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This volume implements AFPD 11-2, *Aircraft Rules and Procedures and* AFPD 11-4, *Aviation Service*. It covers USAF KC-135 aircrew training policy to safely and successfully accomplish worldwide mobility missions. This instruction applies to Air Mobility Command (AMC)-gained Air Force Reserve Command (AFRC) and Air National Guard (ANG) KC-135 units unless specifically exempted (Pacific Air Force (PACAF)-gained for two ANG units). Each MAF MAJCOM may set training requirements lower than specified in this instruction when the statement "or as specified in MAJCOM supplement" is indicated as applicable to that item or event. MAJCOM supplements must be coordinated and approved by HQ AMC/A3T and HQ USAF/A3O-AT according to AFPD 11-2, and AFI 11-202 Volume 1, before publication. Send one copy to HQ AMC/A3T and one copy to HQ USAF/A3O-AT. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

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(459ARW) This supplement implements and extends the guidance of AFI 11-2KC-135 Volume 1, 03 December 2009. The intent of this supplement is to clarify those areas of the parent AFI which are directed to be defined by the unit. The unit supplement is not intended to unnecessarily duplicate the parent AFI. Accordingly, this supplement contains only those paragraphs in need of definition by the unit. This supplement provides an overview of 459 OSF/OST functions, which are further detailed in their associated Process Guides. This instruction has been coordinated and approved through HQ 4 AF/A3T, HQ AFRC/A3T and HQ AMC/A3T. Waivers to the procedures will be requested through 459 OSF/OST and approved by 459 OG/CC. Suggested changes to the supplement will be submitted via AF Form 847, Recommendation for Change of Publication. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual 33-363, Management of Records, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located in Air Force Records Information Management System (AFRIMS) at Air Force (AF) Portal: https://my.af.mil/afrims/afrims/afrims/rims.cfm

SUMMARY OF CHANGES

This instruction incorporates several administrative changes throughout the instruction including correcting website links; removal of KC-135 E-model specific training programs including **Table 6.2**; **paragraph 1.10.5** OFT supervision requirements; **paragraph 1.18**. Training Quota Management updated; FTL D no longer used; GTLs removed; USAFEC name updates; Flight surgeons info consolidated in **Chapter 4**; USAF ancillary training consolidated within C040 event in **Table 4.2**; replaced VT03 with VT05 moved to **Table 4.2**; simulator credit for aircrew training events including **Tables 3.1, 3.2, 3.3**; renumbers **Table 4.1** through **Table 4.8**; adds training events (**Table 2.1**, **Table 3.1**, **Table 4.1, Table 4.2**, **Table 4.3, Table 4.4, Table 4.6**); changes currency and training event volume and frequencies (**Table 4.1**, **Table 4.2, Table 4.3**, **Table 4.4, Table 4.5, Table 4.6**); emergency procedures quarterly requirement **Table 4.4**; simulators moved to Flying **Table 4.4, Table 4.5, Table 4.6,** clarifies actions crewmember fails to meet training requirements (**paragraph 4.9**); **Table 5.5**. Pilot Pre-Instructor training and **Table 5.6**. Boom Operator Pre-Instructor training updated; change CNS/ATM to GATM titles;

changes from 8044 to 8010; includes tactics certification training (**paragraphs 5.7.11 thru 5.7.11.3.5** and **Table 5.11**); RNAV/GPS Operations Certification (**paragraphs 5.7.12**); new MPD program guidelines in **Chapter 5**; update **Table 5.1,** aircrew upgrade TFT and PAA requirements; Tactics may be conducted in OFT **Chapter 3 and Chapter 4**; Redefined dedicated training time in **paragraph 6.3**; delete **Chapter 7**, PTT30, Part Task Trainer; authorizes electronic training documentation (**paragraphs A2.1.1 thru A2.5**). Update to Glossary, Abbreviations and Acronyms.

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Chapter 1

GENERAL

1.1. Training Objective. This instruction prescribes basic policy and guidance for training United States Air Force KC-135 crewmembers according to AFI 11-202 Volume 1, *Aircrew Training.*

1.1.1. The overall objective of the aircrew training program is to develop and maintain a high state of mission readiness for the immediate and effective employment in exercises, peacekeeping operations, contingencies, and war. Mission readiness and effective employment are achieved through the development and mastery of core competencies for KC-135 crewmembers. These core competencies include the ability to conduct AAR, tactical ingress, tactical egress, and tanker operations during all phases of flight, instrument procedures, mission planning, ground operations, crew management and C4/AOC integration.

1.1.2. Link AFTTP 3-3.KC-135, *Combat Aircraft Fundamentals—KC-135,* requirements into mission and continuation training tables while retaining a combat culture, leading edge technologies, pushing capabilities while anticipating warfighter needs.

1.1.3. The secondary objective is to standardize KC-135 training requirements into a single document to meet requirements for a basic document in AFPD 11-2.

1.2. Key Words Explained.

1.2.1. "Will" and "shall," indicate a mandatory requirement.

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

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

1.2.4. "Note," indicates operating procedures, techniques, etc., which are considered essential to emphasize.

1.3. Administration.

1.3.1. Recommendation for Change. Submit suggested improvements to this instruction on AF Form 847, *Recommendation for Change of Publication*, through MAJCOM channels to OPR, HQ AMC/A3T according to AFI 11-215, *Flight Manual Program (FMP).* Send proposals for amending existing course prerequisites or recommendations to change or delete obsolete courseware through the appropriate MAJCOM training staff to the OPR. The OPR address is HQ AMC/A3T, 402 Scott Drive, Unit 3A1, Scott AFB, IL, 62225-5302.

1.3.2. Supplements. This AFI is a basic directive. Each MAJCOM or operational theater may supplement this AFI. MAJCOM supplements may be more, but not less restrictive than this instruction.

1.3.3. Local Training Guidance. Units may supplement this instruction and will submit a copy of the supplement to the parent MAJCOM OPR after approval by the OG/CC. Air National Guard (ANG) is considered a MAJCOM for purposes of this instruction per AFI 11-202 Volume 1.

1.3.4. If a conflict is identified for a training requirement, comply with source document that establishes the training requirement.

1.4. Responsibilities. AFI 11-202 Volume 1 outlines responsibilities for aircrew training.

1.4.1. Lead Command. Air Mobility Command (AMC) is designated lead command for the KC-135 Mission Design Series (MDS) air refueling tanker aircraft according to AFPD 10-9, *Lead Operating Command Weapon Systems Management*, AFPD 11-2, and air refueling procedures training according to AFPD 10-21, *Air Mobility Lead Command Roles and Responsibilities*. Lead command is responsible for establishing and standardizing aircrew flying training requirements in coordination with user commands. HQ AMC/A3 delegates toHQ AMC/A3T the authority to manage all training course requirements, training tasks and Aircrew Training System (ATS) in **Chapter 6**. AMC/A3T is OPR for this instruction.

1.4.1.1. Courses. AMC/A3T, in coordination with user commands, approves continuation training requirements or adjustments, and fields short-notice specialized or in-unit upgrade courses.

1.4.1.2. Realistic Training Review Board (RTRB). HQ AMC/A3T will host a RTRB biennially, or more frequently, as required. The RTRB will review the appropriate training programs for currency, applicability, compliance, and effectiveness. Attendees should include training representatives from the KC-135 community including: HQ AMC/A3T/A3V, USAF Expeditionary Center (USAFEC), AETC, AFRC, ANG, PACAF, USAFE, formal schools, selected unit representatives, and aircrew training system (ATS) instructors or staff, as applicable.

1.4.1.3. Detachment 2, Air Mobility Command Air Operations Squadron (AMCAOS) personnel will:.

1.4.1.3.1. Conduct an annual Simulator Certification (SIMCERT) according to AFI 36-2251, *Management of Air Force Training Systems*, on each Aircrew Training Device (ATD) in the KC-135 ATS (semi-annual for Level C+ certified simulators), or when necessary (e.g. ATD modification, configuration change, etc.). The program is designed to ensure training devices are maintained to their design configuration and provide accurate and credible training. SIMCERT will include objective and subjective testing, inventory inspection, and Quality Assurance Issues (QAI).

1.4.1.3.1.1. Provide host unit 45-day advance notice of a SIMCERT. HQ AMC/A3T may direct a short-notice SIMCERT with verbal coordination between host unit, Det 2 AMCAOS, ATS contractor, and the ATS contract management team. Report SIMCERT results to HQ AMC/A3T and the ATS contract management team.

1.4.1.3.1.2. Monitor training device utilization, availability, and ensure equipment malfunctions are corrected through coordination with the ATS contractor, when required.

1.4.1.3.1.3. For ATD modified with GATM components, conduct SIMCERT in both Pacer CRAG Block 30 (as applicable) and GATM Block 40.X configuration. A SIMCERT is not required for conversion unless deficiencies are identified that effects the ATD status.

1.4.1.3.2. Schedule Subject Matter Experts (SME) for Technical Interchange Meetings (TIM) with the ATS contractor. DET 2, AMCAOS will review all continuation training courses and mission scenarios and recommend changes as necessary when aircraft systems, operating procedures, or mission and command training requirements are modified or changed.

1.4.1.3.3. Conduct an annual Training System Support Center (TSSC) audit of courseware and simulation devices.

1.4.1.3.4. Oversee monthly KC-135 ATS Training System Configuration Working Group (TSCWG) in coordination with AETC 97 TRS Quality Assurance Agency. The TSCWG reviews the status of the tasks requested and courseware and hardware configuration of the KC-135 ATS. Change requests are reviewed and prioritized for incorporation into the KC-135 ATS.

1.4.2. Training Command. AETC/A2/A3 is responsible for formal school (Altus AFB) syllabi and is the approval authority for changes in coordination with lead and user commands according to AFI 11-202 Volume 1. AETC/A2/A3/A10 designates AETC/A3Z to oversee formal school courses and syllabus management in coordination with the ATS Contractor and AMC/A3TK. Copies are available for download (see **paragraph 1.15.6**). AETC/A3R manages the PFT process with link to quotas (see **paragraph 1.14.1**). AETC/A3Z determines the formal school flying capacity in coordination with lead command (ATS alignment).

1.4.2.1. Progress Review (PR). See AFI 11-202 Volume 1. AETC will notify the student's gaining unit of any PR action delaying the student's scheduled graduation date. If the PR recommends a Flying Evaluation Board, AETC will notify the student's gaining MAJCOM.

1.4.2.2. 97 TRS, Altus AFB quality assurance agency monitors ATS performance alongside Detachment 2 AMCAOS.

1.4.2.3. The 97TRS may conduct ATS Contract Compliance Evaluations (CCE) for KC-135 ATS-supported sites according to AMC/AETC Memorandum Of Understanding (MOU). Report results to HQ AETC/A3ZM, HQ AMC/A3TK and ATS contract management team. Evaluation personnel assess ATS contractor performance of aircrew ground training programs to include Computer-Based Training (CBT), simulator training, VTRAT, and training support facilities.

1.4.2.3.1. The host unit will receive 45-day advance notice of the CCE (non-interference basis) via notification memo or Email to the unit POC. Unit support may include the use of an inbrief/outbrief facility, approximately 4 hours CBT time, and access to available crewmembers and staff for the purpose of conducting surveys and/or soliciting comments.

1.4.2.3.2. Units should consider the CCE a unit-level feedback tool to monitor quality of ATS ground training.

1.4.2.4. Maintain all AETC-managed KC-135 courses on ETCA.

1.4.2.5. AMC/A3T is responsible for BNQ ATS formal training at McConnell AFB and interim KC-135 training programs (e.g., Q040, GATM Certification, etc.).

1.4.3. User Commands.

1.4.3.1. Student Management. MAJCOM training staff will manage their student training requirements according to **paragraph 1.14.1.2**.

1.4.3.2. Recall Procedures. Formal notifications to recall students from a formal school must be sent from the student's SQ/CC to OG/CC to MAJCOM/A3T (or equivalent) (email format is acceptable). MAJCOM/A3T (or equivalent) will submit approved recall letter (email or Fax) to AETC/A3R for follow on coordination with 19 AF and Formal Training Unit (FTU) Registrar. Emergency recall during non-duty hours may be coordinated directly with applicable FTU Registrar, with follow up coordination with AETC/A3R & 19 AF on the next duty day.

1.4.4. Wing Commander. WG/CC will ensure unit/local level agencies and facilities support aircrew ground training programs. Host and/or co-located units will develop local agreements to consolidate aircrew training support base-wide.

1.4.5. Operations Group.

1.4.5.1. The OG/CC (or equivalent) will convene a Training Review Panel (TRP) to be chaired by the OG/CC or a designated representative. Panel members should include representatives from squadron training, tactics, operations, safety and other areas as determined by the commander, i.e. ATS contractors, Host Aviation Resource Management (HARM) and Squadron Aviation Resource Management (SARM).

1.4.5.1.1. TRP - Requirements. Convene the TRP semi-annually and maintain minutes for a period of two years (commanders may increase this frequency as required). Squadrons and detachments not collocated with their OG may conduct their own panel or provide representation to the unit's TRP. Panel minutes from non-collocated squadron and detachment TRPs will be forwarded to the unit for inclusion in the unit's TRP.

1.4.5.1.2. 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, current and forecast Flight Training Levels (FTL), upgrade and Continuation Training (CT) status, semi-annual requirement completion rates, crew position gains/losses, Aircraft Commander, Instructor and Evaluator upgrades. OG/CCs will review all unit-defined training "X" events for relevancy to the unit's mission during the semi-annual TRP. This review will be documented in the TRP minutes.

1.4.5.2. The OG/CC will develop and maintain procedures with local servicing Military Personnel Element (MPE) for individual crewmember counseling and personnel system updates affecting active duty service commitment incurred from training described in this AFI. See AFI 11-202 Volume 1, AFI 36-2107, *Active Duty Service Commitments (ADSC)*, and course listing in Education and Training Course Announcements (ETCA) for more information.

1.4.5.2.1. **(Added-459ARW)** 459 FSS/DPMT coordinates directly with crewmembers to provide counseling and personnel system updates affecting active duty service commitment incurred from training described in this AFI.

1.4.5.3. OG/CC may develop additional training requirements and/or programs as necessary to meet unit mission requirements. Units may include such requirements in a local supplement to this AFI.

1.4.5.3.1. **(Added-459ARW)** The 459 OG/CC has delegated the responsibility of developing additional training requirements and/or programs to the 459 OSF/OST. Process Guides outlining these programs are located on the 459 OSF CoP. See paragraph 1.15.8.

1.4.5.4. OG/CC is responsible for establishing and maintaining academic training programs including non-ATS courses (may be delegated to squadron level). The OG (or squadron) OPR will:

1.4.5.4.1. Appoint a primary and alternate instructor for each non-ATS course to be taught.

1.4.5.4.2. Publish a ground training schedule (ANG/AFRC, as required) to include date, time, location, instructor and designated crewmembers for each course (both ATS and non-ATS). Units may include such details in a local supplement to this AFI**.**

1.4.5.4.2.1. **(Added-459ARW)** 459 OSF/OST will publish annual and monthly ground training schedules on the 459 OSF CoP. See paragraph 1.15.8.

1.4.5.4.3. Use MAJCOM, ATS, or unit-developed training products and/or syllabus for all courses, as applicable. Units will reproduce courseware, as applicable. Units will manage and administer the KC-135 ATS CBT programs according to ATS guides and instructions.

1.4.5.4.4. Develop a process to monitor the academic training program for course content, currency of materials, instructor availability, and status of training aids. Squadron should recommend to the commander changes to existing courses or additional academic training courses required, based on crewmember feedback.

1.4.5.4.5. Units will develop local procedures for scheduling ATS courses. The unit training manager is responsible for procedures that minimize schedule changes and maximize training in the available time. Advise ATS contractor for scheduling changes and special training requirements.

1.4.5.4.6. Units will develop procedures for scheduling host or aircrew QUEEN BEE ATD continuation training. May include such details in a local supplement to this AFI.

1.4.5.4.6. **(459ARW)** 459 OSF/OST procedures for scheduling aircrew QUEEN BEE ATD continuation training are provided in the most current QUEEN BEE ATD Continuation Training Process Guide located on the 459 OSF CoP. See paragraph 1.15.8.

1.4.5.4.7. Send recommendations for changes, additions, and deletions of courses through appropriate channels to appropriate MAJCOM with an information copy to HQ AMC/A3T.

1.4.5.5. Instructor Selection and Training. OG/CC (or as delegated/specified in local supplement) will select course instructors (for non-ATS courses) on the basis of professional qualification and aptitude to instruct aircrew/students. Local academic instructor program will follow AFMAN 36-2236, *Guidebook for Air Force Instructors*. An individual instructor may receive course credit if instructing the class.

1.4.5.5. **(459ARW)** Non-ATS Instructor selection and training is delegated to the 459 OSF/OST.

1.4.6. Squadrons. Sq/CC (or designated representative) will:

1.4.6.1. Ensure crewmembers complete in-unit mission, ground, and continuation training programs. Failure to reasonably progress may require action for removal.

1.4.6.2. Before each semi-annual training period assign Flying Training Levels (FTL) and levels of qualifications (instructor, evaluator, etc.) to assigned (and attached) crewmembers (see **Chapter 4**).

1.4.6.3. May delegate responsibility to supervisors for completion of formal school post-graduate questionnaires via AETC web-based survey system. See **https://www.my.af.mil/agepiftprod/**. Complete the questionnaire NLT 120-days after student graduation from the FTU at Altus AFB.

1.4.6.4. Ensure adequate training continuity and supervision of assigned and attached crewmember. Unit commanders may assign additional requirements based on individual crewmember's experience and proficiency.

1.4.6.5. Through the training staff, will review training and evaluation records of a newly assigned or attached crewmember and those crewmembers completing formal training, to determine the necessary training required to complete/certify the individual as Basic Aircraft Qualified (BAQ), Basic Mission Capable (BMC), or Mission Ready (MR) status. Make the appropriate training entry on AF Form 4023, *Aircrew Training Progress Report* or MAJCOM approved substitute (see **paragraphs A2.1** and **A2.3**).

1.4.6.6. Review qualifications and monitor training requirements for unit-assigned Flight Surgeons.

1.4.6.7. Execute unit-level aircrew certifications described in this instruction.

1.4.6.8. Ensure flight commanders or Sq training flight will monitor/check quality of training being accomplished, identify training deficiencies. Advise Sq/CC of additional training needs.

1.4.7. ATS Contractor. The KC-135 Aircrew Training System (ATS) contractor is responsible for academic and aircrew training device (ATD) instruction at the R-model formal school at Altus AFB or specialized training at all KC-135 training sites. This responsibility includes developing, updating and publishing courseware, formal school syllabus, maintain facilities, ATD, etc. according to the KC-135 ATS contract (see **Chapter 6**).

1.4.8. Formal School, Non-ATS. See requirements in AFI 11-202 Volume 1.

1.4.9. SIMCERT Status. KC-135 OFT simulators receive periodic SIMCERTs to gain/maintain Level C+ Certification. Each simulator has unique conditions and

maintenance actions that require the device to gain/lose/regain certification. These actions have a direct impact on flight events creditable in the ATD (**Table 4.4, Table 4.5, Table 4.6, and Table 4.7**).

1.4.9.1. Units who require currency updates should check with their host ATD site manager for latest status.

1.4.9.2. ATD Motion Requirements. For crewmembers to log flying training events motion systems must be used unless otherwise specified. (see **Chapter 4** tables for simulator creditable events.) KC-135 OFT simulators modified with motion systems are capable of dramatic change in pitch and roll sufficient to cause occupants to be injured (if not secured). When training or conducting tours aboard the ATD equipped with motion systems, if motion is applied, all parties aboard will have a seat/seatbelt available (and fitted), the Instructor Operator Station (IOS) will have a certified operator (see **paragraph 5.7.8**). If the amount of people in the ATD exceeds the amount of seats or a certified operator is not aboard, do not use motion.

1.5. Waiver Authority.

1.5.1. Do not deviate from the policies and requirements in this instruction. Report deviations or exceptions without waiver through channels to MAJCOM/A3T (or equivalent) who, in turn, should notify the OPR (lead command) for follow-on action if necessary. Units reporting deviations and exceptions will maintain copies of reported deviations/exceptions for two years. Waiver requests will include supporting rationale, the training start date, a summary of the unit's training plan, and estimated completion date.

1.5.2. Unless specified in this instruction, MAJCOM/A3T (or equivalent level), is the designated waiver authority for specific aircrew training requirements in this instruction that are not governed by AFI 11-202, Volume 1, or other AFIs.

1.5.3. OG/CC is designated waiver authority for minimum flying-hour prerequisites for entry into formal upgrade courses (see **Table 5.1** or **Table 5.4**).

1.5.4. Prerequisites. When a student is entered into a formal course, HQ AETC/A3 designates 19AF as waiver authority for AETC flying training syllabus and formal school prerequisites (exceptions see **paragraph 1.5.3** and **paragraph 1.5.5**). All requests for a syllabus waiver must include supporting rationale. User command training staff should submit prerequisite waiver requests direct to 19 AF. All waivers must be approved before the crewmember departs for formal training. File a copy of all waivers in the trainee's AF Form 4022, *Aircrew Training Folder*, (electronic copy is authorized, see **paragraphs A2.1** and **A2.2**) and hand-carry a hard copy to formal school course.

1.5.4.1. Formal School Course Prerequisite Waiver. For formal school course prerequisite waiver requests, see the appropriate formal course in the ETCA. For Aircraft Commander (AC) Upgrade and/or pre-Instructor Course training requirements, send a waiver request to MAJCOM/A3T (or equivalent), who will endorse and forward to the waiver request to 19 AF for final approval.

1.5.4.2. Formal School Training Waiver. The 19 AF/DO is designated waiver authority for completion of specific formal school events at Altus AFB with the concurrence of the

gaining unit's OG/CC. MAJCOM/A3T (or equivalent) is the designated waiver authority, in coordination with AMC/A3TK for McConnell AFB training.

1.5.4.3. If required for squadron's designated mission, accomplish the events that were waived or not accomplished at the formal school, before assigning mission-ready (MR) status.

1.5.5. In-unit Training Waiver. MAJCOM training staff (or equivalent) is approval/waiver authority for in-unit training in coordination with HQ AMC/A3TK (for ATS support). AMC/A3T, ANG/A3T and AFRC/A3T are designated waiver authorities for the secondary method of training at McConnell AFB FTU training center. Before approval, review the appropriate syllabus and consider availability of ATS formal instruction and ATD (e.g. OFT simulator) requirements. (See **paragraph 5.4.5** for previously certified instructors)

1.5.6. Senior Officer Course (SOC) Waiver. See the appropriate formal course syllabus. Refer to AFI 11-202 Volume 1 for SOC policy and eligibility requirements.

1.5.7. Continuation Training Waiver**.** The OG/CC (or AFRC/ANG-equivalent) is designated waiver authority for semi-annual and currency ground training events as specified in **Table 4.1, Table 4.2,** and **Table 4.3** and flying continuation training currency and requirements in **Table 4.4, Table 4.5, Table 4.6, and Table 4.7** for assigned or attached crewmembers (case-by-case basis only). The OG/CC waiver authority extends the due date and does not delete the requirement. The OG/CC will determine the allowable time period of the waiver (e.g., 30-day extension, next training cycle, etc.). This waiver authority will be used judiciously and should be based on the individual crewmember's experience and proficiency level (i.e., waivers will not be based on a crewmember's availability). OG/CC should consider if sufficient flying events were accomplished (to ensure MR proficiency), before waiver approval. Do not approve a waiver request for the same flying or ground training event deficiency affecting two consecutive training periods. Forward all waiver requests for waivers over two consecutive training periods to MAJCOM/A3T (or equivalent). For all flight currency waiver requests see **paragraph 4.9**.

1.5.8. Waiver Format. For AMC unit waiver requests, use on-line waiver request service on AMC/A3T Community of Practice (CoP) (see **paragraph 1.15**). AFRC waiver request may use AFRC website (see **paragraph 1.15.5**). Ensure the Volume 1 reference paragraph to be waived is included in the waiver request. If necessary, submit a written request through OG/CC or equivalent in the format at **Figure 1.1** to the appropriate MAJCOM OPR. Asterisked (*) items are required for processing. Units will submit waiver requests according to **Table 1.1**. Place a copy of all flying and ground training waivers/training time extensions in the individual's training folder. For waivers not requiring a training folder, OG/CC (or designated unit) will retain unit file copies of approved waiver(s) through the appropriate ASEV cycle according to AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program.*

Figure 1.1. Sample Waiver Request Format.

MEMORANDUM FOR (*Waiver Authority*)
FROM: (*Requester)*
SUBJECT: Waiver Request – (*Individual*), (*Type of Waiver*)

1. **Name and grade.*
2. **Flying organization (assigned or attached).*
3. **Present qualification (include special qualifications/certifications, if appropriate).*
4. **Total flying time; primary aircraft inventory (PAI) time (include instructor or evaluator time, if applicable).*
5. **Waiver request specifics e.g., cite requirement and requested deviation.*
6. **Rationale or justification for waiver request.*
7. *Crew qualification to which person is qualifying or upgrading.*
8. *Previous attendance at any formal instructor course (include course identifier and graduation date).*
9. *Training start date.*
10. *If waiver request for time limit, specify mandatory upgrade or qualification date.*
11. *Date event last accomplished and normal eligibility period.*
12. *Remarks (include formal school courseware required if the waiver request is approved. (e.g. CBT lessons, workbooks, guides, ATS simulator time, etc.)*
13. **Unit point-of-contact (includes name, rank, telephone number, and functional address symbol, and Email address).*
14. *Unit address (if requesting formal school courseware)*

(Signature of Requester)
(*Title*)

Table 1.1. Processing Waivers to AFI 11-2KC-135V1.

Waiver Initiated By:	**Send waiver request to:**	**Waiver Reply Will be Sent to:**	**With Information Copy To:**
Active Duty AMC Wing or Group	HQ AMC/A3TK	OG/CC	HQ AETC/A3ZM, if formal training Altus AFB
AETC	Unit training office through 19AF/DOH to HQ AETC/A3Z	OG/CC	HQ AMC/A3TK
PACAF	OG/CC to PACAF/A3T	OG/CC	HQ AMC/A3TK
USAFE	OG/CC to HQ USAFE/A3T	OG/CC	HQ AMC/A3TK
AFRC Unit	HQ AFRC/A3TA	AFRC Unit	HQ AMC/A3TK
ANG Unit	NGB/A3O	ANG Unit	HQ AMC/A3TK
Assoc Unit	Host OG/CC to waivered individual's parent OG/CC then via appropriate waiver path	Parent OG/CC	Host OG/CC

Waiver Initiated By:	Send waiver request to:	Waiver Reply Will be Sent to:	With Information Copy To:
NOTE: For formal training waiver requests, units will submit requests through MAJCOM channels. MAJCOMs will in turn submit requests to HQ AETC/A3Z for approval. Associate Units will keep Host OG/CC advised on the status of waivers initiated.			

1.6. Use of Flying Hours.

1.6.1. Structure unit flying training missions to achieve optimum training. Any by-product airlift opportunity resulting from training must not degrade the intended training and will comply with applicable Department of Defense Regulation, DoD 4515.13-R, *Air Transportation Eligibility,* AFI 11-401, *Aviation Management,* and AFI 11-202, Volume 1.

1.6.1.1. It is essential that all personnel at every level prevent the misuse of air mobility resources as well as the perception of misuse when planning and executing local or off-station training missions.

1.6.1.2. See AFI 11-2KC-135 Volume 3 for off-station training flight requirements.

1.6.2. Training on Operational Missions. Unless specifically prohibited or restricted by weapon system operating procedures or specific theater operations order (OPORD), the OG/CC exercising operational control may approve upgrade, qualification or special qualification training on operational missions. In order to maximize efficient utilization of training resources, 618 Tanker Airlift Control Center (TACC) and tasked units will jointly identify and take maximum advantage of opportunities to conduct appropriate continuation training items which may be conveniently suited to concurrent operational mission segments. Commanders will ensure the training will not impact mission effectiveness and the crewmember receiving training is under the supervision of an instructor of like specialty. See passenger-carrying restrictions in AFI 11-401 and AFI 11-2KC-135 Volume 3.

1.6.2.1. **(Added-459ARW)** To maximize training opportunities, the 459 OG/CC has approved upgrade, qualification training on operational sorties were available. Restrictions IAW AFI 11-401 and AFI **11-@KC135** Volume 3 will be adhered to at all times.

1.7. In-unit Training Time Limitations. Comply with the time limitations in **Table 1.2**. Crewmembers entered in an in-unit training program for all formal training courses leading to qualification (or re-qualification) should be dedicated to that training program on a full-time basis. In-unit training will begin no later than 45-days (90-days for AFRC or ANG) after reporting or being attached to a new duty station or unit. When conducting in-unit training, the commander will relieve students of duties not directly related to training.

1.7.1. Training time start date is the date when the first significant training event (training event directly contributing to qualification and upgrade) has begun or 45-days (90-days ANG/AFRC) after being attached or assigned to the unit upon completion of the formal school course, whichever occurs first (or as specified in MAJCOM supplement). Examples of significant training events include: Computer-Based Training (CBT), Part Task Trainer (PTT), Operational Flight Trainer (OFT), ground training, flight, etc. MPD pilot upgrade to

AC time limit begins upon Sq/CC direction to begin completion of the events in **paragraph 5.2.4.1** which lead to AC qualification and certification. Training time ends with the successful syllabus completion. One of the following events as indicated by the syllabus: flight evaluation (if required as part of the training program), instructor validation of successful program completion ("sign-off"), or Sq/CC certification (if required as part of the training program).

1.7.2. Sq/CC may extend training time up to 60-days (120-days AFRC or ANG) through a Memorandum For Record (MFR) documentation in training folder; no notification to MAJCOM/A3T (or equivalent) is required. Extensions exceeding 60-days (120-days AFRC or ANG) require MAJCOM/A3T (or equivalent) approval (AMC AD use AMC/A3T waiver website) and will be requested before the crewmember exceeds upgrade training time limits in **Table 1.2**.

1.7.2.1. Use the waiver request format specified in **paragraph 1.5.9**. Include training difficulty, unit corrective action to resolve and prevent recurrence, and estimated completion date.

Table 1.2. In-unit Training Time Limitations.

Training Type	Time	Notes
Initial Qualification	90-days	2
Difference Qualification/Certification	90-days	2
Requalification/Transition Course	90-days	2
Mission Certification Training (MCT)-Conventional Includes in-unit training leading to MR status following initial, difference, or requalification training.	90-days	1,2,4
Mission Certification Training (MCT)-OPLAN-8010 Includes in-unit training leading to OPLAN-8010 MR status.	90-days	1,2,3
Upgrade Qualification or Certification Training (e.g. traditional CP to AC).	90-days	2
Upgrade Qualification MPD Pilot to AC	180-days	
Instructor Upgrade	60-days	2

Training Type	Time	Notes
NOTES: 1. FAIP/OSA (crossflow, etc.) use 120-days. 2. 180-days for ANG/AFRC. 3. Upon completion of initial, difference, or requalification training program and obtaining the appropriate security clearance. SQ/CCs may delay MCT-OPLAN-8010 for operational reasons or lack of security clearance. 4. Special Operations Air Refueling (SOAR) certification use 120-days.		

1.8. Training Documentation. KC-135 units will use ARMS to document training. Units will use the AF Form 4324, *Aircraft Assignment/Aircrew Qualification Worksheet*, to update aircrew certifications. See **Chapter 7** for specific "Q" codes. Retain hardcopy until individual's departure. Return the documents to the crewmember upon departure. See **Attachment 2** for additional information.

1.8. Not Used.

1.9. Flight Evaluator Usage. Use flight evaluators as instructors for any phase of training to capitalize on their expertise and experience. If an evaluator is the primary instructor to train an individual, the same evaluator should not administer the associated evaluation.

1.10. Instructor Training and Supervision Requirements.

1.10.1. All instructors should be MR (wing level and below). Instructors must be current and qualified in any event that they instruct. FTU instructors are only required to maintain BMC.

1.10.2. Faculty Training Course (FTC). FTC instructor graduates will conduct flight training at the formal school for students performing crewmember duties in the KC-135.

1.10.2.1. Maneuvers identified in this AFI or the appropriate syllabus as "FTU-only" or "AETC Instructor Cadre-only" will only be accomplished by instructors assigned to the formal school at Altus AFB, who have completed FTC and are appropriately certified to perform the maneuvers. Exceptions with MAJCOM/A3T (or equivalent) approval only.

1.10.3. When performing crewmember duties, the following personnel will be under direct supervision of an instructor of like specialty.

1.10.3.1. All non-current crewmembers. For non-current crewmembers, direct instructor supervision is required while performing the non-current event. (See **paragraph 4.9.1.1**).

1.10.3.2. All crewmembers in initial, upgrade or requalification flying training unless syllabus states that direct supervision is not required.

1.10.3.2.1. See **paragraph 5.2.4** for MPD requirements.

1.10.3.3. All crewmembers designated by the wing, OG, or Sq/CC.

1.10.4. All unqualified or Flying Training Level (FTL) E crewmembers require direct instructor supervision during all critical-phases-of-flight.

1.10.5. Only designated ATS contractors or Sq/CC certified USAF instructors may operate an OFT. (see **paragraph 5.6.7**)

1.10.5.1. Aircrew members regaining currency in an OFT must be under the supervision of an USAF instructor or an ATS contract Instructor of like specialty, unless specified.

1.10.5.2. Aircrew members will not log events for which they are non-current until currency is regained.

1.11. Distribution. Units will establish distribution requirements of this AFI.

1.12. Transfer of Aircrews. Before a crewmember will interfly from one unit to another, the gaining unit will review and assess their qualification and currency. See also AFI 11-401.

1.12.1. A crewmember qualified in the same Mission-Design Series (MDS) according to AFI 11-202 Volume 2, (e.g., KC-135R/T) will be considered qualified throughout the USAF KC-135 force with the same MDS-model and mission. Certified/qualified MR crewmember transferring between units, accomplish only unit specific training and any applicable events in which they have lost currency. See AFI 11-2KC-135 Volume 3, Chapter 3, Interfly, for additional information.

1.12.2. For Foreign Military Sales (FMS) training and/or exchange officers, see training requirements in AFI 11-401. Initial and/or continuation training requirements are specified in the appropriate MOU, OPLAN, agreements and International Program Directives (IPD) and should mirror training requirements of this AFI to maximum extent possible.

1.13. Aircrew Training While DNIF. Crewmembers whose status is designated, "duty not involving flying (DNIF)," may log ground training events, including simulator training, if the member's physical condition allows it. Consult the flight surgeon initiating AF Form 1042, *Medical Recommendation for Flying or Special Operational Duty*, if the DNIF status includes ground training limitations IAW AFI 48-123, *Medical Examinations and Standards*.

1.14. Aircrew Rated Management Overview.

1.14.1. Programmed Flying Training (PFT). AETC/A3 designates AETC/A3R to manage the KC-135 PFT process in coordination with KC-135 lead and user commands. The PFT balances available formal training quotas, ATS throughput, schoolhouse capacities and course requirements on a Fiscal Year basis. Annually, units will send projected PFT requirements to their respective MAJCOM training staff. When requested, MAJCOM training staff will forward projections to AF/A3O for inclusion into the Graduate Program Requirements Document (GPRD). AETC/A3R will determine training capacity and report shortfall in the GPRD to AF/A3O.

1.14.1.1. AF/A3O sponsors an annual PFT conference for attendees to consider training capacity, MAJCOM training requests, and pipeline aircrew training students from which AF/A3O will produce the Graduate Program Guidance Letter (GPGL). AETC/A3R publish the annual PFT based on the GPGL.

1.14.1.2. Throughout the training year, MAJCOM training staff and AETC PFT managers use assigned/allocated training quotas to assign individual crewmembers into the KC-135 formal schools. Daily student quota adjustments to the annual PFT are made on quota management documents. AETC/A3R will publish the quota management documents on AETC PFT/Flying Hours/Metrics Programs CoP.

1.15. Information Management. Related mobility aircrew training information, including Global Ready Aircraft Commander Course (GRACC), KC-135 Aircrew Training System (ATS), simulator status, is available on a series of commercial and military-only websites. Communities of Practice (CoPs) are available through the AF Portal: **https://www.my.af.mil**, "Communities". The HQ AMC/A3T CoP contains valuable training information.

1.15.1. HQ AMC/A3TF CoP contains specific information covering the Global Ready Aircraft Commander Course (GRACC).

1.15.2. HQ AMC/A3TK CoP contains specific information, links and other features covering the overall KC-135 training programs.

1.15.3. HQ AMC/A3V CoP contains ASEV inspection guides, FCIF, and other features covering the overall KC-135 standardization/evaluation program.

1.15.4. The ATS Contractor maintains a website containing KC-135 training information, photos, courseware listing, GATM information, web-based training courseware and testing, etc. Use site address: **https://www.kc135ats.net/**.

1.15.5. AFRC/A3T CoP contains specific information, links, waiver, and other features.

1.15.6. HQ AETC/A3Z website contains the USAF course ETCA at: **https://etca.randolph.af.mil**. KC-135R-model formal school (Altus AFB) syllabi are available at AETC site: **https://aetc_uft.randolph.af.mil/bookstore/kc-135.htm**.

1.15.7. NGB/A3TM CoP contains specific information, links, waiver, and other features.

1.15.8. **(Added-459ARW)** 459 OSF CoP contains specific information, briefings, process guides, links, and other features covering overall KC-135 training in the 459 OG. The site address is **https://afkm.wpafb.af.mil/Wiki/default.aspx?page=OSF+Training&Filter=RC-OP-00-32**

1.16. Failure to Progress or Complete Training. If a student fails to progress according to syllabus or training requirements, the command accomplishing the training will conduct a Progress Review (PR). The PR can recommend continuation in training or actions IAW AFI 11-402, Aviation and Parachutist Service, Aeronautical Ratings and Badges, e.g. a Flying Evaluation Board (FEB). The formal school will notify the gaining unit of any AFI 11-402 action taken.

1.17. Career Enlisted Aviator Skill Levels. CEAs are not tied to AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted),* skill level upgrade. All enlisted aircrew qualifications are separate and distinct from skill level qualification. Flight evaluations result in an AF Form 8, *Certificate of Aircrew Qualification* IAW AFI 11-202 Volume 2. After an AF Form 8 is completed for the applicable flight evaluation, the crewmember is qualified to perform all duties assigned to that crew qualification regardless of skill level. Aircrew instructor and flight examiner qualifications are also separate and distinct from OJT trainer or certifier designation and are reflected in AFSC by use of "K" prefix (aircrew instructor) and "Q" prefix (standardization and evaluation flight examiner).

1.18. Aircrew Training Quota Management. The following information describes AMC's policy and procedures for quota management. This policy was developed from requirements in

AFI 36-2201, 36-2107 and AFI 11-412. This policy is mandatory for all AMC units. All other units follow MAJCOM/A3T (or equivalent) guidance.

1.18.1. AMC Units: Formal Aircrew Training requirements (except for Simulator Refresher requirements) will be submitted to the appropriate AMC/A3TF quota manager NLT 30 Sep for the following fiscal year. AMC/A3TF will consolidate and crosscheck requests with the Pilot Absorption Management System (PAMS) and submit to Air Staff via the annual Graduate Program Requirements Document (GPRD) Data Call and finalized at the annual Programmed Flying Training (PFT) conference.

1.18.1.1. Other MAJCOMS: Submit Formal Aircrew Training requirements to appropriate MAJCOM Functional Managers NLT 30 SEP for the following fiscal year. The Formal Aircrew Training requirements (except for Simulator Refresher requirements) will be internally coordinated by MAJCOM Functional managers and submitted to Air Staff via the annual Graduate Program Requirements Document (GPRD) Data Call and finalized at the annual Programmed Flying Training (PFT) conference.

1.18.2. OSS training offices will submit the rank, full name, SSAN, course, and class number to AMC/A3TF NLT 45 days prior to class start date (CSD). Please ensure that any internal processes are adjusted to meet this timeline. Training quotas not filled 30 days prior to CSD will be offered to the next unit on the AMC/A3TF standby list. OSS training offices should reconfirm all scheduled training with their units at least 10 days prior to CSD to ensure notification of training, active duty service commitments are established, and orders issued. Please submit all candidates for training quotas using email only to: **AMC.quotamanagement@scott.af.mil**.

1.18.2.1. All course prerequisites will be completed NLT 30 days prior to CSD to allow for remedial training or substitution. Units will internally identify an alternate candidate for each allocated quota. If the primary candidate becomes unavailable 30 - 45 days prior to CSD, notify AMC/A3TF with the alternate's information. If the primary becomes unavailable within 30 days of CSD, contact your host MPF formal training section to locally substitute the alternate IAW AMCI 36-2204 - provide a copy of the local substitution letter to AMC/A3TF.

1.18.2.2. Foreign exchange officers cannot be locally substituted (they must also be identified when submitted to load against an allocation), send the replacement's full data to AMC/A3TF.

1.18.3. When submitting local upgrade (secondary method) requests, use the AMC/A3TF web-site: **https://private.AMC.af.mil/a3/a37t/dot/waivers/userlogin.cfm**.

1.18.3.1. Forward the following information to the appropriate quota manager: rank, name, upgrade, course, projected start, projected completion, and a point of contact. Inform via e-mail when training is complete. If the training being conducted would normally incur an active duty service commitment (ADSC), insure required counseling and AF Form 63 is completed prior to start of training. Contact your local MPF Formal Training office for additional guidance. MILPDS training RIPs will automatically generate ADSC requirements.

1.18.4. When a training allocation cannot be filled, the OSS training office will notify AMC/A3TF so the quota may be reallocated. If circumstances prevent an identified candidate from attending the training (e.g., DNIF, unable to complete prerequisite training, etc.), inform AMC/A3TF immediately. Return all unused quotas to AMC/A3TF NLT 45 days prior to CSD.

1.18.5. All no-shows and late cancellations within 7 days of CSD must be explained. Forward an initial report of circumstances to AMC/A3TF quota management office within 24 hours of CSD. This initial notification will be followed by a memorandum of explanation from the OG/CC to AMC/A3T within one week. E-mail is the preferred method. Send to: **AMC.A3T@scott.af.mil** and courtesy copy **AMC.quotamanagement@scott.af.mil**.

1.18.6. Global Reach Aircraft Commanders Course (GRACC). Active duty units will be given priority over AFRC and ANG units due to mandatory upgrade requirements for AMC crews established in AFI 11-MDS Volume 1. Do not submit more than two candidates per wing per class without the GRACC scheduler's approval. Submit names NET 45 days and NLT 30 days prior to CSD. HQ AMC/A3TF will release the class roster 30 days prior to CSD for units to confirm the names and make any necessary corrections. Unfilled quotas will be available 14 days prior to CSD and units will be notified. Cancellations must be received NLT four duty days prior to CSD to avoid a no-show. HQ AMC/A3TF will not accept any additions 72 hours/3 days prior to CSD. Units can still cancel 24 hours prior to CSD to avoid a no-show being charged to the unit. No-shows will be handled IAW this paragraph. Questions regarding GRACC Scheduling can be referred to HQ AMC/A3TF, DSN 779-7881.

1.18.7. AMC/A3TF will maintain a standby list for each course offered. Send requests for additional quotas to AMC/A3TF for placement on the standby list. If unit capability is in jeopardy, AMC/A3TF will coordinate with Air Staff and AETC to add or reallocate additional quotas. AMC/A3TF quota managers will coordinate with the OSS training offices exclusively. Squadrons or individuals will be referred to their OSS training office. This policy is to ensure that all offices responsible for quota management are in-synch with each other and prevents lost seats. Please submit the name/phone number/e-mail for the primary and alternate point of contact for quota management in the OSS.

1.18.8. AMC units are prohibited from coordinating quota exchanges with other commands. OSS/OST training offices will forward all requests to the AMC quota manager for coordination with other commands. Please allow for extended coordination time when considering this option.

