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Volume 1

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Flying Operations

KC-10 AIRCREW TRAINING

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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AFI 11-2KC10 Volume 1, *KC-10 Aircrew Training*, implements AFPD 11-2, *Aircraft Rules and Procedures*, and AFPD 11-4, *Aviation Service*. It establishes the aircrew training program for the KC-10 aircraft. It applies to all commanders, operations supervisors, and aircrew assigned or attached to all flying activities of commands operating KC-10 aircraft. MAJCOMs, field operating agencies (FOAs) and HQ USAF direct reporting units (DRUs) may supplement this instruction. It is not applicable to ANG. Submit suggested improvements to this instruction on AF Form 847, **Recommendation for Change of Publication**, through MAJCOM channels, to HQ AMC/DOT, 402 Scott Drive, Unit 3A1, Scott AFB, IL 62258-5302. 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 Privacy Act of 1974 affects this instruction. The Privacy Act System Number F011 AF AMC A , Air Force Operations Resource Management Systems (AFORMS) covers required information. The authority for maintenance of the system is 37 U.S.C. 301a (Incentive Pay), Public Law 92-204, Section 715 (Appropriations Act for 1973), Public Laws 93-570 (Appropriations Act for 1974), 93-294 (Aviation Career Incentive Act of 1974), DoDD 7730.57 (Aviation Career Incentive Act and Required Annual Report, February 5, 1976, with Changes 1 and 2), and Executive Order 9397.

This instruction contains references to the following field (subordinate level) publications and forms which, until converted to departmental level publications and forms, may be obtained from the respective MAJCOM publication office:

Publications: AMCI 10-202 Volume 6, AMCPAM 11-215, AMCI 24-101, MCM 3-1 (ACC), AMCI 11-11, AMC Supplement 1 to AFI 36-2243.

Forms: AMC Form 641.

SUMMARY OF REVISIONS

This revision incorporates interim change (IC) 2000-1 which provides guidance on conducting a Progress Review Board (PRB) in the event a trainee shows unsatisfactory progress during either initial qualification or mission qualification training. For Left Seat Initial Qualification Pilots (LSIQP), it permits students to complete training as a copilot based on PRB recommendation and OG/CC approval. Limitations for LSIQP students during mission qualification training are further defined. Differences Training for the upcoming KC-10 TCAS/TAWS modification is outlined. See the last attachment of the publication, IC 2000-1, for the complete IC. A bar (|) indicates revisions from the previous edition.

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Publications: AMCI 10-202 Volume 6, AMCPAM 11-215, AMCI 24-101, AMCI 11-11

Chapter 1

GENERAL

1.1. Program Goals. This volume prescribes basic policy and guidance for training United States Air Force KC-10 aircrews according to AFI 11-202, Volume 1, *Aircrew Training*.

1.1.1. Training Objective. The overall objective of the aircrew training program is to develop and maintain a high state of mission readiness for immediate and effective employment in exercises, peace-keeping operations, contingencies, and conventional or nuclear war.

1.1.1.1. Crediting Training. Training events prescribed by this AFI must be accomplished in accordance with the specifications described in this volume, or other pertinent Air Force, and MAJCOM publications. To obtain credit toward the requirements of this volume, flying must be accomplished in the aircraft in which the individual is obtaining or maintaining qualification unless specifically authorized by this AFI.

1.1.1.2. All KC-10 aircrew members will be trained to the desired level of proficiency prior to a qualification check and unsupervised flight. Training levels B and C crew members receive additional training applicable to the unit's specific mission. Phase III training will be accomplished to maintain proficiency and currency at the desired level. Applicability of individual chapters of this volume are as follows:

1.1.1.2.1. Initial and requalification training is accomplished at the appropriate contractor training facility (Phase IA) and at the appropriate unit (Phase IB) according to **Chapter 2** and the current training contract.

1.1.1.2.2. Upgrade training is accomplished at the appropriate contractor training facility (Phase IA) and the appropriate unit (Phase IB) according to **Chapter 5** and the current training contract.

