAR)**—Aerial refueling of rotary-wing aircraft.

**Hot Refueling**—Aircraft hot refueling is fuel transfer to or from any fuel source other than another aircraft with one or more aircraft engines operating. Hot refueling includes fuel transfer from internal aircraft fuel tanks, auxiliary tanks or internally loaded fuel bladders.

**Low Level**—Tactical operations below 3000 feet AGL.

**Mission Design and Series (MDS) for Aircraft**—The official designation for aerospace vehicles used to represent a specific category of aerospace vehicles for operations, support, and documentation purposes.

**Mission Events**—The unit Defined Operational Capability (DOC) Statement defines required crew capabilities. These capabilities/tactics/events can be categorized as either Core or Special Mission.

**Mission Oriented Simulator Training (MOST)**—Training conducted in a WST or MRD that incorporates a full mission profile. The focus of this training should be crew coordination and problem solving (part of CRM simulator).

**Night Event**—Log a night event when accomplished during official hours of darkness defined as the time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac.

**Operational Flight Trainer (OFT)**—A training device that dynamically simulates flight characteristics. Used for normal, emergency and instrument procedures, to include safety of flight, war fighting tasks, and skill integration training (AFPAM 36-2211).

**PAA Hours**—For the purpose of this instruction, PAA hours include all C-130 hours since assigned to an HC-130 unit.

**Primary Mission Aircraft Inventory**—Aircraft authorized for performance of the Operational mission. The PMAI forms the basis for allocation of operating resources to include manpower, support equipment, and flying-hour funds. The operating command determines the PAI required to meet their assigned missions. (See AFI 16-402, *Aerospace Vehicle Assignment Distribution, Accounting and Termination*)

**RAP Lookback**—A 1- and 3-month RAP sortie requirement used to determine BMC/CMR regression. Lookback requirements (number and authorized sortie types) are IAW MAJCOM RTM.

**Requalification Training (RQT)**—Training required to re-qualify crewmembers in an aircraft or mission in which they were previously qualified.

**SelfContained Approach (SCA)**—An approach conducted using selfcontained navigation systems on the aircraft.

**Simulated Airdrop**—A maneuver during which all standard procedures and signals are followed, but an aerial release is not made. Applicable doors or ramp need not be opened.

**Secondary Method Training**—Formal training conducted at a location not designated as an FTU using SOI and courseware.

**Standard Airdrop Training Bundle (SATB)**—A 15-pound training bundle that may be dropped to simulate personnel, equipment, or CDS airdrops.

**Tactical Recovery**—A visual (aided or unaided) tactical approach designed to maneuver the aircraft from the en route environment to an airfield. Pilots will be certified by an instructor to accomplish tactical recoveries. Navigator directed approaches (SCAs) are not considered tactical recoveries for these purpose of this definition.

**Total Flying Time**—Total time for all aircraft flown in military service to include student time. Time accumulated must be in the aircrew member's current rating (i.e., pilot, navigator, etc.)

**Total Force Awareness Training (TFAT)**—A category of Ancillary Training. General awareness-level training for the “Total Force” combined into concise, Computer Based Training (CBT) blocks. TFAT training is accessed through the Advanced Distributed Learning Service (ADLS). All training in these courses is required once every 12 months. Examples of TFAT include OPSEC, Force Protection and Human Relations. See AFI 36-2201V1.

**Training devices**—All trainers, computer assisted instruction, sound-on-slide programs, videos, and mockups designed to prepare students for flight training or augment prescribed continuation training.

**Training Status**—A deficient status in which a crewmember must fly under the supervision of an instructor when occupying a primary crew position. Once deficient items are corrected, the crewmember is removed from training status.

**Transition Course**—Normally, a shortened version of initial qualification training that gives aircrew members cross-flowing from another military aircraft credit for acquired aviation proficiency.

**Upgrade Training**—Training to qualify/certify a crewmember in a higher crew qualification (i.e. mission pilot or instructor upgrade).

**Weapon System Trainer (WST)**—Device that provides synthetic flight and tactics environment, in which aircrews learn, develop, improve, and integrate skills associated with their crew position. In this instruction WST and simulator are synonymous.

**Verification Training**—Training that updates aircrew on their squadron's wartime mission and real-world mission planning considerations.

**Volume**—For the purposes of this instruction, volume refers to the number of events/sorties an aircrew member must accomplish in a given training period.

## ATTACHMENT 2

### VERIFICATION PLANNING EXERCISE GUIDE

**A2.1. Guideline for Verification Briefings:** The following outlines are provided as guidelines for the development of verification briefings.

#### A2.1.1. Overview:

A2.1.1.1. Introduction (participants and briefing classification).

A2.1.1.2. Review of applicable OPLAN, DOC statements and unit Mission Essential Task List (METL).

A2.1.1.3. Mission overview.

A2.1.1.4. Status of friendly forces (ground, air, and support).

#### A2.1.2. Area of Operations:

A2.1.2.1. Geography (topography, population centers, lines of communications, chokepoints and natural obstacles, major visual and radar significant identification points).

A2.1.2.2. Climatology (effects on unit operations, ground troop movements, and in-flight operations).

A2.1.2.3. Operating base (location, facilities, procedural constraints, strengths and limitations).

#### A2.1.3. Status of Enemy Forces:

A2.1.3.1. Ground forces and accompanying air defense threats (SAMs, AAA, EC, and MIJ), capabilities, strengths and weaknesses.

A2.1.3.2. Airborne forces (numbers, locations, capabilities and tactics).

#### A2.1.4. Mission Employment Briefing:

A2.1.4.1. Ground operations.

A2.1.4.2. Departure (WX contingencies, options).

A2.1.4.3. Route of flight (threat analysis, alternatives, fuel requirements, decision points).

A2.1.4.4. Ingress.

A2.1.4.5. Terminal/Objective area tactics.

A2.1.4.6. Egress plan (route, mutual support agreements).

A2.1.4.7. Recovery (safe corridor procedures, IFF procedures, alternate and emergency airfields).

#### A2.1.5. Escape and Evasion:

A2.1.5.1. PAFEs.

A2.1.5.2. SAR procedures.

**A2.1.6. Essential Elements of Information/Reports:**

A2.1.6.1. Essential elements of information (EEIs).

A2.1.6.2. Required reports and reporting procedures.

## ATTACHMENT 3

### FLYING TRAINING SORTIE AND EVENT DEFINITIONS

**NOTE:** Mission Copilot refers to MPD pilots who have not completed pilot upgrade qualification.

#### A3.1. Sortie Definitions:

A3.1.1. **Basic Sortie [SX23].** Sortie must be flown on an HC-130 aircraft. Log basic sorties on local or operational missions that include appropriate pre-mission planning; preflight according to flight publications; preparation of performance, take-off and landing data; weather and crew/passenger briefings, flight plan filing, and post-mission procedures. Additional requirements by crew position are as follows:

A3.1.1.1. Pilots will complete a takeoff and landing.

A3.1.1.2. Navigators will monitor a departure and approach. If more than one qualified navigator is on a flight, each may obtain sortie credit on the same flight provided each one occupies the navigator position, maintains a log, performs navigator duties, and meets the requirements of the Basic Sortie criteria.

A3.1.1.3. Flight Engineers, Loadmasters, and AMSS may credit any type of mission actually flown. Two crew members may log a sortie on the same mission if the applicable requirements of the Basic Sortie criteria are met.

A3.1.1.4. All. Log only one Basic Sortie per mission.

A3.1.2. **Local Proficiency Sortie (LPS) [SX10].** A local training mission for BAQ, transition and emergency procedures. *Fly maneuvers under the direct supervision of an IP. IPs are not required to fly with another IP to credit this event and need not accomplish all events on a single sortie.* Complete all maneuvers to an acceptable level of proficiency as determined by the IP. Aircraft commanders should emphasize left-seat flying duties; however, they may fly in the right seat for proficiency. *Mission copilots maintaining a left seat basic qualification will fly this event from the left seat to log currency.* Complete all maneuvers to an acceptable level of proficiency as determined by the IP to log the LPS. Should the LPS be incomplete for weather or aircraft malfunction, the instructor will determine whether the entire LPS will be re-accomplished or just the incomplete events. Credit the LPS upon completion of the last event. A minimum of one hour actual flying time is required to log the LPS. When conditions permit, windmill taxi starts and simulated three engine takeoffs may be practiced (demonstrated to mission copilots in MPD Legacy progression). As the absolute minimum, conduct the following maneuvers: **NOTES:** Unit commanders may add to the following minimum LPS sortie criteria. See AFI 11-2HC-130V3 for additional information training policy and restrictions. **EXCEPTION:** ARC units will develop local LPS guidelines to remain within their programmed flying hours.

