

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

**AIR FORCE MANUAL 11-2KC-10,
VOLUME 1**



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Flying Operations

KC-10 AIRCREW TRAINING

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This volume implements Air Force Policy Directive (AFPD) 11-2, *Aircrew Operations*, and Air Force Instruction (AFI) 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*. It establishes the aircrew training guidance for KC-10A aircraft to safely and successfully accomplish their mobility mission. This is a specialized publication intended for use by Airmen who have graduated from technical training related to this publication. This Air Force Manual (AFMAN) applies to all civilian employees and uniformed members of the Regular Air Force and Air Force Reserve. It does not apply to the Air National Guard. Route change requests, questions, or recommendations for amending existing course prerequisites through the MAJCOM training staff to the OPR. Change requests require use of the AF Form 847, *Recommendation for Change of Publication*. The OPR address is AMC/A3T, 402 Scott Drive, Unit 3A1, Scott AFB, IL 62225-5302, AMC.A3T@us.af.mil. 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. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, [paragraph 1.9](#), for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the requestor’s commander for non-tiered compliance items. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with AFI 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Although this publication governs KC-10 aircrew training, it also refers to requirements and guidance contained in other documents. It

is recommended that a review of external references be conducted prior to their use to ensure the specific reference is current and unchanged. The Ready Aircrew Program (RAP) Tasking Memorandum (RTM) is the primary source for aircrew continuation training event frequency, where published. If a conflict exists between this manual and an externally-driven training requirement, other than frequency, comply with the guidance contained in the publication which takes precedence, unless a duly-authorized exemption or waiver is in effect. Compliance with [Attachment 2](#) and [Attachment 3](#) in this publication is mandatory.

SUPPLEMENTS. Each MAJCOM equivalent or subordinate command level may supplement this AFMAN. Supplements (including local supplements) that directly implement this publication are required to be routed to the Office of Primary Responsibility (OPR) for coordination prior to certification and approval in accordance with AFI 11-200 and AFMAN 11-202, Volume 1, *Aircrew Training*. Supplements may be more, but not less restrictive than this manual. MAJCOMs may set training requirements lower than specified in this manual when the statement “or as specified in MAJCOM supplement” is indicated as applicable to that item or event.

SUMMARY OF CHANGES

This document has been substantially revised and needs to be completely reviewed. Major changes include, but are not limited to: Aviation Resource Management System (ARMS) codes updates to standardize them across the Mobility Air Force (MAF), and introduction of the RTM that removes tables in the [Chapter 4](#) and places them into a separate document that will allow more flexible training for MAF crews.

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Chapter 1

GENERAL

1.1. Overview. Although this publication governs KC-10A aircrew training, it also refers to requirements and guidance contained in other documents. It is recommended that a review of external references be conducted prior to their use to ensure the specific reference is current and unchanged. If a conflict exists between this manual and an externally-driven training requirement, comply with the guidance contained in the current document that establishes the requirement, unless otherwise exempted by a higher-level authority.

1.1.1. The primary objective of the aircrew training program is to develop and maintain a high state of mission readiness for 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-10 crewmembers. These core competencies include the ability to conduct receiver and tanker air refueling (AR), tactical ingress, tactical egress, instrument procedures, mission planning, ground operations, crew management and command, control, communications, and computers (C4)/air operations center (AOC) integration.

1.1.2. The secondary objective is to standardize KC-10 training requirements into a single document to meet requirements for a basic document in AFI 11-200, although a review of external references is still required.

1.1.3. Additionally, it links Air Force Tactics, Techniques, and Procedures (AFTTP) 3-3.KC-10, *Combat Aircraft Fundamentals—KC-10*, requirements into mission and continuation training tables while retaining a combat culture, leading edge technologies, and pushing capabilities while anticipating warfighter needs.

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. (Reserved for Future Use.)

1.4. Roles and Responsibilities.

1.4.1. Lead Command.

1.4.1.1. Air Mobility Command (AMC).

1.4.1.1.1. AMC is designated lead command for the KC-10A mission design series (MDS) according to AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*, AFPD 11-2, *Aircrew Operations*, and AFPD 10-21, *Rapid Global Mobility*.

1.4.1.1.2. The lead command is responsible for establishing and standardizing aircrew flying training requirements in coordination with user commands.

1.4.1.2. AMC Directorate of Operations, Strategic Deterrence, and Nuclear Integration (AMC/A3/10).

1.4.1.2.1. AMC/A3/10 is responsible for policy guidance and coordination with user commands related to KC-10 training and operations.

1.4.1.2.2. AMC/A3/10 delegates to AMC/A3T the authority to manage training course requirements, training tasks, quota control, and the training system (TS) contract management in coordination with AMC staff agencies, operational units, contracting officer, and user commands.

1.4.1.3. Air Mobility Command Aircrew Operations and Training Division (AMC/A3T).

1.4.1.3.1. AMC/A3T is responsible for overall management of KC-10A training policy and programs, as stipulated in [paragraph 1.4.1.2.2](#). As such, AMC/A3T coordinates with user command A3Ts (or equivalent) and issue updated ground and flying continuation training guidance to Operations Group Commander (OG/CC) for implementation via RTM as necessary. Once issued, RTMs take precedence over guidance contained in the base manual.

1.4.1.3.2. Course Management. AMC/A3T, in coordination with user commands, approves initial qualification training (IQT), mission qualification training (MQT), continuation training, and locally-taught (secondary method) upgrade courses. Air Education and Training Command (AETC) maintains a list of formal school courses on the Education and Training Course Announcements (ETCA) web site at: <https://app10-eis.aetc.af.mil/etca/SitePages/Home.aspx>.

1.4.1.3.3. Realistic Training Review Board (RTRB). AMC/A3T will host an RTRB biennially, or more frequently as required. The RTRB reviews all training programs for currency, applicability, compliance and effectiveness. Attendees should include representatives from across the KC-10 community, including MAJCOM staffs, applicable Numbered Air Force (NAF) staffs, formal training unit (FTU), standardization and evaluation (Stan/Eval) offices, wing and squadron training offices, and contractor personnel supporting KC-10 training systems.

1.4.1.3.4. Course Change Proposals. The primary venue for recommending changes to KC-10 training programs is the RTRB. Otherwise, send proposals for course modifications, deletions or amending course prerequisites to AMC Tanker Training Branch (A3TK) through the submitter's MAJCOM chain of command for awareness and approval. AMC/A3TK coordinates MAJCOM-recommended proposals and approves/rejects recommendations, then amends course listings where appropriate.

1.4.1.3.5. Student Management. AMC/A3T manages student requirements for AMC-assigned personnel and executes the overall formal course allocation process on behalf of all users - see also [paragraph 1.17](#). AMC/A3T will coordinate with the FTU to assure completion of graduate surveys on first-assignment trainees arriving from Specialized Undergraduate Pilot Training (SUPT). (T-2).

1.4.1.4. Detachment 1, Air Mobility Command Air Operations Squadron (AMC AOS) :

1.4.1.4.1. Aircrew Training Device (ATD) Certification. AMC AOS Det 1 personnel conduct a semi-annual Simulator Certification (SIMCERT) on all ATDs in accordance with AMC/AOS requirements and procedures. SIMCERT includes objective and subjective testing, inventory inspection, quality assurance inspection, and contract compliance evaluation. The contractor runs one quarter (1/4) of the qualification test guide (QTG) every three months based on actual aircraft data. These tests annotate Pass or Fail for each sub-test prior to semi-annual simulator certification. AMC AOS Det 1 uses one simulator period to randomly sample 10% of the QTG. State the profile in the notification letter to the contractor.

1.4.1.4.1.1. Flight Training Device (FTD) Certification. The FTD is tested and certified in the same manner as the simulator except where the fidelity of the device limits the tests. The standards for these types of devices are derived from Federal Aviation Administration (FAA) AC 120-45A.

1.4.1.4.1.2. SIMCERT. Notify the host unit 45 days in advance of a scheduled SIMCERT. A short-notice SIMCERT is available with verbal coordination between host unit, AMC AOS Det 1, AMC/A3TK, TS contractor, and the TS contract management team. Report SIMCERT results to AMC/A3TK and Air Mobility Branch Simulator Division, Agile Combat Support Directorate (AFLCMC/WNS).

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

1.4.1.4.1.4. AMC AOS Det 1 Simulator Testing and Familiarity Training. AMC AOS Det 1 coordinates directly with the contractor when testing or familiarity training in the simulator is required. Use of the simulator is on a non-interference basis with contractor concurrence and AMC AOS Det 1 CC approval.

1.4.1.4.2. TS Courseware Certification. KC-10 courseware development, revisions, and acceptance are tracked by a mutually accepted process between the government and the TS contractor. This process is to review and approve KC-10 courseware for timely delivery, accuracy, and compliance with the KC-10 Instructional Systems Development Management Plan and United States Air Force (USAF) courseware standards. The chief of courseware or appropriate AMC AOS Det 1 courseware representative issues final approval for the government after the training media is ready for implementation at the training sites. Contractual acceptance for the government is vested in the KC-10 program's contracting office located at Wright-Patterson Air Force Base (AFB) (AFLCMC/WNS).

1.4.1.4.2.1. Training Systems Configuration Working Group (TSCWG) is held monthly or as specified by the TS contract, and attended by AMC AOS Det 1 SIMCERT and Courseware representatives. The TS contractor courseware staff briefs the status and disposition of each courseware effort, whether in-scope, out-of-scope, late, or delayed. AMC AOS Det 1 alerts AFLCMC/WNS and

AMC/A3TK of any discrepancies that cannot be resolved through AMC AOS Det 1 and contractor agreements.

1.4.1.4.2.2. AMC AOS Det 1 schedules Subject Matter Experts (SME) for Technical Interchange Meetings with the TS contractor. AMC AOS Det 1 also schedules crewmembers, as required by the contractor, to assist in courseware development including Individual Tryouts (ITO) and Small Group Tryouts (SGTO).

1.4.1.4.3. Contract Compliance. AMC AOS Det 1 personnel conduct periodic Contract Compliance Evaluations (CCE) for KC-10 TS-supported sites and report results to AMC/A3TK and TS contract management. Evaluation personnel assess TS contractor performance of aircrew ground training programs to include Computer-Based Training (CBT), simulator training, and facilities. The KC-10 TS site and Air Force-appointed TS contracting officer representative (COR) receives 45-day advance notice of the CCE (non-interference basis) via notification memo or email. Unit support may include the use of an inbrief and/or outbrief facility, approximately 4-hours CBT time, and access to available crewmembers and staff for the purpose of conducting surveys and/or soliciting comments. Units should consider the CCE a unit-level feedback tool to monitor quality of TS ground training.

1.4.2. Training Command. AMC is the designated training command for KC-10 training in accordance with AFMAN 11-202V1.

1.4.3. User Commands .

1.4.3.1. Student Management. MAJCOM training staff manages student training requirements according to [paragraph 1.7 \(T-2\)](#).

1.4.3.2. Training Resources. User commands will evaluate training resources (aircraft, ATD, and aircrew) necessary to accomplish training requirements and identify known shortfalls to MAJCOM/A3T, or equivalent, for resolution. This evaluation should be accomplished during the Mobility Air Forces (MAF) RTRB at a minimum.

1.4.3.3. Recall Procedures. Formal notifications to recall students from a formal school are sent from the student's squadron commander (Sq/CC) [Air Force Reserve (AFR) Sq/CC or squadron director of operations (Sq/DO)] through the OG/CC [AFR OGs forward to Air Force Reserve Command (AFRC) Mobility Operations Division (A3M)] then to AMC/A3T (email format is acceptable). **(T-2)**. AMC/A3TF will submit the recall letter to AMC/A3T, notify AMC/A3TK, and file the approved letter. **(T-2)**. Emergency recall during non-duty hours may be coordinated directly with applicable FTU, with follow up coordination with AMC/A3TF and AMC/A3TK on the next duty day (see also [paragraph 1.15](#) for failure to complete training).

1.4.4. **Wing Commander (Wg/CC) or Equivalent .** Wg/CCs ensure unit, local-level agencies and facilities support aircrew training programs. Host and/or co-located units will develop local agreements to consolidate aircrew training support base-wide. **(T-2)**.

1.4.5. **Operations Group (OG/CC) or Equivalent .**

1.4.5.1. Training Review Panel (TRP). The OG/CC, or equivalent, will convene a TRP chaired by the OG/CC or designated representative. **(T-2)**. Panel members should

include representatives from squadron training offices, tactics, operations, and safety; wing tactics (OSK), wing training (OST), and flight safety (SEF); and other areas as determined by the commander [e.g., host aviation resource management (HARM), and squadron aviation resource management (SARM)]. Squadrons and detachments not collocated with their OG should participate in the primary TRP, but may conduct their own panel, as approved by their OG/CC. **Note:** It is recommended that non-collocated squadrons and/or detachments forward panel minutes to OST for discussion at the primary TRP and inclusion in the primary TRP minutes.

1.4.5.1.1. Frequency and Documentation. Convene the TRP semi-annually and document pertinent information in TRP minutes. **(T-2)**. Maintain TRP minutes for a period of two years from the date of the panel meeting. **(T-2)**. Commanders may increase meeting frequency at their discretion.

1.4.5.1.2. Format and Content. The TRP should review staff and crewmember management actions necessary to complete group, squadron, flight and ground training programs. Suggested TRP topics include, but are not limited to: current and forecasted flight training levels (FTL), upgrade and continuation training (CT) status, semi-annual requirement completion rates, crew position gains and losses, course critiques, instructor and examiner upgrades, and relevant discussions of Military Flight Operations Quality Assurance (MFOQA) analysis and other proactive safety action programs [e.g., Aviation Safety Action Program (ASAP) and Line Operation Safety Audit (LOSA)] applicable to assigned weapons systems, if available. OG/CCs will review all unit-defined “X” events for relevancy to the unit’s mission during the TRP. **(T-2)**.

1.4.5.2. OG/CCs will develop and maintain procedures with their local servicing military personnel flight (MPF) for individual crewmember counseling and personnel system updates affecting an active duty service commitment (ADSC) incurred from training described in this AFMAN (N/A AFR). **(T-2)**. See AFI 36-2107, *Active Duty Service Commitments (ADSC)*, and course listing in ETCA for more information. OG/CCs may develop additional training requirements and/or programs as necessary to meet unit mission requirements. Units may include such requirements and/or programs in a local supplement to this AFMAN or a local operating instruction (OI).

1.4.5.3. OG/CC is responsible for establishing and maintaining academic training (AT) programs including non-TS courses. This may be delegated to squadron level. The OG/CC, or designated representative, will:

1.4.5.3.1. Appoint a primary and alternate instructor(s) for each non-TS course. **(T-2)**

1.4.5.3.2. Publish a ground training schedule [Air Reserve Component (ARC) as required] to include date, time, location, instructor, course OPR, and designated crewmembers for each course, both TS and non-TS. **(T-2)**. Units may include such details in a local supplement to this AFMAN or a local OI.

1.4.5.3.3. Use MAJCOM, TS, or unit-developed training products and/or syllabi for all courses, as applicable. **(T-2)**. Units are allowed to reproduce courseware, as applicable. Document training in accordance with [Attachment 2](#).

1.4.5.3.4. Develop a procedure to monitor academic training programs for course content, currency of materials, instructor availability, and status of training aids. **(T-2)**. Squadrons recommend to the commander changes to existing courses or additional academic training courses required, based on crewmember feedback.

1.4.5.3.5. Send recommendations for changes, additions, and deletions of courses through appropriate channels to appropriate MAJCOM with an information copy to AMC/A3TK. **(T-2)**

1.4.5.4. Instructor Selection and Training. OG/CC, or designated representative, will select course instructors for non-TS courses based on professional qualifications and aptitude to teach. **(T-2)**. Instructors receive credit for the courses they teach.

1.4.6. **Squadron Commanders (Sq/CC)** . Sq/CC or designated representative will:

1.4.6.1. **Squadron Training Offices (DOT)** . Maintain a squadron training (DOT) section to manage and administer aircrew training programs. **(T-2)**.

1.4.6.1.1. Select and appoint a DOT Chief/Flight CC from the most highly-qualified and experienced instructors. **(T-3)**. Appoint a minimum of one instructor for each crew position to the squadron DOT office. **(T-3)**. At least one instructor, any crew position, should be on duty in DOT during duty hours to the maximum extent possible.

1.4.6.1.2. Qualifications. Appoint DOT staff based on experience, availability, and time-on-station to maximize continuity across training programs and all crew positions. **(T-3)**. **Note:** Previous evaluator or FTU experience is highly desired.

1.4.6.2. Squadron Training Review Panel (STRP). The Sq/CC (AFR Sq/CC or Sq/DO) will convene a STRP chaired by the Sq/CC (may be delegated no lower than the Sq/DO). **(T-2)**. Panel members should include representatives from squadron training, tactics, stan/eval, safety, and operations (i.e., operations officer, assistant operations officer, flight commanders, etc.), and any other areas determined by the Sq/CC (AFR Sq/CC or Sq/DO) (e.g., SARM).

1.4.6.2.1. Frequency and Documentation. Convene the STRP at least monthly (quarterly for AFR) and maintain Sq/CC-approved minutes for a period of two years from the date of the panel meeting. **(T-2)**. **Note:** DOT chiefs may reproduce, distribute, and store minutes, as required, for effective program administration.

1.4.6.2.2. Format and Content. The STRP will review appropriate subject matter to effectively manage the unit's flight and ground training programs and inform unit leadership on the overall status of training. **(T-2)**. The STRP will review individual unit members' progress, evaluate that training objectives are being met across assigned training programs, and that the best candidates are selected for upgrade training by reviewing their experience, proficiency level, and retainability. **(T-2)**. To accomplish these goals, suggested STRP topics include but are not limited to instructor and evaluator manning, crew position gains and losses, status of crewmember training (e.g., crewmembers in an active training status), post-completion actions (e.g., individual's performance during training, closeout activities, certification actions, course critiques, FTL assignments, etc.), future training

projections (e.g., unit course allocations, crewmembers' progress, timelines, completion of prerequisites, etc.), prioritization of upgrade candidates, current training waivers, projected training waivers, status of unit and individual continuation training, event proration, and semi-annual waiver projections and status.

1.4.6.3. Ensure crewmembers complete in-unit mission, ground, and continuation training programs. **(T-2)**. Units will not enroll crewmembers into another aircrew course and/or upgrade until existing upgrades are complete. **(T-3)**. Failure to reasonably progress may require action for removal. **Exception:** See [paragraph 1.5.6](#)

1.4.6.4. Assign FTLs to assigned and attached crewmembers before each semi-annual training period (see [Chapter 4](#)). **(T-2)**. Continuation training requirements in the RTM table are the minimum required events. **Note:** Unit commanders may assign additional requirements to any crewmember based on the individual crewmember's experience and proficiency level.

1.4.6.5. Unit commanders of returning or inbound trainees will ensure both the student and supervisor(s) complete post-graduate course surveys no later than (NLT) 180 calendar days (AFR 240 calendar days) after the student's graduation from formal training. **(T-2)**. **Note:** Surveys are located at: www.kc10ts.com. Click on "Graduate Survey" and select the "Grad Survey" for students or "Ops Supervisor" for the gaining supervisor. Sq/CC, or designated representative, will periodically review the graduate list (that have not yet completed the Graduate Survey) for the appropriate location. **(T-2)**.

1.4.6.6. Ensure effective training continuity and supervision of assigned and attached crewmembers. **(T-2)**. Document all flying training and training reviews in the crewmember's aircrew training folder or electronic equivalent, as defined by the unit's owning MAJCOM. **(T-2)**. The preferred, and in some instances, mandated, electronic equivalent for MAF is the Graduate Training Integration Management System (GTIMS). See [paragraph A2.1.1.3](#)

1.4.6.7. Review training and evaluation records of newly assigned or attached crewmembers and those completing formal training, to determine the necessary training required to complete and certify the individual as basic aircraft qualified (BAQ), basic mission capable (BMC), or mission ready (MR). **(T-2)**.

1.4.6.8. Execute squadron-level aircrew certifications and qualifications described in this manual. **(T-2)**. **Note:** Coordinate with the operations group in developing training programs.

1.4.6.9. Review qualifications and monitor training requirements for squadron-assigned Flight surgeons, where applicable. **(T-2)**.

1.4.6.10. Ensure Sq/DO, or designated representative, monitors quality of training accomplished and identifies training deficiencies. **(T-2)**. Flight commanders, or designated representative, advise the squadron director of operations (DO) of additional training needs and ensure waiver documentation, when applicable, in the crewmember's training record. **Note:** AMC requires the use of GTIMS for waiver management.

1.4.6.11. Designate and certify unit personnel, when required, to operate ATDs. **(T-2)**. Only appropriately designated and certified personnel may operate ATDs. Establish a

selection process and implement initial and recurring training programs to ensure designated and certified personnel are proficient in ATD operations. **(T-2).**

1.4.6.12. Ensure, to the maximum extent possible, that flight training sorties, including those conducted when all Volume 1 training requirements for all crew positions have been met, are required to meet aircrew, unit, or external user requirements. **(T-2).**

1.4.7. **Formal School With TS Contractor** . The KC-10 TS contractor is responsible for academic and ATD instruction at all KC-10 training sites. This responsibility includes developing, updating and publishing courseware and the formal school syllabi in accordance with the TS contract and published syllabi direction. See **Chapter 6** for additional TS guidance.

1.4.8. **Formal School, Non-TS** . See requirements in AFMAN 11-202V1.

1.5. Waiver Authority.

1.5.1. Review MAJCOM-prescribed guidance for issues concerning MAJCOM management of training requirements. MAJCOM/A3T (or equivalent) is designated as the waiver authority for managing training course requirements and training tasks for their assigned units. Lead MAJCOM/A3T, or equivalent, is designated as the waiver authority for managing applicable Training Systems (TS).

1.5.2. Flying Hour and FTU Course Prerequisites. OG/CC is the designated waiver authority for flying hour and course prerequisites for formal upgrade courses specified in the ETCA **Exceptions:** See **Table 5.1, para 1.5.3,** and **para 1.5.5** The unit will file a copy of all prerequisite waivers in the student's GTIMS Training Jacket or training folder, as appropriate. **(T-2).** All prerequisite waivers will be approved before the crewmember arrives for formal training. **(T-2).**

1.5.3. Waiver for In-Unit Training (Secondary Method) in Lieu of Formal School Training. MAJCOM/A3T, or equivalent, is approval/waiver authority for in-unit training via secondary method in coordination with the FTU. Before approval, review the appropriate syllabus and consider FTU course availability and ATD requirements.

1.5.4. Formal Training Unit (FTU) Syllabus Waivers. FTU course syllabus waivers and non-completed events will be annotated in each student's training record. **(T-2).** Students will complete all waived or non-accomplished syllabus and/or formal course training events that are required for the unit's assigned mission in-unit prior to being assigned MR status. **(T-2).**

1.5.5. Non-FTU Training Program Waivers. Submit waiver requests to the waiver authority for any planned and/or expected exception to a non-FTU syllabus, mission qualification/certification program, training plan, etc. Provide sufficient time and detail for the waiver authority to make a determination before the exception occurs. **Note:** Permanent or blanket waivers are not authorized in accordance with AFMAN 11-202V1.

1.5.6. Training Program Deviations and/or Exceptions Without a Waiver. Report inadvertent/ unintended deviations and/or exceptions through channels to the course's owning MAJCOM/A3T, or equivalent waiver authority listed in the course syllabus, who, in turn, makes the appropriate notifications for follow-on action, if required. Document waivers and deviation(s) and/or exception(s) in the student's training record or electronic equivalent

(i.e., GTIMS). **Note:** A deviation is any unplanned variation to a syllabus, mission certification, or training plan (e.g., failure to meet established training timelines, prerequisite completion, flow, etc.). **Note:** An exception is a request to change and/or remove specific requirement(s) based on unforeseen circumstances that prohibited completion of the training event, as scheduled/written (e.g., mission delay, change, equipment failure, divert, etc.).

1.5.7. Senior Officer Course (SOC) Waiver. SOC syllabus waiver authority is AMC/A3 with concurrence of gaining MAJCOM/A3. Refer to AFMAN 11-202V1 for SOC policy and eligibility requirements.

1.5.8. Waiver Format and Routing. Units will adhere to their parent MAJCOM's prescribed format and routing requirements. **(T-2).** A sample hard-copy memo format can be found at [Figure 1.1](#) **Note:** Unless otherwise stipulated, non-AMC units may use GTIMS to process OG-level and below waivers. In such cases, enter "Info only for higher headquarters (HHQ)" in the rationale section.

1.5.8.1. AMC waivers to this manual will be submitted via GTIMS. **(T-2).** **Note:** Ensure the reference paragraph to be waived is included in the waiver request. **(T-2).** Response is returned to OST.

1.5.8.2. For AFR waivers, use of GTIMS is mandated in accordance with AFRC/A3M. **(T-2).**

1.5.9. Continuation Training Waivers. Ground, mobility, and flying continuation training waivers (volume and currency) not otherwise annotated as a higher-level waiver requirement (e.g., externally-driven/ancillary training requirements defined by functional publications, defined as a higher level in this manual, etc.) may be granted for events in the RTM for assigned or attached crewmembers on a case-by-case basis under the following guidelines. **Note:** Waiver authorities should complete a thorough review of the circumstances and consider the crewmember's experience, proficiency, and recency in the event(s) prior to granting waivers for training requirements.

1.5.9.1. First-Time Waivers. First-time waivers for the individual event(s) may be granted by the Sq/CC.

1.5.9.2. Second-Time Waivers. Second-time waivers for the individual event(s) missed in two consecutive training periods may be granted by the OG/CC.

1.5.9.3. Subsequent Waivers. Subsequent waivers for training events missed in three or more consecutive training periods may be granted by the MAJCOM/A3T, or equivalent.

1.5.9.4. Waiver Self-Approval. Commanders shall not waive their own semi-annual training requirements. **(T-2).** When a commander is the designated waiver authority and requires a waiver for their own continuation training flying events, the next higher-level waiver authority is designated as the waiver approval authority [e.g., OG/CC requires a waiver: first waiver resides with the Sq/CC (AFR Sq/CC or Sq/DO) for the unit where the OG/CC is attached to fly and a second period waiver is elevated to either the Wg/CC or MAJCOM/A3T, or equivalent].

1.5.10. Waiver Disposition.

1.5.10.1. Course-Related Waivers. Maintain course-related waivers in the student's training record or electronic equivalent (i.e., GTIMS) for a minimum of two years in

accordance with Air Force (AF) Records Disposition Schedule at <https://www.my.af.mil/afrims/afrims/afrims/rims.cfm>.

1.5.10.2. Continuation Waivers. Maintain a copy of approved continuation training waivers (ground or flying) for a minimum of 48 months from date signed.

Table 1.1. Processing Waivers to AFMAN 11-2KC-10V1.

Waiver Initiated By:	Send waiver request to:	Waiver Reply Will be Sent to:	With Information Copy To:
Regular Air Force AMC Wing or Group	AMC/A3TK	OG/CC	N/A
AFR Unit	AFRC NAF/A3T to AFRC/A3M	AFR Unit	AMC/A3TK

Figure 1.1. Sample Waiver Request Format.

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

1. Name, grade.
2. Flying organization (assigned or attached).
3. Present qualification (include special qualifications and/or certifications if appropriate).
4. Total flying time: primary aircraft inventory (PAI) time (include instructor or evaluator time).
5. Specific nature of waiver request, e.g., cites 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 FTU courseware that is required if the waiver request is approved, e.g., local training).
13. Unit points of contact (name, rank, telephone number, office symbol, and email address).
14. Unit address (if requesting formal school courseware).

(Signature of Requester)

The information herein is FOR OFFICIAL USE ONLY (FOUO) information which will be protected under the Freedom of Information Act (5 U.S.C 552) and/or the Privacy Act

of 1974 (5 U.S.C. 552a). Unauthorized disclosure or misuse of this personal information may result in disciplinary action, criminal and/or civil penalties.

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 shall not degrade the intended training and will comply with applicable Department of Defense (DoD) Instruction 4515.13, *Air Transportation Eligibility*, AFI 11-401, *Aviation Management*, and AFMAN 11-202V1. **(T-0).**

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

1.6.1.2. See AFMAN 11-2KC-10 Volume 3, *KC-10 Operations Procedures*, and Air Mobility Command Instruction (AMCI) 11-208, *Mobility Air Forces Management*, for off-station training flight requirements.

1.6.2. Training on Operational Missions. Unless prohibited or restricted specifically by weapon system operating procedures or 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 Air Operations Center (AOC) [Tanker Airlift Control Center (TACC)] and tasked units will jointly identify and take maximum advantage of opportunities to conduct appropriate continuation training items that may be conveniently suited to concurrent operational mission segments. **(T-2).** Examples include circling approaches and air refueling. If necessary, 618 AOC (TACC) and tasked units will coordinate training mission numbers for the specific mission segment. **(T-2).** 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. **(T-2).** Comply with passenger-carrying restrictions found in AFMAN 11-202V3, *Flight Operations*, AFI 11-401, and applicable AFMAN 11-2KC-10V3, *KC-10 Operations Procedures*, including any supplements for each.

1.6.3. Unit Commanders will utilize ATDs [weapon system trainer (WST), FTD, boom operator trainer (BOT), etc.] for continuation training to the maximum extent possible. **(T-2).**

1.7. In-Unit Training Time Limitations. Comply with the time limitations in [Table 1.2](#) Crewmembers entered in an in-unit training program leading to qualification, or requalification, will be dedicated to that training program on a full-time basis and relieved from extra duties that do not directly contribute to that training program. **(T-2). Exception:** Supervisory personnel may continue their normal duties as time permits.

1.7.1. Training start date (non-MQT) is the date of the first significant training event contributing to qualification, certification or upgrade of the crewmember (e.g., computer based training (CBT) lesson, part task trainer (PTT), Weapons System Trainer (WST), Flight Training Device (FTD), Boom Operator Trainer (BOT), Aircrew System Trainer (AST), ground training, flight training), or 45 calendar days (90 calendar days for ARC) following a member's reporting to the unit following completion of a formal school, whichever occurs first. Training time ends with the completion of one of the following events: flight

evaluation (if required as part of the training program), instructor validation of successful program completion (“sign-off”), or squadron commander certification (if required as part of the training program). Crewmembers should begin their checkrides within 30 days of syllabus completion. **Note:** for Phase IA and IB time limitations of formal KC-10 qualification, upgrade, and requalification (TX-2) courses refer to [Table A3.3](#) (N/A AFR if on inactive status)

Table 1.2. In-Unit Training Time Limitations.

Training	Time Limit	Time Limit AFR	Notes
Requalification	90 days	180 days	2, 3
Aircraft commander upgrade qualification	90 days	180 days	3
Instructor upgrade qualification	60 days	180 days	3
Mission qualification training & certification. Includes in-unit training leading to MR status following initial, difference, or requalification training.	100 days Flight Engineer Basic Prequalification Course (FBP only) 130 days Boom Operator (Basic) Initial Qualification (BBQ only) 90 days (All others)	240 days Flight Engineer Basic Prequalification Course (FBP only) 300 days Boom Operator (Basic) Initial Qualification (BBQ only) 180 days (All others)	1, 3
Notes: 1. MQT starts on the first duty day following the successful completion of a Phase IB evaluation. Mission qualification training events (ground and flight) may be accomplished concurrently with Phase IB training when deemed appropriate by the FTU Chief, squadron DO, or DOT. 2. Not for AF Form 8, <i>Certificate of Aircrew Qualification</i> , downgrades. Additional training due to a AF Form 8 downgrade is set by AFI/AFMAN 11-202, Volume 2, <i>Aircrew Standardization and Evaluation Program</i> . 3. AFR members on active duty status with centrally funded training line number (TLN) or AFRC/A3 Mission Training Program funding will follow AMC Time Limit while members on inactive duty status (i.e., part-time) are allowed the alternative			

AFRC Time Limit. (T-2).

1.7.2. Mission Qualification Training (MQT) time see [Table 1.2](#), [Note 1](#), and [Chapter 3](#).

1.7.3. Training Time Extensions.

1.7.3.1. Sq/CCs (AFR Sq/CC or Sq/DO) may extend training time (prior to a crewmember exceeding course time limits specified in [Table 1.2](#)) for up to 60 calendar days (120-days ARC) using their MAJCOM-approved waiver process. **Note:** AMC/A3 has mandated use of GTIMS for waiver management for all AMC units. No notification to MAJCOM/A3T (or equivalent) is required. Subsequent extensions or extension requests exceeding 60-days (120-days ARC) require MAJCOM/A3T (or equivalent) approval and will be requested before the crewmember exceeds authorized training time (standard or previously-waived). **(T-2).**

1.7.3.2. When a crewmember becomes unavailable for an extended period of time [e.g., deployment, down status, professional military education, etc.] the unit may request a waiver for the full unavailability period plus the estimated time required to complete training following the unavailability period or the unit may formally remove the crewmember from the training program, at the commander's discretion.

1.8. Training Documentation.

1.8.1. ARMS Event Identification Codes. Standardized ARMS event identification codes have been established for the MAF. Refer to [Chapter 7](#) for applicable KC-10 ARMS codes and event descriptions. Refer to [paragraph 7.34](#) for establishing and managing MAF unit-defined ARMS code (i.e., use of "X" codes). OG/CCs (or designated representative) shall document approved unit-defined events, codes, and descriptions in local training guidance, an operating instruction, or publication supplement. **(T-3).**

1.8.2. Periodic and Recurring Training. Document using MAJCOM-approved electronic training management system (i.e., GTIMS), AF Form 1522, *ARMS Additional Training Accomplishment Report*, or locally-approved mission accomplishment report, as defined by MAJCOM and local policy.

1.8.3. Training Programs Leading to Qualification and/or Certification. Use a MAJCOM-approved electronic training management system (i.e., GTIMS) or alternatively, an approved hard copy aircrew training folder. **Note:** The preferred (and in some instances, mandated) electronic training system is GTIMS. KC-10 units will utilize the AF Form 4324, *Aircraft Assignment/Aircrew Qualification Worksheet*, to document award of specific qualifications/certifications in ARMS. **(T-2).** Specifically, Block 22 will contain the following minimum information: certification code (i.e., CQ33Y), certification name (e.g., Phoenix Banner), and date of certification. **(T-2).** **Note:** For upgrade training requirements see [Chapter 5](#) and [Chapter 7](#) for specific certification codes. **Exception:** Personnel may use an AF Form 1522 to credit aircrew certification events that do not require assignment of associated training profiles. **Note:** GTIMS is a suitable electronic alternative for the AF Form 4324 and AF Form 1522 as long as all information is included and documentation of the certification can be verified and tracked through ARMS processing.

1.9. Flight Examiner Usage. Use flight examiners as instructors for any phase of training to capitalize on their expertise and experience. Units may use flight examiners as instructors for

qualification, upgrade, and corrective action training. If an examiner is used as a primary instructor to train an individual, the same examiner cannot administer the associated evaluation.

1.10. Instructor Training and Supervision Requirements:

1.10.1. Instructors shall be current and qualified in any event that they instruct. **(T-2)**. All wing-level and below instructors should be MR.

1.10.2. Faculty Training Course (FTC). The Faculty Training Course is taught at the FTU to prepare newly assigned instructors for schoolhouse duties. This course is locally developed and updated as necessary. All instructors conducting initial qualification flying training will be graduates of FTC. **(T-2)**.

1.10.3. Instructor Supervision Requirements. When performing aircrew duties, the personnel identified in [subparagraphs 1.10.3.1](#) through [1.10.3.5.5](#), will be under the supervision of an instructor: **(T-2)**. See [Table 1.3](#) Seating Chart for pilot seating arrangements. A qualified crewmember will be permitted to occupy a crew position only after they have a valid AF Form 8 for that position. **(T-2)**. This includes all training, operational, and deployed missions. **Exception:** The boom operator (BO) forward position can be released to other crew positions for evaluator/instructor needs at the discretion of the aircraft commander. During receiver air refueling (AR) this duty station should be occupied by the boom operator to the maximum extent possible.

1.10.3.1. All Non-Current Crewmembers. For non-current crewmembers, direct instructor supervision is required while performing the non-current event. **(T-2)**. (See [section 4.10](#) for additional information.)

1.10.3.2. All crewmembers in initial, or requalification flying training, or upgrade students flying an upgrade syllabus sortie as a student (see [paragraph 1.10.3.5](#)).

1.10.3.3. Any other personnel designated by the Wg/CC, OG/CC, or Sq/CC.

1.10.3.4. All unqualified or flying training level (FTL) “E” crewmembers require direct instructor supervision during critical phases of flight. **(T-2)**. For additional information on flight training levels reference [section 4.3.1](#)

1.10.3.5. Exceptions to [paragraph 1.10.3](#) Instructor Supervision Requirements:

1.10.3.5.1. Instructor supervision is not required for pilots certified by the Sq/CC to conduct receiver AR under the supervision of a Sq/CC certified aircraft commander.

1.10.3.5.2. Flight engineer (FE) and boom operator students in instructor upgrade training may fly, on a limited basis, without instructor supervision, as a crewmember in their previous position provided they are current and qualified in that position in order to seat-fill FTU sorties, as required (e.g., a current and qualified mission ready flight engineer (MF) in upgrade to IF may fly unsupervised as an MF). If flying as an FTU student, the instructor supervision requirement of [paragraph A3.1.2.2](#) applies as the member is now in a “student” status for upgrade to the next higher crew position.

1.10.3.5.3. FTU. See [Attachment 3](#) for supervision requirements.

1.10.3.5.4. For Instructor Aircraft Commander Course (IAC) training, selected aircraft events [Formation (RF53Y), Air-to-Air Refueling (AAR) Formation

FPK – qualified non-mission ready (NMR). Graduate of aircraft commander or requalification course (ACIQ, ACQ, PCO, PRQ, IPRQ), in local mission ready training.
 FPQ – qualified mission ready Phase II Mobility Pilot Development (MPD) pilot
 FPC – qualified mission ready Phase I MPD pilot (right seat)
 FPN – qualified non-mission ready (NMR)

Exceptions:

- A. This table does not apply to FTU. FTU: Refer to **Attachment 3** for guidance.
 B. For additional instructor supervision requirements, refer to **paragraph 1.10.3**.

1.11. Transfer of Aircrews.

1.11.1. When a crewmember transfers from one unit to another, the gaining unit will review, assess and assign the appropriate FTL. **(T-2)**. During the review, the gaining unit will normally honor the losing unit's assigned training level. **(T-3)**. Certified/qualified MR crewmembers transferring between units accomplish only unit-specific training and any applicable events in which they have lost currency. See [paragraphs 3.3.4](#) and [3.4.2](#) for additional information regarding transfer of aircrew members.

1.11.2. For Foreign Military Sales, guest pilots, and/or exchange officers, see training requirements in AFI 11-401. Initial and/or continuation training requirements are specified in the appropriate memorandum of understanding (MOU), operations plan (OPLAN), or agreement and should mirror requirements of this AFMAN to the maximum extent possible.

1.12. Aircrew Training While in Down Status. Crewmembers in down status (formerly “duties not including flying”) may complete ground training events or simulator training if the member's physical condition allows it. If unqualified, the crewmember may not participate in graded simulator events unless entered into a requalification program. Consult the flight surgeon initiating DD Form 2992, *Medical Recommendation for Flying or Special Operational Duty*, action (prescribed by AFI 48-123, *Medical Examinations and Standards*) if the down status includes ground training limitations. See [paragraph A2.6.4.3](#)

1.13. Aircrew Rated Management Overview.

1.13.1. Programmed Flying Training (PFT). AMC/A3T fulfills the training command's role in accordance with AFMAN 11-202V1. A key product of this process is the PFT. The PFT balances available training quotas, TS throughput, schoolhouse capacities and course requirements on a fiscal year basis. Annually, units will send projected PFT requirements to their respective MAJCOM quota managers ([paragraph 1.17](#)), who in turn compile and forward projections to Headquarters Air Force Total Force Aircrew Management (HAF/A3TF), for inclusion into the graduate program requirements document (GPRD). **(T-2)**. Training commands determine training capacity and report shortfall in the GPRD to HAF/A3TF.

1.13.2. HAF/A3TF sponsors an annual PFT conference for attendees to balance training capacity, MAJCOM training requests, and pipeline Undergraduate Flying Training students [rated and career enlisted aviator (CEA)] against FTU capacity. The training command allocates approved quotas to user commands, which in turn allocate training quotas to subordinate units. The training command publishes the annual PFT document.

1.13.3. Throughout the training year, MAJCOM training staff and PFT managers use assigned/allocated training quotas to assign individual crewmembers to formal training

quotas. Use quota management documents to make daily student quota adjustments to the annual PFT.

1.14. Information Management. The following online tools are used for Information Management.

1.14.1. AMC/A3T SharePoint®: <https://eim2.amc.af.mil/org/a3T/default.aspx>

1.14.2. AFRC hosts crewmember training on web site: <https://usaf.dps.mil/teams/13261/default.aspx>

1.15. Failure to Progress or Complete Training. If the training received leads to a qualification or certification for the unit's mission, comply with syllabus guidelines. If a crewmember fails to complete an in-unit formal course, the unit training office will send a recommendation to the individual's gaining unit commander. **(T-2).** The recommendation will state whether the crewmember should complete training in-unit, return to the formal school to complete training, or be referred to the AF personnel system for reassignment. **(T-2).**

1.15.1. Progress Review Board (PRB). If a student fails to progress in accordance with the requirements in this manual and/or training syllabus, the trainee's flying unit Sq/CC will convene a PRB in accordance with AFMAN 11-202V1, and the commander's review process outlined in the course syllabi. **(T-2).** A PRB will be convened to review the trainee's records and can recommend continuing training, re-training, modify training, or a Flight Evaluation Board (FEB). **(T-3).** OG/CC will have final approval of PRB recommendations. **(T-2).** See AFMAN 11-402, *Aviation and Parachutist Service*, for FEB and administrative procedures. The TS contractor will identify students who fail to progress in accordance with the applicable TS guidance as outlined in **section 6.6 (T-2)**. The make-up of the PRB will be at the Sq/CC's discretion, but will include, as a minimum, Sq/CC, OST and operations group standardization and evaluation (OGV) representatives, and the FTU Chief. **(T-3).** Phase I TS and AMC AOS Det 1 (or Det 1 designated attendee) will be represented as well. **(T-3).**

1.15.2. Supervised Status/Retraining. Each unit will determine their process for documenting performance which would put a crewmember into a supervised status. **(T-3).** This process will include how and where to document the crewmember's retraining. **(T-3).** As a minimum, an aircrew training folder, or MAJCOM-approved electronic equivalent (i.e., GTIMS) is opened for the retraining unless waived in accordance with **paragraph A2.1.1.1**. The crewmember's unit should develop a training plan, coordinate training resource requirements through OST, then gain Sq/CC approval. The approved training plan should be included in the electronic gradebook upon initial review. For those individuals being trained at the FTU (initial qualification, requalification, and upgrade), FTU instructor(s) coordinate the training plan and gain FTU Chief approval. The AF Form 4025, *Aircrew Summary/Close-Out Report*, or MAJCOM-approved electronic equivalent (i.e., GTIMS) documenting the completed training, will then be given to the unit's stan/eval section in accordance with **paragraph A2.1.5**, and the crewmember will be rechecked at the Sq/CC's discretion (exercised through Stan/Eval). **(T-3).**

1.16. Career Enlisted Aviator (CEA). The determination of CEA qualification is separate and distinct from skill level upgrades. When an AF Form 8 is completed for the applicable flight evaluation, then that crewmember is qualified to perform all duties assigned to that crew qualification regardless of skill level. Aircrew instructor and flight examiner qualifications are

also separate and distinct from on-the-job training (OJT) trainer or certifier designation and are reflected in Air Force Specialty Code (AFSC) by use of “K” prefix (aircrew instructor) and “Q” prefix (aircrew flight examiner) identifiers.

1.17. Aircrew Training Quota Management. The following describes AMC's quota management policy and procedures. This policy is mandatory for all AMC units; all other units follow their MAJCOM guidance.

1.17.1. Administration. AMC/A3TF Quota Managers coordinate with OST exclusively. OSTs are responsible for providing the name, phone number, e-mail address for their primary and alternate quota management points of contact to AMC/A3TF Quota Managers at Defense Switched Network (DSN) 779-7881 or commercial (618) 229-7881. **Note:** Squadrons or individuals work through servicing OST.

1.17.1.1. Quota Allocations. When quotas have been allocated, wing training offices (OSS/OSTs) will submit required student information, course, and class number via encrypted e-mail to AMC/A3TF Quota Managers NLT 45 days prior to class start date (CSD). **(T-2).** **Note:** Contact in accordance with [paragraph 1.17.1](#) for the appropriate e-mail address. Allocated training quotas that cannot be filled at least 45 days prior to CSD will be returned to AMC/A3TF Quota Managers, who will in turn offer them to units on the approved standby list. **(T-2).**

1.17.1.2. Prerequisites. All course prerequisites should be completed NLT 30 days prior to CSD to allow for remedial training or substitution. Units are responsible for identifying an alternate candidate for each allocated quota. If the primary candidate becomes unavailable, send AMC/A3TF Quota Managers a substitution request with the alternate's information.

1.17.1.3. Foreign Exchange Officer Allocations. Foreign Exchange Officers shall be properly identified on requests for formal course allocations and shall not be locally substituted once an allocation has been loaded. **(T-2).** When a change is necessary, units will send justification along with the replacement's complete data to AMC/A3TF Quota Managers for consideration/approval. **(T-2).**

1.17.1.4. Late Changes/No-Shows. Unit leadership will submit a written explanation through OG/CCs to AMC/A3TF Quota Managers within five duty days following any student cancellation/substitution that occurs within 10 calendar days of CSD and for any student “no-show” for an allocated training course. **(T-2).**

1.17.1.5. Additional Allocation Requests. OSS/OSTs send requests for additional quotas to AMC/A3TF Quota Managers. AMC/A3TF coordinates with Air Staff to add or reallocate quotas if unit capability is in jeopardy.

1.17.1.6. External Coordination. AMC units shall not coordinate quota exchanges with other commands or units. **(T-2).** OSS/OSTs will forward all requests to the AMC/A3TF Quota Managers for coordination with other commands. **(T-2).** Please allow for extended coordination time when considering this option.