1.1.1.2.3. Phases II and III are accomplished in-unit according to **Chapter 3** and **Chapter 4** respectively.

NOTE:

All enlisted aircrew qualification is separate and distinct from skill level qualification. When the AF Form 8, Certificate of Aircrew Qualification, is completed for the applicable flight evaluation then that crew member is qualified to perform all duties assigned to that crew qualification regardless of skill level. Aircrew instructor and flight examiner qualifications are also separate and distinct from OJT trainer/certifier designation and are reflected in the AFSC by use of the "K" prefix (aircrew instructor) and "Q" prefix (aircrew standardization/flight examiner).

1.1.1.3. Continuation training events with a specified number of accomplishments are considered the minimum requirements; however, individuals must receive sufficient training to ensure the desired level of proficiency is maintained.

1.1.1.4. Except for continuation training of individuals qualified for unsupervised activity, all training required by this volume must be administered under the direct supervision of an instructor

qualified in the appropriate maneuver or area. See **Chapter 2** and **Chapter 3** for specific exceptions applicable to initial qualification and mission qualification training.

1.1.1.5. Evaluation requirements are in addition to the minimum qualification training requirements of this volume.

1.1.1.6. Training device activities or inflight events requiring proficiency or minimum number of accomplishments must be performed with the crew member in the crew position in which qualification is being attained.

1.1.1.7. Air refueling (AR) training events are applicable only to those individuals qualified or being trained in these tactics. Pilots undergoing initial mission qualification, pilot upgrade program (PUP), or requalification in receiver AR and boom operators (BO) undergoing initial mission qualification, or requalification training must be declared proficient in applicable day activity prior to progressing to night activity.

1.1.1.8. Upon completion of qualification training, unit training managers will provide training event accomplished dates to operations systems management for input into the Air Force Operational Resource Management System (AFORMS). Operations systems management will prorate requirements according to the applicable volume of this AFI.

1.2. Waiver Authority:

1.2.1. Unless specified in this instruction, MAJCOM DOTs, or equivalent level, are the waiver authority for specific aircrew training requirements in this instruction. For currency training, MAJCOM DOs are the waiver authority.

1.2.2. HQ AMC/DOT. HQ AMC/DOT manages the KC-10 Aircrew Training System (ATS) contract and, therefore, possesses waiver authority for all KC-10 student entry criteria to formal schools specified in this volume and AFCAT 36-2223, *USAF Formal Schools*,. ***EXCEPTION***: The operations group commander may waive flying hour requirements.

1.2.3. Operations group commanders may waive completion of specific events during Phase IB training. Accomplish events waived in-unit before mission ready (MR) certification if required for mission accomplishment.

1.2.4. The operations group commander or air reserve component (ARC)-equivalent may waive MAJCOM-directed flying and ground continuation training requirements for individuals assigned to their unit on a case-by case basis. See paragraph **4.1.5.** of this instruction. The OG/CC or ARC-equivalent is not required to send copies of the approved waivers to parent MAJCOM or HQ AMC/DOT.

1.2.4.1. The operations group commander will submit all other waiver requests through proper MAJCOM channels and send information copies to HQ AMC/DOT. (For MAJCOM specific waivers, see MAJCOM specific supplement.) Place copies of MAJCOM approved waiver information in the individual's training folder or Flight Evaluation Folder (FEF). The reporting requirement in this paragraph is exempt from licensing in accordance with paragraph 2.11.12 of AFI 37-124, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections.*

1.2.5. Waiver Format. Provide the following information, in letter or message format, on the referenced individual in a waiver request through OG training office, to HQ AMC/DOTK. DOTK will

send response to OG training office with info copies to numbered air force (NAF). For AFRC requests, units submit requests through AFRC NAF/DOT to HQ AFRC/DOTA. HQ AFRC/DOTA will send response to AFRC unit with copies to NAF/DOT and HQ AMC/DOTK. Items should be identified as below; those not utilized should be marked "N/A" ("not applicable"). Asterisked (*) items must be provided for all waivers; other items as appropriate.

1.2.5.1. *Name, grade, and Social Security number.

1.2.5.2. *Flying organization (assigned or attached).

1.2.5.3. *Present crew qualification including special qualifications.

1.2.5.4. *Total flying time and primary aircraft inventory (PAI) time (include instructor or evaluator time if applicable).

1.2.5.5. *Specific nature of waiver.

1.2.5.6. *Reason and valid justification for waiver.