A3.1.2.1. A review of boldface emergency procedures.

A3.1.2.2. Two instrument approaches (one precision, one non-precision).

A3.1.2.3. A holding pattern or procedure turn.

A3.1.2.4. A circling approach (traffic permitting).

A3.1.2.5. A simulated engine out landing (N/A for MCs in MPD Legacy progression).

A3.1.2.6. A simulated engine out go-around (N/A for MCs in MPD Legacy progression).

A3.1.2.7. A VFR traffic pattern (weather permitting).

A3.1.2.8. 100%, 50%, and no flap landings.

**A3.1.3. Category 1 Navigation Sortie [SX19].** To credit this event, navigators will fly a minimum of two hours using Category 1 procedures. The navigator should perform all tasks normally encountered on a Category 1 mission. These tasks will include, but not be limited to, mission planning, pre-flight fuel planning, equal time point (ETP) computation, chart preparation, deviation checks, coast-out/in procedures, aircraft position fixing using appropriate/available navigation aids (normally, a minimum of one radar and one navigation aid fix), log work, use of navigation systems/computers, pacing, in-flight fuel management, and other appropriate procedures.

A3.1.3.1. The Self-Contained Navigation System (SCNS) and the Global Positioning System (GPS) positions will be recorded, plotted, and evaluated for all fixes. A full line log entry will be accomplished at least once. A fix will be accomplished at least once every hour on all Category 1 routes. This sortie may be accomplished day or night and over land or water.

A3.1.3.2. Category 1 sorties may be logged in the aircraft or WST.

A3.1.3.3. MAJCOMs and units may levy additional requirements for this event.

**A3.1.4. Combat Search and Rescue Task Force (CSARTF) Sortie [SR82].** A CSARTF sortie includes various forces required to search, locate, authenticate and recover a survivor during wartime or contingency operations. Log a CSARTF Sortie when accomplishing a training sortie with at least 3 of the 5 following assets: HC-130, HH-60 (or other rotary recovery vehicle; includes FARP operations), Guardian Angel (PJ/CRO), RESCORT/RESCAP aircraft, or C2 platforms. At a minimum, the CSARTF sortie must integrate all assets in a mission that includes: a realistic combat threat scenario, full mission briefing of all players (CSARTF assets/roles, alert procedures, ATO/SPINS, RESCORT procedures, SEAD, communications, command and control, etc.), live/simulated terminal employment, live/simulated survivor(s), threat reactions, and full mission debrief.

**A3.1.5. Combat Skills Sortie [SR30].**

A3.1.5.1. Pilots may credit a combat skills sortie when a low level route and an air refueling, airdrop, tactical recovery, SCA using infil/exfil procedures, or maximum effort operations (takeoff and landing) are accomplished.

A3.1.5.2. Navigators may credit a combat skills sortie when a low level route and an air refueling, airdrop, or SCA using infil/exfil procedures are accomplished.

A3.1.5.3. FEs may credit a combat skills sortie when a low level route and an air refueling, airdrop, or SCA using infil/exfil procedures are accomplished.

A3.1.5.4. Loadmasters may credit a combat skills sortie when a low level route and an air refueling, airdrop, or infil/exfil are accomplished.

A3.1.5.5. AMSS may credit a combat skills sortie when a low level route and any other tactical event is accomplished; this includes Authentication, Encode/Decode, Secure Voice, Have Quick, and Have CSAR events.

A3.1.5.6. In addition, a combat skills sortie may be logged when any four of the following applicable events are accomplished on the same mission: Rescue airdrops (MA-1 kit, parabundle, or freefall), search pattern, tactical airdrop, low level route, helicopter air to air refueling, maximum effort profile (takeoff and landing), infil/exfil, SCA using infil/exfil procedures, or Chaff/flare/threat events when accomplished in response to threat identification and reaction to threat emitters.

A3.1.6. **Mission Sortie [SR41].** To log a Mission Sortie, conduct a realistic crew-planned combat scenario that relates to the unit's tasked mission. Planning should include or discuss the requirements of combat planning that are not normally "exercised" in local training sorties, such as ATOs, Line of Communication (LOC), ROE, LOAC, threat capabilities/counter tactics, etc. Minimum requirements to credit a mission sortie are: intel scenario, combat mission planning, low or high level profile in conjunction with an Air Refueling Control Time (ARCT)/Time Over Target (TOT)/Time of Arrival (TOA). Include a realistic threat scenario and at least one aircraft defensive maneuver during each sortie. Desired events include air refueling, airdrop, maximum effort takeoff and landing operations, secure voice, Have Quick, Have CSAR, authentication, and use of aircrew protective equipment (helmet, survival and flak vests, weapons and cockpit armor, if available).

A3.1.7. **Commander's Option Sortie [SR99].** Any type mission may be logged. Unit commanders will allocate these sorties for BMC aircrews to meet the BMC requirements and support unit training. Commander allocation of these sorties to CMR aircrews should consider individual training requirements and unit training objectives.

A3.1.8. **Tactical Simulator Sortie [SQ57].** Any simulator sortie flown that meets the criteria of a Combat Skills [SR30] or Mission [SR41] sortie. Emergency procedures should be incorporated into both ground and flight phases.

A3.1.9. **Instrument Simulator Sortie [SQ58].** For pilots, a BAQ type sortie flown in the training device which meets the following minimum requirements.

A3.1.9.1. An en route transition from departure station to transition station under IFR rules using either the low or high structures.

A3.1.9.2. Three instrument approaches (one precision, one non-precision).

A3.1.9.3. A holding pattern and procedure turn.

A3.1.9.4. A circling approach.

A3.1.9.5. A simulated engine out landing (not required for MCs in MPD Legacy progression; however they may conduct these events in the simulator if desired).

A3.1.9.6. A simulated engine out go-around (not required for MCs in MPD Legacy progression; however they may conduct these events in the simulator if desired).

A3.1.9.7. A VFR traffic pattern.

A3.1.9.8. 100%, 50%, and no flap landings.

A3.1.9.9. Analysis and handling of at least one start up malfunction and one ground emergency procure.

### **A3.2. Basic Aircraft Qualification Events.**

A3.2.1. **Precision Approach [AP06].** Any PAR, ILS or MLS approach may be credited if, in the opinion of the pilot, a safe landing can be made from minimums. While the entire IAP need not be flown, the portion from the final approach fix through the decision height and either a landing or an ATC coordinated missed approach will be accomplished.

A3.2.2. **Non-Precision Approach [AP05].** Any VOR, TACAN, NDB or localizer approach may be credited if, in the opinion of the pilot, a safe landing can be made from minimums. While the entire IAP need not be flown, the portion from the final approach fix through the minimum descent altitude and either a landing or an ATC coordinated missed approach will be accomplished.

A3.2.3. **NDB Approach [AP82].** An NDB approach may be credited if, in the opinion of the pilot, a safe landing can be made from minimums. While the entire IAP need not be flown, the portion from the final approach fix through the minimum descent altitude to either a landing or an ATC coordinated missed approach must be accomplished.

A3.2.3.1. If an NDB is unavailable; aircrews may fly an RMI-only VOR approach to credit the event.

A3.2.3.2. Accomplishment updates non-precision approach [AP05].

A3.2.4. **Circling Approach [AP30].** While the entire non-precision IAP need not be flown, the portion from the final approach fix through the circle maneuver to either a landing or an ATC coordinated missed approach will be accomplished. Any circling approach can be credited if, in the opinion of the pilot, a safe landing can be made from the circling maneuver.

A3.2.5. **Takeoff [TO00].** Log this event for any takeoff flown (initial takeoff, takeoffs following a touch-and-go/stop-and-go landing, maximum effort takeoffs).

A3.2.6. **Landing [LD00].** Log this event for any landing accomplished (full stop, touch and go, stop and go). May be dual logged with accomplishment of maximum effort [LD35] and NVG landings [LD33].

A3.2.7. **Unaided Night Landing [LD02].** Any unaided landing accomplished (full stop, touch and go, stop and go) between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac. Accomplishment updates Landing [LD00].

### **A3.3. Low Level Events.**

A3.3.1. **NVG Modified Contour Low Level [RB89].** Fly a 30-minute route segment as part of a low level mission utilizing 500' modified contour terrain-following procedures IAW AFI 11-2HC-130V3 and AFTTP 3-3.HC-130. Only the pilot flying the aircraft may log the event.

A3.3.2. **NVG Modified Contour Low Level (Mountainous) [RB90].** Event requirements are the same as NVG Modified Contour Low Level above, except it must be flown in mountainous terrain requiring significant terrain avoidance for 30 minutes or more. Within the United States, mountainous terrain is defined by CFR 14, Part 95. Outside the United

States, mountainous terrain is defined as having a 500' change in surface altitude over ½ NM. Accomplishment updates NVG Modified Contour Low Level [RB89].