1.17.2. HQ AMC Orientation Tour/GRACC. Global Ready Aircraft Commander Course (GRACC) is a HQ AMC-developed orientation program that provides mobility pilots who are nearing certification as an aircraft commander (AC) with a broad overview and group

tour of HQ AMC, 18th Air Force, and 618 AOC (TACC). Refer questions regarding GRACC to the AMC/A3TF Quota Managers at DSN 779-3576/7881 or commercial (618) 229-3576/7881.

1.17.3. Senior Officer Training Coordination. Forward questions regarding SOC availability and prerequisites to AMC/A3TF at DSN 779-7881 or commercial (618) 229-7881. Otherwise, take no formal actions.

1.17.4. Completion of Training. OSS/OSTs (or equivalent) forward students' formal PFT graduation dates (based on AF Form 8) to AMC/A3TF Course Owner/Registrar NLT 10 days after completion of training. OSS/OST (or equivalent) confirms completion dates with FTU.

1.18. Distribution. Units will establish distribution requirements of this AFMAN. **(T-3).**

Chapter 2

INITIAL QUALIFICATION TRAINING (IQT)

2.1. General Requirements. AFMAN 11-202V1 defines initial qualification training. This chapter specifies minimum training requirements for initial/mission qualification, requalification, conversion training, and senior officer courses. The primary method of initial/mission qualification is to attend and complete the appropriate formal training course in the ETCA. When a quota is not available, units can request a waiver to conduct in-unit qualification training, using formal school courseware.

2.2. Initial Qualification Training (IQT) Prerequisites. Complete initial qualification prerequisites in accordance with the ETCA website, this manual, and the course syllabus.

2.2.1. First assignment instructor pilots (FAIPs), operational support aircraft (OSA), aircraft commanders, and major weapon system (MWS) aircraft commanders meeting flying hour requirements in [Table 6.1](#) complete Aircraft Commander Initial Qualification (ACIQ) course. Graduates of Specialized Undergraduate Pilot Training (SUPT), pilots coming from remotely piloted aircraft (RPA) assignments, and pilots not meeting the flying hour requirements will complete Pilot Initial Qualification (PIQ) course and comply with the mobility pilot development (MPD) program described in [paragraph 5.2 \(T-2\)](#). Enlisted aircrew members coming from RPA assignments will complete the Basic Boom Operator Qualification (BBQ) or Flight Engineer Basic Prequalification (FBP)/Flight Engineer Initial Qualification (FIQ) courses. **(T-2)**.

2.2.2. Before starting a formal initial qualification course, the student may begin training (e.g., CBT, workbooks, etc.) as permitted by the course syllabi. Voluntary self-study prior to course start date does not count as training time start date. See [paragraph 1.7.1](#)

2.3. Ground Training Requirements. Complete ground training requirements for initial qualification in accordance with AFMAN 11-202V1 and this manual. During formal training, aircrews may complete (and receive credit for) aircrew-specific mobility training events found in the RTM. See the appropriate formal training course syllabus.

2.3.1. Ground training events from [Table 2.1](#) that are not accomplished at the FTU or formal course are completed at the gaining unit. The FTU will provide suitable documentation to the gaining unit for non-completed items that includes the appropriate ARMS event identifier(s) and event description. **(T-2)**.

2.3.2. Survival, Evasion, Resistance, and Escape (SERE) Training.

2.3.2.1. Use completion dates from initial SERE school(s) conducted in accordance with AFI 16-1301, *Survival, Evasion, Resistance, and Escape (SERE) Program*, and initial aircrew flight equipment (AFE) training course(s) (usually accomplished during formal school) to establish the follow-on due dates for refresher training.

2.3.2.2. Use graduation date from S-V80-A, *SERE Training*, for initial SS02, *Combat Survival Training*, and SS03, *Conduct after Capture* training dates.

2.3.2.3. Use graduation date from S-V85-A, *Emergency Parachute and Water Survival Training*, for initial SS05, *Water Survival Training*, and SS06, *Emergency Parachute*

Training (EPT) dates. Note: Crewmembers having accomplished only S-V90-A, *Water Survival, Non-Parachuting*, training in a previous weapon system training program will attend S-V85-A, *Emergency Parachute and Water Survival Training*, in order fulfill EPT in weapon systems where SS05 is required. **(T-2).**

2.3.2.4. Complete initial and periodic Local Area Survival refresher training in accordance with AFI 16-1301 and local requirements.

2.3.2.5. Complete periodic SERE, EPT, and Water Survival refresher training in accordance with AFI 16-1301 and local requirements.

2.3.3. Crew Resource Management/Threat and Error Management (CRM/TEM). CRM/TEM is designated as the MAF training standard for CRM training and will be integrated into aircrew training programs, where appropriate. **(T-2).** See [Chapter 6](#) and [Chapter 7](#) for specific details.

Table 2.1. Initial Qualification Ground Training Requirements.

Code	Event	Crew Position	Notes
	Flight Physical	All	1,4
	Physiological Training	All	1,4
AB01Y	Qualification Open Book Examination	All	
AB03Y	Qualification Closed Book Examination	All	
GC33Y	Crewmember Anti-Hijacking CBT	All	3,4
GD05Y	AIR Card User Training	AC	4,5
GD13Y	Aircraft Servicing Training	All	5
GD17Y	Aircrew Intelligence Training (AIT)	All	4,5
GD19Y	Approach Plate Familiarization Ground Training	FE,BO	3
GD25Y	Crew Resource Management (CRM)/Threat & Error Management (TEM) Initial Training	All	4
GD39Y	Hazardous Cargo Ground Training	P,BO	4,5
GD53Y	Instrument Refresher Course (IRC)	P	4
GD63Y	Overwater Navigation Procedures Ground Training	P	3
GD75Y	Tactics Training	All	4,5
GE05Y	Law of War Training	All	3,4
GH01Y	Communications Procedures Ground Training	P	4,5
GK13Y	Boom Operator Cockpit Orientation Initial CBT	BO	1,5
GK17Y	Cargo and Passenger Handling	BO	

	Procedures Ground Training		
GM09Y	Isolated Personnel Report (ISOPREP) Review	All	4,5
GM21Y	Small Arms Training	All	4
LL01	AFE Familiarization	All	1
LL03	Emergency Egress Training, Non-Ejection Seat	All	1
LL04	Aircrew Chemical Biological Radiological, Nuclear (ACBRN) Training	All	5
LL05	Egress with ACBRN	All	5
LL06	Aircrew Flight Equipment Training	All	4
LL07	Aircrew Fit Check	All	5,8
SS01	Local Area Survival	All	1,4,6
SS20	Level-C, (SERE Training, S-V80-A)	All	2,3,4,5
SS32	Water Survival Training, Non-Parachuting (S-V90-A) (ditching aircraft)	All	2,3,4,5
TG02Y	Visual Threat Recognition and Avoidance Trainer (Initial)	All	5,7

Notes:

1. Required prior to first flight.
2. Accomplish SS02 or SS05 if more than 36 months since completion of SS20 or SS32.
3. Crewmembers in initial qualification or requalification are required to complete prior to flying to destinations Outside the Continental United States (OCONUS).
4. AFMAN 11-2KC-10V1 is not the governing directive for completion of this event. In accordance with AFMAN 11-202V1 refer to reference publications which provide guidance for accomplishment of ancillary training requirements.
5. Not required for crewmembers assigned to MAJCOM Headquarters, NAF, 618 AOC (TACC), and USAF Expeditionary Center or BMC/BAQ aircrew unless specified in this AFMAN or AOR Special Instructions (SPINS).
6. Required prior to first flight at home station; students attending training at a location other than their permanent assigned base require SS01 prior to first flight at the training location as well.
7. Prior MWS initial visual threat recognition and avoidance training (VTRAT) does not satisfy the requirement of TG02Y. Prior MWS crewmembers will attend TG02Y for the KC-10. **(T-2).**
8. Members will have fit checks on individually fit ACBRN equipment and Aircrew Laser Eye Protection (ALEP) upon initial issue. **(T-2).** Crewmembers will have LL07 accomplished prior to conducting initial MB28Y. **(T-2).** LL07 is non-grounding.

2.4. Flying Training Requirements. Complete flying training requirements for initial qualification in accordance with AFMAN 11-202V1, this manual, and published KC-10 course syllabi.

2.5. Conversion/Differences Qualification Training Requirements. When possible, qualified personnel in other units provides the initial cadre. In some instances, it may be necessary for units to form an initial cadre of aircrew personnel for whom certain training qualification requirements may be waived. The following conditions apply to the management of initial cadre aircrew qualification:

2.5.1. Form a nucleus of instructor and flight examiner personnel (initial cadre) to begin aircrew conversion/differences training. Converting units may request initial cadre waiver of primary aircraft inventory (PAI) time requirement. Send waiver request through MAJCOM training staff in the format in [paragraph 1.5.4](#). Additionally, units will include the most recent aircraft flown and total time in that aircraft in the remarks section. **(T-1).**

2.5.2. Initial cadre will not be designated in a crew position higher than currently held, (e.g., C-130 mission pilot (MP) to KC-10 examiner pilot (EP)), unless previously qualified at that level in the conversion aircraft (e.g., prior KC-10 EP). **(T-2).**

2.5.3. After final approval, publish a unit letter to identify initial cadre of instructors and flight examiners by crew qualification.

2.6. Multiple Qualifications. Crewmembers will attend a formal initial qualification course for dual qualification in different MDS aircraft. **(T-2).** 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](#)). **(T-2).** Further guidance on multiple qualifications is available in AFMAN 11-202V1.

2.7. Senior Officer Qualification (SOQ). AFMAN 11-202V1 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 4.7](#)). **(T-2).** (See [Attachment 3](#) for descriptions, and formal course syllabi for course specifics). SOQ (training and certification) should be completed within the first 180 days after assuming the assignment. AMC/A3 retains the waiver authority for senior officer pilot (SOP) requirements outlined in this manual.

2.7.1. After qualification in accordance with AFMAN 11-202V1, and with OG/CC approval, senior officers (assigned or attached) may seek training which leads to a higher FTL and/or qualification. The unit OST office is responsible for determining training requirements based on the senior officer's flying experience and familiarity with the weapons system. MAJCOM/A3T (or equivalent) will approve the proposed training plan prior to execution. **(T-2).**

2.7.2. In order to keep the course length to a minimum, and maximize the students' training time, a suite of CBT lessons should be viewed prior to attendance at the Senior Officer Course. These CBT lessons can be found at <https://www.kc10ts.com>. Contact AMC/A3TK for assistance (DSN 779-2553).

2.7.3. SOC graduates shall not perform in-flight events beyond those authorized in their AF Form 8 and/or the completed SOC syllabus. **(T-2).**

2.8. Flight Surgeons. Flight Surgeons may fly with their assigned unit in accordance with local OG/CC policy and may log flight time during IQT. Flight surgeon IQT will include required ground training events from [paragraph 3.5.5](#) and the first two sorties in the member's primary assigned aircraft. **(T-2).** Designate flight surgeons as mission qualified/mission ready in their primary assigned aircraft upon completion of IQT.

2.9. Requalification Training. An aircrew member is unqualified upon expiration of the qualification evaluation, loss of currency exceeding six months (for the following currency items, pilots: AT59Y, AP15Y, AL01Y, and RU01Y – current AF Form 8 with receiver AR qualification. flight engineers: MB10Y. boom operators: RA09Y and RA07Y), failure of a periodic or spot evaluation, when down-graded by the Sq/CC, or completion of a qualification evaluation in a different MDS (unless authorized multiple qualifications). The duration of unqualified time is from the date the aircrew member became unqualified until the specific retraining start date. For active duty service commitments for aircrew training, see AFI 36-2107 (N/A AFR). See AFMAN 11-202V1 for additional requalification training limits and requirements. **Note:** Additional training requirements as a result of an unsatisfactory evaluation (periodic or spot) is in accordance with AFI/AFMAN 11-202V2. Unit training organizations coordinate with unit Stan Eval to track completion and review status at monthly squadron TRPs.

2.9.1. Requalifying KC-10 crewmembers will complete in-unit or formal school training (in accordance with AFMAN 11-202V1) and accomplish those mission qualification/certification events from RTM tables that have expired or are overdue. **(T-2).** See [Table 1.2](#) for in-unit training timeline. Training items to be accomplished during the requalification will be determined by a thorough review of the individual's flying training/history documentation conducted by the appropriate training authority (Sq/DOT for in-unit requalification, or FTU if formal school requalification). **(T-3).** These items will be annotated on the AF Form 4024, *Aircrew Training Accomplishment Report*, or electronic equivalent, in the individual's training folder and specified on the in-unit requalification letter if applicable. **(T-3).**

2.9.2. Former KC-10 instructors may accomplish instructor requalification concurrent with basic requalification (in-unit or formal course) for their crew position. In all cases of loss of qualification exceeding 39 months, all special qualifications and certifications will be re-accomplished. **(T-3).** If the gaining squadron commander determines that the individual requires additional seasoning prior to performing instructor duties, an individual can be certified as an aircraft commander (pilots) or basic qualification (flight engineers/boom operators) until the squadron commander determines the individual is ready to be certified as an instructor.

2.9.3. Requalification Training Courses. Unqualified crew members will complete the appropriate TX-1, TX-2, TX-3 (longest to shortest) courses outlined below. **(T-2).** Pilot, flight engineer, and boom operator TX-1, TX-2, TX-3 Courses:

2.9.3.1. Unqualified KC-10 crewmembers (over 8 years) will complete the initial qualification (PIQ, ACIQ, FIQ, BBQ) formal school flying training course (TX-1) and a flight evaluation. **(T-3).**

2.9.3.2. Unqualified KC-10 crewmembers (greater than 39 months at the end of a non-flying assignment or 51 months at the end of any active flying assignment up to 8 years) will complete the Pilot Requalification (PRQ), Flight Engineer Requalification (FRQ),

and Boom Operator Requalification (BRQ) formal school flying training course (TX-2) as appropriate and a flight evaluation. **(T-3).**

2.9.3.3. Unqualified KC-10 crewmembers (up to 39 months at the end of a non-flying assignment or 51 months at the end of any active flying assignment) will complete a Sq/CC directed requalification (TX-3) course in-unit and a flight evaluation. **(T-3).**

Note: The requalification formal school flying training courses in [paragraph 2.9.3.2](#) may be substituted for the in-unit training.

2.9.3.3.1. Squadron commanders may tailor or expand the TX-3 course based on individual proficiency and experience. Unqualified pilots will complete training in all delinquent items, additional training as directed by the squadron commander, and a flight evaluation. **(T-3).**

2.9.3.3.2. The flying unit Sq/CC will determine requirements for accomplishment of events from [Table 3.1](#) that are not continuation training events (e.g., fighter deployment operations (RA29Y)). **(T-3).**

2.10. Formal Training Unit (FTU) Guidance. The KC-10 Formal Training Units conduct training at two schoolhouses located at Travis AFB and Joint Base McGuire-Dix-Lakehurst. Specific course information is located in [Attachment 3](#) and KC-10 formal course syllabi located on the ATS website: <https://www.kc10ts.com> and [the Electronic Flight Bag \(EFB\)](#).

Chapter 3

MISSION QUALIFICATION TRAINING (MQT) AND CERTIFICATION

3.1. General Requirements. This chapter establishes minimum mission ready criteria and training requirements to be accomplished during mission qualification training (MQT) and MR Certification. Except where specifically stated, squadrons may arrange mission sequence or sequence of items as necessary to use flying training hours effectively and accomplish the unit mission. All crewmembers complete initial qualification (Phase IA/IB) and MQT, but are not necessarily required to be certified in the unit's mission before entering special certification (e.g., large formation, formation lead, etc.) training. Crewmembers in MQT may participate in exercises (see [paragraph 1.6.2](#)).

3.2. Mission-Ready Certification. A crewmember is formally designated MR after successful completion of all MQT ground and flying training requirements, the Sq/CC (or designated representative) completes a review of the crewmember's training record, and the Sq/CC (or designated representative) approves and documents the crewmember's MR certification. **Note:** See [Table 1.2](#) for training time limitations.

3.2.1. ACIQ and PRQ Graduates. ACIQ and PRQ graduates requalifying to aircraft commander will be coded as "FP" with the appropriate suffix in ARMS upon completion of all MQT requirements. **(T-2)**. Units will then count them as MR pilots for force readiness reporting and TRP purposes and they may fly as a "FPL" on any mission (including operational missions). **(T-2)**. ACIQ and PRQ graduates will be coded as "MP" in ARMS once they have been certified as an aircraft commander by the Sq/CC (or designated representative). **(T-2)**. ACIQ and PRQ graduates shall not fly as pilot-in-command until formally certified as a "MP" by the Sq/CC (or designated representative). **(T-2)**.

3.2.2. Pilot Initial Qualification (PIQ) Graduates. PIQ graduates will be coded as "FP" with the appropriate suffix in ARMS upon graduation from formal training and units will count these graduates as pilots for tracking purposes. **(T-2)**. PIQ graduates will be coded as "MP" in ARMS once they have been certified as an aircraft commander by the Sq/CC (or designated representative). **(T-2)**. See [paragraph 5.2](#) for additional requirements for mobility pilot development (MPD) pilot certification as aircraft commander.

3.2.3. Basic qualified boom operators (FB) flying during MQT (who are current and qualified in the aircraft) may fly without an instructor of like specialty on continental United States (CONUS)-only sorties. See [paragraph 3.3.1](#)

3.3. Ground Training Requirements. All crewmembers will accomplish any remaining events from [Table 2.1](#) that were not previously accomplished while at the FTU. **(T-2)**. Aircrew members will complete all academic ground training events required for mission certification in the unit's operational mission (not applicable for senior officers or staff officers maintaining BAQ). **(T-2)**. Training may be accomplished concurrently with other training.

3.3.1. Training sorties and operational missions may be flown before completing all events, provided flight physical, physiological training, AFE Familiarization (LL01), emergency egress training, Non-Ejection Seat (LL03), Aircrew Flight Equipment Training (LL06), and Local Area Survival (SS01) are accomplished. Ground training events required for the mission will be completed prior to being flown. **(T-2)**. Pilots will complete Overwater

Navigation Procedures Ground Training (GD63Y) prior to flying to destinations OCONUS. **(T-2)**. Boom operators will complete Boom Operator Cockpit Orientation Initial CBT (GK13Y) prior to their first flight. **(T-2)**.

3.3.2. Graduates of the formal Pilot Check Out Course need only accomplish ground training events in which they have lost currency.

3.3.3. The TS contractor post-graduate questionnaire will be completed by the student 180 days after scheduled Phase IB graduation date. **(T-3)**. (See [paragraph 1.4.6.5](#)).

3.3.4. Certified or qualified MR crewmembers transferring between KC-10 main operating bases (MOB) will require ISOPREP review (GM09Y), AFE Familiarization (LL01), Local Area Survival (SS01), AFE Aircrew Fit Check (LL07), and unit-specific MR training events (and events in which they may have lost currency during the change of station). **(T-3)**. See [paragraphs 3.4.2](#) and [4.9.2](#) for additional information.

3.3.5. Ground training events accomplished during MQT establish the crewmember's due dates for subsequent continuation training. Completion of Combat SERE Training, Wartime Level C (SS20) or Evasion Conduct After Capture (SS19) [flight surgeon (FS) only], Water Survival Training, Non-Parachuting (S-V90-A) (Ditching Aircraft) (SS32), and initial Aircrew Flight Equipment Familiarization (during formal school) establishes the due date (based on date of first completed course) for recurring Combat SERE Training (SS02), Conduct After Capture (SS03), Water Survival Training (SS05), and Aircrew Flight Equipment Training (LL06). Completion of SS20 or SS19 (FS only) also establishes the due date for recurring Law of War Training (GE05Y).

3.4. Flying Training Requirements:

3.4.1. Upgrade students. Complete mission certification flying training requirements in [Table 3.1](#) Items accomplished to the appropriate proficiency level during FTU count toward this mission ready table. Use date of successful evaluation to establish currency requirements for these events. BAQ crewmembers pursuing MR status are assigned a flight training level and accomplish continuation training requirements in RTM tables. Crewmembers in upgrade training credit all events accomplished during Phase IA, Phase IB, and MQT. See [paragraph 4.4.1](#) Crewmembers pursuing MR status who fail to accomplish minimum aircrew requirements (currency and semi-annual) will fly in a supervised status when that event is required for a particular flight until the delinquent event or currency is corrected. **(T-3)**.

3.4.2. After arrival at the duty station following a permanent change of station (PCS) from the other KC-10 MOB, crewmembers will receive a local area briefing and supervised local orientation flight. **(T-3)**. The lack of a local area briefing and local flight does not preclude the crewmember from deploying as MR. The crewmember will accomplish all grounding items prior to the local orientation flight. **(T-3)**. See [paragraphs 3.3.4](#) and [4.9.2](#) for additional information.

3.4.3. MPD pilots selected for Pilot Check Out (PCO) upgrade certification training will re-accomplish all applicable events in [Table 3.1](#), except for RV15Y, RV17Y, PC35Y, PC39Y, MB28Y, and AV71Y, with an emphasis on aircraft commander duties and responsibilities prior to certification. **(T-3)**.

Table 3.1. Mission Qualification/Certification Flying Training Requirements.

Code	Event	P	FE	BO	Notes
AC05Y	Cargo Mission Evaluation			P	
AV71Y	Aircraft Alert Start Procedures Demonstration	B	B	B	
BR11Y	Briefing and Control of Passengers			P	2
CK17Y	Receptacle Equipped Fighters, Day			P	2
CK19Y	Receptacle Equipped Fighters, Night			P	2
MB28Y	ACBRNTQT [Aircraft/Simulator (Sim)] Sortie	P	P	P	
MB52Y	Integrated Mission Sortie	P	P	P	2
PC35Y	Have-Quick Event	P			2
PC39Y	Secure Voice Event	P			2
RA03Y	Airlift Deployment Operations	P	P		
BR29Y	Ground Static Cargo Load			P	3
RA23Y	Deployment Mission Planning	P	P		
RA29Y	Fighter Deployment Operations	P	P		
RF53Y	Formation	P			2
RU05Y	Receiver AAR, Heavyweight	P	P		1,2
RU07Y	Receiver AAR, Anchor Air Refueling Area (ARA)	P			1,2
RV15Y	Rendezvous AR Emissions Control (EMCON) 3	B	B	B	2
RV17Y	Rendezvous AR EMCON 4	B	B	B	2
<i>B – Briefing Item, P – Proficient</i>					
Notes: 1. Not applicable to graduates of PIQ and ACIQ (until ready for AC certification). 2. Accomplish in MQT if not accomplished in Phase I. 3. Trained to proficiency in the CLT.					

3.5. Mission Qualification Training (MQT). MQT student timeline starts on the first duty day following the successful completion of the Phase IB evaluation. **(T-2).** Flight training will be conducted by KC-10 instructors. **(T-2).** See also [paragraph 5.7](#) for information on special qualifications and certifications. Crewmembers will be certified as MR after completion of all ground training, mobility training, flying training requirements, and certification (if required). **(T-2).**

3.5.1. MPD Pilots [graduates of KC-10 Pilot Initial Qualification (PIQ)]. Refer to [paragraphs 5.3.3](#) through [5.3.4](#)

3.5.2. KC-10 Aircraft Commander Initial Qualification (ACIQ) and Pilot Check Out (PCO) Course. Refer to [paragraph 5.3.5](#) ACIQ and PCO pilots' training should place emphasis on aircraft commander duties and the ability to lead a crew throughout the mobility system. When training is completed, the Sq/CC determines the individual's certification as an aircraft commander.

3.5.3. Flight Engineer Basic Prequalification (FBP) and Flight Engineer Initial Qualification (FIQ): The objective of MQT is to provide graduated exposure to the duties of a KC-10 flight engineer prior to MF certification. To streamline flight engineer training, Phases IIA and IIB have been combined into one MQT program. This allows for the ability to credit events when training becomes available. See [Table 1.2](#) for MQT timeline.

3.5.3.1. FBP Students: MQT begins the first duty day following the successful completion of Phase IB evaluation and ends when the requirements in this chapter and [Table 2.1](#) are complete and documented in accordance with [Attachment 2](#). FBP students require a minimum of two RA03Ys and two RA29Ys. The first RA03Y and RA29Y need only to be completed and documented to a satisfactory level before completing the second RA03Y and RA29Y. The RA03Y and RA29Y shall be completed and documented to a proficient level in accordance with [Attachment 2](#) prior to MF certification. **(T-2)**. Consecutive RA03Ys and RA29Ys are authorized in order to take full advantage of every training opportunity. **Note:** A Dual Role can only satisfy one RA03Y and one RA29Y requirement for MQT. An OG/CC waiver is required prior to using a second Dual Role mission for the requisite RA03Y and/or RA29Y, in accordance with [paragraph 1.5.3](#) of this instruction. **(T-3)**. Locally generated cargo training sorties may be used to satisfy one of the RA03Y requirements.

3.5.3.1.1. FBP students will fly local sorties under instructor flight engineer supervision and may fly local sorties unsupervised once the following items listed below have been completed to the required level [briefing item (B)/satisfactory (S)/proficient (P)] and properly documented to the desired grade as indicated. **(T-3)**. **Exception:** FBP students will not fly on local training sorties where cargo loading is being accomplished without IF supervision. **(T-2)**. **Note:** Local sorties are defined as those scheduled to takeoff and land at home station with no intermediate stops regardless of tasking authority.

3.5.3.1.1.1. RA23Y – Deployment Mission Planning (P)

3.5.3.1.1.2. RA03Y – Airlift Deployment Operations (S)

3.5.3.1.1.3. RA29Y – Fighter Deployment Operations (S)

3.5.3.1.1.4. RV15Y – Rendezvous/AR Emissions Control (EMCON) 3 (B)

3.5.3.1.1.5. RV17Y – Rendezvous AR EMCON 4 (B)

3.5.3.1.1.6. RU05Y – Receiver AAR, Heavyweight (P)

3.5.3.1.2. After achieving designated grade in the events in [paragraph 3.5.3.1.1](#) and sub paragraphs, and prior to flying local sorties unsupervised, squadron training office will document a recommendation in the student's training folder suggesting the

student be able to fly unsupervised. **(T-3)**. This recommendation will then be reviewed and endorsed by the Sq/CC. **(T-3)**.

3.5.3.1.3. FBP students shall have at least 100 primary hours of flight time prior to recommendation for evaluation to achieve MF certification. **(T-3)**. This requirement may be waived by the OG/CC on a case-by-case basis.

3.5.3.1.4. For cargo missions only, FBP students may fill the second engineer augmentation requirement once all items listed above have been completed and provided the other flight engineer is an instructor. Crew augmentation criteria are outlined in AFMAN 11-2KC-10, Volume 3, *KC-10 Operations Procedures*.

3.5.3.1.5. MQT Completion. MQT is complete upon successful accomplishment of the Initial Mission Evaluation in accordance with AFMAN 11-2KC-10V2, *KC-10 Aircrew Evaluation Criteria*, and requirements of RTM Tables. **(T-2)**.

3.5.3.2. **FIQ students:** MQT begins the first duty day following the successful completion of Phase IB evaluation and ends when the requirements in this chapter and **Table 2.1** are complete and documented in accordance with **Attachment 2**. FIQ students require a minimum of only one RA03Y and RA29Y documented to a proficient level in accordance with **Attachment 2** before MF certification. **(T-2)**.

3.5.3.2.1. FIQ students may fly local sorties unsupervised. **Exception:** FIQ students will not fly on local sorties where cargo loading is being accomplished without IF supervision. **(T-2)**.

3.5.3.2.2. For cargo missions only, FIQ students may fill the second engineer augmentation requirement provided the other flight engineer is an instructor. Crew augmentation criteria are outlined in AFMAN 11-2KC-10V3.

3.5.3.3. MQT Completion. MQT is complete upon successful accomplishment of the initial mission evaluation in accordance with AFMAN 11-2KC-10V2 and requirements of RTM Tables. **(T-2)**.

3.5.4. **Basic Boom Operator Qualification (BBQ) Students:** MQT consists of ground and flying training requirements outlined in **Table 3.1**, a syllabus defined KC-10 Cargo Load Training Course, and an in-unit cargo seasoning program. See **Table 1.2** for MQT training time limitations. Refer to KC-10 Cargo Load Training Course syllabus for detailed contractor training information.

3.5.4.1. Phase II Cargo Load Training. Training consists of a 20 day contractor training program in cargo loading operations utilizing a combination of classroom instruction, CBTs, and BR29Y cargo loads in the cargo load trainer (CLT). Student duties are limited to attendance and completion of Phase II. The primary instructor will complete an end of course assessment detailing progression, recommendations, and documenting Phase II training completion. **(T-2)**. Upon completion of the CLT Course boom operators will receive a cargo evaluation in accordance with AFMAN 11-2KC-10V2 in the CLT using one of the 6 cargo loads from the course **(T-2)**.

3.5.4.2. Boom Operator Cargo Seasoning. Upon successful completion of the KC-10 CLT Course boom operators will enter an in-unit seasoning program that consists of a minimum of three cargo loads in the aircraft (static or flying) with an IB. Seasoning

cargo loads are intended to provide added exposure and experience in the aircraft to better prepare boom operators for world-wide mobility operations. Instructors should place emphasis on areas that are difficult to simulate in the CLT, such as, loader marshaling, aircraft preparation for departure, aircraft reconfiguration (loading aids, cargo barrier net/environmental curtain inspection/installation, etc.). and agency coordination. Document accomplishment via the students' GTIMS training jacket. Grading is not required. These students have a valid cargo Form 8 and have proven the ability to safely load cargo in the KC-10. **(T-2).**

3.5.4.3. Fighter Contact Certification training will be in accordance with requirements of CK17Y/CK19Y detailed in [paragraphs 5.7.4, 7.13.2, and 7.13.3](#) MR status shall not be granted until fighter certifications are attained. **(T-2).**

3.5.4.4. MQT Completion. MQT is complete upon successful completion of the Initial Mission Evaluation in accordance with AFMAN 11-2KC-10V2. Boom operators can be certified as MR after successful completion of all ground, mobility, and flying training requirements, as well as certification requirements outlined in [Table 2.1](#) and [Table 3.1](#) **(T-2).**

3.5.5. Flight Surgeon Requirements. Flight surgeon requirements are established in AFMAN 11-202V1, AFI 16-1301, and AFI 11-301V1, *Aircrew Flight Equipment (AFE) Program*.

3.5.5.1. In addition to any external requirements from those publications, flight surgeons will complete the following training events prior to their first flight at a new base:

3.5.5.1.1. Expired/non-complete continuation ground and mobility events in [paragraph 4.6.1](#) **(T-2).**

3.5.5.1.2. Unit Indoctrination (UI) Training (GD81Y). **(T-2).**

3.5.5.1.3. Aircrew Flight Equipment Familiarization (LL01). **(T-2).**

3.5.5.1.4. Local Area Survival Training (SS01). **(T-2).**

3.5.5.2. Flight surgeons are required to complete the following ground training items for continuation training purposes in accordance with the timelines established in the most current RTM: Emergency Egress - Non-Ejection Seat (LL03), Aircrew Flight Equipment Training (AFET) (LL06), Aircrew Flight Equipment (AFE) Fit Check (LL07), Combat Survival Training (SS02), and Water Survival Training (SS05). **(T-2).**

3.5.5.3. Flight surgeons are required to complete the following mobility training items for continuation training purposes in accordance with the timelines established in the most current RTM: ISOPREP Review (GM09Y), ACBRN Ground Training (LL04), and Conduct after Capture (SS03). **(T-2).**

3.5.5.4. Designate flight surgeons as mission qualified/mission ready in their primary assigned aircraft upon completion of IQT. See [paragraph 2.8](#)

Chapter 4

CONTINUATION TRAINING

4.1. General Requirements. This chapter combined with the RTM establishes the minimum ground and flying continuation training required to maintain currency. Individual proficiency may require a greater number of events. Unit commanders will ensure crewmembers receive sufficient continuation training to maintain individual proficiency. **(T-2).** Refer to the current RTM for continuation ground, mobility, and flying training requirements.

4.2. Aircrew Status. Aircrew members are assigned to one of the following statuses.

4.2.1. Mission Ready (MR). An aircrew member who has satisfactorily completed IQT and MQT, and maintains qualification and proficiency in the unit's operational mission.

4.2.2. Basic Mission Capable (BMC). An aircrew member who has satisfactorily completed IQT and MQT, is qualified in some aspect of the unit's mission, but does not maintain MR status. The aircrew member should be able to attain full MR status to meet operational taskings within 45 days.

4.2.2.1. BMC aircrew members may include flying personnel assigned to MAJCOM headquarters; Numbered Air Force (NAF); Expeditionary Mobility Task Forces (EMTF); 618 AOC (TACC); United States (US) Air Force Expeditionary Center (USAF EC); contingency response group (CRG); air mobility operations group/wing (AMOG/AMOW); FTU; direct reporting unit (DRU); or senior officers (or others).

4.2.2.2. FTU BMC instructors shall be certified by the commander in the unit's training mission before performing instructor duties. **(T-3).** Once certified, FTU BMC instructors may conduct all aspects of the FTU's training mission. FTU BMC instructors may fly higher headquarters (HHQ)-tasked missions within CONUS, Alaska, Hawaii, and the Caribbean, but shall be MR for all other locations. **(T-2).**

4.2.2.3. BMC crewmembers may log instructor or evaluator time, when required to perform duties in those capacities, during the portion of the mission for which they are current and qualified.

4.2.3. Basic Aircraft Qualification (BAQ). An aircrew member who has satisfactorily completed IQT and is qualified to perform aircrew duties in the unit's aircraft. The member should perform at the minimum frequency necessary to meet the most recent sortie and flight standards set in this manual and current RTM.

4.2.4. In addition to the above, MR, BMC, and BAQ crewmembers shall accomplish and/or maintain minimum requirements (for their assigned status) established in AFMAN 11-202V1, paragraph 3.1.5. **(T-2).**

4.3. Flying Training Levels.

4.3.1. The Sq/CC (or designated representative) determines and assigns each crewmember an appropriate FTL before the start of each semi-annual period. Base FTL on a crewmember's experience and aircraft proficiency. **Note:** Newly assigned crewmembers are assigned a FTL during in-processing. **Note:** Crewmembers may be assigned a FTL that is more restrictive, but never less restrictive, than the requirements under this paragraph.

4.3.1.1. FTL A—Highly-Experienced Crewmembers (i.e., as a guide, crewmembers having 10 or more years of operational flying experience). Examples include MAJCOM headquarters staff and 618 AOC (TACC) personnel; formal schoolhouse instructors; NAF personnel; USAF EC instructors, Wg/CC, OG/CC, and Sq/CC, Operations Officers, crewmembers assigned to OG evaluation positions, and instructors assigned primarily to staff duties. Sq/CCs (AFR Sq/CC or Sq/DO) have the discretion to assign highly-experienced MR line crewmembers to this level. **Note:** Non-mission ready (NMR) crewmembers assigned to MAJCOM staff and/or NAF instructor/flight evaluators, 618 AOC (TACC), USAF EC, CRG, AMOG, FTU, or direct reporting unit may be categorized as BMC and assigned to FTL A and may fly unsupervised on local training missions provided they are current and qualified for that mission.

4.3.1.2. FTL B—Experienced MR Crewmember (including BAQ Experienced Crewmembers pursuing MR status). As a guide, crewmembers having between 5-10 years of operational flying experience.

4.3.1.3. FTL C—MR Crewmember. Initially assign inexperienced MR crewmembers and inexperienced individuals pursuing MR status after initial qualification training to FTL C. As a guide, crewmembers having less than 5 years of operational flying experience.

4.3.1.4. FTL E—BAQ or BMC non-instructor staff. This training level may include senior officers, MAJCOM, NAF, 618 AOC (TACC), contingency response wing (CRW), and DRU staff who are not maintaining MR or instructor status. FTL E requirements are insufficient for MR status and crewmembers assigned to this FTL will fly with an instructor of like specialty at all times. **(T-2).**

4.3.2. 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 (e.g., instructor upgrade). BAQ crewmembers may be placed into a different FTL any time after attaining MR status. Prorate events upon changing training levels.

4.4. Crediting Event Accomplishment.

4.4.1. Crewmembers may credit events accomplished during training, MQT, operational missions, and satisfactory evaluations toward currency requirements and establish a subsequent due date. They will be qualified in the events and either current or under the supervision of an instructor. **(T-2).** Use date of successful evaluation as the date of accomplishment for all flying training currency events that were trained during the formal or in-unit course. **(T-2).** For upgrade students (not initial qualification or requalification students), continuation training events accomplished during upgrade training prior to the evaluation are credited towards the requirements for the current crew position. Do not log training events for the upgrading crew position prior to the evaluation. **(T-2).**

4.4.2. For an unsatisfactory flight evaluation, do not log continuation training event items graded “unsatisfactory” (according to AFMAN 11-2KC-10V2) until requalified. **(T-2).**

4.4.3. Make-up training (ground or flying) is creditable towards the new training period. For GD15Y, flight engineers and boom operators will accomplish systems refresher material for the missed quarter. **(T-2).**

4.4.4. Instructors and flight examiners may credit up to but not more than 50 percent of their semi-annual training requirements while instructing or evaluating (e.g., if a FTL A instructor flight engineer instructed two MB10Ys when the requirement was three, the instructor could only credit 1 for the half). **Exception:** Instructor and flight examiner pilots may not credit any takeoffs, landings, or receiver air refueling (rendezvous may be credited) flown by another pilot. Instructor and examiner boom operators will accomplish all their own contacts. **(T-2).**

4.4.5. Records and Documentation. All training events will be recorded in ARMS. **(T-2).** Units will use AF Form 1522 prescribed by AFMAN 11-202V1, to record training accomplishments. **(T-2).** **Note:** GTIMS is a suitable electronic alternative for the AF Form 4324 and AF Form 1522 as long as all information is included and documentation certification can be verified and tracked through ARMS processing.

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

4.4.5.2. Combined training events may have only one ARMS entry.

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 reports.

4.4.5.4. Units may use locally developed mission accomplishment reports (MAR), or MAJCOM-approved electronic equivalent (i.e., GTIMS), to document continuation training. Minimum requirements for the MAR is defined within this chapter and tables.

4.4.6. Flying events accomplished in the simulator (WST or BOT) as allowed in the RTM will be coded with an "S" prefix in ARMS. All simulator accomplishments will be documented and tracked in ARMS. **(T-2).**

4.5. Continuation Training Requirements. Individual crewmembers are responsible for completion and tracking of their own continuation training and are expected to actively work with unit schedulers and training officers to identify, schedule, and accomplish required events.

4.5.1. Ground Training Events. Crewmembers will comply with ground training requirements in the RTM. **(T-2).** Use this manual for items not addressed by the RTM.

4.5.1.1. Failure to accomplish continuation ground training events in the RTM shall result in NMR status. **(T-1).** See [paragraph 4.10](#) for regaining mission ready status.

4.5.1.2. Failure to complete mobility training requirements in the RTM does not result in NMR status, but may restrict member from certain missions requiring the associated training.

4.5.1.3. Geographic combatant commanders (CCDR) and/or Air Force component commanders (or their equivalents) may specify additional theater-specific training or mobility requirements for their area of responsibility (AOR). Refer to Air Expeditionary Force (AEF) Center's Expeditionary Readiness Training (ERT) guidance and theater-developed special instructions (SPINS) (where applicable) for specific theater training requirements. In such cases, aircrew members are required to comply with theater-specific guidance in addition to requirements in this manual. If a conflict exists, comply with the more restrictive version.

4.5.1.4. Attached aircrew members (MAJCOM, NAF, 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's SARM office.

4.5.1.5. Crewmembers performing extended alert duty (more than 72 hours) may accomplish ground training during alert postures provided there is no degradation to required response time or mission accomplishment. Specify requirements and/or restrictions in a MAJCOM supplement and/or the unit supplement.

4.5.1.6. Crewmembers who will not remain in the unit's operational mission or will be assigned non-flying positions, are not required to complete ground training events that expire within four calendar months of the change in status date (e.g., reassignment occurs in the month of September, events expiring in May or later need not be accomplished).

4.5.2. Flying and Simulator Continuation Training Requirements. The RTM lists mobility-wide standardized semi-annual flying continuation training requirements by crew position. Event descriptions are located in [Chapter 7](#) and may be updated by the RTM. Flying continuation training events shall only be credited by individual crewmembers when those crewmembers are current and qualified in the event or are under the supervision of an instructor. **(T-2)**. Crewmembers shall not credit continuation training events when their Q/I evaluation is past due. **(T-2)**.

4.5.2.1. ATD Credit for Training Requirements. Document and track all simulator and distributed mission operations (DMO) accomplishments in ARMS in accordance with the RTM. Flying events authorized via the RTM to be accomplished using a simulator (e.g., WST, FTD, BOT, etc.) or using a DMO-linked simulator are logged in ARMS by replacing the first character of the ARMS code with an "S" (simulator) or "D" (DMO), as appropriate. All simulator accomplishments will be documented and tracked in ARMS. **(T-2)**. **Note:** Both S- and D-codes dual credit the associated flying event when completion via simulator is authorized.

4.5.2.1.1. 50% Credit in an ATD. The definition of 50% creditable in the WST is that a minimum of 50% of the semi-annual volume requirements will be accomplished in the aircraft. **(T-2)**. Crewmembers may accomplish remaining percentage in either the WST or the aircraft. If event volume is reduced to one through proration, then that event shall be accomplished in the aircraft. **(T-2)**.

4.5.2.1.2. Crewmember Qualification Requirements. Primary crewmembers may log continuation training events using an ATD per the RTM, provided the crew is qualified in their respective crew positions. The opposite pilot seat is required to be occupied by a qualified crewmember or TS instructor in order for a pilot to credit continuation events. **Exception:** Qualified crewmembers may credit continuation training events when paired with an unqualified crew member, if that event is defined in a requalification plan and a current and qualified Air Force or TS instructor is present in the device.

4.5.2.1.3. Simulator Certification. Currency and training events will only be creditable in simulators holding a current simulator certification from AMC AOS Det 1. **(T-2)**. Specific currency and training events will not be creditable in a simulator

that has been issued a partial decertification for those events by AMC AOS Det 1 in accordance with the restrictions given under the partial decertification. **(T-2)**.

4.5.2.1.4. Credit takeoff, instrument approach, and landing events only at airfields certified in the visual database by AMC AOS Det 1.

4.5.2.1.5. The following events shall not be credited using an ATD when full visual is not used or is inoperative: **(T-2)**.

4.5.2.1.5.1. TW01Y Tactical Departure

4.5.2.1.5.2. TW40Y Combat Descent

4.5.2.1.5.3. RA21Y Defending Climb

4.5.2.1.5.4. RU13Y Receiver AAR, Hvy Wt Breakaway

4.5.2.1.5.5. RF51Y AR Formation

4.5.2.1.5.6. AP07Y Approach-Circling

4.5.2.1.6. The following events may be credited using an ATD when motion is not used or is inoperative:

4.5.2.1.6.1. RF51Y AR Formation

4.5.2.1.6.2. GX91Y – GX94Y Simulator-Refresher

4.5.2.1.6.3. AP15Y Approach-Instrument

4.5.2.1.6.4. AP17Y Approach-Instrument Coupled

4.5.2.1.6.5. AP19Y Approach-Instrument Manual

4.5.2.1.6.6. AP41Y Approach-Precision

4.5.2.1.6.7. AP33Y Approach-Non-Precision

4.5.2.1.6.8. RT07Y Tanker AAR Breakaway

4.5.2.1.7. Simulator sorties will be scheduled as ground events in Global Decision Support System (GDSS) if able, and sortie cancellation authority will reside with the OG/CC (or designated representative). **(T-3)**.

4.5.2.1.8. Pre-requisites for simulator training shall be completed prior to the simulator start time or the training may be cancelled. **(T-3)**. AFR members should accomplish CBTs prior to simulator training, but the sortie will not be cancelled if this is not accomplished. **(T-2)**.

4.5.2.2. Formal Course ATD Credit. Aircrew members who graduate from the following courses can credit refresher simulator training (GX91Y - GX94Y) for the semi-annual period in which they graduate:

4.5.2.2.1. Pilot Initial Qualification (PIQ).

4.5.2.2.2. Aircraft Commander Initial Qualification (ACIQ).

4.5.2.2.3. Pilot Requalification (PRQ).

4.5.2.2.4. Pilot Checkout (PCO).

4.5.2.2.5. Instructor Aircraft Commander (IAC).

4.5.2.3. Formal Course ATD Credit. Aircrew members who graduate from the following courses can credit Crew Resource Management (CRM) training (GX29Y) using the evaluation date as date of accomplishment to establish currency date for subsequent training:

4.5.2.3.1. Pilot Initial Qualification (PIQ).

4.5.2.3.2. Aircraft Commander Initial Qualification (ACIQ).

4.5.2.3.3. Instructor Aircraft Commander (IAC).

4.5.2.4. Allocation of Flying Hours for Continuation Training. Each MAJCOM allocates flying hours to each wing as training, test, and ferry hours or operations and maintenance (O&M) hours. Allocated hours provide all crew positions with sufficient hours (based on FTL C) to accomplish required continuation flying training events.

4.5.2.5. Senior officers and staff crewmembers maintaining BAQ status will (as a minimum) maintain FTL E continuation training requirements. **(T-2)**. This requirement also extends to any additional aircraft in which the crewmember maintains a qualification.

4.5.2.6. Attached aviators may conduct flight training at other locations; however, interfly agreements and other documentation (i.e., ITS, DD Form 2992, and other Go/No-Go documentation) may be required. See AFI 11-401 and AFMAN 11-2KC-10V3 for passenger carrying restrictions.

4.5.2.7. Mission profile and refresher simulators are flown in the same manner as the aircraft, to include the wear and use of professional gear (e.g., headsets, gloves, etc.). No credit is allowed for GX91Y-GX94Y flown without a complete pilot and FE crew complement.

4.6. Flight Surgeon Continuation Training Flying Requirements. AFMAN 11-202V1 defines flight surgeon requirements in [Table 1](#) and is the source document for the following items.

4.6.1. Flight surgeons shall be on aeronautical orders assigning Aviation Service Code (AS) 8A status any time they log time in this MDS as a secondary airframe or when assigned to AMC and logging time in any DoD or foreign military aircraft for which authorization has been granted. **(T-1)**.