1.18.9. Senior Officer Training coordination. ALL Senior Officer Training is directed by AF/DPO, AF/DPG offices in coordination with MAJCOM Senior Leaders Management office and AMC/A3TF, and HQ AETC/A3R. Questions regarding Senior Officer training Course, availability and prerequisites can be forwarded to HQ AMC/A3TF @ DSN 779-3577. No formal actions to schedule training will be taken until directed by AF/DPO or AF/DPG in conjunction with MAJCOM Senior Leaders Management offices.

Chapter 2

INITIAL QUALIFICATION TRAINING

2.1. General Requirements. AFI 11-202 Volume 1 defines initial qualification training. This chapter specifies the minimum training requirements for initial qualification, re-qualification, conversion/difference qualification, and senior officer courses. The primary method for initial qualification is to attend and complete the appropriate formal training course listed in the ETCA. When a formal training course (quota) is not available, units may request a waiver to their MAJCOM to conduct a secondary method of training. Secondary method includes the completion of the appropriate formal training course--academic only with follow-on flying training conducted in-unit. As a last resort, request a waiver to complete a formal training course in-unit using the appropriate syllabus, formal school courseware, and simulator training. In the waiver request (**Figure 1.1**) the unit must describe the proposed alternative training solution and training schedule (see **paragraph 1.5.5**).

2.2. Initial Qualification Training (IQT) Prerequisites. Complete initial qualification prerequisites in accordance with AFI 11-202 Volume 1 and the course syllabus. See **Chapter 6** for formal IQT course listing and prerequisites in **Table 5.1**.

2.3. Ground Training Requirements. Complete ground training requirements for initial qualification in accordance with AFI 11-202 Volume 1 and this instruction. During formal training, aircrews may complete (and receive credit) for Mobility Training and Ancillary Training events in **Table 4.2**. See the appropriate formal training course syllabus.

2.3.1. If events in **Table 2.1** are not accomplished at the FTU, they must be completed at the gaining unit. The FTU will provide the gaining unit with documentation indicating completion of items in **Table 2.1** using standard ARMS Event Identifiers. If in-unit training is accomplished in lieu of formal school attendance, unit is responsible for ensuring all requirements are completed.

2.3.2. Completion of initial SERE Schools, combat (SS20) and water (SS32) according to AFI 16-1301, *Survival, Evasion, Resistance, and Escape (SERE) Operations*, and initial aircrew flight equipment training (during formal school) will establish the follow-on due dates of training (based on the date first completing the course) for recurring SERE and aircrew flight equipment training requirements.

Table 2.1. Initial Qualification Ground Training Requirements.

Code	Event	Crew Position	Notes
E030	5 year Passport, (Primary)	All	2,7
E035	2 year Passport (Secondary)	All	2,7
E112	Information Protection	All	7
E113	Human Relations	All	7
E114	Force Protection	All	7
G002	Aircraft Marshaling Training and Exam	All	5,7
	Flight Physical	All	3,7
	Physiological Refresher	All	3,7

Code	Event	Crew Position	Notes
G010	CBRNE Training	All	2,7
G060	Tactics Training	All	2
G065	Special Departure Procedure Training	P	1
G070	Aircrew Intelligence Training (AIT)	All	2,7
G080B	Communications Procedures CBT	All	2,7
G090	Anti-Hijacking	All	2,7
G100	Law of Armed Conflict (LOAC)	All	7
G120	ISOPREP Review	All	2,7
G130	Instrument Refresher Course	P, N	
G150	Approach Plate Familiarization Training	B	2
G182	Hazardous Cargo	P, B	2
G185	Cargo Loading Training	B	2
G190	Aircraft Servicing	All	2
G231	Initial Crew Resource Management (CRM)	All	7
G280	Small Arms Training	All	7
LL01	Aircrew Flight Equipment Familiarization Tng	All	7
LL03	Emergency Egress Training - Non Ejection	All	7
LL04	Aircrew Chemical Defense Training (ACDT)	All	7
LL05	Egress Training With ACDT	All	2,7
LL06	Aircrew Flight Equipment Training	All	6,7
SS32	Water Survival Training (Initial)	All	4,7
SS20	Combat SERE Training (Initial)	All	4,7
VT05	Threat Recognition Training	All	2

All=All crew positions	*P=All Pilots*	*AC=aircraft commanders, IPs and EPs*	*MPD or MPD/CP= All MPD Pilots or all MPD Pilots and all copilots*	*N=All Navigators*	*B=All Boom Operators*

NOTES:

1. If not accomplished during formal training.
2. Not required for BAQ crewmembers or SOC graduates not on aircrew mobility status (includes senior officers and staff officers maintaining BAQ).
3. Mandatory grounding item after expiration date; individual will not fly until required training is accomplished. Flight Physical expires on the last day of the birth month. Physiological Training expires 60-months after the last day of the month in which previously accomplished.
4. Initial training is called S-V80-A (CST) or S-V90-A(WST) according to AFI 16-1301 see **paragraph 2.3.2.** This training is not accomplished at the FTU, but should be completed before member arrives at the gaining unit. If the member arrives at the gaining unit without this training, it should be scheduled as soon as practical.
5. G002 is required 1 per Permanent Change of Station (PCS) per AFI 11-218.
6. LL06 should be accomplished in conjunction with SS02, LL03, or SS05. See **Chapter 7**.
7. IAW AFI 11-202 Volume 1, refer to reference publications which provide guidance for accomplishment of ancillary training requirements.

2.4. Flying Training Requirements. Complete flying training requirements for initial qualification in accordance with AFI 11-202 Volume 1 and this instruction.

2.5. Conversion/Differences Qualification Training Requirements. When possible, qualified instructor aircrew members will provide the training to create an initial cadre. In some instances, it will be necessary for units to form an initial cadre of crewmember personnel for whom specific training qualification requirements may be waived upon request. The following conditions will apply to the management of initial cadre crewmember qualification:

2.5.1. Tasked MAJCOM, in-coordination with lead and training command, will develop a training plan for unit conversions.

2.5.1.1. The training plan should include provisions to form a nucleus of crewmembers to include instructor and flight examiners (initial cadre).

2.5.1.2. Initial cadre will not be designated in a crew position higher than currently held, e.g. C-17 mission pilot (MP) to KC-135 evaluator pilot (EP), unless previously qualified in the conversion aircraft.

2.5.2. Units with unique aircraft modification (e.g., SATCOM, etc.) or missions (e.g., SOAR, Receiver Air Refueling, etc.) will develop and maintain in-unit difference training programs for assigned/attached crewmembers, if not available, as described in **paragraph 5.7**. Units will submit these training programs to the appropriate MAJCOM/A3T (or equivalent) for approval. Use the appropriate ARMS events in **Table 2.2** and include details in local supplement.

2.5.2.1. Q014, Difference Certification. Sq/CC will complete crewmember certification when difference training is complete and an evaluation is not required. When applicable, annotate "Q014 Difference Certification" (see **paragraph 1.8**). Away from home station the assigned unit will complete an AF Form 4324 and the individual will hand-carry to their host unit.

2.5.3. In-unit Difference Training. Difference training assumes the student is already qualified in the XC-135. The KC-135 ATS maintains several difference courses e.g., KC-135 GATM to Pacer CRAG, etc. In addition, CBT difference lessons are pre-loaded on CBT systems. When a formal difference course is not available, units will develop a DQT program with existing training resources e.g., CBT, etc. and guide in **Table 2.2**. Include all appropriate items in local supplement.

2.5.3. **(459ARW)** The 459 OSF/OST will coordinate with the KC-135 ATS for available difference courses maintained if in-unit difference training will be conducted. AFRC/A3T may coordinate a particular base or unit which already has an established difference training program. The difference training program will be reviewed by the 756 ARS/CC and 756 ARS/DO and approved by the 459 OG/CC.

Table 2.2. KC-135X Difference Qualification Training (DQT) Requirements Guide.

Code	Event	AC	MPD P/ CP	N	BO	Notes
AA01	Qualification Evaluation	1	1		1	2
A005	MPRS Familiarization Training	1	1		1	6

Code	Event	AC	MPD P/ CP	N	BO	Notes
A006	MPRS Certification Training	1	1		1	4, 6
A032	Difference Course (KC-135R to T-model)	1	1		1	6
A035	GATM Block 40.X to Block 30.X Diff Crse	AR	AR	AR	AR	4, 6
A036	GATM Difference Course	AR	AR	AR	AR	4, 6
G025	Aircraft Field Trip	1	1	1	1	
G251	ATD Difference Training Profiles	3	3			1
LL03	Emergency Egress Training-Non-Ejection	P	P	P	P	4
N010	Tanker RV	P	P			4
N016	Tanker RV, Overrun Procedures	P	P			4
N030	Tanker RV Delta (Point Parallel)	P	P			4
N130	Receiver Rendezvous/Air Refueling	P	P			3, 4
N132	Receiver RV Delta	P	F			3, 4
N136	Receiver RV Overrun Procedures	P	F			3, 4
P007	Stall Recognition and Recovery	P	1			1
P018	PNF Takeoff and Climb Duties	P	P			
P020	Takeoff	P	P			
P026	Takeoff and Climb Procedures	P	P			
P035	PMC Off Takeoff	1	F			1
P040	Sim. Engine Failure, Takeoff Continued	P	P			1, 7
P061	VFR Overhead	P	P			4
P066	Maneuver-Steep Turns	P	P			4
P170	Approach and Go-Around, Sim. Engine Out	P	P			1, 7
P171	Approach and Go-Around, Simulated	P	F			1
P180	Approach and Landing, Sim. Engine-Out	P	P			1, 7
P190	Landing	P	P			
P194	Landing 30-Degree Flaps	P	1			7
P200	Touch-and-Go Landing	P	F			
P240	Landing Gear Alternate Extension	F	F		P	
P250	Main Flap Manual Operation	F	F		P	
P366	Checklist Procedures and Use	P	P	P	P	
P367	Crew Coordination	P	P	P	P	
Q001	Open-Book Examination (If Required)	1	1	1	1	
Q002	Close-Book Examination (If Required)	1	1	1	1	
Q014	Difference Certification	1	1	1	1	

Code	Event	AC	MPD P/ CP	N	BO	Notes
R011	Receiver AAR, Indoctrination	P	F		1	3, 4
R013	Acft Receiver AAR	P	F			3, 4
R020	Receiver AAR (Night)	P	F			3, 4
R035	Receiver AAR (Heavy Onload)	P	F			3, 4
R040	Receiver AAR Breakaway & Emergency	P	P	AR	AR	3, 4
R050	Receiver AAR, Tanker Autopilot Off	P	F			3, 4
R060	Tanker AAR	P	P			4
R061	Tanker AAR Indoctrination	P	P			4
R070	Tanker Breakaway and Emergency	P	P			4
R080	Tanker AAR, Autopilot Off	P	P			4, 7
R180	Radio Silent Visual Signals	P	F		1	3, 4, 5
See **A2.4.7** and **A2.4.8** for Grading criteria						

NOTES:
1. For collocated units, accomplished in ATD only.
2. Pilots in DQT with different power plants will complete AA01 according to AFI 11-2KC-135 Volume 2.
3. For receiver pilots only (BO, as required).
4. Accomplish if not already qualified/certified.
5. Required for SOAR-certified BO only.
6. If equipped.
7. Traditional CP trained to familiarization level.

2.6. Multiple Qualification. Crewmembers will attend a formal initial qualification course for dual qualification in different MDS aircraft. Crewmembers maintaining dual qualification in different model aircraft will, as a minimum, maintain FTL A currency requirements in each aircraft (N/A for senior officers; see **paragraph 2.7**).

2.6.1. KC-135R and T model aircraft are considered the same MDS and do not meet multiple qualification criteria in AFI 11-202 Volume 1.

2.7. Senior Officer Qualification Requirements. AFI 11-202, Volume 1 identifies senior officer qualification requirements. Senior Officer Course (SOC) graduates will be assigned FTL E for continuation training purposes and will not fly unsupervised in a primary crew position (see **paragraph 4.3.2.5**). KC-135 R-model SOC is available on ETCA.

2.7.1. After qualification IAW AFI 11-202, Volume 1, and with OG/CC approval, senior officers (assigned or attached) may seek training which leads to a higher FTL and/or qualification. The unit OSS/OST office is responsible for determining training requirements based on the senior officer's flying experience and familiarity with the weapons system. HQ AMC/A3T or appropriate MAJCOM A3T (or equivalent) will approve the proposed training plan prior to execution.

2.7.2. Senior Officers that complete full qualification training requirements will maintain FTL A continuation training requirements.

2.8. Flight Surgeons. AFI 11-202 Volume 1 establishes AFI 11-2(MDS) Vol 1 as directive regarding flight surgeon flying requirements.

2.8.1. Flight surgeons assigned to unit will complete all items in **Table 4.3** for initial qualification. Complete flight surgeon testing on AFDL web based training.

2.9. Requalification Training (RQT). Determine RQT using AFI 11-202 Volume 1 Requalification Training requirements for the duration of unqualified time. The ability to requalify a crewmember should be considered on a case-by-case basis and individual performance. RQT accomplished at the formal school at Altus AFB will follow the appropriate ATS course syllabus (see **Table 6.1**).

2.9.1. Requalification and instructor training may be conducted simultaneously using the matrix at **Table 2.3** to determine criteria. For those crewmembers who are unqualified and have been removed from KC-135 instructor status for more than 39 months, initiate a waiver request to MAJCOM/A3T or equivalent (see **Chapter 1**) and include a Sq/CC directed training plan to regain instructor status when using this option. Units conducting simultaneous requalification and instructor training must compare the formal requalification course syllabus, instructor course syllabus, matrix at **Table 2.3** and the guide at **Table 2.4** to develop the individuals training plan. The plan must include all phases of training and the appropriate (suitable) substitute (e.g. CBT, IBT, simulators, number flights, etc.). For simultaneous requalification at the FTU, a waiver is not required; however, requests will be made from the gaining unit's Sq/CC to the 97 TRS prior to the training start date. The FTU may decide not to qualify the individual to instructor status based on performance or resources.

2.9.1.1. The FTU may conduct simultaneous requalification and instructor training without a waiver for previously qualified KC-135 crewmembers that will be assigned to the FTU.

2.9.2. See AFI 11-2KC-135 Volume 2 for simultaneous instructor re-qualification and re-qualification evaluation requirements.

Table 2.3. Flight Instructor Requalification Matrix.

Is crewmember qualified as a non-instructor in the KC-135?	Instructor Designation (KC-135)	Required Training	Instructor Evaluation
Qualified	Removed for less than 39-months	Directed by the Sq/CC and approved by the OG/CC	Recurring

Is crewmember qualified as a non-instructor in the KC-135?	Instructor Designation (KC-135)	Required Training	Instructor Evaluation
Qualified	Removed for 39-months or more	Directed by the Sq/CC and approved by the OG/CC	Initial
Unqualified less than 39 months	Removed for less than 39-months	Directed by the Sq/CC and approved by OG/CC	Recurring
Unqualified less than 39 months (TX-3)	Removed for more than 39-months	Use the appropriate instructor syllabus. Upon waiver approval, may complete instructor events to requalify as an instructor simultaneously with TX-3.	Initial
Unqualified 39 months or more but less than 8 years (TX-2 course required)	Removed 39-months or more but less than 8-years	Use appropriate formal school TX-2 syllabus and **Table 2.4**. Simultaneously requalify as instructor while attending requalification course with approved waiver.	Initial
Unqualified 39 months or more, but less than 8 years (TX-2 course required)	Removed 8-years or more	Use TX-2 syllabus and **Table 2.4**. May not simultaneously requalify as instructor.	Initial
Unqualified 8 years or more	Removed 8-years or more	Use TX-1 syllabus. May not simultaneously requalify as instructor. For instructor requalification, use formal school syllabus	Initial

Table 2.4. Instructor Requalification Training Guide.

Code	Event	AC	N	BO	Notes
AA01	Instructor Flight Evaluation	1	1	1	
A018	Aircraft commander Responsibilities	1			
A005	MPRS Familiarization Training	1		1	4,5,6
A006	MPRS Certification Training	AR		AR	4, 6
A010	Instructor Pre-Attendance Academics Training	1	1	1	7
A032	Difference Course (KC-135 R to T-model)	1		1	6
A035	GATM Block 40.X to Block 30.X Diff Crse	AR	AR	AR	6
A036	GATM Difference Training	AR	AR	AR	6

Code	Event	AC	N	BO	Notes
A044	Instructor Pre-Attendance Workbook	1	1	1	1
N010	Tanker RV	P			7
P007	Stall Recognition and Recovery	P		F	2
P012	Takeoff-Gyro Mode	P			
P015	Instrument Departure	P			
P020	Takeoff	P			
P040	Simulated Engine Failure, Takeoff Continued	P			
P061	VFR Overhead	P			
P066	Maneuver-Steep Turns	P			
P071	Holding	P			
P072	Penetration (Published or STAR)	P			
P073	En Route Descent	P			
P101	ILS Approach	P			
P102	ILS (Gyro Mode)	P			
P103	PAR Approach (if available)	P			
P110	Non-Precision Approach	P			
P111	VOR/TACAN/FMS Procedures	P			
P112	VOR/TACAN/Localizer/FMS Approach	P			
P117	GPS Approach (GATM Only)	P			
P130	Circling Approach	P			
P140	Visual Traffic Pattern	P			
P160	Missed Approach	P			
P170	Appr. & Go-Arnd, Simulated Engine Out	P			2
P171	Appr. & Go-Arnd, Sim, Eng.Out, Rudr. Power	P			2
P180	Approach and Landing, Simulated Engine Out	P			2
P190	Landing	P			
P194	Landing, 30-Degree Flaps	P			
P195	Landing, Simulated Engine Out, 4-Engine T/O	P			2
P200	Touch-and-Go Landing	P			
P215	Landing Attitude Demonstration	P			
P240	Landing Gear Alternate Extension			P	
P250	Main Flap Manual Operation			P	
P340	Briefing and Control of Passengers			P	
P355	Troubleshooting AAR Equipment Malfunctions			F	

Code	Event	AC	N	BO	Notes
P360	Mission Planning and Briefing	P		P	7
P366	Checklist Procedures and Use	P	P	P	
P369	Aircraft Equipment Operation	P	P	P	
Q001	Open-Book Qualification Examination	1	1	1	
Q002	Closed-Book Qualification Examination	1	1	1	
Q043	ATD-OFT Simulator Operator Training	1			
Q044	Tactics Maneuvers Certification	1	1	1	
R013	Acft Receiver AAR	P			3, 6
R040	Receiver AAR Breakaway & Emergency	P		F	3, 6
R050	Receiver AAR, Tanker Autopilot Off	P			3, 6
R060	Tanker AAR	P		P	
R070	Tanker AAR Breakaway & Emergency	P		P	
R080	Tanker AAR Autopilot OFF	P			
R120	Contacts			P	
R135	Preparation for Contact Procedures			P	
R140	Tanker Manual Contact			P	
R180	Radio Silent Visual Signals	P		P	3
See **A2.4.7** and **A2.4.8** for Grading criteria					

NOTES:

1. Student will complete the most recent web-based pre-attendance instructor course if the individual has been unqualified or removed from KC-135 instructor status over 39-months. Complete the course, including testing, before the flight evaluation.
2. For collocated units, accomplish in the ATD only.
3. Receiver qualified pilots only.
4. If not already qualified/certified.
5. Pilots and boom operators require a one-time only certification flight under supervision of a like-specialty MPRS instructor.
6. If equipped.
7. Assumes Basic Navigator requalification. SOAR-assigned units will develop/maintain a SOAR training program (see **paragraph 2.10.2**).

2.10. Navigator Training. Navigator training includes three training phases:

2.10.1. Basic Navigator. KC-135 unit level staff navigator who may perform in-flight duties not including rendezvous (RDVZ). These basic navigator duties are limited to system operation, communication, and crew coordination. Units may also maintain a local training program for initial and requalification training that focus on FMS-3 (B-Kit) operations, Checklist procedures, CRM and communication training. The maximum level of qualification is BMC (FTL C or FTL E). See ground and continuation training requirements in **Chapter 4**.

2.10.1.1. Basic navigators may fly any sortie with an FMS-3 suite installed. The BMC basic navigator may fly without an instructor of same specialty, once qualified. A BMC navigator may deploy and fly as a staff navigator (mission planning cell, scheduler, etc.). When used, basic navigator will complete requirements in **Table 3.1** and **Table 3.2**. BMC basic navigator will comply with Theater Deployment Requirements (e.g., CONOPS, etc.).

2.10.1.2. Basic navigators non-current (FTL E) may fly with an IN or IP to regain their currency (M010) with a FMS-3 Navigator Suite installed.

2.10.2. SOAR Navigator**.** KC-135 navigators complement designated SOAR units as additional crewmember. SOAR navigator training is conducted in-unit by 22 ARW, McConnell AFB. SOAR navigators will be basic-qualified and will maintain MR status for the SOAR mission. See ground and continuation training requirements in **Chapter 4**.

2.10.2.1. SOAR navigators may fly any sortie with an FMS-3 suite installed.

2.10.3. Instructor Navigator. See **Table 5.4** for minimum flying time requirements. When selected for upgrade, complete course prerequisites (see **paragraph 5.4.22** and **Table 5.4**). The CBT or web-based lessons (and testing) are a baseline program followed by completion of the appropriate in-unit developed instructor training and evaluation. Units will develop additional training requirements to meet requirements in **paragraph 5.4**.

Chapter 3

MISSION QUALIFICATION AND CERTIFICATION TRAINING

3.1. Description. This chapter establishes minimum criteria and training requirements for conventional and OPLAN-8010 mission certification training (MCT). All crewmembers will complete initial/re-qualification training prior to becoming mission ready (MR). Except where specifically stated, units conducting initial/requalification training and MCT may arrange mission sequence or sequence training events as necessary to use flying training hours effectively. Crewmembers will be mission ready (MR) before entry in special mission certification or upgrade training unless noted in **Table 3.1**, **Table 3.2** **or** **Table 3.3**. Crewmembers in MCT may participate in exercises.

3.1.1. Conventional certification must be completed prior to crewmembers deploying. If operational requirements exist, conventional certification and 8010 certification may be conducted separately. If 8010 certification is not conducted in conjunction with conventional certification, the crewmember will complete 8010 certification IAW AMCI 10-450, *KC-135 and C-130 OPLAN 8010 Generated and Alert Forces*, as soon as conditions permit (return from TDY, obtain appropriate clearance, etc.).

3.2. Time Periods for Mission Qualification and Certification Training. See **Table 1.2**. Completion of ground training requirements in **Table 3.1** and flying training requirements in **Table 3.2** will result in a crewmember being declared MR - Conventional. Aircraft commander conventional certification requires Sq/CC approval through the Review and Certification (R&C) Board according to AFI 11-2KC-135 Volume 2.

3.2.1. MR – Conventional certified AC Initial Qualification (ACIQ, crossflow PTX1 graduates) will be counted as a MR pilot for SORTS and TRP purposes and may fly as an FPL, on any crew, including operational missions, upon completion of MCT,. ACIQ graduates are not considered a MR AC and may not fly as A-code (pilot-in-command) until formally certified by the Sq/CC.

3.2.2. Crewmembers in MCT (who are current and qualified), may fly without an instructor of like specialty on CONUS only sorties. OCONUS units may allow NMR crewmembers to fly local, routine, and non-contingency overseas sorties in their respective theater. NMR AC may perform AC duties under supervision of an IP.

3.2.3. For units with OPLAN-8010, completion of the appropriate training events in **Table 3.3** will result in a crewmember being declared MR – OPLAN-8010. Certification will include a mission briefing to the Wg/CC or designated representative.

3.2.3.1. Units will attempt to have 100 percent of line crewmembers OPLAN-8010 certified (not required for basic or SOAR navigators). Complete events in **Table 3.3** before Q010, OPLAN-8010 certification.

3.2.3.2. OPLAN-8010 certification is not required for crewmembers attached for the purposes of maintaining flying currency and expertise (i.e. MAJCOM HQ and NAF assigned crewmembers).

3.2.3.3. Q010 is not required for formal school instructors unless specified in MAJCOM supplement.

3.3. Ground Training Requirements. All crewmembers will complete applicable events in **Table 3.1**, as well as any events not accomplished at the FTU in **Table 2.1**. For units with OPLAN-8010, complete all applicable ground events in **Table 3.3**. MCT is not applicable for senior officers or staff officers who maintain BAQ (except basic navigator) and may be accomplished concurrently with other training programs or courses.

3.3.1. Local training and CONUS missions may be flown before completing all events except as noted in **Table 3.1**.

3.3.2. If required, complete FTU proficiency (P) events (not accomplished at formal school course) before MR.

3.3.3. MR crewmembers transferring between units will require only Aircraft Ground Marshaling Training and Examination (G002), ISOPREP Review (G120), Local Area Survival (SS01), Aircrew Flight Equipment Familiarization (LL01), and unit-specific MR training events (and events in which they may have lost currency during the change-of-station).

3.3.4. Ground training events accomplished during MCT establishes the crewmember's due dates for subsequent continuation training. Completion of S-V80-A, S-V90-A according to AFI 16-1301, and initial aircrew flight equipment training (during formal school) will establish the follow-on due dates of training (based on the date first completing the course) for recurring SS02, SS03, SS05, SS06, an G100 requirements.

Table 3.1. Mission Certification Ground Training Requirements (Conventional).

Code	Event	Crew Position	Notes
A005	MPRS Familiarization Training	P, B	1,2,9
A006	MPRS Certification Training	As Req: P, B	1,2,9
A036	Block 40.X Difference Training	All	1,2,10
G002	Aircraft Marshalling Training and Exam	All	7,13, 16
G003	Flight line Security Training/Exam	All	7,12
G041A	Unit Mission Briefing (Conventional)	All	2,6,8
G065	Special Departure Procedures	P	1,2,4
G080A	Communication Procedures	P, B	7
G081	L-Band SATCOM	N	6,8
G160	Overwater Navigation Procedures	P, N	4
G190	Aircraft Servicing	As Req: P, B	1,4,5,6,11
G210	Ground Alert Start Procedures	P, B	4
LL01	Aircrew Flight Equipment Familiarization Training	All	1,7, 14, 16
LL03	Egress Training	All	4, 16
SS01	Local Area Survival Training	All	1,7,13, 15
Q016	Conventional Certification	All	2,3,6,8
Q017	ILS PRM	P	1,2,4
Q060/ Q70	EMCON 3/4	All	1,2,4
Q579	RNAV/GPS Operations Certification	AC, MPD/CP, N	1,10

Code	Event		Crew Position		Notes
All=All crew positions	*P=All Pilots*	*AC=aircraft commanders, IPs and EPs*	*MPD or MPD/CP= All MPD Pilots or all MPD Pilots and all copilots*	*N=All Navigators*	*B= All Boom Operators*

NOTES:

1. Pilots upgrading to AC are not required to accomplish this item if previously accomplished as a copilot/MPD pilot.
2. Mission-ready crewmembers transferring between flying units only need unit-specific training in these events (plus events in which they lost currency).
3. Q016 may be accomplished before aircraft qualification/re-qualification, however, an individual cannot be signed off as MR until all training is complete. Individuals who are at their unit and awaiting the start of the formal school may begin MCT ground training and establish reference dates. In-unit training time begins upon return from formal school (see **paragraph 1.7**).
4. Credit may be awarded if the event was accomplished at the formal school or during in-unit upgrade.
5. Not required MAJCOM HQ or NAF assigned crewmembers.
6. Not required for formal school instructors unless specified in MAJCOM Supplement.
7. AFI 11-2KC-135 Volume 1 is not the reference publication governing completion of this event. Therefore, IAW AFI 11-202 Volume 1, Paragraph 6, refer to reference publications which provide guidance for accomplishment of ancillary training requirements.
8. SOAR Navigator only.
9. If MPRS-equipped, see requirements/exceptions at **paragraph 5.6.5.2**.
10. If GATM-equipped, see requirement/exceptions at **paragraph 5.6.6**.
11. For units with a primary (or secondary) OPLAN-8010 DOC only. MAF MAJCOM with unique requirements may specify exceptions in the appropriate MAJCOM supplement.
12. Only for individuals who are required to drive on the flight line (as determined by the Sq/CC).
13. Accomplish upon arrival after each permanent change of station. See **paragraphs 3.3.1** and **3.4.2**.
14. Reference AFI 11-301 Volume 1 for details.
15. Reference AFI 16-1301 for details
16. Must be accomplished prior to the first flight

3.4. Flying Training Requirements.

3.4.1. BAQ. Crewmembers pursuing MR status will accomplish FTL C (see **paragraph 4.3.2.3**) continuation training requirements. Upon completion of MCT-Conventional certification, the Sq/CC will adjust the crewmember's training level, if appropriate. Prorate continuation training requirements based on the date MR status was declared.

3.4.2. After arrival at duty station, all crewmembers will receive a local area briefing and supervised local orientation flight to include a takeoff, approach, and landing for MPD pilots (not applicable for in-unit initial, re-qualification or upgrade training).

3.4.2. **(459ARW)** Local area briefing will at a minimum cover 459 ARW OGV AFI11-2KC-135V3, 459 ARW Sup1 guidance, ground operations specific to Andrews AFB, MD

(i.e. ramp freeze procedures, BASH Procedures, Taxi Restrictions) as well as operating in the local Andrews, AFB VFR and radar patterns. The supervised local orientation flight will focus on operating in the Andrews AFB, VFR, radar patterns, as well as the Washington Tri-Area Class B Airspace. This local orientation flight MUST be accomplished prior to the Review and Certification board.

3.4.3. Do not delay awarding MR status for Q033, MPRS certification. Crew member may receive just-in-time training if MPRS aircraft are unavailable for training.

3.4.4. **(Added-459ARW)** Additional flying training requirements can be added at the discretion of the 756 ARS/CC prior to awarding MR status.

Table 3.2. Mission Certification Flying Training Requirements (Conventional).

Code	Event	AC	MPD P/CP	N	BO	Notes
P260	HAVE QUICK Radio Procedures	P	P	P		9,11,12,13
P270	Secure Radio Operation	P	P	P	P	9,11,12,13
P280	ACDTQT	1	1	1	1	9,11,12,13
P290	Aircraft Alert Start Procedures	P	P		P	3,6,9
M001	Sortie	AR	AR	AR	AR	
M030	Overseas Sortie	1				9,12,13
M050	Tactical Sortie	1	1	1	1	7,9,12,13
Q011	Formation Lead Certification	1				12,13
Q021	BRAVO Probe Equipped Receivers				P	2,4,12,13,14
Q022	CHARLIE Receptacle Equipped Fighters, Day				P	4,5,12,13,14
Q023	CHARLIE Receptacle Equipped Fighters, Night				P	2,4,5,12,13,14
Q028	GOLF Day Heavy Receiver	P			P	1,4,5,8,12,13
Q029	GOLF Night Heavy Receiver				P	1,4,5,12,13
Q033	MPRS Certification	AR	AR		AR	2,10,11,13,14
Q040	GATM System Certification	1	1	1	1	10,11,12,13
Q041	GATM Data Link Certification	1	1	1		10,11,12,13
Q044	Tactics Maneuvers Certification	1	1	1	1	7,9,12,13
R160	Radio Silent Breakaway	1	1		P	12,13
R165	Radio Silent AAR	1	1		P	12,13
See **A2.4.7** and **A2.4.8** for Grading criteria.						

Code	Event	AC	MPD P/CP	N	BO	Notes

NOTES:

1. Pilots may be declared MR when certified in category of receivers required by unit mission.
2. Q021 and Q033 may be accomplished before Q023 provided day training is accomplished before commencing night training.
3. Initial training must be accomplished in the aircraft, all others are creditable in OFT.
4. BO may be declared certified in a specific air refueling category with approval by Sq/CC.
5. Sq/CC may declare a BO MR when certified in category receivers required by unit mission or after accomplishing events Q22, Q23, and Q28. Complete remaining events with an instructor.
6. For units with OPLAN-8010 DOC requirement only.
7. Traditional copilots may perform M050 PF duties under direct supervision of an instructor.
8. Day or Night for pilots.
9. Not required for BMC aircrew unless specified in MAJCOM Supplement.
10. If equipped.
11. Not required for AC who may have previously accomplished the event as a CP or MPD pilot.
12. Credit may be awarded if the event was accomplished at the formal school or during in-unit upgrade.
13. Mission-ready crewmembers transferring between flying units only need unit-specific training in these events (plus events in which they lost currency).
14. USAFE may elect to postpone Q023 certification for 90 days (in addition to **Table 1.2** timeline) during long-daylight periods in summer. While Q023 is postponed, units may train and certify boom operators in Q021 and Q033. See **Table 5.8** for qualification requirements.

Table 3.3. Mission Certification Training-OPLAN-8010 Requirements.

Code	Event	Crew Position	Notes
A037	OPLAN-8010 Performance Training	P	1,2
G031	Initial Command & Control Procedures	All	1,2
G033	Unit Alert Procedures	All	1,2,4
G034	MITO Procedures	All	2
G035	PLZT Goggle (or MIL-G) Training	All	1,2,3
G036	Flash Blindness and Thermal Protection	All	1, 2
G040	OPLAN-8010 Study	All	2
G041B	Unit Mission Briefing (8010)	All	2
G190	Aircraft Servicing	All	1, 2, 5
Q010	OPLAN-8010 Certification	All	2, 5

All=All crew positions	*P=All Pilots*	*AC=aircraft commanders, IPs and EPs*	*MPD or MPD/CP= All MPD Pilots or all MPD Pilots and all copilots*	*N=All Navigators*	*B= All Boom Operators*

Code	Event	Crew Position	Notes

NOTES:

1. AC upgrades are not required to accomplish if previously accomplished as a copilot/MPD Pilot.
2. For units with a primary (or secondary) OPLAN-8010 DOC only. MAJCOM with unique requirements may specify exceptions in the appropriate MAJCOM supplement.
3. G035 must be completed within 60-days of helmet modification; crewmember may be declared MR before completing G035.
4. Mission-ready crewmembers transferring between flying units only need unit specific training in these events (plus events in which they lost currency).
5. Credit may be awarded if the event was accomplished at the formal school.

Chapter 4

CONTINUATION TRAINING

4.1. Description. This chapter establishes the minimum flying and related ground training requirements to maintain currency. The unit commander will ensure each crewmember receives sufficient continuation training to maintain individual proficiency.

4.2. Aircrew Status. KC-135 crewmembers are assigned to the following status:

4.2.1. Mission Ready (MR). For Status of Resources and Training System (SORTS), operational tasking, and deployments a MR crewmember is defined as one who is available and qualified in the squadron's mission (will have completed qualification and mission certification training for the applicable crew position in this AFI).

4.2.2. Non-Mission Ready (NMR). A crewmember that is unqualified, non-current or incomplete in required continuation training, or not certified to perform the unit mission. See **paragraph 4.9** for specific guidance on crewmembers who are non-current or incomplete in continuation training.

4.2.3. Basic Mission Capable (BMC**).** A non-mission ready (NMR) crewmember assigned to MAJCOM headquarters, NAF, 618 TACC, USAF Expeditionary Center, Contingency Response Wing (CRW), Contingency Response Group (CRG), formal school, or Direct Reporting Unit (DRU), who has satisfactorily completed mission certification training, does not maintain MR status, but maintains familiarization in the command's or unit's operational mission. Basic (non-SOAR) navigators should be assigned BMC.

4.2.3.1. The crewmember may maintain qualification in some aspects of the unit mission and is able to attain full qualification in the unit mission within 45 days.

4.2.3.2. Formal School (AETC) BMC crewmembers are qualified to conduct all aspects of the AETC training mission. AETC instructors must be qualified in the training/unit mission before performing instructor duties. Current and qualified formal school instructors maintain MR status if they complete the appropriate events in **Chapter 4** (events exempted by note).

4.2.3.3. BMC crewmembers may log instructor or evaluator time for the portion of the mission for which they are current and qualified and performing instructor or evaluator duties.

4.2.4. Basic Aircraft Qualification (BAQ). A crewmember that has satisfactorily completed initial qualification training and is qualified to perform aircrew duties in the unit aircraft.

4.2.5. MR, BMC, and BAQ crewmembers must accomplish and/or maintain the requirements in AFI 11-202 Volume 1 (for their respective status) and the appropriate events in the ground and semi-annual flying continuation tables in **Chapter 4**.

4.3. Training Levels.

4.3.1. Sq/CC will assign Flying Training Levels (FTL) to assigned (and attached) crewmembers (see **paragraph 1.4.6.2**). Base FTL assignments on experience and aircraft proficiency.

4.3.1. **(459ARW)** The 756 ARS/CC will use the following guidelines when determining FTL A and B.

4.3.1.1. NMR crewmembers assigned to MAJCOM staff, NAF, 618 TACC, USAF Expeditionary Center, CRW, CRG, formal school, or direct reporting unit (DRU), are normally categorized as BMC and assigned FTL A or FTL E. Basic (non-SOAR) navigators are assigned FTL C or E.

4.3.1.2. MAJCOM staff and/or NAF instructor/flight evaluators may fly unsupervised when maintaining FTL A and applicable ground training in **Table 4.1**. BMC MAJCOM instructors or evaluators assigned overseas or in the CONUS may fly unsupervised on routine, non-contingency sorties in their respective theaters. Lead Command evaluators may fly unsupervised in any theater when maintaining FTL A and applicable training in **Table 4.1** and **4.2**.

4.3.1.3. Formal school instructors are exempt from a series of training events (e.g., G182, G190, LL04, P280, Q016, SS02, and SS03) unless specified in MAJCOM supplement.

4.3.2. Flying Training Levels (FTL).

4.3.2.1. FTL A Highly Experienced Crewmembers. (As a guide, crewmembers having 10 or more years of operational flying experience) This may include MR or NMR MAJCOM headquarters staff and 618 TACC personnel; formal schoolhouse instructors; NAF personnel; USAFEC instructors, WG/CC, OG/CC, and Sq/CC, operations officers, crewmembers assigned to OG evaluation positions, and instructors assigned primarily to staff duties. Sq/CC may assign highly experienced MR line crewmembers to FTL A.

4.3.2.1. **(459ARW)** FTL A Highly Experienced Crewmembers. Crewmembers having 10 or more years of operational flying experience and assigned the duty position of Instructor. All Evaluators will be assigned to FLT A.

4.3.2.2. FTL B Experienced, MR Crewmember. (As a guide, crewmembers having between 5-10 years of operational flying experience)

4.3.2.2. **(459ARW)** FTL B Experienced, MR Crewmembers. All mission ready Crewmembers having between 5-10 years of operational flying experience and assigned to the duty position of Aircraft Commander or Boom Operator.

4.3.2.3. FTL C MR Crewmember or BAQ Crewmember pursuing MR status after initial qualification training. (As a guide, crewmembers having less than 5 years of operational flying experience) Initially assign inexperienced MR crewmembers to FTL C.

4.3.2.4. FTL D No longer used.

4.3.2.5. FTL E — BAQ or BMC non-instructor staff. May include senior officers, MAJCOM, NAF, and 618 TACC staff who are not maintaining MR or instructor status. FTL E requirements are insufficient for MR status, and crewmembers assigned to FTL E will fly with an instructor of like specialty at all times. (see **paragraph 1.10.4**) BMC Basic Navigators see **paragraph 2.10.1**.

4.3.2.6. Change of FTL. Once the semi-annual period begins, do not move a crewmember to a level requiring fewer events. (***EXCEPTION:*** Units associating FTLs

with crew positions may change FTLs after upgrade i.e. instructor upgrade) BAQ crewmembers may be placed into a different FTL any time after attaining MR status. Prorate events upon changing training levels.

4.3.3. Ground Training Levels (GTL). Operational flying includes all MAF aircraft flight training where the aviator receives periodic continuation training. Separate levels are no longer utilized. All crewmembers will follow the frequency listed for their crew position in **Table 4.1**. See notes for when exceptions apply.

4.4. Training Events/Tables. ARMS training event identifiers and event descriptions are listed in **Chapter 7**. The unit may designate Unit Defined Events (UDE) as "X" event (i.e. X020) and will include local X event identifiers and description in local supplement.

4.4.1. Crediting Event Accomplishment. Credit required events accomplished on training missions, operational missions and satisfactory qualification evaluations toward the crewmembers currency requirements. Event completion establishes a subsequent due date. Use date of evaluation as the date of accomplishment for all flying training currency events that were trained during the formal course. Pilots may credit G271, G272, G273, and G274 upon satisfactory completion of evaluation for the formal course (use the evaluation date as the date of accomplishment). ATS courses are listed in **Table 6.1**. (see **paragraph 4.8** for proration).

4.4.1.1. Credit all AC Upgrade and instructor course training event accomplishments toward continuation training requirements for the crew position in which the individual is currently qualified, including upgrade training done in the left seat and pre- (or post) instructor course pilot training done in the right seat.

4.4.2. For an unsatisfactory flight evaluation, do not log continuation training events items graded Q-3 (according to AFI 11-2KC-135 Volume 2) until re-qualified.

4.4.3. Make-up training (ground or flying) is creditable towards the new training period.

4.4.4. Instructor training requirements and responsibilities. Instructors and flight examiners may credit 50 percent of their total continuation training requirements per event while instructing or evaluating. ***EXCEPTION:*** Instructor and flight examiner pilots may not credit takeoff or landings flown by another pilot. Instructor and flight examiner boom operators may not credit R070, R073, R100, R120, R125, R130, R140, R150, R155, R160, R165 accomplished by another boom operator.

4.4.5. ARMS. Record all training events in ARMS (with the appropriate exemptions, notes, and adjustment in the course descriptions).

4.4.5.1. Training events conducted during block training or phase training may be consolidated under one ARMS entry.

4.4.5.2. Use one ARMS entry for combined training events.

4.4.5.3. Input all one-time events and events required for Permanent Change-of-Station (PCS) in the ARMS database. Do not maintain these events on the crewmember's currency report unless specified in local supplement.

4.4.5.4. Flying events accomplished in the simulator as allowed in **Table 4.4**, **Table 4.5**, **Table 4.6**, and **Table 4.7** will be coded with an "S" prefix and within ARMS use the

Restrictions tab under Profile Task Information. Ensure the maximum number of simulator creditable events is not exceeded.

4.5. Continuation Training Requirements.

4.5.1. Completion and tracking of continuation training is the responsibility of the individual crewmember. Crewmembers shall actively work with unit schedulers and training offices to ensure their continuation training is accomplished as described in this chapter.

4.5.2. Ground Training Events. Crewmembers will comply with requirements of **Table 4.1**, **Table 4.2** and **Table 4.3**.

4.5.2.1. Failure to accomplish events in **Table 4.1** leads to non-mission ready status. See **paragraph 4.9** for exceptions and for regaining mission ready status.

4.5.2.2. Failure to complete mobility training in **Table 4.2** does not lead to non-mission ready status, but may restrict member from certain missions. Mobility training items for attached personnel (i.e. MAJCOM, NAF, USAFEC, etc.) are not required to be tracked at unit of attachment unless deploying with attached unit. These individuals mobility requirements will be determined and tracked by assigned unit's UDM.

4.5.2.3. Crewmembers attached to units (i.e., NAF, MAJCOM, USAFEC, etc.) may accomplish ground training events at locations other than their unit of attachment. The crewmember is responsible for reporting accomplished training events to their unit of attachment (ARMS office).

4.5.2.4. Crewmembers performing alert duty may accomplish ground training that does not degrade required response time or mission accomplishment. Specify requirements and or restriction in MAJCOM supplement and local supplement.

4.5.2.4. **(459ARW)** Crewmembers performing alert duty may perform ground training without restriction, provided required response time will not be degraded. If specific requirements and or restrictions arise they will be addressed during the assumption of alert (AOA) briefing.

4.5.2.5. Flight Surgeons use requirements in **Table 4.3**.

Table 4.1. Aircrew Ground Continuation Tng Reqs (Failure to accomplish = NMR).