**A3.3.3. Unfamiliar Route [RC01].** Log an unfamiliar route on a NVG low level flown as described above and using a newly designed route for that particular mission. An unfamiliar route is defined as any route specifically designed that mission or sortie or any standard training route which the individual has not flown in the last 180 calendar days. May be dual logged with NVG modified contour low level [RB89] or NVG modified contour low level (mountainous) [RB90], as appropriate.

#### **A3.4. Helicopter Air to Air Refueling (HAAR) Events.**

**A3.4.1. HAAR [AR60].** Accomplish IAW flight manual, ATP-56(B), AFI 11-2HC-130V3, and AFTTP 3-3.HC-130. Pilots may credit this event for any type of rendezvous flown to an actual aircraft target. Only the pilot flying the rendezvous may credit this event. In addition to flying the rendezvous, mission copilots should fly with the receivers in the refueling position to credit the event. Navigators must use an electronic aid to direct the aircraft and arrive at the pre-briefed ARCP. If established, ARCT criteria for HAAR is on time to one minute late. FEs must complete the Air Refueling checklist (to include extending hoses) to credit the event. LMs must complete the Air Refueling checklist and have actual contact or at least two minutes with the receiver attempting contact. Fuel does not have to be transferred to receive credit.

**A3.4.2. NVG HAAR [AR61]:** Accomplish an HAAR 30 minutes after sunset until 30 minutes prior to sunrise or when ambient light conditions permit the use of night vision devices. Accomplishment updates HAAR [AR60].

#### **A3.5. Airdrop Events.**

**A3.5.1.** Accomplish IAW AFI 11-2HC-130V3 and AFTTP 3-3.HC-130. SATB and simulated drops should be accomplished at the appropriate altitude, airspeed, and aircraft configuration for the type of drop being simulated. Criteria for crediting airdrops by crew position are as follows:

**A3.5.1.1.** Pilots and Navigators will credit all actual and SATB airdrops that land within 300 meters of the Point of Impact (PI). An off DZ airdrop will not be credited.

**A3.5.1.2.** Both pilots can credit the same airdrop.

**A3.5.1.3.** Navigators must compute a CARP or HARP.

**A3.5.1.4.** Loadmasters must fulfill each event with an actual drop. **NOTE:** If a no-drop condition occurs after the slow-down checklist is completed, aircraft commanders will determine if enough training was accomplished to credit the airdrop for any crew position.

**A3.5.2. Tactical Airdrop [RB78]** Log this event when a successful aircrew-directed, visual airdrop is performed using tactical airdrop checklist. Drop using airborne derived winds or winds reported by Drop Zone Safety Officer (DZSO). TOT, if established, must be within +/- 30 seconds of planned drop time.

**A3.5.3. Night Tactical Airdrop [RB79].** Accomplish tactical airdrop between 30 minutes after sunset and 30 minutes before sunrise (official darkness) or when ambient light

conditions permit the use of night vision devices. Accomplishment updates Tactical Airdrop [RB78].

**A3.5.4. Personnel Airdrop [AD06].** Credit this event when actual personnel are loaded, rigged, all airdrop checklists are completed and personnel exit the aircraft.

**A3.5.5. CDS Airdrop [AD04].** Pilots will log this event if an actual CDS airdrop or an SATB/CRL airdrop using CDS procedures is successfully accomplished. Dual credit Tactical Airdrop [RB78] or Night Tactical Airdrop [RB79], as appropriate. For loadmasters, NVGs should be worn to the maximum extent practical with the cargo compartment blacked-out or configured with NVG lighting at the minimum setting during night airdrop operations.

**A3.5.6. CDS Manual Cut or Static Retriever Cut [AD24/25].** Credit event when an actual CDS bundle is loaded, rigged, all checklists are completed and the load exits the aircraft. Loadmasters will log a manual or static line retriever cut as appropriate. For loadmasters, NVGs should be worn to the maximum extent practical with the cargo compartment blacked-out or configured with NVG lighting at the minimum setting during night airdrop operations. *NOTE:* CRRC may be credited as a CDS drop if CDS procedures are used.

**A3.5.7. Container Ramp Load [AD22].** Credit event when a CRL, ATV, RAMZ, other rescue vehicle or simulated CRL using appropriate load weights and rigging is loaded, rigged, all checklists are completed, and the load exits the aircraft. For loadmasters, NVGs should be worn to the maximum extent practical with the cargo compartment blacked-out or configured with NVG lighting at the minimum setting during night airdrop operations.

**A3.5.8. High Altitude Low Opening (HALO) Airdrop [AD13].** Credit this event when a successful personnel airdrop is performed using a high altitude release point solution for HALO procedures IAW AFI 11-231, *Computed Air Release Point Procedures*.

**A3.5.9. Joint Precision Airdrop System (JPADS).**

**A3.5.9.1. PADS Airdrop Event [AD17].** Provides continuation training for PADS certified crewmembers. The event is defined as follows: PADS airdrop to include mission planning, flight station and cargo compartment configuration, PADS checklists, and I- CDS airdrop to an appropriate DZ. There is no minimum altitude for this event when accomplished in the aircraft, though realistic AFTTP 3- 3 altitudes should be used to the maximum extent possible based on airspace and DZ restrictions.

**A3.5.9.2. PADS Operator Event [AD18].** Provides continuation training for PADS operator certified crewmembers: the event is defined as follows: PADS airdrop to include mission planning, PADS computer preflight and inflight actions, flight station and cargo compartment configuration, PADS checklists, sonde drop/monitoring, guided system wireless transfer, and I- CDS airdrop to an appropriate DZ. There is no minimum altitude for this event when accomplished in the aircraft, though realistic altitudes should be used to the maximum extent possible based on airspace and DZ restrictions.

**A3.5.10. Mission Computer Airdrops**

**A3.5.10.1. Mission Computer Airdrop (MCAD) [AD19].** Accomplish IAW AFI 11-2HC-130V3 and AFTTP 3-3.HC-130. For pilots and navigators, credit this event by flying a VMC en route profile to a successful MCAD.

A3.5.10.2. **IMC MCAD [AD20]**. Accomplish IAW AFI 11-2HC-130V3 and AFTTP 3-3.HC-130. For pilots and navigators, credit this event by flying an IFR drop corridor profile to a successful MCAD. This event may be accomplished in VMC or IMC conditions. Accomplishment updates MCAD [AD19]. **NOTE:** Dual log CDS [AD04] when CDS procedures are used during an MCAD event. Tactical Airdrop [RB78] or Night Tactical Airdrop [RB79] will not be dual credited for accomplishment of MCAD events.

### A3.6. Airland Events.

A3.6.1. **Tactical Recovery [RB99]**. Accomplish a high-/low-altitude tactical recovery IAW AFI 11-2HC-130V3 and AFTTP 3-3.HC-130. Credited this event if the pilot determines a landing could be made from the recovery. Pilots will perform flying duties to credit this event. Mission copilots will log by performing non-flying duties. **EXCEPTION:** Tactical recovery certified mission copilots will perform flying duties to credit. **NOTE:** Navigator directed approaches (SCAs) will not be used to credit this event.

A3.6.2. **Self-Contained Approach (SCA) [AP83]**. Perform SCA approach using INFIL/EXFIL checklist and IAW AFI 11-2HC-130V3, AFTTP 3-3.HC/MC-130 and flight manual guidance. Credited if the pilot determines a landing could be made from the approach after reaching the minimum descent altitude (MDA) and prior to the missed approach point (MAP). SCAs should normally be accomplished during NVG operations. Only the pilot flying the approach may credit this event. *Pilots will not credit SCAs toward non-precision approach requirements.*

A3.6.3. **Maximum Effort Takeoff [TO26]**. Accomplish a Maximum Effort Takeoff IAW Flight Manual, AFI 11-2HC-130V3 and applicable AFTTP 3-3.HC-130 guidance. Event does not have to be accomplished on a short or austere airfield. Aircraft commanders and above will perform flying duties to credit this event. Mission copilots will credit by performing non-flying duties. Pilots may use maximum effort takeoffs to credit BAQ takeoff requirements.

A3.6.4. **Maximum Effort Landing [LD35]**. Accomplish a Maximum Effort landing IAW Flight Manual, AFI 11-2HC-130V3 and applicable AFTTP 3-3.HC-130 guidance on appropriately marked landing zones of 3000 ft or more. When a shortfield landing zone (assault zone) is not available, conduct this training to a normal runway. Simulate the landing to a shortfield by thoroughly briefing appropriate shortfield procedures and runway markings for the simulated LZ. Pilots may credit landings only when the point of touchdown is within the applicable 500' zone and the aircraft can be stopped at the prebriefed location or can turn off the runway at the planned exit location. Mission copilots will credit this event by performing non-flying pilot duties during a max effort landing. Do not credit go-arounds. Maximum Effort Landings may dual credit BAQ landing requirements.