4.6.1.1. Flight surgeons are required to complete the following ground training items for continuation training purposes in accordance with the timelines established in the most current RTM: Emergency Egress - Non-Ejection Seat (LL03), Aircrew Flight Equipment Training (AFET) (LL06), AFE Fit Check (LL07), Combat Survival Training (SS02), and Water Survival Training (SS05).

4.6.1.2. Flight surgeons are required to complete the following mobility training items for continuation training purposes in accordance with the timelines established in the most current RTM: ISOPREP Review (GM09Y), ACBRN Ground Training (LL04), and Conduct after Capture (SS03).

4.6.2. Flight surgeons will maintain the following flying proficiency and currency (as a minimum) in accordance with AFMAN 11-202V1, Table 1. **(T-2)**.

4.6.2.1. Six (6) Total Flight Surgeon Sorties per Semi-Annual Period (FF00).

4.6.2.2. Twelve (12) Total Flight Surgeon Sorties per Annual Period (FF00).

4.6.2.3. One (1) Night Sortie, Flight Surgeon (FF02) per Semi-Annual Period (credits FF00).

4.6.2.4. Two (2) Night Sorties, Flight Surgeon (FF02) per Annual Period (creds FF00).

4.6.2.5. To maintain currency, time between flights will not be more than 60 days. **(T-2)**.

4.6.3. Loss of Currency. MAJCOMs establish procedures for flight surgeons to regain flying currency. Flight surgeons that exceed six months between sorties require completion of LL03, Emergency Egress Training, Non-Ejection Seat, with a certified aircrew instructor prior to the next flight. Flight surgeons require an aircraft commander's signature on a copy of the AMC/SGP Memo or other approved form (e.g., AF Form 1522, locally generated form/memo/etc.) to certify that an egress procedures review was completed prior to flight. **Note:** Documentation on Air Force Technical Order (AFTO) Form 781, *ARMS Aircrew/Mission Flight Data Document*, is not acceptable. The flight surgeon is required to submit this documentation to the local squadron/host aviation resource manager (SARM/HARM) office upon mission completion. SARM/HARM files documentation in accordance with AFRIMS disposition. **(T-2)**.

4.7. Senior Officer Qualification Continuation Ground and Flying Requirements.

4.7.1. SOQ pilots will complete required ground training requirements in accordance with the RTM. **(T-2)**. Units may tailor annual simulator refresher training events and profiles for senior officers. MAJCOM/A3T (or equivalent) is designated as the waiver authority for SOQ ground and flying continuation training events identified in this manual and the RTM.

4.7.2. SOQ pilots will complete flying training requirements associated with their assigned FTL in accordance with the RTM. **(T-2)**. SOQ crewmembers will (as a minimum) maintain FTL-E continuation training requirements. **(T-2)**. **Note:** This requirement also extends to any additional aircraft in which the SOQ crewmember maintains a qualification.

4.7.2.1. KC-10 SOQ pilots will be assigned to FTL-E and will not fly unsupervised in a primary crew position. **(T-2)**. **Exception:** Graduates of SOC programs that provide additional formalized training for specific mission sets/events may be assigned to FTL-A/B/C and may fly unsupervised in only those mission sets, unless otherwise exempted on their AF Form 8 (see [paragraph 2.7](#) and [Table 2.1](#)).

4.7.2.2. SOQ pilots shall not perform in-flight maneuvers or fly as a primary crewmember on mission sets that exceed their SOC training and/or their restricted AF Form 8 (e.g., SOQ pilots who were not fully trained for AAR operations during their SOC, are not authorized to be a primary crewmember on missions requiring AAR). **(T-2)**. Instructors supervising SOQ crewmembers shall use sound judgment and risk management (RM) principles in reviewing the SOQ crewmember's previous training and experience, recency of flight, and overall proficiency. **(T-2)**. This is done to determine maneuvers (from those authorized) the SOQ crewmember may perform during flight.

Note: AMC/A3 retains waiver authority for SOQ waiver requests not otherwise specified by this manual.

4.7.3. SOQ pilots are not exempt from CCMD or AFTRANS (or equivalent) requirements. See [paragraph 4.5.1.3](#)

4.8. Ancillary Training. Ancillary training is guidance or instruction that contributes to mission accomplishment, but is separate from an Air Force specialty or occupational series. This manual is not the governing directive for completion of ancillary training events. In accordance with AFMAN 11-202V1, the source AFMAN provides training frequency for these events unless an approved waiver has been authorized.

4.8.1. Expeditionary Training Requirements. See Unit Deployment Manager (UDM) representative to ensure compliance with additional non-aircrew specific expeditionary readiness training (ERT) requirements established through the Air and Space Expeditionary Forces website (AEF Online) located at: <https://aef.afpc.randolph.af.mil/Predeployment.aspx>.

4.8.2. ARMS Tracking for Ancillary Training Events. Not all ancillary training is tracked in ARMS. AMC/A3T has adopted a new ARMS coding structure. A master list of approved MAF-specific ARMS event identifiers are maintained by AMC/A3TF. Units should continue to track ancillary training events in the appropriate training management system of record (e.g., Advanced Distributed Learning System (ADLS)) for events not tracked in ARMS. **Note:** Crews should continue to reference the source document that establishes the requirement for event specifics and frequency using the event name, as the MAF-specific codes could be different from the parent publication.

4.9. Proration of Training. Crewmembers who are not available for flying duties due to extenuating circumstances for extended periods of time (generally 16 days or more) may be eligible for proration of training requirements in accordance with AFMAN 11-202V1 and this manual. Proration should be used judiciously, especially when considering prorating the same crewmember for consecutive semi-annual training periods.

Table 4.1. 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

4.9.1. Proration Formula. Use [Table 4.1](#) to determine the number of months the crewmember is available during the training period (e.g., crewmember is on a non-flying temporary duty (TDY) for 118 days during the semi-annual period (otherwise available for 64 days) equals two months available per [Table 4.1](#)). Multiply the number of months

available by the event volume from the appropriate table, divided by the total number of months in the training period, then round down to the nearest whole number, but never less than 1 (e.g., two months available x 12 instrument approaches / six months in the semi-annual training period = four required). Subtract previous accomplishments from the prorated total to determine remaining requirements. **Note:** When the prorated volume is reduced to one for any event that is not 100% creditable in the simulator, then that event is required to be accomplished in the aircraft.

4.9.2. Permanent Change of Station Considerations. Crewmembers who PCS during the training period to a unit flying the same MDS aircraft and enter the same or lower FTL may credit training accomplished at the previous base. **Note:** There could be two proration calculations needed when a PCS overlaps a change to a new semi-annual training period. **Note:** Use date departed last duty station through seven-days after a crewmember signs-in at a CONUS location or 14-days after a crewmember signs in at an OCONUS location to determine the number of days available. **Exception:** Use the date of the first training event for the calculation when the training event occurs prior to the 7- or 14-day standard.

4.9.3. Change in Flight Training Levels. Proration may be used for certain crewmembers who require a change in training levels during the semi-annual period (e.g., completion of MR certification) in accordance with [paragraph 4.3.2](#) **Note:** Events accomplished while assigned to the prior FTL are not credited toward the new FTL.

4.9.4. Prorate only if absence is at least 15 cumulative days. For contingency alerts and contingency flying TDYs non-consecutive periods of non-availability can be combined for proration purposes.

4.9.5. Units may also prorate requirements for individuals changing training levels. If requirements are prorated, do not credit events accomplished while in the former FTL.

4.9.6. For upgrade students, continuation training requirements will be prorated from their training start time through the day prior to the successful completion of their upgrade evaluation (see [Table 4.1](#)). (T-2).

4.9.7. For initial qualification and requalification students, training accomplished prior to the successful aircraft flight portion of their evaluation will not be creditable towards their semi-annual continuation training requirements. (T-2). They are considered unavailable for proration purposes. Initial and requalification student's time available for proration purposes begins the duty day prior to the successful completion of their initial or requalification evaluation and will be prorated accordingly. (T-2).

4.10. Failure to Complete Training Requirements. Declare individuals in Air Force Input Tool (AFIT) as NMR, non-basic mission capable (N-BMC), or non-basic aircraft qualified (N-BAQ) if they fail to complete ground or flying continuation training requirements in accordance with AFMAN 11-202V1. **Note:** This does not pertain to individuals pursuing MR status after initial qualification or requalification training.

4.10.1. Failure to Maintain Flying Currency. Currency events are denoted in the most current RTM under the currency (CUR) column with prescribed maximum intervals between accomplishments. Failure to meet a currency requirement results in the crewmember being non-current for that training event. A non-current instructor or evaluator may not instruct or evaluate for the non-current event.

4.10.1.1. Place individuals non-current in one or more currency events in NMR/N-BMC/N-BAQ status (as appropriate) in those unit missions requiring that event.

4.10.1.2. Crewmembers are non-current on the day after an event currency expires (e.g., a crewmember that accomplished an event with monthly currency on 1 September becomes non-current on 1 November).

4.10.1.3. Crewmembers who are non-current for flying training events will be under direct instructor supervision while performing the non-current event(s) until currency has been regained or a waiver has been approved, except as provided below. **(T-2).**

4.10.1.3.1. Sq/CCs (AFR Sq/CC or Sq/DO) may approve non-current crewmembers to fly unsupervised on sorties where the events causing non-current status are not conducted. **Exception:** A crewmember who is non-current in takeoff (AT59Y), instrument approach (AP15Y), or landing (AL01Y) will be supervised on all sorties until currency is regained. **(T-2).**

4.10.1.3.2. Oceanic Sorties. Aircraft commanders who are not current for an oceanic sortie may fly in command on operational CONUS missions. Aircraft commanders may regain oceanic currency under the supervision of a qualified aircraft commander or higher. Pilots can regain currency while being supervised by a current AC or higher in the jump seat. When an AC or higher is not available to occupy the jump seat, the NMR pilot shall be supervised by an instructor or higher in the left seat. **(T-3).**

4.10.1.3.3. Air Refueling Sorties. Aircraft commanders who are non-current for air refueling shall not fly in command on missions requiring receiver air refueling until currency is regained. **(T-3).** Currency for aircraft commanders who are non-current for less than 15 days may be regained on operational AR missions when all of the following conditions are met: the crewmember is under the supervision of a qualified AC or higher, required fuel on-load for the mission is complete, and no passengers are aboard.

4.10.1.4. Individuals who, by the nature of their crew position are NMR, or already require instructor supervision (i.e., some individuals in MQT, FTL E crewmembers) do not need to be separately placed in supervised status over and above what their crew position or training program already confers on them. Crew members in a training program who are already qualified, who have reached a point in their training program before the end of the semi-annual period that permits them to fly unsupervised [e.g., basic qualified flight engineer (FF) or FB], who fall within the currency window to revert to an earlier crew position (e.g., FPK, etc.), or who are undergoing training as a result of a failed evaluation will be tracked as NMR for unit readiness purposes. **(T-2).**

4.10.2. Failure to Complete Semi-Annual Volume Flying Training Requirements. Crewmembers who fail to accomplish the total number of each required semi-annual training event (full or prorated volume, as appropriate) in the most current RTM become non-current for the individual event(s) on the first day of the new semi-annual training period. Sq/CCs (or designated representative) will take the following actions at the end of the semi-annual training period. **(T-2).**

4.10.2.1. Review ARMS products for those crewmembers who become non-current for volume events.

4.10.2.2. Place each non-current crewmember in NMR/N-BMQ/N-BAQ status (as appropriate).

4.10.2.3. Formulate a get-well plan to re-establish individual currencies.

4.10.2.4. Assure that each non-current crewmember is under direct instructor supervision while performing the non-current event(s) until currency is regained or a waiver has been approved.

4.10.2.5. Document by crewmember on an “End of Semi-Annual N-MR/N-BMQ/N-BAQ” letter incomplete events and required actions for each crewmember to regain currency. This allows for tracking of non-current events after ARMS tables are “rolled over” to the new semi-annual period. The default volume of training necessary will be one event unless documented as greater on the “End of Semi-Annual N-MR/N-BMQ/N-BAQ” letter. **(T-2). Note:** Overdue currency and ground continuation training are not included/tracked on the “End of Semi-Annual N-MR/N-BMQ/N-BAQ” letter. **Note:** Letters should be accomplished and maintained electronically using a MAJCOM-approved electronic training database (i.e., GTIMS), but may be accomplished/maintained manually if GTIMS is not yet adopted.

4.10.3. Regaining Currency for Flying Training Events. Non-current crewmembers may regain currency using one of two methods. Crewmembers either complete Sq/CC-assigned training events or they may be granted a waiver.

4.10.3.1. Completion of Assigned Training. Crewmembers become current upon completion of Sq/CC-assigned training event(s).

4.10.3.2. Waivers. Crewmembers may be granted a waiver in accordance with [paragraph 1.5.9](#) to re-establish flying training event currency. Document waivers, when determined appropriate, in accordance with this manual and/or the RTM. Commanders will base the decision to waive a flying continuation training event on the individual crewmember’s experience and proficiency level. **(T-2).** Considerations such as a crewmember’s availability, manning shortfalls, etc. are not appropriate reasons for granting continuation training waivers. **Note:** AMC and AFR units are required to use GTIMS for waiver documentation.

4.10.3.3. Non-Current for up to Six Months. A non-current crewmember is required to demonstrate proficiency in an aircraft or simulator to the satisfaction of an Air Force Instructor (or TS instructor for simulator-creditable events) for all events in the RTM Flying Training tables in which they have lost currency, except as otherwise noted above.

4.10.3.4. Non-Current Exceeding Six Months. A crewmember who remains non-current exceeding six months for flying training events identified in the RTM Flying Training tables is designated as unqualified in the aircraft. The crewmember shall complete Sq/CC-directed requalification training in accordance with [paragraph 2.9](#) followed by an aircrew evaluation in accordance with AFMAN 11-2KC-10V2. **(T-2).** Sq/CC-directed training and evaluation will include all delinquent training items. **(T-2).** Updated currency will be established in accordance with [paragraph 4.4.1](#) upon

successful completion of the required evaluation. **(T-2). Note:** For all other currency events, refer to [paragraph 4.10.4.2](#)

4.10.4. Failure to Complete Ground Continuation Training Requirements.

4.10.4.1. Declare aircrew members who fail to complete ground continuation training events required by the RTM as non-current for the/those specific training event(s). Designate those crewmembers as NMR/N-BMC/N-BAQ until currency is regained or a waiver is granted. The crewmember shall not deploy until required ground training has been accomplished. **(T-3). Exception:** Non-current crewmembers may fly unsupervised on local, routine, and CONUS missions according to the RTM on sorties not requiring the specific ground training event(s).

4.10.4.2. Declare aircrew members who fail to complete aircrew-specific mobility training events required by the RTM as non-current for those specific training events. Do not designate these crewmembers as NMR/N-BMC/N-BAQ, but restrict the crewmember from performing missions requiring the delinquent event(s) until the required training is accomplished or a waiver is granted.

4.10.4.3. Regaining Currency for Aircrew Ground Continuation Training Events. A crewmember has two options to regain currency for ground continuation training events.

4.10.4.3.1. The crewmember completes the required ground training to re-establish currency.

4.10.4.3.2. Specific event(s) may be judiciously waived in accordance with [paragraph 1.5.8](#) Document waivers, when determined appropriate, in accordance with this manual and/or the RTM. Base waiver decisions on the individual crewmember's experience and proficiency level. Do not base waiver decision on scheduling or availability concerns. A waiver extends the due date for the specific event(s), but does not delete the requirement. Aircrew members should complete the event(s) to re-establish currency as soon as possible after currency is lost.

4.10.4.4. Crewmember Restrictions While Non-Current for Ground Continuation Training Events. With the exception of mandatory grounding items noted in the RTM, crewmembers who are non-current for events in the RTM may be permitted to fly on specific sorties under instructor supervision, provided the overdue training event(s) is/are not applicable to that sortie. **Exception:** Crewmembers who are non-current for Combat Survival Training (SS02) or Water Survival Training (SS05) are restricted to CONUS missions until currency is regained or a waiver is granted.

4.10.4.5. An individual NMR for failure to complete Hazardous Cargo Ground Training (GD39Y) may fly unsupervised on local training missions only with Sq/CC approval until training is completed.

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

4.11. Requirements Before PCS or TDY By Members On Active Flying Status. See AFMAN 11-202V1.

4.12. Requirements Before Removal From Active Flying. See AFMAN 11-202V1.

4.13. Requirements While In Inactive Flying Status. See AFMAN 11-202V1.

4.14. Aircrew Flying in Non-US Air Force Aircraft or With Non-US Air Force Units. See AFMAN 11-202V1.

4.15. Training Period. Continuation training program is based on static 6-month (semi-annual) period, for example: 1 January - 30 June or 1 July - 31 December.

Chapter 5

UPGRADE TRAINING

5.1. General Requirements. This chapter identifies general prerequisites and training requirements for upgrade. See minimum flying-hour requirements and prerequisites in [Table 5.1](#)

5.1.1. The flying time prerequisites for upgrade are based on a crewmember having gained the knowledge and judgment required to safely and effectively perform assigned duties in support of the unit's missions. Therefore, it is essential that unit-level training programs focus efforts to develop each crewmember's knowledge and judgement as the crewmember progresses through their flying career.

5.1.2. General Requirements for Formal Upgrade Courses. The following items are basic requirements for formal upgrade training programs (not all-inclusive).

5.1.2.1. Completion of applicable ground and flying requirements required by this manual.

5.1.2.2. Completion of academic prerequisites and special requirements detailed in the ETCA.

5.1.2.3. In-depth knowledge of aircraft systems, operating policies, governing instructions, and applicable tactics, techniques, and procedures.

5.1.2.4. Achieve the minimum flying-hour prerequisite, including left-seat experience for AC Upgrade candidates. **Note:** WST time may be used to credit "KC-10 Total Time" for AC upgrade candidates. (N/A AFR).

5.1.2.5. Course allocation provided by the MAJCOM Quota Manager for the intended course.

5.1.3. Waiver Authority for Formal Course Prerequisites. OG/CC, in accordance with [paragraph 1.5.2](#), is the designated waiver authority for flying-hour prerequisites required for entry into formal upgrade courses defined by [Table 5.1](#) Consult the course syllabus and/or the organization establishing the requirement for other waiver authority determinations.

Table 5.1. Pilot Upgrade Requirements.

From	To	Prerequisite for Course Entry	Requirements Before Aircraft Commander Review and Certification (R&C) Board Certification	Notes
PIQ Graduate	MP (via PCO or In-Unit upgrade)	1000 hours TFT and MPD Phase I & II	Pilot Check Out (PCO) Course or In-Unit upgrade and AC Qualification Evaluation; Mission qualification training; MPD Phase I-III	1
ACIQ Graduate	MP (via ACIQ)	Previous AC in USAF MDS and/or	Mission qualification training; Phase II guide, if required, 200 PAA flying hours	1,2,3

		1000 hours TFT		
Notes: 1. Total flying time (TFT) represents all flying time logged aboard a fixed wing military aircraft as a pilot, including, simulator time, SUPT “student” time, and “other” time. Exception: TFT does not include time in another aircrew specialty or RPA time. 2. Minimum of 200 KC-10 hours PAA required (does not include “other” or Phase IB) before R&C to perform AC duties. 3. For MAF crossflow with similar skill set (e.g., KC-135, C-17, etc.), MPD Phase II guide is not required. Pilots with dissimilar background (e.g., OSA/FAIP, F-16, etc.), accomplish MPD Phase II guide in-unit.				

5.2. Mobility Pilot Development (MPD) Program. MPD is a program for PIQ graduates leading to AC certification. MPD pilots are not ACs. The MPD program consists of the PIQ (or ACIQ) formal training course followed by continuation training and seasoning in a primary aircraft, then progresses to the MPD pilot’s upgrade to and certification as an AC. **Note:** PIQ/ACIQ and AC upgrade programs are described in [Attachment 3](#). MPD continuation training and seasoning is divided into multiple phases: MPD Phase I, MPD Phase II, GRACC, PCO course, and commander certification to AC. All MPD pilots should work towards dual-seat qualification in their assigned aircraft and will maintain qualification requirements according to AFMAN 11-2KC-10V2. **(T-2).** **Note:** See minimum flying hour requirements in [Table 5.1](#) The commander’s assessment of the MPD pilot’s performance drives the timeline required to upgrade to AC. Unit commanders should tailor continuation training and seasoning programs to the individual pilot’s knowledge, skill, and experience level. The success of the MPD program depends on MPD pilots being effectively mentored and provided with sufficient training and development opportunities for success.

5.3. MPD Program Continuation Training.

5.3.1. Documentation. Document MPD training using ARMS as follows: MPD Phase I uses ARMS code CP15Y, MPD Phase II uses ARMS code CP17Y, GRACC uses ARMS code CP11Y, and aircraft commander certification uses ARMS code CP03Y. Document full-course completion and Sq/CC (AFR Sq/CC or Sq/DO) certification using the AF Form 4324 (or electronically using GTIMS).

5.3.2. Training Guides. MPD Phase I & II training guide(s) (TG) are available for download on AMC/A3T’s SharePoint® site or <https://www.kc10ts.com>. MPD pilots should carry appropriate TG(s) on all sorties to maximize training opportunities.

5.3.3. MPD Phase I (CP15Y). MPD Phase I consists of core aircraft commander development activities for new pilots. The center of this training is the MPD Phase I TG that focuses on communications, checklist discipline, aircraft systems knowledge, and basic mission planning to build the MPD pilot’s knowledge and understanding of their assigned aircraft and its mission. MPD Phase I pilots are not expected or authorized to act as aircraft commanders. The program’s intent is to provide them with a variety of opportunities to observe and learn aircrew leadership fundamentals from aircraft commanders in multiple settings. MPD Phase I pilots should not be assigned additional duties in the squadron during

their training period to allow them to focus on study and flying the mission to the maximum extent possible. MPD Phase I pilots will complete the MPD Phase I TG NLT 180 days (365 days for ARC) after becoming mission ready. **(T-3).** **Note:** Pilots crossflowing from FAIP, OSA, or non-MAF weapons systems are not required to complete MPD Phase I.

5.3.3.1. MPD Phase I pilots are restricted to fly in the right seat for day-to-day operations. MPD Phase I pilots may fly in the left seat under direct supervision of an IP. **Note:** With passengers on board, pilot will be qualified in both the event and qualified for the seat occupied. **(T-2).** See [Table 1.3](#) They should be in the right seat for refresher simulators, but may use any proficiency time available at the end to build left-seat experience. MPD Phase I pilots may be in either seat for proficiency simulators.

5.3.3.2. MPD Phase I may be considered complete no earlier than six months after training start date (as defined in [paragraph 1.7.1](#)), provided the pilot has attained a minimum of 200 PAI hours and has completed the MPD Phase I TG. **(T-3).** Document Sq/CC (AFR Sq/CC or Sq/DO) approval via the STRP and transition the pilot to MPD Phase II.

5.3.3.3. Receiver AR training for MPD pilots may be accomplished anytime with an IP (as long as passengers are not on-board) in accordance with AFMAN 11-2KC-10V3 training restrictions. MPD pilots may be entered into a certification program in accordance with [paragraph 5.7.8](#) MPD pilots should be certified in CP19Y, MPD Receiver Air Refueling, prior to entering PCO. This refueling may be accomplished in either seat.

5.3.4. MPD Phase II (CP17Y). MPD Phase II builds on core knowledge and experience gained in MPD Phase I. The center of this training is the MPD Phase II TG that focuses on flying skill, situational awareness, mission considerations, and crew management in preparation for certification as an aircraft commander. As MPD Phase II pilots advance in knowledge, they are encouraged to practice actual mission management skills and decision making under the guidance of an IP.

5.3.4.1. During MPD Phase II, pilots receive increased exposure to flying in the left seat. **Note:** FPs not qualified in the left seat may only fly in the left seat under direct IP supervision and without passengers aboard. MPD Phase II pilots may fly in the left seat in accordance with [Table 1.3](#) Unit leadership will use sound judgement and solid RM principles to determine crew complement and the seat the MPD pilot occupies. **(T-2).** MPD Phase II pilots should be in the left seat during refresher and proficiency simulators.

5.3.4.2. MPD Phase II may be considered complete when the MPD Phase II TG and all prerequisites defined in [Table 5.1](#) are complete. Document Sq/CC (AFR Sq/CC or Sq/DO) approval via the STRP and review training records to determine suitability and timing for upgrade to aircraft commander. Upgrade determinations will be based on performance, experience, and requisite flight hours. **(T-3).** MPD pilots shall have a minimum of one flight evaluation (AF Form 8) following FP mission-ready certification before entry into aircraft commander upgrade. **(T-2).** **Exception:** Crossflow pilots from FAIP, OSA, or non-MAF weapons systems are exempt from this flight evaluation requirement.

5.3.4.3. Global Reach Aircraft Commander Course (GRACC) (CP11Y). This event is an essential familiarization with the operational command and control structures and mission management oversight that resides at the headquarters level. See [paragraph 1.17.2](#) for scheduling and [Chapter 7](#) for additional course details. Attendance is mandatory for AMC pilots and highly-encouraged for all others during upgrade and prior to certification as an aircraft commander. The intent is for MPD pilots to attend GRACC after completion of MPD Phase II (CP17Y) and prior to beginning PCO.

5.3.5. Pilot Checkout (PCO) Course. PCO (also referred to as aircraft commander upgrade) is the final training course before a MPD pilot's certification as an aircraft commander. The Sq/CC (AFR Sq/CC or Sq/DO) determines (via the STRP) projected date for the MPD pilot's PCO course. The actual training start date occurs with the first PCO training event. Training time limitation is defined in [Table 1.2](#) PCO requires an aircrew training folder or MAJCOM-approved electronic equivalent (i.e., GTIMS) to document required training and certification. Multiple training programs may be combined into a single training folder (or GTIMS training template), at the unit commander's discretion. **Note:** TGs are authorized. **Note:** Phase III refers to in-unit upgrade to aircraft commander and does not apply to students going through the formal PCO course at a KC-10 FTU. FTU training time starts on the published class start date (CSD).

5.3.5.1. Aircraft commander candidates accomplishing PCO training events require IP supervision during non-critical phases of flight and direct IP supervision during critical phases of flight. It is permissible for an aircraft commander candidate to be in either seat in the simulator while under IP supervision, as required.

5.3.5.2. The Aircraft Commander candidate will accomplish the following requirements prior to the Aircraft Commander Review and Certification (R&C) Board. **(T-3).**

5.3.5.2.1. The preferred method for completing Aircraft Commander upgrade training is by completion of the PCO course conducted by the contractor followed by flightline training conducted by the Formal Training Unit (FTU). Contractor training covers emergency procedures, tactics, and aircraft commander duties. FTU training completes air refueling training. Units retain the option to conduct in-unit aircraft commander upgrades without waiver for highly qualified and experienced pilots.

5.3.5.2.2. Formation Certification.

5.3.5.3. Aircraft commander candidates shall be current in applicable mission qualification training events listed in [Table 3.1](#) prior to certification. **(T-3).**

5.3.6. Evaluation and Certification. Prior to certification, the upgrade candidate shall demonstrate aircraft commander proficiency during an aircraft commander flight evaluation, to include receiver air refueling in accordance with AFMAN 11-2KC-10V2. **(T-2).** PCO culminates with a Sq/CC's R&C Board recommendation.

5.3.6.1. Aircraft commander candidates accomplishing PCO training events require IP supervision during non-critical phases of flight and direct IP supervision during critical phases of flight. It is permissible for an aircraft commander candidates to be in both seats in the simulator while under IP supervision, as required.

5.3.6.2. Prior to certification, aircraft commander candidates shall be current in applicable MQT events listed in **Table 3.1 (T-3)**.

5.3.7. Certification. Complete certification in accordance with this manual and document via STRP. Assign the appropriate Mobility Pilot Designation Code in accordance with AFI 11-401 AMCSUP I, *Aviation Management*, Table A2.4.

5.4. Aircraft Commander Certification (Prior-Certified in Another MWS).

5.4.1. The following are prerequisites for entry into AC upgrade:

5.4.1.1. Aircraft Commander Initial Qualification (ACIQ) Course.

5.4.1.1.1. 200 KC-10 PAI hours.

5.4.1.1.2. 1000 hours total flying time (TFT): represents all flying time logged aboard a fixed wing military aircraft as a pilot including SUPT “student” and “other” time (but does not include time in another aircrew specialty or RPA time). WST time is creditable to meet TFT requirement.

5.4.1.1.3. Previous USAF MDS.

5.4.1.2. PIQ graduate.

5.4.1.2.1. 1000 hours TFT: represents all flying time logged aboard a fixed wing military aircraft as a pilot including SUPT “student” and “other” time (but does not include time in another aircrew specialty or RPA time). WST time is creditable to meet TFT requirement.

5.4.1.2.2. MPD Phase I and II completed.

5.4.1.3. MPD Phase II Training Guide. **Note:** Optional for MAF crossflow pilots with similar experience (e.g., C-17, KC-135, etc.).

5.4.2. Prior to certification, AC candidates shall accomplish the following events. **(T-3)**.

5.4.2.1. Aircraft Commander Qualification Evaluation.

5.4.2.2. PCO course and in unit upgrades: mission qualification training; MPD Phase I-III.

5.4.2.3. ACIQ graduates will have a minimum of 200 KC-10 hours PAA required (does not include “other” or Phase IB). **(T-2)**. Mission qualification training Phase II guide, if required.

5.5. Aircrew Instructor Program. The instructor course is designed to teach selected crewmembers the fundamentals and concepts of instructing. Select instructor candidates based on experience, judgment, ability to instruct, flying skill, and technical knowledge.

Table 5.2. Instructor Upgrade Prerequisites.

From	To	Prerequisites	Tasks and Events Required Before Certification	Notes
AC	Instruct	200 TFT after KC-10 Aircraft	KC-10 IAC	1

	or Pilot	Commander certification and Formation Certifications complete	course and Initial Instructor Evaluation	
FE	Instruct or FE	1500 TFT with 300 KC-10 PAA or 1800 TFT with 150 KC-10 PAA and 1 year experience as MWS Instructor FE	FIC course and Initial Instructor Evaluation	2
BO	Instruct or BO	1500 TFT with 300 KC-10 PAA or 1800 TFT with 200 KC-10 PAA and 1 year experience as MWS Instructor BO	BIC course and Initial Instructor Evaluation	3

Notes:

Note: Enlisted aircrew qualifications are separate and distinct from skill level qualification. When AF Form 8 is completed for the applicable flight evaluation, the crewmember is qualified to perform duties assigned for the crewmember 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 (aircrew standardization and flight examiner).

1. Total flying time (TFT) represents all flying time logged aboard a fixed wing military aircraft as a pilot including UPT “student” and “other” time (but does not include time in another aircrew specialty). WST time is creditable to meet TFT requirement.
2. Instructor flight engineer candidates with total flying hours logged from other than the flight engineer crew position (i.e., boom operator, loadmaster) require 2000 total flying hours and 750 hours as a KC-10 flight engineer prior to consideration for upgrade. WST time is creditable to meet TFT requirement.
3. Instructor boom operator candidates with total flying hours logged from other than the boom operator crew position (i.e., flight engineer, loadmaster) require 2000 total flying hours and 750 hours as a KC-10 boom operator prior to consideration for upgrade.

5.5.1. See [Table 5.2](#) for instructor upgrade prerequisites.

5.5.2. Individuals who complete the applicable instructor course are qualified instructors for all mission qualification events in which they maintain currency.

5.5.3. Instructor pilot candidates will qualify through the formal KC-10 TS instructor course (IAC). **(T-2)**. Waivers will be reviewed on a case-by-case basis if formal school course allocations are not available. **(T-2)**.

5.5.4. Instructor candidates who previously attended a formal instructor course for instructor qualification and were certified in any US Air Force or Navy fixed-wing aircraft may upgrade in-unit without completing the TS instructor course. In-unit instructor upgrades require OG/CC approval. MAJCOM waivers are not required. Unit commanders determine training required to complete upgrade. Instructor candidates who attend the TS instructor qualification course at the FTU or in-unit may incur an ADSC in accordance with AFI 36-2107 (N/A AFR). All initial instructor upgrade candidates shall be mission-ready for a minimum of six months. **(T-3)**.

5.5.5. Instructor Responsibilities:

5.5.5.1. AF instructors require competency as subject matter experts adept in the methodology of instruction. They also require proficiency in evaluating, diagnosing, and critiquing student performance, identifying learning objectives and student difficulties; and prescribing and conducting remedial instruction using both platform and in-flight instruction.

5.5.5.2. Provide thorough preflight briefings, post-flight briefings, and critiques. Instructors comply with requirements of mission outlines, as appropriate, for the type mission being flown.

5.5.5.3. Review each student's training record prior to each training session; observe, document, and report student performance during each training session; provide unbiased constructive feedback to the student regarding their performance during the training period; and accurately document student performance and instructor recommendations in the student's training record.

5.5.5.4. Ensure all required upgrade training items are completed, signed off, and proficiency demonstrated in accordance with AFMAN 11-2KC-10V2 grading criteria before recommending the student for evaluation, or certifying the student as qualified in an event or mission set. **(T-2)**. Instructors should further ensure training, operations sections, and the flight commander (or designated representative) are apprised of the student's status.

5.5.5.5. IPs are responsible at all times for flight conduct and aircraft safety. Should the student's judgment or proficiency at the controls raise a question in the instructor's mind as to the student's ability to safely complete a prescribed maneuver at any time during the flight, the instructor will immediately assume aircraft control. The instructor should then explain and demonstrate proper tactics, techniques, and/or procedures for the maneuver prior to the trainee resuming control of the aircraft. All instructors place special emphasis on procedures for positively identifying emergency conditions before initiating corrective action.

5.6. Flight Examiner Certification. The Flight Examiner Course is designed to teach selected instructors the fundamentals and concepts of evaluating aircrew performance against a variety of aviation performance and knowledge standards. Select evaluator candidates based on experience, proficiency, judgment, flying skill, instructional performance, and technical knowledge. Flight examiner prerequisites are listed below.

5.6.1. Evaluator Upgrade Prerequisites. Sq/CC (or designated representative) will recommend instructors for flight examiner certification. **(T-2)**. Instructors identified for flight examiner certification are required to possess superior knowledge of Air Force training and evaluation policies and procedures, and the ability to administer evaluations according to applicable publications. Prior to evaluator certification, candidates complete an in-unit flight examiner checkout. **Note:** Enlisted aircrew qualifications are separate and distinct from skill level qualification. When AF Form 8 is completed for the applicable flight evaluation, the crewmember is qualified to perform duties assigned for the crewmember 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 (aircrew standardization and flight examiner).

5.6.2. Flight examiner candidates will:

5.6.2.1. Complete unit flight examiner prerequisites as required, and attend the TS flight evaluator course (where available) for their crew position. **(T-3). Note:** Sq/CCs (AFR Sq/CC or Sq/DO) may waive this requirement if the candidate is a previously-qualified flight evaluator in any MAF aircraft.

5.6.2.2. Observe qualified examiners conducting a cross-section of evaluations, to include techniques used to evaluate aircraft systems and flight directive knowledge. **(T-3). Exception:** Optional for previously-qualified AMC examiners.

5.6.2.3. Demonstrate comprehensive knowledge and application of command policies, AFMAN 11-202V1, AFI/AFMAN 11-202V2, AFMAN 11-2KC-10V2, this manual, and MAJCOM supplements. **(T-3). Exception:** Previously-qualified MAF examiners may accomplish via a thorough examiner-led briefing of these items to update their knowledge and understanding.

5.7. Special Qualifications and Certifications: Certain KC-10 aircrew qualifications and certifications are one-time events trained after completion of formal qualification. **Exception:** See [paragraph 2.9.2](#) Special qualifications and certifications may require an evaluation or an AF Form 4324 update. These programs are usually taught at the unit level by Air Force instructors of like specialty.

5.7.1. EMCON Options 3 and 4 Certification Training (CQ11Y & CQ13Y):

5.7.1.1. Sq/CC (AFR Sq/CC or Sq/DO) will certify crewmembers to accomplish EMCON 3 or 4 procedures during formation, rendezvous, and AR on both operational and training sorties. **(T-3).** All members of the crew will be certified or in training under the supervision of a like specialty instructor. **(T-3).** Document certification via AF Form 4324 as EMCON 3-Certified (CQ11Y) and EMCON 4-Certified (CQ13Y). ARMS event identifiers are RV15Y and RV17Y. Accomplishment during Phase IB is creditable for this certification.

5.7.1.2. Training Program. Unit Sq/CC will determine training requirements based on the crewmember's experience and the unit's mission. **(T-3).** Boom operators with less than 200 flying hours shall receive a minimum of one flight with an instructor stressing radio silent procedures before certification. **(T-3).** Units include details of the EMCON Option 3 and 4 programs in local supplement.

5.7.2. Multi-Element Flight (Formation) Lead Certification (CQ19Y):

5.7.2.1. The squadron commander is responsible for developing a formation lead certification training program.

5.7.2.2. Document the certification via AF Form 4324 as CQ19Y and will, at a minimum, follow the prescribed guidance in [paragraph 7.15.3](#) of this manual under CQ19Y certification. **(T-2).**

5.7.3. Instrument Landing System (ILS) Precision Runway Monitoring (PRM) Certification Training (CE09Y).

5.7.3.1. AFMAN 11-202V3 requires aircrews operating aircraft equipped with Traffic Alert Collision Avoidance System (TCAS) to receive training for operations at airports with ILS precision unway monitoring (PRM) approaches. The Sq/CC or designated representative certifies pilots upon completion of one-time training. Document certification via AF Form 4324 as "ILS PRM-Certified". ARMS event identifier is CE09Y, ILS PRM. Before operations at airports with ILS PRM approach capabilities, pilots will complete the following training and certification. **(T-2)**.

5.7.3.2. Training Program. Review ILS PRM requirements according to the *Aeronautical Information Manual*, **Part 5-4-15**, available at https://www.faa.gov/air_traffic/publications/. View FAA video, "ILS PRM Approach Information for Air Carrier Pilots" available for download. Complete appropriate training including viewing of the video at the FAA web site: <http://www.faa.gov/training/testing/training/prm/>. **(T-0)**.

5.7.4. Fighter Contact Certification (CK17Y & CK19Y). Day and Night Receptacle Equipped Fighter Certification is documented on AF Form 4025 and via AF Form 4324. The FTU should make all possible attempts to complete CK17Y/CK19Y training during Phase IB to include utilizing the student's maximum initial qualification training timeline. If CK17Y or CK19Y is not accomplished during Phase IB, clearly state on the AF Form 4025 which certifications were not completed. These certifications may then be accomplished by AF instructors of like specialty during MQT. Do not schedule boom operators to refuel receptacle-equipped fighter type aircraft without an instructor until both CK17Y and CK19Y are completed and certification is documented.

5.7.5. Aircraft Commander Touch-and-Go Landing Certification (CP09Y):

5.7.5.1. Training Program. The squadron commander is responsible for developing a certification program allowing aircraft commanders the opportunity to practice this skill without IP or Sq/CC certified aircraft commander supervision.

5.7.5.2. Document certification via AF Form 4324. ARMS event identifier is CP09Y, Aircraft Commander Touch-and-Go Landing Certification.

5.7.6. Aircraft Commander Supervision of Touch-and-Go Landings (CP05Y).

5.7.6.1. Training Program. Following aircraft commander upgrade training (either formal course or in-unit) accomplish additional in-unit training to demonstrate the aircraft commander's ability to supervise touch-and-go landings. Document the certification via AF Form 4324. ARMS event identifier is CP05Y, Aircraft Commander Supervision of Touch-and-Go Landings.

5.7.6.2. Touch-and-go landings may be performed by current and qualified instructor pilots, Sq/CC certified pilots, as well as any other pilot under the direct supervision of an instructor or aircraft commander certified to supervise under this paragraph.

5.7.6.3. Non-current aircraft commanders will be under the direct supervision of an IP to regain currency in touch-and-go landings. **(T-2)**.

5.7.7. Aircraft Commander Supervision of Receiver Air Refueling Certification (CP07Y). The squadron commander is responsible for developing a certification program which allows aircraft commanders to supervise pilots (that are not receiver air refueling qualified) as they

practice receiver air refueling. The aircraft commander and the other pilot will each be certified for the event. **(T-3)**. Document the certification via AF Form 4324. ARMS event identifier is CP07Y, Aircraft Commander Supervision of Receiver Air Refueling.

5.7.8. Mobility Pilot Development (MPD) Receiver Air Refueling Certification (CP19Y). The Sq/CC (AFR Sq/CC or Sq/DO) is responsible for developing a receiver AR certification program to be completed by MPD pilots prior to attending PCO upgrade. As a minimum, the ability to move safely from the pre-contact position, to contact, and back again shall be demonstrated to an instructor pilot prior to certification. **(T-3)**. Document the certification via AF Form 4324. ARMS event identifier is CP19Y, MPD Receiver Air Refueling Certification.

5.7.9. Aircraft Commander Right Seat Receiver Air Refueling Certification (CK01Y). The squadron commander is responsible for developing a program to certify ACs to accomplish right seat receiver air refueling. This certification is not required for MR certification. Receiver AR training events may be logged from either seat after an individual is certified to accomplish right seat receiver AR. Document the certification via AF Form 4324. ARMS event identifier is CK01Y, Aircraft Commander Right Seat Receiver Air Refueling Certification.

5.7.10. Large Formation Certification (CQ25Y). The squadron commander is responsible for developing a large formation certification training program for all pilots. This certification will include a minimum of one flight flown under supervision of an instructor pilot. **(T-3)**. If instructor manning prevents placing IPs in all aircraft, units may place an IP in one aircraft in the formation. The optimum is the last aircraft so that the IP may monitor all aircraft of the formation. Commanders of deployed units or tanker task force (TTF) commanders may certify TDY crew members. Forward certification paperwork to the crew member's home unit for filing in the member's training folders. Requires pre-coordination with all formation participants and associated AR support. MPD pilots that were previously certified are not required to be re-certified following PCO. Accomplishment during Phase IB is only creditable towards certification if specifically documented on the AF Form 4025. Document the certification via AF Form 4324. ARMS event identifier is CQ25Y, Large Formation Certification.

5.7.11. Phoenix Banner, Silver and Copper Certification (CQ33Y). Sq/CCs (AFR Sq/CC or Sq/DO) identify their most highly experienced crewmembers for entry into certification training. Training focuses on the unique circumstances that differentiate this mission from other mobility missions. Document the certification via AF Form 4324. ARMS event identifier is CQ33Y, Phoenix Banner/Silver/Copper Certification. **(T-2)**. Wings will establish and maintain Phoenix Banner training programs. **(T-2)**. As a minimum, training consists of an instructor-led in-depth review of AFI 11-289, *Phoenix Banner, Silver, and Copper Operations*, discussion of tasking and execution agencies for Phoenix Banner missions, and how the aircrew will interface with these agencies. Furthermore, the program addresses the personnel to coordinate with, in case of diversion or delay, including the Presidential Advance Agent, US Secret Service, and HMX-1 representative. The goal of training is to educate crewmembers on the requirements for these individuals/agencies and illustrate their ability to help accomplish the mission. Following the review, complete an open book examination of AFI 11-289, minimum passing score of 80 percent, corrected to

100 percent. All aircrew members will complete the training program and be certified prior to flying unsupervised on a PHOENIX BANNER, SILVER, or COPPER mission. **(T-2).**

Chapter 6

AIRCREW TRAINING SYSTEM (TS)

6.1. General Requirements. The KC-10 TS is a civilian contractor-provided aircrew training system. The TS contractor provides training courseware and all academic and ATD instruction. The Air Force conducts all flight training and administers all evaluations. The TS contract guarantees trained students meet government standards. Formal TS courses are listed in [Table 6.2](#) and non-formal TS courses are listed in [Table 6.3](#)

6.2. Applicability. As defined in AFMAN 11-202V1.

6.2.1. Purpose. KC-10 TS is a system of academics, ATD sessions, and ground training phases. This system provides qualification, requalification, upgrade, senior staff, differences, and continuation training to attain and maintain appropriate qualification for KC-10 crewmembers and maintenance engine run technicians.

6.2.2. Goal. The goal of the TS program is to optimize aircrew training through the integrated use of academics, ATD, and flight line KC-10 aircraft instruction. The KC-10 TS, by contract, establishes performance requirements in the TS performance work statement (PWS) and system specification.

6.2.3. Responsibilities:

6.2.3.1. TS Contractor. Each TS site provides academic and ATD training for KC-10 crewmember qualification, requalification, upgrade, senior staff, differences, and continuation training programs to meet course objectives.

6.2.3.2. AMC/A3T.

6.2.3.2.1. Provide overall management authority for KC-10 contract training.

6.2.3.2.2. Act as AMC focal point for review of all recommended initiatives directed toward the KC-10 training contract. This includes recommendations for changes submitted by contractor or other Air Force agencies.

6.2.3.2.3. Ensure instruction is of the highest quality through the review of crewmember surveys, instructor/examiner feedback, FTU feedback, and through their own evaluations.

6.2.3.3. AMC AOS Det 1:

6.2.3.3.1. Conduct an annual SIMCERT (semi-annual for level C+ devices) on all ATDs.

6.2.3.3.2. Assist in scheduling unit crewmembers required by the contractor for courseware development in Individual Tryouts (ITO) and SGTO.

6.2.3.4. Air Force-Appointed TS Contracting Officer Representative (COR). CORs are primary focal points and liaisons between the Air Force and contractors at each TS site. CORs are the sole point of contact (POC) for their respective TS. The COR may direct the contractor to perform or stop work only on safety related issues. The administrative contracting officer (ACO) and procurement contracting officer (PCO) have the overall authority to direct contractor start/stops on the TS.

6.2.3.5. Wings and Groups:

6.2.3.5.1. Provide constructive reports and inputs concerning the KC-10 TS program to AMC/A3TK.

6.2.3.5.2. Provide assistance and support with subject matter expertise when requested by AMC/A3T or AMC AOS Det 1.

6.2.3.5.3. Review ETCA website course description and adhere to guidance and procedures concerning requesting, allocating, sub-allocating, and confirming attendance at scheduled formal training courses. Close coordination with the formal school quota manager (AMC/A3TK or A3TF) is imperative to ensure effective utilization of training slots and contractor resources.

6.3. Dedicated Training Time. As defined in AFMAN 11-202V1.

6.3.1. It is imperative that students complete training in a timely and uninterrupted manner. Students will enroll on a full-time basis (AFR students will be available for the entire ground and simulator phases, but do not need, though highly encouraged, to be on a full-time basis for the flight phase) **(T-2)**.