1.2.5.7. Crew qualification to which person is qualifying or upgrading.

1.2.5.8. Previous attendance at any formal instructor course (include course identifier and graduation date).

1.2.5.9. Training start date.

1.2.5.10. Mandatory upgrade or qualification date.

1.2.5.11. Date event last accomplished and normal eligibility period.

1.2.5.12. Remarks, to include formal school courseware required.

1.2.5.13. *Requesting unit point of contact (include name, rank, telephone number, and functional address symbol).

1.3. Use of Flying Hours, Fenced Trainer Policy, and Training Management.

1.3.1. Each training mission must be structured to achieve optimum training. Any by-product airlift opportunity resulting from training must not degrade the intended training in any way and must comply with applicable Department of Defense (DoD) instructions. Any use of flying training hours to accomplish other than direct training requirements must be approved by the MAJCOM/DO or appropriate NAF commander. EXCEPTION: The approval authority for Off-Station Training Flights is the Wing Commander.

1.3.2. Training on Operational Missions. Unless specifically prohibited or restricted by weapon system operating procedures or specific theater operations order (OPORD), the operations group commander or ARC equivalent may allow upgrade or special qualification training on operational missions. Commanders will ensure the training will not impact mission effectiveness and the crew member receiving training is under the supervision of an instructor of like specialty. If passengers are carried, both pilots must be qualified.

1.3.3. Training on Alert. Aircrew members performing extended alert duty (more than 72 hours) may accomplish any type of ground training, during normal duty hours, that does not degrade required response time or mission accomplishment. ARC personnel may accomplish while performing any alert duty.

1.3.4. Training While in Duty Not Including Flying (DNIF) Status. Aircrew members whose status is DNIF may log ground training events, including simulator, if the member's physical condition allows it. The flight surgeon who signs the AF Form 1042, **Medical Recommendation for Flying or Special Operational Duty**, placing the crew member DNIF, should be consulted if the crew member's ability to complete training is in question.

1.3.5. Fenced Trainer Policy:

1.3.5.1. As specified by AMCI 10-202, volume 6, *Mission Reliability Reporting System (MRRS)*, the specific number of KC-10 fenced trainers is set by HQ AMC/DOT by periodic message updates. The number of fenced aircraft includes Joint Airborne/Air Transportability Training (JA/ATT) aircraft at an average of one per day per base. There may be periods where more than one JA/ATT is tasked off station at a given time. However, this will be offset by periods when there is no JA/ATT tasking. The fence should be adjusted IAW paragraph **1.3.5.5.** if a unit's JA/ATT tasking consistently deviates from an average of one per day. Any other off-station tasking to include CONUS fighter drags, channels, and dual roles, need not be supported with fenced training aircraft. All local horseblanket air refueling taskings will be supported with the fenced aircraft.

1.3.5.2. When local training goals are exceeded or when urgent operational needs outweigh local training needs, unit commanders may voluntarily reduce local training to cover additional off-station commitments.

1.3.5.3. Regarding maintenance cancellations, once the weekly flying schedule is published, unscheduled maintenance on a given tail number will affect the mission it is assigned against (local or off-station). For example, if an aircraft tail number is scheduled against a channel, but becomes nonmission capable (NMC) 24 hours prior to the mission, there is no requirement to adjust the week's flying schedule to meet the channel commitment. If the Tanker Airlift Control Center (TACC) requires a spare for a particular mission, they will task one. Conversely, if a local fenced trainer becomes NMC, a TACC tasked aircraft will not be used to replace it.

1.3.5.4. Especially during contingencies, if over-tasking begins to jeopardize fenced trainers, the unit scheduling branch should coordinate with TACC to drop the lowest priority taskings to ensure the fenced trainers can support qualification and continuation training.

1.3.5.5. Requests for waivers or changes to the number of fenced trainers should be forwarded to HQ AMC/DOTK (with information copies to HQ AFRC/DOT). DOTK will coordinate the request with HQ AMC/LGF, TACC, and the unit OG/CC before forwarding to HQ AMC/DOT for approval.

1.4. Responsibilities. AFI 11-202, Volume 1 outlines responsibilities for aircrew training. See also **Chapter 6** for detailed responsibilities regarding ATS and Programmed Flying Training (PFT) management.