A3.6.5. **Night Max Effort Landing [LD36]**. Accomplish a Maximum Effort Landing at night (unaided). May dual credit both Maximum Effort Landing event and BAQ landing requirements.

A3.6.6. **NVG Landing [LD33]**. Accomplish an NVG landing IAW applicable flight manual, AFI 11-2HC-130V3 and AFTTP 3-3.HC-130 guidance. Mission pilots and copilots

will perform flying duties to credit this event. For mission copilots, event requirement is only applicable to individuals who are special qualified in Right Seat NVG Landings. Blacked-out landing zones (LZ) should be used to the maximum extent possible.

A3.6.6.1. May dual credit BAQ landing requirements.

A3.6.6.2. NVG landings flown using max effort procedures to a 500' LZ may dual credit Maximum Effort Landings if the LZ is identifiable and the landing is within that zone. NVG touch-and-go landings may credit an NVG takeoff and an NVG landing.

A3.6.6.3. FEs will credit when an NVG landing is accomplished and NVGs are used for runway clearing and identification. FEs may regain currency for NVG landings under the supervision of an NVG landing qualified IP as long as that IP is not performing any other instructor duties at the time.

A3.6.7. **NVG Takeoff [TO27]**. Accomplish an NVG takeoff IAW applicable flight manual, AFI 11-2HC-130V3 and AFTTP 3-3.HC-130 guidance. Mission pilots and copilots will perform flying duties to credit this event. For mission copilots, event requirement is only applicable to individuals who are special qualified in Right Seat NVG Landings.

A3.6.7.1. May dual credit BAQ takeoff requirements.

A3.6.7.2. NVG takeoffs flown using max effort procedures may dual credit Max Effort Takeoffs [TO26].

A3.6.8. **NVG Go Around [LD34]**. Accomplish NVG go-around IAW applicable flight manual and AFI 11-2HC-130V3 guidance. Mission pilots and copilots will perform flying duties to credit this event. For mission copilots, event requirement is only applicable to individuals who are special qualified in Right Seat NVG Landings.

A3.6.9. **Infil/Exfil and Infil/Exfil w 4-wheeled vehicle [RC37/RC38]**. Minimum requirements to Log this event are as follows:

A3.6.9.1. A landing will be performed to an immediate offloading/onloading operations on the runway/taxiway followed by a take-off. Maximum effort operations should be employed to the maximum extent possible. Offload/onload of personnel or any vehicle certified for rapid INFIL/EXFIL. Operations are conducted using the INFIL/EXFIL checklist and canary slides/ground loading ramps.

A3.6.9.2. For Loadmasters to log Infil/Exfil w 4-wheeled vehicle[RC38], the requirements above must be met along with the following: Operations will be conducted a night using NVGs and a four-wheeled vehicle (a HMMMV, SUV, or truck is recommended but may be an ATV or other four wheel vehicle) will be onloaded/offloaded. **EXCEPTION:** With SQ/CC approval, daytime operations may be used to credit this event.

### A3.7. Defensive Maneuvers Events.

A3.7.1. **Chaff Event [MF50]**. Credit this event for in-flight dispensing of chaff during a tactical mission profile in response to an actual or simulated threat. Event requires engagement (electronic or simulated), actual countermeasures release, and appropriate defensive maneuver. Log only one chaff event per mission.

A3.7.2. **Flare Event [MF49]**. Credit this event for in-flight dispensing of self-protection flares during a tactical mission profile as a threat response. Event requires engagement (simulated, smokey SAM, etc) actual countermeasures release, and appropriate defensive maneuver. Log only one flare event per mission.

A3.7.3. **Threat Event [RB65]**. Log this event when the aircrew detects and reacts with the combination of appropriate defensive calls, appropriate defensive maneuver(s) and Aircraft Defensive Systems (ADS) to defeat a surface or airborne threat (optical, IR, or radar). Normally the aircrew will react because of an ADS or RWR indication or threat call which may be simulated by any crewmember depending on training/threat scenario.

A3.7.3.1. Unit should tailor Threat Event requirements to the current and potential mission taskings.

A3.7.3.2. The PIC will determine how far to take the threat reaction based on weather, terrain, aircrew experience and other aircraft.

A3.7.3.3. Log only one threat event per mission.

### **A3.8. Communication Events.**

A3.8.1. **Secure Voice [RB67]**. Credit this event as follows: Load all secure voice/data devices IAW the appropriate checklists or instructions. Establish two-way contact both in the clear and in secure voice/data modes. This may be accomplished to any station. Only one Secure Voice event may be logged per day.

A3.8.2. **Authentication [RA35]**. To credit this event, provide a correct response to an authentication challenge using appropriate authentication tables. Only one Authentication event may be logged per day.

A3.8.3. **Encode/Decode [CE56]**. Credit this event as follows: Correctly encode and transmit a message or receive and decode a message using appropriate tables. Only one Encode/Decode event may be logged per day.

A3.8.4. **Have Quick [RA87]**. To credit this event, set up and operate the radio in anti-jam mode (HAVE QUICK). Establish contact with an aircraft/station and pass and receive a message in the active anti-jam mode. The training objective is to operate Have Quick throughout multiple phases of flight for a particular training mission. Only one HAVE QUICK event may be logged per day.

### **A3.9. Search and Rescue / Pyrotechnic Events.**

A3.9.1. **Search Pattern [RB66]**. Credit this event on sorties where the planning, SCNS programming, and in-flight execution of at least two of the six possible search patterns types is accomplished. The crew should fly each search pattern a minimum of 10 minutes and include a simulated sighting, breakout and pattern rejoin in each scenario. Conduct search pattern using the appropriate track spacing, radius/width, altitude and airspeed consistent with meteorological conditions and (simulated) objective of the search.

A3.9.2. **Parabundle [RB51]**. Log this event when an actual parabundle (or simulated with sea dye or marker smoke) is dropped.

A3.9.3. **Freefall [AD23]**. Log this event when an actual freefall bundle (or simulated with sea dye or marker smoke) is dropped.

A3.9.4. **MA-1Kit [AD21]**. Log this event when dropping a MA-1/2 Sea Rescue kit using delivery patterns specified in AFTTP 3-3.HC-130. For pilots, the kit must bracket survivor on the briefed side (upwind/downwind) and may be simulated with markers. Loadmasters should drop an actual or dummy kit, but may use training aids if necessary (e.g. V bags, sea dye or markers and signals).

A3.9.5. **Trail Line Airdrop [AD26]**. Log this event when dropping equipment using trail line delivery procedures.

A3.9.6. **Illumination Flares [RB03]**. To log this event, Loadmaster will deploy at least two of the following flares: LUU-2/B, LUU-4/B or LUU-19. The AMSS may assist the loadmaster when duties permit and if properly trained.

**A3.10. Ground Mission Events. NOTE:** (ARC only) MAJCOMS may authorize dual logging for FARP [AR58] and Hot Refueling [AR42].

A3.10.1. **Hot Refueling [AR42]**. To log this event, perform Hot Refueling operations. Accomplish and complete either HOT REFUELING (Tanker) or (Receiver) Checklist. Accomplish IAW AFI 11-2HC-130V3 and AFTTP 3-3.HC-130. To credit this event a fuel onload or offload must be accomplished with one or more engines operating (refuel/defuel at fixed-sites, refuel/defuel with approved fuel trucks, or receive fuel from a fixed-wing tanker at a FARP). When mission requirements dictate, this event may be credited for currency without an actual flight with SQ/CC approval.

A3.10.2. **FARP [AR58]**. Accomplish IAW AFI 11-2HC-130V3 and AFTTP 3-3.HC-130. To credit this event the panel operator and Hot Refueling Supervisor (HRS) must establish the FARP site, pressurize the hose, collapse the site, load equipment and prepare aircraft for departure. Accomplish and complete FARP Checklist. The FARP must be conducted while using NVGs. When mission requirements dictate, this event may be credited for currency without an actual flight with SQ/CC approval.

A3.10.2.1. LMs may credit by performing PO, HRS or HDP duties

A3.10.2.2. Appropriately trained AMSS may credit by performing HDP duties.

**A3.11. Miscellaneous Events.**

A3.11.1. **Chemical Defense Task Qualification Training (CDTQT) [ME17]**. CDTQT provides an exercise emphasizing hands-on training, dressed out in partial chemical defense (CD) ensemble. Applicable to units identified to be stationed in or subject to deployment or operations through a chemical threat area (CTA) as defined in AFPD 32-40, *Disaster Preparedness*, and AFI 10-2501, *Air Force Emergency Management Program, Planning and Operations*.