6.3.2. Students will be relieved of duties not directly related to training. **(T-2). Exception:** Supervisory personnel may continue their normal duties as time permits.

6.4. TS Course Prerequisites. TS course prerequisites are listed in [Tables 5.1, paragraph 5.6.1](#), and [Table 6.1](#). Each TS course is designed and based on student prerequisites being met. Prerequisites may include a minimum number of flying hours, squadron operations officer recommendation, and completion of applicable TGs. AETC maintains a list of formal school courses on the Education and Training Course Announcement (ETCA) website.

Table 6.1. Initial Qualification Training Requirements.

From	To	Prerequisites	Tasks and Events Required Before Certification
Unqualified	MP	Previous MWS Aircraft Commander or FAIP/OSA Aircraft Commander; 1000 Total flying hours	Aircraft Commander Initial Qualification (ACIQ) PTX-1 course and Aircraft Commander Qualification Evaluation; mission qualification training; 200 PAA flying hours (see Table 5.1 for ACIQ R&C requirements)
Unqualified	FP	SUPT Graduate	Pilot Initial Qualification (PIQ) course and Pilot Qualification Evaluation; mission qualification training
Unqualified	FBP	Basic Flight Engineer- Undergraduate Flying Training [Career Enlisted	Flight Engineer Basic Prequalification Course (FBP) is prerequisite to FIQ for students with less than 3 years as fixed-wing performance engineer; mission

		Aviator Center of Excellence (CEA CoE)]	qualification Training. All FIQ2 students shall accomplish FBP regardless of prior/previous qualification/experience. (T-2).
Unqualified	FIQ	FBP or 3 years as performance fixed-wing engineer	Flight Engineer Initial Qualification (FIQ) course and Qualification Evaluation; mission qualification training
Unqualified	BBQ	Basic Boom Operator-Undergraduate Flying Training (CEA CoE)	Boom Operator (Basic) Initial Qualification (BBQ) course and Qualification Evaluation; mission qualification Training
Note: Total flying hours 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).			

Table 6.2. KC-10 TS Formal Courses.

Course ID	Title	Student	Training Devices PH-1A	Training Days PH-1A	Notes
KC-10 BBQ	Boom Operator (Basic) Initial Qualification	1	21 BOTs 2 FTDs 6 CLMs	37 days + 2 CRM/TEM	4
KC-10 BRQ	Boom Operator Requalification	1	7 BOTs 1 FTD 3 CLMs	13 days	4
KC-10 BIC	Boom Operator Instructor Course	2	12 BOTs, 2 FTDs, 6 CLMs	18/15 days	1,4
KC-10 FBP	Flight Engineer Basic Prequalification Course	2	1 WST 2 FTDs 1 BOT	14 days	
KC-10 FIQ	Flight Engineer Initial Qualification	1	24 WSTs 30 FTDs	54 days	6
KC-10 FIQ2	Flight Engineer Initial Qualification	2	24 WSTs 30 FTDs	54 days	7
KC-10 FRQ	Flight Engineer Requalification	1	9 WSTs 7 FTDs	24 days	2

KC-10 FIC	Flight Engineer Instructor Course	2	10 WSTs 1 FTD	18/15 days	1
KC-10 PIQ	Pilot Initial Qualification	2	24 WSTs 17 FTDs	54 days	6
KC-10 ACIQ/PTX-1	Aircraft Commander Initial Qualification	2	24 WSTs 17 FTDs	54 days	6
KC-10 PCO	Pilot Check Out Course	2	8 WSTs 2 FTDs	10 days	
KC-10 PRQ/PTX-2	Pilot Requalification	2	9 WSTs 7 FTDs	24 days	
KC-10 IAC	Instructor Aircraft Commander Course	2	10 WSTs 1 FTD	18/15 days	1
KC-10 SSF	Senior Staff Officer Familiarization	2	2 WSTs 1 FTD, 1 BOT	3 days	3
KC-10 SOC	Senior Officer Course	1	5 WSTs 1 FTD	5 days	3,5

Notes:

1. There are two tracks available for instructor upgrade. Track I is for students that have never been Air Force flight instructors (the longer course that includes extra academics) and Track II is for all others. For instructor courses that include the three-day Academic Instructor Course (AIC) portion, if the student was a previously qualified instructor, they need not accomplish this training and will start three days later.
2. KC-10 FRQ requires pilot class KC-10 PRQ to be scheduled at the same time.
3. See **paragraph 2.7** for additional requirements.
4. While planned for one student, this course can accommodate two students by doubling the number of BOT and FTD periods required.
5. The squadron to which the senior officer is attached provides an appropriate pilot seat filler to complement their SOC student.
6. Course is designed for one ACIQ, one PIQ, and one FIQ student or two PIQ students and one FIQ student.
7. All FIQ2 students shall accomplish the FBP course regardless of prior/previous qualification/experience. **(T-2).**

Table 6.3. KC-10 TS Non-Formal Courses.

Course ID	Title	Course Student	Student	Trainin g Devices	Trainin g Days	Notes
KC-10 MEQ	Maintenance Engine Run Qualification	MX Member receiving initial training for KC-10 Engine Ground Operation	2	2 FTDs	1 day	
KC-10 MER	Maintenance Engine Run Refresher	MX Member receiving refresher training for KC-10 Engine Ground Operation	4	2 FTDs	1 day	
KC-10 TEF	Two Engine Ferry Course	Highly experienced OG /Stan Eval Pilots and Flight Engineers	2/ 1	1 WST	2 days	
Course ID	Title	Course Student	Students	Trainin g Devices	Trainin g Days	Notes
KC-10 PFREF	Pilot / Flight Engineer Refresher	Continuation Training for KC-10 Qualified Pilots and Flight Engineers	2/ 1	2 WSTs	2 days	
KC-10 BREF	Boom Operator Refresher	Continuation Training for KC-10 Qualified Boom Operators	1	3 BOTs	2 days	
KC-10 ATT	Additional Training Time (4+00)	KC-10 qualified Pilots and Flight Engineer	2/ 1	1 WST	1 day	
KC-10 CAT II	Category II ILS Training	KC-10 qualified Pilots and Flight Engineers	2/ 1	1 WST	1day	1
KC-10 HAZ	Hazardous Cargo Training	KC-10 qualified Pilots and Boom Operators				2

KC-10 CRM/TEM -IT	Crew Resource Management and Threat and Error Management Initial Training	All KC-10 Crewmembers				3
KC-10 CRM/TEM -RT	Crew Resource Management and Threat and Error Management Recurring Training	All KC-10 Crewmembers				3
KC-10 CRM/TEM -I/ET	Crew Resource Management and Threat and Error Management Instructor/Ex aminer Training	All KC-10 Instructors & Examiners				3
KC-10 ATD-P/FE	Aircrew Training Device Course (P/FE)	KC-10 IP/Evaluators KC-10 IF/Evaluators	3/ 2	2 WSTs 1 FTD	2 days	4
KC-10 ATD-BO	Aircrew Training Device Course (BO)	KC-10 IBO/Evaluators	2	2 BOTs	2 days	4

Notes:

1. This course is archived for future reference/use and are not updated nor maintained by the TS contractor. They can be updated for use following AMC/A3TK notification to the contractor.
2. This training is Computer Based Training.
3. CRM/TEM training is developed in accordance with AFI 11-290, *Cockpit/Crew Resource Management Program* and MAJCOM supplement. Training is included in the requisite Initial Qualification, Instructor Qualification, and Refresher courses.
4. Course designed to teach KC-10 qualified instructors and evaluators to operate devices (WST and FTDs for IPs/IFEs, BOT for IBOs).

6.5. Crew Resource Management/Threat and Error Management (CRM/TEM).

6.5.1. General. The KC-10 TS incorporates CRM/TEM principles during all phases of training including initial qualification, requalification, upgrade, senior staff, differences, and continuation training. **(T-2).**

6.5.2. Objective. Ensure all aircrews maintain proficiency required to safely operate the aircraft and effectively perform the assigned mission. Crewmembers will utilize training devices to enhance training areas that ATDs are particularly well suited to accomplish (e.g., wind shear and microburst training, low visibility approaches, systems knowledge, emergency and abnormal procedures, etc.). **(T-2).**

6.5.3. CRM/TEM Development. CRM/TEM has been designed to train aircrew members to cope with human behavior concerns that potentially affect aircrew performance and safety. Effective pilot monitoring (PM) behaviors and relevant verbalize, verify, and monitor (VVM) skills are also trained. Documented studies of aircraft accidents and additional data suggest that most human behavioral problems observed among aircrews can be grouped into three primary categories: interpersonal communications, situational awareness, and team leadership.

6.5.4. CRM/TEM Program. CRM/TEM is presented on a recurring basis throughout training. An introduction to CRM/TEM is presented during initial qualification training. Refresher training and mission-oriented simulator training (MOST) missions are accomplished during annual simulator proficiency periods. These training periods are dedicated to reviewing and applying CRM/TEM principles, effective PM behaviors, and relevant VVM skills. The KC-10 TS incorporates CRM/TEM principles during all phases of training including initial and continuation training to meet requirements of AFI 11-290 and MAJCOM supplement. Instructors use AMC Form 4031, *CRM/TEM Skills Criteria Training/Evaluation*, as prescribed in AFI 11-290, as supplemented, for CRM/TEM skills training.

6.6. Unsatisfactory Student Progress. If a student's training progress is unsatisfactory, the contractor will notify the student's squadron commander. **(T-2).** Following a review of the student's record, the government (Sq/CC, OSS/OST, AMC AOS Det 1, COR) determines whether to continue or terminate training.

6.6.1. The contractor will provide written feedback to the student's gaining unit commander or training office for students who display substandard performance. **(T-2).**

6.6.2. Remediation Procedures. TS contractor, COR, AMC AOS Det 1, and AMC/A3TK shall receive prompt notification of failed flight evaluations culminating an TS course. **(T-2).** Local procedures will ensure notification is completed within 24 hours of failure for local evaluations and within 24 hours after return to home station for off-station evaluations. **(T-2).** Remediation subsequent to a failed flight evaluation may be the TS contractor's responsibility, Air Force's responsibility, or a joint responsibility, depending on the nature of failure. In every case, close coordination is required to achieve maximum trainee progress. Direct contact with appropriate TS instructor supervisor is encouraged.

6.6.2.1. Remediation Scheduling: When a trainee is required to return for remediation regarding deficient areas, the trainee's unit, appropriate wing or group training office, and TS training manager coordinates training start and completion dates. The TS contractor

contacts the trainee's squadron commander if a trainee is identified during TS contractor's instruction to need remediation or additional training.

6.6.2.1.1. If the TS contractor determines no further amount of remediation or additional instruction will result in the individual attaining required proficiency level, the contractor expeditiously informs the trainee's squadron commander verbally and follow-up in writing. As a minimum, the Air Force TS COR receives a courtesy copy of this documentation. Following a review of the student's record, the government (Sq/CC, OSS/OST, AMC AOS Det 1, and COR) determines whether to continue or terminate training.

6.7. Courseware Changes. Changes to TS courseware may be proposed by any KC-10 crewmember. Complete recommended change on TS contractor's change proposal form and submit to the local COR. Change proposals are sent through wing or group training and TS COR offices to AMC AOS Det 1. AMC AOS Det 1 will coordinate with AMC/A3TK, the TS contractor, and the originator to provide feedback to reflect action taken. Change proposal forms are available from TS contractor site manager at each site.

6.8. Scheduling:

6.8.1. AMC/A3T Responsibilities:

6.8.1.1. Submit the following fiscal year's student training requirements to the contractor no later than 28 February of the current year.

6.8.1.2. Publish and distribute the next fiscal year's annual programmed flying training (PFT) schedule no later than 1 June of the current year.

6.8.1.3. Coordinate changes to the current PFT with the KC-10 program management team and the contractor and then distribute those changes.

6.8.2. Contractor Responsibilities: (These reports are exempt from Office of Management and Budget review in accordance with *Title 44, United States Code, Sections 3501-3521.*)

6.8.2.1. Develop and submit the following year's PFT to AMC/A3TF no later than 15 April of the current year. Notify AMC/A3TF and A3TK prior to 15 April of the current year for resolution if yearly PFT request received by the contractor exceeds contracted PFT baselines from either the overall PFT numbers requested or due to contractor limitations.

6.8.2.2. Provide units with a quarterly pilot, FE, and boom operator (BO) refresher and Additional Training Time (ATT) schedule no later than 45 days prior to the start of the following quarter. The contractor fills any vacancies in each quarter's draft WST and BOT schedule with ATT periods. The goal is to ensure the squadrons have the opportunity to use 100% of available WST time as long as the contracted ATT throughput is not exceeded. The training facility manager and all local KC-10 squadrons establish mutually agreeable scheduling procedures.

6.8.3. OG/CC OPR (AFRC/A3RB) Responsibilities:

6.8.3.1. No later than the last week in August of each year, provide AMC/A3TF with estimated training requirements (initial qualification, requalification, upgrade, senior

staff, ATD refreshers, engine run, and additional simulator training time) of their units for the next fiscal year. **(T-2).**

6.8.3.2. Coordinate with AMC/A3TF when additional training slots are required. **(T-2).** Thoroughly justify additional requirements for training slots. **(T-2).**

6.8.3.3. Provide Wing Formal Training with either a form letter or an annotated class roster indicating the date and names of crewmembers completing their evaluation. **(T-2).**

6.8.4. Unit Responsibilities:

6.8.4.1. No later than the last week in July of each year, provide OG/CC (AFRC/A3RB for AFR units) with the estimated training requirements (initial qualification, requalification, upgrade, ATD refreshers, and additional simulator training time) of their units for the next fiscal year. **(T-2).**

6.8.4.2. When training involves TDY, it is unit funded. In this case, units shall provide fund cite to the applicable military personnel section (MPS). **(T-2).** Formal courses requiring TDY for AFR crewmembers has different funding requirements depending on pay status; refer to AFRC/A3RB.

6.8.4.3. No later than 45 days prior to the class start date, units will inform AMC/A3TF (AFRC/A1KE for AFR units) with class number, name, and a SSN of personnel attending. **(T-2).**

6.8.4.3.1. AMC/A3TF will coordinate with the contractor site managers to compare the AMC/A3TF list to the PFT and ensure every course on the AMC/A3TF list has the same number of students as the PFT. **(T-2).**

6.8.4.3.2. On the first day of class, units will coordinate with contractor instructor to ensure only the students designated on the AMC/A3TF list are trained. **(T-2).** If no student or the wrong student attends the class, the contractor will coordinate with the unit and AMC/A3TF to correct the problem. **(T-2).**

6.8.4.4. Thirty (30) days prior to the start of a new quarter, AMC units will notify AMC/A3TF of all allocations they do not plan to use during that quarter. **(T-2).**

6.8.4.5. AMC/A3TF makes unused allocations available to other units. Normally, AMC allocated slots remain AMC slots until relinquished by AMC/A3TF. Similarly, AFR slots remain AFR slots until relinquished by AFRC/A3RB.

6.8.4.6. Units desiring to trade quotas may do so without AMC headquarters' approval; however, they shall inform AMC/A3TF and all appropriate agencies and units. **(T-2).**

6.8.4.7. Submit requests for additional training quotas directly to AMC/A3TF or AFRC/A3RB (as applicable) with information copies to OG/CC. AMC/A3TF will take required action and inform applicable command formal training (DPPET-AMC) of any new authorized classes.

6.8.4.8. Coordinate aircrew refresher and additional training time scheduling requirements with the applicable training facility. The unit will work with the training facility manager to establish mutually agreeable and effective scheduling procedures. **(T-2).** As a minimum, in accordance with the contract, the contractor provides next quarter's schedule to the units 45 days prior to the start of the quarter. Units will

designate which unit will use each training period and cancel any training that is not needed. **(T-2)**. Units will then return the schedule with squadron assignment no later than 20 days prior to the start of the quarter. **(T-2)**. Each Regular Air Force (RegAF) and AFR associate unit will coordinate closely when scheduling ATD training. **(T-2)**. Training slots that cannot be filled by one unit will be offered to other units in a timely manner. **(T-2)**. Training slots should not go unfilled unless absolutely unavoidable.

6.8.4.9. Ensure the training contractor is kept apprised of scheduling changes or training requirements. The contractor should be provided as much advance notice as practical.

6.8.4.10. When practical, the contractor schedules one ATT per week per RegAF squadron. Schedule these ATTs so they may be used for crewmember evaluations on the third consecutive day following a two-day refresher. Intent is to move RegAF simulator evaluations out of quarterly refresher periods and into ATT simulator periods.

6.8.4.11. When practical, squadrons use these ATT periods to schedule RegAF recurring simulator evaluations. If practical, try to schedule more than one evaluation during the same ATT, (e.g., a pilot and flight engineer who are both in their eligibility window). Units should also strive to maintain crew integrity throughout the three-day period.

6.8.4.12. Squadron schedulers notify the contractor training administrator with the names of the students for refresher ATD periods. The squadron scheduler may replace individuals to meet mission requirements. If the squadron cannot fill the training session with a full crew, the contractor will be notified of the cancellation by 1600 Local, the work day prior to the scheduled training. **(T-2)**. When the squadron does not fill the scheduled training session and does not notify the contractor administrator of a cancellation, this constitutes a "no-show." No-shows are submitted to AMC on the contractor monthly throughput report. AMC AOS Det 1 will notify squadron Director of Operations of any "no-shows" incurred by the squadron. **(T-2)**.

6.8.5. Simulator Tours: See [paragraph 6.13](#)

6.9. Administration:

6.9.1. TS Feedback.

6.9.1.1. Air Force-appointed TS CORs are primary focal points and the liaison agency between the Air Force and the TS contractor. CORs are the only Air Force personnel empowered to evaluate any component of contract compliance. These individuals are entrusted with quality assurance, are the only appropriate office (unit-level) to direct contractor to perform or stop work via the administrative contracting officer's or procurement contracting officer's direction, and are accountable for these actions. Each wing or group commander establishes TS CORs positions and enforce directives, requirements, and procedures established by DoD and MAJCOM directives and publications. **(T-0)**. TS CORs will maintain a current copy of the TS contract(s), designated quality assurance regulations and directives, and quality assurance procedures. **(T-2)**.

6.9.1.2. Operational Evaluation. The TS contractor is required to evaluate the TS program (both formal and non-formal) and its graduates' on-the-job performance as stated in the contract.

6.9.1.3. Feedback includes inputs from graduates, flight commanders (or designated representatives), and examiners. Analysis of actual performance (Air Force evaluation) and trainee critique data help to determine if graduates' on-the-job performance meets the master task listing (MTL) and established performance standards. The importance of this on-the-job performance feedback from graduates, flight commanders, and examiners cannot be overemphasized. This data is vital to establishing a database to identify trends and support revisions to the TS.

6.9.2. TS Data Collection. Collect and report internal and external data and corrective actions taken according to approved operation evaluation plan.

6.10. Training Implementation/Student Expectation:

6.10.1. Crew Member Preparation. The crew member is responsible for adequate preparation prior to reporting for each ATD mission. This includes a review of the mission profiles, pre-course study material, all associated normal, abnormal, and emergency procedures, and applicable aircraft systems. Aircraft Systems Training (GD15Y) will be accomplished by the flight engineer and boom operator during the quarter for those systems topics in accordance with RTM tables. **(T-2).**

6.10.2. Mission Pre-Briefing. Prior to each ATD mission, the instructor briefs crew members on mission objectives, specific training items to be accomplished, scheduled systems and performance training, crew resource management and threat and error management, and any additional area of emphasis. The briefing should include data and information necessary to complete the mission, special procedures, and aircraft systems. The information presented in the briefing should correlate to the tasks to be reinforced in the training device. It should include any changes or adjustments to pre-positioned data and a review of the overall mission and coordination of individual crewmember responsibilities. Prior to executing the scheduled training event, a designated crewmember should conduct a mission briefing covering AFMAN 11-2KC-10V3 briefing items.

6.10.3. Mission Debrief. Following ATD missions, discuss all aspects of the mission. Place emphasis on all observed weak areas. The crew is required to enter maintenance discrepancies in the AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*, prescribed by Technical Order (T.O.) 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policy and Procedures* and debrief the maintenance technician. **(T-2).**

6.11. Browsing Training Products. KC-10 crewmembers and engine-run personnel are encouraged to browse any and all lessons, guides, and material within the TS. This is particularly appropriate to those crewmembers preparing to enter upgrade courses. Use the following guidelines:

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

6.11.2. Coordinate browser requests with the local TS site manager.

6.11.3. Trainees are not to be scheduled to browse lessons for remediation. Remediation will be scheduled by coordinating with the TS contractor. **(T-2).** 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. **(T-2).**

6.12. Aircraft Flights for TS Training Instructors. TS Contractor Personnel Flight Operations. TS training instructors observe in-flight operations according to AFI 11-401 and the KC-10 TS contract. Flights will be accomplished according to the terms and conditions of a current government contract. **(T-2).** TS contract instructors who observe local missions (defined as training missions originating and returning to home station) may observe the mission in Mission Essential Personnel (MEP) status. TS contract instructors are authorized (at the Aircraft Commander's discretion) to occupy the flight deck during any phase of flight. As MEPs, TS contract instructors may observe all portions of KC-10 training missions to include tactical maneuvers, receiver air refueling, tanker air refueling, touch-and-go landings, and full stop taxi back landings. TS contract instructors are not authorized access to flight controls nor shall they occupy a primary crew position. **(T-2).** Units detail local requirements in a supplement to this AFMAN. TS contractor instructors are required to fly a minimum of one time per year, subject to OG/CC concurrence and the TS contract.

6.13. TS Facility Tours.

6.13.1. Wing training offices will coordinate all requests for KC-10 TS facility tours with the contractor as soon as possible, but at least 24 hours in advance to ensure the tour will not impact simulator maintenance or training. **(T-2).** Training will not be affected to meet a tour time and tours requiring whole periods or a significant part of simulator periods will typically not be supported. **(T-2).** The fifteen-minute break during each WST is the most opportune time to accomplish an orientation without adversely affecting training.

6.13.2. Facility tours 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. **(T-2).**

6.13.3. OG/CC ensures an Air Force representative meets, greets, accompanies, and conducts all tours. The contractor is not manned for nor on contract to perform these duties. **(T-2).**

6.14. Aircrew Evaluation:

6.14.1. General. The decision of the Air Force examiner as to the ability of the aircrew member to meet qualification levels as set forth in AFI/AFMAN 11-202V2, shall be final and will not be subject to question by the contractor. **(T-2).** An AF Form 8 will be completed for all initial and recurring simulator evaluations. **(T-2).** Less than qualified performance will be documented as Qualification Level 3. **(T-2).**

6.14.2. Initial Qualification Evaluations. Prior to commencing Phase IB flight training in the KC-10, each crew member will be administered an evaluation (AC03Y or AC33Y as appropriate) in the applicable ATD; evaluation will be used to evaluate the effectiveness of contractor training as well as the capabilities and proficiency of the student. **(T-2).** Each initial qualification (IQ) training device evaluation shall be conducted using either contractor-developed (and Air Force approved) mission scenarios or local unit standardization-evaluation (Stan/Eval) developed scenarios. **(T-2).** **Exception:** Boom operator evaluations will be conducted using contractor-developed Air Force-approved scenarios. **(T-2).** For unit-developed profiles, the examiner will coordinate with the

contractor, at a minimum, one day prior to the evaluation and ensure it is compatible with ATD software. **(T-2). Exception:** If using a standard local profile, coordination will be accomplished prior to the simulator period. **(T-2).** In the event of an unqualified rating (ATD or in-flight), a qualification level 3 AF Form 8 is issued to document the unqualified performance. The contractor is responsible for all retraining (ground-based) in those phases and sub-phases determined to be under the direct control of the contractor. A joint contractor and Air Force review board consisting of crew specialty representatives from group level training, FTU (if an in-flight evaluation), group and/or squadron stan/eval and appropriate contractor personnel will review the aircrew member's performance and determine those phases of the ground based courses that require additional training to meet qualification levels. **(T-2).** The contracting Officer will require contractor to comply with these standards through the applicable terms of the contract

6.14.3. Recurring Evaluations. Recurring ATD evaluations use either contractor-developed refresher profiles, evaluation profiles, or Air Force examiner provided profiles. **Exception:** Boom operators evaluations will be conducted using contractor-developed Air Force-approved scenarios. **(T-2).** For unit-developed profiles, the examiner will coordinate with the contractor, at a minimum, one day prior to the evaluation and ensure it is compatible with ATD software. **(T-2). Exception:** if using a standard local profile, coordination will be accomplished prior to the simulator period. **(T-2).** In the event of an evaluation failure (in-flight or ATD), the appropriate ATD should be used to the maximum extent possible for retraining and rechecks. Usually, additional training and rechecks will be accomplished during a unit's scheduled ATT periods. **(T-3).** In all cases, the unit will coordinate with the training contractor for ATD or instructor availability. **(T-2).** In some cases, it may be necessary to cancel or reschedule training to accomplish the desired corrective actions.

Chapter 7

ARMS IDENTIFIERS AND COURSE DESCRIPTIONS

7.1. Description. ARMS event identifiers are standardized for mobility crewmembers. Event descriptions are listed by function. See [Table 7.1](#)

7.1.1. ARMS event identifiers have been revised and standardized across mobility platforms and grouped to provide improved functionality for the MAF.

7.1.2. In accordance with SecAF guidance, ancillary training CBT events may be completed via other methods by an appropriately-qualified trainer using the approved training outlines downloaded from ADLS. Always update the correct training system of record following completion of any training event.

7.1.3. Records and Documentation. Units will ensure that training accomplishment is appropriately recorded in the Training System of Record (e.g., ADLS, etc.) for the specific training course/event, when tracked for convenience in another system (e.g., GTIMS, ARMS, etc.). **(T-1).** ARMS or GTIMS (or MAJCOM-approved electronic equivalent) may be used to generate a computerized letter of X's; however, ARMS remains the system of record for aircrew training. Course instructors deliver required forms to the appropriate scheduling and training documentation sections within one duty day after teaching a course. **(T-3).** AFI 33-360 or governing functional publication may prescribe alternate/additional forms to document certain training. **Exception:** Small arms training is recorded on AF Form 522, *USAF Ground Weapons Training Data*, and provided to the student upon completion of the training course, as prescribed by AFI 36-2654, *Combat Arms Program*. Students will then log the training with the appropriate scheduling/training/tracking section. **(T-3).**

Table 7.1. ARMS Identifier Groups.

Identifier	Group	Paragraph
AA	Headquarters USAF-Directed Evaluation Events	7.2.
AB	Headquarters USAF-Directed Examination Events	7.3.
AC	General Evaluation Events	7.4.
AH	En Route – High-Level (AH) Events	7.5.
AL	Landing Events	7.6.
AP	Approach Events.	7.7.
AT	Start, Taxi, Takeoff Events	7.8
AV	Aircraft Demonstration Events	7.9.
AZ	Abnormal Procedures Events	7.10.
BR	Aircraft Training Events	7.11.
CE	General Certification Events	7.12.
CK	Tanker Certification Events	7.13.
CP	Aircraft Commander and Mobility Pilot Development Certification Events	7.14.

CQ/CS	Specialized Crew Certification Events	7.15
FF	Flight Surgeon Events	7.16.
GB/GC/GD	General Ground and Computer Based Training Events	7.17.
GE	Expeditionary Training Events	7.18.
GH	Communications Training and Communications Equipment Events	7.19.
GK	Tanker-Specific Training Events	7.20.
GM	Mobility Training Events	7.21.
GS	Senior Officer Course Events	7.22
GX/GY	Simulator Events	7.23.
LL	AFE Training Events	7.24.
MB	Mission/Sortie Events	7.25
PC	Aircraft Communications Equipment Events	7.26.
RA	Refueling Operations Events	7.27.
RF	Refuel Formation Events	7.28.
RT/RU/RV	Refuel, Receiver, and Rendezvous Events	7.29.
SS	Survival, Evasion, Resistance, Escape (SERE)	7.30.
TG	Tactical Ground Training Events	7.31.
TK	Tanker Flight Training Events	7.32
TW	Tactical Aircraft Training Events	7.33.
X	Unit-Defined (X) Events	7.34.

7.2. Headquarters USAF-Directed Evaluation (AA) Events. Academic course numbers, titles, and brief descriptions follow. More detailed course descriptions and information are available in the applicable contractor training course book and the KC-10 training syllabi.

7.2.1. **AA01** – Evaluation, Qualification. Administered in-flight according to AFI/AFMAN 11-202V2 and AFMAN 11-2KC-10V2 as supplemented. Required prior to unsupervised flight and required as a course completion item for qualification, requalification, and upgrade training as directed by this volume.

7.2.2. **AA11** – Evaluation, Instrument. See AFMAN 11-2KC-10V2.

7.2.3. **AA21** – Evaluation, Combined Qualification Instrument. Administered according to AFI/AFMAN 11-202V2 and AFMAN 11-2KC-10V2 as supplemented. Required prior to unsupervised flight and required as a course completion item for qualification, requalification, and upgrade training as directed by this volume.

7.3. Headquarters USAF-Directed Examination (AB) Events. To be credited, applicable examination or evaluation is satisfactorily completed according to AFI/AFMAN 11-202V2.

7.3.1. **AB01Y** – Qualification Open Book Examination.

7.3.2. **AB03Y** – Qualification Closed Book Examination.

7.3.3. **AB05Y** – Aircraft Marshaling Examination.

7.3.3.1. Purpose. Ensures crewmembers understand proper marshaling procedures preventing aircraft taxi incidents.

7.3.3.2. Description. MAJCOMs ensure that all ground and all aircrew personnel who are or could be directly involved with aircraft movement are tested on their knowledge of marshaling signals, airport markings, lights, and signs. Test personnel within 30 days after reporting for duty following permanent change of station (N/A if tested at a formal school within the previous six months), or after their first assignment to duties requiring knowledge of marshaling signals and/or airport markings, lights, and signs. Review of AFMAN 11-218, *Aircraft Operations and Movement on the Ground*, and AFMAN 11-2KC-10V3 taxi restrictions/limitations, followed by an exam which may be incorporated into the crewmembers open book examination according to AFI/AFMAN 11-202V2.

7.3.3.3. OPR: AMC/A3T.

7.3.3.4. Curriculum Development: Squadron.

7.3.4. **AB09Y** – Instrument Refresher Course (IRC) Examination.

7.3.5. **AB31Y** – Flightline Security and Drivers Examination. Ensures crew members understand proper flightline driving and security procedures. Required prior to driving on the flightline. Training includes examination and certification to drive vehicles on the flightline according to local procedures and a briefing by the flightline constable covering the physical layout of restricted areas and owner or user responsibility for security reporting and detection.

7.3.5.1. OPR: AMC/A3A/SFO.

7.3.5.2. Unit is Airfield Management and Flightline Constable.

7.4. General Evaluation (AC) Events.

7.4.1. **AC03Y** – ATD Qualification and Upgrade Evaluation. Administered in ATD (WST or BOT) according to AFI/AFMAN 11-202V2. Required as course completion item for qualification, requalification, and upgrade training in this volume. Does not qualify individual for unsupervised flight. Pilot evaluations includes all in-flight requirements of an AFI/AFMAN 11-202V2 instrument evaluation.

7.4.2. **AC05Y** – Cargo Mission Evaluation. Administered to boom operators according to AFI/AFMAN 11-202V2, and AFMAN 11-2KC-10V2 as supplemented. Required prior to unsupervised cargo loading operations.

7.4.3. **AC19Y** – Instructor Evaluation. Administered in-flight according to AFI/AFMAN 11-202V2 and AFMAN 11-2KC-10V2 as supplemented. Required as a course completion item for instructor upgrade training as directed by this volume.

7.4.4. **AC23Y** – Mission Evaluation.

7.4.5. **AC33Y** – Senior Staff (Basic ATD) Evaluation.

7.4.6. **AC35Y** – Senior Staff (Basic Qualification) Evaluation.

7.4.7. **AC41Y** – Flight Evaluation Folder (FEF) Review.

7.4.8. **AC43Y** – Flight Publications Check.

7.4.9. **AC03Y** – ATD Qualification and Upgrade Evaluation.

7.4.10. **AC05Y** – Cargo Mission Evaluation.

7.5. En Route – High-Level (AH) Events.

7.5.1. **AH01Y** – En Route Descent.

7.5.2. **AH05Y** – General Navigation Procedures Event.

7.5.2.1. Pilots: Includes maintaining in-flight log and chart information, fixing, maintaining track, establishing reliable estimated times of arrival (ETA) and meeting control times.

7.5.2.2. Flight engineers: Student computes required information to utilize Flight Management System (FMS) for in-flight fuel planning. At minimum, this consists of:

7.5.2.2.1. Extract coordinates for new destination from Flight Information Publications (FLIP) documents and navigation charts. Computation errors in computing coordinates cannot exceed 10 nautical miles.

7.5.2.2.2. Compute distance between two points from a navigational chart. Computation errors cannot exceed 20 nautical miles per navigation leg.

7.5.2.2.3. Determine true heading between two points from a navigational chart. Computation errors shall not exceed 5 degrees.

7.5.2.2.4. Extract required information from flight plans for mission planning and in-flight re-planning.

7.5.3. **AH11Y** – Holding.

7.5.4. **AH15Y** – Instrument Departure. For flight engineers to recognize and announce deviations from briefed or published procedures for instrument departures. Should identify and recognize mandatory, minimum, and maximum altitudes. Ensures the FGS is programmed as briefed by the pilot to include changes in air traffic control (ATC) clearances. The student should be able to identify the position of the aircraft during the appropriate departure procedure using available primary navigation aids.

7.5.5. **AH17Y** – Penetration Descent (Published or STAR). Does not include en route descent.

7.5.6. **AH19Y** – Pilot Monitoring Takeoff and Climb Duties. Perform pilot monitoring (PM) takeoff duties according to aircraft flight manual from takeoff through aircraft clean-up and initial climb.

7.5.7. **AH21Y** – Special Departure Procedures (SDP). Contractor administered training during PIQ and ACIQ Phase 1A training that satisfies AFMAN 11-202V3 certification requirement. OPR is AMC/A3TK.

7.5.8. **AH25Y** – Takeoff and Departure. Event includes all activity from completing “Before Takeoff” checklist until completing departure. Student ensures the FGS (flight guidance system) is programmed as briefed in the “Before Takeoff” checklist to include changes in ATC clearances. Notify pilot of any discrepancies or malfunctions. Ensure

required N1 is set prior to 80 knots and monitor engine instruments throughout departure. Engine limitations cannot be exceeded. Monitor all altitudes and headings being flown and ensure there are no deviations from ATC clearances and that sufficient terrain separation is maintained. Demonstrate ability to perform duties as prescribed in the flight manual and other governing directives. Omissions or deviations cannot compromise safety or detract from the overall efficient conduct of the mission.

7.6. Landing (AL) Events.

7.6.1. **AL01Y** – Landing. Used to record total pilot landings with emphasis on hazards and difficulty in accomplishing crosswind landings. If crosswind conditions exist during transition training, place special emphasis in accomplishing maximum number of student landings during this period. If unable to accomplish landings with crosswind conditions, IP briefs student pilots thoroughly and completely on all procedures and techniques of crosswind landings. Multi-log all other landings under this task as applicable.

7.6.2. **AL07Y** – Landing-Full Flaps (50 Degrees).

7.6.3. **AL09Y** – Landing-Full Stop Reverse Thrust.

7.6.4. **AL13Y** – Landing-Left Seat. Any landing (full stop or touch and go) accomplished from the left seat.

7.6.5. **AL15Y** – Landing-Night Unaided. All landings accomplished when logging “primary night time” in accordance with AFI 11-401. Dual log with AL01Y.

7.6.6. **AL19Y** – Landing-Right Seat. Any landing (full stop or touch and go) accomplished from the right seat.

7.6.7. **AL25Y** – Landing-Touch-and-Go.

7.6.7.1. Purpose: Continuation training for pilots.

7.6.7.2. Description: Training for pilots to maintain proficiency landing the aircraft accomplished to a touch-and-go.

7.6.7.3. OPR: AMC/A3T.

7.6.7.4. Training Media: OFT or Aircraft.

7.6.7.5. Additional Information. Student touch-and-go landings are supervised by current and qualified instructor pilots and squadron commander certified aircraft commanders. Dual log with AT59Y, AL01Y, AL15Y, and AL13Y as applicable.

7.7. Approach (AP) Events.

7.7.1. **AP01Y** – Approach and Landing-Full Stop. Event includes all activity from departing cruise altitude for initial penetration or letdown to completing descent, landing, and the “Parking-Engine Shutdown” checklist. Pilot demonstrates the ability to perform duties prescribed by flight manual and other governing directives. Omissions and deviations cannot affect safety of flight. Areas of emphasis are:

7.7.1.1. Computing required landing data specified by flight manual and applicable directives.

7.7.1.2. Using appropriate approach procedures book to verify Approach Briefing matches published procedures.

7.7.1.3. Recognizing and announcing deviations from briefed or published procedures for descent, approach, missed approach, and landing phases of flight. Identifying and recognizing the following altitudes and navigation fixes: initial approach fix (IAF) altitude, final approach fix (FAF) and altitude, decision height (DH), minimum descent altitude (MDA), and missed approach point (MAP) using the appropriate approach plate. Ensuring FGS is programmed as briefed by pilot to include changes in ATC clearances.

7.7.2. **AP03Y** – Approach-area navigation (RNAV), required navigation performance (RNP), or global positioning system (GPS). Fly approach using certified approach from the FMS database.

7.7.3. **AP05Y** – Approach-Backcourse Localizer.

7.7.4. **AP07Y** – Approach-Circling. Dual-log with type approach flown.

7.7.5. **AP15Y** – Approach-Instrument. For flight engineers, the ability to recognize and announce deviations from briefed or published procedures for approach, missed approach, and landing phases of flight. Identifying and recognizing the following altitudes and navigation fixes: initial approach fix (IAF) altitude, final approach fix (FAF) and altitude, decision height (DH), minimum descent altitude (MDA), and missed approach point (MAP) using the appropriate approach plate. Ensure FGS is programmed as briefed by pilot to include changes in ATC clearances. The student should be able to identify the position of the aircraft during the appropriate approach procedure using available primary navigation aids. Dual-log with any instrument approach.

7.7.6. **AP17Y** – Approach-Instrument (Coupled). A published approach flown when the aircraft is controlled through manipulation of the flight guidance system by the pilot flying (PF). Instrument approach events may be dual-logged where appropriate. For instance, AP41Y may be dual-logged with AP21Y, AP27Y, AP45Y, and either AP17Y or AP19Y, whichever is accomplished.

7.7.7. **AP19Y** – Approach-Instrument (Manual). A published approach flown when the aircraft is controlled by actual hands-on flying.

7.7.8. **AP21Y** – Approach-Instrument Landing System (ILS).

7.7.9. **AP27Y** – Approach-Instrument Landing System (ILS) Flight Director Off/Gyro Mode. Accomplish with flight director off and autopilot in any position other than command (CMD).

7.7.10. **AP29Y** – Approach-Missed. To be accomplished without autopilot assistance. Not to be dual-logged with AP31Y.

7.7.11. **AP31Y** – Approach-Missed (Auto). For initial or requalification training, do not accomplish this event in-flight until a thorough briefing has been conducted by an IP on anticipated pitch and power changes, especially at the lighter gross weights.

7.7.12. **AP33Y** – Approach-Non-Precision.

7.7.13. **AP37Y** – Approach-Non-Precision [Non-Directional Beacon (NDB)/ Very High Frequency (VHF) Omnidirectional Range (VOR)/ Tactical Air Navigation (TACAN)/Localizer].

7.7.14. **AP41Y** – Approach-Precision.

7.7.15. **AP45Y** – Approach-Precision Approach Radar (PAR).

7.7.16. **AP49Y** – Approach VOR/TACAN/FMS Procedures. Instrument approach, including problems in course interception, tracking, holding, and fix-to-fix navigation.

7.7.17. **AP51Y** – Approach-Surveillance Radar (ASR).

7.7.18. **AP53Y** – Approach-Visual Flight Rules (VFR) Overhead. See AFTTP 3-3.KC-10 for techniques on the set-up and execution of this event and the common errors associated with the VFR overhead pattern.

7.7.19. **AP57Y** – Approach-Visual Traffic Pattern.

7.8. Start, Taxi, Takeoff (AT) Events.

7.8.1. **AT59Y** – Takeoff. Initial takeoff or takeoff following touch and go landing.

7.8.2. **AT63Y** – Takeoff-Flight Director Off. Accomplish with flight director off. Dual log with AT67Y and AT73Y, as appropriate.

7.8.3. **AT67Y** – Takeoff-Initial. The first takeoff following completion of the “Before Takeoff” or “Full Stop Taxi Back” checklist. **Exception:** Senior staff pilots (colonels and above) who require in-flight supervision and instructor pilots may log an AT67Y after accomplishing an initial takeoff or touch-and-go. Dual log with AT59Y.

7.8.4. **AT69Y** – Takeoff-Left Seat. Designed to track left seat opportunities for all pilots (to include aircraft commanders and higher). Initial takeoff or takeoff following touch and go landing from the left seat.

7.8.5. **AT73Y** – Takeoff-Night. In addition to the requirements of AT67Y, accomplish the takeoff between the hours of official sunset and sunrise. Dual log with AT67Y.

7.8.6. **AT77Y** – Takeoff-Right Seat. Initial takeoff or takeoff following touch and go landing from the right seat.

7.8.7. **AT79Y** – Taxi-Exercise. Accomplish 180-degree taxi turns in minimum turn radius and 90-degree left and right turns using techniques that would be effective on minimum width taxiways (see AFMAN 11-2KC-10V3). Exercise includes thorough instructor pre-briefing to include taxi references, hazards of engine jet blast, foreign object damage (FOD) precautions, proper taxi braking technique, speeds, power requirements, techniques for supervising taxi operations from the right seat, and AFI 11-218 requirements and marshaling procedures. Instructor supervision is required for this event. IPs should accomplish their AT79Y requirements with another IP onboard the aircraft. MPD pilots log an AT79Y when in Phase II training (FPQ) only. Boom operator should become familiar with scanner duties and responsibilities that may be required when taxiing in tight or congested areas.

7.8.8. **AT83Y** – Taxi-Mobility Pilot Development (MPD) Taxi Event. Designed to increase left seat taxi opportunities for MPD pilots. MPD pilots dual log a AT83Y when accomplishing a AT79Y. Event requires left seat taxi to/from parking and/or taxi to/from

runway. Conducted at home stations or familiar locations (familiar locations to be defined by local OG/CC). Event includes pre-briefing by the MPD pilot demonstrating knowledge of taxi references, hazards of engine jet blast, foreign object damage (FOD) precautions, proper taxi braking technique, speeds, power requirements, and marshaling procedures to the aircraft commander.

7.8.9. **AT89Y** – Preflight Proficiency Event. Perform preflight, cockpit preparation, and engine start procedures with no omissions or deviations that would detract from flight and ground safety or overall efficient conduct of the mission. Aircraft limitations are not to be exceeded. Recognize and report all abnormal indications or maintenance discrepancies. Accomplish inspections in sufficient time to allow completion of pre-takeoff duties. Demonstrates a thorough understanding and use of aircraft forms.

7.9. Aircraft Demonstration (AV) Events.

7.9.1. **AV71Y** – Aircraft Alert Start Procedures Demonstration. Event is intended to ensure crew members have thorough knowledge of standby force (alert) procedures as well as understanding the many operational considerations for utilizing these procedures. Training consists of:

7.9.1.1. Mission qualification training (MQT). Individuals and their instructor utilize discussion period in the aircraft to review all aspects of flight manual procedures and various operational considerations. Discussion includes responsibilities of all crew positions. Scramble response is not required.

7.9.1.2. Flight manual procedures. Procedures and techniques used in standby force and launch situations are the same as those used during normal operation of the aircraft except time element may be reduced. Every attempt to conform to normal procedures should be made if time permits without compromising safety of flight. Crew members are to follow current flight manual procedures. Unique aspects of standby force procedures that demand careful consideration are:

7.9.1.2.1. Aircraft acceptance, power off cocking procedures, scramble procedures, and uncocking

7.9.1.2.2. Starting engines with doors disarmed, ladder installed, and crew members responding, if warranted by response timing.

7.9.1.2.3. Checklist procedures

7.9.1.3. Operational considerations. Many scenarios may warrant using Standby Force (Alert) procedures: conventional and contingency, humanitarian assistance, aircraft evacuation, exercises, etc. In any scenario and at any location, the AC ensures the entire crew receives complete guidance from the tasking agency (or as deemed appropriate in the absence of such agency). For local scenarios, review local base and wing operations series publications. At minimum, guidance includes:

7.9.1.3.1. Real or exercise scenario

7.9.1.3.2. Response timing required

7.9.1.3.3. Means of notification

7.9.1.3.4. Means of response

7.9.1.3.5. Aircraft security

7.9.1.3.6. Mission tasking, flight planning, and flight plan

7.9.1.3.7. Performance capabilities, limitations, and takeoff and landing data

7.9.1.3.8. Maintenance status and recurring inspections

7.9.2. **AV73Y** – Demonstrations, Airwork/In-Flight. These exercises and demonstrations are intended to acquaint flight crews with handling properties of the aircraft under normal and abnormal conditions. See AFMAN 11-2KC-10V3 and AFTTP 3-3.KC-10 for guidance on in-flight maneuvers. Accomplish abnormal configuration approaches only in the simulator.

7.9.3. **AV75Y** – Landing Attitude Demo. The purpose of this in flight exercise is to establish and maintain the landing attitude long enough to observe all visual cues so that consistent, correct landing attitude can be learned and to demonstrate the flying characteristics of the KC-10 while in the flare. Follow guidance in AFTTP 3-3 KC-10.

7.9.4. **AV79Y** – Steep Turns Demonstration. Aircrews may use up to 45-degrees bank angle when accomplishing this event. Complete the event in Level C+ certified ATD or aircraft. See AFTTP 3-1.KC-10/KC-135, *Tactical Employment*, for tactical application of this event against air-to-air threats. See AFTTP 3-3.KC-10 for techniques on the purpose, set-up, execution, and common errors associated with this event.

7.10. Abnormal Procedures (AZ) Events.

7.10.1. **AZ01Y** – Approach and Go-Around (Simulated Engine Out) (Sim Only).