Code	Event	Crew Position	Freq	Reference Directive	Notes
	Flight Physical	All	A	*AFI 48-123*	1,11,14,15
	Physiological Refresher	All	60M	*AFI 11-403*	1,11,15
G030	OPLAN-8010 Command & Control Procedures.	P, B	Q	*AMCI 10-450*	2,3,13,20
G040	OPLAN-8010 Study	P, B	Q	*AMCI 10-450*	2,3,13,20
G041A	Unit Mission Briefing (Conventional)	All	AR		2,13,20
G041B	Unit Mission Briefing (8010)	All	A	*AMCI 10-450*	2,3,13,20
G060	Tactics Training	All	SA		2,8,13,17,20

Code	Event	Crew Position	Freq	Reference Directive	Notes
G070	Aircrew Intelligence	All	A	*AFI 14-105 w/supp* *AFI 14-202v1* *AFI 14-MDSv1*	2,8,15,20
G080A	Communications Procedures	All	365D	*AFI 33-201v2*	2,8,13,15,16
G080B	Communications Procedures CBT	All	365D	*AFI 33-201v2*	2,8,13,15,16
G090	Anti-hijacking	All	T	*AFI 13-207*	2,15, 20
G130	Instrument Refresher Course	P, N	4Q	*AFMAN 11-210*	15,18
G145	MPRS Ground Training	P	A		8,9,12,20
G150	Appr. Plate Familiarization	B	A		20
G182	Hazardous Cargo Training	P	T	*AFIMAN 24-204*	2,20
	Hazardous Cargo Training	B	24M	*AFIMAN 24-204*	2,20
G185	Cargo Loading Training	B	A		2,8,20
G190	Aircraft Servicing	P, B	T		2,3,13,20
G210	Ground Alert Start Procd.	P, B	A		2,3,8,13,20
G215	EADI Multifunction Display	B	B		2,13,20
G220	Aircraft Systems-CBT/GST	P	A		6, 20
	Aircraft Systems-CBT/GST	N	AR		6,20
G221	Datalink Refresher—CBT	P	A		9,20
	Datalink Refresher—CBT	N	A		2,20
G227BR	APU—CBT	B	B		20
G228R	Electrics and Fuel Systems	B	A		20
G229	AAR Systems	B	A		20
G230	CRM Refresh Trng	All	A	*AFI 11-290*	6,15,20
G802	SOAR Ground Training	All	A		2,5,20
LL03	Emergency Egress Training -Non-Ejection Seat	All	T	*AFPD 11-3* *AFI 11-301v1*	1,15
LL06	Aircrew Flight Equipment	All	T	*AFI 11-301*	19
NV03	NVG Ground Refresher	P, B	20M	*AFI 11-202v1*	5,15,20
SS02	Combat SERE Training	All	36M	*AFI 16-1301*	2,15,20
SS05	Water Survival Training	All	36M	*AFI 16-1301*	2,15,20
Q010	OPLAN-8010 Certification	P, B	A		2, 3,10,13,20
Q061	Tactics Test	All	18M		2,8,13,17,20

*See **Terms** for frequency definitions*

All=All crew positions	*P=All Pilots*	*AC=aircraft commanders, IPs and EPs*	*MPD or MPD/CP= All MPD Pilots or all MPD Pilots and all copilots*	*N=All Navigators*	*B= All Boom Operators*

Code	Event	Crew Position	Freq	Reference Directive	Notes

NOTES:

1. Failure to accomplish recurring ground events will result in "do not fly" status until the training is accomplished. See the appropriate event descriptions.
2. Not required for BMC or BAQ aircrew unless specified in this AFI (e.g. Basic Navigator see **paragraph 2.10.**).
3.Required for units with OPLAN-8010 requirements or as directed by MAJCOM. For USAFE, currency is S (Semi-Annual) for G030 and G040.
4. Not Used.
5. Special Operations Air Refueling (SOAR)-certified crewmembers only.
6. Credit during initial, upgrade, and re-qualification training to establish a reference date.
7. Not Used.
8. Local sorties not requiring this event may be accomplished while non-current for this event. (see **paragraph 4.9.3.1.**)
9. As Required for BMC crewmembers.
10. In addition to the annual requirement, crewmembers must recertify with each OPLAN-8010 revision IAW AMCI 10-450.
11. Flight Physical and Physiological Training are tracked on the top of each crewmember's Individual Training Summary (ITS). Therefore, there is no longer a need to assign and track these training events in the training module of ARMS.
12. G145 Required if unit is MPRS equipped and crewmember is certified.
13. Not required MAJCOM HQ or NAF assigned crewmembers.
14. Flight Physical expires on the last day of the birth month.
15. AFI 11-2(MDS) Volume 1 is not the governing directive for completion of this event. IAW AFI 11-202 Volume 1, Paragraph 6, refer to HQ USAF/A3OT reference publications for current ancillary training frequencies.
16. OG/CC may approve an extension of six months.
17. OG/CC may specify an alternate frequency for Tactics training, but not less than "annual."
18. Crewmembers on active flying status must complete IRC every fourth quarter after completion IAW AFMAN 11-210. This course is not linked with the IRC examination which is to be completed in the check cycle.
19. LL06 should be accomplished in conjunction with SS02, LL03, or SS05. See **Chapter 7**.
20. The OG/CC or equivalent is the waiver authority for this event. See **paragraph 4.9.3**.

Table 4.2. Aircrew Specific Mobility Training Requirements (Failure to accomplish = restrictions may apply*).

Code	Event	Freq	Reference Directive	Notes
C040	Mobility Folder Review	AR	*AFMAN 10-401* *AFI 36-507*	1
E030	5-Year Passport (Primary)	60M	*Foreign Clearance Guide*	
E035	2-Year Passport	24M	*Foreign Clearance Guide*	
G120	ISOPREP Review	AR	*JP 3-50*	

Code	Event	Freq	Reference Directive	Notes
G280	Small Arms Training	24M	*AFI 36-2226* *AFI 31-207*	
LL04	Aircrew Chemical Defense	B	*AFI 11-301v1*	3
SS03	Conduct After Capture	36M	*AFI 16-1301*	3
SS07	Contingency SERE (HRI	AR	*AFI 16-1301COCOM Directive*	2
VT05	Threat Recognition	A	*Chapter 4*	3
*See **Terms** for frequency definitions*				

NOTES:

1. See Unit Deployment Manager (UDM) for Mobility Folder Review frequency and additional USAF Ancillary and Mobility requirements.
2. X denotes designator to differentiate different contingency and/or theater training tasking requirements. Units may use suffix "E" for Enduring Freedom, "I" for Iraqi Freedom, and "H" for Horn of Africa.
3. The OG/CC or equivalent is the waiver authority for this event. See **paragraph 4.9.3**.

**Failure to accomplish events may restrict a crewmembers ability to participate in missions that require the event.*

Table 4.3. Flight Surgeon Ground and Aircrew Specific Mobility Continuation Tng Reqs.

Code	Event	Frequency	Notes
	Flight Physical	A	1,6
	Physiological Refresher	60M	1,6
C040	Mobility Folder Review	AR	3
E030	5-Year Passport (Primary)	60M	2
E035	2-Year Passport (Secondary)	24M	2
G090	Anti-Hijack Training	One-time	5
G120	ISOPREP Review	AR	2
G231	CRM (One-time Event in Primary Assigned Aircraft)	One-Time	
LL01	Aircrew Flight Equipment Familiarization Training	One-Time	
LL03	Emergency Egress Training, Non-Ejection	B	1
LL04	Aircrew Chemical Defense Training (ACDT)	B	2,5
LL05	Egress Training with ACDE	One-Time	2
LL06	Aircrew Flight Equipment (ALSE)	B	5
SS02	Combat SERE Training (CST)	36M	2,5
SS03	Conduct After Capture	36M	2,5
SS05	Water Survival Training (WST)	36M	5
SS07(X)	Contingency SERE Indoctrination (CSI)	AR	4
*See **Terms** for frequency definitions*			

Code	Event	Frequency	Notes

NOTES:

1. Failure to accomplish recurring ground events will result in "do not fly" status until the training is accomplished.
2. Flight Surgeons without a mobility requirement (not on mobility status) do not need to accomplish this training. Should be tracked in ARMS (accomplish when due).
3. See Unit Deployment Manager (UDM) for Mobility Folder Review frequency and additional USAF Ancillary and Mobility requirements.
4. X denotes designator to differentiate different contingency and/or theater training tasking requirements. Units may use suffix "E" for Enduring Freedom, "I" for Iraqi Freedom, and "H" for Horn of Africa.
5. The OG/CC or equivalent is the waiver authority for this event. See **paragraph 4.9.3**.
6. Flight Physical and Physiological Training are tracked on the top of each crewmember's Individual Training Summary (ITS). Therefore there is no longer a need to assign and track these training events in the training module of ARMS.

4.5.3. Flying Continuation Training Requirements. Use **Table 4.4**, **Table 4.5, and Table 4.6**. **See Chapter 7** for event descriptions.

4.5.3.1. ATD Credit for Training Requirements. Crewmembers may credit flight training events in **Table 4.4, Table 4.5, Table 4.6, and Table 4.7** in the ATD as noted (see **paragraph 4.4.5.4** for ARMS tracking). Both continuation training events and other events are listed.

4.5.3.1.1. Continuation training OFT profiles (G271-G274, or G278) should be scheduled once per quarter to allow crewmembers the opportunity to train on emergency procedures throughout the year.

4.5.3.1.2. ATS contract instructor's supervision meets the requirements for continuation training events requiring instructor or direct instructor supervision.

4.5.3.2. As a minimum, senior officer and all other crewmembers maintaining BMC or BAQ status in the KC-135 will maintain FTL E. Senior officers on MR status will comply with **Table 4.4**, **Table 4.5**. This requirement also applies to additional aircraft in which a senior officer may be qualified (see multiple qualification). See AFI 11-401 and AFI 11-2KC-135 Volume 3 for passenger carrying restrictions.

4.5.3.3. Each MAJCOM provides flying-hours to each wing as training, test, and ferry hours or organizational and maintenance (O & M) hours. Allocated flying hours are based on FTL C, and are designed to provide all crew positions with sufficient hours to accomplish all continuation flying training requirements with percentage of completion aboard flight simulators.

Table 4.4. KC-135 Pilot Semi-Annual Continuation Flying Requirements.

		Aircraft Commander					MPD P/CP				Credit in OFT			
Code	**Event**	**A**	**B**	**C**	**E**	**CUR**	**A**	**B**	**C**	**CUR**	**%**	**Maintain**	**Regain**	**Notes**
F020	Formation	1	1	2			1	1	1		100			1,2,18,20
F030	Large Formation	A	A	A			A	A	A		100			1,2,20
F060	AAR Formation	1	1	2			1	1	2		100			1,2,18,20
G271	Sim. Prof 1	A	A	A	AR		A	A	A		100			23,24
G272	Sim. Prof 2	A	A	A	AR		A	A	A		100			23,24
G273	Sim. Prof 3	A	A	A	AR		A	A	A		100			23,24
G274	Sim. Prof 4	A	A	A	AR		A	A	A		100			23,24
G278	Sim Prof 6	AR	AR	AR	AR		AR	AR	AR		100			
M007	GATM Data Link	A	A	A			A	A	A		100			1,12,19,20, 22

M008	Pacer CRAG Proficiency					365				365	100	Y	Y	1,6,12,17
M010	Proficiency Sortie	2	2	2			2	2	2		100			
M020	Unit Specific Tng Sortie	4	4	4			4	4	4					1
M030	Overseas Sortie	A	A	A			A	A	A					1,2,5,20
M050	Tactical Sortie	A	A	A			A	A	A		100			1,2,20,26, 27
N010	Tanker RV	4	5	6		Q	4	5	6	Q	100	Y	Y	20
N020	Tanker RV Golf	1	1	2			1	1	2		100			1,20
N030	Tanker RV Delta	1	1	2			1	1	2		100			1,12,20
N040	Tanker RV Alpha	1	1	1			1	1	1		100			1,20
N110	Communication Procd.	1	1	2			1	1	2					1,7, 16
P010	Takeoff-Initial	2	4	6	2	Q	2	4	6	Q	100	Y	Y	
P020	Takeoff	8	10	12	6	M	8	10	12	M	100	Y	Y	9
P028	Right Seat Takeoff										100			25
P029	Left Seat Takeoff										100			25
P030	MaxMode T/O—30 Flap	1	1	1			1*	1*	1*		100			13
P040	Sim Eng Fail, T/O Cont	2	2	2		Q	2*	2*	2*	Q*	100	Y	Y	8, 9,13, 29
P061	VFR Overhead	A	A	A			A*	A*	A*		100			1,2,13, 14,26,27
P062	Tactical Departure	A	A	A			A*	A*	A*		100			1,2,13, 14,20,26,28
P063	Tactical Arrival	1	1	1			1*	1*	1*		100			1,2,13, 14,20,26,27
P064	Slide Exercise	1	1	1			1	1	1		100			1,2,12,14, 20, 26, 27
P065	Single Ship Scram Exer	1	1	1			1	1	1		100			1,2,14,20, 26, 27
P066	Maneuver-Steep Turns	1	1	1			1	1	1		100			1,2,14,26, 27
P067	Mid Mission Join-up	A	A	A			A	A	A		100			1,2,14,18, 20,26,27
P068	Combat Descent	A	A	A			A	A	A		100			1,2,14, 20,26,27
P069	Defending Climb	A	A	A			A	A	A		100			1,2,14, 20,26,27
P070	Instrument Appr	6	8	12	6	M	6	8	12	M	100	Y	Y	9
P100	Precision Appr	3	4	6	2		3	4	6		100			
P110	Non-Precision Approach	3	4	6	1		3	4	6		100			
P117	GPS Approach	2	2	2			2	2	2		100			22
P130	Circling Appr	1	2	2			1	2	2		100			
P140	Visual Traffic Pattern	2	2	2			2	2	2		100			
P160	Missed Appr	2	3	3			2	2	2		100			
P170	Appr Go Around(Simulated Engine Out)	2	3	3		Q	2*	3*	3*	Q*	100	Y	Y	8,13, 29

P180	Appr & Landing(Simulated Engine Out)	2	2	2		Q	2*	2*	2*	Q*	100	Y	Y	8,13, 29
P190	Landing	8	10	12	6	M	10	14	18	M	50	Y	Y	
P192	Landing, Night (Unaided)	2	2	2	2	Q	2	2	2	Q	50	Y	Y	10
P198	Landing, Right Seat										100			25
P199	Landing, Left Seat										100			25
P200	Touch and Go Landing					M					100	Y	Y	1,6,9,15
P260	HAVE QUICK Procd.	A	1	1			A	1	1					1,11
P270	Secure Radio Operations	A	1	1			A	1	1					1,11
P271	Authentication Procd.	1	1	1			1	1	1					1
P280	ACDTQT	T	B	A			T	B	A		100			1,14
P290	Aircraft Alert Start Procedures	A	A	A			A	A	A		100			1,2,7,12,20, 21
R010	Receiver AAR	4	5	6		Q					100	Y	N	When Available
R013	Receiver AAR, Aircraft	2	2	3		Q						N	N	4, 30
R020	Receiver AAR (Night)	1	2	3										4
R035	Receiver AAR (Heavy Onload)	A	A	A										4
R040	Receiver AAR Bkwy & Emerg. Sep.	1	1	1			1	1	1					4
R050	Receiver AAR Tanker Autopilot OFF	1	2	2										4
R060	Tanker AAR	4	5	6		Q	4*	5*	6*			N	N	13, 20
R070	Tanker AAR Bkwy Procedures	2	2	2			2	2	2					20
R080	Tanker AARAutopilot OFF	2	3	3			2*	3*	3*					13
R100	Tanker AAR Heavy Receiver	1	1	2			1*	1*	2*					13, 20
S036	SOAR RV	1	1	1			1	1	1					3
S200	NVG Operations	1	1	1			1	1	1					3
*See **Terms** for frequency definitions*														

NOTES:

1. Not required for BMC aircrew unless specified in MAJCOM Supplement.
2. Not required for formal school instructors unless specified in MAJCOM supplement**.**
3. SOAR-certified pilots only.
4. Receiver qualified pilots only. Loss of currency (R010, R013) or failure to complete semi-annual volume requirement (R010, R013, R020, R035, R040, and R050) does not result in a loss of mission ready status. Crewmembers may continue to participate unsupervised in all missions not requiring receiver AAR; they may not deploy as a receiver-SOAR crewmember (i.e., filling a receiver-SOAR requirement) until the event is accomplished or currency is regained.
5. OG/CC may substitute CONUS operational sorties for overseas sorties when tanker/airlift requirements or crewmember availability is insufficient for accomplishing the overseas sortie requirement. Consecutive CONUS sortie substitutions are not permitted.
6. Loss of currency does not result in a loss of mission ready status.
7. Required for OPLAN-8010 MR crewmembers only (may be combined with P271).
8. Collocated units must accomplish event in the simulator. Non-collocated units will accomplish P040, P170, and P180 requirements semi-annually. Non-collocated units will attempt to accomplish as many three-engine training requirements as possible in the simulator. Unless specified by MAJCOM/A3.
9. Multiple aircraft qualified pilots, will accomplish one event quarterly in each aircraft model qualified (qualified/maintaining currency in two MDS model aircraft, e.g., KC-135R and RC-135W). KC-135 R and T model aircraft are considered the same MDS (see **paragraph 1.12.1**).
10. OG/CC may authorize 90-Day currency extension for night events to compensate for climatic adjustments (long-daylight periods in summer). OG/CC may authorize pro-ration of night events for the period 1 April through 30 September.
11. Typically accomplished with F020, Formation.
12. Motion not required to receive credit using simulator.
13. Items with asterisk (*) are for required for MPD pilots only**.**
14. Complete the event in the aircraft if simulator is not available.
15. Currency requirement for touch and go certified AC only. Loss of currency does not result in loss of Mission Ready (MR) status.
16. N/A for units permanently based overseas.
17. Units with more than one aircraft configuration (e.g., Block 40 and Block 30) and crewmember is maintaining qualification/certification in Block 30. If currency is lost, must regain B30 currency with an IP; if currency is lost for 6 months or more (18 months since last flown B30), must accomplish the A035 syllabus, see 7.2.14. If not collocated with an ATD, may substitute aircraft flight for A035F.
18. ATD link to second ATD required for credit if not accomplished in aircraft. Do not dual log F030 with an F020 if F030 is accomplished in the ATD (since linked ATD is not needed for F030).
19. Accomplish CPDLC and/or ADS operations. May accomplish M007 in the ATD using G27x simulator profile with Data Link objectives.
20. Pilots may log event complete if accomplishing PF or PNF duties.
21. May be accomplished in an OFT after initial training in aircraft.
22. Required upon completion of certification/qualification (Block 40, RNAV/GPS).
23. ANG, AFRC and AETC R-model pilots complete four formal ATS instructed OFT system

simulators (G271-G274) per year. Complete Data Link profile if GATM System (Q040) certified. With MAJCOM waiver/approval in coordination with AMC/A3T, units may elect to complete a minimum of two (of the four OFT system profiles) per year. If used, alternate accomplishing the OFT profiles biennially.

24. CRM MOST (G240) are combined with ATS R-model simulator profiles (G271-G274). Complete one profile and dual log credit for G230. When co-located at ATS facility, Boom Operators and SOAR Navigators will attend a minimum of one ATD profile (MOST). Boom Operators, whose pilots are attending a non co-located ATD at an off-site ATS facility are encouraged to attend a minimum of one ATD simulator profile for G240, CRM MOST.

25. All pilots (i.e. EP, IP, MP, FPx) will log left and right seat takeoffs and landings to ensure balanced exposure of the entire pilot crew force.

26. Not required for pilots assigned to MAJCOM HQ, NAF, 618 TACC, USAF EC.

27. Units collocated with simulator should perform this event in the simulator but may be accomplished in the aircraft during operational or continuation training missions on a non-interference basis.28. Simulator only event

29. Individuals who have been deployed for an entire quarter or more (i.e. 1 Jan thru 31 Mar) are considered current for this event until 45 days after return to home station. The intent of this note is to allow crewmembers who are unable to accomplish the event while deployed to remain MR and return to home station from the AOR without restriction.

30. Dual log R010 when accomplish R013

Table 4.5. Navigator Continuation Flying Requirements.

		Navigator FTL				Credit in OFT			
Code	**Event**	**A**	**C**	**E**	**CUR**	**%**	**Maintain**	**Regain**	**Notes**
G240	CRM MOST Simulator Profile	A	A	AR					3
M010	Proficiency Sortie	1	1	1	*60D*	*100*	*Y*	*Y*	2, 4,7

M020	Unit-Specific Trng Sortie	AR	AR						7
M050	Tactical Sortie	A	A			*100*			6,7,9
P270	Secure Radio Operation	1	1						1,2,7
P271	Authentication Procedures	1	1						1,2,7
P280	ACDTQT	T	T			*100*			1,8
S036	SOAR Rendezvous	1	1						5,7
S101	ARC-210 DAMA SATCOM Tng.	A	A						5,7

*See **Terms** for frequency definitions*

NOTES:

1. Not required for basic navigators who have not completed the requirement for deployment in **Chapter 3**.
2. Instructors may receive credit when observing, instructing, or performing evaluator duties.
3. CRM MOST (G240) are combined with ATS R-model simulator profiles (G271-G274). Complete one profile and dual log credit for G230. When co-located at ATS facility, Boom Operators and SOAR Navigators will attend a minimum of one ATD profile (MOST). Boom Operators, whose pilots are attending a non co-located ATD at an off-site ATS facility, are encouraged to attend a minimum of one ATD simulator profile for G240, CRM MOST.
4. Navigators can regain/maintain currency with Instructor Pilot monitoring sortie.
5. Required for SOAR qualified navigator only.
6. Basic Navigator complete M050 if required in MAJCOM or local supplement.
7. Aircraft equipped with FMS-3 station.
8. Complete in the aircraft if simulator is not available.
9. Units collocated with simulator should perform this event in the simulator but may be accomplished in the aircraft during operational or continuation training missions on a non-interference basis.

Table 4.6. Boom Operator Continuation Flying Requirements.

		Boom Operator FTL				**Credit in OFT**			
Code	**Event**	**A**	**B**	**C**	**CUR**	**%**	**Maintain**	**Regain**	**Notes**
G240	CRM MOST Simulator Profile	A	A	A					10
M010	Proficiency Sortie	A	1	1					3
M020	Unit-Specific Training Sortie	AR	AR	AR					12
M050	Tactical Sortie	A	A	1		100			3,12,13
M051	MPRS Sortie	A	A	A					8
N110	Communications Procedures	1	1	2					4,5,12
P270	Secure Radio Operation	1	1	2					1,12
P271	Authentication Procedures	1	1	1					1,12

P280	ACDTQT	T	B	A		100			1,3,7,12
P300	Cargo Loading	A	A	A					1,3
R070	AAR Breakaway & Emer. Sep.	1	1	2					
R100	AAR, Heavy Receiver	1	2	2					
R120	Contacts	15	18	24	*60D*		N	N	
R130	Night Contacts	5	6	8	*180D*		N	N	6
R140	Tanker Manual Contact	2	3	4					
R150	Fighter Contact	2	2	2	*180D*		N	N	9
R160	Radio Silent Breakaway	1	1	1					1
S036	SOAR Rendezvous	1	1	1					5
S200	NVG Operations	1	1	1					5
*See **Terms** for frequency definitions*									

NOTES:

1. Instructors may receive credit when observing, instructing, or performing evaluator duties.
2. N/A for units permanently based overseas.
3. Not required for formal schoolhouse (AETC instructors)
4. Required for OPLAN-8010 MR crewmembers only (may be combined with P271).
5. Required for SOAR-certified boom operators only.
6. OG/CC may authorize 90-day currency extension for night events for climatic adjustments (long-daylight periods in summer). OG/CC may prorate night events for the period 1 Apr through 30 Sep.
7. Complete in the aircraft if simulator is not available.
8. If MPRS Certified.
9. Boom Operators assigned to MAJCOM, NAF, USAF Expeditionary Center, CRW, CRG, or formal schoolhouse R150 currency is 1 per 365-days with no frequency requirements.
10. CRM MOST (G240) are combined with ATS R-model simulator profiles (G271-G274). Complete one profile and dual log credit for G230. When co-located at ATS facility, Boom Operators and SOAR Navigators will attend a minimum of one ATD profile (MOST). Boom Operators, whose pilots are attending a non co-located ATD at an off-site ATS facility are encouraged to attend a minimum of one ATD simulator profile for G240, CRM MOST.
11. Motion not required to credit using simulator.
12. Not required for BMC aircrew unless specified in MAJCOM Supplement.
13. Should be performed in the simulator but may be accomplished in the aircraft during operational or continuation training missions on a non-interference basis.

Table 4.7. Additional Flight Events Creditable in ATD.

Code	Event	Number Creditable	Maintain Currency	Regain Currency	Notes
N100	INS Airborne Alignment	ALL	YES	YES	1
P006	Airwork	ALL	YES	YES	
P007	Stall Recognition and Recovery	ALL	YES	YES	
P015	Instrument Departure	ALL	YES	YES	
P018	PNF Takeoff and Climb Duties	ALL	YES	YES	1

Code	Event	Number Creditable	Maintain Currency	Regain Currency	Notes
P026	Takeoff and Climb Procedures	ALL	YES	YES	
P027	EWO Departure	ALL	YES	YES	
P071	Holding	ALL	YES	YES	
P072	Penetration (Published)	ALL	YES	YES	
P073	En Route Descent	ALL	YES	YES	
P101	ILS Approach	ALL	YES	YES	
P102	ILS (Gyro Mode)	ALL	YES	YES	
P104	MLS Approach (GATM only)	ALL	YES	YES	
P112	TACAN, VOR, or Localizer Approach	ALL	YES	YES	
P113	ASR Approach	ALL	YES	YES	
P171	Approach and Go-Around Simulated Engine-Out, Rudder Power Off	ALL	YES	YES	
P193	50 Flap Landings	ALL	YES	YES	
P194	30 Flap Landings	ALL	YES	YES	
P311	Flight with an Instructor	ALL	YES	YES	1
P365	Autopilot Off Cruise	ALL	YES	YES	

NOTES:

1. Motion not required to credit using simulator.

4.6. Flight Surgeon Continuation Flying Requirements. Flight Surgeons will comply with the requirements of this volume and AFI 11-202, Volume 1. See **Table 4.3** for flight surgeon ground continuation training requirements.

4.6.1. Flight Surgeon loss of flying currency. Units will notify the MAJCOM Command Surgeon of non-current Flight Surgeons (AMC units send notification to HQ AMC/SGP).

4.6.1.1. Flight Surgeons that exceed 60 days between sorties (but less than 180 days) require completion of emergency egress training (non-ejection) with a certified aircrew instructor prior to the next flight.

4.6.1.2. Flight Surgeons that exceed 180 days between sorties require completion of emergency egress training (non-ejection) with a certified aircrew instructor prior to the next flight, completion of the online Flight Surgeon Qualification Exam (**https://afms.csd.disa.mil/kc/login/login.asp**), and compliance with local qualification guidance.

4.7. Ancillary Training.

4.7.1. Definition. Ancillary Training is guidance or instruction that contributes to mission accomplishment, but is separate from an Air Force Specialty or occupational series. AFI 11-2KC-135 Volume 1 is not the governing directive for completion of ancillary training events. IAW AFI 11-202 Volume 1 the source AFI provides training frequency for these events

unless an approved waiver has been authorized. See Unit Deployment Manger representative to ensure compliance with additional USAF personnel training requirements.

4.8. Proration of Training. AFI 11-202 Volume 1 describes proration of training requirements for crewmembers not available for flying duties. In addition, prorate training for non-availability due to contingency alerts and contingency flying TDYs when contingency precludes training for certain mission events (PACAF and USAFE: also contingency operations from home station). This authority must be used judiciously, especially when prorating the same crewmember for consecutive semi-annual training periods.

4.8.1. Use this formula to determine training requirements at the end of the training cycle: number of months available times the event volume divided by the number of months in the training period. Round down to the nearest whole number, but not less than 1 (e.g. 5.6 rounds to 5).

4.8.1.1. Use **Table 4.8** to determine the number of months available. Prorate only if absence is at least 15-cumulative days.

4.8.1.2. When an individual permanently changes station (PCS) during the training cycle to a unit flying the same model aircraft and enters the same FTL or lower, credit training accomplished at the previous base. Prorate training requirements based on the time available (e.g., time at former base, plus time at new base, minus number of days not available) during the training period. Time available starts 7 days after sign-in for CONUS, 14 days after sign-in for OCONUS or on the date of actual accomplishment of the first training event, whichever occurs first. Subtract previous accomplishments from the prorated total to determine remaining requirements.

4.8.2. Units may also prorate requirements for individuals changing training levels. Prorate remaining training requirements for copilots entered into Category I AC upgrade training from beginning of the training cycle to the date entered into upgrade training (**paragraph 5.3.2**). Units will consider AC Qualification students in a non-flying Temporary Duty (TDY) status during the academic and flying portions of training.

Table 4.8. Individual Availability.

Days Available	Months Available
0-15	0
16-45	1
46-75	2
76-105	3
106-135	4
136-165	5
>166	6

4.9. Failure to Complete Training Requirements. Declare individuals NMR if they fail to maintain flying currency, fail to complete semi-annual flying continuation training requirements or ground continuation training requirements. The following guidance applies:

4.9.1. Flight Training Currency. Flight currency is associated with those events denoted in the flying continuation training tables by a specific period of time (monthly, quarterly, semi-

annual, or annually) within which an event must be accomplished. A currency event must be accomplished at least once within that specified time in order to maintain the currency.

4.9.1.1. Loss of Currency**.** Place individuals in one or more currency events in supervised training status for that event and declare them NMR in those unit missions requiring that event. Crewmembers are "non-current" the day after event currency expires (i.e. a crewmember, who accomplished a *monthly* currency event on 5 September, becomes non-current on 1 November).

4.9.1.1.1. A Pilot non-current in Takeoff (P010, P020, P040), Landings (P170, P180, P190), Approaches (P070), or Landing, Night (unaided) (P192) will not fly unsupervised on any sortie.

4.9.1.1.2. Pilots non-current in Data Link (M007) still maintain MR status and may fly the Block 40.X aircraft in a non-Data Link mode, and may still deploy OCONUS in either Block 40.X or Block 30 (Pacer CRAG) (if applicable) aircraft.

4.9.1.1.3. Pilots non-current in N010 Tanker RV do not require direct instructor pilot supervision.

4.9.1.1.4. A navigator who is non-current may be supervised by an instructor pilot and may regain currency by the same. (Except SOAR RV)

4.9.1.1.5. For all other non-current events, place individuals in supervised training status for that event and declare them NMR in unit missions requiring the event. The crewmember cannot deploy until currency is regained. (see **paragraph 1.10.3.1**). ***EXAMPLE:*** If the individual is non-current for tanker air refueling, the individual may fly unsupervised on CONUS sorties which are not scheduled for and do not accomplish tanker air refueling. OCONUS MAJCOM may allow individuals to fly local, routine, and non-contingency mission in their respective theater as specified in local or MAJCOM supplement.

4.9.1.2. Regaining Currency.

4.9.1.2.1. Loss of Currency up to 6-Months. Crewmembers maintain their current training level and no training folder is required. Crewmember must demonstrate proficiency in the aircraft or simulator (as appropriate) in all delinquent items while under supervision of an instructor. (see **paragraph 1.10.3.1** and **1.10.5.1**).

4.9.1.2.1.1. If a pilot or navigator has not accomplished data link procedures for up to 6 months, the crewmember will accomplish refresher data link CBTs (if available), review aircraft normal/ abnormal data link operations/procedures, and review appropriate data link operating manuals prior to (within 30 days) planned flights in areas where data link operations with air traffic services unit(s) (ATSU) are anticipated.

4.9.1.2.2. Loss of Currency exceeding 6-Months. Crewmember is declared Unqualified for a loss of currency of events in **Table 4.4**, **Table 4.5**, and **Table 4.6**. The crewmember will complete Sq/ CC directed requalification training (and evaluation, if required) according to AFI 11-2KC-135 Volume 2.

4.9.1.2.2.1. If a pilot has lost currency in Block 30 sortie (M008), and the loss of currency has exceeded 6 Months, the pilot is uncertified in Block 30 and will only

maintain their Block 40 qualification. A035 is required to regain Block 30 certification, see 7.2.14.

4.9.2. Failure to Complete Semi-annual Flying Training Events.

4.9.2.1. The Sq/CC will review ARMS products at the end of each semi-annual training period. For individuals who fail to accomplish training requirements, the Sq/CC will either declare them NMR or request an OG/CC Waiver for the requirement (**paragraph 1.5.7**).

4.9.2.2. Waivers for Flight Training Events. The Sq/CC will send waiver requests for Failure-to-complete and Loss-of-Currency to the OG/CC for endorsement, per **paragraph 1.5.7**.

4.9.3. Ground Training Events.

4.9.3.1. Failure to Complete. Individuals who fail to complete ground training requirements are declared NMR. The crewmember cannot deploy until training is accomplished (***EXCEPTION:*** Noncurrent crewmembers may fly unsupervised on local, routine, and CONUS missions according to **Table 4.1** on sorties not requiring the ground training event).

4.9.3.1.1. If a crewmember is incomplete in 8010 ground training, the OG/CC may waive the event(s) for only one quarter. If the crewmember is incomplete for subsequent quarters the OG/CCs may elect to allow crewmembers to remain MR – conventional only. Make-up training should be complete as soon as practicable in the delinquent 8010 items.

4.9.3.1.2. An individual NMR for failure to complete Hazardous Cargo Training (G182) may fly unsupervised on local training missions only with Sq/CC approval until training is completed.

4.9.3.2. Waivers for Ground Training Events. The OG/CC or equivalent may waive ground continuation training events identified in **Table 4.1**, **Table 4.2**, and **Table 4.3** per **1.5.7**. The decision to grant a waiver will be based on the individual crewmember's experience and proficiency level (i.e. waivers will not be based on a crewmember's availability). OG/CC will determine the allowable time period of the waiver. The make-up training should be accomplished at the earliest opportunity. This waiver is for unforeseen circumstances only and only for events that will not degrade mission accomplishment.

4.9.4. Make-up training (ground or flying) is creditable towards the new training period.

4.10. Requirements Before PCS Or TDY By Members On Active Flying Status. AFI 11-202 Volume 1 specifies requirements before PCS or TDY.

4.11. Requirements Before Removal From Active Flying Status. AFI 11-202 Volume 1 specifies requirements before removal from active flying.

4.12. Requirements While In Inactive Flying Status. AFI 11-202 Volume 1 specifies requirements while in inactive flying status.

4.13. Retraining. AFI 11-202 Volume 1 specifies retraining restriction before separation, retirement, or mandatory inactive flying status.

4.14. Aircrews Flying in Non-US Air Force Aircraft and with Non-US Air Force Units. AFI 11-202 Volume 1 addresses individuals flying in this status.

4.15. Training Period. The tables are based on semi-annual flying continuation training event requirements with the first cycle beginning on 1 January and ending on 30 June and second cycle beginning 1 July and ending on 31 December**.**

Chapter 5

UPGRADE TRAINING

5.1. Description. This chapter identifies general prerequisites and training requirements for upgrade.

5.1.1. OG/CC is designated waiver authority for minimum prerequisites for entry into upgrade programs (this includes all **Table 5.1** flying hours requirements).

Table 5.1. Pilot Prerequisites for Upgrade Selection Matrix.

From	To	Prerequisite for Course Entry	Prerequisite Before R&C Board Certification	Notes
Various MWS	AC (TX1 or TX2)	Previous AC in USAF MDS and/or 1000 Total Flying Time (TFT)	100 hours in KC-135 (PAA*)	1,2,3,4,5
Traditional Copilot	AC (Not available at Altus AFB)	1000 hours Total Flying Time (TFT)	400 hours in KC-135 (PAA)	1,2,3
MPD Pilot	AC In Unit	1000 hours Total Flying Time (TFT)	400 hours in KC-135 (PAA)	1,2,3
AC	Instructor	200 hours in KC-135 (PAA) after R & C to AC		1
Instructor	Evaluator	Sq/CC recommendation.		

NOTES:

1. TFT represents all flying time logged aboard a fixed wing aircraft as a "military" pilot including UPT, student, and "other" time (but does not include time in another aircrew specialty). Simulator time is creditable to meet TFT requirement.
2. KC-135 simulator time counts towards PAA. Aircraft flying hours count towards PAA hours required before R&C Board certification. Do not count other time towards PAA time.
3. GRACC, if required (see **paragraph 5.4**).
4. 100 hours required in KC-135 PAA before R&C to perform aircraft commander duties.
5. For Pilot cross-flow from MWS with similar skillset (i.e.C-17, C-5) use TX2. Those with dissimilar background (i.e.T-1, F-16) use TX1

*PAA in this Table refers to hours accumulated in the KC-135 aircraft (primary, secondary, instructor or evaluator).

5.2. Mobility Pilot Development (MPD). The Mobility Pilot Development aircraft commander upgrade program is a continuous upgrade process to replace legacy copilot aircraft commander upgrade courses. This section applies to SUPT graduates upon successful completion of FTU Pilot Initial Qualification (PIQ) and MCT. The MPD program includes PIQ, continuation training (simulator training, local sorties and a variety of mission types: business efforts, CORONET's, deployments, etc.) and the upgrade process. MPD upgrade process is a three step process (identification, training, and certification)**.** See minimum flying hour requirements in **Table 5.1**. All MPD pilots will be dual-seat qualified pilots and will maintain qualification requirements according to AFI 11-2KC-135 Volume 2. MPD pilots are not Aircraft Commanders, but should be considered in continuous aircraft commander training upon graduation from the FTU until AC certification. They will gradually make the transition from inexperienced PIQ graduate to Aircraft Commander. Training timelines are based on performance and, at the discretion of the Sq/CC, tailored to an individual's capabilities and experience level.

5.2.1. Continuation Training. Upon initial enrollment in MCT, the intention is to allow the MPD pilot to concentrate on learning flying and non-flying duties in both seats as well as familiarization with KC-135 employment.

5.2.2.1. The MPD pilot may fly unrestricted with an IP or MP in either seat, based upon the aircraft commander's judgment and Operational Risk Management (ORM) decision. Sq/CCs must ensure that MPD pilots receive balanced exposure to the left and right seats to ensure proficiency and currency with the flying and non-flying duties in both seat positions and gain experience prior to Aircraft Commander upgrade.

5.2.2.1.1. MPD Pilots will maintain proficiency in emergency procedures as listed in **Table 4.4**. MPD Pilot will be under direct IP supervision if accomplishing emergency procedures in the aircraft.

5.2.2.1.2. MPD pilots will track left and right seat takeoffs and landings in ARMS, as listed in **Table 4.4**. Accomplish simulator profiles from either seat to meet training requirements.

5.2.2.2. MPD Documentation. An MPD pilot training folder will be opened upon MPD pilot arrival at the unit and will remain open until the MPD pilot has completed MCT. A second training folder will be opened upon SQ/CC selection for upgrade until certified as an aircraft commander (electronic versions are authorized and encouraged). Training programs may be combined in a single training folder at the unit's discretion.

5.2.2.2.1. Use the AF Form 4025 to close the MPD MCT folder upon MR status and the upgrade program training folder upon aircraft commander certification.

5.2.3. GRACC Completion. (see **paragraph 5.3.4**)

5.2.4. **Upgrade Training.** Based upon experience and requisite flight hours the MPD pilot will be identified for upgrade by squadron leadership to the SQ/CC. Once the SQ/CC has selected the individual, training time begins and the upgrade candidate will begin accomplishing the requisite training (**paragraph 5.2.4.1**) and receive an evaluation IAW AFI 11-2KC-135 Volume 2. (See **Table 1.2** for in-unit training time limitations for MPD upgrade) MPD pilots selected for upgrade that are current and qualified, require IP supervision during non-critical phases of flight and direct IP supervision during critical

phases of flight. Training may be accomplished in aircraft or OFT unless specified otherwise.

5.2.4.1. The MPD pilot will accomplish the following under IP supervision prior to AC Review and Certification (R&C) Board:

5.2.4.1.1. Formation Lead Certification (Q011). Proficiency as formation lead must be demonstrated on two of the three full profile formation sorties (one should be a large formation). (see **paragraph 5.6.1**). If simulator is used for Lead Certification see **5.6.1.2.2** for DMO requirements.

5.2.4.1.2. Golf Day (Q028), Heavy Receivers (KC-10, C-5, C-17, E-4, or B-2). Demonstrate proficiency.

5.2.4.1.3. Hazardous cargo (G182). Accomplish CBT.

5.2.4.1.4. Overseas Training (M030). Overseas mission will place emphasis on AC duties, oceanic crossing procedures, enroute, and mission management training objectives. For USAFE, an overnight mission must be accomplished. IP led G160 should be completed in preparation for M030.

5.2.4.1.5. Instructor Recommendation mission. Demonstrate proficiency in three-engine pattern work, tactics, CRM, and touch & gos.

5.2.4.1.6. Applicable Training events in **Table 3.1**, **Table 3.2,** and **Table 3.3** must be accomplished prior to Aircraft Commander Certification.

5.2.4.1.7. Evaluation and Certification. The MPD training program culminates in the AC flight evaluation according to AFI 11-2KC135 Volume 2 evaluation criteria (SPOT evaluation with ability to complete annual) and Sq/CC's Review and Certification (R & C) Board recommendation.

5.2.5. Mobility Pilot Designation Codes. AFI 11-401 defines pilot aviation codes. For standardization, use the codes from **Table 5.2** (3rd letter designator distinguishes the status for a MPD pilot who completed formal training with evaluation (graduate).

5.2.5. **(459ARW)** Additional guidance is provided in the most current MPD Process Guide located on the 459 OSF CoP. See paragraph 1.15.8.

Table 5.2. AMC Pilot Designation Codes.

If first two are "FP"	Qualified Pilot. Then 3rd character is:

	"N"	Qualified Non-Mission Ready (NMR). This is used for the following: 1. Pilot currently in ACIQ, ACQ, or PCO course and has not completed qualification checkride. 2. Pilot Initial Qualification (PIQ) course graduate currently in local mission ready training. 3. If the MPD pilot/Traditional Copilot will be NMR for an EXTENDED period of time (greater than a month). 4. Not used for short duration NMR status due to DNIF or short term currency deficiencies.
	"L"	Qualified Non-Mission Ready (NMR). This is used for the following: 1. Graduate of aircraft commander course (ACIQ, ACQ, PTX2, PCO, local upgrade), in local mission ready training. 2. Pilots designated "E" level for continuation training. 3. Senior Officer Course (SOC) graduate. MDS specific Vol. 1 guidance applies to level of supervision/mission capability.
	"C"	Qualified Mission Ready (MR). This is used for the following: 1. Traditional Co-Pilot (Non-MPD); replaces MC designation. ***NOTE:*** This code (FPC) will be eliminated after all the traditional copilots have upgraded to first pilot or aircraft commander, as applicable.
	"Q"	Qualified Mission Ready (MR). This code is used for the following: 1. Qualified Mission Ready, MPD Pilot. 2. Graduates of aircraft commander course (FPLs) who have not acquired enough PAA hours for AC R&C, but have completed all local mission ready training requirements.
If "MP"	**Fully Certified/Qualified Aircraft Commander. Then 3rd character is:**	
	"N"	Non-Mission Ready (NMR) Aircraft Commander. This code is used: 1. If the MP will be NMR for an EXTENDED period of time (greater than a month). 2. Not used for short duration NMR status due to DNIF or short term currency deficiencies.
If "IP"	Fully Certified/Qualified Instructor Pilot who is performing instruction on the mission.	

If "EP"	Fully Certified/Qualified Evaluator Pilot who is performing evaluator duties on the mission.