A3.11.1.1. Prerequisites. Prior to conducting this event, each crewmember will have completed Emergency Egress Training-Non Ejection Seat (LL03), Aircrew Chemical Defense Training (ACDT) (LL04), and Egress Training with ACDE (LL05).

A3.11.1.2. To log CDTQT crew members will wear the flying helmet (if applicable) and AERP ACDE equipment that includes the MBU-19/P hood and mask assembly, CQU-7/P blower assembly with filter canisters and batteries, MXU-835 intercom assembly and glove set and comply with the following guidance:

A3.11.1.2.1. Pilots will review emergency procedures and accomplish at least one take-off, approach, and landing, and complete all associated checklists.

A3.11.1.2.2. Flight engineers will be supervised by a safety observer and wear the gear for at least one take-off, approach, and landing, and complete all associated checklists.

A3.11.1.2.3. Navigators will be supervised by a safety observer and wear the gear for a minimum of 30 minutes while performing navigator duties.

A3.11.1.2.4. Loadmasters will be supervised by a safety observer and wear the gear for a minimum of 30 minutes while performing loadmaster duties.

A3.11.1.2.5. Airborne Mission System Specialists (AMSS) will be supervised by a safety observer for a minimum of 30 minutes while performing AMSS duties.

A3.11.1.3. If training is accomplished in the simulator; ATS instructors will observe the exercise. No additional supervision is required and there are no restrictions on how many crew members may wear the gear

A3.11.1.4. If training is accomplished in the aircraft:

A3.11.1.4.1. For initial CDTQT. All crewmembers must have a dedicated safety observer who is current and qualified in CDTQT.

A3.11.1.4.2. For recurring CDTQT (including crewmembers that are overdue CDTQT). There must be at least one safety observer who is current and qualified in CDTQT in the cockpit area, cargo compartment and cabin area, as applicable.

A3.11.1.4.3. Safety observers do not need to be instructor qualified. **EXCEPTION:** For pilots, conducting initial CDTQT, the safety observer will be an instructor pilot occupying the other seat.

A3.11.1.4.4. Safety observer will not don/wear any ACDE components. Primary crewmembers may serve as safety observers as long as they are able to monitor/access the crew position(s) conducting training.

A3.11.1.4.5. Only one pilot or flight engineer will be dressed out in ACDE at any time.

A3.11.1.4.6. During any training/exercise airdrop missions, only one primary loadmaster will be dressed out in ACDE at any time.

A3.11.1.5. SQ/CCs may further restrict CDTQT as desired but may not waive any of the requirements listed above for training or exercise purposes.

**ATTACHMENT 4****PILOT/FLIGHT ENGINEER SIMULATOR REFRESHER COURSE**

**A4.1.** Simulator refresher training is designed to improve standardization and to provide maximum training on normal, instrument and emergency procedures. The primary purpose for this training is to accomplish events that are prohibited or potentially unsafe to accomplish in the aircraft. These events should be accomplished in both qualification and tactical scenarios. The pre-briefing and simulator missions will thoroughly review the areas below.

A4.1.1. Modifications may be made to accommodate variations in MDS or aircraft configuration.

A4.1.2. Students will not be evaluated by flight examiners during this training.

**A4.2.** Academics will include a review and discussion of normal operations, limitations, malfunctions and associated emergency procedures for the following aircraft systems and operating environments:

A4.2.1. Oxygen System

A4.2.2. Smoke, overheat, fire detection and extinguishing systems.

A4.2.3. Fuel system:

A4.2.4. Environmental:

A4.2.4.1. Air conditioning system.

A4.2.4.2. Pressurization system.

A4.2.4.3. Bleed Air system.

A4.2.5. Anti/deicing systems.

A4.2.6. Electrical system:

A4.2.6.1. AC power sources and buses.

A4.2.6.2. AC power distribution system.

A4.2.6.3. DC power distribution.

A4.2.6.4. Ground and emergency power.

A4.2.7. Engines:

A4.2.7.1. Engine oil system.

A4.2.7.2. Engine starting and ignition.

A4.2.8. Propellers.

A4.2.9. Instruments:

A4.2.9.1. Pitot-static systems.

A4.2.9.2. Compass system.

A4.2.10. Hydraulics:

A4.2.10.1. Hydraulic systems.

A4.2.10.2. Flight controls.

A4.2.10.3. Landing gear.

A4.2.10.4. Brake systems.

A4.2.10.5. Aft cargo door and ramp.

A4.2.10.6. Tanker air refueling systems.

A4.2.11. Communication/navigation systems.

A4.2.11.1. Communication equipment. Include Have Quick/Secure Voice systems, crypto loading procedures, SATCOM, Data Burst/DAMA.

A4.2.11.2. Navigation systems.

A4.2.12. Integrated flight control system:

A4.2.12.1. Autopilot.

A4.2.12.2. Flight director system.

A4.2.13. Adverse and hot/cold weather operations, thunderstorm avoidance, and wind shear.

A4.2.14. Current trends of accidents, incidents, and equipment malfunctions. A formalized CRM refresher course satisfies this requirement.

**A4.3.** Thoroughly review the following additional areas:

A4.3.1. Crash landing and ditching.

A4.3.2. Bailout.

A4.3.3. Alternate Departure minimums.

A4.3.4. Performance data.

A4.3.5. Drift down (one homework problem satisfies this requirement).

A4.3.6. Buddy start (academics/classroom only).

A4.3.7. Windmill taxi start.

A4.3.8. Three-engine takeoff.

A4.3.9. Stalls and recoveries. Devote a minimum of 30 minutes of academic classroom training to a discussion of:

A4.3.9.1. Situations in which the aircraft is most susceptible to stall.

A4.3.9.2. Avoiding stalls when encountering those situations.

A4.3.9.3. Importance of crew coordination in preventing stalls.

A4.3.9.4. Stall recognition and recovery procedures.

A4.3.9.5. Relationship and effects of airspeed, gross weight, bank angles, aircraft configuration, and how they affect stalls.

A4.3.9.6. PJ Minimum Operating Speeds (MOS), HAAR MOS and energy management during high density altitude HAAR operations.

A4.3.9.7. How to prevent secondary stalls.

A4.3.9.8. Fin stalls.

**A4.4.** Simulator missions will include the following areas:

A4.4.1. Mission profile briefing prior to each WST mission.

A4.4.2. Instrument approaches.

A4.4.3. Engine out procedures with emphasis on instrument approaches. As a minimum, each pilot will accomplish the following:

A4.4.3.1. One 3-engine approach, landing and go-around.

A4.4.3.2. One 2-engine approach landing and go-around.

A4.4.3.3. Two rejects on each simulator mission (per pilot).

A4.4.3.4. Two engine failures after refusal speed per pilot during the course.

A4.4.4. Minimum of one planned tactical/low level mission where conditions are altered or emergencies created that will test the crew's ability to react and adapt to changing environmental and mission factors. Emphasis should be placed on the applicable conditions that rescue crews operate under, i.e. night, low level, HAAR and/or airdrop/airland. This mission should also incorporate a review of CRM principles to meet the requirements of a MOST mission as defined by AFI 11-290, *Cockpit/Crew Resource Management Training Program*.

A4.4.5. Minimum of one planned mission where runway length is critical, minimum altitude for terrain/obstacle clearance during climb, cruise, and descent is stressed and examples of operating and experiencing emergencies at Emergency War Plan (EWP) weights is demonstrated.

A4.4.6. Minimum of one planned mission where an engine failure after takeoff is performed into rising terrain at a high density altitude.

A4.4.7. Minimum of one planned mission where pilots are allowed to:

A4.4.7.1. Fly in the HAAR configuration in high density altitude, mountainous terrain to demonstrate/emphasize energy management considerations.

A4.4.7.2. Fly emergency climb procedures.

A4.4.7.3. Fly penetration descent procedures.

A4.4.8. Emergencies and malfunctions will cover the following at least once during the length of the course. Items not covered in the simulator will be discussed during briefing and debriefing.

A4.4.8.1. Auxiliary Power Unit (APU) and Gas Turbine Compressor (GTC) fire.

A4.4.8.2. Starting malfunctions.

A4.4.8.3. Engine fire on ground.