7.10.2. **AZ07Y** – Approach and Landing (Simulated Engine Out). (Sim Only).

7.10.3. **AZ19Y** – Rejected/Aborted Takeoff. (Sim Only).

7.10.4. **AZ21Y** – Simulated Engine Failure-Continued Takeoff. (Sim Only).

7.10.5. **AZ23Y** – Simulated Second Engine Failure (Final Approach). (Sim Only).

7.10.6. **AZ25Y** – Simulated Single-Engine Operation. (Sim Only).

7.10.7. **AZ27Y** – Stall Recognition and Recovery Training. Accomplish this event in simulator only.

7.10.8. **AZ31Y** – Two-Engine Ferry Event. Certification training consists of the contractor course and reviewing the following items:

7.10.8.1. Command guidance on two-engine ferry operations (AFMAN 11-2KC-10V3)

7.10.8.2. Mission planning

7.10.8.3. Coordination of overflight

7.10.8.4. Aircraft preparation for ferry flight

7.10.8.5. T.O. 1C-10(K)A-1-4, *Two-Engine Ferry Operations*

7.11. Aircraft Training (BR) Events.

7.11.1. **BR09Y** – Autopilot-off (Cruise) Training. Accomplish any time during flight for a minimum of 15 minutes with autopilot disengaged. Do not credit during takeoff, departure, approach, or transition phase.

7.11.2. **BR11Y** – Briefing and Control of Passengers. Event ensures boom operators are trained to properly load and care for passengers in-flight, ensure passengers are properly documented, and ensures boom operators are:

7.11.2.1. Able to brief, assist, and safely evacuate passengers

7.11.2.2. Able to handle in-flight emergencies and problems concerning passengers (rapid decompression, airsickness, heart attack, etc.)

7.11.2.3. Familiar with the operation of aircraft emergency equipment to include:

7.11.2.3.1. Fire extinguishers

7.11.2.3.2. Fire protection equipment

7.11.2.3.3. Normal and emergency oxygen equipment

7.11.2.3.4. Signaling devices

7.11.2.3.5. Overwater emergency equipment

7.11.2.4. Emergency egress equipment (ropes and slide rafts). Areas include applicable flight manual and directive restrictions.

7.11.3. **BR13Y** – Checklist Procedures and Use Training. Accomplish all checklists according to governing TOs.

7.11.4. **BR15Y** – Climb Training. Event includes all activity from completing departure until level-off or stabilized cruise. Student demonstrates the ability to perform duties prescribed by flight manual and other governing directives. Omissions or deviations cannot compromise safety or detract from overall efficient conduct of the mission.

7.11.5. **BR19Y** – Crew Coordination Training. Instruct each crew member in techniques and procedures for close coordination with other crew positions according to flight manual and applicable instructions. Emphasize crew coordination during mission planning, preflight, and throughout each flight. Each crew member comprehends the need for close crew coordination.

7.11.5.1. ACs demonstrate ability to command crew in effective and efficient manner while performing their own duties. Pilots accomplish duties in accordance with the flight manual, assist AC as directed, and take command of crew in the AC's absence.

7.11.5.2. Flight engineer initial qualification and requalification include all phases of operation during which two or more crew members coordinate information or actions. Student coordinates effectively with other crew members and supporting agencies during all phases of the mission as required by flight manual, mission requirements, or governing directives incurring no more than minor delays, misunderstandings, or confusion. Student actions should not affect overall efficient conduct of the mission. Areas of emphasis are:

- 7.11.5.2.1. Coordination with boom operator during aircraft preflight
- 7.11.5.2.2. Coordination with AC and support personnel to ensure aircraft is MR by briefed engine start time
- 7.11.5.2.3. Coordination with boom operator before flight concerning:
 - 7.11.5.2.3.1. Zone loading restrictions (cargo missions only)
 - 7.11.5.2.3.2. Fuel load distribution (identify fuel location for takeoff and ballast fuel requirements for cargo loading or unloading)
 - 7.11.5.2.3.3. Aircraft zero fuel weight and zero fuel CG
- 7.11.5.2.4. Coordination with boom operator on aircraft emergencies and abnormals
- 7.11.5.2.5. Coordination between student and crew during AR
- 7.11.5.3. Boom operator initial qualification and requalification. Includes all phases of operations during which two or more crew members coordinate information or actions. Student coordinates effectively with other crew members and supporting agencies during all phases of the mission as required by flight manual, mission requirements, or governing directives, incurring no more than minor delays, misunderstandings, or confusion. Student's actions should not affect overall efficient conduct of the mission. Areas of emphasis are:
 - 7.11.5.3.1. Coordination with the flight engineer during all phases of the mission that affect aircraft CG.
 - 7.11.5.3.2. Coordination with other crew members concerning aircraft emergencies or abnormals.
 - 7.11.5.3.3. Coordination with support agencies to ensure orderly flow during cargo operations.
 - 7.11.5.3.4. Coordination with other mission boom operators to ensure they work together as team to complete all phases of each mission.
 - 7.11.5.3.5. Coordination with and brief AC concerning hazardous cargo (proficiency in MQT).
- 7.11.6. **BR21Y** – Cruise Training. Event includes all activity not specifically covered in other areas of flight. Student demonstrates proficiency in the following:
 - 7.11.6.1. Accomplish procedures required by flight manual, checklist, and applicable directives with no omissions or deviations that would detract from overall efficient conduct of the mission.
 - 7.11.6.2. Completed and update In-flight data logs (structural assessment, engine monitoring, and flight plan and fuel log) according to pertinent directives. Errors or omissions cannot detract from accuracy and effectiveness of the log.
 - 7.11.6.3. For in-flight fuel re-planning, student effectively utilizes general navigation skills (AH05Y), required FLIPs (or navigational charts if required), flight plan and fuel log, FMS (BR25Y), and performance manual to accomplish actual or simulated in-flight re-planning of fuel requirements due to mission changes. Student effectively coordinates

with crew to accurately assess the situation for re-planning fuel requirements. Students complete these tasks in sufficient time to prevent delays or unsuccessful completion of the mission. Fuel computation error cannot exceed tolerances in AFMAN 11-2KC-10V3. Instructor emphasizes the importance of being prepared for mission changes and in-flight re-planning at any time.

7.11.7. **BR23Y** – Equipment Operation Training. Demonstrate proficiency in operating all applicable aircraft systems and equipment as prescribed by flight manual. Includes individual systems knowledge, general panel operation, analysis of equipment malfunctions, and use of proper corrective actions. This area does not include emergency or abnormal procedures.

7.11.8. **BR25Y** – Flight Management System (FMS) Operations Training. Demonstrate proficiency in FMS knowledge and procedures. Areas of emphasis are:

7.11.8.1. Loading database, flight plans, refueling patterns, approaches and waypoints

7.11.8.2. Performing routine functions throughout the sortie

7.11.8.3. Recognizing and documenting malfunctions and malfunction codes

7.11.9. **BR27Y** – Fuel Management and Conservation Training. Student flight engineers accomplish fuel management, including transfer when applicable, with no more than minor deviations from procedures outlined by flight manual. T.O. 1C-10(K)-5 limitations cannot be exceeded. Pilots and FE students demonstrate knowledge and practical application of fuel conservation techniques and procedures addressed in flight manual, performance manual, local operating instructions, and applicable directives.

7.11.10. **BR29Y** – Ground Static Cargo Load. Event may be credited when loading cargo aboard either the CLT or an actual aircraft using any OSS/OST-developed or AMC AOS Det 1-approved load. No more than two cargo-qualified boom operators may credit a single loading event. Both must perform associated loading duties. **Exception:** An IB or EB performing instructor/evaluator duties may credit the event. **Note:** OSS/OST schedules all static load requirements, and coordinates with applicable support agencies for static cargo load operations. **Note:** Crew rest is required for all boom operators accomplishing this event in accordance with AFMAN 11-202V3.

7.11.10.1. Static Load Requirements: OSS/OST establishes a minimum of 3 separate and distinct static loads consisting of the following items:

7.11.10.1.1. Minimum 6 pallets of cargo

7.11.10.1.2. 1-2 Hazardous items (simulated with applicable container labels or markings)

7.11.10.1.3. Netted (1 pallet with side net/top net and 1 pallet with side net/top straps)

7.11.10.1.4. 1 High profile pallet greater than 85 inches

7.11.10.1.5. 1 Heavy pallet greater than 6.5K lbs

7.11.10.1.6. 2 pallets with axles (for restraint/adjacent axle solutions) for 1 of the 3 load plans

- 7.11.10.1.7. TO 1C-10(K)A-9, *Cargo Loading Manual*, section 5 item for 1 of the 3 load plans
- 7.11.10.1.8. Accomplish static load operations as if cargo were to be airlifted with all required cargo documentation (i.e., load plans, manifests, hazardous certificates, joint inspections, etc.). Complete all procedures through TO 1C-10(K)A-1, boom operator's "Before Takeoff" checklist and final maximum fuel calculations to credit this event for currency.
- 7.11.10.2. Utilize the KC-10 CLT for initial/requalification training to the maximum extent possible.
- 7.11.10.3. Continuation Training. Boom Operators may dual log BR29Y and RA07Y for currency when all static load requirements have been met.
- 7.11.10.4. Additional Information: Cargo Load Trainer (CLT)
 - 7.11.10.4.1. Static loads are accomplished on the CLT with contractor provided and AMC AOS Det 1-approved load plans along with contractor supported aerial port load teams.
 - 7.11.10.4.2. Units provide their own instructors and schedule training through the Travis KC-10 Training System scheduler when utilizing Government Use Time (GUT).
 - 7.11.10.4.3. Non-contract instructors and students review CLT procedures and emergency procedures prior to the start of training.
 - 7.11.10.4.4. KC-10 Training System Loads are planned and set as scheduled for the period.
 - 7.11.10.4.5. All other limitations addressed in [paragraph 7.11.10](#) apply.
- 7.11.11. **BR31Y** – Instructor and Evaluator Duties and Techniques Training.
 - 7.11.11.1. Instructor upgrade. At minimum, instructor-candidate receive training in responsibilities for quality assurance of contractor-administered training programs. Instructor-candidates demonstrate proficiency in all of the following areas:
 - 7.11.11.1.1. Student briefing
 - 7.11.11.1.2. Student critique
 - 7.11.11.1.3. Training documentation
 - 7.11.11.1.4. Effectively conveying knowledge of aircraft operation and systems to their student
 - 7.11.11.1.5. Knowledge and use of the KC-10 training syllabi
 - 7.11.11.1.6. Knowledge and use of this manual and AFMAN 11-2KC-10V3
 - 7.11.11.1.7. Teaching ground training courses
 - 7.11.11.2. Examiner upgrade. Examiner candidate receives training in the following areas:
 - 7.11.11.2.1. Examiner's responsibilities in quality assurance of contractor training

7.11.11.2.2. Administrative functions

7.11.11.2.3. Review of AFMAN 11-202V1, AFI/AFMAN 11-202V2, and AFI/AFMAN 11-2KC-10 (applicable volumes)

7.11.12. **BR39Y** – Manual Throttle Operation Training. Manually compute takeoff power from performance manual, manually set this in the "Max Limit window" on the N1 gauges, and demonstrate manually setting engine power (TS OFF) during takeoff and climb. Throttles should not be adjusted except to prevent exceeding engine limitations. CL thrust should be recomputed every 5,000 feet pressure altitude for lapse rate temperature deviation.

7.11.13. **BR35Y** – Main Cabin Door Procedures (Departure/Arrival) Training. This event includes door operation (for all crew positions), and installation and removal of portable ladder and briefing slide exit procedures (for boom operators). Proficiency is required in arming and disarming main cabin doors, to include position of girt bar, coordination with flight crew, and safety considerations while operating doors.

7.11.14. **BR41Y** – Mission Planning and Briefing Training. For initial qualification, requalification, and upgrade training, accomplish all applicable phases of mission planning as prescribed by governing directives. Place emphasis on proficiency with the computer flight planning software, briefing procedures and techniques and ability to react to dynamic changes. Activity requires instructor supervision from like specialty for each training sortie. For instructor upgrade, student briefs all phases of flight and maneuvers to be performed with emphasis on correct techniques, procedures, and safety. Pilot students should be expected to prepare a seat/activity plan to maximize student training.

7.11.15. **BR43Y** – Performance Knowledge and Use Training.

7.11.15.1. Aircraft Commander and pilot initial qualification and requalification. Student verifies accuracy of takeoff data computed by FE according to flight manual.

7.11.15.2. FE initial qualification and requalification. Student correctly applies performance manual procedures and charts when computing data for aircraft operations to not exceed tolerances in AFMAN 11-2KC-10V2. Use sample problems to determine student proficiency in performance areas not normally encountered during local training missions. Cover the following areas at minimum:

7.11.15.2.1. Obstacle limited takeoff [maximum allowable cabin load (ACL)]

7.11.15.2.2. Screen height

7.11.15.2.3. Ground Minimum Control Speed (VMCG) limited takeoff (maximum ACL)

7.11.15.2.4. Takeoff with contaminated runway [runway surface condition (RSC), maximum ACL]

7.11.15.2.5. Windshear takeoff

7.11.15.2.6. Derated takeoff (runway condition reading, RCR)

7.11.15.2.7. Takeoff data for normal, abnormal configurations

7.11.15.2.8. Special Departure Procedures (SDP)

7.11.15.2.9. Minimum Climb Gradient Computation of speeds for minimum maneuvering, holding or orbit, minimum AR speed, receiver overrun speed, and endurance or maximum endurance

7.11.15.2.10. Landing data for normal, abnormal configurations (light, medium, and heavy gross weights), and dual hydraulic failures

7.11.15.2.11. Driftdown

7.11.16. **BR45Y** – Post-flight Training. Event covers all activity from completing the Parking Checklist through maintenance debriefing. Student demonstrates the ability to:

7.11.16.1. Accomplish all procedures required by flight manual and applicable directives with no omission or deviation that detracts from overall efficient conduct of the mission.

7.11.16.2. Complete all forms and logs, including AFTO Form 781A, *Maintenance Discrepancy and Work Document* and AFTO Form 781H, *Aerospace Vehicle Flight Status and Maintenance*, both prescribed by T.O. 00-20-1, and required maintenance debrief forms. Accomplish forms with no more than minor omissions or errors that did not affect accuracy and effectiveness of forms. Ensure AFTO Form 781A entries contain sufficient data (to include in-flight troubleshooting) to facilitate maintenance troubleshooting the write-up.

7.11.16.3. Accomplish all post-mission duties if maintenance support is not available (GD13Y Aircraft Servicing Training).

7.11.17. **BR47Y** – Pre Takeoff Training. Pre-takeoff applies from aircrew assembly time through the “Before Takeoff” checklist. Student performs pre-takeoff duties prescribed by flight manual and other governing directives. Accomplish procedures required by flight manuals, checklist, and applicable directives with no omission or deviation that would detract from overall efficient conduct of the mission. Student demonstrates effective coordination with their crew and support personnel to ensure aircraft is MR by briefed engine start time. **Note:** Grade preflight proficiency (BR05Y) separately.

7.11.18. **BR49Y** - Preflight Training. Student demonstrates the ability to perform preflight, cockpit preparation, and engine start procedures with no omissions or deviations that would detract from flight and ground safety or overall efficient conduct of the mission. Aircraft limitations are not be exceeded. Student recognizes and reports all abnormal indications or maintenance discrepancies. Accomplish inspections in sufficient time to allow completion of pre-takeoff duties. Demonstrates a thorough understanding and use of aircraft forms.

7.12. General Certification (CE) Events.

7.12.1. **CE09Y** – ILS PRM Certification.

7.12.1.1. Purpose: Special certification required for pilots operating at airports with ILS Precision Runway Monitoring (PRM) approach capability.

7.12.1.2. Description: AFMAN 11-202V3 requires aircrews operating aircraft equipped with TCAS to receive training and be certified prior to operating at ILS PRM-capable airports. Training should be accomplished at the FTU to the maximum extent possible. When training is not accomplished at the FTU, it may be accomplished in-unit according

to [paragraph 7.12.1.6](#) and the Sq/CC or designated representative certifies the pilot via electronic training record (i.e., GTIMS) or an AF Form 4324 as "ILS PRM-Certified".

7.12.1.3. OPR: AMC/A3V.

7.12.1.4. Training Media: Self-study of FAA-designated CBT and training materials.

7.12.1.5. Instructor: Required to sign-off training accomplishment via GTIMS or AF Form 4324.

7.12.1.6. Additional Information: Training program consists of a review of ILS PRM requirements defined in the *Aeronautical Information Manual*, [Part 5-4-15](#) and viewing the FAA video, "*ILS PRM Approach Information for Air Carrier Pilots*" (all training resources are available for download on the FAA's website http://www.faa.gov/training_testing/training/prm/).

7.13. Tanker Certification (CK) Events.

7.13.1. **CK01Y** – Aircraft Commander Right Seat Receiver Air Refueling Certification.

7.13.2. **CK17Y** – Receptacle Equipped Fighters (Day) Certification. Perform day boom air refueling contact training under instructor supervision with receptacle equipped fighters. CK17Y is not to be accomplished in the BOT. CK17Y training may be accomplished upon proficiency in RA19Y. Demonstrate proficiency in CK17Y activity prior to progressing to CK19Y. Dual log with RA11Y for continuation training.

7.13.3. **CK19Y** – Receptacle Equipped Fighters (Night) Certification. Perform night boom air refueling contact training under instructor supervision with receptacle equipped fighters. Contacts require the aid of external air refueling lighting. CK19Y is not to be accomplished in the BOT. CK19Y training may be accomplished upon proficiency in CK17Y and RA13Y. Demonstrate CK17Y and CK19Y to proficiency for certification. Dual log with RA11Y for continuation training.

7.14. Aircraft Commander and Mobility Pilot Development Certification (CP) Events.

7.14.1. **CP05Y** – Aircraft Commander Supervision of Touch-and-Go Landings Certification.

7.14.2. **CP07Y** – Aircraft Commander Supervision of Receiver Air Refueling Certification.

7.14.3. **CP09Y** – Aircraft Commander Touch-and-Go Landing Certification.

7.14.4. **CP11Y** – Global Reach Aircraft Commander Course (GRACC) Certification.

7.14.4.1. Purpose. Familiarize aircraft commander candidates with Headquarters AMC Staff functions and global mission management activities in support of AMC's worldwide mobility mission sets.

7.14.4.2. Description. Attendance is mandatory for AMC pilots and highly-encouraged for all others during upgrade and prior to certification as an aircraft commander. **(T-2)**. This event is an essential familiarization with the operational command and control structure, staff functions, and mission management oversight resident at the headquarters level. The course consists of a series of staff-level briefings and face-to-face interaction with the headquarters-level staff to provide each pilot with knowledge and tools they will need as they execute their worldwide mission. Attendees are also provided a

familiarization tour of certain headquarters facilities relating to HQ AMC, HQ 18 Air Force, 618 AOC (TACC), and HQ USTRANSCOM.

7.14.4.3. OPR: AMC/A3T.

7.14.4.4. Training Media. In-person attendance at Headquarters AMC, Scott AFB, IL.

7.14.4.5. Instructor. Headquarters-Level Staff Officer.

7.14.4.6. Additional Information. GRACC is transferable between all mobility weapon systems. If unable to complete CP11Y prior to AC certification, AMC units may schedule attendance up to 90 days post-certification with no special provisions required. Attendance beyond 90 days post-certification requires OG/CC approval. See [paragraph 1.17.2](#) for scheduling details. Further course details are available at: https://cs2.eis.af.mil/sites/app10-etca/SitePages/ETCA_BCI_CourseDetail_lt1K.aspx?BCIListID=1250.

7.14.5. **CP15Y** – Mobility Pilot Development (MPD) Phase I Certification.

7.14.6. **CP17Y** – Mobility Pilot Development (MPD) Phase II Certification.

7.14.7. **CP19Y** – Mobility Pilot Development (MPD) Receiver Air Refueling Certification.

7.15. Specialized Crew Certification (CQ and CS) Events.

7.15.1. **CQ15Y** – Flight Evaluator Certification.

7.15.2. **CQ18Y** – FP Left Seat Certification. FPs may be certified after successful completion of an AFI/AFMAN 11-202V2 evaluation in the left seat. FPs are considered right-seat only qualified unless they meet this requirement and hold the CQ18Y certification (see [Table 1.3](#) for exceptions).

7.15.3. **CQ19Y** – Multi-Element Flight (Formation) Lead Certification. Program intent is to certify aircraft commanders who possess significant experience in flying all aspects of unit formation missions and are specifically qualified to lead formations. Program should include the following items:

7.15.3.1. Minimum of four hours of self-study on formation procedures in AFMAN 11-2KC-10V3, North Atlantic Treaty Organization (NATO) Allied Tactical Publication (ATP) 3.3.4.2, *Air to Air Refueling*, and United States Standards Related Document (SRD), as well as additional study materials provided by the FTU (which may include: standardized techniques, safety reports, recent flight crew information files (FCIF) related to formation, cross-flow information obtained from other tanker and receiver units, and materials provided by MAJCOM headquarters).

7.15.3.2. Closed-book examination administered by training section.

7.15.3.3. Minimum of three formation flights (two as lead) under supervision of an IP. Plan at least one formation flight as a large formation (three or more aircraft). To the maximum extent possible, training should include tanker operations with heavy receivers and multiple fighter-type receivers and formation as receiver lead (where applicable). In addition, demonstrate instrument meteorological conditions (IMC) and visual meteorological conditions (VMC) wing-to-lead position change procedures. IMC position change may be accomplished in the WST using existing tanker models.

7.15.3.4. Certification in writing by the squadron commander. Phase IB formation training is creditable for MQT formation lead certification if specifically mentioned on the final AF Form 4025. Lack of formation lead certification does not preclude swapping positions on a two-ship training mission for the purpose of conducting receiver AR training. Formation lead certification is required for lead when two or more large (non-fighter) aircraft fly in formation during phases of flight other than refueling operations.

7.15.4. CQ25Y – Large Formation Certification.

7.15.5. CQ33Y – Phoenix Banner/Silver/Copper Certification. Aircrew members completes required training and is certified prior to flying unsupervised on a Phoenix Banner, Silver, or Copper mission. Sq/CCs identify their most highly qualified crewmembers for entry into certification training. Training focuses on the unique circumstances that differentiate this mission from other mobility missions. Document the certification via AF Form 4324. ARMS event identifier is CQ33Y, Phoenix Banner/Silver/Copper Certification.

7.15.5.1. As a minimum, the Phoenix Banner training program consists of an in-depth review of AFI 11-289 discussion of tasking and execution agencies for Phoenix Banner missions, and how the aircrew will interface with these agencies. Furthermore, the program addresses the personnel to coordinate with, in case of diversion or delay, including the presidential Advance Agent, US Secret Service, and HMX-1 representative.

7.15.5.2. The goal of training is to educate crewmembers on the requirements for these individuals/agencies and illustrate their ability to help accomplish the mission. Following the review, an open book examination of AFI 11-289, minimum passing score of 80 percent, corrected to 100 percent.

7.15.6. CQ53Y – Two-Engine Ferry Certification. Accomplish at direction of AMC/A3T/A3V.

7.16. Flight Surgeon (FF) Events: Defined in AFMAN 11-202V1.

7.17. General Ground Training and Computer Based Training (GB, GC, and GD) Events.

7.17.1. GC33Y – Crewmember Anti-Hijacking CBT.

7.17.1.1. Purpose: To provide aircrews with training on US Air Force policy and guidance on preventing and resisting aircraft piracy (hijacking).

7.17.1.2. Description: Course provides scenario-based training of anti-hijacking theory, guidance, procedures, and scenarios for crewmembers who are authorized by their commander to arm for anti-hijacking purposes.

7.17.1.3. OPR: AMC/A3T.

7.17.1.4. Training Media: CBT on ADLS via AMC Gateway, classroom session, or participation in a hijack prevention exercise.

7.17.1.5. Instructor: Unit-designated instructor or SFS instructor for classroom training. No instructor required for CBT or exercise participants.

7.17.1.6. Additional Information: Complete hijack prevention training at least annually (*not to exceed 365 days from previous date accomplished*). **(T-3). Exception:** Operations Group Commanders may waive this requirement on a case-by-case basis not

to exceed 24 months from previous date accomplished. **Note:** Computer based training, classroom training, or active participation in a hijack prevention exercise satisfies this requirement.

7.17.2. **GC49Y** – Sexual Assault Prevention and Response (SAPR)/Suicide Prevention Training (Annual Green Dot).

7.17.2.1. Purpose: Provide recurring Total Force Awareness Training (TFAT) to all Air Force members related to SAPR and suicide prevention.

7.17.2.2. Description: Formalized training course that offers a comprehensive multi-faceted approach to preserving our Air Force heritage by utilizing awareness and prevention education, recognizing and presenting effective victim advocacy, clarifying reporting options and the response process, promoting societal change through individual and community collaboration and methods for recognizing potential indicators and accessing available resources to combat suicide in the force. Green Dot also includes resilience and suicide prevention training in compliance with AFI 90-5001, *Integrated Resilience*.

7.17.2.3. OPR: Installation Sexual Assault Response Coordinator (SARC).

7.17.2.4. Training Media: CBT or in-person briefing (determined at the installation level).

7.17.2.5. Instructor: N/A for CBT. SARC-trained instructor for in-person briefing.

7.17.2.6. Additional Information: Annual requirement per AFI 90-6001, *Sexual Assault Prevention and Response (SAPR) Program* and AFI 90-5001. All personnel are required to be current in annual training prior to and throughout the duration of a deployment. **Note:** ARMS is not the training system of record for this training, but may be used for tracking purposes in addition to the training system of record. **(T-2)**.

7.17.3. **GC51Y** – Sexual Assault Prevention and Response (SAPR)/Suicide Prevention Post-Deployment Training.

7.17.3.1. Purpose: Provide a focused “Return and Reunion” briefing for all personnel following a deployment.

7.17.3.2. Description: The SARC conducts post-deployment SAPR reintegration training within 30 days of members returning from a deployment.

7.17.3.3. OPR: Installation Sexual Assault Response Coordinator (SARC).

7.17.3.4. Training Media: In-person briefing (determined at the installation level).

7.17.3.5. Instructor: SARC-trained instructor.

7.17.3.6. Additional Information: Does not meet requirements for annual training. This is a post-deployment requirement per AFI 90-6001. **Note:** ADLS is the training system of record for this course. ARMS tracking is authorized in addition to ADLS, but is not a substitute for the ADLS tracking requirement.

7.17.4. **GD01Y** – Additional Training Time (ATT). Additional WST, FTD, and BOT training time used for other than quarterly refresher requirements (i.e., airfield qualification training, pilot proficiency activity, microburst training, aircrew evaluations). ATT training

time does not include pre-briefing or post-mission debriefing time. Specific training accomplished should be annotated on a MAR or Dot sheet.

7.17.5. GD02Y – ADS-B/Mode 5 Ground Training.

7.17.5.1. Purpose: Ground training session to teach pilots the fundamentals of automatic dependent surveillance-broadcast (ADS-B) and identification friend or foe (IFF) Mode 5 operations and procedures.

7.17.5.2. Description: ADS-B equipment determines an aircraft's position based on satellite navigation and periodically broadcasts details to enable tracking by both ground stations and other suitably equipped aircraft. Mode 5 is a military component of IFF that provides encrypted secure Mode S and ADS-B positioning to receiver stations. This event is a ground training session with an instructor (or CBT where developed) that provides the trainee with information on ADS-B and IFF Mode 5 background, equipment components, equipment operation, operational and airspace requirements, system limitations, procedures and exemptions, key loading, and tactical considerations.

7.17.5.3. OPR: AMC/A3T

7.17.5.4. Training Media: In-person training (one-on-one or group sessions), video, and/or CBT.

7.17.5.5. Instructor: TS contractor

7.17.5.6. Additional Information: Training may be incorporated into initial and/or periodic refresher training sessions provided by TS contractors.

7.17.6. GD03Y – AFRC Associate Program Orientation Indoctrination. Course of instruction that includes concepts, policies, techniques, operating procedures, working relationships and other appropriate information to ensure both RegAF and AFRC associate personnel thoroughly understand the AFRC Associate Program. Instruction is locally developed by host wing and associate unit using applicable instructions and documents.

7.17.7. GD05Y – AIR Card® User Training.

7.17.7.1. Purpose. Ensure the AIR Card® primary and alternate agency program coordinators and users have a detailed knowledge and understanding of policies, guidance and procedures related to the off-station procurement of aviation fuel and ground services, and understand the consequences of inappropriate actions.

7.17.7.2. Description. Complete initial AIR Card® user training in accordance with accordance with AFI 11-253, *Managing Off-Station Purchases of Aviation Fuel and Ground Services*. Course provides AIR Card® users with an understanding of the program, authorized purchases, documentation, and restrictions related to the card's use.

7.17.7.3. OPR: AF/A3TF.

7.17.7.4. Training Media: Online course hosted on the Joint Knowledge Online website, <https://jkodirect.jten.mil> (course number J4OP-US1185 or under the title AIR Card® User Training).

7.17.7.5. Additional Information. Complete initial training prior to using the AIR Card®; complete refresher training at least once every 3 years.

7.17.8. **GD07Y** – Aircraft Commander Responsibilities. Pilots receive a comprehensive briefing on their responsibilities to the mission and to the flight crew while performing AC duties. This briefing includes, but not limited to C2, chain of command, DoD Foreign Clearance Guide (eFCG), International Civil Aviation Organization (ICAO) procedures, passenger handling, cargo handling, customs, Uniform Code of Military Justice (UCMJ), billeting, security, aircraft performance and limitations, crew rest, crew duty day, all volumes of AFMAN 11-2KC-10, and flight crew qualifications. Review of the KC-10 AC's duties and responsibilities as part of this event. Senior staff need only receive a briefing on those areas pertinent to their level of qualification.

7.17.9. **GD09Y** – Aircraft Field Trip. Gives initial qualification students the opportunity to locate and operate equipment, practice interior and exterior inspections, and get questions answered. Also, instructor candidate students are given the opportunity to practice instructional techniques as they lead the trip under the supervision of qualified FTU instructors. A static aircraft should be used for the field trip. Training should be accomplished during FTU in-processing, as a group (i.e., all available crew positions) and is completed prior to the first flight for initial qualification students. Areas to be covered include, but are not limited to, cabin door operation, alternate aircraft access locations, emergency equipment operation, manual operation of numerous fuel valves, taxi references, and auxiliary power unit (APU) operations to include emergency shutdown. In addition, initial qualification students should be guided through a typical preflight sequence covering procedures and techniques from arrival at the aircraft up through the completion of the "Cockpit Preparation" checklist. Normally accomplished in conjunction with LL03. OPR is AMC AOS Det 1; Instruction by FTU instructors; Unit is squadron training section.

7.17.10. **GD13Y** – Aircraft Servicing Training. Provides crew members with training for turning their aircraft (recovery, servicing, and launch) when maintenance support is not available. Initial training course consists of video training and an aircraft field trip with hands-on training for ground handling and servicing of the KC-10. FEs are trained to proficiency on ground handling and servicing procedures and requirements when maintenance support is not available. Pilots and boom operators are trained on their responsibilities for assisting the FE during aircraft turn operations. This field trip is normally in conjunction with GD09Y. Refresher training consists of pilots, FEs, and boom operators viewing AMC AOS Det 1 video. Refresher credit may also be given for an aircraft field trip with hands-on training for ground handling and servicing of the KC-10. OPR is AMC/A3TK; Unit is FTU.

7.17.11. **GD15Y** – Aircraft Systems Training. Additional systems training designed to supplement training provided during each quarterly WST refresher. This contractor-developed course is divided into lessons consisting of study material and review exercises. Each lesson is assigned to a specific training quarter as outlined below. This ensures each lesson matches systems that are highlighted during each quarterly WST refresher. Though not mandatory, squadrons are encouraged to expand on this training. Flight engineers and boom operators accomplish systems refresher CBTs for any missed quarter.

7.17.11.1. *January-March* (WST missions 1/2 or 9/10): hydraulics, air conditioning, pressurization, and flight instruments.

7.17.11.2. *April-June* (WST missions 3/4 or 11/12): flight controls, APU, and power plant.

7.17.11.3. *July-September* (WST missions 5/6 or 13/14): electrics, landing gear, and brakes.

7.17.11.4. *October-December* (WST missions 7/8 or 15/16): pneumatics, fuel, and anti-ice.

7.17.12. **GD17Y** – Aircrew Intelligence Training (AIT). Provides crews with the fundamentals of threat knowledge, visual recognition, and collection and reporting requirements. Enhances crewmember's understanding of threats to unit assets with a direct impact on mission success and aircrew survival. Course provides aircrew with details concerning how, when, and what to include in mission reports (MISREP), ops-intel interface, request for information, Escape and Evasion procedures, and the development and coordination of evasion plans of action (EPA). See AMCI 14-1020, *Air Mobility Intelligence Mission and Responsibilities*. The unit intelligence officer administers a tailored AIT-related test to determine training objectives are met. May be conducted in conjunction with GD75Y as determined by agreement between local Intel and Tactics offices. OPR is AMC/A2.

7.17.13. **GD19Y** – Approach Plate Familiarization Ground Training. Provides flight engineers and 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. This training is designed to review terminal instrument procedures (TERPS). The training includes a breakdown of standard DoD and Jeppesen® 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. Refresher training is accomplished by completing the contractor developed Approach Plate Familiarization Ground Training CBT (training and testing) at the appropriate KC-10 TS learning center or via the KC-10 TS website. If student passes the test, the contractor provides student with documentation showing successful training completion. If the student does not pass the test, the student re-accomplishes the CBT lesson(s) until successful. **Note:** GD19Y is the minimum training required for Approach Plate Familiarization Ground Training. Units are encouraged to expand or supplement this training as appropriate. OPR is AMC AOS Det 1.

7.17.14. **GD25Y** – Crew Resource Management (CRM)/Threat & Error Management (TEM) Initial Training.

7.17.14.1. Purpose: To provide aircraft and crew-specific initial CRM/TEM training (including effective pilot monitoring (PM) and VVM behaviors).

7.17.14.2. Description: Introduces common CRM/TEM core subjects and current CRM/TEM Topic(s) of the Year, effective PM behaviors, and relevant VVM skills. This training is normally conducted within a classroom with interactive exercises. See AFI 11-290 and MAJCOM supplement, as applicable.

7.17.14.3. OPR: AMC/A3TO

7.17.14.4. Curriculum Development: TS contractor

7.17.14.5. Training Media: CBT and WST/LS lesson

7.17.14.6. Instructor: TS instructor

7.17.14.7. Additional Information: Initial CRM/TEM training is normally conducted during formal school initial qualification training. Crewmembers upgrading in-unit require initial CRM/TEM training from a certified instructor in accordance with AFI 11-290, as supplemented. Initial CRM/TEM should be dual-logged to credit CRM/TEM Refresher for ARMS tracking purposes. Utilize the initial checkride completion date.

7.17.15. **GD27Y** – Crew Resource Management (CRM)/Threat & Error Management (TEM) Refresher Training.

7.17.15.1. Purpose: To provide classroom-presented CRM/TEM refresher training (including effective PM and VVM behaviors).

7.17.15.2. Description: Reinforces initial CRM/TEM training through an academic review of the CRM/TEM skills common core subjects, effective PM behaviors, and relevant VVM skills, with emphasis on CRM/TEM Topic(s) of the Year. See AFI 11-290 and MAJCOM supplement, as applicable.

7.17.15.3. OPR: AMC/A3TO.

7.17.15.4. Curriculum Development: AMC/A3T and TS contractor.

7.17.15.5. Training Media: Classroom and Aircrew Training Device.

7.17.15.6. Instructor: TS instructor (primary), designated IP, IF or IB (secondary)

7.17.15.7. Additional Information: Refer to AFI 11-290 and the associated MAJCOM supplement to employ USAF instructors to teach CRM/TEM. USAF IPs may instruct pilots, engineers, or boom operators. USAF FEs and BOs may only instruct their own crew position. Prior to instructing, the instructor is required to have accomplished the current year's GD25Y and be designated in writing by the OG/CC as a "CRM/TEM Instructor". In addition, designated CRM/TEM Instructors are required to complete AF-mandated TS Instructor training. Contact local TS to obtain CRM/TEM training materials. GD25Y CRM/TEM seats are typically pre-purchased under the TS contract for assigned crewmembers. Therefore, units are expected to utilize TS instructor-led GD25Y to the maximum extent possible. AF instructor-led training should be by exception only (i.e., when the TS option is not available).

7.17.16. **GD29Y** – CRM/TEM Instructor Training.

7.17.16.1. Purpose: Qualifies new and existing instructors (any crew position) as CRM/TEM Instructors.

7.17.16.2. Description: Instruction designed for new and existing unit aircrew instructors (any crew position) to become CRM/TEM Instructors. See AFI 11-290 and MAJCOM supplement, as applicable.

7.17.16.3. OPR: AMC/A3TO.

7.17.16.4. Curriculum Development: MATS Contractor.

7.17.16.5. Training Media: CBT.

7.17.16.6. Instructor: Additional information: The intent of this training is for instructors (any crew position) to be able to instruct CRM/TEM concepts/techniques/applications to crewmembers of the same crew position (e.g., instructor MB to teach MBs).

7.17.17. **GD39Y** – Hazardous Cargo Ground Training. (mission qualification/certification and continuation) Ensures KC-10 pilots and boom operators are knowledgeable in loading and transporting hazardous cargo. Provides instruction reviewing mobility aircrew hazardous materials procedures and AFMAN 24-204, *Preparing Hazardous Materials for Military Air Shipments*; and Air Force Joint Instruction (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. Complete TS provided CBT lesson. OPR is AMC AOS Det 1.

7.17.18. **GD40Y** – Human Relations Education (HRE)/Equal Opportunity (EO) Training.

7.17.18.1. Purpose: Training program to provide annual training in compliance with AFPD 36-27, *Equal Opportunity*, related to unlawful discrimination, harassment, and reprisal by military personnel.

7.17.18.2. Description: Program was developed to educate military and civilian personnel in an effort to eradicate unlawful discrimination against, harassment of, intimidation of, or threatening of another Airman on the basis of race, color, religion, sex (including pregnancy, gender identity, and sexual orientation), national origin, age (40 or older), disability, genetic information, or reprisal. This training applies to all military and civilian Air Force (AF) personnel, including Air Force Reserve Units, and Air National Guard (ANG) personnel in federal active duty status under Title 10, U.S. Code. It does not apply to contract employees (unless authorized by law or regulation to file a federal agency complaint), employees or applicants of the Army and Air Force Exchange Service, members of the ANG (to include ANG Technicians) in a duty status under Title 32, U.S. Code., refer to AFI 36-2710, *Equal Opportunity Program*. **Note:** ARMS is not the training system of record for this training, but may be used for tracking purposes in addition to the training system of record.

7.17.18.3. OPR: AFPC/EO.

7.17.18.4. Training Media: In-Person Briefing.

7.17.18.5. Instructor: Appropriately-certified EO instructor.

7.17.19. **GD41Y** – Initial Qualification Academic Course. Contractor course of instruction leading to initial qualification in the KC-10 that includes academic and ATD instruction. Flight training commences when all requirements of GD41Y are satisfactorily completed.

7.17.20. **GD45Y** – Instructions/Directives Knowledge/Use-Initial and mission qualification/Certification. Includes all publications, directives, and pamphlets students utilize in operating KC-10 except for flight, AR, and performance manuals. At a minimum, students demonstrate knowledge of publications listed in [Tables 7.2](#) and [7.3](#) that apply to their specific crew position. Requirement consists of locating information requested by

instructor and providing accurate interpretation. ACs, senior staff, and PCOs may accomplish event in conjunction with GD07Y (Aircraft Commander Responsibilities).

Table 7.2. Associated Directives (Initial/Requalification).

PUBLICATION	POSITION
AFMAN 11-2KC-10, Volume 1, <i>KC-10 Aircrew Training</i> (this manual)	ALL
AFMAN 11-2KC-10, Volume 3, <i>KC-10 Operations Procedures</i>	ALL
AFMAN 11-202, Volume 1, <i>Aircrew Training</i>	ALL
AFI/AFMAN 11-202, Volume 2, <i>Aircrew Standardization/Evaluation Program</i>	ALL
AFMAN 11-202, Volume 3, <i>Flight Operations</i>	ALL
AFI 11-207, <i>Fighter Aircraft Delivery</i>	ALL
AFMAN 11-218, <i>Aircraft Operations and Movement on the Ground</i>	ALL
AFI 11-301, Volume 1, <i>Aircrew Flight Equipment (AFE) Program</i>	ALL
AFI 11-401, <i>Aviation Management</i>	ALL
AFI 13-207, <i>Preventing and Resisting Aircraft Piracy (Hijacking)</i> FOUO	ALL
AFMAN 34-135, <i>Air Force Lodging and Air Force Laundry and Linen Exchange Programs</i>	ALL
AFMAN 24-204, <i>Preparing Hazardous Materials for Military Air Shipments</i>	P,BO
AFJI 11-204, <i>Operational Procedures for Aircraft Carrying Hazardous Materials</i>	ALL
AFTTP 3-3.KC-10, <i>Combat Aircraft Fundamentals, KC-10 (U)</i>	ALL
AMCI 11-207, <i>Weapons and Tactics Program</i>	ALL
AMCI 11-208, <i>Mobility Air Forces Management</i>	ALL
AMCI 24-605, Volume 2, <i>Air Transportation Operations</i>	P,BO
NATO Standard ATP 3.3.4.2, <i>Air to Air Refueling</i>	P
ATP 3.3.4.2, <i>United States Standards Related Document</i>	P
DoD Foreign Clearance Guide (eFCG)	ALL
Squadron Read File and FCIF	ALL
T.O. 1C-10(K)A-1-2, <i>Minimum Equipment List</i>	ALL

Table 7.3. Associated Directives (Instructor Qualification).

PUBLICATION	POSITION
AFI/AFMAN 11-202, Volume 2, <i>Aircrew Standardization/Evaluation Program</i>	ALL
AFMAN 11-218, <i>Aircraft Operations and Movement on the Ground</i>	ALL

AFMAN 11-2KC-10, Volume 1, <i>KC-10 Aircrew Training</i> (this manual)	ALL
AFMAN 11-2KC-10, Volume 3, <i>KC-10 Operations Procedures</i>	ALL
AFI 11-401, <i>Aviation Management</i>	ALL
Contractor Course Book (applicable course numbers)	ALL
KC-10 Flight Training Syllabus	ALL
Note: Instructor Upgrade. Instructor candidates utilize and become knowledgeable in the publications, directives, and pamphlets contained in this table to perform KC-10 instructor duties. At a minimum, instructor candidates are required to demonstrate knowledge of the publications listed in this table. that apply to their specific crew position. This requirement consists of locating information requested by the instructor and providing an accurate interpretation.	

7.17.21. **GD47Y** – Instructor Academic Training. Contractor course of instruction (KC-10 IAC, FIC, BIC) leading to instructor qualification in the KC-10 that includes academic and training device instruction. GD47Y requirements are satisfactorily completed prior to formal flight training.

7.17.22. **GD51Y** – Instructor Training Course Workbook. Complete the Instructor Training Course Workbook prior to beginning KC-10 instructor courses (GD47Y). This is a vital portion of the training program in order to achieve desired results.

7.17.23. **GD53Y** – Instructor/Evaluator Calibration.

7.17.24. **GD55Y** – Instrument Refresher Course. Ensures pilots possess sufficient knowledge of all applicable directives, procedures, and techniques to assure safe and professional instrument flying. Guidance for development of unit IRC programs, including topics and subject outlines, course length, instructor prerequisites, and methods of instruction is contained in AFMAN 11-210, *Instrument Refresher Program (IRP)*. IRC is accomplished according to AFI/AFMAN 11-202V2. Complete the IRC test within the evaluation eligibility period. Address following topics where applicable to the unit mission:

7.17.24.1. Controlled flight into terrain (CFIT) (applicable to all)

7.17.24.2. VFR flight rules, maneuvers, and procedures

7.17.24.3. Operations under the Global Air Traffic Management (GATM) system:

7.17.24.4. North Atlantic High Level Airspace (NAT HLA)

7.17.24.5. Reduced Vertical Separation Minimums (RVSM) airspace and procedures

7.17.24.6. Required Navigation Performance (RNP) airspace and procedures

7.17.24.7. Special Departure Procedures

7.17.24.8. Complete IRC CBT courseware or KC-10 IRC web-based program on the AMC Gateway site located at https://amc.adls.af.mil/kc/main/kc_frame.asp?blnWhatsNew=True. The CBT is complemented by 2-hour instructor based training (IBT). Complete IRC examination within the evaluation eligibility period according to AFI/AFMAN 11-202V2. See

AFMAN 11-210. Course is available via CBT or 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 Air Force Flight Standards Agency (AFFSA) SharePoint® site. OPR is AMC/A3T; Unit is OG/CC; Curriculum Development by AFFSA.

7.17.25. **GD58Y** – Joint Mission Planning System (JMPS) Advanced User Training.

7.17.26. **GD59Y** – Joint Mission Planning System (JMPS) Basic User Training.

7.17.27. **GD63Y** – Overwater Navigation Procedures Ground Training. To provide instruction and review of procedures and restrictions for Atlantic and Pacific oceanic crossing and international airspace. The training covers oceanic crossing requirements, contingencies, ACFP review, equal time point (ETP), and RNP/RNAV.

7.17.27.1. Training Aids: Overwater Navigation Procedures Ground training located on the AMC/A3T SharePoint® website (**GD63Y - Overwater Navigation**).

7.17.27.2. Instructor: Instructor led GD63Y presentation/discussion required for mission certification ground training for all initial qualifications and aircraft commander upgrades.

7.17.27.3. OPR: AMC/A3T.

7.17.28. **GD65Y** – Pilot Check Out (PCO) Course. Contractor course of instruction (KC-10 PCO) leading to aircraft commander qualification for MPD pilots in the KC-10 that includes academic and training device instruction.

7.17.29. **GD71Y** – Requalification Course. Contractor course of instruction for requalification of pilots, FEs, and boom operators using an abbreviated version of the initial qualification course (DG41Y). Flight training commences when all GD71Y requirements are satisfactorily completed.

7.17.30. **GD75Y** – Tactics Training.

7.17.30.1. Purpose. Provides the crewmember with information necessary for effective and successful execution of the unit's assigned employment mission.