5.3. Aircraft Commander (AC) (Traditional Copilots Only). Remaining traditional copilots will continue to upgrade to aircraft commander by attending the PIQ course at Altus AFB followed by an accelerated MPD pilot upgrade timeline upon return to home unit as determined by the SQ/CC.

5.3.1. General. Flying time prerequisites required for upgrade are based on a pilot having gained knowledge and judgment required to effectively accomplish the unit's mission. Sq/CC must ensure continuation training programs emphasize these areas. See minimum flying-hour requirements in **Table 5.1**.

5.3.1.1. Units should select upgrade candidates based on upgrade potential, retainability, and mission requirements.

5.3.1.1.1. This instruction and ETCA, if applicable, list the pre-requisites and special requirements for formal school PIQ course. Units should work directly with their MAJCOM PFT quota managers (AD is AMC/A3TF) to fill available upgrade slots no later than 45 days before class start date.

5.3.1.2. AC upgrade-PIQ (see **Table 6.1**) quotas will be allocated to MAJCOM by AETC/A3R PFT manager upon request.

5.3.1.3. AC upgrade candidates must hand-carry copies of Category I training reports to formal school FTU or secondary course at McConnell AFB.

5.3.1.4. GRACC Completion. (see **paragraph 5.3.4**).

5.3.2. Secondary Method Upgrade. For traditional copilots, formal school attendance is the primary method for of AC upgrade training. The secondary method may include completing the course academics phase (including ATD) at McConnell AFB and returning for in-unit flying training/evaluation.

5.3.2.1. Conduct secondary method upgrade training by exception. For all secondary method upgrades, the unit will send a waiver request to MAJCOM/A3T (or equivalent) staff (see **paragraph 1.5.5**). Several agencies will require coordination including AMC/A3T for copies of ATS courseware, etc. before approval.

5.3.2.2. Secondary method academic and ATD training at McConnell AFB will be followed by return to home unit for SQ/CC directed flight training in preparation for evaluation per AFI 11-2KC-135 Volume 2.

5.3.2.3. Complete applicable ground and flying requirements of this instruction.

5.3.3. AC Upgrade Training. Both formal and secondary AC upgrade (non-MPD) will be divided into two categories (or as specified in MAJCOM supplement).

5.3.3.1. Category I, Aircraft Commanders Responsibilities. Duration: A maximum 45 day orientation period. The individual may continue to perform copilot duties. Category I training consists of ground and flight training before Category II training. Proficiency is not required for Category I training. Complete all ground training currency events, (e.g., altitude chamber, annual physical, etc.) to cover the training period up to scheduled Category II completion date plus 30 days.

5.3.3.1.1. Before entering upgrade training flying experience will include left-seat time as a pre-requisite. Units will develop a familiarization program for aircraft commander candidates receiving Category I training (includes one ATD if co-located with ATD training facility and Sq/CC confirmation) before left-seat flying duties. Include details in local supplement. Category I will include a minimum of two left-seat familiarization sorties within 45 days before arrival at FTU/McConnell AFB. Category I will also consist of the training events in **Table 5.3**. One sortie will include a full mission profile including AAR. The second sortie will include at least 1-hour dedicated to left-seat pattern training under direct supervision of an instructor.

5.3.3.1.1. **(459ARW)** The 459 ARW no longer has any "Traditional Copilots" and upgrades all MPDs to AC IAW paragraph 5.2 Mobility Pilot Development (MPD).

Table 5.3. AC Upgrade Prerequisites (Category I).

Code	Event	Number
P020	Takeoff	2
P040	Simulated Engine Failure, Takeoff Continued	3
P170	Approach and Go-Around, Simulated Engine-Out	3
P171	Approach and Go-Around, Simulated Engine-Out, Rudder Power Off	1
P180	Approach and Landing, Simulated Engine-Out	3
P190	Landing (to include one full stop)	6
P194	Landing, 30-Degree Flaps	3
P200	Touch-and-Go Landing	6
P360	Mission Planning and Briefing	2
P366	Checklist Procedures and Use	2
P367	Crew Coordination	2
P369	Aircraft Equipment Operation	2
R060	Tanker AAR	1

5.3.3.2. Category II consists of academic, ATD and flying training.

5.3.3.2.1. The Sq/CC will declare a crewmember in the AC upgrade program at FTU/McConnell AFB NMR and remove from continuation training. Declare individuals MR upon completion of MQ training and approval by the Review and Certification Board (R&C Board) according to AFI 11-2KC-135 Volume 2 (or as directed in MAJCOM supplement). (per time limits in **Table 1.2**).

5.3.3.2.2. For in-unit flight/evaluation after completion of the secondary method (see **paragraph 5.3.2**), the unit will submit the in-flight evaluation completion date to the appropriate MAJCOM training management branch within 30 days of the evaluation to accurately compute active duty service commitments or as specified in MAJCOM supplement. Include course completion information: Course number, date of qualification (evaluation date). For secondary method, include start and graduate dates.

5.3.3.2.3. In-unit flight/evaluation. If ASR and PAR approaches are not readily available (determined by the flight instructor) accomplish the training event in OFT. Units without on-site ATD may complete training without this event. Accomplish

reverse refueling training as an instructor-led ground training seminar. Annotate method of accomplishment for these events in the individual's training record. As a minimum, complete one local and two missions (out and back) in the Enroute system before mission certification or as specified in local supplement.

5.3.4. Global Ready Aircraft Commander Course (GRACC). GRACC is a three-phase process designed to familiarize pilots with all aspects of operating in the en route system. The three phases are divided as follows: Pilot to Aircraft Commander Phase I (V280), Pilot to Aircraft Commander Phase II (V281), and HQ AMC Orientation Tour (V282). See **Chapter 7** for course description.

5.3.4.1. Applicability. GRACC training is required for active duty pilots upgrading to aircraft commander. GRACC is highly encouraged for mobility forces including AFRC and ANG pilots. A one-time course, completion is transferable between all mobility weapon systems. Waiver authority is OG/CC or equivalent.

5.3.4.2. Documentation. Completion of each phase of GRACC is documented in ARMS (V280, V281, and V282). Document the completion of the entire course via the AF Form 4324 as "GRACC" using ARMS event identifier Q280.

5.3.4.3. Training Guides. GRACC workbooks are available for download on the AMC/A3T CoP. Workbooks should be carried on all sorties to maximize training opportunities. Additional information on GRACC can be located on the ETCA website, **https://etca.randolph.af.mil/showcourse.asp?as_course_id=GRACC**.

5.3.4.4. **Phase I**. Pilot To Aircraft Commander Phase I (V280). This phase consists of completing the V280 generic MAF workbook. MPD Pilots/copilots will complete this V280 workbook NLT 180 days after becoming mission ready. The workbook will help new pilots become familiar with moving a mission within the Mobility Enroute System and other associated requirements. For non-AMC unit or FAIP/OSA pilots transitioning to MAF aircraft, V280 will not be accomplished; however V281 and V282 are still required

5.3.4.5. **Phase II**. Pilot To Aircraft Commander Phase II (V281). The second phase consists of completing a second MDS-specific workbook. V281 will serve to review all the objectives in Phase I (V280) with more MDS specific topics. Pilots will complete V281 before Phase III (V282) and starting their formal aircraft commander upgrade & certification course. Aircraft Commander candidates who have transferred from non-AMC units or FAIP/OSA assignments will complete V281 and V282 before AC certification during an R & C board. MAJCOMs may substitute an alternate aircraft-specific Training Guide for the Phase II Training Guide.

5.3.4.6. **Phase III**. HQ AMC Orientation Tour Phase III (V282). The third phase visits HQ AMC and the 618 TACC. This event provides an in-depth look at selected 618 TACC and AMC operations as well as an opportunity to interact with command senior staff. Ideally, this course should be completed by aircraft commander candidates after completing Phase II, but before attending formal aircraft commander upgrade training. V282 will be completed prior to AC certification.

5.3.5. **(Added-459ARW)** Additional guidance is provided in the most current MPD Process Guide located on the 459 OSF CoP. See paragraph 1.15.8.

5.4. Aircrew Instructor Program. Instructor candidates will be selected based on experience, judgment, ability to instruct, flying skills, and technical knowledge. Use instructor upgrade flying time prerequisites in **Table 5.1** for pilots and **Table 5.4** for navigators and boom operators**.** These series of courses are designed to teach pre-selected pilots and boom operators the fundamentals and concepts of instructing an aircrew member. The courses will lead to qualification as KC-135 instructor pilot or instructor boom operator and includes ground, ATD, and flight instruction in the KC-135 aircraft and its aircrew training programs. See the appropriate crewmember instructor course syllabus for details.

Table 5.4. Navigator and Boom Operator Upgrade Prerequisites.

Aircrew Position	Total Flying Time	Total -135 Time	Notes
Navigator	500-hours	350-hours	
Boom Operator Option 1Option 2	1500-hours 700-hours	300-hours500-hours	

5.4.1. Units should identify and send the names of candidates to fill allocated instructor course quotas to HQ AMC/A3TF, or MAJCOM equivalent training quota managers no later than 45 days before class start date. See the appropriate syllabus for in-unit course training events.

5.4.2. Pre-Instructor Course Training. Units will provide pre-attendance simulator or flying training to instructor course candidates before school attendance. The purpose of the additional flight or simulator training is to help prepare instructor candidates to instruct while performing the maneuvers. These events will be completed by the instructor candidate demonstrating to their instructor on how to perform the procedure and/or techniques that would assist other crew members. When applicable, the instructor candidate should provide instruction throughout the pre-course training. Complete the appropriate pre-attendance workbook and lessons and on-line examination available on ATS contractor website (see **paragraph 1.15**). Candidates must successfully complete the lessons and on-line examination (85%) before proceeding to formal school outlined in the syllabus. This pre-attendance courseware must be accomplished no earlier than 60 days and no later than 30 days prior to the class start date. Pre-instructor flying training will include, but is not limited to the following (list additional requirements are in the appropriate MAJCOM supplement):

5.4.2.1. Pilot—Complete events in **Table 5.5**. Emphasis should be placed on performing events within prescribed tolerances using appropriate instructor techniques. Individuals who have not accomplished the ground and certification training (“G” and “Q” events) in listed **Table 5.5**. must complete the events NLT Pilot Pre-Instructor Training Completion.

5.4.2.1.1. P215, Landing Attitude Demo must be accomplished in the aircraft.

5.4.2.1.2. Instructor Aircraft Commander candidates must have been previously certified as Touch and Go Phase I (Q050) and Phase II (Q051) Aircraft Commanders for a minimum of 6 months prior to instructor upgrade.

Table 5.5. Pilot Pre-Instructor Training.

Code	Event	Number	Code	Event	Number
A017	Instructions/Directives Knowledge/Use	1P	P360	Mission Planning and Briefing	1
A009	Instructor Pre-Attendance Academics Training	1	G065	Special Departure Procedures	1
M001	Sortie	1	Q040	GATM System Certification	1
P012	Takeoff-Gyro Mode	1	Q041	GATM Data Link Certification	1
P040	Simulated Engine Failure, Takeoff Continued	1	Q050	AC Touch and Go Landings Certification	1
P180	Approach and Landing, Simulated Engine-Out	2P	Q051	Supervision of Touch and Go Landings Certification	1
P215	Landing Attitude Demonstration	2	Q579	RNAV/GPS Operations Certification	1
See **A2.4.7.** and **A2.4.8.** for Grading criteria					

5.4.2.2. Navigator— Instructor training will be conducted "in-unit training only." Candidates must complete the instructor navigator web-based training lessons and examination (85%) followed by the appropriate events/items as required by the local unit. As a minimum, each unit program will include one flight with the candidate in the role of instructor. Instructor Navigator training will provide the skills necessary to instruct a Basic Navigator to SOAR navigator qualification.

5.4.2.3. Boom Operator—Minimum of three flights with IBO candidate acting in role of instructor on all flights. Ample time will be allowed for sortie pre-briefs and critiques. One sortie should concentrate on instructor positioning, instructor techniques, and note taking/communication skills. In addition, the instructor should discuss supervision, situational awareness, task management, and intervention during air refueling, and personal limitations with the candidate. Every opportunity should be used for the candidate to practice teaching different systems or procedures. Examples include Landing Gear/Flaps systems, MBL/EBL, Reverse AAR, AAR systems/malfunctions, Emergency Boom Hoist, Hydraulics, Electrics, Pneumatics, Fuels, or APU. Emphasis should be placed on proper format, lesson planning, and delivery as described in AFMAN 36-2236, *Guidebook for Air Force Instructors*. Briefings should be accomplished until proficient. Preferably the final sortie should be flown with operations superintendent or training manager. Candidates must successfully complete the lessons and on-line examination (85%) before proceeding to formal school outlined in the syllabus. Complete the events in **Table 5.6**.

Table 5.6. Boom Operator Pre-Instructor Training.

Code	Event	Number	Code	Event	Number
A017	Publication/Directive Knowledge/Use	3	P250	Main Flap Manual Operation (Instructional Briefing)	2

Code	Event	Number	Code	Event	Number
P240	Landing Gear Alternate Extension (Instructional Briefing)	2	P360	Mission Planning and Briefing	3
R140	Tanker Manual Contact	3	P360C	Manual Moment Computations	2
P366	Checklist Procedures and Use	3	P340	Briefing and Control of Passengers	1
R060	Tanker AAR	3	P367	Crew Coordination	3
R180	Radio Silent Visual Signals	1	R220	Manual Boom Latching (If available. Briefing item if not available.)	1
R070	Tanker AR Breakaway and Emergency Separation	2			
See **A2.4.7.** and **A2.4.8.** for Grading criteria					

5.4.3. The instructor candidate's Sq/CC will ensure the latest pre-attendance lessons, workbook, testing and initial training flights are complete before departing for the formal school. The Sq/CC or designated representative will sign the pre-attendance workbook (certifying completion of the prerequisites). Use only the most recent version of the workbook (old/outdated versions will not be accepted). Failure to complete instructor course pre-attendance workbook, flight training, and examination (if used) will result in the candidate being returned to home unit.

5.4.4. Instructor candidates will arrive for instructor training course both current and qualified in their unit assigned aircraft.

5.4.4.1. Instructor candidates are responsible to bring the necessary personal flying equipment, publications (see **Table 5.7** and the appropriate syllabus) and complete the most current version of their pre-attendance workbook and/or testing in the course syllabus. Hand-carry copies to instructor training course of pre-attendance training reports, aircrew training folder, medical records, individual data summary, flight history, and applicable waivers at in-processing. The candidates' FEF is not required. Due to the addition of tactics training that require a secret clearance, candidates should have a security clearance that will not expire while attending the course.

5.4.5. In-Unit Instructor Course. Current and qualified KC-135 instructor candidates who previously attended a formal instructor school for instructor qualification and were qualified instructors in any US Air Force aircraft and meet the minimum flying hour requirements of **Table 5.1** may upgrade in-unit with OG/CC approval. Sq/CC will follow pre-instructor course training and determine training required to complete the instructor upgrade in-unit based on the approved (formal school) ATS courseware in **Table 6.1**. The syllabus will list all ground, ATD, and flying training events. Evaluation will be according to AFI 11-2KC-135, Volume 2 for initial instruction evaluations. Previously qualified KC-135 instructors will accomplish the appropriate training found in **Table 2.4**. Sq/CC will determine, and OG/CC will approve training required to complete the instructor upgrade in-unit (including evaluation according AFI 11-2KC-135 Volume 2, *KC-135 Aircrew Evaluation Criteria*).

Sq/CCs may require prior instructors to attend the ATS instructor qualification course. Units must coordinate with AMC/A3T ATS Manager for simulator schedule considerations.

5.4.6. Instructor Course Documentation for AFRC, ANG or AD personnel who do not complete an instructor training course and formal school-administered evaluation (Academics-Only Course):

5.4.6.1. Closeout Instructor Course AF Form 4025 will contain remarks by the Sq/CC or Sq/DO recommending the candidate for an instructor evaluation, removal, or reconsideration for instructor training at a later date. The closeout report will include results of academic tests, in-flight progress report, course/class number, start and course completion date.

5.4.6.2. After an instructor candidate successfully completes the instructor evaluation, the unit will send a copy of AF Form 8 to 97 TRS, Altus AFB who in turn will return a Certificate of Completion in memo format to the individual's squadron.

5.4.7. Instructor Course Training.

5.4.7.1. During the formal course, candidates may expect multiple simulated emergencies during simulator training. The maneuvers are in the instructor course syllabus and help broaden the experience base of the candidate.

5.4.7.2. Each IP and IBO candidate will receive an initial instructor evaluation at the formal school according to AFI 11-2KC-135 Volume 2. Successful completion of an initial instructor evaluation and certification by the unit R & C Board (Review and Certification Board) are the final actions of the instructor training course.

5.4.7.3. Instructor course candidates demonstrating unsatisfactory progress during the academic phase may be removed from training and returned to home station (see **paragraph 1.16**).

5.4.7.4. Instructor Training Course Required Publications. See AETC/A3F bookstore CoP for complete list of required publications.

Table 5.7. Instructor Training Course Required Publications.

AFI 11-202 Volumes 1, Volume 2, and Volume 3	P, B
AFI 11-218, *Aircraft Operation and Movement on the Ground*	P
AFI 11-401, *Aviation Management*	P, B
AFI 11-2KC-135 Volume 2, C/*KC-135 Aircrew Evaluation Criteria*	P, B
AFMAN 11-217 Volume 1, *Instrument Flight Procedures*	P
AFI 11-2KC-135 Volume 1, *KC-135 Aircrew Training*	P, B
AFI 11-2KC-135 Volume 3, *C/KC-135 Operations Procedures*	P, B
AFI 11-2KC-135 Volume 3, Addenda A, *Configuration*	P,B
AFI 11-301 Volume 1, *Aircrew Flight Equipment (AFE) Program*	P, B
AFTTP 3-3.KC135, *Combat Aircraft Fundamentals-KC-135*	P, B, SOAR N

5.5. Flight Examiner Program.

5.5.1. Sq/CC will recommend instructors for flight examiner certification. Instructors identified for certification as flight examiners must possess satisfactory knowledge of training and evaluation policies and procedures and the ability to administer evaluations according to applicable publications.

5.5.2. Flight Examiner (FE) Certification. See AFI 11-202 Volume 2. New examiner candidates should complete the A060 series CBT courseware before certification. Sq/CC may elect to not use A060 course if the candidate was previously certified or demonstrates satisfactory evaluation skills.

5.6. Special Qualifications and Certifications. Document all additional certifications in ARMS (see **paragraph 1.8**). Use appropriate event identifiers listed in **Chapter 7** of this instruction. Qualifications and Certifications are one-time events. For requalification, Sq/CC should evaluate if any training is required on a case-by-case basis.

5.6.1. **Formation Lead Certification Training (Q011).**

5.6.1.1. Sq/CC will certify AC in formation lead responsibilities. Certify an Aircraft Commander who completes the minimum training requirements or MPD pilot (who meet requirements in **paragraph 5.2.4**) and who possess experience in all facets of their unit's formation missions. Document certification as "Formation Lead--Certified. ARMS event identifier is Q011 (see **paragraph 1.8**).

5.6.1.2. Training Program. Unit Sq/CC will determine training requirements. As a minimum, formation lead training program should include:

5.6.1.2.1. Study of formation procedures in AFI 11-2KC-135 Volume 3, Chapter 18, *KC-135 Flight Crew Air Refueling Procedures*; NATO ATP-56(A/B), *Air-to-Air Refueling*; AFTTP 3-3.KC-135, *Combat Aircraft Fundamentals-KC-135*, and study guides. Units with ATD/Level C+ capability may use one OFT profile (simulator mission) of a large cell formation under day visual conditions. During the simulator mission, emphasize formation planning, flight discipline, climb-out procedures, position change, tactically maneuvering the formation, formation threat reaction, and ETCAS formation station keeping/management.

5.6.1.2.2. Minimum of three full mission profile formation flights (minimum of two sorties as lead) under the supervision of an instructor pilot (two full aircraft profiles with one as lead if an OFT simulator profile is used). ***EXCEPTION:*** When two or more simulators have a DMO link (G276C), all three formation training sorties may be completed in the simulator. To the maximum extent possible, flights should include AAR operations with multiple receivers, both heavy and fighter-type aircraft. At least one formation flight/OFT profile should be flown as part of a large formation (3 or more aircraft). AC upgrades may credit up to two formation flights accomplished during ACQ (AC Upgrade).

5.6.1.2.3. **(Added-459ARW)** Additional guidance is provided in the most current Formation Lead Certification Process Guide located on the 459 OSF CoP. See paragraph 1.15.8.

5.6.2. Not Used.

5.6.3. **Special Operations (SOAR) Certification Training (Q015).**

5.6.3.1. Training and Sq/CC certification for designated crewmembers flying AAR missions in support of special operations forces (SOAR). Document certification as "SOAR—Certified." Include a separate entry as "KC-135 NVG-Certified," Document in ARMS using event identifier Q015 (see **paragraph 1.8**).

5.6.3.2. Training Program. Emphasize procedures in AFI 11-2KC-135 Volume 3 Addenda C, *KC-135 Special Operations*, versus standard tanker AAR procedures in NATO ATP-56(B).

5.6.3.2.1. Initial ground training events:

5.6.3.2.1.1. G801--Initial SOAR Training

5.6.3.2.1.2. VV01--NVG Training and Qualification.

5.6.3.2.2. Initial flight events:

5.6.3.2.2.1. N013--Rendezvous--Emission Option 3 (radio silent)

5.6.3.2.2.2. S036--SOAR Rendezvous (1 total)

5.6.3.2.2.3. S101--In-flight ARC-210 DAMA SATCOM Training

5.6.3.2.2.4. S200--NVG Operation

5.6.3.2.2.5. NV03 –NVG Refresher (if required)

5.6.4. **ILS PRM Certification Training (Q017).**

5.6.4.1. AFI 11-202 Volume 3, *General Flight Rules*, requires aircrews operating aircraft equipped with TCAS to receive training for operations at airports with ILS Precision Runway Monitoring (PRM) Approaches. The Sq/CC or designated representative will certify pilots upon completion of one-time training. Document certification as "ILS PRM-Certified". ARMS event identifier is Q017, ILS PRM (see **paragraph 1.8**). Before operations at an airport with ILS PRM approaches capabilities, pilots will complete the following training and certification.

5.6.4.2. Training Program. Review ILS PRM requirements according to the Airman's Information Manual (AIM), Part 5-4-15. Complete appropriate training including viewing of the video. The most current information can be downloaded at the FAA website: **http://www.faa.gov/education_research/training/prm**.

5.6.4.3. View FAA video, "ILS PRM Approach Information for Air Carrier Pilots. The large-file video is also available on the AMC/A3T CoP (see **paragraph 1.15**).

5.6.5. **Air Refueling (AAR) Certification/Qualifications**.(Q021-Q033) Document additional AAR certification in ARMS using events Q021 through Q033 **(**see **paragraph 1.8)**.

5.6.5.1. **Receiver AAR.**

5.6.5.1.1. Unit-level training certifies a crewmember in receiver rendezvous and AAR procedures specified in ATP-56(B) and flight manual including evaluation according to AFI 11-2KC-135 Volume 2. For pilots, document receiver AAR qualification in the individual's FEF according to AFI 11-2KC-135 Volume 2.

5.6.5.1.2. Training consists of rendezvous and AAR to include closure, contact and breakaway procedures. Instructor will demonstrate all limits and manual boom latching procedures. The student must be able to establish contact under simulated conditions of radio silence, pilot-director lights out, and tanker autopilot off. Unless already current and qualified as a receiver aircraft commander, Instructor will declare the receiver pilot proficient in "day" contact before advancing to night activity. During the hours of darkness according to AFI 11-401, conduct practice in rendezvous, closure, and contacts until able to maintain contact for 10 minutes toggle-engaged time. (see **Chapter 7** for ARMS "Q" event identifiers for pilots and booms).

5.6.5.2. **MPRS Certification Training (Q033).**

5.6.5.2.1. If unit is equipped with MPRS, complete A006, MPRS Certification Training, as a one-time course in **Table 5.8**. A number of KC-135 aircraft may receive the MPRS kits deployed fleet wide. Basic knowledge of MPRS system and associated equipment is imperative for standardization (in the event crewmembers are tasked to perform MPRS air refueling pod operations in MPRS equipped aircraft). For A005 and A006, use MPRS training program (slides and lesson plans) on AMC/A3TK CoP (see **paragraph 1.15**) until available in the KC-135 ATS (e.g., CBT training). Units should make every effort to complete ground training at home station.

5.6.5.2.2. Flight Training. MPRS one-time certification sortie. A like-specialty MPRS instructor will supervise pilots or boom operators by observing equipment and AAR Pod refueling operations. The instructor pilot may supervise training activities from either the jump seat or either pilot seat. The IBO will observe training activities from the instructor position in the boom operator's compartment. Units may complete certification using just-in-time training at home station or in COCOM AOR, as applicable.

5.6.5.2.3. Document training closeout on AF Form 4025 and place in training folder. Document certification as "MPRS—Certified,". ARMS event identifier is Q033 (see **paragraph 1.8**).

Table 5.8. MPRS Certification Training Requirements.

Code	Event	Pilot	BO	Note
A006	MPRS Certification Course	1	1	
A006A	MPRS System Description (IBT)	1	1	
A006B	MPRS Specifications and Limitations (IBT)	1	1	
A006C	MPRS Normal Procedures (IBT)	1	1	
A006D	MPRS Performance (IBT)	1	1	
A006E	MPRS Abnormal Procedures (IBT)	1	1	
A006F	MPRS Cautions and Warnings (IBT)	1	1	
G025	Aircraft Field Trip	1	1	
M001	Sortie	1P	1P	1
P360	Mission Planning and Briefing	1P	1P	

Code	Event	Pilot	BO	Note
P361	Preflight	1P	1P	
P366	Checklist Procedures and Use	1P	1P	
P367	Crew Coordination	1P	1P	
P369	Aircraft Equipment Operation	1P	1P	
Q033	MPRS Certification	1	1	1
R073	AAR Pod Breakaway and Emerg. Separation	1P	1P	
R135	Preparation for Contact Procedures	1P	1P	
R155	Probe and Drogue Contact		2P	
R195	Tanker Wing Pod AAR	1P	1P	
See **A2.4.7.** and **A2.4.8.** for Grading criteria				

NOTE:

1. Pilots and boom operators require a one-time only certification flight under supervision of a like-specialty MPRS instructor. MPRS certification is required before unsupervised use of equipment and AAR Pod refueling operations in-flight.

5.6.6. **GATM (Block 40. X) Difference Training(Q040/Q041).** ***NOTE:*** The GATM training program has been migrating from aircraft to simulator training; all FTU and instructor courses are being modified to GATM-only. Further guidance can be found in this publication and also in AFI 11-2KC-135 Volume 3 and the KC-135 GATM Transition Guide (see AMC/A3TK CoP).

5.6.6.1. Crewmembers will complete an initial A036, GATM Difference Course, (see **Table 5.9**) when their unit of assignment begins GATM conversion (receives Block 40.X modified aircraft). The baseline KC-135 configuration for the unit GATM modification is Pacer CRAG (PC) Block 31. Crewmembers will be qualified in this configuration before GATM certification. (***NOTE:*** Aircrew members attending FTU GATM courses and who are assigned to units who have not completed GATM modification will receive A035 GATM Block 40.X to Block 30.X Difference Course training).

5.6.6.1.1. Units accomplishing an in-unit requalification training program may credit Block 40.X training simultaneously with Block 31 training where applicable. Because the Block 40.X difference training leads to a certification, the qualification evaluation should be in a Block 31 aircraft as applicable, see AFI 11-2KC-135 Volume 2 for documentation.

5.6.6.2. Wing (OSS/OST) / Squadron training instructors will manage the Block 40.X difference certification program. Core KC-135 bases will retain both PC Block 31 and GATM-modified aircraft and will ensure all crewmembers maintain qualification/currency in both configurations.

5.6.6.3. Ground Training. ATS Contractor conducts all ground training consisting of Instructor Based Review (IBR) and CBTs plus 3 GATM OFT profiles. Crewmembers

must complete CBT lessons A036A through A036L within 45 days before GATM OFT sessions A036M through A036O see **Table 5.9** and **Table 5.10**.

Table 5.9. GATM Certification Ground Training Requirements.

Code	Events	AC	MPD P/ CP	N	BO	Notes
A036	GATM R-model Differences Course	1	1	1	1	
A036A	GATM Modifications (CBT)	1	1	1	1	
A036B	GATM Concepts (CBT)	1	1	1	1	
A036C	IHC and IMFD Overview (CBT)	1	1	1		
A036D	Flight Management Function (CBT)	1	1	1		
A036E	Communication Systems (CBT)	1	1	1		
A036F	Navigation Systems (CBT)	1	1	1		
A036G	Surveillance Systems (CBT)	1	1	1		
A036H	Air Traffic Management Operations (CBT)	1	1	1		
A036I	Coordination Items for Boom Operator CBT)				1	
A036J	Flight Display System (CBT)	1	1	1		
A036K	Integrated GATM Operational Procedures (CBT)	1	1	1		
A036L	GATM Electrical System (CBT)	1	1		1	
A036HO1	Handout--GATM Training Pilots & Navigators	1	1	1		
A036HO2	Handout—GATM Training for Boom Operators				1	
A036PTT	GIPTT IHC Exercise/Familiarization	1	1	1		2
A036P	GATM IOS Operation	1				1
G025	Aircraft Field Trip	1	1	1	1	
P360	Mission Planning and Briefing	1P	1P	1F		
P360A	AFMSS Mission Planning	1P	1P	1F		
P360B	AFMSS DAFIF Data Loading Procedures	1P	1P	1F		
See **A2.4.7.** and **A2.4.8.** for Grading criteria						

NOTES:

1. Unit instructors designated by SQ/CC will complete IOS training and certification to operate the IOS.
2. Training tools: may use aircraft, OFT or the GATM Integrated-hand-controller Part Task Trainer (GIPTT).

5.6.6.4. GATM (Block 40.X) Flight Training. Flight training will be conducted in-unit (based on aircraft availability) by Block 40.X certified instructors with the exception of 3 OFT Profiles conducted by ATS contractor. Sorties will emphasize systems operations and 3 person (4 person with a navigator) CRM. A required proficiency level (RPL) of "3" equates to proficiency for that event. Document training closeout on AF Form 4025 and place in training folder. Document certification as "GATM—Certified", see **Table 5.10**. ARMS event identifier is Q040 (see **paragraph 1.8**). GATM configured OFT may be used in place of aircraft flight.

5.6.6.5. Data Link Training. Requires one additional ATS contractor OFT Profile (A036R) plus a certification sortie.

5.6.6.5.1. Certification. Accomplish one overseas sortie operating in data link airspace to include an "AFN Log On", three CPDLC position reports, message sending/receiving (e.g. altitude change, course offset, route change requests), and an "End Service" message. Every attempt will be made to fly a route which includes a non-compulsory reporting point. If unable to fly a route that includes a non-compulsory reporting point, demonstrate editing the "NEXT" waypoint in a CPDLC position report. The training program leading to data link certification may be accomplished in the ATD in place of the flight requirement. This training requires a Block 40.X data link certified Air Force instructor to accomplish the minimum requirements using the A036R GATM Data Link syllabus, focusing on the differences between Pacific and Atlantic operations. Accomplish training within 90 days (180 days for ANG/AFRES) of completing the Block 40.X difference certification. Document training closeout on AF Form 4025 and place in training folder (May be documented with Q40, if applicable). Document certification as "GATM—Data Link Certified,", see **Table 5.10**. Document in ARMS using event identifier Q041 (see **paragraph 1.8**). Units have the option to use a data link OFT profile in place of an overseas flight (see AMC/A3TK CoP for additional OFT guidance). ***NOTE:*** May be extended an additional 60 days with Sq/CC approval. If not accomplished within given time frame, crewmember must re-accomplish the data link ground training class prior to receiving flight training. Inform AMC/A3TK, of circumstances for non completion.

Table 5.10. GATM Certification Flight Training Requirements.

CODE	EVENT	Pilot	N	BO	Notes
A036M	GATM OFT Profile #1	1	1		6, 7
A036N	GATM OFT Profile #2	1	1	1	6, 7
A036O	GATM OFT Profile #3	1	1		6, 7
A036R	GATM Data Link OFT Profile #4	1			5,7
M001	Sortie	P	P		1
N010	Tanker RV	P			1
N020	Tanker RV Golf (Enroute)	P			1
N030	Tanker RV Delta (Point Parallel)	P			1
N040	Tanker RV Golf (Anchor)	P			1
N090	Control Time Exercise	P			1
N160A	FMS Navigation	P	P		1,2
P010	Takeoff – Initial	P			1
P015	Instrument Departure	P			1
P020	Takeoff	P			1
P070	Instrument Approach	P			1
P071	Holding	P			1
P073	Enroute Descent / VNAV	P			1
P100	Precision Approach	P			1

CODE	EVENT	Pilot	N	BO	Notes
P101	ILS Approach	P			1
P110	Non-Precision Approach	P			1
P112	VOR/TAC/LOC/FMS Approach	P			1
P190	Landing	P			1
P260	HAVE QUICK Radio Procedures	P	P		
P270	SECURE RADIO Procedures	P	P		
P360	Mission Plan & Briefing	P	P		2
P361	Preflight	P	P		1
P366	Checklist Procedures	P	P		1
P367	Crew Coordination	P	P		1
P368	Postflight	P	P		1
P369	Aircraft Equipment Operations	P	P		1
P390	AOC Initialization	P	P		1
P391	HF SELCAL	P			1
P392	SATCOM Communication	P	P		1
P393	Flight Plan Load / PCMCIA	P	P		1
P394	Flight Plan Load / Data Link	P	P		1
P395	Nav & A/R Data Base Load Ops	P	P		1
P396	AFN Logon	P			1
P397	ADS & CPDLC	P			1
P398	Data Link Training Sortie	P			1
Q040	GATM System Certification	1	1	1	1
Q041	GATM Data Link Certification (ATC)	1			1,3
Q579	RNAV/GPS Approach Certification	P			4,8
See **A2.4.7.** and **A2.4.8.** for Grading criteria					

NOTES:

1. May be accomplished in the simulator.
2. SOAR certified navigators only.
3. Requires a designated FANS region or ATS facility with Data link capability. May be accomplished in the ATD using approved syllabus.
4. Q579 should be conducted as part of GATM Certification Training.
5. Required for Datalink Certification Training.
6. Navigator may use on-board OFT (at IOS station) with an operable MFD, CDU and IHC.
7. Units without a simulator will Queen Bee crews to ATS sites with Block 40.X modified simulators (contact AMC/A3TK for site locations).
8. Q579 will be completed in the simulator (see **paragraph 5.6.11.** for exceptions)

5.6.6.6. Continuation Training. This training is designed to maintain and expand aircrew Block 40.X knowledge and proficiency (See **Chapter 4**).

5.6.7. **KC-135 OFT Simulator Operator Certification Training (Q043).**

5.6.7.1. Description. Applies to unit instructors with access to Level C+ OFT simulator, OFT modified with GATM or BOWST. Units will include training details in local supplement. Sq/CC will designate and certify instructors for OFT operations using OFT contractors. Document certification on as "ATD-IOS—Certified," Document in ARMS using event identifier Q043 (see **paragraph 1.8**).

5.6.7.1. **(459ARW)** 756 ARS/CC will only designate and certify instructors that received training during ACIQ at Altus AFB, OK. Since the 756 ARS is non-collocated and rarely operates the simulator unaccompanied by an ATS Contractor; all certified instructors will conduct refreshed training prior to operating the OFT unaccompanied. The refresher training will be at the discretion of the ATS Site Manager.

5.6.7.2. Training Program. Schedule training with local ATS contractor/instructors. Emphasize training on safety precautions, shut-down and evacuation procedures when the device is on motion. When configured with GATM, include procedures to initiate data link message notification and responses. Use the ATS Contractor Operating Guide for limits and restrictions. ARMS event identifier is A036P.

5.6.8. **Tactics Certification Training (Q044).**

5.6.8.1. If not certified, the Sq/CC will certify all aircrew in the following tactic maneuvers: P061, VFR Overhead; P062, Tactical Departure; P063, Tactical Arrival; P064, Slide Exercise; P065, Single Ship Scram Exercise; P066, Maneuver—Steep Turns; P067, Mid-Mission Join-Up; P068, Combat Descent; and P069, Defending Climb, see **Table 5.11**. Aircraft flight is not required; certification may be accomplished with simulator or flight training. See **Chapter 7** event descriptions for day and night proficiency requirements.

5.6.8.2. Document training closeout on AF Form 4025 and place in training folder. Document certification as "AFTTP 3-3.KC-135 Tactics Maneuvers—Certified" (see **Table 5.11**). ARMS event identifier is Q044 (see **paragraph 1.8**). Once certified, pilots practice maneuvers as part of M050, Tactical Sortie.

5.6.8.3. Before flying tactics maneuvers (P062, Tactical Departure and P063, Tactical Arrival), pilots will review items below. See also "VFR Guidance Review" slide presentation on the HQ AMC/A3T CoP (see **paragraph 1.15**) or other training media. The aircrews will CHUM, study, and carry in-flight a chart (minimum TPC scale) covering the VFR Route of Flight. Review/study civilian sectional or host nation equivalent chart before accomplishing VFR training.

5.6.8.3. **(459ARW)** Additional guidance is provided in the most current Tactics Certification Process Guide located on the 459 OSF CoP. See paragraph 1.15.8.

5.6.8.3.1. VFR weather requirements.

5.6.8.3.2. Airspace and VFR pattern entry requirements.

5.6.8.3.3. Class B, C, and D airspace ATC services.

5.6.8.3.4. VFR cruising and minimum altitudes and flight following.

5.6.8.3.5. MAJCOM-Directed guidance.

Table 5.11. Tactics Certification Requirements.

Code	Training Event	Pilot	N	B	Notes
P061	VFR Overhead	P	1	1	1,2,3,4,5
P062	Tactical Departure	P	1	1	1,2,3,4,5
P063	Tactical Arrival	P	1	1	1,2,3,4,5
P064	Slide Exercise	P	1	1	1,2,3
P065	Scram Exercise (Single Ship)	P	1	1	1,2,3
P066	Maneuver – Steep Turns	P	1	1	1,2,3
P067	Mid-Mission Join Up	P	1	1	1,2,3,6
P068	Combat Descent	P	1	1	1,2,3,5,7
P069	Defending Climb	P	1	1	1,2,3
Q044	Tactics Maneuvers Certification	1	1		
Q061	Tactics Test	1	1	1	
See **A2.4.7.** and **A2.4.8.** for Grading criteria					

NOTES:

1. Traditional Copilots will accomplish the pilot-not-flying (PNF) duties. MPD pilots will accomplish pilot-flying duties. For definition and set up of events, see AFTTP 3-3.KC-135
2. Navigator and Boom Operator must accomplish crew resource management (CRM) duties.
3. Aircraft flight not required. May be accomplished by flight or simulator training.
4. Navigator and Boom Operator need only see either a day or night procedure for each arrival and departure event.
5. Must accomplish the event(s) during the day before accomplishing at night. Both day and night proficiency are required prior to certification. See definition of event in **Chapter 7**.
6. ATD link to second ATD required for credit if not accomplished in aircraft.
7. Proficiency must be attained in both Turning (single-ship only) and Straight ahead.

5.6.9. **Aircraft Commander Touch and Go Landings (Q050), Supervision of Touch and Go Landings (Q051) and Receiver Air Refueling (Q052) Certification Training.**

5.6.9.1. Sq/CC will certify an AC to perform touch and go landings (Q050), supervise unit touch and go landings (Q051), and if applicable, supervise receiver air refueling (Q052). Before certification the AC should have accumulated a minimum of 50 hours (not including other time) since AC qualification. Document certification as "AC Touch and Go Landing—Certified," "Supervise Touch and Go Landing—Certified" or "Supervise Receiver AAR—Certified." ARMS event identifies are Q050, Q051 and Q052 (see **paragraph 1.8**).

5.6.9.2. Training Program. Complete the following items before the AC performs a solo touch and go landings (Phase I), supervise a unit MPD pilot/CP touch and go landings (Phase II), or supervises MPD pilot/CP receiver AAR, if applicable:

5.6.9.2.1. Sq/CC directed ground and in-flight certification training in touch and go procedures.

5.6.9.2.2. Sq/CC certification allowing an AC to supervise copilot/MPD pilot touch and go landing (Phase II). Phase II should normally occur after completion of Phase I, however, both phases may be completed simultaneously if approved by Sq/CC.

5.6.9.2.3. Touch and go training may be accomplished concurrently with an in-unit upgrade or qualification program.

5.6.9.3. See AFI 11-2KC-135 Volume 3 for conditions under which a certified AC is authorized to conduct/supervise touch and go landings.

5.6.9.4. **(Added-459ARW)** Additional guidance is provide in the most current Aircraft Commander Touch and Go Landings, Supervision of Touch and Go Landings Process Guide located on the 459 OSF CoP. See paragraph 1.15.8.

5.6.10. **EMCON Options 3 and 4 Certification Training (Q060/Q070).**

5.6.10.1. Sq/CC will certify crewmembers to accomplish EMCON 3 or 4 procedures during formation, rendezvous, and AAR on both operational and training sorties. All members of the crew must be certified or in training under the supervision of a like specialty instructor. Thorough coordination with the receiver aircrew is required for units to practice EMCON 3 or 4 on non-operational training missions. Coordination should be accomplished during mission planning phase. In no case will a crew launch under EMCON 3 or 4 without prior coordination with the receiver crew. Document certification as "EMCON 3 and 4—Certified." ARMS event identifiers are Q060 and Q070 (see **paragraph 1.8**).

5.6.10.2. Training Program. Unit Sq/CC will determine training requirements based on the crewmember's experience and the unit's mission. BO with less than 200-flying hours must receive a minimum of one flight with an instructor stressing radio silent procedures before certification. Units will include details of the EMCON Option 3 and 4 programs in local supplement.

5.6.10.3. **(Added-459ARW)** The training program is defined in the most current EMCON Option 3 and 4 Certification Process Guide located on the 459 OSF CoP. See paragraph 1.15.8.

5.6.11. **RNAV/GPS Operations Certification (Q579).** Before flying RNAV/GPS LNAV approaches or flight within RNAV 1 or RNAV 2 airspace, pilots will receive a onetime training certification. Instruction will contain Ground and Flight based training. Flight training should be accomplished in a Level C+ OFT. For units not collocated with an OFT, initial cadre must be certified using an OFT location to learn the flight maneuvers. These instructors may return to the unit and use an aircraft acting as the certified safety pilot instructing from the jump seat. Training will cover RNAV/GPS/RNP airspace and how it relates to enroute, terminal, and approach navigation. Navigators will receive Certification using Ground Training only. Navigators may attend OFT session.

5.6.11.1. Ground Training. A minimum of two hours of IBT is required to educate crewmembers on RNAV/GPS/RNP airspace and RNAV (GPS) LNAV approaches. All relevant directives and publications should be covered in sufficient detail to provide the crewmember the ability to operate safely in this airspace. Operations of KC-135 GATM

systems related directly to flying RNAV (GPS) LNAV approaches must also be covered. (see AMC/A3TK CoP for training information)

5.6.11.2. Flight Training. Flight training requires pilots to be at a set of controls. Training may be logged as PF or PNF. **Table 5.12** lists the minimum requirements for certification.

Table 5.12. RNAV/GPS Operations Certification Requirements.

Code	Training EVENT	Pilot	Notes
P117	RNAV (GPS) LNAV Approach	P	
	RNAV 1 DP and STAR	1	
	RNAV (GPS) Approach via IAF (No-PT) (Missed Approach)	1	
	RNAV (GPS) Approach via IAF/FAF (Course Reversal)	1	
	RNAV (GPS) Approach via IAF/FAF (No-PT) (Remove Course Reversal)	1	
	("or GPS") Overlay (Vectors to Final) (RAIM Failure)	1	
See **A2.4.7.** and **A2.4.8.** for Grading criteria			

5.6.11.3. Documentation. Document certification as "RNAV/GPS Appr—Certified." Document in ARMS using event identifier Q579 (see **paragraph 1.8**).