- A4.4.8.4. Wing isolation and bleed air divider valve failure.
- A4.4.8.5. Aborted takeoff.
- A4.4.8.6. Engine fire or failure takeoff.
- A4.4.8.7. Runaway pitch trim.
- A4.4.8.8. Engine overheat.
  - A4.4.8.8.1. Nacelle overheat. One (on the ground or while airborne) per course.
  - A4.4.8.8.2. Turbine overheat. One (on the ground or while airborne) per course.
- A4.4.8.9. Precautionary engine shutdown.
- A4.4.8.10. Engine failure or fire in flight.
- A4.4.8.11. Air start.
- A4.4.8.12. Fuel jettison.
- A4.4.8.13. Cargo jettison (academics only).
- A4.4.8.14. Fuselage fire.
- A4.4.8.15. Smoke and fume elimination.
- A4.4.8.16. Electrical malfunctions and fire, including four-engine power loss.
- A4.4.8.17. Turbulence and thunderstorm penetration airspeed procedures.
- A4.4.8.18. Engine, wing, and empennage icing.
- A4.4.8.19. Air conditioning compartment overheat.
- A4.4.8.20. Air conditioning anti-ice over temperature.
- A4.4.8.21. Compass failure.
- A4.4.8.22. Oil system failure (as a result of low oil quantity, low oil pressure, and/or high oil temperature).
- A4.4.8.23. Landing gear failure.
- A4.4.8.24. Flight control failure (one control system inoperable).
- A4.4.8.25. Asymmetric flaps.
- A4.4.8.26. Inflight door warning.
- A4.4.8.27. Rapid decompression.
- A4.4.8.28. Emergency descent.
- A4.4.8.29. Three-engine approach and go-around.
- A4.4.8.30. Two-engine approach and go-around.
- A4.4.8.31. No-flap approach.
- A4.4.8.32. Wheels up landing.
- A4.4.8.33. Prop malfunctions.

A4.4.8.34. Windmill taxi start.

A4.4.8.35. Three-engine takeoff.

A4.4.8.36. Confidence Maneuvers - slow flight/HAAR flight, approach to stalls, and stall recoveries.

A4.4.8.36.1. As a minimum, each pilot will accomplish the following:

A4.4.8.36.1.1. Power-on and/or power-off stalls with gear up/down for 0, 50, and 100 percent flap configurations.

A4.4.8.36.1.2. Stalls will be performed by each pilot for both straight and level flight (either clean or 50 percent flaps) and with varying bank angles (30/45 degrees bank with 50 percent flaps or 60 degrees bank with clean configuration).

A4.4.8.36.1.3. Fin stalls.

A4.4.8.36.2. While stall training may be practiced at all altitudes, emphasize training at traffic pattern altitudes and lower. During recovery, stress minimum loss of altitude and avoiding entry into a secondary stall.

A4.4.8.37. Unusual attitude and spatial disorientation.

A4.4.8.38. Controllability check.

A4.4.9. Mission profile debriefing following each WST mission.

## ATTACHMENT 5

### NAVIGATOR REFRESHER COURSE

**A5.1. General.** The navigator refresher course is designed to improve standardization and to provide maximum training to improve and refine navigator job skills. A simulator should be used if available. Students will not be evaluated during the Navigator Refresher Course. The course will be designed to cover the following areas as a minimum.

**A5.2. Premission Planning.** Given a mission scenario, prepare applicable charts and documents to fly the mission.

**A5.3. Preflight Fuel Management.** Given a completed flight plan, compute the preflight fuel management section of the fuel log using T.O. 1C-130H-1-1.

**A5.4. In-flight Fuel Management.** Given appropriate fuel planning documents and forms, compute fuel entries IAW AFI 11-2HC-130V3.

**A5.5. Calibration Checks.** Given a compass, true airspeed meter, true heading, indicated airspeed, and outside air temperature gauge, compute calibration checks for each instrument (as required).

**A5.6. Navigation Equipment.** Given appropriate navigation equipment, cross-check and integrate all applicable navigation equipment to arrive at the most accurate position.

**A5.7. Pacing.** Given a simulator mission or classroom situation, perform/discuss inflight navigation duties with emphasis on maintaining situational awareness and staying ahead of the aircraft.

**A5.8. Instrument Approach and Departure Procedures.** Using DoD flight information publications (FLIP) for approach and departure, discuss the proper procedures for monitoring aircraft during approach and departure operations. Discuss flight publications that can be used in lieu of DoD FLIP products.

**A5.9. Publications Review.** Review contents of the Foreign Clearance Guide (unclassified and classified portions), FLIP Documents, Flight Information Handbook, and the National Imagery and Mapping Agency (NIMA) Chart Products Catalog. Review procedures for Due Regard.

**A5.10. HARP Review.** For those navigators maintaining HARP qualification, review procedures then compute and plot a HARP.

**A5.11. Navigation Systems Review.** Review each component and interface of the applicable aircraft's navigation system.

**A5.12. Mapping and Geodesy.** Conduct a review of mapping theory to include datum conversion and GPS capabilities/limitations.

**A5.13. Air Tasking Orders, Special Instructions, and Communications Instructions/Matrix.** Conduct a review of the format, and content, emphasizing verification of data to insure mission information is complete, accurate, and de-conflicted.

**A5.14. Psychological Operations and Procedures.** Conduct a review of psychological operations and procedures associated with Leaflet airdrop operations.

**A5.15. Emergency Procedures.** Discuss navigator duties and responsibilities during aircraft emergencies. Discuss responsibilities during emergency landings, bailout, ditching and ground egress. Emphasis should be on crew coordination.

**A5.16. HC-130P Navigator Electronic Warfare Refresher.** While attending Nav refresher, students will complete instruction in the following areas.

A5.16.1. Principles of chaff and flares.

A5.16.2. ALR-69, ALE-40, and AAR-47 systems.

A5.16.3. Threats identification and capabilities.

A5.16.4. Threat evasive maneuvers and calls IAW AFTTP 3-1.HC-130.

**ATTACHMENT 6****AIRBORNE MISSION SYSTEM SPECIALIST REFRESHER COURSE**

**A6.1.** The airborne mission system specialist refresher course is designed to improve standardization and to refine the AMSS' job skills. Students will not be evaluated during refresher training.

**A6.2.** The course will be designed to cover the following areas using simulator/computer based instruction and academics:

- A6.2.1. Self Contained Navigation System (SCNS).
- A6.2.2. Flight Information Publications (FLIP).
- A6.2.3. Air Defense Identification Zone (ADIZ) Procedures.
- A6.2.4. Flights over International Airspace under "Due Regard".
- A6.2.5. Global High Frequency (HF) Network.
- A6.2.6. Code and Authentication Documents.
- A6.2.7. Emergency Procedures and Messages. Discuss AMSS duties and responsibilities during aircraft emergencies. Discuss responsibilities during emergency landings, bailout, ditching and ground egress. Emphasis should be on crew coordination.
- A6.2.8. Aircraft Electrical System.
- A6.2.9. Intercept Procedures.
- A6.2.10. HF Liaison Radio.
- A6.2.11. Very High Frequency (VHF)/Frequency Modulation (FM) Radio.
- A6.2.12. Direction Finding (DF) System.
- A6.2.13. Radio Compass.
- A6.2.14. Ultra-High Frequency (UHF) Radio/HAVE QUICK II/SATCOM.
- A6.2.15. VHF/Amplitude Modulation (AM)/FM Radio.
- A6.2.16. KYK-13, Simple Key Loader (SKL).
- A6.2.17. Secure Voice Systems.
- A6.2.18. GPS.
- A6.2.19. IFF.
- A6.2.20. Data Burst.
- A6.2.21. Defensive Systems/Threat Recognition Procedures.
- A6.2.22. Oxygen System
- A6.2.23. Flight Director Mode Selector (FDMS)
- A6.2.24. Chart Navigation.
- A6.2.25. TACAN/VOR Procedures.

A6.2.26. Horizontal Situation Indicators (HSIs)

**ATTACHMENT 7****FLIGHT ENGINEER SYSTEMS REFRESHER COURSE**

**A7.1.** The system refresher course is designed to improve standardization and to provide maximum training on normal procedures, emergency procedures, and hostile environment repair. It consists of in-depth systems coverage and emergency procedures for each system. Modifications may be made to meet unit MDS differences.

**A7.2.** The system refresher will include the following areas:

A7.2.1. The crewmember will review normal operations, limitations, and malfunctions of the following aircraft systems as well as associated emergency procedures:

A7.2.1.1. Warning systems.

A7.2.1.2. Oxygen systems.

A7.2.1.3. Smoke, overheat and fire detection and extinguishing systems.

A7.2.1.4. Fuel system, Air refueling, SPR operations.

A7.2.1.5. Environmental:

A7.2.1.5.1. Air conditioning system.

A7.2.1.5.2. Pressurization system.

A7.2.1.5.3. Bleed Air.

A7.2.1.6. Anti-ice/de-ice systems.

A7.2.1.7. Electrical system:

A7.2.1.7.1. Alternating Current (AC) power sources and buses.

A7.2.1.7.2. AC power distribution system.

A7.2.1.7.3. Direct Current (DC) power distribution.

A7.2.1.7.4. Ground and emergency power.