7.17.30.2. Description. 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-10/KC-135 and 3-3. KC-10 as well as any other documents pertaining to the execution of the unit's mission. Additional information may be added to the course by the unit tactician, weapons officer, if applicable, or by the direction of the OG/CC.

7.17.30.3. OPR: AMC Combat Operations (A3D).

7.17.30.4. Instructor: Only graduates of the USAFWS, Group/Wing Weapons and Tactics Flight Commanders or rated aircrew instructors appointed by Group/Wing Weapons and Tactics Flight Commander are authorized to instruct GD75Y.

7.17.30.5. Additional Information.

7.17.30.5.1. Units complete a tactics assessment directed by the Chief of Tactics to complete GD75Y. This assessment may consist of an instructor evaluated scenario, verbal evaluation, or open book evaluation. TG03Y (VTRAT Refresher Training)

may be completed as part of GD75Y for those individuals who previously accomplished VT01 (Initial VTRAT) training. TG03Y training should be completed by either the VTRAT trainer or classified CBT accomplished on a Secret Internet Protocol Router Network (SIPRNET) computer. The courseware is posted on the AMC Combat Operations SIPRNET website.

7.17.30.5.2. OG/CC may specify an alternate frequency for Tactics training, but not less than annual. CATS-MECOC students may credit GD75Y upon completion of course syllabus. May be conducted in conjunction with GD15Y as determined by agreement between local Intel and Tactics offices.

7.17.31. **GD81Y** – Unit Indoctrination (UI) Training. Unit defined mission, local requirements and procedures familiarization for newly assigned crewmembers or personnel.

7.18. Expeditionary Training (GE) Events.

7.18.1. **GE03Y** – Chemical, Biological Radiological, & Nuclear (CBRN) Defense (Hands-On) Training.

7.18.1.1. Purpose: Hands-on training in the use of CBRN (ground) defense equipment and associated procedures.

7.18.1.2. Description: Externally-driven ancillary training requirements defined by functional publication and/or guidance. Refer to AEF Online ERT Checklist and AFI 10-2501, *Emergency Management Program*, for training requirements and frequency.

7.18.1.3. OPR: EM & CBRN Defense Policy/Modernization (AF/A4CXR).

7.18.1.4. Training Media: Classroom/Lab.

7.18.1.5. Instructor: Certified trainer.

7.18.1.6. Additional Information: Per AFI 10-2501, **Attachment 2**, aircrew members are “non-exempt”. Non-exempted personnel require only GE03Y at the AEF Online-designated frequency.

7.18.2. **GE05Y** – Law of War (Basic) CBT (Formerly Law of Armed Conflict).

7.18.2.1. Purpose: Periodic training for all Airmen on DoD policies and the Geneva Conventions related to personal conduct during periods of armed conflict and military operations.

7.18.2.2. Description: CBT provides required training for all Airmen to satisfy this requirement. Accomplished in accordance with the timeline specified in the current Expeditionary Readiness Training (ERT) Checklist located on the AEF Online site: <https://aef.afpc.randolph.af.mil/Predeployment.aspx>.

7.18.2.3. OPR: AF Judge Advocate (JA).

7.18.2.4. Curriculum Development: AF/JA.

7.18.2.5. Training Media: CBT or briefing using downloaded TG located on ADLS.

7.18.2.6. Instructor: N/A.

7.18.2.7. Additional Information: Refer to ERT Checklist found on AEF Online for currency requirements.

7.18.3. **GE07Y** – Use of Force (L-6) CBT.

7.18.3.1. Purpose: To provide aircrews with training on US Air Force policy and guidance on Use of Force.

7.18.3.2. Description: This training covers topics on Air Force assets, Use of Force policy, and the Use of Force Model as outlined in AFI 31-117, *Arming and Use of Force by Air Force Personnel*.

7.18.3.3. OPR: AMC/A3T

7.18.3.4. Curriculum development: AFSFC/SFOP.

7.18.3.5. Training Media: CBT on ADLS (L6–Use of Force) or via a qualified instructor using AF-approved training outline (i.e., group settings).

7.18.3.6. Instructor: Required only for group method using the AF-approved training outline.

7.18.3.7. Additional Information: Crewmembers complete the “L6-Use of Force” CBT located on ADLS prior to attending Small Arms Training. Additionally, pre-deployment requirements may apply (see AEF Online ERT Checklist for expeditionary requirement). Members comply with Use of Force training requirements in accordance with AFI 31-117.

7.19. **Communications Training and Communications Equipment (GH) Events.**

7.19.1. **GH01Y** – Communications Security (COMSEC) Procedures Ground Training. Provides aircrews recurring study in communications procedures. Enables aircrews to become proficient in the use of AMCH 17-201-S, *Mobility Tanker Aircrew Communications* and the *Flight Information Handbook (FIH)* while ensuring crew members possess a thorough knowledge of all communications and COMSEC requirements. Training includes code loading devices, equipment operation, Air Force Spectrum Interference Resolution (AFSIR), authentication and Identification, Friend or Foe, Selected Identification Features (IFF/SIF) codes and procedures, Iridium Phone, HAVE QUICK, and Secure Voice, as applicable. Training involves COMSEC user requirements to include receiving, protecting, destroying, and accounting for COMSEC material according to AFMAN 17-1302-O, *Communications Security (COMSEC) Operations*. See AFMAN 17-1302-O and AFI 11-244, *Instructions for Combat Crew Communications*.

7.19.1.1. OPR is MAJCOM: AMC/A3T/A3TK and CPSS/STSP; Unit is TS contractor, Combat Crew Communications, COMSEC responsible officer (CRO), wing, operations group, and squadron training personnel; Instructors are: TS instructors (if included in TS contract), wing, operations group, and/or squadron training personnel, if instructor led. Training Aids and Media: AF Form 4168, *COMSEC Responsible Officer and User Training Checklist*. Units may choose to complete COMSEC handling procedures by CBT or IBT format. The unit’s combat crew communications flight (CCCF) briefs local procedures, updates, and the classified portion. Do not log until both parts are complete.

7.19.1.2. Additional Information: CBT version of GH01Y is a general overview of COMSEC handling procedures for aircrews. The CBT version does not cover all the requirements and local procedures. Use the CBT version as an additional tool to enhance the training program. CCCF is required to cover all the other requirements.

7.20. Tanker-Specific Training (GK) Events.

7.20.1. **GK13Y** – Boom Operator Cockpit Orientation Initial CBT (One-time event). To provide KC-10 boom operators with knowledge and familiarization of flightdeck instruments and gauges. The CBT provides basic knowledge, location and function of instruments and gauges to help provide better situational awareness during flightdeck operation.

7.20.1.1. OPR: AMC AOS Det 1.

7.20.1.2. Curriculum Development: TS contractor is responsible for curriculum development.

7.20.1.3. Training Media: CBT on <https://www.kc10ts.com>.

7.20.1.4. Additional Information: Dual log with GK15Y.

7.20.2. **GK15Y** – Boom Operator Cockpit Orientation Refresher CBT. To provide KC-10 boom operators refresher training of flightdeck instruments and gauges. The CBT provides basic knowledge, location and function of instruments and gauges to help provide better situational awareness during flightdeck operation.

7.20.2.1. OPR: AMC AOS Det 1.

7.20.2.2. Curriculum Development: TS contractor is responsible for curriculum development.

7.20.2.3. Training Media: CBT on <https://www.kc10ts.com>.

7.20.3. **GK17Y** – Cargo and Passenger Handling Procedures Ground Training. Ensures KC-10 boom operators are knowledgeable in cargo planning and loading procedures and are able to properly handle passengers when they are transported on KC-10 aircraft. Course teaches proper and effective interaction with passengers. It defines acceptable and unacceptable behaviors, and teaches communication skills and problem solving when dealing with passengers. OPR is AMC AOS Det 1; TS contractor is responsible for curriculum development; Unit is squadron training section.

7.20.4. **GK29Y** – Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM) Difference Course.

7.20.4.1. Purpose: One-time ground training for CNS/ATM difference certification.

7.20.4.2. Description: CBT or IBT covering differences between legacy and CNS/ATM configured aircraft systems.

7.20.4.3. OPR: AMC/A3TK.

7.20.4.4. Training Media: CBT and IBT.

7.20.4.5. Instructor: CNS/ATM certified USAF and TS instructors.

7.20.4.6. Additional Information: pilots and flight engineers in TX-2/TX-3 Requal—Accomplish TS CBT and accomplish one-period IBT led by a CNS/ATM TS Instructor. **Exception:** SOC pilots. N/A PIQ, and FIQ students.

7.20.4.7. SOC pilots—Accomplish a minimum one-period IBT session led by a CNS/ATM certified USAF Instructor.

7.20.5. **GK75Y** – Two-Engine Ferry Initial Training. Contractor course of academic and ATD instruction designed to train selected crew members (pilots and FEs) on procedures, techniques, aircraft preparation, performance, and crew coordination required to successfully complete KC-10 Two-Engine Ferry missions. Crew consists of two instructor or evaluator pilots and one instructor or evaluator flight engineer. See AFMAN 11-2KC-10V2 for crew selection criteria.

7.20.6. **GK79Y** – Weight and Balance Calculation Training. This event trains flight engineers to accomplish DD Form 365-4, *Weight and Balance Clearance Form F - Transport/Tactical*, when aircraft is operated with minimum crew (i.e., aircraft commander, pilot, and FE). Training is limited to a non-cargo mission scenario. Student completes weight and balance form according to all information required by the basic weight list and loading data manual. Minor discrepancies, without omission of required information, are permissible.

7.21. Mobility Training (GM) Events.

7.21.1. **GM03Y** – Mobility Folder Review.

7.21.1.1. Purpose: Ensure Air Force personnel are prepared for deployment to locations specified by tasking order.

7.21.1.2. Description: The unit commander prepares his/her unit for deployment in accordance with this manual, AFMAN 10-409-O, *Support to Adaptive Planning*, AFI 10-403, *Deployment Planning and Execution*, and AFI 36-129, *Civilian Personnel Management and Administration*. In addition to the aircrew-specific training items contained in this manual, Air Force members have Air Force-specific and theater-specific training that is required prior to a deployment. The UDM is tasked to ensure all personnel meet readiness training requirements.

7.21.1.3. OPR: Unit-Level UDM.

7.21.1.4. Training Media: N/A.

7.21.1.5. Instructor: N/A.

7.21.1.6. Additional Information: See AFI 10-403, ERT Checklist, and local guidance. Frequency of this event is determined by the installation deployment officer and should be published in the installation deployment plan.

7.21.2. **GM09Y** – Isolated Personnel Report (ISOPREP) Review.

7.21.2.1. Description. Review of isolated personnel report (ISOPREP). May be completed in conjunction with Aircrew Intelligence Training (AIT). All crewmembers maintain a digital ISOPREP in Personnel Recovery Management System (PRMS), in accordance with Joint Personnel Recovery Agency (JRPA) guidance. Once printed, the ISOPREP card is classified CONFIDENTIAL and safeguarded according to Joint Publication (JP) 3-50, *Personnel Recovery*. **(T-0)**. During employment operations, review ISOPREP information: upon deployment, prior to the first mission of the day, and as often as necessary thereafter. Refer to CCMD guidance for specific AOR requirements.

7.21.2.2. OPR: AMC/A2.

7.21.2.3. Additional Information: Complete review of DD Form 1833, *Isolated Personnel Report (ISOPREP)* as prescribed by JP 3-50 and CCMD PR directives. **(T-0)**.

7.21.3. **GM11Y** – Official Passport – Primary (No-fee)

7.21.3.1. Purpose: Facilitate short-notice worldwide mobility response capability.

7.21.3.2. Description: Certain locations require no-fee passports, valid for 5 years, for entry, as communicated in the *DoD Foreign Clearance Guide*. In accordance with AFI 10-403, AMC/A3 designates that a primary no-fee passport is a mission-essential item for mobility aircrew readiness to support peacetime deployment/employment requirements and United Nations mission support. **Note:** US Department of State policy governs passport issuance. Refer to latest DoD policy memoranda regarding passport requests. **Note:** OG/CC may waive this mobility requirement when a crewmember has applied for and passport is pending or has applied for and was denied a primary official passport to permit the crewmember to fly tasked missions to locations that do not require passports for entry/transit. Waivers should be documented using GTIMS for tracking purposes.

7.21.4. **GM12Y** – Official Passport – Secondary (No-fee).

7.21.4.1. Purpose: Facilitate worldwide mobility response capability to locations requiring an entry visa.

7.21.4.2. Description: Certain locations require a no-fee passport, valid for 4 years, and entry visa, as communicated in the *DoD Foreign Clearance Guide*. In order to maintain short-notice worldwide mobility status, secondary passports may be required to facilitate entry visas for designated crewmembers. As entry visas often require long processing periods and submission of an official passport, a secondary passport enables crewmembers to remain worldwide mobile while one of their two passports is submitted for visa application processing. In accordance with AFI 10-403, AMC/A3 designates OG/CCs as the determination authority for secondary passport requirements. OG/CCs should document crewmembers designated to maintain a secondary official passport and track requested/denied applications for those crewmembers. **Note:** US Department of State policy governs passport issuance. Refer to latest DoD Policy Memoranda regarding passport requests.

7.21.5. **GM21Y** – Small Arms Training.

7.21.5.1. Purpose: Trains crewmembers in successful engagement of enemy targets within the range and capabilities of their assigned weapon.

7.21.5.2. Description: Course established to meet the requirements of AFI 36-2654 and AFI 31-117. Crewmembers are assigned an arming group based on their ground and/or in-flight arming requirements and complete training based on the assigned arming group requirement(s) and purpose for arming. Training frequency is determined by the crewmember's assigned arming group and/or purpose (i.e., anti-hijacking versus deployment). Additionally, pre-deployment requirements may apply (see AEF Online ERT Checklist).

7.21.5.3. OPR: Directorate of Logistics, Engineering and Force Protection (AMC/A4S).

7.21.5.4. Instructor: qualified security forces squadron combat arms instructor.

7.21.5.5. Training Aids: Academics and firing range exercise; includes use of force and live fire or simulator training. Simulator training may not be used for initial qualification (AFI 36-2654, AFI 31-117).

7.21.5.6. Additional Information: AFR may define alternate frequency requirements. Accomplish (based on assigned arming group) in accordance with AFI 36-2654 [12 months for Arming Group A (MAJCOM extendable to 24 months), 36 months for Arming Group B assigned to a deployable UTC (i.e., YR/DW enabler aircrews), or when tasked by name to deploy with associated arming requirement for all other Group B personnel). **Note:** Crewmembers are required to complete the AF-approved “L6-Use of Force” course via ADLS or in a group setting using an AF-approved instructor and course outline/presentation prior to attending GM21Y. (T-2).

7.22. Senior Officer Course (GS) Events.

7.22.1. **GS01Y** – Senior Officer Course (SOC). Contractor course of instruction (KC-10 SOC) which provides basic qualification (academic and simulator training) for authorized senior staff-level personnel. Flight training commences when all GS01Y requirements are satisfactorily completed.

7.22.2. **GS03Y** – Senior Staff Orientation Course. Contractor course of instruction (KC-10 SSF) that provides training for authorized senior staff-level personnel requiring familiarization in KC-10 and associated training program. It is intended for senior officers who are unfamiliar with the KC-10 and its mission and does not involve any form of aircraft qualification. Senior staff-level personnel who previously accomplished a formal KC-10 pilot training course that resulted in a AF Form 8 qualification (e.g., KC-10 SOC, KC-10 PCO, KC-10 IAC, etc.) receive credit for the KC-10 SSF course. Regardless of the venue of KC-10 SSF course credit, KC-10 SSF course credit expires 39 months from the date of the member's last KC-10 aircraft flight.

7.23. Simulator (GX and GY) Events.

7.23.1. **GX29Y** – Simulator-CRM/TEM MOST.

7.23.1.1. Purpose: To provide a practical, hands-on application of classroom-presented CRM/TEM refresher concepts, including effective PM and relevant VVM behaviors, through problem solving and human factors issues during a realistic, demanding mission scenario.

7.23.1.2. Description: Mission Oriented Simulator Training (MOST) event is accomplished in an appropriate ATD to reinforce CRM/TEM proficiency, effective pilot monitoring behaviors, and relevant VVM skills. See AFI 11-290 and MAJCOM supplement, as applicable.

7.23.1.3. OPR: AMC/A3TO.

7.23.1.4. Curriculum Development: TS contractor.

7.23.1.5. Training Media: CBT and WST/LS lesson.

7.23.1.6. Instructor: TS instructor.

7.23.1.7. Additional Information: The performance of each individual crewmember (student) is critically assessed and documented by simulator instructors/observers in

accordance within accordance with AFI 11-290 and MAJCOM supplement, as applicable. Completion of GX91Y and GX93Y credits GX29Y.

7.23.1.8. MDS-Specific Information: Training in the WST with a full crew complement, is desired. As a minimum two pilots are required to be present. GD25Y is a pre-requisite for GX29Y and is accomplished as part of the pre-briefs before the GX29Y CRM/TEM MOST Sims. Upon completion of Phase IA of qualification or instructor upgrade training, log GD25Y and GX29Y using evaluation date as date of accomplishment to establish currency date for subsequent training.

7.23.1.8.1. The recommended minimum crew size for this course is an aircraft commander, MPD pilot, flight engineer and boom operator. If MAJCOMs authorize less than the recommended crew complement to attend refresher training, the affected units ensure that the TS contractor is able to support the missing crewmembers. Although crew training is more effective with the FE and boom operator present, the FE and boom operator does not need to be present for the crew to receive credit.

7.23.1.8.2. For pilots and flight engineers, GX29Y is accomplished as one of the required quarterly refreshers missions. Dual-log with GX91Y-GX94Y.

7.23.2. **GX61Y** – Simulator-Instrument. Review and practice of instrument procedures is integrated into every KC-10 refresher WST (GX91Y-GX94Y).

7.23.3. **GX79Y** – Simulator-Proficiency Sortie. Training profile may include CRM/TEM, formation, Proficiency Sortie (MB10Y), flight procedures listed in AFMAN 11-202V3, corrective action training, etc. Units may develop processes to use this profile to satisfy pre-deployment training or flying training in RTM table. Cannot be dual-logged with CRM/TEM MOST Simulator (GX29Y), Simulator-Refresher (GX91Y-GX94Y) or an instrument/qualification evaluation. TS contractor-administered simulator courses. OPR is AMC/A3TK.

7.23.4. **GX85Y** – Simulator-Refresher Boom Operator Trainer BOT. Contractor-administered refresher course (KC-10 BREF) utilizing BOT and CLT. Course is administered quarterly and consists of three 2.5-hour training periods, CBTs, and a Cargo Load Exercise. To receive credit for this event, accomplish associated CBTs, a Cargo Load Exercise, and a minimum of 2 BOT periods. Planned 2 BOT period refreshers require prior AMC/A3TK approval. At the discretion of the evaluator, a single BOT period may be used to administer evaluations for FTL B and higher crewmembers. Unplanned BOT period cancellations (From 3 to 2 periods) due to weather or maintenance will qualify for GX85Y credit. The following training areas are required to be accomplished during each quarterly BOT:

7.23.4.1. ARO Station Inspection

7.23.4.2. Preparation for Contact–Boom/Centerline Drogue/Wing AR Pod System

7.23.4.3. Direct receiver(s) to the contact position

7.23.4.4. Oral and visual communication

7.23.4.5. Boom Disconnect using AUTO or MANUAL retract (as required)

7.23.4.6. Boom Disconnects using the IDS

7.23.4.7. Tanker AR Breakaway (practice emergency separation)

7.23.4.8. Nozzle Binding (required annually) (N/A AFR)

7.23.4.9. Post Air Refueling–Boom/Centerline Drogue/Wing Pod Drogue

7.23.4.10. After Landing/Parking

7.23.4.11. Associated Abnormal/Emergency checklist procedures

7.23.4.12. APU training (start, shut down, and associated emergency and abnormal procedures) (required semi-annually)

7.23.4.13. Annually, as part of one of the refresher periods, all USAF instructor/evaluator boom operators (IBO, EB) will receive a "Nozzle Binding" scenario. **(T-2)**. This scenario requires two contract TS instructors (primary instructor plus TS instructor simulating a student). During this training the USAF IBO occupies the IB instructor seat (N/A AFR).

7.23.5. **GX91Y-GX94Y** – Simulator-Refresher Phase 1-4. Annotate specific training accomplished on a MAR, (See **RTM** for training events that can be accomplished or logged in ATDs). Contractor-administered simulator refresher courses (KC-10 PFREF) of instruction for aircraft commanders, pilots, and flight engineers. Consists of two WST periods per quarter (each period consist of: 2.0 hours pre-brief, 4.0 hour WST period, and 1.0 hour de-brief) emphasizing crew coordination, normal, abnormal, emergency procedures, aircraft performance, as well as aircraft systems.

7.23.5.1. AMC AOS Det 1-approved quarterly refresher profiles include, as a minimum, the abnormal and emergency procedures listed in [paragraphs 7.23.5.5](#) and [7.23.5.6](#) below. AMC AOS Det 1 may substitute/delete single items on the list once per year to accommodate emphasis items or for accomplishing abnormal/emergency procedures requiring additional time. Depending on device availability, one FTD and one WST may be used in AMC AOS Det 1-approved profiles.

7.23.5.2. Day two in the WST is still suitable for recurring simulator evaluations. Evaluation consists of complete instrument evaluation, aircraft commander and pilot, and applicable portions of a qualification evaluation. Recurring simulator evaluations should be administered to two pilots and one FE as much as possible. This minimizes the number of evaluation periods required as well as minimize negative impacts on refresher training.

7.23.5.3. Due to unusual or unforeseen circumstances, AMC/A3TK may approve conversion to a single-day refresher profile, in coordination with the TS contractor. Limited Single day refresher profiles to highly experienced crewmembers, and not be accomplished in consecutive quarters. Students in an approved single-day profile should not have accomplished a single-day refresher in the previous quarter. Do not use single-day profiles to accomplish pilot or flight engineer evaluations, profiles are inadequate to accomplish both training and evaluation. Accomplished with at least one FPK+ on the crew. AFR may substitute an FTL A FPQ for an AC, if needed.

7.23.5.4. If an individual is unable to accomplish the quarter's refresher simulator requirement, they may become NMR until they accomplish the next quarter's refresher.

7.23.5.5. Aircraft commanders and pilots:

7.23.5.5.1. Loss of all engines/generators

7.23.5.5.2. Engine fire or severe damage

7.23.5.5.3. Hydraulic system abnormal or emergency

7.23.5.5.4. Second engine fails on final approach (AZ23Y) (FP: PM duties only required)

7.23.5.5.5. Single-engine operation (AZ25Y) (FP: PM duties only required)

7.23.5.5.6. Engine-out approach and landing (AZ07Y)

7.23.5.5.7. Approach and Go-Around (Simulated Engine Out) (AZ01Y)

7.23.5.5.8. Simulated engine failure, engine failure after V1 (AZ21Y) or aborted takeoff (AZ19Y)

7.23.5.5.9. Performance Exercise

7.23.5.6. Flight engineers, at minimum, accomplish the areas listed above as well as the following:

7.23.5.6.1. Tanker (RT21Y) and Receiver (RU05Y) Heavyweight AR real time training using contractor-developed profile (not required every quarter). Flight engineers may operate isolated to allow pilots to work on separate requirements at the same time. The FTD/WST is the primary method for accomplishing flight engineer training requirement for RU05Y and RT21Y.

7.23.5.6.2. Aircraft Performance. One or more of the following performance areas as selected by AMC AOS Det 1 and/or the TS contractor SME for use during quarterly refresher training:

7.23.5.6.2.1. Compute AR performance data for slow speed and heavyweight missions

7.23.5.6.2.2. Obstacle clearance where runway cut-back is required in order to make the takeoff with a given gross weight (GW)

7.23.5.6.2.3. Correction factor for configuration changes (CFCC)

7.23.5.6.2.4. VMCG limited GW

7.23.5.6.2.5. Reduced thrust takeoff with V1 equal to VMCG and assumed temperature is checked and reduced

7.23.5.6.2.6. Takeoff GW exceeds tire speed limiting weight

7.23.5.6.2.7. V1 limited by VMBE

7.23.5.6.2.8. Windshear takeoff

7.23.5.6.2.9. Compute landing data, to include speeds and landing distance, for a landing at or near 436,000 GW with a wet runway and an abnormal flap or slat configuration

7.23.5.6.2.10. Compute the landing distance using performance manual charts for

dual hydraulic system failure with dry and wet runway

7.23.5.6.2.11. Compute reference ground speed for landing with headwinds and tailwinds

7.23.5.6.2.12. Compute time and fuel to alternate using fighter drag abort scenario

7.23.5.6.2.13. Compute time and fuel to alternate after completing a local flying mission and weather is below minimums at home base

7.23.5.6.2.14. Compute brake cooling time following an aborted takeoff

7.23.5.6.2.15. Using the brake cooling time chart, compute data to determine if it is safe to make subsequent takeoff following an aborted takeoff (i.e., brake's capability to stop aircraft if abort becomes necessary on second takeoff)

7.23.5.6.2.16. Compute brake energy

7.23.5.6.2.17. Compute driftdown performance data

7.23.5.6.2.18. Compute endurance speed for a given endurance scenario

7.23.5.6.2.19. Compute takeoff data whereby multiple obstacles are present along the flight path

7.23.5.6.2.20. Compute takeoff data for a light weight takeoff and set proper speeds on the TOLD card in a situation where V2 is higher than flap retract speed

7.23.5.6.2.21. Compute takeoff data with an RSC

7.23.5.7. Additional Information: For GX91Y–GX94Y – Refresher Simulator Continuation Training, consecutive training periods consist of missing a single quarter's training event in two consecutive years (e.g., missing GX91Y twice consecutively) or missing two quarter's training requirements consecutively (e.g., GX91Y and GX92Y consecutively). Refer to [paragraph 1.5](#) Waiver Authority.

7.24. Aircrew Flight Equipment Training (LL) Events. MAJCOMs may combine and/or supplement courses to fulfill their needs, unless otherwise noted in the event description. Refer to AFI 11-301V1, for basic course descriptions. AFECT event instruction may be consolidated as long as curriculum requirements are met and individual events are tracked by the designated identifiers in ARMS.

7.24.1. LL01 – AFE Familiarization.

7.24.1.1. Purpose: The event should familiarize aircrew members with local AFE policies and procedures to include equipment issue, use, local aircraft and equipment configurations (includes survival components), inspection and fit-check cycles, preflight, and post-flight requirements.

7.24.1.2. Description: One-time event, per every base assignment. It should be conducted during aircrew in-processing, and is complete prior to the first flight at home station.

7.24.1.3. OPR: AMC/A3T.

7.24.1.4. Unit: Squadron Aircrew flight equipment.

7.24.1.5. Curriculum Development: Each unit is responsible for tailoring training to meet unit needs.

7.24.1.6. Instructor: Qualified aircrew flight equipment technician. The AFE technician does not need to be a certified AFE Continuation Training Instructor to conduct and sign off LL01. Technicians providing LL01 to assigned aircrew are familiar with local AFE operations, aircraft and equipment configurations and signed off in the training business area on the fundamentals of all equipment discussed in LL01.

7.24.1.7. Training Aids: Instructor based training with AFE training aids.

7.24.1.8. Additional Information: N/A

7.24.2. **LL03** – Emergency Egress Training, Non-Ejection Seat.

7.24.2.1. Purpose: Understand aircraft egress procedures.

7.24.2.2. Description: Evaluates aircrew and passenger 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 in accordance with AFMAN 11-202V3.

7.24.2.3. OPR: AMC/A3T.

7.24.2.4. Unit: Squadron aircrew flight equipment.

7.24.2.5. Curriculum Development: Each unit is responsible for tailoring training to meet unit needs.

7.24.2.6. Instructor: Aircrew flight equipment officer (AFEO) or qualified instructor aircrew.

7.24.2.7. Training Aids: Aircraft and instructor based training with AFE training aids.

7.24.2.8. Additional Information: N/A.

7.24.3. **LL04** – Aircrew Chemical Biological Radiological, Nuclear (ACBRN) Training.

7.24.3.1. Purpose: Understand ACBRN procedures.

7.24.3.2. Description: An academic and equipment training session in which the aircrew member demonstrates and performs donning, doffing, and buddy dressing procedures using ACBRN equipment. This training also includes information on hazards and limitations of wearing the equipment properly and improperly, preflight procedures, aircraft integration and aircrew processing. Furthermore, instruction includes aircraft emergency considerations, limitations to consider during emergency ground egress, and the aircrew contamination control area (ACCA). Each aircrew demonstrates procedures (i.e., complete dress out) during the training event for initial and subsequent classes. Aircrew processes through an ACCA during their initial LL04 event; subsequent classes require a minimum of 10 percent of aircrew demonstrate ACCA processing procedures. Crewmembers who accomplish initial ACBRN at a technical training unit, Replacement Training Unit, or FTU may receive credit for initial training on arrival at their permanent duty station. Aircrew may be credited with LL04 during local Attack Response Exercises; provided all AFECT requirements and objectives are satisfied, (i.e.,

crewmember donned ACBRN equipment and subsequently processed through ACCA). Do not combine this training (LL04) with GE01Y, CBRN Training.

7.24.3.3. OPR: AMC/A3T.

7.24.3.4. Unit: Squadron aircrew flight equipment.

7.24.3.5. Curriculum Development: Each unit is responsible for tailoring training to meet unit needs.

7.24.3.6. Instructor: Qualified aircrew flight equipment continuation training instructor.

7.24.3.7. Training Aids: Instructor based training with AFE training aids.

7.24.4. LL05 – Egress Training with ACBRN.

7.24.4.1. Purpose: LL05 Egress Training with ACBRN equipment.

7.24.4.2. Description: A one-time event, or change of MDS to evaluate the aircrew's ability to demonstrate proficiency in the use of primary as well as secondary, air and ground egress procedures while wearing ACBRN equipment. Training stresses the unique changes in procedures to include added difficulties aircrew would and could experience as a result of wearing ACBRN equipment. This training needs to be accomplished before the aircrew's ACBRN flight requirement. This event should be taught concurrently with LL04 so that the AFE instructor (LL04) can assist/guide the LL05 instructor if needed. Accomplishing this training also satisfies the requirements in LL03 if all LL03 objectives are met.

7.24.4.3. OPR: AMC/A3T.

7.24.4.4. Unit: Squadron aircrew flight equipment.

7.24.4.5. Curriculum Development: Each unit is responsible for tailoring training to meet unit needs.

7.24.4.6. Instructor: Aircrew flight equipment officer (AFEO) or qualified instructor aircrew.

7.24.4.7. Training Aids: Aircraft and Instructor based training with AFE training aids.

7.24.5. LL06 – Aircrew Flight Equipment Training.

7.24.5.1. Purpose: To familiarize aircrew with aircrew flight equipment.

7.24.5.2. 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.

7.24.5.3. OPR: AMC/A3T.

7.24.5.4. Unit: Squadron aircrew flight equipment.

7.24.5.5. Curriculum Development: Each unit is responsible for tailoring training to meet unit needs.

7.24.5.6. Instructor: Qualified aircrew flight equipment continuation training instructor.

7.24.5.7. Training Aids: Instructor based training with AFE training aids.

7.24.5.8. Additional Information: N/A.

7.24.6. **LL07** – Aircrew Fit Check

7.24.6.1. Purpose: Ensure a comprehensive sizing and fit check of all individually sized/fitted AFE gear.

7.24.6.2. Description: Periodic training requirement that ensures AFE gear worn during flight in non-ejection seat aircraft is fit checked and verified for size/fit (i.e., any sized/fitted item). Fit checks for all non-ejection seat aircraft also includes ACBRN equipment. Refer to most current RTM for continuation training frequency.

7.24.6.3. OPR: AMC/A3T.

7.24.6.4. Unit: Squadron Aircrew flight equipment.

7.24.6.5. Curriculum Development: None.

7.24.6.6. Instructor: Performed by 1P0X1 technicians who are task-certified in for the event, and all applicable equipment tasks involved in completing a detailed fit check (e.g., fundamentals, donning, fit, inspection, operational checkout etc.). The AFE technician does not need to be qualified AFE continuation training instructor to conduct and sign off LL07.

7.24.6.7. Training Aids: None.

7.24.6.8. Additional information: Non-grounding event. Accomplish per each assignment or change in MDS. LL07 is required to be current where equipment described in [paragraph 7.24.6.2](#) is used. Additional AFE issued equipment specifically sized or fitted (i.e., ALEP) should be accomplished with LL07. Refer to RTM for fit check currency requirements.

7.25. **Mission/Sortie (MB) Events.**

7.25.1. **MB10Y** – Proficiency Sortie. Provides crewmembers specific guidance on items that should be accomplished during local training sorties that emphasize core skills. See requirements listed below by crew position.

7.25.1.1. Pilots: As a minimum, a pilot proficiency sortie consists of the following:

7.25.1.1.1. Three instrument approaches

7.25.1.1.2. Missed approach

7.25.1.1.3. VFR traffic pattern (weather permitting)

7.25.1.1.4. In addition, the following should be accomplished when available and applicable:

7.25.1.1.4.1. Circling approach

7.25.1.1.4.2. Holding pattern or procedure turn (to include entry)

7.25.1.1.5. **Notes:**

7.25.1.1.5.1. If flown in the aircraft, once the exercise commences, it should not be disrupted for any other type of training. A minimum of 1.5 flying hours, 1 hour for AFR, should be scheduled for this event. Accomplish with an IP - formal school instructors are exempt from the IP requirement. IPs should accomplish their MB10Y requirements with another IP on board the aircraft.

7.25.1.1.5.2. If accomplished in the WST, the MB10Y event does not require any specific time requirements as long as the requirements listed above are met. Pilots should focus on instrument proficiency with all engines/systems operating. This event is not intended to be logged while handling multiple aircraft malfunctions. IP or TS contractor pilot instructor supervision is required if an MB10Y is accomplished in the WST.

7.25.1.1.5.3. Because holding is incorporated into the quarterly refresher simulator profile, MB10Y time need not be spent on holding unless further training is necessary.

7.25.1.1.5.4. If circumstances prevent completion on one sortie (aircraft or WST), credit may be taken after a second IP-supervised sortie, provided the combined activity fulfills the intent of this paragraph.

7.25.1.1.5.5. Instructors should tailor each MB10Y to the individual pilot's needs.

7.25.1.2. Flight engineers: To credit a proficiency sortie, flight engineers complete a full preflight inspection, perform the required pre-departure activities, applicable panel duties, checklists for the type mission flown and complete TOLD. Half of the semiannual requirements may be credited by performing a through-flight inspection versus a complete preflight inspection, provided all other duties associated with a proficiency sortie are accomplished.

7.25.1.2.1. **Exception** : Flight engineers may credit a sortie for missions flown where a preflight inspection was not possible (e.g., NERCC), and a preflight inspection was accomplished at another time. When a preflight is accomplished, not associated with or after flight, log a preflight event AT89Y. When required, combine the preflight and through-flight proficiency sortie events by logging an MB13Y. Logging a combined MB13Y will dual log to MB10Y and update the monthly proficiency sortie currency requirement.

7.25.1.2.2. FTL A and B flight engineers may accomplish the MB10Y event in the WST or FTD (motion not required) with Sq/CC waiver approval. See [paragraph 1.5.9](#) for continuation training waivers and RTM Table 6.3.

7.25.1.3. Boom Operators: Boom operators may credit a proficiency sortie when they have completed required actions from preflight checklist through engine shutdown checklist and accomplished an AR contact and/or cargo load event. When possible, proficiency sorties should be accomplished under instructor supervision. **Note:** If circumstances prevent completion in one sortie, credit may be taken after completion on subsequent sortie.

7.25.2. **MB13Y** – Flight Engineer Proficiency (Combined) Sortie. See MB10Y flight engineer requirement.

7.25.3. **MB20Y** – Unit Specific Sortie. Unit defined sortie to accomplish mission specific training events. The following is a listing of events that can be used on an MB20Y: any individual training event (approaches, landings, ARs); 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; tactical navigation training; composite exercises; corrective training or identified weaknesses. Flight engineers may use MB20Y to log an off-station sortie.

7.25.4. **MB28Y** – Aircrew Chemical, Biological, Radiological, or Nuclear Task Qualification Trainer (ACBRNTQT) (Aircraft/Sim) Sortie.

7.25.4.1. Purpose: Enable crewmembers to become aware of their limitations while wearing ACBRN.

7.25.4.2. Description: An exercise emphasizing hands-on training, dressed out in ACBRN equipment. To credit MB28Y, the aircrew member dons ACBRN gear and performs, at a minimum: aircraft preflight, at least one mission element, and a critical phase of flight. The standard flight suit can be used in lieu of the CWU-66/P coverall. This event can be performed on all mission sets with all crewmembers dressed out with a safety observer present in the cockpit and cargo compartment/BO station. The cockpit safety observer will be a pilot of sufficient qualification as to be able to take over controls should one of the dressed out pilots become incapacitated (e.g., if the two pilots at the controls are both IPs, then the safety observer may be a FP. **(T-3)**. If the pilots at the controls are a basic AC and a FP, then the safety observer needs to be an AC at a minimum). **(T-3)**. The specialty and qualification level for the cargo compartment/BO station observer is at the discretion of the SQ/CC.

7.25.4.3. OPR: AMC/A3T.

7.25.4.4. Training Media: Aircraft or OFT/WST/BOT. KC-10 crewmembers may only credit in the sim with Sq/CC waiver (N/A AFR) and if the previous event was accomplished in the aircraft.

7.25.4.5. Instructor: Not required for continuation training. An instructor in like-specialty is required to regain currency.

7.25.4.6. Accomplish LL03, LL04, and LL05, unless already current, before being scheduled for this event.

7.25.4.7. Additional Information: Applicable only to crew members filling a wing position or below. Exempted members include SOC graduates, Basic Aircraft Qualification (BAQ)/Basic Mission Capable (BMC), and FTU crewmembers unless theater SPINS or reporting instructions are more restrictive. Only one MB28Y may be logged per FDP. Crew members not current or qualified will not perform crew duties in combat zones. **(T-3)**. Crewmembers current upon day of deployment remain current through the end of the quarter following redeployment (e.g., if a crewmember returns from a deployment on 30 June, they remain current through 30 September and go non-current on 1 October unless an event was accomplished between 1 July – 30 September). Currency can be regained in the SIM only if it was previously performed in the aircraft. Credit this event in the WST if completed in the aircraft in the previous training cycle (i.e., every other event can be done in the WST).

7.25.4.7.1. Aircrew Chemical, Biological, Radiological, and Nuclear Task Qualification Training (ACBRNTQT) should be accomplished in the aircraft. If accomplished in a WST, TS instructors observe the exercise. No other supervision is required and no restrictions apply on whom and how many crewmembers may wear the gear.

7.25.4.7.2. If performed in the aircraft, both pilots can be dressed out at the same time if under an additional pilot safety observation. In addition, all crew positions may be dressed out at the same time with a safety observer for each crew position (i.e., boom operator and flight engineer may be dressed out at the same time). Do not dress out safety observers for inflight operations. Aircraft commanders designate which safety observer will occupy the jump seat. An aircraft commander does not require an instructor in the other pilot seat to conduct MB28Y in the aircraft. FPs may conduct MB28Y with any aircraft commander. Neither an instructor nor experienced aircraft commander is required. Pilots will don the gear and accomplish at least one takeoff, approach, and landing, and complete all crew position checklists associated with approach and landing. **(T-2).**

7.25.4.7.3. FEs supervised by another FE wear the gear during takeoff, approach, and landing. When logged in the aircraft, boom operators supervised by another boom operator may wear the gear while accomplishing a boom contact. When logged in the BOT, boom operators accomplish at least 1 boom contact. Aircraft commanders coordinate the training during mission planning the business day before flight similar to EMCON 3 or 4 training.

7.25.5. **MB30Y** – Oceanic/Overwater Sortie. To ensure crews are proficient in oceanic procedures and to familiarize crewmembers with evolving ATC and 618 AOC (TACC) procedures necessary for worldwide mobility taskings. Sortie includes primary aircrew logging primary, secondary, instructor, or evaluator time outside the 48 contiguous states of the CONUS associated with a procedural oceanic crossing as well as a review of oceanic procedures and overseas (non-FAA) airspace regulations. Conduct a review of airspace considerations [minimum navigation performance specification (MNPS), RNAV/RNP, AP1/2/3/4, etc.] for the intended route of flight as well, review of associated documents (to include, but not limited to the *North Atlantic MNPS Airspace Operations Manual*, a sample NAT Track Message, North American Routes, and the North Atlantic European Routing System). Review oceanic re-routing procedures. Discussions include emphasis of critical CRM/TEM activities associated with a re-route, with a focus on updating the master oceanic log, the oceanic plotting chart and the FMS. Additionally, review VVM and PM duties in accordance with AFMAN 11-2KC-10V3, and AFI 11-290_AMC Sup, *Cockpit/Crew Resource Management Program*.

7.25.5.1. OG/CC may elect to substitute a CONUS sortie, coupled with an extensive review of oceanic navigation procedures, for the procedural oceanic obligation when aircraft requirements or crewmember availability is insufficient for accomplishing the oceanic sortie requirement. Consecutive CONUS sortie substitutions are not permitted.

7.25.5.2. OG/CC at OCONUS units may allow accomplishment of an off station sortie which includes a takeoff (AT59Y) or landing (AL01Y) at a location other than home

station. In all cases, aircrew members are still required to review airspace and oceanic crossing procedures.

7.25.5.3. Crewmembers performing instructor or evaluator duties may log MB30Y provided appropriate airspace and oceanic procedures are instructed/evaluated during the sortie.

7.25.5.4. Two oceanic sorties may be credited if total mission time exceeds 30 flight hours (ARC crewmembers may log two oceanic sorties if total mission time is less than 30 flight hours) and the pilot logs primary, secondary, instructor, or evaluator time during oceanic crossings.

7.25.5.5. Training Aids: Overwater Navigation Procedures Ground Training (GD63Y) located on the AMC/A3T SharePoint® (see [paragraph 1.14.1](#)).

7.25.5.6. OPR: AMC/A3T.

7.25.6. **MB52Y** – Integrated Mission Sortie.

7.25.6.1. Purpose: Integrated mission scenarios ensure aircrew are familiar with integration with blue assets, to include Intel, C2ISR, CAF, SOF, etc.

7.25.6.2. Description: The intent of the sortie is to provide aircrew with the experience required to operate and survive in a near peer, A2/AD, or contested, degraded, operationally limited environment that requires integration with blue assets and intel. Training scenarios are developed tactical employment against relevant threats. Scenarios should include the following:

7.25.6.2.1. Mission Planning: Participation in a mission planning cell (MPC), while not mandatory, is recommended. Brevity, integration contracts, deconfliction, threat capabilities, blue air capabilities, kill box/keypad and/or bullseye operations, and threat mitigation is normally discussed during the integrated brief/debrief and performed when required or as dictated by the applicable scenario. Scenarios can incorporate applicable products (e.g., intel, air tasking order, special instruction, threats, bullseye, restricted operating zone, kill box/keypad, etc.).

7.25.6.2.2. Tactics and Intel (IN) Objective/Scenario Development: AMC/A3D provides semi-annual scenario guidance. Mission planning includes input from OSK and IN in an effort to develop desired learning objectives and a realistic flying training plan for the sortie that replicates an advanced real-world threat country. This input can be in the form of either a pre-developed tactical scenario developed by OSK and IN or approval by OSK and IN to a scenario developed by the mission planning instructor. **Note:** OSK and IN units supporting the KC-10 coordinates with AMC AOS Det 1, in the scenario development.

7.25.6.2.3. Intel participation: IN will be part of the scenario/objective development, mission planning cell, mission execution day (preferably MEP status on aircraft). **(T-3)**. IN debrief is encouraged, but may be substituted by approved alternate means. KC-10 Sim instructors may substitute in for Intel during WST/BOT accomplishment as appropriate.

7.25.6.2.4. Blue Asset Integration: Mission planning, execution, and debrief includes C2, escort, and/or strike assets. If real-world assets are not available, this will be

provided by a scenario script developed by OSK and IN or the mission planning instructor, and approved by OSK and IN. **(T-3).**

7.25.6.2.5. Threat Reaction Requirements: At a minimum, plan three threats from the following list: IR, ADA, RF, airborne, jamming, passive detection, nuclear threats, and/or MDS specific threats. Integrate these threats to fit within the scenario flown.

7.25.6.2.6. KC-10: In addition to the requirements in [subparagraphs 7.25.6.2.1 through 7.25.6.2.5](#) above, accomplish at least four of the following events: formation, large formation, AAR formation, tanker RV, receiver AAR, EMCON 3/4 Procedures, HAVE QUICK II, visual formation station-keeping procedures, slide, scram (retrograde), tactical arrival, tactical departure, combat descent, defending climb, contingency rejoin, or kill box/keypad operations. Boom operators can credit MB52Y scenarios flown in the Boom Operator Trainer (BOT). Boom operator specific requirements: MB52Y may be accomplished each half in a simulated environment. Accomplish in the BOT utilizing approved OSK, IN, and AMC AOS Det 1-developed scenario and briefings. Accomplish a minimum three of the following six events to log MB52Y: EMCON 4 procedures, quick flow fighter refueling, visual signals from the receiver, scram, slide, or radio silent operation. Log MB52Y accomplished in the BOT using AMC AOS Det 1 MB52Y profiles.

7.25.6.2.7. Mission Debrief: Mission debrief includes an aircrew debrief analyzing success and failures of objectives, execution, intel/blue asset integration, and scenario development.

7.25.6.3. OPR: AMC/A3T, OCR: AMC/A3D.

7.25.6.4. Training Media: Aircraft or WST/BOT. Crews may credit in the WST/BOT provided the above requirements are met and training conducted in a secure WST/WST facility. Furthermore, conduct mission planning with Intel involvement, and an OSK-approved threat scenario/scenario script provided to the WST/BOT operator.

7.25.6.5. Instructor: Not required for continuation training or to regain currency.

7.25.6.6. Crew Requirements: In order to log MB52Y, crewmembers occupy their respective primary crew position or act as an augmenting crewmember for their MDS during the above listed events. All members of the crew (i.e., pilots, boom operators, flight engineers, etc.) are actively integrated into the scenario, to include mission planning. The max crew complement allowed is basic plus two additional crew members, or an augmented crew complement, whichever is higher. The intent is to fly the mission with the crew complement as it would be flown in combat.