5.6.11.4. **(Added-459ARW)** Additional guidance is provided in the most current RNAV/GPS Certification Process Guide located on the 459 OSF CoP. See paragraph 1.15.8.

5.6.12. **AETC Faculty Training Course (FTC).** FTC is a one-time AETC course to better prepare newly-assigned instructors for FTU-instruction at Altus AFB.

5.6.12.1. All instructors conducting initial qualification flying training will be graduates of FTC.

5.6.12.2. With MAJCOM/A3 approval, AFRC and ANG instructors may conduct in unit initial qualification training on a case-by-case basis without FTC (see **paragraph 1.10.2.1**). Before approval, consider previous experience and high instructor demands during initial qualification training.

Chapter 6

AIRCREW TRAINING SYSTEM (ATS)

6.1. Description. The KC-135 ATS is contractor-provided aircrew training system. The ATS contractor provides qualification and continuation training courseware, academic instruction, ATD operation/instruction and training facility management. The USAF provides all flight instruction.

6.1.1. The ATS contract guarantees trained students meet government standards. The Air Force validates training, conducts all flight training aboard the KC-135, and administers all evaluations according to AFI 11-202 Volume 2.

6.1.2. Reports**.** For initial qualification training, the KC-135 ATS includes a post-training feedback system that elicits information and comments in critique format from students, supervisors, and evaluators. The program seeks to collect data to monitor the training while seeking to continually improve, update, and refine the ATS. Return critiques to: 97TRS/CC, 510 North Sixth Street Suite 3, Altus AFB OK 73523-5089.

6.2. Applicability. As defined in AFI 11-202 Volume 1.

6.2.1. Purpose. The KC-135 ATS is a system of academics, ATD sessions, ground and flight training phases. The system provides qualification, upgrade, and continuation training to attain and maintain the appropriate qualification for KC-135 pilots, navigators, and boom operators.

6.2.2. Goal. The ATS program goal is to optimize aircrew training through the integrated use of academics, ATD, and flight-line KC-135 aircraft instruction. The KC-135 ATS has performance requirements in a Statement of Work (SOW) and system specification. The ATS follows the USAF-sponsored ISD process; developing (and maintaining) a Master Task Listing (MTL), Evaluation Standards of Document (ESD), Objective Media Analysis Report (OMAR), and Media Selection Syllabus Report (MSSR) products (approved by HQ AMC/A3T). These products help define each course content, standards, and training media selected for each task and objective.

6.2.3. Responsibilities.

6.2.3.1. ATS Contractor (see **paragraph 1.4.7**) will co-host a quarterly KC-135 ATS System Review Board (SRB) to outline the ATS program including currency, applicability, and effectiveness. Publish meeting minutes and monitor suspenses (specified in the ATS contract).

6.2.3.1.1. ATS contractor maintain the OFT, WST, BOPTT, CPT, CLT, GIPTT, NPT and other devices or training aids, to enhance flight training programs. Schedule lessons, ATD missions and conduct mission overviews and debrief (by the ATS instructor) for each lesson. Provide all necessary data to complete the ATD mission or assigned task.

6.2.3.1.2. The ATS contractor ensures instructors provide an environment for simulator training that is as realistic, as possible. Attention will be directed to crew coordination throughout all phases of flight. Crews will utilize equipment in the

trainer the same as in flight. This shall include communications, personal, and emergency equipment. Correct communications phraseology; techniques; checklist usage and regimentation; and instrument, flight, and AAR procedures will be stressed at all times. Realistic aircraft systems and NAVAID failures and malfunctions will be included in a logical and timely manner.

6.2.3.1.3. Conduct a post lesson critique to reinforce the desired learning outcomes.

6.2.3.1.4. Provide comments on the recurring training documentation. The intent of these comments is to provide meaningful feedback to the appropriate levels of supervision (Air Force and contractor) on the student's continuation training. In those rare cases where the student requires more training than the time available, exhibits less than required preparation, or displays an attitude problem, the instructor must provide immediate documentation/feedback to the student's unit through appropriate channels.

6.2.3.1.5. Provide all students with a training critique.

6.2.3.2. HQ AMC/A3T (see **paragraph 1.4.1**). HQ AMC/A3TK ATS Manager provides overall management authority for KC-135 ATS contract training through the AF Training Group (507 ACSS/GFLC).

6.2.3.2.1. Ensure the ATS Contractor-provided academic and ATD training complies with policies and directives in this instruction and the ATS contract.

6.2.3.2.2. Ensure training performance objectives are met.

6.2.3.2.3. Act as AMC focal point for review of all recommendations, changes or initiatives affecting the KC-135 ATS program.

6.2.3.2.4. Receive the ATS Contractor quarterly KC-135 ATS System Review Board (SRB).

6.2.3.2.5. Determine Fiscal Year training requirements (ATS throughput range).

6.2.3.3. HQ AETC/A3Z (see **paragraph 1.4.2**). In addition, HQ AETC/A3ZM will monitor all actions associated with the KC-135 training program through close coordination with Detachment 2/AMCAOS, 97 TRS, and HQ AMC/A3TK.

6.2.3.3.1. Monitors KC-135 ATS formal school aircrew training performance objectives. May submit quality assurance report (QAR), if required.

6.2.3.3.2. Act as AETC focal point for review of all recommendations/initiatives directed toward the KC-135 ATS contract in coordination with HQ AMC/A3TK.

6.2.3.3.3. Reviews crewmember feedback tools including critiques, evaluator feedback, and course feedback.

6.2.3.3.4. Review and evaluates ATS contractor training analysis, objective hierarchy, courses and training materials for accuracy, currency, and effectiveness.

6.2.3.3.5. 97 TRS (AETC). Ensures instruction is of the highest quality through the review of crewmember critiques, evaluator feedback, course feedback, and course monitoring/evaluation. Reviews and evaluates the task analysis, objective hierarchy, and contractor courses and training materials for accuracy, currency, and

effectiveness. Act as the focal point for proposed formal school syllabus changes at Altus AFB.

6.2.3.4. Det 2/AMCAOS (see **paragraph 1.4.1.3**).

6.2.3.5. Air Force-Appointed ATS Project Officer (PO) and Quality Assurance Representative (QAR). PO/QAR is the primary focal point and liaison between the Air Force and ATS contractors at each ATS training site. PO/QAR is the sole point of contact for their respective ATS. The PO/QAR may direct the contractor to perform or stop work only on safety related issues. The Administrative Contracting Officer and Procurement Contracting Officer have the overall authority to direct contractor start/stops on the ATS.

6.2.3.6. Wings and Groups.

6.2.3.6.1. Provide constructive reports and inputs concerning the ATS program in **Chapter 1**.

6.2.3.6.2. Provide assistance and support with subject matter expertise (SME) upon request by HQ AMC/A3T or Det. 2 AMCAOS.

6.2.3.6.3. Review ETCA course description and requirements for requesting, allocating, scheduling, and confirming attendance for formal training courses. Close coordination with the MAJCOM formal school quota managers (for AMC AD use HQ AMC/A3TF) is imperative to ensure effective utilization of training slots and contractor resources.

6.2.3.7. KC-135 ATS Syllabi.

6.2.3.7.1. The ATS contractor should develop and maintain the appropriate course syllabi with approval by Training Command (**paragraph 1.4.2**) or HQ AMC/A3T. Each syllabus is the blueprint for each KC-135 ATS course in a format standardized by HQ AETC. The format is also adopted for AMC managed courses (e.g., BNQ at McConnell AFB).

6.2.3.7.2. ATS contractor will produce each course syllabus and is therefore responsible for curriculum development described in the KC-135 ATS Contract Statement-of-Work (SOW) and System Specification (SPEC). The ATS Contractor will review syllabi annually and update, as required in coordination with HQ AETC/A3ZM. AETC reviews each course syllabus every two years.

6.3. Dedicated Training Time. As defined in AFI 11-202, Volume 1.

6.3.1. Applies to formal school and continuation training. It is imperative that students complete training in a timely and uninterrupted manner. Students will enroll on a full-time basis. Relieve students of duties not directly related to training. ***EXCEPTION:*** Senior Officer Course (SOC) students may continue their normal duties as time permits.

6.4. ATS Course Prerequisites. Course prerequisites in **Table 5.1 and Table 5.4,** include a minimum number of flying hours, commander recommendation, and completion of applicable training guides or workbooks. Each ATS course is designed and based on certain prerequisites being met by the trainee before course entry. All prerequisites must be complete, with exception

by approved waiver by the appropriate agency (see **Chapter 1**), before entering a formal course listed in **Table 6.1**.

Table 6.1. KC-135R-model ATS Courses.

Course ID	Title	Duration	Notes
KC135PTX1	Pilot Transition Course 1	15 weeks	1,3,4
KC135PIQ	Pilot Initial Qualification Course	18 weeks	1,4
KC135AC	Aircraft Commander Upgrade	10 weeks, 4 days	1,3
KC135PTX2	Pilot Transition Course 2	11 weeks, 4 days	1,2,3,4
KC135PTX3	Pilot Transition Course 3	13 weeks, 4 days	1, 3,4
KC135IAC	Instructor Aircraft Commander Course	4 weeks, 3 days	1,4
KC135PFTC	Faculty Training Course (FTC) (Altus Only)	4 weeks	1
KC135A035	KC135 Block 40-to-30 Differences Training (Pilot/Boom)	2 days/1 day	1
KC135NBQ	Basic Navigator Initial/Requalification/SOC	5 weeks, 3 days	1,6
KC135IN	Instructor Navigator (In-Unit only)	2 weeks	1,6
KC135BIQ	BO Initial Qualification	14 weeks, 4 day	1,7
KC135BRQ	BO Requalification	8 weeks, 4 days	1,3,4
KC135IB	Instructor Boom Operator	5 weeks, 4 days	1
KC135BFTC	BO Faculty Training Course (FTC) (Altus Only)	4 weeks	1
KC135SOC	Senior Officer Course (SOC)	7 days	1,4,5

NOTES:

1. Course duration/content is subject to change, see ETCA or syllabus for course details.
2. Aircraft commander requalification includes pilots previously qualified in the KC-135.
3. These courses have proficiency advancement option that allows for accelerated completion of the flying portion of the training.
4. Block 40 Syllabus
5. Pilot course for senior officers (O-6 selectees and above) who will fly under instructor supervision.
6. Instructor upgrade is available in-unit only (see **paragraph 5.5.2.2.**)

6.5. Lesson Objectives. Use lesson objectives as a reference to establish training and evaluation standards. The KC-135 ATS use the Master Task List (MTL) and the Evaluation Standards Document (MTL/ESD) available on the ATS Contractor website (see **paragraph 1.15**).

6.5.1. MTL and ESD Purpose. MTL and ESD provide the basis for ATS courseware development, and are a principle source for evaluation criteria (validate MDS crewmember performance).

6.5.1.1. Courseware development and instructors training KC-135 crewmembers may use criteria from the MTL and ESD to help determine the ability of an individual to meet

performance levels required to be mission-qualified. For evaluation, use AFI 11-2KC-135 Volume 2 criteria.

6.5.1.2. Conduct the Air Force evaluation to ESD standards, in a timely manner subsequent to the trainee's completion of the ground-based or flight training (to guarantee standards).

6.5.2. Crew resource management (CRM) training. The KC-135 ATS incorporates CRM principles during all phases of training including initial and continuation training to meet requirements of AFI 11-290, *Cockpit/Crew Resource Management Training Program*. A CRM facilitator course is also available, upon request. Instructors use AF Form 4031, *CRM Skills Criteria Training/Evaluation*, for CRM skills training IAW AFI 11-290.

6.6. Unsatisfactory Student Progress. See **paragraph 1.16**. Any time during a trainee's ATS ground instruction for formal school or unit-level continuation training, the ATS instructor considers training progress is unsatisfactory, lack of preparation or participation, etc. the ATS contractor will notify the unit training manager.

6.6.1. Failure to Progress. If a student fails to progress according to syllabus requirements, the command accomplishing the training will conduct a Progress Review (PR). The PR can recommend continuation in training or AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badge*s, action, e.g., a Flying Evaluation Board (FEB) to the individual's unit commander. The ATS contractor will identify students who fail to progress according to the ATS contract (see **Chapter 6**)

6.6.1.1. Failure to Complete Training. If crewmember fails to complete a formal course, the formal school (ATS contractor will notify AMC/A3TK for training deficiencies at McConnell AFB) will send a recommendation of action to the individual's unit. The recommendation will specify if the student should complete training in-unit, return to the formal school to complete training, or be referred to the AF personnel system for reassignment.

6.7. Courseware Changes. See **paragraph 1.3.1**. While completing CBT, the user may also submit a comment or proposed change at the point of instruction using a "Control C" input. See CBT on-screen instructions on the opening to each CBT lesson. The inputs are consolidated as part of the CBT centralized reporting function. ATS contractor, in coordination with 97 TRS/TRQ (if applicable) will monitor "Control C" inputs for consideration of future courseware updates.

6.8. Scheduling.

6.8.1. HQ AMC/A3TK ATS Manager, through KC-135 ATS Contracting office and training group (507 ASSC/GFLC) will determine FY ATS formal school and continuation training requirements (throughput) for all ATS courses. PFT reflects the planned annual formal school throughput based on Air Force requirements, formal school and ATD capacities, and contract authorizations. ATD simulator scheduling at formal school is managed by 97 TRS, Altus AFB in coordination with the ATS Contractor, Training Management System (TMS) scheduling office.

6.8.2. Units with co-located ATS facility schedule directly with the local ATS site. Units without an ATS facility have been designated (by HQ AMC/A3TK ATS Manager) to

"QUEEN BEE" to ATS facilities. While an ATD undergoes conversions or hardware modifications the ATS management team or ATS contractor may request the host or QUEEN BEE unit aircrews divert to sites with available training capacity. The ATS contractors' TMS office at Altus AFB and AMC/A3TK orchestrate the annual scheduling of KC-135 pilots and QUEEN BEE sites in coordination with 507 ASSC/GFLC.

6.8.3. Cancellation of ATS Formal School Course Quota. The ETCA request units notify their MAJCOM/A3T (or equivalent) staff (AMC AD call HQ AMC/A3TF) within 45 days before class start date if a quota cancellation or no-fill is pending. All formal school quota cancellations must be made no later than 30 days prior to class start date to enable the quota to be reallocated. For cancellations at McConnell AFB notify MAJCOM/A3T (or equivalent) staff immediately and site scheduler as early as possible to permit reallocation/rescheduling. Short notice cancellation of one student may result in the delay/cancellation of the paired pilot.

6.9. Administration.

6.9.1. General. Recurring academic and ATD training ensures required subject training materials are presented in a realistic manner on a programmed/phased basis.

6.9.2. Objective. Ensure all crewmembers maintain the proficiency to safely operate the KC-135 aircraft and effectively perform the assigned mission. Crewmembers utilize the ATD to enhance the training areas (e.g., windshear/microburst training, low visibility approaches, systems knowledge, emergency/abnormal procedures, degraded navigation systems, etc.).

6.10. Training Implementation/Student Expectations.

6.10.1. Self-Study**.** Each crewmember is responsible for their adequate preparation before reporting for each ATD mission. Review the mission profile, pre-course study material, associated normal, abnormal, and emergency procedures, and applicable aircraft systems. Each pilot must review the applicable portions of the flight publications and answer review exercises questions located in the OFT profile.

6.10.2. Pre-mission**.** The ATS instructor will conduct a pre-mission briefing before each OFT and cover the mission overview, academic session overview (if applicable), systems, aircraft loading, performance data, route-of-flight, communications, takeoff weather, simulator discrepancies, and OFT emergency egress. Also include mission objectives, special procedures specific (required) training items, scheduled systems and performance training, CRM, and any additional area of emphasis. Prior to executing the scheduled training event, the designated crewmember should conduct a mission briefing covering AFI 11-2KC-135 Volume 3 required briefing items.

6.10.3. Mission**.** The crew and ATS instructor will fly the ATD profile to maximum extent possible. For proper pacing, it is imperative the pilot team cope with simulated emergencies while continuing to fly the aircraft. Limit "freezing the OFT" to meet training objectives.

6.10.4. Post-mission. The ATS instructor will critique the crew's performance during each phase of the mission. Several ATDs are equipped with Tdapps, a dual-screen simulator mission playback system. Complete post-mission documentation IAW Technical Order 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policy and*

Procedures, to include AFTO Form 781A, *Maintenance Discrepancy and Work Documentation***,** AFTO Form 781H**,** *Aerospace Vehicle Flight Status and Maintenance* and ARMS products. Send requests or recommendations for additional training to the unit training manager. Accomplish additional training as soon as practical, schedule permitting.

6.11. Browsing Training Products. KC-135 crewmembers are encouraged to browse any and all lessons existing within the ATS. This is particularly applicable to those personnel preparing to enter upgrade courses, subject to the following restrictions:

6.11.1. Browser time is on a space-available basis.

6.11.2. All browser requests will be coordinated with the ATS training supervisor.

6.11.3. Trainees are not to be scheduled to browse lessons for remediation. Remediation will be scheduled by coordinating with the ATS contractor. Browsing a lesson does not enable the trainee to take the end-of-lesson test. Trainees in remediation will be enrolled in lessons for review in order to take the end-of-lesson test and keep a permanent record of the remediation.

6.12. Aircraft Flights for ATS Training Instructors.

6.12.1. ATS contractor provides opportunities for Air Force flight instructor to observe trainee progress in ATD. Likewise, KC-135 ATS simulator instructors may observe students during flight training according to AFI 11-401 and the terms and conditions of the current KC-135 ATS contract.

6.13. KC-135 ATS Facility Tours.

6.13.1. Wing training offices will coordinate all requests for KC-135 ATS facility tours with the contractor as soon as possible, but in no case later than 24 hours before the planned event. This may require close coordination with public affairs and protocol. Air Force option time may be used at the discretion of the OG/CC. Tours will be on an as-available basis and will not displace scheduled training events.

6.13.2. OG/CC will ensure an Air Force representative meets, greets, accompanies, and conducts all tours. The contractor is not manned for or on contract to perform these duties. The contractor shall be responsible for providing an aircrew training device operator only.

6.14. Aircrew Evaluation.

6.14.1. General. The Air Force examiner's decision as to the ability of the aircrew member's ability to meet qualification levels as set forth in AFI 11-202, Volume 2 and AFI 11-2KC-135 Volume 2, shall be final and will not be subject to question by the contractor. An AF Form 8 will be completed for all evaluations IAW AFI 11-2KC-135 Volume 2.

Chapter 7

ARMS EVENT IDENTIFIERS AND COURSE DESCRIPTIONS

7.1. Description. ARMS event identifiers are standardized for mobility crewmembers.

Table 7.1. ARMS Identifiers.

Identifier	Group	Paragraph
A	Academic training	7.2
AA	USAF-Specified	7.3
AD	Airdrop	N/A
AS	Airland	N/A
B	Navigation & Individual Proficiency	N/A
C	Miscellaneous	7.7
E	Miscellaneous	7.7.7
FE	Miscellaneous	N/A
FR	Formation Departure & Recovery	N/A
F	Formation Training	7.8
G	Ground Training	7.9
H	Miscellaneous (Health)	7.7.18
LE	Miscellaneous (Aircrew Flight Equipment)	7.7.19
LL	Aircrew Flight Equipment	7.10
M	Mission Specific	7.11
NV	NVG	7.12
N	Crew Proficiency	7.13
P	Individual Proficiency	7.13.18
Q	Qualification	7.14
R	Air Refueling	7.15
RS	Tactical Approaches / Departures	N/A
S	Special Operations (SOAR)	7.16
SK	SKE	N/A
SS	SERE	7.17
V	Global Ready Aircraft Commander	7.18
VL	Visual Low Level	N/A
VT	Visual Threat Recognition & Avoidance	7.20
VV	NVG	7.21

Identifier	Group	Paragraph
X	Unit Defined	7.12

7.2. Academic (A) Training Events.

7.2.1. **A001—Initial Qualification Academic Course**.

7.2.2. **A002—Aircraft Commander Upgrade Course (KC-135ACA)--Academic Only**. This course is no longer offered. This type of course is only available as secondary method of training at McConnell AFB, KS.

7.2.3. **A003—Senior Staff Orientation Course**. Two-day orientation for senior officers. Does not meet the requirements for A004, Senior Staff Course, and does not result in a qualification in the KC-135.

7.2.4. **A004—Senior Staff Qualification Course (KC135SOC)**. This course is taught at formal school, Altus AFB.

7.2.5. **A005—MPRS Familiarization Training.** Orientation course to familiarize KC-135R crewmembers to the MPRS hardware installed on selected aircraft. Training does not include certification to operate the MPRS equipment.

7.2.6. **A006—MPRS Certification Training.** See **paragraph 5.6.5.2** and **Table 5.8** for course details. **Description:** Training for MPRS including system overview, normal procedures, performance considerations, abnormal procedures, cautions, and warnings. Just in time training is permissible if aircraft unavailable for training. **OPR:** MAJCOM: HQ AMC/A3T. **Unit:** OSS/OST Training **Aids:** PowerPoint slides, see A3TK CoP. Training is taught in-unit by IBO or IP. Training will include the following:

7.2.6.1. A006A—MPRS System Description (IBT).

7.2.6.2. A006B—MPRS Specifications and Limitations (IBT).

7.2.6.3. A006C—MPRS Normal Procedures (IBT).

7.2.6.4. A006D—MPRS Performance (IBT).

7.2.6.5. A006E—Abnormal Procedures (IBT).

7.2.6.6. A006F—Cautions and Warnings (IBT).

7.2.7. **A010— Instructor Academic Training**. Will complete the appropriate lessons in KC–135 IAC or KC–135 IB Syllabi. See related workbook as ARMS event identifier A044.

7.2.8. **A017—Instructions/Directives/Knowledge/Use**. Review assigned publications in AFI 11-2KC-135 Volume 3, including applicable T.O.s and AFTTP 3-3.KC-135 with emphasis on amplified checklists systems knowledge and procedures.

7.2.9. **A018—Aircraft Commander Responsibilities.**

7.2.10. **A026—Difference Course (KC-135E to KC-135R-model)**. Initial academic courseware and lessons are available in CBT format. OFT simulator training included a minimum of two OFT missions.

7.2.11. **A029—Difference Course**. Generic course currently not used.

7.2.12. **A032—Difference Course (KC-135T-model)**. Pilots must be qualified in KC-135R-model before completing this course. Units will develop this course, see AMC/A3T CoP (**paragraph 1.15**) for baseline lesson plan and presentation.

7.2.13. **A034—Requalification Course**. See the appropriate crewmembers syllabus for course details.

7.2.14. **A035—GATM Block 40. X to Block 30.X Difference Course**. **Purpose:** Ensure KC-135 aircrew completing GATM FTU training courses are proficient in system operation of Pacer CRAG Block 30.X systems before reporting to units who have not begun GATM conversion.

7.2.14.1. A035A— IBT Block 40 Publications (pilot and boom)

7.2.14.2. A035B—CBT Block 40 to 30 Differences Orientation (pilot and boom)

7.2.14.3. A035C—CBT Block 40 to 30 Differences MFD (pilot)

7.2.14.4. A035D—CBT Block 40 to 30 Differences FMS (pilot)

7.2.14.5. A035E—CBT Block 40 to 30 Differences Systems (pilot)

7.2.14.6. A035F—OFT Block 40 to 30 Differences OFT (pilot)

7.2.14.7. A035G—CBT Block 40 to 30 Differences for Boom Operators (boom)

7.2.14.8. A035H—IBR Boom Operator Review (boom; uses VR viewer)

7.2.15. **A036—Block 40. X R-model Difference Course.** See **paragraph 5.7.10** and **Table 2.2** and **Table 5.9**.

7.2.15.1. A036A—GATM Modifications (CBT).

7.2.15.2. A036B—GATM Concepts (CBT).

7.2.15.3. A036C—Integrated Hand Controller (IHC) and IMFD Overview (CBT).

7.2.15.4. A036D—Flight Management Function (CBT).

7.2.15.5. A036E—Communication Systems (CBT).

7.2.15.6. A036F—Navigation Systems (CBT).

7.2.15.7. A036G—Surveillance Systems (CBT).

7.2.15.8. A036H—Air Traffic Management Operations (CBT).

7.2.15.9. A036I—Coordination Items for Boom Operator (CBT).

7.2.15.10. A036J—Flight Display System (CBT).

7.2.15.11. A036K—Integrated GATM Operational Procedures (CBT).

7.2.15.12. A036L—GATM Electrical System (CBT).

7.2.15.13. A036M—GATM Difference OFT Profile #1 (OFT).

7.2.15.14. A036N—GATM Difference OFT Profile #2 (OFT).

7.2.15.15. A036O—GATM Difference OFT Profile #3 (OFT)

7.2.15.16. A036P—GATM IOS Operations**.** (See Q043 and **paragraph 5.7.10**). **Purpose:** Ensure SQ/CC designated instructors are familiar with the OFT to include using the IHC and IOC when configured with CNS/ATM. One time training event after initial training with ATS contractor aboard Level C+ OFT CNS/ATM configured.

7.2.15.17. A036R-GATM Data Link OFT Profile #4 (OFT)

7.2.15.18. A036S Block 40.4 – Academic Training for differences between Block 40.x and Block 40.4 (If Required) Difference training from previous block modifications of the KC-135 Block 40 aircraft.. IBT using training documents provided by HQ AMC/A3T CoP

7.2.15.19. A036HO1—Handout—CNS/ATM Training Pilot and Navigator. CBT course guide.

7.2.15.20. A036HO2—Handout—CNS/ATM Training for Boom Operators. CBT course guide.

7.2.15.21. A036PTT—GATM Integrated Part Task Trainer (GIPTT). PC-based trainer designed to allow a crewmember to develop dexterity skills necessary to operate the Integrated Hand Controller (IHC) and graphic presentation. May also be used for menu layout/changes, mission planning, and mission procedural training.

7.2.16. **A037—OPLAN-8010 Performance Training**. Review performance data (manual and automated).

7.2.17. **A044—Instructor Training Course Workbook**. See **Chapter 5** description. Complete before attending formal course (IAC) or conducting in-unit upgrade. A sub-part to the overall instructor course. See related ARMS event description, A010.

7.2.18. **A052—Receiver AAR Indoctrination**. Initial/Familiarization in-flight training.

7.2.19. **A053—Receiver AAR (Initial) Course.** Unit with receiver DOC will develop the course and include details in local supplement.

7.2.20. **A060—Flight Examiner Course**. Complete before certification IAW AFI 11-2KC-135 Volume 2 (One-time event) (see **5.6.2**).

7.3. USAF-Specified (AA) Events.

7.3.1. **AA01—Qualification Evaluation.** See AFI 11-2KC-135 Volume 2.

7.3.2. **AA02—Qualification Evaluation, Simulator.**

7.3.3. **AA11—Instrument Evaluation.** See AFI 11-2KC-135 Volume 2.

7.3.4. **AA12—Instrument Evaluation, Simulator.**

7.3.5. **AA21—Combined Qualification and Instrument Evaluation.**

7.3.6. **AA22—Combined Qualification and Instrument Evaluation, Simulator.**

7.3.6.1. AA22A INSTR/QUAL Sim Profile 1.

7.3.6.2. AA22B INSTR/QUAL Sim Profile 2.

7.3.6.3. AA22C INSTR/QUAL Sim Profile 3.

7.3.6.4. AA22D INSTR/QUAL Sim Profile 4.

7.3.6.5. AA22E INSTR/QUAL Sim Profile 5.

7.3.6.6. AA22F INSTR/QUAL Sim Profile 6. FTU Instrument/Qualification Evaluation.

7.4. Airdrop (AD) Events (N/A KC-135).

7.5. Airland (AS) Events (N/A KC-135).

7.6. Navigation & Individual Proficiency (B) Events (N/A KC-135).

7.7. Miscellaneous (C, E, H, FE, LE) Events.

7.7.1. **C010—CWD Driver Operations.**

7.7.2. **C020—Mass Casualty Exercise.**

7.7.3. **C030—Mobility Briefing.**

7.7.4. **C040—Mobility Folder Review. Purpose:** Ensure Air Force Personnel are prepared to for deployment to locations specified by tasking order. **Description:** The unit commander ensures unit personnel prepare for deployment in accordance with this AFI, AFMAN 10-401, and AFI 36-507. In addition to the aircrew specific training items contained in this AFI, Air Force members have Air Force specific and theater specific requirements that must be met prior to deployment. The unit UDM is responsible to ensure all personnel meet these additional ancillary and mobility training requirements. **OPR:** Unit Commander, Unit Deployment Manager, and individual crewmembers. **Additional Information:** See AFI 10-403, *Deployment Planning and Execution*. Frequency of this event will be determined by the Installation Deployment Plan (IDP).

7.7.4. **(459ARW)** Crewmembers will conduct a mobility folder review annual with the unit UDM.

7.7.5. **C050—Unit Disaster Preparedness Training.**

7.7.6. **C200—AFMSS Portable Flight Planning Software.** Mission planning lesson conducted during initial qualification training. Includes two lessons and workshop (with hand-on training).

7.7.7. **E011—Standards of Conduct Briefing.**

7.7.8. **E012—Suicide Awareness and Violence Prevention Training.** No longer used. See E113 for new training requirement.

7.7.9. **E020—AMC Escort Training.**

7.7.10. **E030—5-Year Passport. (Primary) Description:** As required for unit mission. Due date should be 3 months before the passport expiration date to prevent passport from expiring. Units should have minimum of two passports. Aircrews are required to have a minimum of 1 – 5-year passport and a secondary for Visa application. Additional passports as required for unit mission.

7.7.11. **E035–2 yr Passport. (Secondary) Description:** As required for unit mission. Primary use is for visa application. Due date should be 3 months before the passport expiration date to prevent passport from expiring. Units should have minimum of two

passports. Aircrews are required to have a minimum of 1 – 5-year passport and a secondary for Visa application. Additional passports as required for unit mission.

7.7.12. **E040—Base Populace Briefing.**

7.7.13. **E050—Newcomer Substance Abuse Awareness Briefing.**

7.7.14. **E060—Newcomers Social Actions Briefing.**

7.7.15. **E112—Information Protections.** 30-minute duration. **Purpose:** Ensure all personnel using Air Force information systems understand the necessity and practice of safeguarding information processed, stored, or transmitted on all these systems. See course description in ETCA, Ancillary Training. **Reference:** USAF-wide web-based training program. This training replaces: Information Security (INFOSEC); NATO Security; E100--Information Assurance (IA); Records Management; Privacy Act; and Freedom of Information Act. Training can be located at the Air Force Portal **https://www.my.af.mil/faf/FAF/fafHome.jsp** / Top Viewed: Training / ADLS

7.7.16. **E113—Human Relations.** 30-minute duration. **Purpose:** See course description in ETCA, Ancillary Training. **Reference:** USAF-wide web-based training program. This training replaces Combat Trafficking and Suicide Awareness and Violence Prevention (SVAT). Combating Trafficking in Persons (must complete this section prior to SVAT being able to open). Training can be located at the Air Force Portal **https://www.my.af.mil/faf/FAF/fafHome.jsp** / Top Viewed: Training / ADLS

7.7.17. **E114—Force Protection.** 30-minute duration. **Purpose:** See course description in ETCA, Ancillary Training. **Reference:** USAF-wide web-based training program. This program replaces G110, Level 1 Antiterrorism Training. Training can be located at the Air Force Portal **https://www.my.af.mil/faf/FAF/fafHome.jsp** / Top Viewed: Training / ADLS

7.7.18. **Health Training (H) Events.** AFI 41-106, *Medical Readiness Planning and Training*, requires medical units to track immunizations for medical and non-medical personnel. The most current system is called the Air Force Complete Immunizations Tracking Application (AFCITA) according to AFJI 48-110, *Immunizations And Chemoprophylaxis.* This program is maintained by base medical function. Aircrews follow the USAF baseline vaccine group in AFCITA then add the appropriate MDS-specific group. KC-135 crews should followed AMC_Aircrew_3 or as specified by MAJCOM. Units may also elect to supplement the AFCITA system by tracking H events in ARMS. Use the following events if unit directs tracking in ARMS:

7.7.18.1. **H010—Physical Fitness Assessment.** Air Force Physical Fitness standards are three evidence-based fitness components: body composition, 1 ½ mile timed run, and muscular fitness (push-up and crunch). See AFI 34-266, *Air Force Fitness and Sports Programs.*

7.7.18.2. **H020—Dental Examination.**

7.7.19. **LE01—Helmet Inspection (If Issued).**

7.7.20. **LE02—Oxygen Mask Inspection (If Issued).**

7.8. Formation Training (F) Events. ***NOTE:*** Pilot Not Flying (PNF) log events when performing PNF duties.

7.8.1. **F020—Formation**. Two or more aircraft with the same intended route of flight, maintaining station-keeping operations by either or both visual and electronic means. The formation will be flown with successive tankers in line astern and stepped up or down behind the leader. . Use procedures in applicable AFIs and T.O.s. Intent is to gain proficiency to include preflight and operating ETCAS during KC-135 formations (station keeping). Must be flown through completion of level-off or join-up (whichever occurs first) and a minimum 30 minutes in formation. Includes buddy departure for credit. AC must brief the portion of the mission that they will be lead. Recommend use of EMCON 2 procedures (not applicable for formal schoolhouse). Plan HAVE QUICK and SECURE RADIO Operation during each formation flight. (N/A ATD) For continuation training, any formation position is creditable. Log only one F020 per sortie.

7.8.2. **F030—Large Formation**. Three or more aircraft with the same intended route of flight, maintaining station-keeping operations by either or both visual and electronic means (KC-135s or a mix with KC-10s). Any formation position is creditable. Must be flown through completion of level-off or join-up (whichever occurs first) and minimum 30 minutes of formation. Recommend use of EMCON 2 (or EMCOM 3) the entire flight to include preflight, formation departure, and join-up. Do not preclude ATC reporting (non-contingency training missions) or other communication for safety of flight. This event should be accomplished using the virtual formation syllabi in the simulator

7.8.3. **F060—AAR Formation**. Two or more aircraft with the same intended route of flight, maintaining station-keeping operations by either or both visual and electronic means (KC-135s or a mix with KC-10s). Minimum 15 minutes of AAR formation time required. Includes rendezvous and AAR procedures in ATP-56B, AFTTP 3-3.KC-135 and AFI 11-2KC-135 Volume 3. Credit may be taken if receiver aborts provided a sampling of AAR formation positions are accomplished. Not creditable in lead position if receiver aborts. Intent is AAR formation position training in other than lead position. Attempt to balance lead and number two positions (wing) during training period.

7.9. Ground Training (G) Events.

7.9.1. General.

7.9.1. **(459ARW)** Alert responses are coordinated through appropriate command and control channels and in accordance with IAW 459 OSF/OSX policies.

7.9.1.1. A crewmember that instructs (a class) may receive credit for the academic training requirement.

7.9.1.2. Records and Documentation. Units will use AF Form 1522, *ARMS Additional Training Accomplishment Input*, IAW AFI 11-202 Volume 1. Record G280, Small Arms Training on AF Form 522, *USAF Ground Weapons Training Data*, IAW AFI 36-2226. The course instructor will deliver the completed forms to the appropriate scheduling and training documentation sections within one duty day after the class is taught.

7.9.2. **Flight Physical.** See requirements in AFI 11-401 for specific information on expiration. Flying restrictions are required after expiration date.

7.9.3. **Physiological Refresher**. See requirement in AFI 11-401. See course details in AFI 11-403, *Aerospace Physiological Training Program*. Flying restrictions are required after expiration date.

7.9.4. **G002—Aircraft Marshaling Training and Examination**. **Purpose:** Ensure designated crewmembers understand the proper marshaling procedures and signals to help prevent aircraft taxi incidents. Use AF Visual Aid (AFVA) 11-224**,** *Aircraft Marshalling Signals***,** for reference. **Description**. Review of AFI 11-218, *Aircraft Operation and Movement on the Ground*, and AFI 11-2KC-135 Volume 3 taxi restrictions/limitations followed by a 20-question examination or as directed in MAJCOM supplement. All ground and aircrew personnel who are or could be directly involved with aircraft movement will be tested on their knowledge of marshalling signals, airport markings, lights and signs. This test will occur within 30 days after reporting for duty following a permanent change of station (N/A if tested at a formal school within previous 6 months, or after their first assignment to duties requiring aircraft movement knowledge. Aircraft Marshalling Signal questions may be incorporated into the crewmembers open book examination according to AFI 11-202 Volume 2. A self-contained CBT software program is available, see ETCA course description for information to request a copy. **OPR**: MAJCOM: HQ AMC/A3T. **Unit**: Squadron.

7.9.5. **G003—Flight line Security and Drivers Examination**. **Purpose:** Ensure crewmembers understand proper flightline driving and security procedures. Crewmembers who are required to drive on the flightline must receive this course. **Description**. Training, examination, and certification to drive vehicles on the flightline according to local procedures. Also, includes a briefing by the flightline Constable covering the physical layout of restricted areas and owner or user responsibility for security reporting and detection. Sq/CC directed training for crewmembers that will drive on a USAF flightline. **OPR**: MAJCOM: HQ AMC/A7F/SFO. **Unit:** Chief, Airfield Management and Flightline Constable.

7.9.6. **G007—Flight Records Review**. See requirements in AFI 11-401, and AFI 11-421, *Aviation Resource Management.* Flying restrictions are required after expiration date.

7.9.7. **G010—CBRNE Training. Purpose:** Train crewmembers to successfully survive and fight in a Chemical, Biological, Radiological, Nuclear, or High-Yield Explosive (CBRNE) environment while wearing ground crew individual protective equipment. **Description:** Academic and hands-on training with ground crew protective equipment components. G284, CBRNE Defense Awareness Course must be completed within 60 days prior to attendance of G010. Units may combine this training with LL04 (Aircrew Chemical Defense Training), provided both aircrew and ground ensembles are fully covered. **OPR:** HQ AMC/A7O or MAJCOM/CEX. **Curriculum Development:** HQ AFCESA/CEX and local civil engineering readiness flight. **Training media:** Lecture, accompanied by hands-on training with the ground crew protective equipment. **Instructor:** Qualified disaster preparedness personnel (Civil Engineering Readiness Flight).

7.9.8. **G025—Aircraft Field Trip. Purpose:** Familiarize students with the aircraft, model, or aircraft system to include all crew stations and perhaps functions of other crewmembers to facilitate proper crew coordination. **Description**. Instructors determine field trip content based on the training objective (e.g., MPRS), student experience, and training status of the

student. If necessary, the instructor will discuss or demonstrate the student's responsibilities during emergency conditions. Accomplish before initial flight. May be accomplished in conjunction with LL03, Emergency Egress Training-Non-Ejection. Initial qualification Boom Operator must install nose gear down lock pin from lower nose compartment through observation window. **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** Squadron.

7.9.9. Not Used.

7.9.10. **G030—OPLAN-8010 Command and Control Procedures**. **Purpose**. To ensure positive control crewmembers understand command and control procedures as they relate to the OPLAN-8010 mission. For units with OPLAN-8010 DOC requirement only. Units based OCONUS, MAJCOM will define requirements in MAJCOM Supplement. **Description.** Practice in OPLAN-8010 message decoding and operational reporting procedures as outlined in EAP-STRAT, Volume 5, AFI 10-207 AMC SUP 1, and the AMC 8010 Command and Control Procedures (CCP) Annual Training Plan (ATP). The ATP outlines the minimum refresher training requirements. These include self-study items, emergency action message (EAM) processing exercises and evaluations. Evaluations are conducted with a tape scenario and an open-book written test on concepts from EAP-STRAT, Volume 5. Crew members must be able to proficiently demonstrate knowledge and required actions upon receipt of EAMs. The Wg/CC, OG/CC or their designated representative (specify in local supplement) will certify aircrews. **Instructor:** Command post personnel designated (in writing) as a Command and Control Procedures instructor. **OPR:** MAJCOM: HQ AMC/A3OC **Unit:** Command post. Training aids and media: AMC 8010 Unit Training Plan, CCP Instructor, unit developed tests and training/ evaluation tape scenario's; PC training material, as required.

7.9.10. **(459ARW)** The 459 ARW/CC, or designated representative, will certify aircrews.

7.9.11. **G031—Initial OPLAN-8010 Command and Control. Procedures:** Overview of OPLAN-8010 (CCP) as outlined by EAP-STRAT, Volume 5, AFI 10-207 AMC SUP 1, and AMC 8010 CCP Master Training Plan (MTP). Aircrews are considered initially trained or certified when all tasks/subtasks have been trained and signed off by the unit CCP Trainer. Trainees will annotate completion on the AMC 8010 CCP Master Task List. Upon completion of all required initial CCP training aircrew members will be certified in writing by wing commander or designate representative. For units with OPLAN-8010 DOC requirement only. Units based OCONUS, MAJCOM will define requirements in MAJCOM Supplement.

7.9.12. **G033—Unit Alert Procedures**. **Purpose**: For units whose mission (DOC requirements) include alert response as specified in local supplement. Units based OCONUS, MAJCOM will define requirements the appropriate MAJCOM Supplement. To ensure newly assigned crewmembers understand local procedures, policies, and requirements associated with Alpha and Bravo alert duty. **Description**: Course includes required professional gear, crew rest requirements, alerting procedures, alert area entry and exit procedures, standard maintenance procedures, alert response routing, specialized briefing requirements, aircraft acceptance and cocking, uncocking and recocking, scramble procedures, daily alert preflight, and alert postures. Scramble and alert start procedures require a tour of the physical layout of local alert taxi routes for launch, increased posture, and exercise recoveries. Emphasis to hazards of taxi obstacles, sharp turns, excessive taxi

speed, adverse weather, and darkness. Covers all local base and wing directives concerning local and satellite alert operations. G210 and P290 are minimum pre-requisites for G033, Unit Alert Procedures. Initial accomplishment of G210 may be done in conjunction with G033, Unit Alert Procedures. **OPR**: MAJCOM: HQ AMC/A3TK. **Unit**: Squadron.

7.9.13. **G034—Minimum Interval Take-Off (MITO) Procedures**. **Purpose**: For units with OPLAN-8010 DOC requirement only. Units based OCONUS, MAJCOM will define requirements in MAJCOM Supplement. Review procedures and techniques used to launch the maximum number of aircraft in a minimum time interval (improve survivability of KC-135 force in an emergency war order situation). **Description:** Instructor-lead discussion on the aerodynamic differences between a 12- to 15-second MITO and a 30-second formation takeoff, to include local area procedures. **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor and squadron. Curriculum Development: ATS contractor and squadron. **Training aids and media:** CBT (when available) and MITO instructor guide.

7.9.14. **G035—PLZT Goggle Training**. **Purpose:** For units with OPLAN-8010 DOC requirement only. Units based OCONUS, MAJCOM will define requirements in MAJCOM Supplement. Familiarize crews with proper handling, donning, testing and storage of EEU-series PLZT goggles. If unit is not equipped, training will be for MIL-G goggles. **Description:** On modification of their helmet, and with the assistance of a Aircrew Flight Equipment technician, each crewmember will demonstrate how to properly handle, don, test and store the PLZT goggles to include locating and installing the power cables. In addition, crews will be familiar with all contents of the flash blindness kits. **OPR**: HQ AMC/A3TF. **Unit:** Squadron aircrew flight equipment. **Training aids and media:** PLZT goggles, modified helmet. **Instructor:** Aircrew Flight Equipment technician.