A7.2.1.8. Engines:

A7.2.1.8.1. Engine oil system.

A7.2.1.8.2. Engine starting and ignition.

A7.2.1.8.3. APU/GTC.

A7.2.1.9. Propellers control systems.

A7.2.1.10. Instruments:

A7.2.1.10.1. Pitot-static systems.

A7.2.1.10.2. Radar operation and limitation.

A7.2.1.11. Hydraulics:

A7.2.1.11.1. Hydraulic systems.

- A7.2.1.11.2. Flight controls.
- A7.2.1.11.3. Landing gear.
- A7.2.1.11.4. Brake systems.
- A7.2.1.11.5. Aft cargo door and ramp.
- A7.2.1.12. Communication/Interphone Communication System (ICS).
- A7.2.1.13. Integrated flight control system to include the flight director system.
- A7.2.1.14. Current trends of accidents, incidents, and equipment malfunctions.
- A7.2.1.15. Hostile environment repair.
- A7.2.2. Thoroughly review the following additional areas:
  - A7.2.2.1. Crash landing.
  - A7.2.2.2. Bailout.
  - A7.2.2.3. Ditching.
  - A7.2.2.4. Performance data.
  - A7.2.2.5. Driftdown.

**A7.3.** Emergencies and malfunctions will cover the following at least once during the course:

- A7.3.1. APU and GTC fire.
- A7.3.2. Starting malfunctions.
- A7.3.3. Engine fire on ground.
- A7.3.4. Wing isolation and bleed air divider valve failure.
- A7.3.5. Engine fire or failure takeoff.
- A7.3.6. Engine overheat.
- A7.3.7. Fuel jettison.
- A7.3.8. Cargo jettison.
- A7.3.9. Fuselage fire.
- A7.3.10. Smoke and fume elimination.
- A7.3.11. Electrical malfunctions and fire.
- A7.3.12. Engine, wing, and empennage icing.
- A7.3.13. Air conditioning compartment overheat.
- A7.3.14. Air conditioning anti-ice over temperature.
- A7.3.15. Oil system failure.
  - A7.3.15.1. Low quantity.
  - A7.3.15.2. Low pressure.

- A7.3.15.3. High temperature.
- A7.3.16. Landing gear failure.
- A7.3.17. Flight control failure.
- A7.3.18. Asymmetric flaps.
- A7.3.19. Inflight door warning.
- A7.3.20. Rapid decompression.
- A7.3.21. Wheels up landing.
- A7.3.22. Prop malfunctions.
- A7.3.23. Component location and identification.

**ATTACHMENT 8**  
**LOADMASTER REFRESHER COURSE**

**A8.1. General.** The LM refresher course is designed to improve standardization and provide maximum training on LM duties and responsibilities. Schedule an aircraft or PTT for applicable portions of this course. The course will be designed to cover the following areas as a minimum.

**A8.2. Publications.**

A8.2.1. Discuss publications required by LMs to perform their duties:

A8.2.1.1. Technical orders.

A8.2.1.2. AF publications.

A8.2.1.3. Command publications.

A8.2.2. State directives to be carried in flight.

A8.2.2.1. Aircraft mission kit (applicable portions).

A8.2.2.2. LM kit.

A8.2.3. Review LM duties/responsibilities as outlined in AFI 11-2HC-130V3.

**A8.3. Aircraft Systems and Operations.** Explain correct procedures, operational checks, and normal usage IAW T.O. 1C-130B-1, *Flight Manual/USAF Series/C-130E/H*; T.O. 1C-130A-9, *Cargo Loading*; T.O. 1C-130(H)H-1, *Flight Manual/USAF Series/HC-130H/HC-130P/HC-130N, Flight Manual/USAF Series* and AFTTP 3-1.HC-130.

A8.3.1. Public address system.

A8.3.2. Interphone/ICS system.

A8.3.3. Hydraulic systems.

A8.3.4. Oxygen Systems.

A8.3.5. Benson tanks.

A8.3.6. Lighting systems.

A8.3.7. Defensive system (AN/ALE 47).

**A8.4. Cargo Loading Systems and Aids:**

A8.4.1. Explain correct procedures, operation checks and normal usage for cargo winching IAW T.O. 1C-130A-9.

A8.4.1.1. Winch installation.

A8.4.1.2. Checklist procedures.

A8.4.1.3. Accessory kits.

A8.4.1.4. Internal winching configuration.

A8.4.1.5. External winching configuration.

A8.4.1.6. Self-winch configuration.

A8.4.2. Explain correct procedures, operational checks, and limitations of the 463L dual rail system IAW T.O. 1C-130A-9 and T.O. 1C-130(H)H-1, (as applicable).

A8.4.2.1. Left and right side locks.

A8.4.2.2. Pallet weight limitation.

A8.4.2.3. Rail limitations with missing core bolts.

#### **A8.5. Structural Limitations:**

A8.5.1. Using the floor loading capacity chart in T.O. 1C-130A-9, determine the following:

A8.5.1.1. Contact area pressures/Pounds per Square Inch (PSI).

A8.5.1.2. Contact area pressures/Pounds per Square Foot (PSF).

A8.5.1.3. Linear foot limitations/Pounds per Linear Foot (PLF).

A8.5.1.4. Axle and wheel weight limits.

A8.5.1.5. Compartment load limits.

A8.5.2. Compute the area and PSI for specific items of cargo with and without shoring:

A8.5.2.1. Skid mounted cargo.

A8.5.2.2. Drums.

A8.5.2.3. Pneumatic tires.

A8.5.2.4. Solid rubber tires and steel wheels.

#### **A8.6. Weight and balance:**

A8.6.1. Determine formulas used for weight and balance and solve problems by using formulas to compute the center of gravity of an aircraft:

A8.6.1.1. Basic weight and balance formula.

A8.6.1.2. Center of gravity and load/shift formula.

A8.6.2. Select and use charts and graphs required to complete DD Form 365-4, **Aircraft Weight and Balance Clearance Form F- Transport:**

A8.6.2.1. T.O. 1C-130(H)H-1, (as appropriate) weight limitations charts.

A8.6.2.2. T.O. 1C-130(H)H-5, *Sample Basic Weight Checklists and Loading Data/HC-130H HC-130N/HC-130P.*

#### **A8.7. Airlift of Hazardous, Perishable, Classified Materials, and Cargo Requiring Special Handling.**

A8.7.1. Using AFMAN 24-204, state restrictions and precautions for handling, loading, and airlifting of hazardous materials.

A8.7.1.1. Restrictions from compatibility chart.

A8.7.1.2. Safety precautions and **Shippers Declaration for Hazardous Goods.**

A8.7.1.3. Procedures for utilizing DD Form 2133, **Joint Airlift Inspection Record.**

A8.7.1.4. Protective clothing and equipment.

A8.7.2. IAW AFJMAN 24-204, state procedures for airlifting the following:

A8.7.2.1. Mail.

A8.7.2.2. Biological material.

A8.7.2.3. Classified material.

**A8.8. Load Planning:**

A8.8.1. Review the basic principles of load planning and demonstrate the use of projection charts in T.O. 1C-130A-9.

A8.8.2. Load plan given mixed loads to include the following:

A8.8.2.1. Palletized cargo.

A8.8.2.2. Distributed cargo.

A8.8.2.3. Concentrated cargo.

A8.8.2.4. Hazardous cargo.

A8.8.2.5. Vehicles.

A8.8.2.6. Troops.

A8.8.3. Using load plan and chart E, compute DD Form 365-4.

**A8.9. Applied Load Restraint.** State Restraint Criteria and Tie-down Capacities.

A8.9.1. Directional restraint requirements.

A8.9.2. Tie-down devices, straps.

A8.9.3. Use of chain bridle and chain gate.

A8.9.4. Use of barriers for spear type items.

A8.9.5. Using a tape measure, compute required restraint on selected items.

A8.9.6. Winch loading an item of rolling stock into the aircraft.

**A8.10. Fleet service.** Review the joint responsibilities of fleet service and the LM IAW AFJMAN 24-204 and AMCI 24-101.

A8.10.1. Aircraft cleanliness.

A8.10.2. Supplies and equipment.

A8.10.3. Meals.

A8.10.4. Forms.

**A8.11. Passenger handling techniques:**

A8.11.1. Review the responsibilities and duties of the LM for troop and medical evacuation flights.

A8.11.1.1. Seating.

A8.11.1.2. Briefings.

A8.11.1.3. Meals and comfort items.

A8.11.1.4. Emergency procedures and equipment.

A8.11.1.5. In-flight duties.

A8.11.2. Passenger relations.

**A8.12. Emergency procedures.**

A8.12.1. Review emergency procedures outlined in T.O. 1C-130(H)H-1, that pertains to the LM:

A8.12.1.1. Ground operations.