7.25.6.7. Operational Missions: Operational missions and validated exercises, including virtual exercises, where the required events were performed, count towards credit for MB52Y.

7.25.6.8. Additional Information: Applicable only to crew members filling a wing position or below. Exempted members include SOC graduates, BAQ/BMC, and FTU crewmembers unless theater SPINS or reporting instructions are more restrictive. Only one MB52Y may be logged per FDP. Crewmembers may log 1 MB52Y per month

during combat deployments where the minimum requirements were met. Crewmembers not current or qualified for MB52Y cannot perform crew duties in combat zones, except as noted in training table. Crewmembers current upon day of deployment remain current through the end of the quarter following redeployment (e.g., if a crewmember returns from a deployment on 30 June, they remain current through 30 September and go non-current on 1 October unless an event was accomplished between 1 July – 30 September.

7.26. Aircraft Communications Equipment (PC) Events.

7.26.1. **PC35Y** – Have-Quick Event. 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. The time of day (TOD) should be updated from a ground station master clock when possible.

7.26.2. **PC39Y** – Secure Voice Event. Training consists of properly loading Secure Voice code and making at least one transmission and reception using Secure Voice with like-equipped aircraft.

7.27. Refueling Operations (RA) Events.

7.27.1. **RA01Y** – Air Refueling Operations. Event is designed to provide student with knowledge of procedures, techniques, and crew coordination requirements of the flight engineer. Student demonstrates knowledge of terminology, procedures, and flight engineer responsibilities for the following operations:

7.27.1.1. Buddy departure and join-up (vertical, horizontal separation, and inter-plane communications)

7.27.1.2. Formation (vertical, horizontal separation, and interplane communications)

7.27.1.3. AR formation (vertical, horizontal separation, and interplane communications)

7.27.1.4. RV Delta (altitude separation, receiver armament, turn range and offset computations)

7.27.1.5. RV Golf (timing, aircraft separation)

7.27.1.6. Rendezvous overrun (airspeed as a receiver and as a tanker)

7.27.1.7. Radio silent visual signals (location in the NATO Standard ATP 3.3.4.2/U.S. SRD and application)

7.27.1.8. Breakaway

7.27.1.9. Rendezvous, AR, and formation EMCON options

7.27.2. **RA03Y** – Airlift Deployment Operations. Event trains crew members in duties and crew coordination required to effectively and safely operate the aircraft in the worldwide airlift role. Accomplishing this event should ensure that each individual can effectively perform specific tasks and responsibilities of their crew positions in a dynamic, real-world, operational environment involving the airlift system. Squadron commanders (or equivalent) determine whether an actual cargo flight is required for pilot MQT. Flight engineers require an actual cargo flight in the aircraft. Event may be dual-logged with RA29Y (Fighter Deployment Operations) when requirements of both events are accomplished on the same

mission. At minimum, crew members demonstrate knowledge of, or ability to perform, items listed below. Only minor omissions or deviations that would not compromise safety or detract from overall efficient conduct of the mission are permissible. All duties and responsibilities should be carried out according to Air Force and MAJCOM instructions, flight manuals, and AFMAN 11-2KC-10V3, if applicable.

7.27.2.1. Pilot:

7.27.2.1.1. Required communications (position reports, change in flight plan, command and control (C2) monitoring requirements, operational reports, etc.)

7.27.2.1.2. Required C2 coordination, particularly with AMC agencies [i.e., coordination with 618 AOC (TACC), air terminal operations centers (ATOCs), aerial port, or CRWs]]

7.27.2.1.3. Awareness of cargo requirements and restrictions (i.e., manifest, hazardous cargo, human remains (HR), etc.)

7.27.2.1.4. Awareness of passenger requirements and restrictions (i.e., manifest, waivers, etc.)

7.27.2.1.5. Air defense identification zone (ADIZ) procedures and restrictions

7.27.2.1.6. International Civil Aviation Organization (ICAO) procedures and restrictions

7.27.2.1.7. Non-DOD (including Jeppesen®) approaches and restrictions

7.27.2.1.8. Operations at airports without operating control towers (including UNICOM requirements)

7.27.2.2. Flight engineer:

7.27.2.2.1. Coordinate with crew to establish maximum allowable cabin load (ACL) capability prior to or after arriving on station

7.27.2.2.2. Demonstrate proficiency in utilizing performance manual to compute MTOGW [Performance Knowledge and Use Training (BR43Y)]

7.27.2.2.3. Coordinate with boom operator prior to cargo loading and downloading on the following:

7.27.2.2.3.1. Tipping center of gravity (CG)

7.27.2.2.3.2. Restrictions on moving or redistributing fuel after the boom operator has computed tipping CG

7.27.2.2.3.3. Zone loading limitations

7.27.2.2.3.4. Fuel ballast requirements

7.27.2.2.3.5. Hazardous cargo awareness concerning type, location, and quantity of hazardous cargo, airfield restrictions, route of flight, etc.

7.27.2.2.3.6. Optimized CG at or near the aft limit for mission conditions, both for takeoff and in-flight, when practical

7.27.3. **RA05Y** – Breakaway Radio Silent. Event is to be accomplished as a tanker for boom operators and as a receiver for pilots and flight engineers 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 pre-contact position. Should this event be scheduled as part of a radio silent AR, coordination can be done any time prior to the flight.

7.27.4. **RA07Y** – Cargo Loading (Tanker).

7.27.4.1. Purpose: Continuation training for Boom Operators.

7.27.4.2. Description: Event ensures boom operators are trained to and maintain proficiency in airlift procedures supporting worldwide cargo operations. Crew rest per AFMAN 11-202V3 is required for all boom operators accomplishing this event. Event may be logged by no more than two cargo-qualified booms per cargo load. A third boom may log a cargo load if fulfilling the role of IB or EB. A Cargo Load event consists of all T.O. 1C-10(K)A-9 checklists from Loading Coordination/Preparation through Cargo Off-loading.

7.27.4.3. Responsibilities: Cargo-qualified boom operators work together to ensure all aspects of the cargo mission are completed. Cargo and passenger oversight duties are normally assigned to the secondary BO. The primary BO normally assists the secondary BO with cargo and passenger duties, when not performing primary duties. **Note:** It is essential that Secondary BOs coordinate all cargo onload/offload (aircraft tipping, maximum fuels, lateral unbalance, etc.) calculations with the primary boom operator to ensure accuracy.

7.27.4.4. Qualification: Mission ready boom operators must be current, qualified, and certified mission ready to perform cargo loading operations unsupervised.

7.27.4.5. Continuation Training: RA07Y or BR29Y may be used to maintain cargo currency for boom operators. **(T-2).**

7.27.5. **RA09Y** – Contact. Total Number. For qualification, satisfactory progress in day contacts is required prior to attempting radio silent or night contacts. If accomplished in the BOT, up to 50 percent of contacts may be logged under all environmental conditions and may be dual-logged with RA15Y contacts.

7.27.6. **RA11Y** – Contact Fighter. CK17Y and CK19Y proficiency and certification required prior to accomplishing without instructor supervision. Log the actual number of contacts accomplished and dual log with RA09Y. Do not dual log with RA09Y while completing CK17Y and CK19Y training events. Boom operators cannot log RA11Y until they have been certified on an AF Form 4324 for CK17Y and CK19Y.

7.27.7. **RA13Y** – Contact Night. Contacts made when the use of external lighting is required to aid in refueling. Dual log with RA09Y.

7.27.8. **RA15Y** – Contact Tanker Manual. Contacts made with the AR Signal System in override during tanker manual override (TMO), or manual boom latching (MBL) operations. Conduct a thorough review of TMO equipment and procedures with students prior to attempting tanker manual contacts in the aircraft. Dual log with RA09Y. See current NATO Standard ATP 3.3.4.2.

7.27.9. **RA17Y** – Contingency Rejoin. Rejoin with another aircraft using visual turning rejoin techniques or air refueling rejoin procedures. Pilot may log the event if accomplishing PF or PM duties. Event may be credited as the maneuvering aircraft for any rendezvous for air refueling purposes that is not a RV Delta or RV Golf. See AFTTP 3-1.KC-10/KC-135 for tactical application of this event against air-to-air threats. See AFTTP 3-3.KC-10 for techniques on the purpose, set-up, execution and common errors associated with this event.

7.27.10. **RA19Y** – Contact Day. For initial qualification or requalification. Day proficiency is required prior to attempting radio silent or night contacts. Dual log with RA09Y.

7.27.11. **RA21Y** – Defending Climb. Event will only be trained in a WST to ensure the training encompasses flying the maneuver from a slow-speed air refueling scenario requiring aircraft configuration changes and or bank restrictions. A defending climb is an evasive maneuver flown in response to surface fire. See AFTTP 3-1.KC-10/KC-135 for tactical application of this event against surface-to-air threats. See AFTTP 3-3.KC-10 for techniques on the purpose, set-up, execution, and common errors associated with this event.

7.27.12. **RA23Y** – Deployment Mission Planning. Event includes mission planning duties and requirements for both fighter deployments and airlift operations. At minimum, student demonstrates knowledge of current operations functions and responsibilities, customs and agricultural requirements, and command control requirements (i.e., required coordination with command and control centers, ATOC, contingency response wing). Specifically, student should be able to accomplish the following:

7.27.12.1. Coordinate for billeting, diplomatic clearances, transportation, and meals.

7.27.12.2. Given various types of flight plans utilized by the KC-10 (CORONET-generated, 618 AOC (TACC)-generated, or locally produced), demonstrate knowledge of flight plan format and information by explaining what various headings and columns of numbers represent.

7.27.12.3. Given a computer flight plan, demonstrate how to verify accuracy of the flight plan fuel load to include receiver offload updates.

7.27.12.4. Demonstrate knowledge of mission planning documents, such as DoD Foreign Clearance Guide (*eFCG*), flight information publications (FLIP), Mobility Air Forces Management (AMCI11-208), airfield suitability guidance and information in GDSS Airfield Detail and the Airfield Suitability and Restrictions Report (ASRR), altitude reservation (ALTRV), special pilot in command airports and associated airport qualification products (AQP) and guidance found in AMCI 11-211, *Destination Airfield Suitability Analysis*, etc., by locating information requested by instructor and providing accurate interpretation.

7.27.12.5. Emphasize utilization of the IFR Supplement to determine airfield support capability, services (e.g., civilian vendors who have been contracted to provide fuel, etc.), weight bearing capability, runway or airfield restrictions, etc.

7.27.13. **RA25Y** – Drogue System Operation.

7.27.13.1. Contractor Qualification Training. Utilizing BOT, boom operator demonstrates procedures for deploying and rewinding AR drogue. Applicable emergency procedures for jettisoning drogue are demonstrated.

7.27.13.2. In-Flight Training. Boom operator accomplishes procedures for deploying and rewinding AR drogue.

7.27.13.3. Initial Qualification Training. Pilots and flight engineers are briefed on all drogue procedures.

7.27.14. **RA29Y** – Fighter Deployment Operations. Event trains students in duties and crew coordination required to effectively and safely operate aircraft during worldwide fighter deployments. Accomplishing this event should ensure each individual can effectively perform his or her crew positions specific tasks and responsibilities in a dynamic, worldwide operational environment involving fighter movements. The ideal mission to complete this requirement would be OCONUS fighter deployment or redeployment with multiple refueling legs; however, squadron commander determines and defines which missions (CONUS and/or OCONUS) are suitable for mission qualification training. May be dual-logged with RA03Y (Airlift Deployment Operations) when requirements of both events are accomplished on the same mission. At a minimum, crewmembers demonstrate knowledge or ability to perform the items listed below. Only minor omissions or deviations that would not compromise safety, or detract from overall efficient conduct of the mission, are permissible. Perform duties and responsibilities in accordance with Air Force and MAJCOM instructions, flight manuals, and AFMAN 11-2KC-10V3 (if applicable).

7.27.14.1. Pilot:

7.27.14.1.1. Required communications (position reports, change in flight plan, C2 monitoring requirements, operational reports, etc.)

7.27.14.1.2. Tracking mission progress (e.g., refueling points, abort or divert base requirements, etc.)

7.27.14.1.3. Required C2 coordination (i.e., coordination with 618 AOC/TACC, TTF, ACC/AOS, etc.)

7.27.14.1.4. Fuel management/planning (coordination with the flight engineer on fuel plan and progress, updates of weather, and divert base considerations)

7.27.14.1.5. ADIZ procedures and restrictions

7.27.14.1.6. ICAO procedures and restrictions

7.27.14.2. Flight engineer:

7.27.14.2.1. Utilize computer flight plan (CFP) to determine AR points. Perform tracking of AR points using the FMS and coordinate refueling times to ensure offloads are accomplished on schedule. Instructor explains "bingo points" and emphasizes importance of starting and ending each refueling on time.

7.27.14.2.2. Effectively utilize general navigation skills (AH05Y), required FLIPs (or navigational charts if required), flight plan, fuel log, FMS (BR25Y), and performance manual to accomplish actual or simulated in-flight re-planning of fuel requirements (tanker and fighter) to alternate or abort recovery airfield. Student effectively

coordinates with crew to accurately assess the situation for re-planning fuel requirements. Student completes these tasks in sufficient time to prevent delays or unsuccessful completion of the mission. Fuel computation error cannot exceed tolerances listed in AFMAN 11-2KC-10V2. Instructor emphasizes importance of being prepared for mission changes and in-flight re-planning at any time.

7.27.14.2.3. Maintain fuel log and flight plan to accurately show fuel status and fuel consumption trends at all times.

7.27.14.2.4. Record appropriate data from each AR using unit-approved worksheets.

7.27.15. **RA47Y** – Scram. Accomplish this maneuver single ship only. Complete the event in a WST or aircraft during operational or continuation training missions on a non-interference basis. Pilot may log the event if accomplishing PF or PM duties. See AFTTP 3-1.KC-10/KC-135 for tactical application of this event against air-to-air threats. See AFTTP 3-3.KC-10 for techniques on the purpose, set-up, execution and common errors associated with this event.

7.27.16. **RA51Y** – Slide. Accomplish this maneuver in tactical context single ship or in formation. Complete the event in a WST or aircraft. Pilot may log the event if accomplishing PF or PM duties. See AFTTP 3-1.KC-10/KC-135 for tactical application of this event against air-to-air threats. See AFTTP 3-3.KC-10 for techniques on the purpose, set-up, execution and common errors associated with this event.

7.27.17. **RA63Y** – Supervision of Right Seat Takeoff, Landing, Touch-and-Go Landing, and Receiver Air Refueling Ground Training. This event gives those students going through the PCO, ACIQ, or PRQ (aircraft commander) courses exposure to common mistakes made by inexperienced pilots.

7.28. Refuel Formation (RF) Events. Formation (RF) Events. Pilots may log applicable events when performing pilot monitoring (PM), instructor, or evaluator duties.

7.28.1. **RF51Y** – Aircraft Air Refueling (AAR) Formation. 15 minutes of AR formation required (tanker or receiver). Consists of rendezvous and AR procedures prescribed by AR T.O.s, AFTTP 3-3.KC-10, and AFMAN 11-2KC-10V3. Credit may be taken if receiver aborts or if conducting KC-10 on KC-10 formation and AR, provided a sampling of AR formation positions are accomplished. Not creditable in lead position.

7.28.2. **RF53Y** – Formation. Follow procedures from AFTTP 3-3.KC-10, AR technical orders (T.O.) and AFMAN 11-2KC-10V3. At least 30 minutes of formation, to include the departure and join-up, should be planned and accomplished. Each aircraft commander briefs their portion of the mission they will lead. Accomplish PC35Y and PC39Y prior to and/or during each formation flight and plan on using EMCON 2 procedures throughout. Essential radio communications required for safety of flight, or failure to accomplish a PC35Y or PC39Y, does not preclude crediting the event. Log only one RF53Y per sortie. Credit may be taken for all formation positions.

7.28.3. **RF55Y** – Tanker Formation (Large). Three or more aircraft, not necessarily the same type, in cell formation, be flown through completion of level-off or join-up, whichever occurs first. Follow procedures from AFTTP 3-3.KC-10, AR technical orders (T.O.) and AFMAN 11-2KC-10V3. Any position is creditable. Dual log with RF53Y.

7.28.4. **RF57Y** – Tanker Formation, Radio Silent Visual Signals. The preferred method for training pilots is to accomplish this item in the WST. Pilots recognize the signals and take appropriate action. Reference to checklist is permissible for all but “Breakaway” signal. Boom operators use applicable boom signal and pilot director light coaching switches to direct receiver from pre-contact through post AR. Coordination between pilots and boom operators is mandatory prior to radio silent operations. Boom operators may accomplish in the BOT or aircraft during upgrade.

7.29. Refuel, Receiver, and Rendezvous (RT, RU, RV) Events.

7.29.1. **RT01Y** – Radio Silent AAR. Refueling accomplished without any EMCON 1 or 2 required radio calls. Any type receiver may be used for training.

7.29.2. **RT03Y** – Tanker AAR. Credit only one RT03Y for each receiver formation and AR control time (ARCT) refueled regardless of number of aircraft. 10-minute toggles-engaged time is desired.

7.29.2.1. Pilots may receive credit for either PF or PM duties.

7.29.2.2. Flight Engineer Qualification. Demonstrate ability to perform duties prescribed by flight manual, ATP 3.3.4.2/SRD and other governing directives without omissions or deviations that would detract from overall efficient conduct of the mission. Primary areas of responsibility are:

7.29.2.2.1. Fuel transfer and management

7.29.2.2.2. Checklist initiation and accomplishment

7.29.2.2.3. Crew coordination and monitoring rendezvous

7.29.2.3. Flight Engineer Continuation Training. Accomplishing duties prescribed by flight manual, ATP 3.3.4.2/SRD and other governing directives (rendezvous through post AR checklist).

7.29.3. **RT05Y** – Tanker AAR Autopilot-Off. All axis of the tanker autopilot is disengaged and AR contacts should be practiced for a minimum of 10 minutes.

7.29.4. **RT07Y** – Tanker AAR Breakaway. Breakaway or emergency separation should be initiated with the receiver in the AR envelope. The pilot, flight engineer, and boom operator demonstrate proficiency in executing breakaway procedures.

7.29.5. **RT15Y** – Tanker AAR Slow Speed. Rendezvous and tanker AR with any aircraft (e.g., A-10, B-52, C-130, etc.) that might require using minimum AR speed. If this AR is unavailable, a slow speed tanker refueling exercise may be substituted (see AFTTP 3-3.KC-10). Each student explains ATP 3.3.4.2/SRD procedures and limitations for aircraft that may require slow speed AR down to minimum AR speed (i.e., 1.2G cruise buffet onset, with additives). In addition, each student computes minimum AR speed and maximum tanker GW for various KC-10 configurations and altitudes.

7.29.6. **RT21Y** – Tanker Heavyweight Offload. Requires aircraft GW $\geq$ 556,000 pounds or total of all body tank fuel and zero fuel weight $\geq$ 414,000 pounds at start of refueling.

7.29.6.1. Qualification Training. Instructor evaluates student knowledge of tanker heavyweight mission planning, fuel management, T.O. procedures, performance, and

limitations. Objective is to ensure Phase IA heavyweight tanker training objectives were achieved and retained. If scheduling restrictions prevent accomplishing event in flight, instructor may evaluate student's proficiency by oral examination or using sample problems and scenarios.

7.29.6.2. Continuation Training. Primary purpose of event is to reinforce fuel management procedures and techniques and review aircraft performance limitations associated with heavyweight tanker AR. ATD is the primary method for accomplishing this event.

7.29.7. **RU03Y** – Receiver AAR, Aircraft. (Dual-log with RU01Y.)

7.29.8. **RU05Y** – Receiver AAR (Heavyweight Receiver/Heavy Onload). (Dual-log with RU01Y.)

7.29.8.1. Pilot: Requires minimum onload of 10,000 pounds with an end refueling GW of 556,000 pounds or greater. Accomplish event under direct IP supervision prior to unsupervised accomplishment. To maximize training, recommend event be accomplished behind KC-135. Accomplish initial training in the aircraft.

7.29.8.1.1. To credit RU05Y in the aircraft, a minimum of 2 contacts, one for at least ten minutes, is required. If the closures, contacts, and disconnects are stable, 2 contacts may be combined for the ten minute “toggles-engaged” time.

7.29.8.1.2. Continuation training. Receiver AR, Heavyweight (RU05Y) logged in the WST should accomplish either 15 minutes of closures from pre-contact to contact, or a sustained contact of 5 minutes.

7.29.8.2. Flight engineer: Requires either the aircraft GW be equal to or greater than 556,000 pounds or the total of all body tank fuel and aircraft zero fuel weight equal to or greater than 414,000 pounds at end of refueling. The following further illustrates this guidance:

7.29.8.2.1. Qualification training. Instructor evaluates student knowledge of receiver heavyweight mission planning, fuel management, ATP 3.3.4.2/SRD procedures, performance, and limitations. Objective is to ensure Phase IA heavyweight receiver training objectives were achieved and retained. If scheduling restrictions prevent accomplishment of event in flight, instructor may evaluate student proficiency by discussion, oral examination, or using sample problems or scenarios.

7.29.8.2.2. Continuation training. Event reinforces fuel management procedures, develops and refines fuel management techniques for reducing boom contact time, and reviews aircraft and performance limitations associated with heavyweight receiver AR. ATD is the primary method for accomplishing FE training requirement for this event.

7.29.9. **RU07Y** – Receiver AAR Anchor Air Refueling Area (ARA). (Dual-log with RU01Y.)

7.29.9.1. Qualification Training [KC-10 Instructor Aircraft Commander Course (IAC), Aircraft Commander Initial Qualification (ACIQ), Pilot Requalification (PRQ), PCO and in-unit upgrade]. Students shall be able to establish and maintain contact. May be flown day or night; students demonstrate proficiency in day receiver AR prior to flying event at

night (not applicable for instructor upgrade). Activity should include practice in rendezvous, closure, and contacts until able to maintain contact in a turn, preferably in an anchor area for 5 minutes without disconnect. Toggles-engaged time does not apply during tanker autopilot-off operations. May be accomplished during MQT if availability precludes accomplishment at the FTU. Accomplish in the aircraft for Initial training.

7.29.9.2. Continuation Training. Aircraft commanders should accomplish 10 minutes of toggles-engaged time. Toggles-engaged time does not apply during tanker autopilot-off refueling or during higher headquarters missions. RU07Y logged in the WST should accomplish either 15 minutes of closures from pre-contact to contact, or a sustained contact of 5 minutes.

7.29.10. **RU09Y** – Receiver AAR Breakaway. Initiated with receiver in the AR envelope. Aircraft commanders and pilots demonstrates proficiency in executing breakaways. Flight engineers demonstrates proficiency in flight engineer duties during a breakaway. This event includes practice emergency separations.

7.29.11. **RU11Y** – Receiver AAR Day. All requirements of RU01Y apply for credit. (Dual-log with RU01Y.)

7.29.12. **RU13Y** – Receiver AAR Heavyweight Breakaway. Initiated while within the AR envelope and at weights above 556,000 lbs. Training places emphasis on smooth control inputs and awareness of flight characteristics at heavy weights. Training is conducted in the WST only. Dual log with RU09Y. This event includes emergency separations.

7.29.13. **RU15Y** – Receiver AAR Indoctrination. PIQ demonstrates ability of safely holding astern, taking control of the aircraft to safely clear the tanker in emergency, and executing a breakaway maneuver. May be accomplished in the WST or aircraft.

7.29.14. **RU17Y** – Receiver AAR, Night. Refueling accomplished when tanker external lighting is required to define visual references. All requirements of RU01Y apply for credit. (Dual-log with RU01Y.)

7.29.15. **RU19Y** – Receiver AAR Tanker Auto-pilot OFF.

7.29.16. **RT19Y** – Rendezvous AR EMCON 3. Any rendezvous accomplished when primary means are not available or utilized. During formation tactics, limit credit to the tanker actually accomplishing rendezvous. Dual-credit with RT27Y and specific type rendezvous.

7.29.17. **RT25Y** – Tanker RV Rendezvous Overrun Procedures. Accomplish according to ATP 3.3.4.2/SRD.

7.29.18. **RT27Y** – Tanker RV. Does not include tanker buddy procedures. Accomplish in accordance with ATP 3.3.4.2/SRD. Do not credit unless actually accomplishing a rendezvous.

7.29.19. **RT29Y** – Tanker RV Alpha. See ATP 3.3.4.2/SRD, formerly called Anchor Rendezvous. Dual-log with RT27Y and RT03Y.

7.29.20. **RT31Y** – Tanker RV Delta. See ATP 3.3.4.2/SRD, formerly called Point Parallel Rendezvous. Tanker performs rendezvous to include maintaining offset, monitoring range to receiver, and initiating final turn. Dual-log with RT27Y.

7.29.21. **RT33Y** - Tanker RV Golf. See ATP 3.3.4.2/SRD, formerly called En Route Rendezvous. Creditable as tanker or receiver. Dual-log with RT27Y.

7.29.22. **RT35Y** – Tanker Wing Pod AAR. All crew members are required to be familiar with the wing AR Pod system. Training emphasizes unique performance considerations, preflight procedures, system operation, and system malfunctions. Training includes an aircraft field trip. In addition, boom operators demonstrate proficiency in operating WARP system in BOT or in flight by accomplishing checklist procedures for deploying and rewinding both wing-mounted drogues.

7.29.23. **RU01Y** – Receiver AAR.

7.29.23.1. Pilot Continuation Training: aircraft commanders should accomplish 10 minutes of toggles-engaged time. Toggles-engaged time does not apply during tanker autopilot-off refueling or during higher headquarters missions. Receiver AAR (RU01Y) logged in the WST should accomplish either 15 minutes of closures from pre-contact to contact, or a sustained contact of 5 minutes.

7.29.23.2. Pilot Upgrade (ACIQ, PRQ, PCO and in-unit upgrade): Aircraft commander upgrade students establish contact under simulated conditions of radio silence, amplifier override (manual boom latching), pilot director lights out, and tanker autopilot-off. Student demonstrates proficiency in day activity to an instructor prior to advancing to night activity (not applicable for instructor upgrade). Night activity should include practice in rendezvous, closure, and contacts until able to maintain contact for 5 minutes without disconnect. Toggles-engaged time does not apply during tanker autopilot-off operations.

7.29.23.3. Pilot Upgrade (Instructor): Aircraft commanders upgrading to instructor demonstrate familiarity with, and be able to communicate the dynamic refueling environment. In addition to the requirements in the above paragraph, they are able to demonstrate proficiency the air refueling envelope.

7.29.23.4. Flight Engineer Qualification.

7.29.23.4.1. Demonstrate ability to perform duties prescribed by flight manual, ATP 3.3.4.2/SRD and other governing directives without omissions or deviations that would detract from overall safe and efficient conduct of the mission. Primary areas of responsibility are:

7.29.23.4.1.1. Fuel transfer and management

7.29.23.4.1.2. Checklist initiation and accomplishment

7.29.23.4.1.3. Crew coordination and monitoring rendezvous

7.29.23.4.2. Flight Engineer Continuation Training. Accomplishing FE duties prescribed by flight manual, ATP 3.3.4.2/SRD and other governing directives.

7.29.24. **RV01Y** – Receiver Rendezvous Air Refueling. Accomplish in accordance with ATP 3.3.4.2/SRD.

7.29.25. **RV05Y** – Receiver Rendezvous Overrun Procedures. Accomplished in accordance with ATP 3.3.4.2/SRD.

7.29.26. **RV07Y** – Receiver RV Echo. Any rendezvous accomplished when primary means are not available or utilized. During formation tactics limit credit to receiver actually accomplishing rendezvous. Dual-log with RV01Y.

7.29.27. **RV09Y** – Receiver RV Golf. See ATP 3.3.4.2/SRD, formerly called En Route Rendezvous. Creditable as tanker or receiver. Dual-log with RV01Y.

7.29.28. **RV11Y** – Rendezvous AR EMCON 1. AR procedures established to conduct initial qualification, requalification, and difference training for either tanker or receiver crews. Any and all emitters are authorized to ensure timely training, feedback, and maximum safety. Dual-log with type rendezvous accomplished and RU01Y or RT03Y.

7.29.29. **RV13Y** – Rendezvous AR EMCON 2 (Restricted Communications). Radio silent refueling formation, except that rendezvous and initial portion of AR is conducted with two radio exchanges. Accomplish according to ATP 3.3.4.2/SRD. Dual log with type of rendezvous accomplished and RU01Y or RT03Y.

7.29.30. **RV15Y** – Rendezvous/AR EMCON 3 (Communications Out). Radio Silent rendezvous and AR. Using other emitters is authorized unless prohibited by supported operations, plans, etc. If valid receiver requirement exists, units may utilize this option after thorough coordination with receiver unit. Emission options 3 and 4 require extensive pre-coordination between tanker and receiver units. Coordination normally take place during mission planning. Unless waived by squadron commander for mission priority reasons, crews coordinate with receiver unit if EMCON 3 or 4 procedures are required to be performed. Squadron commander certified crew members are authorized to conduct EMCON 3 or 4 operations. Squadron commander determines certification training requirements based on individual pilot or flight engineer experience and units mission, except for the boom operator. Boom operators with less than 200 hours of flight time as a boom operator receive a minimum of one flight with an instructor stressing Radio Silent procedures, under EMCON 3 conditions, prior to squadron commander certification. Credit may be awarded on all operational support sorties when mission requirements are met. Dual-log with type of rendezvous accomplished RT01Y and RU01Y or RT03Y (see [paragraph 5.7.1](#)).

7.29.31. **RV17Y** – Rendezvous AR EMCON 4 (Emission Out). No emitters will be used unless specifically authorized by the plan supported. This includes radios, radio navigation transmitters, radar, radio altimeters, IFF, exterior lighting, etc. This option is not routinely practiced during peacetime operations unless specifically addressed by tasking order (see [paragraph 5.7.1](#)).

7.30. Survival, Evasion, Resistance, Escape (SERE) (SS) Events. AFI 16-1301 is the SERE parent regulation. In such cases where there is a conflict between this reference and the parent regulation, the parent regulation takes precedence. OPR is AMC Combat Tactics (A3DT). Courseware and guidance provided by AMC/A3DT.

7.30.1. **SS01** – Local Area Survival (LAS). Identify environmental aspects that could affect an aircrew member in a local area survival scenario. Determine personnel recovery tactics, techniques and procedures applicable to local area flying operations. SS01 is a one-time requirement prior to first flight at every assignment. Personnel who PCS and then return for subsequent assignments accomplishes this training during each reassignment. This training

is provided for subsequent re-assignments to the same base. See AFI 16-1301 and applicable MAJCOM guidance.

7.30.2. **SS02** – Combat Survival Training (CST). Aircrew demonstrates proficiency in tactics, techniques and procedures (TTP) for survival and recovery under field conditions, while in a simulated combat environment using weapons system specific survival equipment. This training is designed to enforce learning objectives through hands-on experiential training. MAJCOMs tailor training based on mission, type of aircraft, and level of risk. See AFI 16-1301 and/or MAJCOM supplement. This course is conducted by 1T0X1 SERE Specialists or other personnel trained in accordance with SERE training plans validated by the SERE MAJCOM Functional Manager and approved by the Career Field Manager (AF/A3O-AS).

7.30.3. **SS03** – Conduct After Capture (CAC). Training is mandatory for mobility personnel required to maintain currency in S-V80-A SERE TTPs. Mission Ready (MR)/Combat Mission Ready (CMR) and personnel assigned to combat-coded units receives CAC not to exceed 36 months between events. Complete SS03 prior to being awarded mission ready status. See AFI 16-1301 and MAJCOM supplements. This course be taught by 1T0X1 SERE Specialists or other personnel trained in accordance with SERE training plans validated by the SERE MAJCOM Functional Manager and approved by the Career Field Manager (AF/A3O-AS).

7.30.4. **SS05** – Water Survival Training (WST). Aircrew demonstrate proficiency in TTP for survival and recovery from a water environment using weapons system specific survival equipment. This training should be conducted in natural waters (pond, lake, or ocean) or an environmental pool if logistically possible. Training in swimming pools is authorized if overall training objectives are not compromised. WST utilizes the demonstration and performance method of instruction. MAJCOMs tailor training based on mission, type of aircraft, and level of risk. Refer to AFI 16-301 and/or MAJCOM supplement for further information.

7.30.5. **SS19** – Evasion Conduct After Capture (ECAC). Provides post-egress evasion and conduct after capture procedure training for Flight surgeons, Aeromedical Evacuation (AE) aircrew members, and other designated personnel. Air Force equivalent course is S-V88-AL. Not applicable for pilots, flight engineers, or boom operators.

7.30.6. **SS20** – Level-C, (SERE Training, S-V80-A). Air Force equivalent course is S-V80-A (Initial). Refer to AFI 16-1301.

7.30.7. **SS32** – Water Survival Training, Non-Parachuting (S-V90-A) (Ditching Aircraft).

7.31. Tactical Ground Training (TG) Events.

7.31.1. **TG02Y** – Visual Threat Recognition and Avoidance Trainer (Initial). A course of instruction consisting of a sequence of lessons that exposes aircrew members to threat recognition and associated mission considerations in a VTRAT trainer device. Dual log with TG03Y for ARMS tracking purposes.

7.31.1.1. OPR: AMC/A3D.

7.31.1.2. Additional Information: One time event. Prior MWS Initial VTRAT does not satisfy the requirement of TG02Y. Prior MWS crew members attends TG02Y for the KC-10. Courseware and guidance provided by TS contractor.

7.31.2. **TG03Y** – VTRAT Refresher Trainer. Ensures aircrews are trained to recognize tactical environment aircraft threats. Complete using the VTRAT trainer device, classified CBT (available on CD and accomplished on a SIPRNet computer), or utilizing an alternate media approved/authorized by AMC/A3D. VTRAT is available at both KC-10 training sites; advance scheduling notice is required. TG03Y may be completed in conjunction with GD75Y.

7.31.2.1. OPR: AMC/A3D.

7.31.2.2. Instructor: Unit Tactics.

7.32. Tanker Flight Training (TK) Events.

7.32.1. **TK05Y** – APU Start Procedures Training. Event ensures boom operators maintain proficiency in APU starting procedures.

7.32.2. **TK07Y** – Communications Training (Tanker). Demonstrate proficiency in the application of communications and interphone procedures required by flight manual and governing directives.

7.32.3. **TK09Y** – Iridium Satellite Phone Training. Accomplish all required transmissions and monitoring procedures according to flight manual. Minor omissions, errors, or delays that do not detract from communication of the message or efficient conduct of the mission are permissible.

7.32.4. **TK11Y** – Manual Pressurization Training. Pressurization system is operated in "manual" from takeoff through landing and maintaining cabin rate of climb acceptable for crew and passenger comfort. Cabin altitude is maintained according to altitude schedule placard on FE's upper panel. Student demonstrates ability to prioritize cockpit duties to monitor and maintain manual control of pressurization system during flight from takeoff through landing.

7.32.5. **TK15Y** – Radar Operation Training. Operation of radar according to T.O. procedures during all phases of flight. Emphasize effective use of radar for weather avoidance (during departure, en route, and recovery), maintaining formation position, use of BCN and MKR modes during rendezvous, detecting overruns during receiver and tanker rendezvous, and tilt control and vectoring techniques for initial closure after receiver rendezvous. Practice tilt adjustment techniques using radar for skin painting aircraft as well as calculating cloud heights.

7.32.6. **TK17Y** – Two-Engine Ferry Continuation Training. Contractor-administered academic and ATD instruction designed to provide selected crew members (pilots and flight engineers) with two-engine ferry refresher training. At minimum, the course covers procedures, techniques, tech order review, aircraft preparation, performance, and crew coordination. **Note:** This training supports formal Two-Engine Ferry Course.

7.33. Tactical Aircraft Training (TW) Events.

7.33.1. **TW01Y** – Tactical Departure. Event will only be trained in a WST and consists of a low altitude/high speed departure. May be accomplished on operational missions when directed or required. See AFTTP 3-1.KC-10/KC-135 for tactical application of this event against terminal area threats. See AFTTP 3-3.KC-10 for techniques on the purpose, set-up, execution and common errors associated with this event.

7.33.2. **TW25Y** – Tactical Large Force Employment.

7.33.3. **TW40Y** – Combat Descent. Event will only be trained in a WST. **(T-2)**. May be accomplished on operational missions when directed or required. See AFTTP 3-1.KC-10/KC-135 for tactical application of this event against air-to-air threats. See AFTTP 3-3.KC-10 for techniques on the purpose, set-up, execution, and common errors associated with this event.

7.33.4. **TW50Y** – Tactical Arrival. Event is flown for training using a tactical scenario developed by local units. If arriving VFR, comply with all VFR guidance in AFMAN 11-202V3, FLIP GP and AP, FARs, and applicable host nation guidance. The purpose of this event can be found in AFTTP 3-1.KC-10/KC-135. See AFTTP 3-1.KC-10/KC-135 for tactical application of this event against terminal area threats. See AFTTP 3-3.KC-10 for techniques on the purpose, set-up, execution and common errors associated with this event. TW50Y may be logged upon accomplishment of either of two arrivals:

7.33.4.1. Random Shallow maneuver may be performed in the aircraft or WST. This option may be accomplished day or night on operational missions when directed or during operational or continuation training missions on a non-interference basis.

7.33.4.2. Low Altitude/High Speed arrival is restricted to a WST or on operational missions when directed. **(T-2)**.

7.34. Unit-Defined (X) Events. Contact MAJCOM ARMS Functional for list of allocated unit-defined codes by location. Unit-defined events for all MAF units begin with “X”, are five characters long with the second and third characters allocated as numbers, fourth character is a letter, and the final character is a “Y”. Once allocated by the MAJCOM, unit-defined events may be managed at the local level within the allocated codes and are not captured in the MAJCOM’s ARMS database. They should be judiciously considered and/or approved at the OG/CC level and published in local guidance documenting event identifiers, associated ARMS nomenclature, volume, currency and/or frequency. OG/CCs should periodically review during the TRP, established X-events for continued relevancy to the unit’s mission and document those reviews, when accomplished, in the TRP minutes along with any specific actions taken.

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Deputy Chief of Staff, Operations

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

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Abbreviations and Acronyms

AAR—air-to-air refueling

AC—aircraft commander

ACBRN—aircrew chemical, biological, radiological, and nuclear

ACBRNTQT—aircrew chemical, biological, radiological, and nuclear task qualification training

ACCA—aircrew contamination control area

ACIQ—Aircraft Commander Initial Qualification (previous MWS aircraft commanders or FAIP/OSA aircraft commanders), aka PTX-1

ACQ—Aircraft Commander Qualification

ADS-B—automatic dependent surveillance-broadcast

ADSC—active duty service commitment

AE—aeromedical evacuation

AEF—Air Expeditionary Force

AETC—Air Education and Training Command

AF—Air Force

AFB—air force base

AFE—Aircrew flight equipment

AFFSA—Air Force Flight Standards Agency

AFI—Air Force Instruction

AFIT—Air Force Input Tool

AFJI—Air Force Joint Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFR—Air Force Reserve

AFRC—Air Force Reserve Command

AFSC—Air Force Specialty Code

AFTO—Air Force Technical Order

AFTTP—Air Force Tactics, Techniques, and Procedures

AIT—aircrew intelligence training

ALEP—aircrew laser eye protection

AMC—Air Mobility Command

AMC AOS—Air Mobility Command Air Operational Squadron

AMCI—Air Mobility Command Instruction

ANG—Air National Guard

AOC—air operations center

APU—auxiliary power unit
AQP—airport qualification products
AR—air refueling
ARA—air refueling area
ARC—Air Reseve Component (ANG and AFRC)
ARCT—air refueling control time
ARMS—Aviation Resource Management System
ASAP—Aviation Safety Action Program
ASR—airport surveillance radar
ASRR—Airfield Suitability and Restrictions Report
AST—Aircrew System Trainer
AT—academic training
ATC—air traffic control
ATD—Aircrew Training Device
ATOC—air terminal operations center
ATP—Allied Tactical Publication
BAQ—basic aircraft qualification/qualified
BBQ—Basic Boom Operator Qualification
BIC—Boom Operator Instructor Course
BMC—basic mission capable
BO—boom operator
BOT—Boom Operator Trainer
BRQ—Boom Operator Requalification
C4—command, control, communications, and computers
CAC—Conduct After Capture
CBRN—chemical, biological, radiological, nuclear
CBT—computer-based training
CC—commander or appropriate AFRC/ANG operations supervisor
CCE—contract compliance evaluations
CCMD—combatant command
CEA—career enlisted aviator
CEA CoE—Career Enlisted Aviator Center of Excellence, Lackland AFB, TX

CFIT—controlled flight into terrain
CLM—Cargo Load Model
CLT—Cargo Loading Trainer
CNS/ATM—Communication, Navigation, Surveillance/Air Traffic Management
COMSEC—communications security
CONUS—continental United States
COR—contracting officer representative
CRG—contingency response group
CRM/TEM—crew resource management and threat and error management
CRO—COMSEC responsible officer
CRW—contingency response wing
CSD—class start date
CST—Combat Survival Training
CUR—currency
DMO—distributed mission operations
DO—director of operations
DOD—Department of Defense
DOT—squadron training offices
DRU—direct reporting unit
DSN—Defense Switched Network
ECAC—Evasion Conduct After Capture
EMCON—emission control
EP—evaluator pilot or examiner pilot
EPA—evasion plans of action
ESD—Evaluator Standards Document
ETCA—education and training course announcements
ETP—equal time point
FAA—Federal Aviation Administration
FAA AC—Federal Aviation Administration Advisory Circular
FAIP—first assignment instructor pilot
FB—basic qualified boom operator
FBP—Flight Engineer Basic Prequalification

FE—Flight Engineer
FEB—Flight Evaluation Board
FEF—Flight Evaluation Folder
FF—basic qualified flight engineer
FIQ—Flight Engineer Initial Qualification
FLIP—flight information publications
FMS—Flight Management System
FOD—foreign object damage
FP—qualified pilot
FPC—qualified mission ready phase I MPD pilot (right seat)
FPK—qualified non-mission ready (NMR) pilot
FPL—qualified mission ready (MR) pilot
FPN—qualified non-mission ready (NMR) pilot
FPQ—qualified mission ready Phase II MPD pilot
FRQ—Flight Engineer Requalification
FS—flight surgeon
FTC—Faculty Training Course
FTD—flight training device
FTL—flying training level
FTU—formal training unit
GPRD—graduate program requirements document
GPS—global positioning system
GRACC—Global Ready Aircraft Commander Course
GT—ground training
GTIMS—Graduate Training Integration Management System
HARM—host aviation resource management
HHQ—higher headquarters
HQ—headquarters
IAC—Instructor Aircraft Commander Course
ICAO—International Civil Aviation Organization
IPRQ—Instructor Pilot Requalification
IFF/SIF—identification, friend or foe, selected identification features

ILS—instrument landing system
IMC—instrument meteorological conditions
IN—intelligence; also called, intel
IP—instructor pilot
IQT—Initial Qualification Training
IRC—Instrument Refresher Course
ISOPREP—isolated personnel report
ITO—individual tryout
JP—joint publication
MAF—Mobility Air Force
MAJCOM—major command
MAR—mission accomplishment report
MDS—mission-design-series (i.e., KC-10A)
MEP—mission essential personnel
MFOQA—Military Flight Operations Quality Assurance
MISREP—mission reports
MNPS—minimum navigation performance specification
MOB—main operating base
MOST—mission-oriented simulator training
MOU—memorandum of understanding
MP—mission pilot
MPC—mission planning cell
MPD—mobility pilot development
MPS—military personnel section
MQT—mission qualification training
MR—mission ready
MTL—master task listing
MWS—major weapon system
MX—maintenance
N/A—not applicable
NAF—Numbered Air Force
NLT—no later than

NAT HLA—North Atlantic High Level Airspace
NATO—North Atlantic Treaty Organization
NDB—non-directional beacon
NMR—non-mission ready
OCONUS—Outside the Continental United States
OG—operations group
OG/CC—operations group commander
OGV—operations group standardization and evaluation
OI—operating instruction
OPLAN—operations plan
OPORD—operations order
OPR—office of primary responsibility
OSA—operational support airlift
OSK—wing tactics
OSS—operations support squadron
OST—wing training
P—proficient
PAA—primary aircraft authorization
PAI—primary aircraft inventory
PCO—Pilot Check Out
PCS—permanent change of station
PF—pilot flying
PFT—programmed flying training
PIQ—Pilot Initial Qualification
PM—pilot monitoring (previously pilot not flying)
POC—point of contact
PR—progress review
PRB—progress review board
PRM—precision runway monitoring
PRQ—Pilot Requalification Training
PTT—part task trainer
PTX—Pilot Transition Course

PWS—performance work statement
QTG—qualification test guide
RAP—ready aircrew program
RCR—runway condition reading
RegAF—Regular Air Force
RM—risk management
RNAV—area navigation
RNP—required navigation performance
RPA—remotely piloted aircraft
RPL—required proficiency level
RSC—runway surface condition
RTM—ready aircrew program tasking memorandum
TRTB—Realistic Training Review Board
RVSM—reduce vertical separation minimum
SARMS—Squadron Aviation Resource Management System
SERE—survival, evasion, resistance, and escape
SGTO—small group tryouts
SIM—simulator
SIMCERT—Simulator Certification
SIPRNET—Secret Internet Protocol Router Network
SME—Subject Matter Expert
SOC—Senior Officer Course
SOQ—Senior Officer Qualification
SPINS—Special Instructions
Sq/CC—Squadron Commander
Sq/DO—Squadron Director of Operations
SRD—Standards Related Document
SSF—Senior Staff Officer Familiarization Course
SSN—Social Security Number
Stan/Eval—Standardization and Evaluation
STRP—Squadron Training Review Panel
SUPT—Specialized Undergraduate Pilot Training

TACAN—Tactical Air Navigation
TACC—Tanker Airlift Control Center
TBT—Task Based Training
TCAS—Traffic Alert Collision Avoidance System
TDY—Temporary Duty
TERPS—Terminal Instrument Procedures
TFT—Total Flying Time
TG—training guide
TLN—Training Line Number
TMO—Tanker Manual Override
T.O.—Technical Order
TOD—Time Of Day
TRP—Training Review Panel
TS—Training System (Aircrew and Maintenance under single contract)
TSCWG—Training Systems Configuration Working Group
TTF—Tanker Task Force
TTP—Tactics, Techniques, And Procedures
TX-1/2/3—Transition Courses
USAF—United States Air Force
US—United States
VFR—Visual Flight Rules
VHF—Very High Frequency
VMC—Visual Meteorological Conditions
VMCG—Ground Minimum Control Speed
VOR—VHF Omnidirectional Range
VTRAT—Visual Threat Recognition and Avoidance Trainer
VVM—Verbalize, Verify, and Monitor
Wg/CC—Wing Commander
WST—Weapon System Trainer
WX—Weather

Terms

AR Mission—Flight that involves AR procedures as a tanker or receiver aircraft.