7.9.15. **G036—Flash Blindness and Thermal Protection. Purpose:** Familiarize crews with proper handling and installation of thermal curtains and donning the eye patch or gold goggles, if available. Units based OCONUS, MAJCOM will define requirements in MAJCOM Supplement. **Description**: Each crewmember will demonstrate where to locate and how to properly handle and install the thermal curtains and don the eye patch or gold goggles, if available. **OPR**: HQ AMC/A3T. **Unit:** Squadron. **Training aids and media**: CBT and instructor led demonstration in the aircraft. **Instructor:** Squadron instructor.

7.9.16. **G040—OPLAN-8010 Study**. **Purpose:** All crewmembers in units with a primary or secondary OPLAN 8010 DOC statement will receive this training. Units based OCONUS, MAJCOM will define requirements in MAJCOM Supplement. Provides crewmembers the information necessary for the effective and successful completion of the unit's OPLAN-8010 mission. **Description:** This course will review USSTRATCOM and AMC OPLAN-8010 procedures. The lesson should be based on any procedural changes that have been implemented. Crews should be given a period of crew-study to assist in strengthening weak areas. Staff specialists should be available to answer crewmember questions. The unit's OPLAN-8010 study should cover the overall OPLAN operational details with emphasis on the unit's OPLAN-8010 mission. **OPR**: HQ AMC/A3TK. **Unit**: XP. **Instructors**: XP and applicable wing staff agencies, as required.

7.9.17. **G041—Unit Mission Briefing**. **Description:** Briefing by unit operations plans on sortie requirements and operations procedures applicable to the unit's mission(s).

7.9.17.1. G041A**—Unit Mission Briefing (Conventional). Purpose:** Briefing by unit operations plans on sortie requirements, operations procedures for conventional missions in the unit DOC. May be accomplished in conjunction with G041B.

7.9.17.2. G041B—Unit Mission Briefing (8010). **Purpose:** Briefing by unit operations plans on sortie requirements, operations procedures, and changes applicable to the unit's OPLAN-8010 mission. **Description:** Initial and Annual briefing covering updated procedures and changes to unit's OPLAN-8010 mission. G041B can satisfy the annual "re-cert" Q010 requirement with Wing/CC written approval. **Additional Information:** In addition to the annual requirement, crewmembers must recertify with each OPLAN-8010 revision IAW AMC 10-450, paragraph 7.1.1.".

7.9.18. **G060—Aircrew Tactics Training. Purpose:** To provide the crewmember with information necessary for effective and successful execution of the unit's assigned employment mission. **Description:** G060 will be administered semi-annually using courseware developed by HQ AMC/A3D. OG/CC may specify an alternate frequency for Tactics training, but not less than "annual." The courseware is posted on the AMC Combat Operations SIPRNET website **https://www.amc.scott.af.smil.mil/hosted_orgs/dok/**. The course is based on information found in Air Force Tactics, Techniques, and Procedures (AFTTP) 3-1.General Planning, 3-1.Threat Guide, 3-1.KC-135, and 3-3.KC-135, this document, as well as any other documents pertaining to the execution of the unit's mission. May be accomplished in conjunction with VT05. Additional information may be added to the course by the unit tactician, weapons officer (if applicable) or by the direction of the OG/CC. CATS attendance (St. Joseph, MO) meets semi-annual requirement. May be conducted in conjunction with G070 as determined by agreement between local Intel and Tactics offices. **OPR.** HQ AMC/A3D **Course Development:** HQ AMC A3D. **Instructors:** Rated Instructor Required. Graduate of the USAF Weapons School, the USAF Expeditionary Center Tactics School, or the AATTC Aircrew Course. **Training Media:** Interactive lecture. Secret Power Point capable computer and projector. **Additional Information:** WIC instructors, cadre and students may credit G060 with completion of formal weapons syllabus.

7.9.19. **G065—Special Departure Procedure Training (SDP). Purpose:** Provide pilots the knowledge required to effectively use KC-135 specific Jeppesen SDPs. SDPs will provide engine-out escape routing when loss of an engine occurs at or after S1. One-time training event. **Description:** Course will provide pilots with details on Jeppesen website usage, how data is developed, and how to incorporate SDPs into mission planning and execution. **OPR:** HQ AMC/A3TK. Course **Development:** HQ AMC/A3TK. **Instructors:** Qualified Instructor Pilots. **Training Media:** Course is available through AMC/A3TK CoP for training slides. Slides must be presented via two hour IBT.

7.9.20. **G070—Aircrew Intelligence Training (AIT)**. **Purpose:** Provide crews fundamentals of threat knowledge, visual recognition, and collection and reporting requirements. Enhance crewmember understanding of threats to unit assets with a direct impact on mission success and aircrew survival. **Description:** Course will provide aircrew with details concerning how, when and what to include in Mission Reports (MISREP), Ops-Intel interface. Request for Information(RFI), Escape and Evasion procedures and the development and coordination of Evasion Plans of Action(EPA). See AMCI 14-105, and AFI 14-105_AMC Sup1 (see AFI 12-2KC-135 V3 when published) for further guidance. The

unit intelligence officer will administer an AIT-related test to determine if training objectives are being met. May be conducted in conjunction with G060 as determined by agreement between local Intel and Tactics offices. **OPR:** HQ AMC A2. **Course Development:** HQ AMC/A2. **Instructors:** Qualified Intelligence Instructor. **Training Media:** Lecture

7.9.21. **G080—Communications Procedures.** Ensure crewmembers possess a thorough knowledge of all communication and COMSEC requirements. **Description**. This course includes detailed discussion of equipment operation, procedures, and training requirements applicable to peacetime and wartime communications operations. Training should cover: Authentication procedures, OPLAN-8010 (if applicable), IFF/SIF codes, code loading devices (e.g., CZY-10, etc.), equipment operation, AFSIR, HAVE QUICK, Flight Information Handbook (FIH), KY-58, SECURE VOICE Radio, AMCH 33-1, *Aircrew Communications Handbook*, L-Band SATCOM (if applicable), COMSEC user requirements, (including and other communications information pertinent to unit. **Reference**: AFI 33-201, Volume 2 *Communication Security (COMSEC) User Requirements*. **OPR**: MAJCOM: HQ AMC/ A3T/A3A/CPSS/STSP. **Unit**: ATS contractor, Combat Crew Communications, COMSEC responsible officer (CRO), and wing, operations group, and squadron training personnel. **Training Aids**: AF Form 4168, COMSEC Responsible Officer and User Training Checklist. **Instructor**: Wing, operations group, and squadron training personnel, if instructor led and Combat Crew Communications.

7.9.21.1. **G080A— Communications Procedures** . IAW AFI 33-201 Volume 2, paragraph 5: "CROs use this AFI (AFI 33-201 Volume 2) and other applicable publications to set up a comprehensive, periodic training program for COMSEC users. Training is mandatory for all personnel listed on the access list. Ensure that all personnel are familiar with correct procedures in operating associated cryptographic equipment utilizing applicable AFKAOs, KAOs, AFSSIs, or similar instruction provided by the COMSEC manager. Use AF IMT 4168, **COMSEC Responsible Officer and User Training Checklist,** to document initial and refresher training of all users. Complete a separate training checklist for each person with access. Each block beside each item that applies must contain the initials of the trainer and trainee. Provide annual refresher training to all personnel who have been granted access. Accomplish training at least every 365 days by completing a new AF IMT 4168. Maintain only the most current form on file." Ensure all personnel with authorized access know how to handle, control, and use the COMSEC material. Local procedures, updates, and the classified portion will be briefed by the unit's Combat Crew Communications Flight.

7.9.21.2. **G080B—Communications Procedures CBT.** Units may choose to complete COMSEC handling procedures by CBT or IBT format. This ATS CBT is required in addition to CRO training in G080A.

7.9.22. **G081—L-Band SATCOM.** If equipped and if required in the unit's DOC statement only. Unit developed.

7.9.23. **G082—KY58 Radio--Academics**. See G080, Communications Procedures.

7.9.24. **G090—Anti-Hijacking**. **Purpose:** Provide crewmembers with training on USAF policy that includes war and peacetime requirements for arming USAF personnel and the use of deadly force. Training includes the process to identify and train aircrews armed to protect resources, use of force model, and preventing/resisting acts of aircraft piracy (hijacking).

Description: This training will meet requirements in AFPD 16-8, *Arming Of Aircrew, Mobility, And Oversea Personnel*, and AFI 36-2226, *Combat Arms Program*, to include procedures in AFI 31-207, *Arming And Use Of Force By Air Force Personnel.* This course will supplement training in G280, Small Arms Training. **OPR**: MAJCOM: HQ AMC/A3T AMC/A7S. **Unit:** ATS contractor. **Training Aids:** CBT fulfills requirement. The unit may supplement CBT training with instructor led discussions based on the Use of Force Model (UFM) in AFI 31-207 and criterion test (locally developed).

7.9.25. **G100—Law of Armed Conflict (LOAC). Purpose:** Ensure Air Force personnel understand the LOAC. **Description:** See requirements in AFPD 51-4, *Compliance With the Law of Armed Conflict* (LOAC) and AFI 51-401, *Training And Reporting To Ensure Compliance With The Law Of Armed Conflict*. "Annually, all commanders will ensure that assigned personnel are trained in the principles and rules of LOAC. At a minimum, training will include subjects required by the 1949 Geneva Conventions for the Protection of War Victims and the Hague Convention IV respecting the Laws and Customs of War on Land of 1907." **OPR**: MAJCOM: JA Staff. **Unit**: Commanders may supplement AF, MAJCOM LOAC training programs. **Training aids:** LOAC training is available in several formats including web-based training at: **https://golearn.csd.disa.mil/** or via AF Portal link, MAJCOM/JA staff websites or KC-135 ATS CBT. LOAC may be taught during G070, Aircrew Intelligence Training. Completion of any LOAC training course fulfills the requirement of this AFI. **Additional Information**: Due to different mission requirements, units may increase emphasis on those areas in the course of particular interest to them. During wartime or contingency operations, commanders may direct staff to conduct LOAC training in coordination between JA.

7.9.26. **G120—ISOPREP Review**: **Purpose:** May be completed during an aircrew's G070, Evasion and Recovery (E&R) Training. All crewmembers will have two current, accurate and identical hard copy ISOPREP cards on file IAW Joint Personnel Recovery Agency (JRPA) guidance. Once completed, the ISOPREP card is classified CONFIDENTIAL and must be safeguarded according to. Individuals with an ISOPREP card will review the card at least every six months. During employment operations, personnel will review ISOPREP upon deployment, prior to the first mission of the day and as often as necessary thereafter. **Description**: Complete review on DD Form 1833 or electronic version. See Joint Pub 3-50.2, *Doctrine for Joint Combat Search and Rescue*, and Joint Pub 3-50.3, *Joint Doctrine for Evasion and Recovery* (JPRA) for process and examples. **OPR**: MAJCOM: HQ AMC/A2. Unit: Intelligence officer. Frequency in cited references is annual while MAF aircrews standardize at 180 days.

7.9.27. **G130—Instrument Refresher Course**. **Purpose:** Ensure pilots possess a sufficient knowledge of all applicable directives, procedures, and techniques to assure safe and professional instrument flying. **Description**: Guidance for development of unit IRC programs, including topics and subject outlines, course length, instructor prerequisites, and methods of instruction are contained in AFMAN 11-210, *Instrument Refresher Course Program*. IRC is accomplished according to AFI 11-2KC-135 Volume 2 and applicable MAJCOM Supplement. If using computer based training (CBT), complete KC-135 IRC web-based program **https://amc.csd.disa.mil/kc/login/login.asp**. Register and receive a login ID and a password. After log-in at "campus" map, select "learning center" then work desk, select "course information & enrollment". On course information & enrollment page,

type "IRC" in the "keywords" block and search. The list of available weapon systems will appear in the lower half of the screen. Select KC-135 Version. The CBT must be complemented by a 2-hour instructor based training (IBT) prior to signing off G130. This course is no longer linked with the IRC examination. This course (G130) must be completed every fourth quarter after completion IAW AFMAN 11-210. Complete IRC examination within the evaluation eligibility period according to AFI 11-202 Volume 2. See AFMAN 11-210, *Instrument Refresher Course (IRC) Program.* **OPR**: MAJCOM: HQ AMC/A3T. **Unit:** OG/CC. **Curriculum development:** Air Force Flight Standards Agency (AFFSA). **Training Aids**: Course is available from web based program with a follow-on two-hour IBT. The IBT may source from the core IRC including "hot topics", IRC testing software and questions are available from AFFSA CoP.

7.9.28. **G145-- MPRS Ground Training. Purpose:** Review MPRS limitations and procedures. **Description:** Instructor based review of MPRS system including limitations and procedures. **OPR:** MAJCOM: HQ AMC/A3T. **Training Aids:** See MPRS Ground Training slides found on the A3T CoP.

7.9.29. **G150—Approach Plate Familiarization Training**. **Purpose:** Provide boom operators with the knowledge and skills necessary to monitor the briefed departure and approach and advise the pilots of any deviations that would compromise safety. **Description**: Seminar for boom operators providing instruction to safely monitor all instrument departures and approaches. Also include training to help monitor equipment for correct settings and pilot's instruments to ensure the departure and approach procedures are being accomplished as briefed. Course includes: A breakdown of standard DOD approach plates; Explanation of aircraft navigation equipment; departure and terminal arrival procedures, instrument approach types; initial approach portion to the final approach portion; and final approach procedures. Credit if accomplished at formal school. **OPR**: MAJCOM: HQ AMC/A3T. **Unit:** ATS contractor and squadron. **Training Aids:** See G150 CBT augmented with IBT to include briefing slides, video, etc.

7.9.30. **G160—Overwater Navigation Procedures**. **Purpose:** To provide pilots and navigators instruction and review of procedures and restrictions for Atlantic and Pacific oceanic crossing and international airspace. The syllabus will cover oceanic crossing requirements and contingencies, ACFP review, ETP, and RNP/RNAV. **OPR:** MAJCOM/HQ AMC/A3TK. **Training Media:** Applicable A3TK and AFFSA Hot Topic briefings as outlined on the AMC/A3TK CoP. Locally developed products must be submitted to AMC/A3TK for approval. **Instructor:** IP or IN led briefing/discussion.

7.9.31. **G182—Hazardous Cargo Training**. **Purpose:** To familiarize crewmembers with procedures and restrictions when carrying hazardous materials. **Description:** Provides instruction reviewing mobility aircrew hazardous materials procedures and AFMAN 24-204(I), *Preparing Hazardous Materials for Military Air Shipments;* and AFJI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Materials*. The syllabus includes: Hazardous Classification, Aircraft Loading and Passenger Movement, Packaging, Tactical and Contingency Airlift, Marking and Labeling, Aircrew Responsibilities, and Certification. **OPR**: MAJCOM: HQ AMC/A3T. **Unit:** ATS contractor. **Training Aids:** CBT.

7.9.32. **G183—Floor Loading. Purpose:** To provide instruction in floor loading cargo on the KC-135 aircraft. **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor. **Training Aids:** CBT.

7.9.33. **G184—Palletized Cargo Loading. Purpose:** To provide instruction on loading palletized cargo on the KC-135 aircraft. **OPR**: MAJCOM: HQ AMC/A3T. **Unit:** ATS contractor. **Training**

7.9.34. **G185—Cargo Loading Training. Purpose:** To provide instruction in loading cargo on the KC-135 aircraft. **Description.** Training consists of two CBTs: G183—Floor Loading, and G184—Palletized Cargo Loading, a cargo loading exercise, manual DD Form 365-4, *Weight and Balance Clearance Form F—Tactical* computation, and emergency procedures review. Planned cargo load plans will be loaded on the aircraft and critiqued by the instructor and can be either floor loaded or palletized loads. Emphasis will be focused on proper checklist procedures, computation of restraint, hazardous cargo, and weight and balance. The squadron senior boom operator/Program Manager may exempt highly experienced boom operators from the cargo loading exercise. **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor and squadron. **Training aids and media:** Computer Based Training Lessons (CBT).

7.9.35. **G190—Aircraft Servicing**. **Purpose:** To ensure all crewmembers are familiar with the procedures necessary to service their aircraft at a post-OPLAN-8010 recovery base when qualified maintenance support is not available. Completion of this course does NOT qualify crews to perform maintenance tasks, but does allow them to assist qualified maintenance personnel in ground refueling operations. **Description**: Classroom instruction or CBT that covers servicing requirements of the aircraft, safety, approved fuels, lubricants and fluids, frequency of servicing, and aircraft servicing locations and requirements. Course includes field trip for hands-on demonstration by qualified maintenance personnel or a unit instructor boom operator who has completed the Maintenance Qualification Training Program (MQTP) for servicing. **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor and squadron. Training aids and media: CBT or classroom instruction. **Instructor:** Qualified maintenance personnel/unit instructor boom operator who has completed MQTP.

7.9.36. **G210—Ground Alert Start Procedures**. **Purpose:** To ensure pilots and boom operators are able to perform the procedures required to quick start an aircraft cocked on alert status. **Description**: Course covers the physical characteristics, operating procedures, checklists, and cockpit indications of normal and abnormal APU alert starts. Use ground training course to review aircraft hazardous areas and limits during alert starts. **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor. **Training Aids:** CBT fulfills requirement. **Additional Information**: Complete G210 before accomplishing initial P290, Aircraft Alert Start Procedures. G210 and P290 are minimum pre-requisites for G033, Unit Alert Procedures. Initial accomplishment of G210 may be done in conjunction with G033, Unit Alert Procedures.

7.9.37. **G215—EADI Multifunction Display for Boom Operators (CBT). Purpose:** To provide an annual review of the EADI symbols and displays. **Description:** Lesson provides a review of the EADI symbols and displays, including warning flags, and a series of problems and questions to answer. This CBT is intended for boom operators only. **OPR:**

MAJCOM: HQ AMC/A3TK. **Unit:** ATS Contractor. **Training Aids:** CBT fulfills requirement.

7.9.38. **G220—Aircraft Systems Refresher Training (CBT/GST). Purpose:** Annual review of critical aircraft systems. **Description**. Computer-based scenario that introduces the pilot or boom operator to a series of randomly generated aircraft system training modules with progressive advancement based on criterion testing and aircraft system knowledge. Complete the training event and log as a single ARMS entry. After completing GST lessons, log G220. GST lessons cover hydraulic system, flight controls, fuel system, electrical system, environmental system, and engines, propulsion system and APU. Boom operators use G229-Air Refueling Systems, G227BR-APU, and G228R-Electrics and Fuels CBTs. **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor. **Training aids and media:** CBT.

7.9.39. **G221—GATM Refresher. Purpose:** Annual CBT review and/or GPITT exercise of GATM system updates. Under development.

7.9.40. **G227BR—APU Systems. Purpose:** Annual review of aircraft systems for Boom Operators. BO covers APU portion of G220 via the G227BR CBT. **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor. Training aids and media: CBT.

7.9.41. **G228R—Electrics and Fuels Systems. Purpose:** Annual review of aircraft systems for Boom Operators. BO covers Electrics and Fuels portion of G220 via the G228R CBT. **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor. Training aids and media: CBT.

7.9.42. **G229—Air Refueling Systems. Purpose:** Annual review of aircraft systems for Boom Operators. BO covers Air Refueling portion of G220 via the G229 CBT. **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor. **Training aids and media:** CBT.

7.9.43. **G230—Crew resource management (CRM) Refresher--Academics**. **Purpose:** Mission-specific continuation CRM training conducted according to AFI 11-290, *Cockpit/Crew Resource Management Training Program*. **Description:** Reinforces initial CRM training through an academic review of the common core subjects (according to AFI 11-290) with specific emphasis on an annual refresher topic. G240 is conducted within G271-G274 simulator profiles. **OPR**: MAJCOM: HQ AMC/A3T. **Unit**: ATS contractor. **Additional Information**: G230 should be accomplished before conducting G240 CRM simulator profile (e.g., simulator pre-brief). Completion of CRM pre-work is required before attending CRM refresher training. Pre-work will be distributed to organizations in sufficient time and supply to allow completion. Crewmembers may also receive credit for attending formal CRM training (by ATS contractor).

7.9.43.1. **(Added-459ARW)** G230Q—Quarterly Crew Resource Management (CRM). Quarterly requirement to receive the AMC/AFRC approved quarterly CRM special interest item. The web site is **http://www.cti-crm.com**/. The username and password for the website are located in the most current CRM Process Guide located on the 459 OSF CoP. See paragraph 1.15.8.

7.9.44. **G231—Initial crew resource management (CRM)**. **Purpose:** Aircraft and crew-specific CRM training conducted according to AFI 11-290, *Cockpit/Crew Resource Management Program*. **Description**. Introduces common core subjects (according to AFI

11-290). If initial CRM is not accomplished at the formal school, it must be accomplished within 1-year of reporting to home station. Units may use G230 courseware if G231 is not taught locally. Dual log with G230. **OPR**: MAJCOM: HQ AMC/A3T. **Unit:** ATS contractor. **Additional Information**: Completion of any CRM pre-work, if applicable, is required prior to attending CRM training. Pre-work will be distributed to organizations in sufficient time and supply to allow completion.

7.9.45. **G232—Instructor and Evaluator CRM**. One-time requirement taught during instructor upgrade.

7.9.46. **G234—FSA/CAS**. Instruction on the operation of the FSA/CAS in the E model. Available on CBT.

7.9.47. **G240—Crew Resource Management (CRM) Simulator**. **Purpose:** To provide hands-on application of classroom-presented CRM refresher concepts through CRM simulator training. Highlights human factor issues in a realistic mission scenario as a crew during simulator training. **Description**: CRM Mission Oriented Simulator Training conducted according to AFI 11-290. Complete the Mission Oriented Simulator Training (MOST) in-conjunction with approved simulator training profiles (G271-G274). Each simulator pre-brief will set the stage for a particular CRM topic; aircrews will practice CRM during the OFT period followed by CRM during debriefing. Priority will be given to the CRM Topic-of-the-Year in the pre-brief. **OPR**: MAJCOM: HQ AMC/A3T. **Unit:** ATS contractor. **Additional Information:** Should be accomplished in conjunction with G230, CRM Refresher. Optimal scheduling of CRM simulator is not later than 5 days following completion of G230.

7.9.48. **G244—Crew Coordination**. **Purpose:** To improve non-pilot crewmembers knowledge of standard indications and settings for the pilot's instruments and flight controls for takeoff, approach and landing. **Description**: Course details the proper settings for trim, spoilers, flaps, brakes, etc., and proper indications for altimeters, starter switches, fuel panel, etc., for takeoff, approach, and landing phases. Available for units as a unit directed event (UDE). **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor. **Training Aids:** CBT.

7.9.49. **ATD Training Profiles.**

7.9.49.1. **G271—OFT R-model Simulator Profile 1. Purpose:** Review hydraulics systems and CRM. Simulator profiles are subject to period change/adjustments to meet evolving requirements. Data link profile included to meet data link refresher training requirement. **Description**: ATS contractor-administered simulator courses for pilots (CRM for crews). **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor. **Additional Information**: Completion of PIQ, AC Upgrade, Instructor Training Course OFT simulator training is creditable toward continuation training.

7.9.49.2. **G272—OFT R-model Simulator Profile 2. Purpose:** Review engines, fuel systems, and CRM. Simulator profiles are subject to period change/adjustments to meet evolving requirements. **Description**: ATS contractor-administered simulator courses for pilots (CRM for crews). **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor. **Additional Information**: Completion of PIQ, AC Upgrade, Instructor Training Course OFT simulator training is creditable toward continuation training.

7.9.49.3. **G273—OFT R-model Simulator Profile 3. Purpose:** Review Electrics, Stab Trim, Related Safety Mishap(s), Pacer CRAG FMS, ETCAS, EGPWS, MFD system malfunctions and CRM. Simulator profiles are subject to period change/adjustments to meet evolving requirements. **Description**: ATS contractor-administered simulator courses for pilots (CRM for crews). **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor. **Additional Information**: Completion of PIQ, AC Upgrade, Instructor Training Course OFT simulator training is creditable toward continuation training.

7.9.49.4. **G274—OFT R-model Simulator Profile 4. Purpose:** Train Pneumatics, Aerodynamics systems and CRM (formation when available). Simulator profiles are subject to period change/adjustments to meet evolving requirements. **Description**. ATS contractor-administered simulator courses for pilots (CRM for crews). Data link profile included to meet data link refresher training requirement. **OPR**: MAJCOM: HQ AMC/A3TK. **Unit:** ATS contractor. **Additional Information**: Completion of PIQ, AC Upgrade, Instructor Training Course OFT simulator training is creditable toward continuation training.

7.9.49.5. **G276—OFT R-model Simulator Profile 5. Purpose: A La Carte.** Profile consists of training modules to include CRM, formation, M010, Pilot Proficiency, heavy weight landing, Pod-Proofing, Visual Maneuvering etc. Units may develop process to utilize this profile to satisfy flying training in **Table 4.4**. Profile may also be used for corrective action training, instrument approaches, fix-to-fix navigation, holding pattern, procedure turn entries, etc. in AFMAN 11-217 Volume 1. **Description**: ATS contractor-administered simulator courses for pilots (CRM for crews).**OPR**: **Unit:** HQ AMC/A3TK.

7.9.49.5.1. **G276A Pilot Proficiency**. Dual log with M010.

7.9.49.5.2. **G276B Formation Training.** Dual log with F020 Formation (2-ship) or F030 Large Formation (3-ship large aircraft), if appropriate.

7.9.49.5.3. **G276C Formation Training with DMO**. Dual log with F020 event. Flown with second aircrew in DMO connected virtual environment.

7.9.49.5.4. **G276D Engine Out Training**. Dual log with P040, P170, P171, or P180 events. Quarterly event, 1 Jan 09 (AD, PACAF, & USAFE)

7.9.49.5.5. **G276E Visual Maneuver Training.** Dual log with P061-P069 series events, as applicable.

7.9.49.5.6. **G276F GATM Data Link.** Dual log with M006 and/or M007, as required.

7.9.49.6. **G278—OFT R-model Simulator Profile 6.** Government Use Time. To meet specific unit training requirements. **Description.** Non-ATS instruction. Units will use available government simulator time. Will require OFT IOS certified instructor. **OPR**: Unit and/or HQ AMC/A3TK.

7.9.50. **G280—Small Arms Training**. **Purpose:** To train crewmembers in successful engagement of enemy targets within the range and capabilities of their assigned weapon. **Description:** Academics and firing range exercise; includes use of force, live fire, or firearms simulator training; simulator training may not be used for initial training. Include

Rules of Engagement (ROE), and Arming and the Use of Force (UOF) ancillary training event according to AFI 36-2226, *Combat Arms Program* and AFI 31-207, *Arming and Use of Force by Air Force Personnel*. Aircrew are categorized as Arming Group B for anti-hijacking/protecting resources purposes. **OPR**: MAJCOM: HQ AMC/A7F. **Unit:** Security Forces (SF). **Instructor:** Qualified SF combat arms instructor. **Additional Information**: This event is not required before a crewmember is MR. Complete training within 180 days of the crewmember becoming MR. AD aircrews follow frequency in **Table 4.2**. IAW AFI 36-2226, "MAJCOMs may link Group B aircrew firearms training to an aircrew ground training cycle program." Active Duty aircrew will follow requirement of **Table 4.2**. ANG/AFRC see AFI 36-2226 for ARC guidance.

7.9.51. **G281—Self Aid/Buddy Care (SABC) Training. Purpose:** Provide basic life and limb-saving techniques to help wounded or injured personnel survive in medical emergencies until medical help is available. Mobility aircrews are required, for global operations, to be able to provide Self Aid. See AFI 36-2238, *Self Aid and Buddy Care Training.* **Description:** Complete initial then refresher training that may include video tape, handouts or instruction. See unit UDM for additional guidance.

7.9.52. **G284—CBRNE Defense Awareness Course.** Purpose: CBT course designed to familiarize the student with the CBRNE topics prior to attending G010, CBRNE Defense Training Course. Topics include Threats, Equipment, Command and Control, Pre- and Trans-Attack Measures, Decontamination Equipment, and Post-Attack Sustainment Operations. Description: The primary method for completion is using the learning management system (LMS) on the internet at **https://golearn.csd.disa.mil**. This computer-based-training (CBT) must be completed no more than 60 days prior to attending the CBRNE Defense Training Course conducted by the CE Readiness Flight. Unit schedulers, training managers, or unit deployment managers will verify successful completion of training before an individual is scheduled for the CBRNE Defense Training Course. The only acceptable method of verification is the training certificate. OPR: HQ AFCESA/CEXR Curriculum Development: HQ AFCESA/CEX and local civil engineering readiness flight. Training Media: Lecture, but may be CBT. Instructor: CBT. Additional Information: See unit UDM for additional guidance. Students must score a minimum of 80% (same as CBT) to pass. Also see AFMAN 10-100, Airman's Manual.

7.9.53. **G300—Hydroplaning**. **Purpose:** To teach pilots how to react to hydroplaning situations on wet runways. **Description**: Course describes how to recognize hydroplaning on wet runway surfaces and what actions to take for braking. **OPR**: MAJCOM (HQ AMC/A3T). **Unit:** ATS contractor. Training aids and media: CBT. **Additional Information**: Course is available on CBT and is available for units as a unit directed training event if desired.

7.9.54. **G310—Weather Avoidance Radar**. **Purpose:** Instruct pilots and navigators how to tune radar for weather detection and avoidance. **Description**. In-depth review on procedures and techniques for optimum tuning of the radar indicator for thunderstorm detection. **OPR**: MAJCOM (AMC/A3T). **Unit:** ATS contractor. **Training aids and media:** CBT. Unit directed training event (UDE) only.

7.9.55. **G755–Roll-on Beyond-Line-of-Sight Communications Equipment (ROBE) Training**. Purpose: To train aircrew members on the proper loading, restraint, and use of

installed ROBE communications equipment. Description: This just-in-time training to be conducted either at home station or at deployed location prior to operation of ROBE equipment. **OPR**: AFGCIC. **Curriculum Development:** AFGCIC. **Training Media:** Lecture, CBT, and or PowerPoint presentation. **Instructor:** CBT and/or ROBE qualified instructor. **Additional Information:** No currency applies to this event. Aircrew will require refresher training prior to operating equipment if period between use exceeds 365 days.

7.9.56. **G801—Initial SOAR Training**. In-depth discussion of AFI 11-2KC-135 Volume 3, Addenda C (S), *Special Operations AR Procedures*. See 22 ARW-Specific Training Program.

7.9.57. **G802—Recurring SOAR Ground Training**. Recurring special operations training to include a review of AFI 11-2KC-135 Volume 3, Addenda C (S), *Special Operations AR Procedures*, communications, and operations security procedures. See 22 ARW-Specific Training program.

7.9.58. **G993—AFRC/ANG Refresher Simulator A**. First of two ARMS identifiers. Dual log with G271, G272, G273, or G274 as appropriate for KC-135 R-model OFT simulator training. Ensure one data link profile is accomplished annually (GATM certified crews only).

7.9.59. **G994—AFRC/ANG Refresher Simulator B**. Second of two ARMS identifiers. Dual log with G271, G272, G273, or G274 as appropriate for KC-135 R-model OFT simulator training. Ensure one data link profile is accomplished annually (GATM certified crews only.

7.10. Aircrew Flight Equipment Training (LL) Events.

7.10.1. **LL01—Aircrew Flight Equipment Familiarization. Purpose:** To ensure all crewmembers are familiar with KC-135 Aircrew Flight Equipment and are able to identify, locate and utilize appropriate emergency equipment. Units may combine with Local Area Survival (SS01). Description: See AFPD 11-3, AFI 11-301 Volume 1, AFOSH Standard 127-100 and applicable MAJCOM guidance. OPR: HQ AMC/A3TL. **Additional Information:** Each unit is responsible for tailoring training to meet unit needs.

7.10.2. **LL03—Emergency Egress Training, Non-Ejection**. **Purpose:** Ensure crewmembers and passengers ability to demonstrate proficiency in air and ground emergency egress procedures. Stress the importance of aircrew coordination, aircrew and passenger responsibilities and use of appropriate emergency egress equipment. Ensure aircrews are aware of their responsibilities for conducting safety and passenger briefings according to AFI 11-202 Volume 3. Aircrew must be capable of explain ground and in-flight egress procedures, are able to identify and document equipment discrepancies, can perform required egress procedures, and are able to identify, locate and utilize appropriate emergency equipment. Also, to ensure all crew members understand the operation of fire extinguishers located in the aircraft and fire bottles positioned outside the aircraft. The course should also address egress difficulties associated with the Aircrew Chemical Defense Ensemble (ACDE) and emergency contamination control when combined with LL05. **Description**: Ensure aircrew and passenger ability to demonstrate proficiency in air and ground emergency egress/ejection procedures. In aircraft with multi-crew ejection seat capability, stress importance of aircrew coordination actions in emergency situations. Ensure aircrews are

aware of their responsibilities for conducting safety and passenger briefings IAW AFI 11-202, Volume 3.If unit elects to conduct training at the aircraft, practice "hands-on" egress scenarios to enforce the importance of aircrew coordination actions required for emergency situations. See AFPD 11-3, *Life Support*, AFI 11-301 Volume 1, *Aircrew Flight Equipment (AFE) Program*, AFOSH Standard 127-100 and applicable MAJCOM guidance. **OPR**: MAJCOM: HQ AMC/A3T. **Unit:** Squadron. **Curriculum development:** Unit. **Instructor**: Certified aircrew and aircrew flight equipment instructors will provide egress training to all aircrew and operational support crewmembers. Fire department personnel will provide fire extinguisher training. **Training Aids**: CBT (for continuation training). Fire extinguisher and fire bottle. Aircrew Eye/Respiratory Protection (AERP) equipment (if unit-equipped). **Additional Information**: Accomplish initial egress training in the aircraft. CBT may be used to accomplish continuation training (with the exception of the fire extinguisher and fire bottle training). Actual performance of ground emergency egress procedures at the aircraft is desired. Scheduling will coordinate with maintenance to ensure aircraft availability for training. An appropriate maintenance stand and safety equipment must be immediately below windows and hatches being used. A safety observer or instructor must be positioned on the maintenance stand to assist as necessary. Contact the fire department for extinguisher training.

7.10.3. **LL04—Aircrew Chemical Defense Training (ACDT)**. Provide training to all crewmembers stationed in or subject to deployment or operations through a Chemical Threat Area (CTA). **Description**: An academic and equipment training session in which the aircrew member demonstrates and performs donning, doffing, and buddy dressing procedures using either the first or second generation ACDE or Aircrew Eye/Respiratory Protection (AERP) equipment. This training also includes information on hazards and limitations of wearing the equipment properly and improperly, preflight procedures, aircraft integration, and parachute descent emergency procedures. Each aircrew will demonstrate procedures during their initial class; subsequent classes require a minimum of 10% of aircrew participants to dress out and demonstrate ACCA decontamination processing procedures. Crewmembers who accomplish initial ACDT at a Technical Training Unit (TTU), Replacement Training Unit (RTU), or Formal Training Unit (FTU) will receive credit for initial training on arrival at their permanent duty station. See AFI 11-301 and the MAJCOM supplement. Units may combine this training with G010, CBRNE training, provided both aircrew and ground ensembles are fully covered (AFPD 11-3, AFI 11-301 Volume 1). See AFI 10-2501 for course details**. OPR**: MAJCOM: HQ AMC/A3T. **Unit:** Aircrew Flight Equipment.

7.10.4. **LL05—Egress Training with ACDE**. **Purpose:** Provide training to all crewmembers to safely egress assigned aircraft while wearing ACDE. **Description**. Ensure the aircrew's ability to demonstrate proficiency in the use of primary as well as secondary air and ground egress procedures while wearing ACDE. Training will stress the unique changes in procedures to include added difficulties aircrew would and could experience as a result of wearing ACDE. Training must be accomplished at least once in each assigned MDS aircraft. Accomplishing this training also satisfies the requirements in LL03. See AFI 11-301 Volume 1 for course description. One time event. **OPR**: MAJCOM: HQ AMC/A3T. **Unit:** Aircrew Flight Equipment.

7.10.5. **LL06 Aircrew Flight Equipment Training (AFET) (LL06) (formerly Aircrew Life Support Equipment [ALSE] Training)Purpose:** Academic and equipment training in which crewmembers demonstrate their ability to locate, preflight, and use all aircrew and passenger ALSE carried aboard unit aircraft or issued to crewmembers. Ensure crewmembers are briefed on the limitations and safety issues related to ALSE. **Description:** An academic and equipment training event, in which aircrew members demonstrate their ability to locate, preflight, and use all aircrew and passenger AFE carried aboard unit aircraft or issued to aircrew members. This training includes the limitations and safety issues related to AFE. Additionally, include aircrew clothing items and information on hazards associated with improper wear and failure to use only authorized clothing and equipment items. AFET is conducted as part of initial qualification training for students. Units should combine LL06 with SS02, LL03, SS05, and track completion of the following AFET subcategories to ensure proper aircrew currency:

7.10.5.1. **LL06C Combat Survival AFET**: normally accomplished with the same frequency and logged in conjunction with SS02.

7.10.5.2. **LL06E Egress/Oxygen AFET**; normally accomplished with the same frequency and logged in conjunction with LL03.

7.10.5.3. **LL06W Water Survival AFET**; normally accomplished with the same frequency and logged in conjunction with SS05. OPR: HQ AMC/A3TL. Additional Information: See AFI 11-301 and the MAJCOM supplement, AFPD 11-3.

7.11. Mission-Specific Training (M) Events.

7.11.1. **M001—Sortie**. Log one M001 for each AFTO 781H sortie flown.

7.11.2. **M005—Dual Qualification Sortie.** Multiple aircraft qualified pilots, will accomplish one event quarterly in each aircraft model qualified (qualified/maintaining currency in two MDS model aircraft, e.g., KC-135R and RC-135W). This requirement does not include KC-135 R and T model aircraft.

7.11.3. **M007—GATM Data Link Proficiency Sortie.** Accomplish CPDLC and/or ADS operations. Dual log when completing a G271-G274 with data link profile aboard the simulator. Pilots may log event complete if accomplishing PF or PNF duties (Q041 certified crews only).

7.11.4. **M008 -- Pacer CRAG Sortie.** As a minimum, accomplish the following events for each sortie: Pilots: Preflight (P361), Tanker RV (N010), Instrument Approach (P070), and Post flight (P368). Basic/SOAR Navigators: Preflight (P361) and Post flight (P368). Boom Operators: Preflight (P361) and Post flight (P368) (Required for unit aircrew maintaining Block 30 aircraft). Loss of Block 30 currency results in loss of Block 30 qualification according to **paragraph 4.9.1.2.2**.

7.11.5. **M010—Proficiency Sortie**. The following requirements are listed by crew position:

7.11.5.1. **Pilots**—Must be accomplished under the supervision of an IP. IPs must accomplish at least one M010 under the supervision of another IP (N/A for FTU instructors). Once the exercise commences, it should not be disrupted for any other type of training. As a minimum, a pilot proficiency sortie/OFT profile will consist of:

7.11.5.1.1. Review of boldface emergency procedures; three instrument approaches; missed approach; and VFR traffic pattern (weather permitting). In addition, the following events should be accomplished when available: Holding pattern or procedure turn (to include entry); Circling approach; Simulated engine-out landing (weather permitting, not applicable to restricted traditional copilots); Simulated engine-out go-around or missed approach (weather permitting, not applicable to restricted traditional copilots); Partial flap landing (if applicable); and Engine Failure Take-Off Continued. ***NOTE:*** If circumstances prevent completion on one sortie/OFT profile, credit may be taken after a second IP-supervised sortie/OFT profile, provided the combined activity fulfills the intent of this event. Instructors should tailor each M010 to the individual pilot's needs. Particular emphasis should be placed on simulated systems malfunctions, simulated-engine out operations and instrument procedures.

7.11.5.2. **Basic Navigator**—Complete in-flight duties to include management of FMS and MFD operations. The sortie will include CRM skills for 4-person operation. SOAR Navigator, include the items above plus flight planning/data loading, loading/operating communication systems, and rendezvous (S036, SOAR Rendezvous, if available).

7.11.5.3. **Boom Operator**—Must be accomplished under IBO supervision (N/A for FTU instructors). Complete all primary ground and in-flight duties to include air refueling. Emphasis should be placed on CRM and air refueling procedures, including normal and TMO contacts and practice emergency separation. A review of cargo loading procedures is highly encouraged. (The intent of this event is to review and reinforce all boom operator responsibilities while under instructor supervision.) ***NOTE:*** If circumstances prevent completion on one sortie, credit may be taken after a second IB supervised sortie, provided the combined activity fulfills the intent of this event.

7.11.6. **M020—Unit Specific Training Sortie**. Unit defined sortie to accomplish mission specific training events. The following is a suggested listing of events that can be used on a M020: Any individual training event (approaches, landings, AAR); Exercise training (RED FLAG, MAPLE FLAG); US Navy or Marine Corps drogue training; practice mobility training; night formations; large formations; Night receivers and refueling; special mission tasking; special operations tasking; and composite exercises.

7.11.6.1. **(Added-459ARW)** The current requirements of M020 will be listed in a 459 OSF/OST Policy Letter. This policy letter can be found on the 459 OSF Cop. See paragraph 1.15.8.

7.11.7. **M030—Overseas Sortie**. The principle goal is to ensure crews are proficient in oceanic crossing procedures and to familiarize crewmembers with evolving ATC and 618 TACC procedures necessary for worldwide mobility taskings. Sortie includes primary aircrew logging a take-off (P020) or landing (P190) outside the 48 conterminous states of the United States and a review of oceanic crossing procedures and overseas airspace. Airspace considerations (MNPS, RNAV/RNP, AP1/2/3/4, etc.) for the intended route of flight will also be covered. Crewmembers performing instructor or evaluator duties may log M030 provided appropriate airspace and oceanic procedures are instructed/evaluated during the sortie. OG/CC may elect to substitute a CONUS operational sortie for overseas when tanker/airlift requirements or crewmember availability is insufficient for accomplishing the

overseas sortie requirement. Consecutive CONUS sortie substitutions are not permitted. OG/CC at OCONUS units may allow accomplishment of an off station sortie which includes a takeoff (P020) or landing (P190) at a location other than home station. In all cases aircrew members are still required to review airspace and oceanic crossing procedures based upon the frequency for M030 in **Chapter 4**. **OPR:** MAJCOM/HQ AMC/A3TK. **Training Aids:** G160 overwater navigation training program is under development and will be available on the A3TK CoP. Units may pull from a variety of sources: AFFSA Hot Topics and applicable FLIP, AIPs, FAA, ICAO, etc...**Instructor:** Aircraft Commander or IP led crew pre-mission review.

7.11.8. **M050—Tactical Sortie**. Units will develop a tactical sortie. Mission must be flown using a tactical scenario (Intel, ATO/SPINS, Threats, Bulls Eye, etc.) and may be logged during a large force exercise, AOR or local sortie/simulator. For credit, will include a minimum three of the following events: P062, Tactical Departure; P063, Tactical Arrival; P064, Slide Exercise; P065, Single Ship Scram Exercise; P067, Mid-Mission Join Up; or P068, Single Ship Combat Descent, or P069 Defending Climb; See AFTTP 3-3.KC-135 for event descriptions. Pilots may log event complete if accomplishing PF or PNF duties in the seat to maximize CRM reactions during the tactical scenario. ***NOTE:*** For ANG and AFRC, if circumstances prevent completion on one sortie, credit may be taken after a second sortie, provided the combined activity fulfills the intent of this event.

7.11.9. **M051—MPRS Sortie.** The principle goal is to review MPRS procedures for certified crewmembers. Must include the extension and retraction of at least one drogue.

7.12. Night Vision Goggles (NV) Events.

7.12.1. **NV01—NVG Training and Qualification**. Instruction and qualification on the operation, care, and use of night vision goggles.

7.12.2. **NV02—NVG Event.** For SOAR qualified aircrew. Includes in-flight operation of NVG, including preflight check and visual acquisition of the receiver.

7.12.3. **NV03 –NVG Refresher. Purpose:** Continuation training for mission ready SOAR qualified aircrew using Night Vision Goggles. See SOAR local training and AFI 11-202 Volume 1 requirements.