A8.12.1.2. Inflight.

A8.12.1.3. Landing.

A8.12.2. Review jettison procedures in T.O. 1C-130(H)H-1, T.O. 1C-130A-9, and AFI 11-2HC-130V3.

**A8.13. Tactics.** Review equipment and procedures used in combat situations.

A8.13.1. Scanner duties.

A8.13.2. Threat recognition and avoidance tactics.

A8.13.3. Defensive tactics.

**A8.14. Infiltration and Exfiltration:**

A8.14.1. Vehicles.

A8.14.2. Troops.

A8.14.3. Cargo compartment preparation.

A8.14.4. Canary slides.

**A8.15. Aerial Delivery Equipment.** Review the function and limitation of airdrop components.

A8.15.1. Platforms.

A8.15.2. Containers.

A8.15.3. Release assemblies.

A8.15.4. Parachutes.

A8.15.5. Aerial delivery hardware and expendables.

A8.15.6. Pyrotechnics and MA-1/2 kits.

**A8.16. Container delivery system (CDS).** Review equipment, configurations, and procedures for CDS airdrops including heavy CDS procedures.

A8.16.1. CDS kit.

A8.16.2. Center vertical restraint (CVR) (as applicable).

A8.16.3. Buffer stop assembly (as applicable).

A8.16.4. Release gate locations.

A8.16.5. Joint airdrop inspection (JAI).

A8.16.6. In-flight checklist procedures.

A8.16.7. Malfunction procedures.

**A8.17. Not Used.**

**A8.18. Not Used.**

**A8.19. Paratroop or Door Bundle Drop.** Review equipment, configurations, and procedures used in actual/simulated paratroop drops.

A8.19.1. Anchor cables.

A8.19.2. Static line retrievers.

A8.19.3. Y-cables for troop doors.

A8.19.4. Jump platforms.

A8.19.5. Door Bundles.

A8.19.6. Configurations IAW T.O. 1C-130A-9.

A8.19.7. Towed Paratrooper Retrieval System.

A8.19.8. LM and jumpmaster inspection checklist.

A8.19.9. In-flight procedures.

A8.19.10. Paratroop emergency procedures.

**A8.20. Combat Rubber Raiding Craft (CRRC).** Review equipment, configuration and procedures for CRRC airdrops.

A8.20.1. Release systems/single or multiple airdrop.

A8.20.2. Limitations.

A8.20.3. JAI.

A8.20.4. Combination airdrop procedures.

A8.20.5. Inflight checklist procedures.

A8.20.6. Malfunction procedures.

**A8.21. Container Ramp Loads.** Review equipment, configuration and procedures for bundles airdropped from the aircraft cargo ramp.

A8.21.1. Release method.

A8.21.2. Ramp roller configuration.

A8.21.3. Combination airdrop procedures.

A8.21.4. Load inspection.

A8.21.5. Inflight checklist.

A8.21.6. Malfunction Procedures.

**A8.22. Method A and B Combat Offload** (as applicable):

A8.22.1. Platforms.

A8.22.2. Containers.

**A8.23. Helicopter Air-to-Air Refueling.** Review the responsibilities and duties of the LM for air refueling IAW T.O. 1C-130(H)H-1, ATP-56(B), AFI 11-2HC-130V3, AFTTP 3-3.HC-130, as appropriate.

A8.23.1. Safety precaution/restriction.

A8.23.2. Aircraft weight and balance.

A8.23.3. Interphone/radio procedures.

A8.23.4. Communications-out procedures.

A8.23.5. Systems operations.

A8.23.6. Inflight checklist.

A8.23.7. Terminology/calls.

A8.23.8. Emergency procedures.

**A8.24. FARP.** Review the responsibilities and duties of the LM for FARP IAW AFI 11-2HC-130V3, AFTTP 3-3.HC-130, AFI 11-235 *Forward Area Refueling Point Operations*, T.O. 1C-130(H)H-1, and T.O. 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*. CBI courseware may be used for this block.

A8.24.1. Safety precaution/restriction.

A8.24.2. Interphone/Radio procedures.

A8.24.3. System operations.

A8.24.4. Checklist procedures.

A8.24.5. Assembly/reassemble area.

A8.24.6. Terminology/calls.

A8.24.7. Emergency procedures. Discuss LM duties and responsibilities during aircraft emergencies. Discuss responsibilities during emergency landings, bailout, ditching, and ground egress. Emphasis should be on crew coordination.

**A8.25.** -(If Available) JAI requirement and procedures IAW AFJI 13-210, *Joint Airdrop Inspections Records, Malfunction Investigations, and Activity Reporting*, and applicable technical orders.

A8.25.1. Responsibility.

A8.25.2. Required forms and completion procedures/documentation.

A8.25.3. Critical inspection areas/procedures.

A8.25.4. Disposition procedures.

A8.25.5. Unilateral airdrop training JAI responsibilities.

A8.25.6. Joint Army Air Force Training (JAAT)/Special Assignment Airlift Mission (SAAM)/Contingency/exercise/emergency airdrop JAI responsibilities.

**A8.26. Psychological Operations and Procedures.** Conduct a review of psychological operations and procedures associated with leaflet airdrop operations.

**A8.27. Pyrotechnic Operations.** Loadmasters will perform proper loading and downloading procedures for all pyrotechnic equipment used to support rescue mission operations.

**ATTACHMENT 9**  
**SAMPLE NOMINATION LETTER**

**A9.1.** Forward nomination letter with latest ARMS Flying History Report.

**Figure A9.1. Example of Nomination Letter.**

<p>MEMORANDUM FOR 347OSS/OST 347 RQG/CC ACC/A3JT IN TURN</p> <p>FROM: 71 RQS/CC/DO</p> <p>SUBJECT: Nomination for Navigator Instructor Qualification– Lt Deman, Ace</p> <p>1. The 71 RQS nominates Lt Ace Deman for HC130-IN-UQ (<i>use full course identification</i>) class 2003001. His personal information is as follows:</p> <p style="padding-left: 40px;">a. SSAN: <i>Self explanatory</i></p> <p style="padding-left: 40px;">b. Security Clearance: <i>Self explanatory</i></p> <p>2. Lt Deman meets all prerequisites requirements for course entry. <i>Provide elaborating detail as required (e.g. member will meet hour requirements by requested course date, or OG/CC has waived 10% of PAA requirements, etc).</i></p> <p>3. Lt DeMan has been briefed by the unit training officer or unit commander’s representative and accepts the appropriate ADSC IAW AFI 36-2107, <i>Active Duty Service Commitments (ADSC)</i>.</p> <p>4. Any questions may be directed to (<i>unit training officer</i>) at DSN (<i>XXX-XXXX</i>).</p> <p style="text-align: right;">(<i>Signature of Requester</i>) (<i>Title</i>)</p> <p>Attachment:</p> <ol style="list-style-type: none"> <li>1. Flying History Report</li> <li>2. Additional supporting Documentation as Required</li> </ol>
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**ATTACHMENT 10**  
**EXAMPLE WAIVER TEMPLATE**

**A10.1.** Example of Waiver Template.

**Figure A10.1. Example of Waiver Template Memo.**

<p>MEMORANDUM FOR OSS/OST RQG/CC MAJCOM/A3J IN TURN</p> <p>FROM: SQ/CC/DO</p> <p>SUBJECT: Waiver Request (<i>Individual</i>), (<i>Type of Waiver</i>)</p> <ol style="list-style-type: none"> <li>1. <i>Name, grade.</i></li> <li>2. <i>Flying organization (assigned or attached).</i></li> <li>3. <i>Present qualification (include special qualifications/certifications if appropriate).</i></li> <li>4. <i>Total flying time; primary aerospace vehicle inventory (PAI) time (include instructor or evaluator time, if applicable).</i></li> <li>5. <i>Waiver request specifics e.g., cite requirement and requested deviation.</i></li> <li>6. <i>Rationale or justification for waiver request.</i></li> <li>7. <i>Crew qualification to which person is qualifying or upgrading.</i></li> <li>8. <i>Previous attendance at any formal instructor course (include course identifier and graduation date).</i></li> <li>9. <i>Training start date.</i></li> <li>10. <i>If waiver request for time limit, specify mandatory upgrade or qualification date.</i></li> <li>11. <i>Date event last accomplished and normal eligibility period.</i></li> <li>12. <i>Remarks (include formal school courseware that is required if the waiver request is approved (e.g. local training)).</i></li> <li>13. <i>Unit point-of-contact (include name, rank, telephone number, and functional address symbol, and Email address).</i></li> <li>14. <i>Unit address (if requesting formal school courseware).</i></li> </ol> <p style="text-align: right; margin-top: 20px;">(Signature of Requester)</p>
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(Title)