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.

Aeromedical Evacuation (AE)—The movement of patients under medical supervision to and between medical treatment facilities by air transportation.

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

Aircrew Training Device (ATD)—Includes Flight Training Device (FTD), Boom Operator Trainer (BOT), Weapons Systems Trainer (WST), FMS trainer, Cargo Loading Trainer (CLT), Aircraft Systems Trainer (AST), and other flight simulators.

Aircrew Training System (TS)—Integrated qualification, upgrade, and continuation training program for crewmembers. Civilian contractors conduct most academic and ATD training. Air Force conducts all flight 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 Trainer (BOT)—Aircrew Training Device (ATD) providing synthetic flight, capable of system and emergency procedures training in which KC-10 boom operators learn, develop, improve, and integrate skills associated with the KC-10 boom pod. The KC-10 TS operates two BOTs, one at Joint Base McGuire-Dix-Lakehurst and one at Travis AFB.

Cargo Load Model (CLM)—A miniature, scaled model representing the cargo portion of the fuselage and various pallet models in which KC-10 boom operators learn, develop, and improve understanding of basic cargo loading practices. The KC-10 TS contractor operates one scaled model CLM at Joint Base McGuire-Dix-Lakehurst and one at Travis AFB.

Cargo Load Trainer (CLT)—A full scaled model representing the cargo portion of the fuselage and various pallet models in which KC-10 boom operators learn, develop, and improve understanding of basic cargo loading practices. The one full scaled CLT is located at Travis AFB.

Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM)—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.

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.

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.

COMSEC Responsible Officer—Individual appointed by a unit commander to oversee the unit's COMSEC program as outlined in AFMAN 17-1302-O.

Contingency Response Wing (CRW) and Contingency Response Group (CRG)—Team of qualified Air Force personnel established to control, coordinate, and function as an Air Force tanker and airlift C2 facility at a base where normal AMC C2 facilities are not established or require augmentation.

Continuation Training—Ground and flight training events necessary to maintain mission-ready or basic aircraft qualification status.

Crew Resource Management and Threat and Error Management (CRM/TEM) Training—See specifics of CRM/TEM in AFI 11-290. CRM/TEM has been designed to train aircrew members to cope with human behavior concerns that potentially affect aircrew performance and safety. Effective PM behaviors and relevant VVM skills are also trained. Documented studies of aircraft accidents and additional data suggest that most human behavioral problems observed among aircrews can be grouped into three primary categories: interpersonal communications, situational awareness, and team leadership. CRM/TEM training is conducted by the TS contractor as part of yearly refresher missions. GX29Y requires prerequisite academics (GD25Y), which is conducted as part of the pre-briefs for the CRM/TEM refresher missions. Pilots dual log GX29Y with GX91Y-GX94Y.

Critical Phases of Flight—As defined in AFMAN 11-202V3. Refer to **paragraph A3.1.2** and course specific syllabi for exceptions regarding FTU training missions.

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/AFMAN 11-202V2, AFMAN 11-2KC-10V2, and appropriate MAJCOM supplement.

Direct Instructor Supervision—Instructor of like specialty with immediate access to controls (for pilot position, instructor will occupy either seat).

Down Status—Formerly “duties not including flying”

Event—A training requirement or training event described in this AFMAN. Several events or tasks constitute a training profile.

EP—Fully certified/qualified evaluator pilot or examiner pilot who is performing evaluator duties on the mission.

Familiarization Event—An item completed by demonstration, observation, briefing, or in-seat experience. Proficiency is not required.

Flight Engineer Basic Prequalification (FBP) Track Student—A Basic flight engineer graduate and/or student with less than three years fixed-wing flying experience. FBP track students are required to attend the FBP course prior to FIQ.

Flight Engineer Initial Qualification (FIQ) Track Student—A flight engineer student that is currently and/or previously qualified in another fixed-wing MDS for three or more years. Based

on their previous experience as flight engineer, FIQ track students do not require the FBP course prior to FIQ.

Flight Examiner or Evaluator—A crewmember designated to administer evaluations according to AFI/AFMAN 11-202V2, and the appropriate MAJCOM supplement.

Flight Surgeon (FS)—Medical doctor qualified to perform flight surgeon duties and has current aeronautical orders in that AFSC.

Flight Training Device (FTD)—Duplicate of WST without motion or visual system that provides enhanced systems training environment in which aircrews learn, develop, improve, and integrate skills associated with their crew position. Crewmembers may operate individually or as a team.

Flying Training Level (FTL)—A standard assigned to crewmembers by the squadron commander, based upon experience, directing flying continuation training requirements.

Formal School Courseware—Training syllabi and all other materials used to conduct formal school courses.

Formal Training Unit (FTU) Chief—Responsible for formal ground and flight training for initial qualification, requalification and upgrade training of KC-10 pilots, engineers and boom operators (both active duty and reserve).

FPK—Qualified non-mission ready (NMR) pilot. Graduate of aircraft commander or requalification course (ACIQ, ACQ, PCO, PRQ, IPRQ), in local mission ready training.

FPL—Qualified mission ready (MR) pilot. Graduate of aircraft commander or requalification course (ACIQ, ACQ, PCO, PRQ, IPRQ) who has not acquired enough PAA hours for AC certification, but has completed all local mission ready training requirements.

Global Ready Aircraft Commander Course (GRACC)—A multi-step process designed to familiarize the new aircraft commander or aircraft commander candidate with the finer points of operating in the AMC en route system.

Graduate Training Integration Management System (GTIMS)—Comprehensive training management system that provides the method of maintaining information required on aircrew training.

Instructor Supervision—A qualified instructor of like specialty supervising a maneuver or event.

Instructor-Candidate—A crewmember undergoing upgrade training to instructor.

Instructor—Crewmember trained, qualified, and certified by the Sq/CC as an instructor.

IP—Fully certified/qualified instructor pilot who is performing instruction on the mission.

Main Operating Base—A RegAF or AFRC/ANG training location.

Mission-Oriented Simulator Training (MOST)—Part of the aircrew CRM/TEM training program; includes a practical application, a full-mission scenario in ATD.

Mission Qualification Training (MQT)—Formerly referenced as Phase II training.

Mission-Ready (MR)—Crewmember who is current, qualified, and certified in the unit's missions.

Mobility Pilot Development (MPD)—The process by which a MPD pilot transitions from a new qualified pilot in the MDS to a fully qualified and certified aircraft commander.

Monthly—Training required once every calendar month. Crewmembers are non-current the day after event currency expires (e.g., a crewmember, who accomplished a monthly currency event on 5 September, becomes non-current on 1 November).

Night—in accordance with AFMAN 11-202V3 and AFI 11-401, night is the time between the end of evening civil twilight and the beginning of morning civil twilight.

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.

Oceanic Sortie (OCONUS sortie)—Sortie includes primary aircrew logging primary, secondary, instructor, or evaluator time outside the 48 contiguous states of the CONUS associated with a procedural oceanic crossing as well as a review of oceanic procedures and overseas (non-FAA) airspace regulations; see MB30Y definition in Chapter 7 for approved substitution(s).

Part Task Trainer (PTT)—A physical training device to practice a specific task (e.g., CLT).

Pilot Initial Qualification (PIQ)—Term used to describe the FTU course for initial qualification of a SUPT student into a MAF KC-10 pilot.

Pipeline—An initial qualification trainee directed for training by the AF Personnel Center process.

Primary Method—Training conducted normally at a location designated to train a course using MAJCOM-approved syllabi.

PTX-1—Pilot Transition Course, unqualified in MDS over 8 years, in accordance with AFMAN 11-202V1 (KC-10 equivalent course is ACIQ).

PTX-2—Pilot Transition Course, unqualified 39 or 51 months up to 8 years, in accordance with AFMAN 11-202V1 (KC-10 equivalent course is PRQ).

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.

Refresher Simulator—Simulator training emphasizing aircraft systems, normal and emergency procedures, and mission-specific training requirements.

Requalification Training—Training to requalify a crewmembers in an aircraft in which they have been previously qualified. See **Chapter 2** for requalification training requirements.

Secondary Method—Training conducted at a location not normally designated to train specific MAJCOM-approved syllabi (e.g., airdrop qualification course conducted at a line unit).

Semiannual—6-month training periods from 1 January to 30 June and 1 July to 31 December.

Significant Training Event—A training event directly contributing to qualification and upgrade, (e.g., computer based training CBT lesson, weapon system trainer (WST), ground training, flight, etc.).

Simulated Engine Failure Takeoff Continued (EFTOC)—Practice procedure simulating engine failure after a takeoff or touch and go.

Simulator—A fixed-based Aircrew Training Device (ATD) providing synthetic flight including: WST and BOT.

Special Mission—Any mission requiring special qualification (PNAF, low-level AR, etc.).

Supervised Training Status—Crewmember will fly under instructor supervision as designated by the Sq/CC or evaluator. Use as a result of loss of currency or due to less-than-qualified evaluation.

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

Training Level—A standard assigned to crewmembers, by the squadron commander, directing continuation training requirements.

Triennial—Training required once every three calendar years.

TX-1—Transition Course, unqualified in MDS over 8 years, in accordance with AFMAN 11-202V1.

TX-2—Transition Course, unqualified 39 or 51 months up to 8 years, in accordance with AFMAN 11-202V1.

TX-3—Transition Course, unqualified less than 39 or 51 months, in accordance with AFMAN 11-202V1.

Unit overprint—An overprint of a form may be words printed over an original AF Form or a newly created form which has, at a minimum, the same information required on the original AF Form. The intent of these training forms is to have proper documentation during the training process. All locally-developed forms/overprints should be approved through the appropriate wing training office.

Unit—Unless otherwise specified in this volume, “unit” refers to squadron-level activity.

Upgrade Training—Training to qualify a crewmember in a higher crew position.

Verbalize, Verify, and Monitor (VVM)—A three-step, closed-loop system of communication designed to significantly reduce errors.

Weapon System Trainer (WST)—Device with 6 degrees of motion and a visual system that provides synthetic flight and tactics environment in which aircrews learn, develop, improve, and integrate skills associated with their crew position. Crewmembers may operate individually or as a team.

Attachment 2

AIRCREW TRAINING DOCUMENTATION

A2.1. General Information. This attachment provides standardized guidelines on proper training documentation. Instructions are provided for AF Form 4023, *Aircrew Training Progress Report*, AF Form 4024, AF Form 4025, and aircrew TGs. These forms are identified for use in this manual. Units may use the Graduate Training Integration Management System (GTIMS) or MAJCOM-approved electronic equivalent in lieu of the hard-copy requirements described in this regulation. AMC units must use GTIMS see [paragraph A2.1.1.3 \(T-2\)](#). Units shall maintain all referenced documentation (training, reviews, waivers, etc.) within the database when an electronic option is used. **(T-2)**. Use of enhancements to GTIMS capabilities is highly encouraged. Contact the GTIMS Help Desk for further assistance.

A2.1.1. Initiate a training folder for [Table 6.2](#) formal training (either at formal school or in-unit), mission qualification/certification, special qualification or certification training, in-unit upgrade program to the next higher crew qualification, requalification training (either at formal school or in-unit), or for any corrective action or additional training. Training offices will include a Training Plan with the Commander's initial review upon GTIMS grade book assignment. **(T-3)**. GTIMS assigned grade books for commander-directed or TX-3 training will match Training Plan requirements as outlined. **(T-2)**. Unit-created templates for formal courses or MQT will be linked to the AMC-owned master templates. **(T-2)**. Units will not alter AMC owned templates establishing training requirements. **(T-2)**.

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 enters comments pertinent to the training deficiency on AF Form 4023, GTIMS grade book, or the training guide. Use the existing training folder 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 paper or electronic folder (e.g., a tanker pilot upgrading to aircraft commander (AC) may have his or her upgrade, mission qualification/certification, and formation lead training combined in one folder). **(T-3)**.

A2.1.1.3. Electronic training folders and forms are authorized. AMC directs the use of the electronic training folder program (GTIMS) for all RegAF units. All requirements associated with this attachment (i.e., reviews, ground training requirements, flight training time, etc.) will be documented within GTIMS. **(T-2)**. GTIMS is a suitable substitute for hard copy aircrew training folders, 4023, 4024 and 4025. Units cannot alter the original templates without AMC/A3TK approval. **(T-2)**. Units will store electronic training folders (other than GTIMS) and reports not reproduced on paper for inclusion in the training folder in 2 places (a primary and a backup) for at least one year. **(T-2)**.

A2.1.1.3.1. For formal training with established HQ AMC Task Based Training (TBT) templates, the AMC template will be used (or linked to the unit template). **(T-2)**.

A2.1.1.3.2. Unit-developed TBT Templates will have “Require Commander Review” and “Display Primary Grade Regression” checked; Exceptions shall be approved by AMC/A3TK, or A3TM (as appropriate). **(T-2).**

A2.1.2. Formal schools send training folder with all training records to the trainee’s gaining unit. Squadron commanders will review formal school training records and enter appropriate comments on the training guide progress record AF Form 4023, or GTIMS Initial Review tab at the start of in-unit training (i.e., MQT). **(T-3).**

A2.1.3. Squadrons will maintain training folders for their personnel in a location readily accessible to instructors and supervisory personnel. **(T-2).** The trainee may review his or her folder at any time. Electronic versions will be password protected to ensure data integrity. **(T-3).** GTIMS CAC login suffices for this protection.

A2.1.4. The instructor or trainer will review the training folder prior to all flight related training periods. **(T-2).** Those areas not previously accomplished or those, in which crew members require additional training, will be noted for possible inclusion during the current training period. **(T-3).**

A2.1.5. Upon completion of training, complete and place an AF Form 4025 in the individual’s training folder, or accomplish a sufficient write-up in the student’s training jacket in GTIMS Final Review. Document appropriate description of events per [paragraph A2.5](#) Place a copy of the AF Form 4025 in the individual’s FEF only if directed by the guidance implementing the associated training. Squadrons will retain all training folders for 1 year then return them to the crew member (N/A for GTIMS). **(T-3).** Do not insert training folders, AF Forms 4023, AF Forms 4024, or training guide into FEFs. Document in ARMS per applicable event and [paragraph 1.8](#) Close completed TBT Templates via the closeout process (Manage Status/Recommended Closeout). Annotate the status as complete (100% training accomplished) or attrited (removed from training prior to completion). **(T-2).**

A2.1.6. Training Guides, AF Forms (4023, 4024, 4025), MAJCOM-approved electronic equivalent (i.e., GTIMS), and/or unit overprints may be used for all KC-10 continuation and formal training. The current AMC/A3TK-approved formal school training guides are available through the [TS Website: https://www.kc10ts.com](https://www.kc10ts.com).

A2.1.7. For purposes of training documentation, classroom only training conducted at the unit is identified as Academic Training (AT). Ground Training (GT) is considered all training conducted outside the classroom not associated with a flight or aircrew training device (**Exception:** WST/BOT G events). All ground training referenced in this AFMAN is referenced as (GT).

A2.1.8. Units will use the AF Form 4324 to update aircrew certifications in ARMS or in GTIMS. **(T-3).** Blocks 5 – 6 are used to document initial, upgrade, or downgrade, of aircrew qualification. Block 22 is used to document award of specific ARMS qualification or certification code task identifiers containing the following minimum information: Task ID code (e.g., CQ33Y), Certification Name (e.g., Phoenix Banner), and date of certification. AF Form 1522s may be used in lieu of AF Form 4324 to document new aircrew certifications that require award of specific ARMS Task Identifier codes that do not require assignment of associated training profiles. Forward completed form to the unit SARMS section for

processing. Once updated and signed, the letter of X's becomes the source document for certifications.

A2.2. Instructions for Aircrew Training Folder. This is a folder constructed of hard stock paper. The inside covers have tables for documenting training. Include AF Forms 4023, 4024, 4025, and additional information (waivers, memorandums, etc.). Place training guides inside the folder. Units may organize the training folder to fit their needs provided all necessary documentation is included. This includes the use of tabs and/or dividers when multiple certifications or phases of training are included in one training folder (i.e., MPD folder with Phase I, Phase II, various certifications, continuation training, PCO, Aircraft Commander MQT training). Comply with the following when documenting aircrew training on the form. **Note:** Formal school instructors using TS courseware are not required to complete the following sections of the folder: ground training summary, written evaluations, performance evaluation summary, and flying training summary if this information is tracked by other means and sent to the gaining unit with the folder. Trainee information will be documented with the same requirements of the training folder in GTIMS per this attachment. **(T-2).**

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 certification, enter type (e.g., 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 formal course number (e.g., "KC10P"), otherwise, leave blank.

A2.2.2. Ground Training Summary (inside left). This section provides a chronological record of ground training events. Record non-flying training events. Entries are required for: PTT, WST, FTD, BOT, and GT. Entries are required for in-unit academic instruction conducted according to formal school courseware. Classroom academic training is identified as AT. Overprints are authorized and, if used, are placed on the left side of the training folder.

A2.2.2.1. Date. Self-explanatory.

A2.2.2.2. Training period. Enter sequentially numbered training period designators (e.g., "FTD-1", "WST-2", "GT-3", 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/trainer (qualification). Enter the name of the instructor or trainer and aircrew qualification (e.g., aircraft commander (AC), instructor pilot (IP), 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 AFMAN 11-2KC-10V2 description or other appropriate identifier.

A2.2.4.3. Grade. Enter according to AFMAN 11-2KC-10V2.

A2.2.5. Performance Evaluation Summary. Record data on required evaluations including re-evaluations (if applicable).

A2.2.5.1. Date recommended. Enter the date recommended for a performance evaluation (BOT, WST, or flight).

A2.2.5.2. Type evaluation. Enter AFMAN 11-2KC-10V2 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 training courses. **(T-3).** For in-unit training programs leading to an AFMAN 11-2KC-10V2 evaluation, squadron commanders or operations officers are required to accomplish reviews prior to flight evaluations. **(T-3).** An Ad-hoc Ops or CC Review stating "Records Review Accomplished" in GTIMS following a "Recommend evaluation for (crew position)" on the training progress report satisfies this requirement.

A2.2.5.5. Date evaluated. Enter the date the evaluation was completed.

A2.2.5.6. Evaluator. Self-explanatory.

A2.2.5.7. Grade. Enter according to AFI/AFMAN 11-202V2.

A2.2.6. Flying Training Summary (inside right). 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). Overprints are authorized and, if used, are placed on the right side of the training folder.

A2.2.6.1. Date. Self-explanatory. On operational missions, enter inclusive dates (e.g., 28 Jul - 7 Aug 13).

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. **(T-3).**

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. Enter the flight time the trainee was actually in the seat in the lower half of the block.

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 the total cumulative seat time in the lower half of the block.

A2.2.7. Performance and Knowledge Standards. Use with AF Form 4024, see [paragraph A2.4.11](#)

A2.2.8. Grading Codes. Use with AF Form 4024, see [paragraph A2.4.8](#)

A2.2.9. 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. File AF Form 4023s in order with the most recent activity on top. Complete this form or a unit-developed overprint anytime formal training requirements are completed or anytime the aircraft commander or instructor considers that a write-up is warranted. For multiple-leg missions or deployments, one write-up may be made covering the entire mission if desired. **Note:** Training guides may be used to document training instead of the AF Form 4023. This form may be used for TS and formal school courses. Units will document TBT missions and training events with the same requirements of the AF Form 4023 in GTIMS per this attachment. **(T-2).**

A2.3.1. Training Period and Date (block 1). Training period is ground, simulator, or flight (e.g., AT-1, GT-1, SIM-3, S-4, etc.). Annotate the date the training occurred.

A2.3.2. AT, GT, FLY, and ATD (blocks 2, 4, and 6). Annotate time allocated for training and keep a running total (blocks 3, 5, and 7) by adding previous totals to current training period time. Annotate classroom academic training periods as AT and tabulate under the ground training block.

A2.3.3. Total Training Time (block 8). Keep a running total of all training time (add blocks 3, 5, and 7).

A2.3.4. Remarks and Recommendations (block 9). Describe the mission scenario. Local overprints are authorized. Elaborate comments with trainee strengths and weaknesses, identify problem areas, record unusual circumstances, and indicate student progress. Recommendations should be specific and include tasks requiring further training and the type of training required. Include training completed and any other performance based information. If more space is required for annotating remarks, draw vertical arrows through

sortie information heading section (blocks 1 through 8) of following block or on separate form 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 training folders. **(T-3)**. The squadron commander or operations officer will review active status training folders at least once each quarter (N/A formal schoolhouse). **(T-3)**. The Squadron commander or operations officer quarterly review may count towards the monthly squadron training review. Document reviews on an AF Form 4023. The reviewer will annotate "monthly review" or "quarterly review," as applicable, in the training period block. **(T-3)**. Write comments concerning the trainee's progress, status, or recommendations in the mission profile, comments, and recommendations block. Initial reviews fulfill the requirement for the monthly and quarterly review for the month and quarter the review was completed. Quarterly reviews start the third month following the initial review (for example, an initial review conducted 20 January will have a quarterly review in the month of April). **(T-3)**.

A2.3.4.2. Monthly reviews are not required for formal school courses except in documented cases of unsatisfactory progress. TS personnel will review the student's records and ensure all required training is completed prior to entering flight training. **(T-2)**. If problems are encountered during the flying phase, the squadron will conduct reviews necessary and document unsatisfactory progress. **(T-3)**.

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 report. **(T-2)**.

A2.3.5. Instructor (Block 10). Instructors will print and sign their name and annotate their rank and crew qualification. **(T-2)**.

A2.3.6. Students (Block 11). Students will print and sign their name. **(T-2)**.

A2.3.7. Reviewer (Block 12). For monthly and quarterly reviews, squadron commanders, operations officers, or flight commanders will print and sign their name and indicate their position. **(T-2)**. Flight commanders may use their initials in the review block after reviewing individual AF Form 4023 entries. Monthly and quarterly reviews in GTIMS satisfies this requirement. Units will document all training or gradebook reviews in the "Reviews" tab in the GTIMS grade book. **(T-2)**.

A2.3.8. AF Form 4023 will be completed and reviewed by the student prior to his or her next flight related training event. **(T-3)**.

A2.4. Instructions for the AF Form 4024. This form tracks, for each sortie, individual event, 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. **(T-2)**. Maintain AF Form 4024 on the right side of the training folder. **Note:** Training guides may be used to document training instead of the AF Form 4024. The AF Form 4024 may be used for TS and formal school courses. Each sortie, individual event, task accomplishment, and grades will be documented with the same requirements of the AF Form 4024 in GTIMS per this attachment. **(T-2)**.

A2.4.1. Name. Self-explanatory.

A2.4.2. Crew Position. Self-explanatory. For aircrew members in an upgrade program, enter the aircrew position to which they are upgrading.

A2.4.3. Course or Phase of Training. Enter the formal course identifier (e.g., KC10P). For special mission certification, enter the type and identify the method of training (e.g., WST training, flying training, etc.).

A2.4.4. Sortie. Enter sortie number (e.g., S-1, S-2, FTD-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 "1," "B," "F," "P," "S," or "U" as appropriate.

A2.4.8.1. "1"—Item accomplish once by the crew member, but does not require proficiency.

A2.4.8.2. "B"—Briefing item only.

A2.4.8.3. "F"—Familiarization event; proficiency is not required. The operations group commander or equivalent determines whether "F" items are completed by briefing, demonstration, observation, or actual accomplishment.

A2.4.8.4. "P"—Proficient; crew member has achieved the required proficiency level.

A2.4.8.5. "S"—Satisfactory; crew member has not achieved the required proficiency level but progress is satisfactory.

A2.4.8.6. "U"—Unsatisfactory; crew member was previously proficient, but has regressed or progress is unsatisfactory.

A2.4.8.7. **Note:** Events preceded by an (*) are trained to proficiency by the contractor in the appropriate ATD during phase 1A; however proficiency in the ATD may in some cases not equate to full aircraft proficiency due to differences in the real-world flight environment. For this reason a student may be graded "S" until full aircraft proficiency is demonstrated in phase 1B for an event graded "*P" in the ATD. An "S" grade denotes satisfactory progression and does not require contractor notification. However, once a crew member has received "P" for an event (in phases 1A, 1B or MQT), the only subsequent grade allowed is either "P" or "U". Likewise, multiple consecutive "S" grades may indicate lack of progression and warrant a "U". Instructors will include an associated remark with any event graded "U" on AF Form 4023. **(T-2).**

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 while in training.

A2.4.11. Required Proficiency Level (RPL). RPL for the specific event and task. Each event and task has a performance standard designated for the required proficiency level the crew member shall 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 evaluator standards document (ESD) for each weapon system or identified in this volume. For the KC-10, all events have an RPL of "3" for performance and "C" for knowledge (if knowledge standards are used in addition to performance standards). KC-10 units may use "P" to signify the RPL has been attained. Performance and knowledge standards follow:

Table A2.1. Event and Task Performance Standard.

Code	Performance is	Definition
1	Extremely Limited	Individual can do most activities only after being told or shown how.
2	Partially Proficient	Individual can do most of the behaviors, but not necessarily to the desired levels of speed, accuracy, and safety.
3	Proficient	Individual can do and show others how to do the behavior in an activity at the minimum acceptable levels of speed, accuracy, and safety without the assistance of an instructor. For MPD pilots, proficiency may involve actual airplane control or non-pilot flying duties only. For instructors, proficiency includes the ability to demonstrate, instruct, and supervise ground and flight activity.
4	Highly Proficient	Individual can do behaviors in an activity at the highest level of speed, accuracy and safety.

Table A2.2. Event and Task Knowledge Standard.

Code	Knowledge of	Definition
A	Fact 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 shall 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.
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A2.4.11.1. 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 an activity is graded “U” after having achieved “P” in the same task. Regression from a “P” to a “U” requires an explanation in the student’s training folder. The overall grade is at the instructor’s discretion.

A2.4.11.2. 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). **(T-3).**

A2.5. Instructions for the AF Form 4025.

A2.5.1. Units will close out student folders within five duty days once training timeline ends in accordance with [paragraph 1.7](#) or when all required training is complete. **(T-3).** When a training folder is closed, units will complete a single summary/closeout report (Form 4025 or final review in GTIMS) detailing the individual's strengths, weaknesses, overall performance, and other pertinent information. **(T-2).**

A2.5.2. Squadron commanders, operations officers and flight commanders will ensure the comments on this form do not reflect personnel opinions or biases. **(T-3).** All comments shall be supported by information contained in the AF Forms 4023, 4024, training guides or GTIMS training accomplishment reports as applicable. **(T-3).** At formal schools, the instructor will accomplish the AF Form 4025 or final review, and the squadron commander's signature is optional. **(T-3).**

A2.6. Aircrew Training Guides. If available, aircrew training guides may be used as reference for training programs. AMC units will document all training accomplished in GTIMS in accordance with this attachment. **(T-2).**

A2.6.1. The TS contractor will develop TGs. **(T-2).** Units may produce aircrew training guides when the TS contractor is unable to provide them. Training guides will be developed in accordance with AFI 36-2670, *Total Force Development*. **(T-1).** Coordinate training guide development through appropriate MAJCOM with an info copy sent to AMC/A3T. **(T-2).**

A2.6.2. Initiating Training Guides. Training and resource management personnel in each unit will initiate a training guide on crew members prior to their entering any phase of qualification training. **(T-3).** Units may elect to use TGs as reference only and utilize AF Form 4023 and subsequently, the AF Form 4024 or GTIMS to document the completion of each training event.

A2.6.3. Use of TGs. Specific instructions for annotating training are included in each TG.

A2.6.3.1. Active status TGs may 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 and initial the training progress record prior to the next training period. **(T-3)**.

A2.6.3.2. Complete the training progress record with 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. 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. **(T-3)**. Trainees will not be recommended for an evaluation if any required training events are incomplete or requires corrective action. **(T-3)**.

A2.6.3.3. On missions without an instructor or examiner, the senior qualified counterpart (e.g., AC for pilots, etc.) will accomplish required training for those areas not requiring an instructor. **(T-3)**. Annotate applicable training information on the training progress record.

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 training guide or in GTIMS. **(T-3)**.

A2.6.3.5. At the conclusion of training, when all requirements of training are met, fill-out an AF Form 4025 in accordance with this volume. Maintain completed training reports 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 or training reports in the flight evaluation folder.

A2.6.4. Review Procedures:

A2.6.4.1. Instructors and students will review the training guide and/or training reports after each training period. **(T-3)**. Training accomplished, problem areas, and immediate goals will be discussed. **(T-3)**. The following are areas covered in the comments' section. **(T-3)**.

A2.6.4.1.1. Pilots. AR missions: Indicate whether the flight was day or night. Also, include whether contact was heavy- or light-weight and the accumulated contact time.

A2.6.4.1.2. Flight engineers. AR missions: Indicate whether contact was heavy- or light-weight.

A2.6.4.1.3. Boom Operators.

A2.6.4.1.3.1. Operational flights or static loads. Enter a general description of the payload, number of pallets, rolling stock cargo (trucks, engines, tanks, etc.), floor-loaded general cargo, and passengers (e.g., 8 pallets and five passengers).

A2.6.4.1.3.2. AR missions. Indicate whether the flight was day or night. Also, include whether contact was heavy or fighter type aircraft and the accumulated number of contacts.

A2.6.4.2. For in-unit training programs the flight commander or squadron training representative will conduct a monthly review of TGs. **(T-3)**. This review will be indicated by entering initials and date in the review block of the TG. **(T-3)**. In addition, the commander or operations officer will review active TGs at least once each calendar

quarter and prior to an evaluation. **(T-3)**. This review will be a separate entry on the training guide and will include comments on weak areas and upgrade potential. **(T-3)**. Indicate review by signing the instructor trainer block of the training progress record, and enter "quarterly review" in the training period identifier block.

A2.6.4.3. Records of crew members not receiving training, but in an active status, will be reviewed monthly and quarterly as indicated above. **(T-3)**. If applicable, units will enter the statement, "no training accomplished during this period," the reason why, and the projected date when training will resume on the student's training progress record. **(T-3)**.

A2.6.5. Disposition of TGs:

A2.6.5.1. If used, place completed TGs in training folder 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 six months. **(T-2)**.

Attachment 3

FORMAL TRAINING UNIT (FTU) GUIDANCE

A3.1. General Requirements. Qualification training for KC-10 crew members consists of Phases IA and IB requirements. Phase IA is administered by the training contractor and Phase IB is administered by US Air Force instructors. Phase IA training is contractor-developed and Air Force-approved. The objective of Phase IA training is to minimize aircraft flying training within simulation and human factor constraints. Phase IB training validates transfer of training from Phase IA; however, Phase IB training is driven primarily by training aircrews to proficiency in receiver AR, formation, various types of approaches, landings, as well as experience in the differences of the real-world flight environment. Phase IB training requirements and events are conducted under AMC/A3T-approved syllabi. All Phase IB training for most, if not all, students will be accomplished at the appropriate AMC FTU. **(T-2).** Current syllabi can be found at <https://www.kc10ts.com> and the EFB.

A3.1.1. Formal Training Unit (FTU) Instructors. RegAF Operations Support Squadrons are provided with staff authorizations (pilot, flight engineer, and boom operator) over and above the crew force. Positions are allocated per AMC manpower standard AMCMS to support initial qualification, requalification, upgrade, and continuation training requirements at each KC-10 main operating base (MOB). Personnel assigned to these positions will be very capable and highly experienced, both as instructors and KC-10 aircrew members. **(T-3).** All FTU instructors will be thoroughly familiar with KC-10 course books, syllabi, training requirements, operational techniques, contractor training program, and governing directives associated with training to include this manual. **(T-3).** Assigned instructors will have an associate's degree or higher within one year of being assigned to FTU instructor duty. **(T-3).**

A3.1.2. Instructor Supervision Requirements. All flight training conducted under this attachment will be supervised by a qualified instructor of like specialty. **(T-2).** Crew members undergoing initial qualification training will be under direct instructor supervision during critical phases of flight. **(T-2).**

A3.1.2.1. **Exceptions:** The requirement for direct instructor supervision during tanker AR is not required for initial qualification students after demonstrating proficiency in Tanker AAR Auto-Pilot Off (RT05Y) and recommendation for "supervised AR" by an instructor pilot. During initial qualification training, once the student demonstrates the ability to taxi the aircraft safely (no sooner than after sortie 1), they may be certified by their instructor to taxi without direct instructor supervision.

A3.1.2.2. Two KC-10 IAC students or one PCO and one KC-10 IAC student may sit in the seats together for all flight events in which they are current and qualified. All FTU students still require direct instructor supervision for takeoff, landing, tactics, and receiver AR.

A3.1.3. The training and upgrade folder of individuals undergoing training under this attachment will be reviewed by the instructor prior to each mission briefing for each sortie. **(T-3).** Areas that were previously identified unsatisfactory or unsafe will be reviewed and corrective measures discussed in detail with the student. **(T-3).** In coordination with the FTU chief, the instructor will ensure that the training contractor is apprised of less than satisfactory activity of a student undergoing Phase IB training. **(T-3).** If appropriate,

additional academic and ATD training may be coordinated and scheduled with the training contractor.

A3.1.4. All ACs will be capable of accomplishing AC duties from the left seat and pilot duties from the right (i.e., no requirement to be right-seat qualified in receiver AR). **(T-2)**.

A3.1.5. Prior to commencing Phase IB flight training in the KC-10, each crew member, with the exception of SSF students, will be administered an evaluation (AC03Y or AC33Y as appropriate) in the applicable ATD. **(T-2)**. This evaluation will be used to assess the effectiveness of contractor training as well as the capabilities and proficiency of the student. **(T-2)**.

A3.2. Initial Qualification Training. Conducted at the appropriate contract training facility and Air Force unit. Training is designed to qualify aircrew members in specific crew positions of the KC-10 aircraft. Initial qualification training requirements are found in the appropriate syllabi. Specific course prerequisite, entry qualifications, and other requirements are listed in **Table 6.1**

A3.2.1. KC-10 ACIQ – Aircraft Commander Initial Qualification (PTX-1): Qualifies prior MWS, FAIP, and OSA aircraft commanders as a KC-10 Aircraft Commander.

A3.2.2. KC-10 PIQ – Pilot Initial Qualification: Qualifies an SUPT graduate to operate the KC-10 from the right seat and does not result in an Aircraft Commander certifiable pilot. The pilot will be Aircraft Commander certified in unit or via PCO per **Chapter 5**. **(T-3)**.

A3.2.3. KC-10 FBP – Flight Engineer Basic Prequalification Course: Provides required training for Senior Airman and above with no prior flight engineer experience to successfully complete the KC-10 FIQ follow on course. Requires BFE (Lackland AFB) prerequisite.

A3.2.4. KC-10 FIQ – Flight Engineer Initial Qualification: Qualifies a prior fixed wing performance engineer as a KC-10 flight engineer. Experience requirement is at least three years as a performance engineer (fixed wing). Also qualifies KC-10 FBP graduates (see **paragraph A3.2.3**) as KC-10 flight engineer.

A3.2.5. KC-10 BBQ – Boom Operator (Basic) Initial Qualification: Qualifies member as KC-10 boom operators. Requires BBO (CEA CoE) prerequisite.

A3.2.6. KC-10 SSF – Senior Staff Officer Familiarization Course: The contractor-administered Senior Staff Officer Familiarization Course consists of three days of academic and simulator training followed by one aircraft flight. It is intended for familiarization only and does not lead to qualification in the aircraft. Senior staff officers who complete this course cannot log FP time nor be at a set of controls with passengers on the aircraft. Senior staff-level personnel who previously accomplished a formal KC-10 pilot training course that resulted in an AF Form 8 qualification (i.e., KC-10 SOC, KC-10 PCO, KC-10 IAC, etc.) receive credit for the KC-10 SSF course. Regardless of the venue of KC-10 SSF course credit, KC-10 SSF course credit expires 39 months from the date of the member's last KC-10 aircraft flight.

A3.2.7. KC-10 SOC – Senior Officer Course: The Senior Officer Course consists of pre-course CBTs, five days of contractor administered academic and simulator training, and a maximum of four flights with Air Force instructors. This training is the minimum required to attain basic qualification in the aircraft with instructor supervision.

A3.2.7.1. School quotas for senior officer courses are controlled by AMC/A3TF. These courses are scheduled according to need in cooperation with the TS contractor. Training throughput requirements may affect availability of these courses.

A3.2.7.2. Requests for training should be forwarded to AMC/A3TF/K (AFR users contact AFRC/A3TM). AMC/A3TF will work in conjunction with AMC/A1A and AFRC/A1T to finalize course approvals and schedules. These requests will be submitted a minimum of 45 days prior to requested start date. **(T-2)**. AMC/A3 will be final authority should a disagreement arise regarding eligibility. **(T-2)**.

A3.3. Aircraft Commander Upgrade. Individuals may upgrade to aircraft commander via the formal Pilot Check Out (PCO) course or in-unit. The preferred method for aircraft commander upgrade is PCO.

A3.4. Aircrew Instructor Program. Courses are designed to teach selected crew members fundamentals and concepts of instructing.

A3.4.1. Pre-course materials are provided by the contractor to the unit no later than 35 days prior to course start date. The package will contain a road map of the course, supplemental materials, pre-course reading assignments, and a course workbook. **(T-2)**. Squadron Training Units will request pre-course materials from the site contractor and ensure successful completion prior to course start date. **(T-2)**.

A3.4.2. Specific course prerequisites, entry qualifications, and other requirements are listed in **Table 5.2**. All instructor candidates will be trained to a level of proficiency that will ensure their ability to instruct and supervise student activity. **(T-2)**. Successful completion of ground and flight requirements, including completing an AFI/AFMAN 11-202V2, as supplemented, evaluation, qualifies the individual to be placed in instructor status.

A3.4.2.1. KC-10 IAC – Instructor Aircraft Commander Course: Qualifies current and qualified KC-10 AC as a KC-10 IP.

A3.4.2.2. KC-10 FIC – Flight Engineer Instructor Course: Qualifies current and qualified KC-10 FE as a KC-10 IF.

A3.4.2.3. KC-10 BIC – Boom operator instructor Course: Qualifies current and qualified KC-10 MB as a KC-10 IB.

A3.5. Formal Training Unit. The flying phase of training is accomplished at the Formal Training Unit (FTU). Although a considerable amount of time is spent mission planning for sorties, due to the dynamic nature of the tanker mission, instructors are given great flexibility in accomplishing activity during sorties. Therefore the syllabi provides a recommended number of sorties, but training is complete once proficiency is gained in all the required areas.

A3.5.1. In order to ensure continuity of training, the number of different flight instructors should be limited to a maximum of four for students undergoing qualification, requalification, or upgrade training (not applicable for all AFR training and RegAF initial cargo qualification). The flying squadron commander, operations officer, AMC AOS Det 1 personnel, and FTU Chiefs (pilot, FE, and BO) do not count against the four-instructor rule.

A3.5.2. Each student will have one instructor who will monitor the student's progress throughout their training. **(T-3)**. This primary instructor will be designated, in writing, and

will personally ensure the student is proficient in all required areas and is ready for evaluation, if required. **(T-2).**

A3.6. Failure to Progress or Complete Formal Training. If a student fails to progress according to syllabus or training requirements, the FTU accomplishing the training will conduct a progress review (PR) in accordance with AFMAN 11-202V1 and the Commander's Review Process outlined in the course syllabus. **(T-2).** The PR can recommend continuation in training or other actions in accordance with AFMAN 11-402 (e.g., a Flying Evaluation Board). Following the PR, the FTU will notify the gaining unit of any AFMAN 11-402 actions taken or any delay in the student's graduation date. **(T-2).** If the PR recommends a FEB, the FTU will also notify the student's gaining MAJCOM/A3T or equivalent. **(T-2).** If a crewmember fails to complete a formal upgrade course at the FTU, the FTU will send notification to the individual's gaining commander and AMC/A3TF course owner detailing the circumstances of the failure along with a recommendation on whether the crewmember should complete training in-unit, return to the formal school to complete training, or be referred to the Air Force Personnel System for reassignment. **(T-2).** **Note:** For TS-administered courses, the TS contractor identifies students who fail to progress according to the TS contract (see **Chapter 6**).

A3.6.1. Phase IA. An individual may be removed from Phase IA training if identified by the training contractor as incapable of successfully completing a course of instruction. A joint Air Force and contractor review of the identified student's record will be conducted and a joint recommendation made as to termination or continuation. **(T-2).** The training contractor will notify the applicable squadron commander and AMC AOS Det 1 to determine the appropriate course of action. **(T-2).**

A3.6.1.1. AMC AOS Det 1 will: **(T-2).**

A3.6.1.1.1. Review training records to ensure the training provided was within contract requirements and guidelines.

A3.6.1.1.2. Review required procedures and assist local units in taking appropriate action to ensure that aircrew members who cannot meet training proficiency standards are eliminated from training. See AFMAN 11-402.

A3.6.1.2. The squadron commander will: **(T-2).**

A3.6.1.2.1. Chair Air Force and contractor review of the identified student's record.

A3.6.1.2.2. Request the contractor to provide additional training, if appropriate.

A3.6.1.2.3. If the student is to be eliminated from training, notify AMC/A3TK and AFRC/A3M (AFRC disqualification or suspension from aviation service), via message with information to the appropriate NAF/A3T, if applicable.

A3.6.2. Phases IB. If an individual is unable or unwilling to complete any phase of training, the Sq/CC will determine appropriate administrative action. (See AFMAN 11-402 for flight evaluation board or administrative procedures.) **(T-1).**

Table A3.1. Initial Qualification Ground Training Requirements (Phase IB).

Code	Ground Training Events	ACI Q	PI Q	FE	BO	Notes
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	Flight Physical	1	1	1	1	1
	Physiological Training	1	1	1	1	1
AB01Y	Qualification Open Book Examination	P	P	P	P	
AB03Y	Qualification Closed Book Examination	P	P	P	P	
GD03Y	AFRC Associate Program Orientation Indoctrination	1	1	1	1	
GD07Y	Aircraft Commander Responsibilities	1				
GD09Y	Aircraft Field Trip	P	P	P	P	
GD13Y	Aircraft Servicing Training	F	F	F	F	
GD25Y	Crew Resource Management (CRM)/Threat & Error Management (TEM) Initial Training	B	B	B	B	
GD45Y	Instructions/Directives Knowledge/Use	P	P	P	P	
GD53Y	Instrument Refresher Course	P	P			
GH01Y	Communications Procedures Ground Training	1	1			
GK13Y	Boom Operator Cockpit Orientation Initial CBT				1	1
LL01	AFE Familiarization	1	1	1	1	1
LL03	Emergency Egress Training, Non-Ejection Seat	1	1	1	1	1
LL06	Aircrew Flight Equipment Training	1	1	1	1	1
SS01	Local Area Survival	1	1	1	1	1,2

Notes:

1. Required prior to first aircraft flight. **(T-2)**. Mandatory grounding item; individual will not fly until required training is accomplished. Flight physicals become due 366 days after the previous physical, and expire after the 455th day or as indicated on the DD Form 2992, whichever occurs first. The required frequency may vary to address waivers and/or individual physical limitations (as determined by the flight surgeon), but in no case will exceed 455 days.
2. Required prior to first flight at home station; students attending training at a location other than their permanent assigned base require SS01 prior to first flight at the training location as well.

Table A3.2. Upgrade Ground Training Requirements (Phase IB).

Code	Ground Training Events	AC	IP	IF	IB
AB01Y	Qualification Open Book Examination	P	P	P	P
AB03Y	Qualification Closed Book Examination	P	P	P	P
DG09Y	Aircraft Field Trip		P	P	P
GD03Y	AFRC Associate Program Orientation Indoctrination	1			
GD07Y	Aircraft Commander Responsibilities	1			
GD13Y	Aircraft Servicing Training			P	
GD25Y	Crew Resource Management (CRM)/Threat & Error Management (TEM) Initial Training	B			
GD29Y	CRM/TEM Instructor Training		B	B	B
GD45Y	Instructions/Directives Knowledge/Use	P	P	P	P
GD47Y	Instructor Academic Training		1	1	1
GD51Y	Instructor Training Course Workbook		1	1	1
GD53Y	Instrument Refresher Course	P	P		

A3.7. Training Time Limitations. Aircrew members entered in a qualification, requalification, or upgrade training program will be dedicated to that program on a full time basis. **(T-2).** **Exception:** Supervisory personnel may continue their normal duties as time permits. Individuals who enter initial qualification, requalification, or upgrade training at the formal school are subject to the time requirements in [Table A3.3](#)

A3.7.1. In order to assure training continuity, the student's first Phase IB flight should occur no later than seven days after completing FTU in-processing to include indoctrination and block training.

A3.7.2. Enter in the Training Review Panel (TRP) the names of all FTU students not initially qualified or MR (qualified) per [Table A3.3](#) time limits. Units will fully explain reasons for failure to complete training within these limits. **(T-3).** For FTU training, no training time extension waivers are required provided this TRP guidance is followed.

A3.7.3. Student training folders will be closed out and transferred to the student's gaining unit within five duty days of student's successful flight evaluation. **(T-3).**

Table A3.3. Training Time Limitations.

Course	Phase IA & IB (Active)	Phase IA & IB (AFR)	Notes
KC-10 BBQ	120	180	1

KC-10 FBP	185	180	1,2
KC-10 FIQ	140	180	1
KC-10 PIQ	140	180	1
KC-10 ACIQ	140	180	1
KC-10 BRQ	120	180	1
KC-10 FRQ	90	180	1
KC-10 PRQ	90	180	1
KC-10 BIC	90	180	1
KC-10 FIC	90	180	1
KC-10 IAC	90	180	1
KC-10 PCO	90	180	1
Notes: 1. Phase I starts on first day of contractor training. 2. FBP limits include the FIQ portion of training.			