7.13. Crew and Individual Proficiency Events "N & P".

7.13.1. **N010—Tanker RV**. Any rendezvous and air refueling accomplished using the procedures in ATP-56 (B), Allied Tactical Publication. Credit when receiver joins the tanker at "pre-contact." Includes RV Golf, RV Delta, RV Alpha and AWACS directed methods. Dual log with N0xx RV procedure. Instructors and evaluators may take credit for any rendezvous they instruct or evaluate.

7.13.2. **N011—Rendezvous—Emission Option 1**. Procedures primarily used for FTU-level training. Any and all emitters are authorized, see ATP-56(B), Allied Tactical Publication. Dual log with N010.

7.13.3. **N012—Rendezvous—Emission Option 2.** Normal procedure for rendezvous and AAR. Radio silent formation except for RV and AAR which is conducted with limited radio exchange. All other emitters are authorized. Essential radio transmissions for flight safety may be made. See ATP-56(B), Allied Tactical Publication. Dual log with N010.

7.13.4. **N013—Rendezvous—Emission Option 3.** Radio silent operations including formation, RV and AAR. The use of other emitters is authorized unless specifically prohibited. See ATP-56(B), Allied Tactical Publication. Dual log with N010.

7.13.5. **N014—Rendezvous—Emission Option 4**. No emitters will be used unless specifically authorized by the plan which the AAR is supporting (ATO, Rules of Engagement (ROE)), Operations plan, Safe Passage procedures, or other mission directive). Includes radio(s), aircraft Data LINK (if applicable), radio navigation transmitters, radar, radio altimeters, IFF, exterior lighting. Do not practice during operations unless specifically tasked due to FAA and ICAO identification requirements. See ATP-56(B), Allied Tactical Publication. Dual log with N010.

7.13.6. **N015—Tanker Alternate Rendezvous**. Any tanker rendezvous not using the FMS as the primary means. May include timing, ATC directed, etc. Dual-log with N010.

7.13.7. N016—Tanker RV Overrun Procedures.

7.13.8. **N020—Tanker RV Golf. See ATP 56(B), formerly called enroute rendezvous**. Pilots Dual-log with N010.

7.13.9. **N030—Tanker RV Delta. See ATP 56(B), formerly called point parallel rendezvous**. Pilots Dual-log with N010.

7.13.10. **N040—Tanker RV Alpha. See ATP-56(B), formerly called anchor rendezvous**. Includes any rendezvous in an anchor area tanker, receiver, or GCI and AWACS-directed. Pilots dual-log with N010 (R060, if applicable).

7.13.11. **N100—INS Airborne Alignment (PC)**. Simulates INS operation on Pacer CRAG Block 30/31- only KC-135 under OPLAN-8010 conditions. Leave INS in STBY until after takeoff and follow air alignment using flight manual procedures. For continuation training, ensure proper MEL-required operation of INS in NAV mode prior to takeoff; air alignment may be initiated any time in-flight.

7.13.12. **N110—Communication Procedures**. Crewmembers will copy at least one emergency action message using both HF and UHF radios (only the first six elements of a UHF message, are necessary). Crewmembers will verify message currency with radio not used to obtain original message. Contact a global command and control station using HF radio. Crewmembers will accomplish launch and authentication check and maintain a log of all communications.

7.13.13. **N130—Receiver RV Rendezvous**. Pilots accomplish in accordance with the ATP-56 (B), Allied Tactical Publication.

7.13.14. **N131—Receiver RV Golf. See ATP 56 (B), formerly called enroute rendezvous**. Dual-log with N130.

7.13.15. **N132—Receiver RV Delta. See ATP-56 (B), formerly called point parallel rendezvous**. Dual-log with N130.

7.13.16. **N135—Receiver RV Echo. See ATP-56 (B), formerly called alternate rendezvous**. Dual-log with N130.

7.13.17. **N136—Receiver RV Overrun Procedures**. **See ATP-56 (B).** Log an overrun when the receiver's closure rate prevents stabilizing in the pre-contact position, or when

forward movement of the receiver is considered excessive during contact or approach to contact.

7.13.18. **P006—Airwork.** Block of time scheduled and devoted to learning and maintaining basic flying skills. Objective of this event is to demonstrate or reinforce understanding of aircraft flight characteristics. Recommend accomplishment in an airwork area with reserved altitude blocks. The following events may be accomplished: Steep Turns--Target bank angle should not exceed 45-egrees of bank; Lateral Control Demonstration; Trim Demonstration; Approved in-flight tactics events; and Additional items such as vertical "S."

7.13.19. **P007—Stall Recognition and Recovery**. ATD Only.

7.13.20. **P010—Takeoff—Initial**. Includes all activity from initiation of the takeoff checklist up to and including establishment of climb configuration and airspeed. The takeoff following a touch-and-go is not creditable. ***EXCEPTION:*** Senior pilots (colonels and above) who require in-flight supervision and instructor pilots may log a P010 after accomplishing (pilot flying) an initial takeoff or touch-and-go. Dual log with P020.

7.13.21. **P011—Takeoff—Night.**

7.13.22. **P012—Takeoff—Gyro Mode**. Takeoff using max mode climb procedures without assistance of RGA command bars.

7.13.23. **P015—Instrument Departure**. That portion of flight after establishing climb configuration and airspeed through SID routing or first en route point on the radar departure.

7.13.24. **P018—PNF Takeoff and Climb Duties**. Practice PNF takeoff duties, to include setting takeoff power and monitoring aircraft performance and acceleration through cleanup altitude.

7.13.25. **P020—Takeoff**. Initial takeoff or takeoff following touch and go landing.

7.13.26. **P026—Takeoff and Climb Procedures**.

7.13.27. **P027—EWO Departure**. 330 KIAS climb airspeed will be established after flap retraction and maintained until level off or climb Mach is attained. Pilots may receive credit as PF or PNF.

7.13.28. **P028—Right Seat Takeoff.** Dual log with P020. All pilots will track right seat takeoffs completed on each sortie.

7.13.29. **P029—Left Seat Takeoff.** Dual log with P020. All pilots will track left seat takeoffs completed on each sortie.

7.13.30. **P030—Max Mode Takeoff, 30 Flap**. Dual log with P020.

7.13.31. **P035—PMC-Off**. Takeoff with simulated outboard engine PMC inoperative. Set the PMC switch for the engine to OFF and accomplish takeoff (TO) PMC-off procedures. Restricted to ATD only, do not practice this maneuver in the aircraft.

7.13.32. **P040—Simulated Engine Failure, Takeoff Continued**. Authorized for IP, AC, and MPD pilots. Practice procedure for simulated failure after takeoff or touch and go. If accomplished in the aircraft, direct IP supervision is required. Dual log with P020. Simulator Only for units collocated with a simulator. Non-collocated units will attempt to accomplish in simulator.

7.13.33. **P045—Simulated Engine Failure on the Runway.** Restricted to ATD only, do not practice this maneuver in the aircraft.

7.13.34. **P061—VFR Overhead**. The overhead approach is designed to allow the maximum number of aircraft to recover at an airfield in the minimum amount of time. See AFTTP 3-3.KC-135 for techniques on the set-up and execution of this event and the common errors associated with the VFR Overhead.

7.13.35. **P062—Tactical Departure**. Event will be flown using a tactical scenario developed by local unit. If departing VFR, comply with all VFR guidance in AFI 11-202 Volume 3, FLIP GP and AP, FARs, and applicable host nation guidance. Low altitude high speed departures (LAHSD) may be accomplished to build aircrew proficiency in departure maneuvers. LAHSD will only be trained in the simulator. See AFTTP 3-3.KC-135 for techniques on the set-up and execution of these events and the common errors associated with Tactical Departures. Accomplish P062 day or night in the simulator or on operational missions when directed by SPINS. See event M050, Tactical Sortie. Pilots may log event complete if accomplishing PF or PNF duties in the seat to maximize CRM reactions during the tactical scenario. Spiral Up Departures are no longer authorized tactical maneuvers and will not be trained.

7.13.36. **P063—Tactical Arrival**. Event will be flown using a tactical scenario developed by local unit. If arriving VFR, comply with all VFR guidance in AFI 11-202 Volume 3, FLIP AP and GP, FARS, and applicable host nation guidance. Curvilinear approach or low altitude high speed arrival (LAHSA) may be accomplished to build aircrew proficiency in maneuvers. LAHSA will only be trained in the simulator. See AFTTP 3-3.KC-135 for techniques on the set-up and execution of this event and the common errors associated with Tactical Arrivals. Accomplish P063 day or night on training sorties/simulator or on operational missions when directed by SPINS. See event M050, Tactical Sortie. Pilots may log event complete if accomplishing PF or PNF duties in the seat to maximize CRM reactions during the tactical scenario. For initial tactics certification training, proficiency must be attained by accomplishing both the LAHSA and Curvilinear approaches (both day and night) in the aircraft/OFT prior to certification. Spiral Arrivals are no longer authorized tactical maneuvers and will not be trained.

7.13.37. **P064—Slide Exercise.** Accomplish this maneuver in tactical context single ship or in formation. Complete the event in aircraft/ Level C+ certified ATD. See AFTTP 3-3.KC-135 for techniques on the set-up and execution of this event and the common errors associated with Slides. The purpose of this event can be found in AFTTP 3-1.KC-10/KC-135 (S), *KC-135 Combat Tactics* or AFTTP 3-3.KC-135. Pilot may log the event if accomplishing PF or PNF duties. See event M050, Tactical Sortie."

7.13.38. **P065—Single Ship Scram Exercise.** Accomplish this maneuver in tactical context single ship only. Complete the event in aircraft/ Level C+ certified ATD. See AFTTP 3-3.KC-135 for techniques on the set-up and execution of this event and the common errors associated with Scrams. The purpose of this event can be found in AFTTP 3-1.KC-10/KC-135(S) or AFTTP 3-3.KC-135. Pilot may log the event if accomplishing PF or PNF duties. See event M050, Tactical Sortie."

7.13.39. **P066—Maneuver—Steep Turns.** Aircrews may use up to 45-degrees bank angle when accomplishing this event. Complete the event in aircraft/Level C+ certified ATD. See

AFTTP 3-3.KC-135 for techniques on the set-up and execution of this event and the common errors associated with Maneuver Steep Turns. The purpose of this event can be found in AFTTP 3-1.KC-10/KC-135(S) or AFTTP 3-3.KC-135. See event M050, Tactical Sortie."

7.13.40. **P067— Mid-Mission Join Up.** Rejoin with another aircraft using either visual turning rejoin techniques, timing, Rules of Eight, or Whiz Wheel. Pilot may log the event as the maneuvering aircraft. Pilot may log the event if accomplishing PF or PNF duties. Day/VMC conditions are required to accomplish visual turning rejoin techniques, all others may be accomplished and logged in IMC or night conditions. See AFTTP 3-3.KC-135 for techniques on the set-up and execution of this event and the common errors associated with Mid-Mission Join Ups. The purpose of this event can be found in AFTTP 3-1.KC-10/KC-135 (S) or AFTTP 3-3.KC-135. See event M050, Tactical Sortie. Complete the event in aircraft or simulator. Simulator accomplishment of visual turning rejoin requires the utilization of linked simulators. Dual log with N040 when performed in an anchor area.

7.13.41. **P068—Combat Descent.** This event is broken into two types; Turning (single ship only) and Straight ahead. Complete the event in either the aircraft/Level C+ certified ATD. When accomplishing a turning combat descent in the aircraft, conduct in VMC under IP supervision. See AFTTP 3-3.KC-135 for techniques on the set-up and execution of this event and the common errors associated with Combat Descents. The purpose of this event can be found in AFTTP 3-1. KC-10/135 (S) or AFTTP 3-3.KC-135. Pilots may log event complete if accomplishing PF or PNF duties in the seat to maximize CRM reactions during the tactical scenario. See event M050, Tactical Sortie. For initial tactics certification training, proficiency must be attained in both Turning (single ship only) and Straight ahead combat descents (both day and night) in the aircraft or simulator prior to certification.

7.13.42. **P069—Defending Climb.** A defending climb is an evasive maneuver flown in response to surface fire. See AFTTP 3-3.KC-135 for techniques on the set-up and execution of this event and the common errors associated with Defending Climbs. Complete the event in either aircraft/Level C+ certified ATD. Pilots may log event complete if accomplishing PF or PNF duties in the seat to maximize CRM reactions during the tactical scenario. The purpose of this event can be found in AFTTP 3-1.KC-10/KC-135(S) or AFTTP 3-3.KC-135. See event M050, Tactical Sortie.

7.13.43. **P070—Instrument Approach**.

7.13.44. **P071—Holding**.

7.13.45. **P072—Penetration (Published or STAR)**.

7.13.46. **P073—En Route Descent**.

7.13.47. **P080—Instrument Approach (Auto or Coupled)**. Approach with autopilot coupled to the ILS.

7.13.48. **P100—Precision Approach**. Dual log with P070.

7.13.49. **P101—ILS Approach**. Dual log with P100 and P070.

7.13.50. **P102—ILS (Gyro Mode)**. Dual log with P100 and P070.

7.13.51. **P103—PAR Approach** (if available). Dual log with P100 and P070.

7.13.52. **P104—MLS Approach (GATM Aircraft Only)**. Dual log with P100 and P070. **Purpose.** Familiarization training for successful use of aircraft Microwave Landing System (MLS) IAPs. **Description**. Any MLS approach that meets aircraft system capabilities. 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 procedure or instructions, must be accomplished using MLS guidance. **OPR:** AMC/A3TK. **Training Media**: Aircraft or OFT with GATM configuration. Additional Information: Pilots must receive MLS ground training (either through the FTU or via in-unit training). See the flight manual, AFI11-2C-KC-135 Volume 3, and AFI 11-202 Volume 3, for additional information.

7.13.53. **P105—MLS Approach-Azimuth Only (GATM Only).** Dual log with P110 and P070. **Purpose.** Training for aircraft commanders and pilots to fly Microwave Landing System (MLS) Azimuth-Only IAPs. **Description**. Any MLS approach that meets aircraft system capabilities. 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 procedure or instructions, must be accomplished using MLS guidance**. OPR**: AMC/A3TK. Training Media: Aircraft or ATD equipped with GATM. Aircrew members must receive MLS ground training (either through the FTU or via in-unit training). See the flight manual, AFI11-2C-KC-135 Volume 3, and AFI 11-202 Volume 3 for additional information.

7.13.54. **P110—Non-Precision Approach**. Dual log with P070.

7.13.55. **P111—VOR/TACAN/FMS Procedures.** Includes fix-to-fix navigation, course interception, and general radio aid navigation. This event does not include an instrument approach.

7.13.56. **P112—VOR/TACAN/Localizer/FMS Approach**. Dual log with P110 and P070.

7.13.57. **P113—ASR Approach**. Dual log with P110 and P070.

7.13.58. **P115—Back-course LOC**. Dual log with P110 and P070.

7.13.59. **P117—RNAV/GPS Approach.** KC-135 Block 40 (GATM) is certified for RNAV/GPS approaches. Guidance information originates from a certified approach from an FMS database. See aircrew training program in **Chapter 5**. Dual log with P070.

7.13.60. **P130—Circling Approach**. Dual-log with type approach flown.

7.13.61. **P140—Visual Traffic Pattern**. Maneuver flown to position aircraft for landing from the visual traffic pattern. May dual log with P061.

7.13.62. **P160—Missed Approach.**

7.13.63. **P170—Approach and Go-Around, Simulated Engine-Out**. If accomplished in the aircraft, IP supervision or qualified AC. Simulator Only for units collocated with a simulator. Non-collocated units will attempt to accomplish in simulator.

7.13.64. **P171—Approach and Go-Around, Simulated Engine-Out, Power Rudder Off**. If accomplished in the aircraft, direct IP supervision required. Dual log with P170. Simulator Only for units collocated with a simulator. Non-collocated units will attempt to accomplish in simulator.

7.13.65. **P172—Approach and Go-Around, Simulated Engine-Out, FCAS Off**. Simulated loss of an outboard engine with loss of SYD/EFAS. Accomplish under direct IP supervision, if accomplished in the aircraft, with rudder power on to low approach only. Dual log with P170. Simulator Only for units collocated with a simulator. Non-collocated units will attempt to accomplish in simulator.

7.13.66. **P180—Approach and Landing, Simulated Engine-Out**. If accomplished in the aircraft, IP supervision or qualified AC is required. Simulator Only for units collocated with a simulator. Non-collocated units will attempt to accomplish in simulator.

7.13.67. **P190—Landing**.

7.13.68. **P192—Landing, Night (unaided).** Dual log with P190. See AFI 11-401, for "night" criteria.

7.13.69. **P193—Landing, 50-Degree Flaps**. Dual log with P190.

7.13.70. **P194—Landing, 30-Degree Flaps**. Dual log with P190.

7.13.71. **P195—Landing, Simulated Engine-Out, 4 Engine Takeoff**. Direct IP supervision, if accomplished in the aircraft.

7.13.72. **P196—Landing, Full-Stop**.

7.13.73. **P198—Landing, Right Seat.** Dual log with P190. All pilots will track right seat landings completed on each sortie.

7.13.74. **P199—Landing, Left Seat.** Dual log with P190. All pilots will track left seat landings completed on each sortie.

7.13.75. **P200—Touch-and-Go Landing**. Currency requirement for touch-and-go certified AC. Loss of currency does not result in a loss of mission ready status. Dual log with P020, P190, and P192 as applicable.

7.13.76. **P211—Simulated Two Engine Landing. ATD Only** .

7.13.77. **P212—No Airspeed/No AOA Approach. ATD Only** .

7.13.78. **P215—Landing Attitude Demonstration**. Dual-log with P190 and P200. Direct IP supervision.

7.13.79. **P216—Right Seat Braking Exercise (Simulator Only--includes FTU/Formal Instructor Courses)**. Exercise teaching braking from the right seat. Event may be accomplished as a taxi exercise on the runway or taxiway.

7.13.80. **P240—Landing Gear Manual Extension**. See procedures and restrictions in AFI 11-2KC-135 Volume 3 and procedures in flight manual.

7.13.81. **P250—Main Flap Manual Operation**. Should be accomplished on the ground (if applicable). See procedures and restrictions in AFI 11-2KC-135 Volume 3 and procedures in flight manual.

7.13.82. **P260—HAVE QUICK Radio Procedures**. Training consists of properly configuring the radio for HAVE QUICK operation and making at least one transmission and reception using HAVE QUICK mode of operation with any source. When practical,

rendezvous and refueling should be accomplished utilizing the HAVE QUICK mode of operation. Does not require flight, but must be accomplished in aircraft.

7.13.83. **P270—Secure Radio Operation**. Training consists of properly loading SECURE VOICE code and making at least one transmission and reception using SECURE VOICE with like equipped aircraft. BO proficiency for loading SECURE VOICE codes only. Dual log with P272 when accomplished. See AMCH 33-1, *AMC Tanker Airlift Communications Handbook* (U). Does not require flight, but must be accomplished in aircraft.

7.13.84. **P271—Authentication Procedures.** Training consists of demonstrating proper challenge and reply authentication procedures using the TRIAD authenticator. Units will determine how best to accomplish the training (i.e., authenticate a transmission with command post, between aircraft in formation, etc.).

7.13.85. **P272—KY-58 Radio Operation**. Will demonstrate keying (e.g., KIK-13, etc.), loading KY-58, completing secure radio transmission with another aircraft. Will demonstrate proper procedures to zeroize KY-58 and/or KIK-13.

7.13.86. **P280—Aircrew Chemical Defense Qualification Training (ACDTQT).** An exercise emphasizing hands-on training, dressed out in partial chemical defense (CD) ensemble. Do not accomplish in conjunction with a formation take-off or a night formation departure. The purpose of the exercise is to enable crewmembers to become aware of their limitations while wearing the equipment. Complications of heat exhaustion, fatigue, hyperventilation, limited dexterity, and hampered communication can all be experienced during the exercise. Observers must closely monitor crewmember actions during the exercise. If a crewmember experiences difficulties such as excessive thermal stress, hyperventilation, headaches, etc., and either the observer or crewmember believes it is unsafe to continue, the equipment will be immediately removed. Use the following aircrew CD items: Flying helmet (if applicable); MBU-19/P hood and mask assembly; Filter pack with filters and CQU-7/P blower assembly with filter canisters and batteries; MXU-835 intercom assembly; Filter pack suspension straps; and Glove set (cotton, butyl, Nomex).

7.13.86.1. ACDTQT should be accomplished in a simulator (government-use time) with visual displays, provided a simulator exists or is available. If accomplished in a simulator, instructors may observe the exercise, no other supervision is required. There is no restrictions for who (and how many crewmembers) may wear the gear.

7.13.86.2. If performed in the aircraft, only one pilot will be dressed out at any time.

7.13.86.3. The AC will be supervised by an IP occupying the right seat. CP and MPD pilots will be supervised by an IP or experienced AC (as determined by the Sq/CC) in the pilot seat. A safety observer crewmember will occupy the jump seat. Pilots will don the gear and accomplish at least one take-off, approach, and landing, and complete all crew position checklists associated with approach and landing.

7.13.86.4. Navigators will be supervised by another navigator (boom operator may supervise KC-135 navigators) and wear the gear for a minimum of 30 minutes. Boom operators, supervised by another crewmember will wear the gear during take-off, approach, and landing.

7.13.86.5. Crewmember will be current in LL04 before accomplishing this event in the aircraft or ATD.

7.13.87. **P290—Aircraft Alert Start Procedures**. See also G210, Ground Alert Start Procedures. The initial accomplishment must be in an aircraft that has been cocked to simulate alert status, i.e., windshield cover, pitot covers, engine plugs, etc., installed, if appropriate. Crew (two pilots and one boom operator) must respond via normal alert notification (which requires engine start) or from a wing tip position and accomplish alert start and taxi checklist items while in the chocks. Pilots must receive a thorough briefing by a unit instructor pilot on APU operation before performing an alert start. Subsequent requirements may be accomplished in an ATD or the aircraft.

7.13.88. **P300—Cargo Loading**. Initial P300 event must be IB supervised. Accomplish either floor loading or palletized cargo loading during a deployment, operational or training mission or exercise. A Cargo Load event consists of all T.O. 1C-135-9 checklists from Loading Coordination/Preparation through Cargo Off-loading. If unable to complete Cargo Off-loading due to mission requirements, those items must be reviewed prior to logging this event. P300 may be dual logged with successful completion of Q180, Cargo Qualification.

7.13.89. **P310—Instructor and Evaluator Duties**. Creditable when providing instruction or AFI 11-2KC-135 Volume 2 evaluation in-flight or instructing in the ATD.

7.13.90. **P311—Flight with an Instructor**.

7.13.91. **P312—Instructor Techniques**.

7.13.92. **P335—Prep for Contact.**

7.13.93. **P340—Briefing and Control of Passengers**.

7.13.94. **P355—Trouble Shooting AAR Equipment Malfunctions (FTU or Instructor Course with BOPTT or BOWST only)**.

7.13.95. **P360—Mission Planning and Briefing**.

7.13.95.1. **P360A—AFMSS Mission Planning.**

7.13.95.2. **P360B—AFMSS DAFIF Data Loading.** Identify, load and verify successful update to on-board aircraft system installed on CNS/ATM aircraft.

7.13.95.3. **P360C—Manual Moment Computations.** Compute weight and balance using manual moments. For Pre-Instructor Upgrade training, discussion should include information found in applicable weight and balance technical orders and techniques for ensuring proper computations.

7.13.96. **P361—Preflight**.

7.13.97. **P362—Pretakeoff**.

7.13.98. **P363—Climb**.

7.13.99. **P364—Cruise**.

7.13.100. **P365—Autopilot Off Cruise**.

7.13.101. **P366—Checklist Procedures and Use**.

7.13.102. **P367—Crew Coordination**.

7.13.103. **P368—Post Flight**.

7.13.104. **P369—Aircraft Equipment Operation**. Use this event when the crewmember demonstrates proficiency in operating the appropriate aircraft equipment: 1. Ground start and taxi procedures (P, CP). 2. Hydraulic system (P, CP). 3. Fuel panel management (P, CP). 4. Pneumatic system (P, CP). 5. APU (ALL). 6. AAR system (BO). 7. Radar and navigation systems (P, CP, N). 8. Communication radios (ALL). 9. MPRS (P, CP, BO, if applicable). 10. GATM.

7.13.105. **P380—Spoiler and Lateral Control Demonstration**. Requires IP supervision. Demonstration of roll rates and aileron forces required for different spoiler settings and the reduced lateral control effectiveness after spoiler or hydraulic malfunction.

7.13.106. **P382—Trim Demonstration**. Requires IP supervision. Demonstration of primary and secondary methods to trim the aircraft.

7.13.107. **P383—Simulated Jammed Stabilizer Demonstration**.

7.14. Qualifications and Certifications "Q" Events.

7.14.1. **Q001—Open-Book Qualification Examination**. See AFI 11-2KC-135 Volume 2.

7.14.2. **Q002—Closed-Book Examination**. See AFI 11-2KC-135 Volume 2.

7.14.3. **Q003—Mission Evaluation.** Pilot Mission Evaluation. See requirement in AFI 11-2KC-135 Volume 2

7.14.4. **Q005—ATD Evaluation**. Administered in ATD (OFT, CTP, BOPPT, BOWST), according to AFI 11-2KC-135 Volume 2 (Do not use for reoccurring checkride requirements). See FTU syllabi for evaluation conducted aboardKC-135 OFT simulators.

7.14.5. **Q009-Tactics Open-Book Examination.**

7.14.6. **Q010—OPLAN-8010 Certification**. Upon completion of training, certification by wing commander or designated representative that the aircrew member can perform the OPLAN 8010 mission.

7.14.7. **Q011—Formation Lead Certification**. Units will develop this program. See formation lead duties in AFI 11-2KC135 Volume 3. Designed to certify an AC (upgrading MPD pilot) as formation lead.

7.14.8. **Q014—Difference Certification**. Documents all training required to qualify individuals in a different MDS aircraft or different tactic requiring certification is complete. Q014 is not required when an AA01 Qualification/Mission Difference Evaluation or AAXX series evaluation is accomplished in same MDS.

7.14.9. **Q015—Special Operations Air Refueling (SOAR) Certification**. Certifies completion of all training required to air refuel special operations aircraft. Commanders will determine the requirement for this event and missions to be certified using this event.

7.14.10. **Q016—Conventional/Mobility Certification**. Wing or group commander (or designated representative) certification that a crewmember is prepared to accomplish the

unit's conventional or mobility mission as specified in the unit's DOC statement and AEF commitments.

7.14.11. **Q017—ILS PRM Certification.** See training program description in **Chapter 5**.

7.14.12. **Q021-Q033—AAR Certification**. BO—Q021, Q022, Q023, Q028, Q029, and Q033. ACs—Q028 and Q033. BO initial qualification according to AFI 11-2KC-135 Volume 2 and may refuel all receivers except the aircraft below. Certify crewmembers in the following category certifications:

7.14.12.1. **Q021—BRAVO Probe Equipped Receivers**. Complete video program # 1918 before flight. Video #1918 may be used for certification if probe receivers are not available. If video certification is utilized, in-unit mission certification must complete Q022 before starting Q021 or Q033. Students may complete Q021 prior to Q022 or Q033 if certification is accomplished with actual receivers under direct IB supervision. FTU may complete in BOPTT/BOWST.

7.14.12.2. **Q022—CHARLIE Receptacle Equipped Fighters, Day**. Complete video program #1919 before flight.

7.14.12.3. **Q023—CHARLIE Receptacle Equipped Fighters, Night.** Complete video program #1919 before flight.

7.14.12.4. **Q028—GOLF Day Heavy Receivers (KC-10, C-5, C-17, E-4, or B-2)**. Accomplishment with one receiver aircraft will certify a pilot and/or boom operator for all five MDS heavy aircraft.

7.14.12.5. **Q029—GOLF Night Heavy Receivers (KC-10, C-5, C-17, E-4, or B-2)**. Accomplishment with one receiver aircraft will certify boom operator for all five MDS heavy aircraft (N/A for pilots).

7.14.12.6. **Q033—Multi Point Refueling System (MPRS) Certification**. See MPRS Certification Training (**paragraph 5.7.9**). Boom operators may complete Q021 and Q033 before Q022 provided day training is accomplished before night. ***NOTES:*** **1.** All category certification training requires supervision by an instructor certified in that category. **2.** Day certification must be completed before beginning training in night certification. **3.** Before attempting initial contact, the trainee must monitor radio communication procedures and observe an instructor demonstrated contact with the applicable category receiver. **4.** The squadron will review FTU records to determine category certifications obtained at FTU and ensure entry in ARMS.

7.14.13. **Q038—GATM to PACER CRAG Difference Certification.** Requires difference training completion for crewmember to operate the KC-135 aircraft equipped with Block 30/31 configuration. Complete A035, GATM Block 40.X to Block 30.X Certification Training program before Q038 certification.

7.14.14. **Q040—GATM System Certification.** Requires SQ/CC certification for crewmembers to operate the KC-135 aircraft equipped with Block 40 or Block 40.X configuration. Complete A036, GATM Certification Training program before Q040 certification.

7.14.15. **Q041—GATM Data Link Certification.** Requires SQ/CC certification for crewmembers to operate the KC-135 aircraft equipped with Block 40 or Block 4X

configuration. Complete A036 and conduct flight training in FANS region or ATS facility with Data Link Capability. See latest GATM on AMC/A3T CoP (see **paragraph 1.15**).

7.14.16. **Q043—ATD—OFT Simulator Operator Training.** See **paragraph 5.6.8**. **Purpose:** Ensure SQ/CC designated instructors are familiar with the OFT or WST safety systems, hazards/precautions associated motion systems, and emergency stop/emergency evacuation procedures. For GATM see A036P, GATM IOS Operation. Q043 is a one-time certification after initial training with ATS contractor aboard Level C+ OFT training device.

7.14.17. **Q044—Tactics Maneuvers Certification**. See **paragraph 5.6.8** for details. See latest information and syllabus on AMC/A3T CoP (see **paragraph 1.15**).

7.14.18. **Q050—Aircraft Commander Touch and Go Landing Certification.** Designed to certify ACs by the SQ/CC to allow the AC to accomplish unsupervised touch and go landings.

7.14.19. **Q051—Supervision of Touch and Go Landings Certification**. Designed to certify AC by the SQ/CC to perform unsupervised touch and go landings and supervise unit pilot's touch and go landings and receiver air refueling.

7.14.20. **Q052—Supervision during Receiver Air Refueling.** Designed to certify AC by the SQ/CC to supervise unit pilot's during receiver air refueling.

7.14.21. **Q060—EMCON 3 Certification**. Requires SQ/CC certification for crewmembers to accomplish EMCON 3 procedures during formation, rendezvous, and AAR on both operational and training sorties.

7.14.22. **Q061—Tactics Test**. **Purpose**: To test aircrew tactics knowledge. An open book 25 question tactics test using AMC/A3D Test bank. **OPR**: HQ AMC/A3D.

7.14.23. **Q070—EMCON 4 Certification**. Requires SQ/CC certification for crewmembers to accomplish EMCON 4 procedures during formation, rendezvous, and AAR on both operational and training sorties.

7.14.24. **Q160—Instrument Refresher Course Examination**. See requirements in AFI 11-202 Volume 2.

7.14.25. Q170-FEF Review.

7.14.26. **Q180—Cargo Qualification.** See requirement in AFI 11-2KC-135 Volume 2. Dual log with P300 Cargo Loading.

7.14.27. **Q280—GRACC Certification.** See requirements at **paragraph 5.3.4.2**.

7.14.28. **Q579 —RNAV/GPS Operations Certification Purpose**: Certify Pilots to fly RNAV 1 & 2 routes, RNAV/GPS Approaches. **Description:** Course is designed for Pilots qualified on GATM KC-135R Block 40.x aircraft equipped with FMS-800. IBT and OFT training on GPS/RNAV/RNP terminology and environments followed by proficiency training in OFT. IBT must include thorough review of MAJCOM slides and relevant publications. OFT requirements in **Chapter 5**. **OPR:** MAJCOM: HQ AMC/A3T. **Training Aids:** Slides available on AMC/A3TK CoP.

7.15. Air Refueling (R) Events.

7.15.1. **R010—Receiver AAR**. **Qualification Training**. Consists of practice in receiver AAR including closure and contacts. The instructor will demonstrate all limits and manual boom latching. The student must be able to establish contact under simulated conditions of radio silence, pilot director lights out, and tanker auto-pilot off. Students must be declared safe in day activity by an instructor prior to advancing to night activity. The first night mission should include training during twilight and extend into the hours of darkness. During the hours of darkness, conduct practice in rendezvous, closure, and contacts until able to maintain sustained contact for 10 minutes without a disconnect. **Continuation Training**. Pilots may credit one R010 per Tanker ARCT by accomplishing a closure from the pre-contact position and maintaining a 10-minute sustained toggles-engaged contact. Instructors and evaluators should accomplish at least two receivers AAR while occupying the right seat. ***NOTE:*** Dual-seat qualified (non-instructor) ACs must be under direct instructor pilot supervision when attempting contacts from the right seat. Pilots must be under direct instructor supervision when attempting contacts from either seat.

7.15.2. **R011—Receiver AAR, Indoctrination**. Ability to maintain pre-contact position, recognize any unsafe condition, and safely separate one aircraft from the tanker.

7.15.3. **R012—Receiver AAR (Day)**.

7.15.4. **R013— Receiver AAR, Aircraft.** (Dual log with R010 -- See 7.15.1).

7.15.5. **R020—Receiver AAR (Night)**.

7.15.6. **R035—Receiver AAR (Heavy Onload)**. Requires minimum onload of 35,000 pounds of fuel. For qualification training, the pilot must accomplish a total of 15 minutes toggle-engaged time.

7.15.7. **R040—Receiver AAR Breakaway and Emergency Separation**. Initiated with the receiver in the AAR envelope. See procedures in ATP-56(B), aircraft commanders must demonstrate proficiency in executing the breakaway. For pilots, include checklist duties only. All crewmembers must be familiar with the requirements, conditions and communication signals to initiate Breakaway.

7.15.8. **R050—Receiver AAR, Tanker Auto Pilot-Off**. The tanker autopilot must be disengaged and AAR contacts should be practiced for a minimum of 10 minutes.

7.15.9. **R060—Tanker AAR**. Credit only one R060 for each receiver cell/ARCT regardless of the number of aircraft in formation. Award credit if AAR contact is established (10 minute toggles engaged time is desirable). Aircraft Commanders and pilots may receive credit when occupying either seat position. Additional aircraft commanders, pilots and BOs may log R060 if they accomplish refueling in their primary crewmember position.

7.15.10. **R061—Tanker AAR, Indoctrination**.

7.15.11. **R063—No Power Limits.**

7.15.12. **R064—Pressure Disconnect. (Formal Instructor Course, instructor only)**

7.15.13. **R065—Receiver Lateral Stability. (Formal Instructor Course, instructor only))**

7.15.14. **R067—Simulated Receiver Engine-Out (Formal Instructor Course, instructor only)**

7.15.15. **R070—Tanker AAR Breakaway and Emergency Separation**. Breakaway should be initiated with the receiver in the AAR envelope. The pilot and BO must demonstrate proficiency in executing breakaway procedures.

7.15.16. **R071—Receiver-Only Separation. (Formal Instructor Course, instructor only)**

7.15.17. **R072—Tanker-Only Separation. (Formal Instructor Course, instructor only)**

7.15.18. **R073—MPRS AAR Pod Breakaway/Emergency Separation.**

7.15.19. **R080—Tanker AAR Autopilot Off**. All axes of the tanker auto pilot must be disengaged and AAR contacts must be practiced for a minimum of 10 minutes.

7.15.20. **R100—Tanker AAR, Heavy Receiver**. The XX-135, XC-130, E-3A, E-4, E-6, E-8, C-5, C-17, C-32, B-52, B-1, B-2, and KC-10 are designated heavy receiver. Dual-log with R060.

7.15.21. **R120—Contacts**. For qualification, satisfactory (S) progress in day contacts must be demonstrated prior to attempting radio silent or night contacts. Includes the total number of contacts accomplished.

7.15.22. **R122—BOWST Contact.** For future use when Boom Operator Weapon System Trainer (BOWST) becomes available.

7.15.23. **R125—Day Contacts**. For qualification, satisfactory (S) progress in day contacts must be demonstrated prior to attempting radio silent or night contacts.

7.15.24. **R130—Night Contacts**. Loss of night currency will not cause loss of MR status for day operations. Dual-log with R120.

7.15.25. **R135—Preparation for Contact Procedures**.

7.15.26. **R140—Tanker Manual Contact**. Prior to attempting, students must demonstrate knowledge of tanker manual operational equipment and procedures.

7.15.27. **R150—Fighter Contact**. Log the actual number of contacts accomplished. BO must obtain a contact with the fighter. Additional BO may also log a R150 if they accomplish a contact. Currency not required for alert duty not requiring this event (i.e. 8010, START alerts) BO may log R150 for B-1 refueling, provided he or she is Q022 qualified.

7.15.28. **R155—Probe and Drogue Contact.**

7.15.29. **R160—Radio Silent Breakaway.** Event is to be accomplished using radio silent procedures. No radio call will be made during accomplishment of breakaway unless it is needed due to actual emergency or system malfunction. This event may take place with the receiver in either the contact or precontact position. For the event to occur from the contact position, prior coordination must take place among the BO, tanker pilot and receiver pilot. As a minimum, the time of occurrence must be coordinated. Should this event be scheduled as part of a radio silent AAR, coordination can be done any time prior to the flight. This event may also be accomplished during an AAR that does not involve radio silent procedures. Pilots may log R160 any time it is accomplished by the Boom Operator.

7.15.30. **R165—Radio Silent AAR**. BO will demonstrate the ability AAR radio silent to an instructor BO during an actual AAR. Any type receiver may be used for this training. The individual's training records must show certification in radio silent AAR before achieving

mission qualification status or participating in EMCON 3 or 4 operations. See ATP-56(B) for EMCON descriptions. Pilots may log R165 any time it is accomplished by the Boom Operator.

7.15.31. **R170—Tanker Heavyweight Offload**. Requires a minimum offload of 50,000 pounds and a start AAR gross weight of 250,000 pounds. A 1 percent deviation from these weights is authorized.

7.15.32. **R180—Radio Silent Visual Signals**.

7.15.33. **R190—Tanker Drogue AAR**.

7.15.34. **R195—Tanker Wing Pod AAR**.

7.15.35. **R220—Manual Boom Latching**.

7.15.36. **R225—Reverse Flow AAR**. This event (KC-135s in the tanker role) is restricted to AETC Instructors at formal school only. On aircraft equipped with the ARR [B] system, KC-135R/Ts aircrews may practice procedures (under IP supervision).

7.15.37. **R230—Emergency Boom Hoist**.

7.15.38. **R400—Tanker Power Management (AETC Instructor Cadre only).**

7.15.39. **R410—Aerodynamic Effects of Boom Position (AETC Instructor Cadre only).**

7.15.40. **R420—Simulated Loss of Tanker Engine During AAR (AETC Instructor Cadre only).**

7.15.41. **R430—Tanker AAR Evaluation Platform (AETC Instructor Cadre only).**

7.15.42. **R440—Aerodynamic Effects of Various Closures (AETC Instructor Cadre only).**

7.15.43. **R450—Turns and Altitude Changes While In Contact (AETC Instructor Cadre only).**

7.15.44. **R460—Night Light Demonstration (AETC Instructor Cadre only).**

7.16. Special Operations (S) Events. ***NOTE:*** "S" events are required for SOAR qualified crewmembers per the specific continuation training table. Failure to complete the continuation training in the required training period does not result in NMR status.

7.16.1. **S036—SOAR Rendezvous** (SOAR certified only). Special operations rendezvous utilizing enroute overtaking rendezvous procedures (see AFI 11-2KC-135 Volume 3 Addenda C).

7.16.2. **S101—In-flight ARC-210 DAMA SATCOM Training**. Loading secure tape, uplink and downlink frequencies, and zeroizing procedures for the ARC-210 DAMA SATCOM radio.

7.16.3. **S200—NVG Operations.**

7.17. Survival Training (SS) Events. Refer to AFI 16-1301, for specific instructions and course requirements. **OPR:** HQ AMC/A3T.

7.17.1. **SS01—Local Area Survival. Purpose:** Identify local policies and procedures that could affect an aircrew member's recovery. Determine personnel recovery tactics,

techniques and procedures applicable to local area flying operations. **Description:** Event requirements are defined in AFI 16-1301. **Unit OPR:** HQ AMC/A3DT. **Additional Information:** Each unit is responsible for tailoring training to meet unit needs.

7.17.2. **SS02—Combat Survival Training (CST) Purpose:** . Academic and field training designed for aircrew members whose duties may include overflight of or deployment to hostile territory. CST provides aircrew members an opportunity to demonstrate their ability to operate aircrew flight equipment (AFE), employ survival/evasion techniques, and practice rescue procedures under simulated combat conditions. **Description**: See AFI 16-1301 and MAJCOM supplement. This course includes in-depth instruction for aircrew members to demonstrate their ability to operate life support equipment, employ survival/evasion techniques, and rescue procedures under simulated combat conditions. **Unit OPR:** Wing Tactics/SERE Course length will not exceed one training day. Units may schedule aircrew members to complete both CST and WST events in a single training day.

7.17.3. **SS03—Conduct After Capture (CAC) Training. Purpose:** Training designed for crewmembers in units with a war fighting responsibility. **Description:** Commonly referred to as Resistance Training (RT), provides refresher training for wartime, governmental, and hostage detention situations. **Additional Information**: Course is classified "Secret" and requires a classified capable classroom. Mission Ready (MR)/Combat Mission Ready (CMR) and personnel assigned to combat-coded units will receive CAC every 36 months. 36 month currency starts from last accomplishment of training date, either formal school or continuation training. CAC must be completed prior to being awarded MR status. **Unit OPR**: Wing Tactics/SERE.

7.17.4. **SS05—Water Survival Training (WST)**. To provide crewmembers the opportunity to demonstrate proficiency for survival and recovery from a water environment using weapon system survival equipment. **Description:** Conduct initial S-V90-A (SS32) according to AFI 16-1301. Crewmembers will demonstrate the ability to employ water survival techniques and rescue procedures. Survivor needs using water-related equipment, accessories, and procedures will be stressed. An emphasis will be placed on the appropriate use of passenger support equipment and the proper care of passengers during a survival situation. See MAJCOM supplement. **Additional Information:** Mission Ready (MR)/Combat Mission Ready (CMR) and personnel assigned to combat-coded units will receive WST every 36 months. 36 month currency starts from last accomplishment of training date, either formal school or continuation training. WST must be completed prior to being awarded MR status. See water survival training "hands on" requirement in AFI 16-1301 for course details. Course length will not exceed six hours. Units may schedule aircrew members to complete both WST and CST in a single training day. **Unit OPR:** Wing Tactics/SERE.

7.17.5. **SS07—Contingency SERE Indoctrination (CSI).** CSI is a Combatant Command directed activity for High Risk of Capture/Isolation (HRC/ I) personnel deploying to a specific theater of operations or contingency. CSI is current for a period of time as determined by gaining Combatant Command (normally 2 years). If no certified briefer is available locally, coordinate (with sufficient lead time) through HQ AMC/A3DT for a scheduled briefing. **OPR**: Wing Tactics/SERE **Additional Information**: HQ/AF AND MAJCOMS do not control course content or frequency. Waiver authority is the COCOM CFACC. As required by contingency and/or theater training tasking only.

7.17.6. **SS20—Combat Survival Training (CST), Wartime Level C (S-V80-A) (Initial)**

7.17.7. **SS31—Water Survival Training, Parachuting (S-V86-A)(Initial).** Meets the requirements for initial Water Survival Training, however, due to the removal of parachutes from the KC-135, S-V90-A (SS32) is the preferred course for new pilots.

7.17.8. **SS32—Water Survival Training, Non-Parachuting (S-V90-A) (Initial)**

7.18. GRACC (V) Events.

7.18.1. **V280—Pilot to Aircraft Commander Upgrade Phase I**

7.18.2. **V281— Pilot to Aircraft Commander Upgrade Phase II**

7.18.3. **V282— HQ AMC Visit**

7.19. Visual Low Level (VL) (N/A KC-135)

7.20. Visual Threat Recognition & Avoidance (VT) Events.

7.20.1. **VT01— Initial VTRAT.** VTRAT is available at KC-135 simulator training sites. Advance scheduling notice is required.

7.20.2. **VT05— Threat Recognition Refresher. Purpose:** Ensure aircrew are trained to recognize tactical environment aircraft threats. Complete using Tactics Threat Recognition video or use of the VTRAT device. VTRAT is available at KC-135 simulator training sites. Advance scheduling notice, is required. VT05 can be completed in conjunction with G060. **OPR:** AMC/A3D **Training Aids:** Threat Recognition Video and/or VTRAT device. **Instructor:** Unit Tactics.

7.21. NVG (VV) Events.

7.21.1. **VV01**--NVG Training and Qualification.

7.22. Unit Defined (X) Events (UDE). Reserved for use by local units. Publish OG/CC level guidance documenting local event identifiers, associated ARMS nomenclature, volume, currency and/or frequency. OG/CC should review all "X" events for relevancy to the unit's mission during the TRP. This review will be documented in the TRP minutes (see **paragraph 1.4.5.1.1**).

7.22. (459ARW)Unit Defined "X" Events (UDE). "X" events will be reviewed and updated at a minimum every semi-annual TRP. The most up to date list of UDE is published on the most recent semi-annual TRP minutes.

7.22.1. **(Added-459ARW)** X003—Mask Fit Test. IAW AFOSHSTD 48-137. Accomplish upon arrival at the first permanent duty station. QNFT will be re-accomplished if a new size or type mask is issued, the wearer gains/loses 10% or more of body weight following completion of the initial QNFT or the wearer experiences extensive dental work, facial surgery, scarring, or disfigurement.

7.23. Adopted Forms.

AF Form 8, *Certificate of Aircrew Qualification*

AF Form 63, *Active Duty Service Commitment (ADSC) Acknowledgement Statement*

DD Form 365-4, *Weight and Balance Clearance Form F – Transport/Tactical*

AF Form 522, *USAF Ground Weapons Training Data*

AFTO Form 781A, *Maintenance Discrepancy and Work Document*

AFTO Form 781H, *Aerospace Vehicle Flight Status and Maintenance*

AF Form 847, *Recommendation for Change of Publication*

AF Form 1042, *Medical Recommendation for Flying or Special Operational Duty*

AF Form 1522, *ARMS Additional Training Accomplishment Report*

DD Form 1833, *Isolated Personnel Report (ISOPREP)*

AF Form 4022, *Aircrew Training Folder*

AF Form 4023, *Aircrew Training Progress Report*

AF Form 4024, *Aircrew Training Accomplishment Report*

AF Form 4025, *Aircrew Summary/Close-Out Report*

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

AF Form 4168, *COMSEC Responsible Officer and User Training Checklist (LRA).*

AF Form 4324, *Aviation Resource Management System (ARMS) Upgrade Worksheet*

PHILIP M. BREEDLOVE, Lt Gen, USAF
DCS, Operations, Plans and Requirements

(459ARW)

MATTHEW J. BURGER, Col, USAFR
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

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Abbreviations and Acronyms

A—Annual

AAR—Air to Air Refueling

A3T—Chief, Aircrew Operations and Training

AC—aircraft commander

ACDE—Aircrew Chemical Defense Ensemble

ACDT—Aircrew Chemical Defense Training

ACDTQT—Aircrew Chemical Defense Task Qualification Training

ACIQ— Aircraft Commander Initial Qualification (previous MWS Aircraft Commanders or FAIP/OSA Aircraft Commanders)

ACQ—Aircraft Command Qualification

AD—Active Duty

ADS—Automatic Dependent Surveillance (-A/-C) Addressed/Contract; (-B) Broadcast

ADSC—Active Duty Service Commitment

AE—Aeromedical Evacuation

AEB—Airman Evaluation Board

AEF—Air Expeditionary Force

AERP—Aircrew Eye/Respiratory Protection

AETC—Air Education and Training Command

AF—Air Force

AFB—Air Force Base

AFCESA— Air Force Civil Engineering Support Agency

AFCITA—Air Force Complete Immunizations Tracking Application

AFDL—Air Force Distance Learning

AFE—Aircrew Flight Equipment

AFFSA—Air Force Flight Standards Agency

AFFT—Aircrew Flight Familiarization Training

AFI—Air Force Instruction

AFJI—Air Force Joint Instruction

AFMAN—Air Force Manual

AFMSS—Air Force Mission Support System

AFN—ATC Facilities Notification

AFPD—Air Force Policy Directive

AFOSH—Air Force Occupational Safety and Health

AFRC—Air Force Reserve Command

AFSC—Air Force Specialty Code

AFSIR—Air Force Spectrum Interference Resolution

AFTO—Air Force Technical Order

AFTTP—Air Force Tactics, Techniques, and Procedures

AGL—Above Ground Level

AIT—Aircrew Intelligence Training

ALEP—Aircrew Laser Eye Protection

AMC—Air Mobility Command

AMW—Air Mobility Wing

AMCAOS—Air Mobility Command Auxiliary Operational Squadron

ANG—Air National Guard

AOC—Air Operations Center

AP—Auto Pilot

APU—Auxiliary Power Unit

AQP—Airport Qualification Program

ARMS—Aviation Resource Management System

AR—As Required

ARC—Air Reserve Component (ANG and AFRC)

ARCP—AAR Control Point

ARCT—AAR Control Time

ARIP—AAR Initial Point

ARMS—Aviation Resource Management System

ASEV—Aircrew Standardization/Evaluation Visit

ASR—Airport Surveillance Approach

ASRR—Airfield Suitability and Restrictions Report

AT—Academic Training

ATC—Air Traffic Control

ATD—Aircrew Training Device

ATOC—Air Terminal Operations Center

ATS—Aircrew Training System

B—Biennial

BAI—Backup Aircraft Inventory

BAQ—Basic Aircraft Qualification/Qualified

BFE—Basic Flight Engineer

BLM—Basic Load Master

BMC—Basic Mission Capable

BO—Boom Operator

BOPTT—Boom Operator Part Task Trainer

BOWST—Boom Operator Weapon System Training

C—Cyclical (17-Month Qualification Evaluation Cycle)

C4—Command, Control, Communications and Computers

CAC—Conduct After Capture

CATM—Combined Arms Training Maintenance

CBRNE—Chemical, Biological, Radiological, Nuclear and High Yield Explosive

CBT—Computer-Based Training

CC—Commander or appropriate AFRC/ANG Operations Supervisor

CCAT—Cabin Combat Arms Training

CCP—Command And Control Procedures

CCRW—Command Curriculum Review Workshop

CDU—Control Display Unit

CEA—Career Enlisted Aviator

CFIT—Controlled Flight Into Terrain

CFT—Cockpit Familiarization Trainer

CHUM—Chart Update Manual

CLT—Cargo Loading Trainer

CNS/ATM—Communication, Navigation, Surveillance/Air Traffic Management

COMSEC—Communications Security

CONOPS—Concept of Operations

CONUS—Continental United States

CoP—Community of Practice

CP—Copilot

CPDLC—Controller Pilot Data Link Communications

CRG—Contingency Response Group

CRM—Crew Resource Management

CRO—COMSEC Responsible Officer

CRW—Contingency Response Wing

CSD—Class Start Date

CSI—Contingency SERE Indoctrination

CST—Combat Survival Training

CT—Continuation Training

CTA—Chemical Threat Area

CUR—Currency

CWD—Chemical Weapons Defense

DeMS—Deployment Management System

DMO—Distributed Mission Operations

DMT—Distributed Mission Training

DNIF—Duty Not Involving Flying

DO—Deputy Commander for Operations

DOC—Designed Operational Capability

DOD—Department of Defense

DQT—Difference Qualification Training

DRVSM—Domestic Reduces Vertical Separation Minimum

DSN—Defense Switched Network

DS—Defensive Systems

DZ—Drop Zone

EAR—Event Accomplishment Report

EGPWS—Enhanced Ground Proximity Warning System

EMCON—Emission Control

EMTF—Expeditionary Mobility Task Force

EOC—End Of Course

EOR—Explosive Ordinance Reconnaissance/Recognition

EP—Fully Certified/Qualified Evaluator Pilot(who is performing evaluator duties on the mission)

EPA—Evasion Plans Of Action

ESD—Evaluator Standards Document

ETCA—Education and Training Course Announcements

E-TCAS— Enhanced Traffic Collision And Avoidance System

ETP— Equal Time Point

FAA—Federal Aviation Administration

FAIP—First Assignment Instructor Pilot

FB—Basic Qualified Boom Operator

FC—Basic Qualified Copilot

FCIF—Flight Crew Information File

FCV—Fuel Control Valve

FE— Flight Examiner

FEB— Flight Evaluation Board

FEF—Flight Evaluation Folder

FEO—Flight Equipment Officer

FIR—Flight Information Region

FLIP—Flight Information Publications

FMAC—Fuel Management Advisory Computer

FMS—Flight Management System

FMS—Foreign Military Sales

FN—Basic Qualified Navigator

FOD—Foreign Object Damage

FP—Flight Qualified Pilot

FPC— Flight Qualified Mission Ready Traditional Non-MPD Co-Pilot (Replaces MC designation)

FPL— Flight Qualified Non-Mission Ready Pilot (ACIQ/ACQ/PCO graduate in local MR training, or FTL E pilots)

FPN—Flight Qualified Non-Mission Ready Pilot (ACIQ/ACQ/PCO students prior to checkride, PIQ Graduate in local MR training, or SOC graduate)

FPQ— Flight Qualified Mission Ready MPD Pilot

FS—Flight Surgeon

FSAS—Fuel Saving Advisory System

FTC—Faculty Training Course

FTL—Flying Training Level

FTU—Formal Training Unit

GATM—Global Air Traffic Management

GIPTT—CNS/ATM Integrated Hand Controller Part Task Trainer

GPS—Global Positioning System

GPRD—Graduate Program Requirements Document

GRACC—Global Ready Aircraft Commander Course

GST—Ground System Training

GT—Ground Training

GTL—Ground Training Level

HARM—Host Aviation Resource Management

HARMS— Host Aviation Resource Management System

HF—High Frequency

HQ—Headquarters

HQ—HAVE QUICK

HRC—High Risk of Capture

HVAA—High Value Airborne Asset

IA—Information Assurance

IAP—Instrument Approach Procedure

IAW—In Accordance With

IBO—Instructor Boom Operator

IBT—Instructor-Based Training

ICAO—International Civil Aviation Organization

IFE—In-Flight Emergency

IFF/SIF—Identification, Friend or Foe, Selected Identification Features

ILS—Instrument Landing System

IMC—Instrument Meteorological Conditions

IN—Instructor Navigator

IOS—Instructor Operator Station

IP— Fully Certified/Qualified Instructor Pilot who is performing instruction on the mission

IPD—International Program Directives

IQT—Initial Qualification Training

IRC—Instrument Refresher Course

ISD—Instructional Systems Development

ISOPREP—Isolated Personnel Report

ITO—Individual Tryout

ITS—Individual Training Summary

L-BAND—Satellite Communications Frequency

LAAR—Low Altitude Air Refueling

LAHSD—Low Altitude High Speed Departures

LCL—Local

LL—Low-Level

LMT—Learning Management System

LNAV—Lateral Navigation

LOAC—Law Of Armed Conflict

LZ—Landing Zone

M—Monthly

MAF—Mobility Air Force

MAJCOM—Major Command

MANPAD—Man-Portable Air-Defense System

MB—Mission Boom Operator

MC—Mission Copilot

MCT—Mission Certification Training

MDS—Mission-Design-Series (I.E., KC-135R)

MEP—Mission Essential Personnel

MFD—Multi-Function Display

MFR—Memorandum For Record

MILPDS—Military Personnel Data System

MISREP—Mission Reports

MITO—Minimum Interval Takeoff

MLS—Microwave Landing System

MN—Mission Navigator

MNPS—Minimum Navigation Performance Specification

MOB—Main Operating Base

MOST—Mission-Oriented Simulator Training

MOU—Memorandum Of Understanding

MP—Mission Pilot

MPD—Mobility Pilot Development

MPD P—Mobility Pilot Development Pilot

MPF—Military Personnel Flight

MPN—Aircraft Commander (Non-Mission Ready)

MPRS—Multi-Point Refueling System

MQF—Master Question File

MQT—Mission Qualification Training

MR—Mission Ready

MRP—Mission Review Panel

MSL—Mean Sea Level

MSN—Mission

MSSR—Media Selection Syllabus Report

MTL—Master Task Listing

MWS—Major Weapon System

MX—Maintenance

N/A—Not Applicable

NAF—Numbered Air Force

NAVAID—Navigational Aid

NCO—Non-Commissioned Officer

NET—Not Earlier Than

NGB—National Guard Bureau

NLT—Not Later Than

NMR—Non-Mission Ready

NOTAM—Notice To Airmen

NVD—Night Vision Devices

NVG—Night-Vision Goggles

O&M—Organizational and Maintenance

OCONUS—Outside the Continental United States

OFT—Operational Flight Trainer (KC-135 R-model Simulator)

OG—Operations Group

OG/CC—Operations Group Commander

OGV—Operations Group Standardization and Evaluation

OMAR—Objective Media Analysis Report

OME—Operational Mission Evaluation

ORM—Operational Risk Management

ONP—Over-Water Navigation Procedures

OPLAN—Operations Plan

OPORD—Operations Order

OPR—Office Of Primary Responsibility

OSA—Operational Support Airlift

OSS—Operations Support Squadron

P—Proficient

PA—Privacy Act

PAA—Primary Aircraft Authorization

PACAF—Pacific Air Forces

PAI—Primary Aircraft Inventory

PAMS—Pilot Absorption Management System

PAR—Precision Approach Radar

PCMCIA—Personal Computer Memory Card Interface Association

PCO—Pilot Checkout (N/A KC-135)

PCS—Permanent Change of Station

PF—Pilot Flying

PFT—Programmed Flying Training

PIC—Pilot In Command

PIQ—Pilot Initial Qualification

PM—Pilot Monitoring

PNF—Pilot Not Flying

PO—Project Officer

POC—Point Of Contact

PR—Progress Review

PRD—Program Requirements Document

PRM—Precision Runway Monitoring

PTT—part task trainer

QA—Quality Assurance

QAI—Quality Assurance Issue

QAR—quality assurance representative

QUAL—Qualification

R&C—Review and Certification

RDS—Records Disposition Schedule

RIP—Report of Individual Personnel

RNAV— Area Navigation

RNP—Required Navigation Performance

RPL—Required Proficiency Level

RQT—Requalification Training

RTRB—Realistic Training Review Board

RV—Rendezvous

RVSM—Reduce Vertical Separation Minimum

SAT—Small Arms Training

SABC—Self Aid Buddy Care

SARMS—Squadron Aviation Resource Management System

SATCOM—Satellite Communications

SELCAL—Selective Calling System

SERE—Survival, Evasion, Resistance, And Escape

SG—Surgeon General

SIM—Simulator

SIMCERT—Simulator Certification

SIPRNET—Secret Internet Protocol Router Network

SKE—Station Keeping Equipment

SME—Subject Matter Expert

SOAR—Special Operations Air Refueling

SOC—Senior Officer Course

SORTS—Status Of Resources And Training System

SOW—Statement Of Work

SPEC—Specification

SPINS—Special Instructions

SPR—Single-Point Refueling Manifold

Sq/CC—Squadron Commander

Sq/DO—Squadron Director of Operations

SRB—System Review Board

SSN—Social Security Number

Stan/Eval—Standardization and Evaluation

SUNT—Specialized Undergraduate Navigator Training

SUPT—Specialized Undergraduate Pilot Training

TACAN—Tactical Aid to Navigation

TACC—Tanker Airlift Control Center

TAG—Training Advisory Group

TCAS—traffic Alert Collision Avoidance System (also called E-TCAS)

TDAPPS—

TDY—Temporary Duty

TEQ—Training Effectiveness Questionnaire

TERPS—Terminal Instrument Procedures

TFT—Total Flying Time

TG—Training Guide

TI—Theater Indoctrination

TIM—Technical Interchange Meeting

TL—Training Level

TMO—Tanker Manual Operation

TMS—Training Management System

T.O.—Technical Order

TOD—Time Of Day

TOT—Time Over Target

TRP—Training Review Panel

TTF—Tanker Task Force

TTP—Tactics, Techniques, And Procedures

TX—Transition

UB—Unqualified Boom Operator

UC—Unqualified Copilot

UDM—Unit Deployment Manager

UE—Unit-Equipped

UHF—Ultra High Frequency

UIR—Upper Information Region

UMD—Unit Manning Document

UN—Unqualified Navigator

UP—Unqualified Pilot

UPT—Undergraduate Pilot Training

US—United States

USAF—United States Air Force

USAFEC—United States Air Force Expeditionary Center

USAFE—United States Air Forces in Europe

USAFWS—United States Air Force Weapons School

UTA—Unit Training Assembly

VFR—Visual Flight Rules

VHF—Very High Frequency

VMC—Visual Meteorological Conditions

VOR—VHF Omnidirectional Range

VTRAT—Visual Threat Recognition and Avoidance Trainer

Wg/CC—Wing Commander

WIC—Weapons Instructor Course

WPS—Weapons School

WST—Weapon System Trainer (Includes Air Vehicle Simulator linked to the Loadmaster or Boom Operator Station)

WX—Weather

Terms

Academic Training—A course of instruction including, but not limited to, classroom instruction for aircraft systems and operation, flight characteristics and techniques, performance, normal procedures, abnormal procedures, and emergency procedures. To adequately prepare students, academic courses should be completed prior to simulator or flight training.

Aircraft Commander (AC)—Pilot who has been certified to perform "pilot-in-command" duties.

Aircraft Systems Refresher—Aircraft and crew position unique systems refresher courses.

AAR Mission—Flight that involves AAR procedures as a tanker or receiver aircraft.

Aeromedical Evacuation (AE)—The movement of patients under medical supervision to and between medical treatment facilities by air transportation.

Aircrew Training Device (ATD)—Includes cockpit procedures trainer, boom operator part task trainer, weapons systems trainer, operational flight trainer, celestial training device, table top navigation and rendezvous trainer, cargo loading trainer, and other flight simulators.

Aircrew Training System (ATS)—Integrated qualification, upgrade, and continuation training program for crewmembers. Civilian contractors conduct most academic and ATD training.

Annual—Training required once every calendar year.

Basic Aircraft Qualified (BAQ)—Aircrew member who has successfully completed an in-flight evaluation, but is not mission qualified in his or her assigned aircraft.

Biennial—Training required once every two calendar years.

Boom Operator Part Task Trainer (BOPTT)—Aircrew Training Device (ATD) providing synthetic flight and tactics environment in which KC-135 Boom Operators learn, develop, improve, and integrate skills associated with the KC-135 boom pod. The KC-135 ATS operates two BOPTT configured for KC-135R training located at Altus AFB. The BOPTT are classified to meet FAA Level-A training device standards; capable of system and emergency procedures training.

Boom Operator Weapon System Trainer (BOWST)—Aircrew Training Device (ATD) providing virtual flight environment in which KC-135 Boom Operators learn, develop, improve, and integrate skills associated with the KC-135 boom pod. Two BOWST are under development to replace two BOPTT supporting initial training for KC-135R at Altus AFB. A third BOWST is under development to support SOAR and continuation training for KC-135R at McConnell AFB. The BOWST may be classified to meet FAA Level-6 training device standards; capable of system and emergency procedures currency training standards.

Cargo Load Trainer (CLT)—Aircrew Cargo Load Trainer device that provides actual environment in which crewmembers learn, develop, improve, and integrate skills associated with their crew position. The KC-135 ATS operate one CLT configured for KC-135R training located at Altus AFB. The CLT is an actual aircraft with wings removed. The interior of the CLT allows crewmembers to configure the space for floor loading and/or cargo rail loads.

Communications Security (COMSEC)—COMSEC material, other than equipment or devices, that assists in securing communications and which is required in the production, operation, or

maintenance of COMSEC systems and their components. Examples are keys, codes, authentication information in physical or electronic form, call signs, frequencies, and supporting documents.

Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM)—Collective term replacing the acronym, GATM. The USAF is equipping aircraft to meet a specific Communication, Navigation, or Surveillance mandate to fly in a sovereign nation's specified airspace. CNS/ATM addresses the three major system categories worldwide (communication, navigation, and surveillance) and includes the intended end state for these changes: the transition from Air Traffic Control (ATC) to Air Traffic Management (ATM). The term further achieves standardization DoD-wide. The Global Access Navigation and Safety (GANS) Team on 6 May 2004 adopted policy for future programming documents such that the term "CNS/ATM" will replace "GATM".

Computer-Based Training (CBT)—Ground training system that uses computer-generated graphics or text in conjunction with interactive programs as the primary medium of instruction.

Continuation Training—Ground and flight training events necessary to maintain mission-ready or basic aircraft qualification status.

Crew resource Management (CRM) Training—See specifics of CRM in AFI 11-290. CRM is designed to improve aircrew teamwork, dynamics, and effectiveness.

Critical Phases-of-Flight—See AFI 11-2KC-135 Volume 3. The instructor must occupy one of the seats or stations, with immediate access to the controls.

Currency Event—Flying continuation training events with prescribed maximum interval-between-accomplishment shown in the "CUR" column.

Cycle—17-month cycle based on in-flight evaluation completion according to AFI 11-202 Volume 2 and AFI 11-2KC-135 Volume 2, and appropriate MAJCOM supplement.

Direct Instructor Supervision—Instructor of like specialty with immediate access to controls (for pilot position, instructor will occupy either seat).

Event—A training requirement or training event described in this AFI. Several events or tasks constitute a training profile.

Familiarization Event—An item completed by demonstration, observation, briefing, or in-seat experience. Proficiency is not required.

Flight Examiner or Evaluator—A crewmember designated to administer evaluations according to AFI 11-202 Volume 2, and the appropriate MAJCOM supplement.

Flight Surgeon (FS)—Medical doctor qualified to perform flight surgeon duties and has current aeronautical orders in that AFSC.

Frequency—How often an event must be accomplished to maintain currency.

Term	Definition	Example
180D, 365, etc…	Expires at the end of the ***n***th day after the Last Accomplished Date.	180D: If **Last accomplished** = 10 Feb 07 **Expires End of** = 8 Aug 07 **Overdue** = 9 Aug 07

M, **12M, 24M,** etc…	Expires at the end of the last day of the ***n***th Calendar Month after Last Accomplished.	15M: If **Last accomplished** = 10 Feb 07 **Expires End of** = 31 May 08 **Overdue** = 1 Jun 08
Q - Quarterly	Expires at the end of the last day of the Quarter after the Last Accomplished Quarter. Training Quarters are defined under the term "**Quarterly**."	If **Last accomplished** = 10 Feb 07 **Expires End of** = 30 Jun 07 **Overdue** = 1 Jul 07
4Q – 4th quarter	Expires at the end of the last day of the 4th Quarter after the Last Accomplished Quarter. Training Quarters are defined under "**Quarterly**."	4Q: If **Last accomplished** = 10 Feb 07 **Expires End of** = 31 Mar 08 **Overdue** = 1 Apr 08
SA – Semi-Annual	Expires at the end of the last day of the Semiannual period *after* the training was accomplished. The *Semiannual Training Periods* are specified under the term "**Semiannual**."	If **Last accomplished** = 10 Feb 07 **Expires End of** = 31 Dec 07 **Overdue** = 1 Jan 08
A - Annual	Expires at the end of the last day of the Calendar Year *after* the training was accomplished.	If **Last accomplished** = 10 Feb 07 **Expires End of** = 31 Dec 08 **Overdue** = 1 Jan 09
B - Biennial	Expires at the end of the last day of the 2nd Calendar Year *after* Training was accomplished.	If **Last accomplished** = 10 Feb 07 **Expires End of** = 31 Dec 09 **Overdue** = 1 Jan 10
T - Triennial	Expires at the end of the last day of the 3rd Calendar Year *after* Training was accomplished.	If **Last accomplished** = 10 Feb 07 **Expires End of** = 31 Dec 10 **Overdue** = 1 Jan 11
One-time	Self-explanatory	
AR – As required	Self-explanatory	

Instructor—Crewmember trained, qualified, and certified by the Sq/CC as an instructor.

Instructor-Candidate—A crewmember undergoing upgrade training to instructor.

Instructor Supervision—A qualified instructor of like specialty supervising a maneuver or event.

Mission-Oriented Simulator Training (MOST)—Part of the aircrew CRM training program; includes a practical application, a full-mission scenario in ATD.

Mission-Ready (MR)—Crewmember who is current, qualified, and certified in the unit's missions.

Mission Review Panel (MRP)—Unit level staff, reviews previous day's flight and ground training.

Mobility Pilot Development (MPD)—The process by which a MPD pilottransitions from a new dual-seat qualified pilot in the MDS to a fully qualified and certified aircraft commander.

Monthly—Training required once every calendar month.

Night—After official sunset until before sunrise according to AFI 11-401, *Aviation Management*.

Non-Mission Ready (NMR)—A crewmember that is unqualified, non-current or incomplete in required continuation training, or not certified to perform the unit mission.

Operational Flight Trainer (OFT)—KC-135R-model Aircrew Training device that provides synthetic flight and tactics environment in which crewmembers learn, develop, improve, and integrate skills associated with their crew position. The KC-135 ATS operates 19 OFT devices configured for KC-135R-model training at 13 locations worldwide.

Overseas Sortie (OCONUS sortie)—A sortie that includes a take-off or landing outside the 48 conterminous states of the United States.

Part Task Trainer (PTT)—A physical training device to practice a specific task (e.g., BOPTT) or software for a CBT trainer e.g., Pacer CRAG, FMAC, etc.

Pilot Initial Qualification (PIQ)—Term used to describe the FTU course for initial qualification of a SUPT student into a MAF KC-135 pilot.

Pipeline—An initial qualification trainee directed for training by the AF Personnel Center process.

Quarterly—3-month periods defined as 1 October to 31 December (first quarter of the fiscal year), 1 January to 31 March, 1 April to 30 June, and 1 July to 30 September.

Queen Bee ATD—- Simulator used by non-co-located units.

Quinquennial—Training required once every 5-years.

Requalification Training—Training to requalify a crewmembers in an aircraft in which they have been previously qualified. See **Chapter 2** for requalification training requirements.

Semiannual—6-month training periods from 1 January to 30 June and 1 July to 31 December.

Simulated Engine Failure Take-off Continued (EFTOC)—Practice procedure simulating engine failure after a take-off or touch and go.

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

Tactical Arrival and Departures (TAD)—Tactical maneuvers in AFI 11-2KC-135 Volume 3.

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.

Triennial—Training required once every three calendar years.

Attachment 2

AIRCREW TRAINING DOCUMENTATION

A2.1. General Information. This attachment provides guidelines on proper training documentation. 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. These forms are prescribed in AFI 11-2C5 Volume 1, *C5 Aircrew Training*.

A2.1.1. Create an AF Form 4022, for ETCA formal training courses (formal school or in-unit), mission qualification, special qualification, certification training, in-unit upgrade program to the next higher crew qualification, requalification training (formal school or in-unit), MPD, and all corrective action or additional training. (see AMC/A3T CoP, Universal Aircrew Training, for examples of AF Form 4022, 4023, 4024, 4025)

A2.1.1.1. 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 or the training guide. Use the existing AF Form 4022 for end-of-course evaluations that result in additional training.

A2.1.1.2. At the unit'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; e.g., a CP or MPD pilot upgrading to AC may have the upgrade, mission qualification, and formation lead training combined in one folder.

A2.1.1.3. Electronic Training Folders are authorized. Electronic training folders and reports not reproduced on paper for inclusion in the AF Form 4022, must be stored in 2 places (a primary and a backup) for at least one year.

A2.1.1.3.1. Electronic versions must be password protected to ensure data integrity (Ensure individual has only read access to their files).

A2.1.1.3.2. Digital signatures are authorized using "//signed//" plus the individuals name.

A2.1.2. Formal schools will send AF Form 4022 or aircrew training guide (formal schoolhouse only) with all training records to the trainee's gaining unit. This may be done electronically at the gaining unit's request. Sq/CC will review formal school training records and enter appropriate comments on the training guide progress record or AF Form 4023.

A2.1.3. The unit (typically squadron-level) will maintain the training folders for assigned personnel in a location readily accessible to instructors and supervisory personnel. The trainee may review his or her folder at any time.

A2.1.4. 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. Sq/CC or Sq/DO will review active training folders quarterly, and flight commanders or squadron training representatives will conduct a monthly review. Annotate monthly and quarterly reviews on AF Form 4023 or in

the training guide. Quarterly reviews suffice for monthly reviews. ***NOTE:*** Due to the frequency of review, and brief course length at the FTU, the 97 OG/CC will determine the requirement to review student training documentation.

A2.1.5. Upon completion of training, place hard copy of the AF Form 4025 in the individual's flight training folder. Place a copy of the AF Form 4025 in the individuals FEF only if directed by the appropriate (e.g., AFI 11-202 Volume 2/MAJCOM Supplement, AFI 11-2KC-135 Volume 2). Squadrons will retain all AF Forms 4022 for 1-year, then return to the crewmember, see **paragraph A2.1.1.3**. Document in ARMS per applicable event and **paragraph 1.8**.

A2.1.6. If training guides are not used, use AF Forms 4023, 4024, and 4025 for ATS and formal school courses.

A2.1.7. 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 training conducted outside the classroom not associated with a flight or ATD. All G series ground training referenced in this AFI will be referenced as (GT).

A2.1.8. The AF 4324 will be used as a "source document" for recording the various aircrew certifications. Completed/original AF 4324s will be kept on file in the unit ARMS office for the duration of the aircrew member's assignment and released to the member upon reassignment. AF 4324, blocks 1-5 and 11-13, will be used to document any new aircrew certification and award of specific ARMS "Q" code identifiers. Specifically, block 11 will contain the following minimum information: Q code (i.e. QXXX), Certification Name (i.e. "GRACC"), and date of certification. Forward completed for to the unit ARMS section for processing.

A2.2. Instructions for AF Form 4022. This folder is constructed of hard stock paper. The inside cover includes tables for documenting training. AF Forms 4023, 4024, 4025, training guides, and additional information (waivers, etc.) will be attached through the centered holes of the folder. Obtain a folder through the AF publications system. Electronic versions may be used at the unit's discretion. ***NOTE:*** Formal school instructors 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.

A2.2.1. Trainee Information (cover): Provides trainee and course information.

A2.2.1.1. Name and grade. Self-explanatory.

A2.2.1.2. Aircrew position. Self-explanatory. (For aircrew members in an upgrade program, enter the aircrew position to which they are upgrading).

A2.2.1.3. Unit of assignment. Self-explanatory.

A2.2.1.4. Type of training. Enter formal course title or, for special mission qualification, enter type, e.g. SOAR, formation lead etc. For other types of training, enter a descriptive identifier.

A2.2.1.5. Class number. Enter formal school class number; otherwise, leave blank.

A2.2.1.6. Course number: Enter only the ETCA formal course number, e.g., "KC135AC," etc. Otherwise, leave blank.

A2.2.2. Ground Training Summary (inside left). This section provides a record of ground training events. Record non-flying training events. Entries are required for CPT, OFT, GIPTT, or NPT. Entries are required on the AF Form 4022 for in-unit academic instruction conducted according to formal school courseware. Identify classroom academic training as AT. Overprints are authorized and, if used, will be placed on the left side of the AF Form 4022.

A2.2.2.1. Date. Selfexplanatory.

A2.2.2.2. Training period. Enter sequentially numbered training period designators, e.g. "CPT-1," "OFT-2," "GT-3, OFT-5, etc.", or specific course identifier.

A2.2.2.3. 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.

A2.2.2.4. Instructor or Trainer (Qualification). Enter the name of the instructor or trainer and aircrew qualification, e.g., aircraft commander (AC), instructor pilot (IP), instructor navigator (IN), etc.

A2.2.2.5. Training time. Self-explanatory. Do not include time normally associated with pre-briefing and debriefing.

A2.2.3. Training Period Designators. Codes to describe training periods. Formal training schools may use more descriptive designators if required.

A2.2.4. Written Evaluations. If applicable and desired, record data for the in-flight evaluation required to complete the training program.

A2.2.4.1. Date. Enter the date the written evaluation was satisfactorily completed.

A2.2.4.2. Type. Enter the AFI 11-2KC-135 Volume 2 description or other appropriate identifier.

A2.2.4.3. Grade. Enter according to AFI 11-2KC-135 Volume 2.

A2.2.5. Performance Evaluation Summary. Record data on required evaluations including reevaluations (if applicable).

A2.2.5.1. Date Recommended. Enter the date recommended for a performance evaluation (CPT, OFT, or flight).

A2.2.5.2. Type Evaluation. Enter AFI 11-2KC-135 Volume 2 evaluation description or other appropriate identifier.

A2.2.5.3. Instructor (Qualification). Enter the name and aircrew qualification of the instructor recommending the student for an evaluation.

A2.2.5.4. 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 school training courses. Sq/CC or designated representative will review before flight evaluations.

A2.2.5.5. Date Evaluated. Enter the date the evaluation was completed.

A2.2.5.6. Evaluator. Selfexplanatory.

A2.2.5.7. Grade. Enter according to AFI 11-2KC-135 Volume 2.

A2.2.6. 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).

A2.2.6.1. Date. Selfexplanatory. On operational missions, enter inclusive dates, e.g., 28 Jul - 7 Aug 08.

A2.2.6.2. Training Period. Enter sequentially numbered training period designators, e.g., "S-1," "AD-1," "O-2," etc.

A2.2.6.3. Status. Enter "INC" and reasons, "WX," "MX," 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.

A2.2.6.4. Instructor (Qualification). Enter the name and aircrew qualification of the instructor.

A2.2.6.5. 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. For MPD training, see **paragraph 5.2.2.1**.

A2.2.6.6. 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.

A2.2.7. Performance and Knowledge Standards. (For use with AF Form 4024, see **paragraph A2.4.11**)

A2.2.8. Grading Codes. (For use with AF Form 4024, see **paragraph A2.4.8**)

A2.2.9. 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.

A2.3. 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. Complete this form or a unit developed overprint anytime formal training requirements are completed or anytime the AC/IP considers that a write-up is warranted. File AF Forms 4023 in order with the most recent flight on top. FTU may use MAJCOM approved substitute. Digital signatures are authorized. (i.e. //signed//). ***NOTE:*** AF Form 4023 is optional if a training guide is used to record training.

A2.3.1. Training Period and Date (Item 1). Training period is ground, simulator, or flight, i.e., AT-1, GT-1, SIM-3, S-4, etc. Also, annotate the date the training occurred.

A2.3.2. 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. ***NOTE:*** For formal schoolhouse, 97 OG will determine applicability of items 2-8.

A2.3.3. Total Training Time (Item 8). Keep a running total of all training time (add items 3, 5, and 7).

A2.3.4. 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) and continue remarks.

A2.3.4.1. 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 Forms 4022. The Sq/CC or designated representative will review active status AF Forms 4022 at least once each quarter. Document reviews on an AF Form 4023. The reviewer will annotate "monthly review" or "quarterly review," as applicable, in the training period block. Operations review will be annotated, and if required, a separate entry in the training record including comments on the student's progress will be made. Initial reviews by Sq/CC's fulfill the requirement for the monthly and quarterly review for the month and quarter the review was completed.

A2.3.4.2. Monthly reviews are not required for formal school courses except in documented cases of unsatisfactory progress. In this case, flight commander initials on the AF Form 4023 or training guide satisfy this requirement. ATS personnel will review the student's 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.

A2.3.4.3. When the trainee attains sufficient knowledge, experience, and prerequisites for upgrade, the instructor will recommend an evaluation and state: "Recommend evaluation for (crew position)" on the training progress record. Trainees will not be recommended for an evaluation if a TG required event is incomplete or requires corrective action. ***EXCEPTION:*** Copilot/MPD Pilot ATS progress reviews (evaluations) may be administered with open areas in the TG.

A2.3.5. Instructor Block (Item 10). Instructors will print and sign their name and annotate their rank and crew qualification.

A2.3.6. Students Block (Item 11). Students will print and sign their name.

A2.3.7. 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.

A2.3.8. Students and instructors will review the AF Form 4023 or training guide prior to the next training period. FORMAL SCHOOL COURSES ONLY: To ensure documentation flow does not delay training, once flight training begins, ATS instructors are not required to

review the training folder, and may forward subsequent training reports to the flightline unit training representative electronically (electronic signatures authorized), who will review and insert the report into the student's AF Form 4022 or training guide. Except in cases of unsatisfactory student performance, ATS training reports do not require student or instructor review prior to the next flight training period.

A2.4. 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 Forms 4024 on the right side of AF Form 4022. ***NOTE:*** The AF Form 4024 is optional if a training guide is used to record training.

A2.4.1. Name. Self-explanatory.

A2.4.2. Crew Position. Self-explanatory.

A2.4.3. Course or Phase of Training. Enter the ETCA formal course identifier, e.g., KC-135AC. For special mission qualification, enter the type and identify the method of training, e.g., OFT training, flying training, etc.

A2.4.4. Sortie. Enter sortie number e.g., S-1, S-2, CPT-1, etc.

A2.4.5. Date.

A2.4.6. Training Event and Task Listing. Reflects the tasks and subtasks in the training program that require specific student performance or knowledge proficiency standards.

A2.4.7. Number Accomplished. Reflects the number of times an event was accomplished on that sortie.

A2.4.8. Grade. Enter a "B", "F," "P," "S," or "U," as appropriate.

A2.4.8.1. "1"Item must be accomplished once by the crewmember, but does not require proficiency.

A2.4.8.2. "B"Briefing item only.

A2.4.8.3. "F"Familiarization item; proficiency is not required. The OG/CC or delegate will determine whether "F" items are completed by briefing, demonstration, observation, or actual accomplishment.

A2.4.8.4. "P"Proficient; crewmember has achieved the required proficiency level.

A2.4.8.5. "S"Satisfactory; crewmember has not achieved the required proficiency level but progress is satisfactory.

A2.4.8.6. "U"Unsatisfactory; crewmember was previously proficient, but has regressed or progress is unsatisfactory.

A2.4.9. Total Number Required. Indicates the total repetitions of an event or task required by the course syllabus.

A2.4.10. Total Number Accomplished. Total of the number of repetitions actually accomplished.

A2.4.11. 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 must 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 follow:

Table A2.1. Event and Task Performance Standard.

Event and Task Performance Standard		
Code	**Performance is:**	**Definition:**
	Extremely Limited	Individual can do most activities only after being told or shown how.
	Partially Proficient	Individual can do most of the behaviors, but not necessarily to the desired levels of speed, accuracy, and safety.
	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/MPD pilots, proficiency may involve actual aircraft control or copilot/pilot duties only. For instructors, proficiency includes the ability to demonstrate, instruct, and supervise ground and flight activity.
	Highly Proficient	Individual can do behaviors in an activity at the highest level of speed, accuracy and safety.
Event and Task Knowledge Standard		
Code	**Knowledge of:**	**Definition:**
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.

A2.4.11.1. 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 associated remark on AF Form 4023explanation in the student's training folder. 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 an evaluation (when applicable) or certification (when applicable).

A2.5. Instructions for AF FORM 4025.

A2.5.1. For each training program complete a summary and close-out report, upon completion of the defined final training program events, including: Evaluation, IP "sign-off" and Sq/CC certification. This form details the individual's strengths, weaknesses, overall performance, and other pertinent information. A copy of this report will be filed in the crewmembers training folder after completion of training. See **paragraph A2.1.5**.

A2.5.2. Sq/CC or designated representative will ensure the comments on AF Form 4025 do not reflect personal opinions or biases. All comments must be supported by information contained in the AF Forms 4023 and 4024 or training guides, as applicable. At formal schools, the instructor will accomplish the AF Form 4025, Sq/CC signature is optional. Digital signatures are authorized. Refer to the Air Force Records Disposition Schedule (RDS) located at **https://www.my.af.mil/gcss-af61a/afrims/sfrims/** for further guidance. USAFE: After one year, training offices will retain the AF Form 4025 in the crewmember's training folder (AF Form 4022) and all other records may be returned to the individual.

A2.6. Aircrew Training Guides (TG).

A2.6.1. The ATS contractor will develop TG. Units may also produce a TG when the ATS contractor is unable to provide them. TG will be developed in accordance with AFI 36-2201 Volume 1, *Training Development, Delivery, and Evaluation*. Coordinate TG development through appropriate MAJCOM.

A2.6.2. Initiating TG. Training and resource management personnel in each unit will initiate a TG on crewmembers prior to their entering any phase of qualification training. These TG will be inserted in AF Form 4022 and may be used in lieu of AF Forms 4023 or 4024.

A2.6.3. Use of TG. Specific instructions for annotating training are included in each TG. TG will be placed in an AF Form 4022 and maintained in accordance with **paragraph A2.1.1**.

A2.6.3.1. Active status TG will be carried by the student during all training and operational missions and made available to the instructor for review and annotation. The student will review the TG and initial the training progress record prior to the next training period.

A2.6.3.2. Complete the training progress record portion of the TG in sufficient detail to specify areas of training accomplished, areas needing improvement, recommended

specific study areas for the trainee, and recommended training for the next training period.

A2.6.3.3. On missions without an instructor or examiner, the senior qualified counterpart (e.g., AC for copilots/MPD pilots, etc.) will accomplish required training for those areas not requiring an instructor. Annotate applicable training information in the TG.

A2.6.3.4. When an initial qualification flight evaluation is not successfully completed and additional training is required, the flight commander will annotate deficient areas on reproduced pages of the appropriate TG and training progress record. Place the mini-TG in the AF Form 4022 and used to document completion of additional training.

A2.6.3.5. At the conclusion of training, when all requirements of the TG are met, fill-out an AF Form 4025 in accordance with **paragraph A2.5**. Maintain TG and associated AF Form 4025 in a training folder according to **paragraph A2.1.5**.

A2.6.3.6. Do not maintain the training guide in the flight evaluation folder.

A2.6.4. Review Procedures:

A2.6.4.1. Instructors and students will review the TG after each training period and discuss training accomplished, problem areas, and immediate goals. To ensure documentation flow does not delay training, once flight training begins, ATS instructors are not required to review the training folder, and may forward subsequent training reports to the flight line unit training representative electronically (electronic signatures authorized), who will review and insert the report into the student's AF Form 4022 or training guide. Except in cases of unsatisfactory student performance, ATS training reports do not require student or instructor review prior to the next flight training period.

A2.6.4.2. The flight commander or squadron training representative will conduct a monthly review of TGs. This review will be indicated by entering initials and date in the review block of the TG.

A2.6.4.3. The Sq/CC or designated representative will review active TG's at least once each calendar quarter and before an evaluation. This review will be a separate entry on the TG and will include comments on weak areas and upgrade potential. Indicate review by signing the instructor-trainer block of the training progress record, and enter "quarterly review" in the training period identifier block.

A2.6.4.4. Records of crewmembers, not receiving training (but in an active status), will be reviewed monthly and quarterly as indicated above. If applicable, the statement, "no training accomplished during this period," the reason why, and the projected date when training will resume will be entered on the student's training progress record.

A2.6.5. Disposition of TGs:

A2.6.5.1. Retain each (completed) TGs in AF Form 4022 and maintain according to **paragraph A2.1.5**.

A2.6.5.2. Formal schools will maintain copies of the aircrew training records on incomplete trainees for 6 months.