1.4.1. AMC Headquarters. As lead command MAJCOM for the KC-10 as specified in AFPD 11-2 *Aircraft Rules and Procedures*, and AFPD 10-9 *Lead Operating Command Weapon System Management*, AMC is responsible for standardizing aircrew flying training requirements in coordination with other user MAJCOMs and applicable ATS contractors. HQ AMC is responsible for training course requirements, training tasks, and quota control in coordination with other headquarters as follows:

1.4.1.1. Courses. The AMC Director of Operations (DO), in coordination with other MAJCOMs, approves courses. Send proposals for amending existing course prerequisites or deleting obsolete

courses through the appropriate headquarters to HQ AMC/DOT for approval. HQ AMC/DOT will process the approved changes in coordination with the AFCAT 36-2223 office of primary responsibility (OPR).

1.4.1.2. Command Curriculum Review Workshop (CCRW). HQ AMC/DOT will host a CCRW biennially (or more frequently as required) to review MDS training programs. Attendees should include training representatives from HQ AMC/DOT/DOV/SG, AMWC/WCOX, ACC, AETC, AFRC, ANG, PACAF, USAFE, Air Force Special Operations Command (AFSOC), curriculum developers, formal schools, NAF training and standardization offices, selected unit representatives, and ATS contractors.

1.4.1.3. Programmed Flying Training (PFT). HQ AMC/DOT is responsible for the PFT IAW AFI 11-202, Volume 1.

1.4.1.3.1. AMC units will send projected PFT requirements to HQ AMC/DOT. Other units (including AFRC) will send projected PFT requirements to HQ AMC/DOT through their parent MAJCOMs.

1.4.1.4. Deleted.

1.4.1.5. HQ AMC/DOTK is the office of primary responsibility (OPR) for the KC-10 Aircrew Flight Training Syllabus. Detachment (Det) 1, AMC Air Operations Squadron (AMCAOS), will be responsible for reviewing and updating the pamphlet annually to coincide with the training requirements of this volume. Training syllabus will be reviewed to ensure compatibility with contractor-provided academic and aircrew training device (ATD) training.

1.4.1.5.1. Required distribution is HQ AMC/DOTK (2), HQ AMC/DOTV (5), HQ AMC/DOU (2), HQ AMC/DPPET (2), HQ USAF/XOOT (3), HQ AFRC/DOTA (2), 15 AF/DOVT (4), 21 AF/DOVT, Det 1 AMCAOS (7), AMWC/WCO (3), AMWC/WCC (1), 9 AF/DOV (1), 22 AF/DOO (1), 4 AF/DOOK (1), all KC-10 wing and group DOTs (1), and all KC-10 combat crew training school (CCTS) flights (4).

1.4.2. Other MAJCOMs. MAJCOMs will provide policy and guidance in order for units to develop their respective training programs. MAJCOM unique training requirements will be forwarded by the MAJCOM to HQ AMC/DOT as necessary.

1.4.2.1. Supplements. MAJCOMs may supplement this instruction as outlined in AFI 11-202, Volume 1. MAJCOM supplements may be more but not less restrictive than this instruction. MAJCOMs are permitted to set requirements lower than those in this instruction when the statement "or as specified in MAJCOM supplement" is indicated as applicable to that item or event. Supplements must be approved by HQ AMC and Air Staff IAW AFPD 11-2, *Aircraft Rules and Procedures*. Coordinate supplements through HQ AMC/DOT before publication, and send two copies to HQ AMC/DOT and one copy to HQ USAF/XOOT after publication.

1.4.3. Operations Groups. The operations group will convene a training review panel (TRP). The operations group will determine frequency, format and content of the meetings. The TRP should review staff and aircrew management actions necessary to complete the squadron's flight and ground training programs.

1.4.3.1. The operations group will establish procedures with the servicing military personnel flight (MPF) for individual counseling and personnel system updates for the active duty service commitment (ADSC) incurred. See paragraph **1.8.**

1.4.3.2. The operations group, in coordination with the flying squadrons, will determine the functions and responsibilities of the operations support squadron (OSS) training flight. Any flight commander training functions stipulated in this volume may also be performed by appropriate OG or OSS training flight personnel or flying squadron training flights.

1.4.3.3. OG/OGV will notify the KC-10 simulator Project Officer/Quality Assurance Representative (PO/QAR) or designated representative not later than 72 hours after any unsuccessful initial qualification/upgrade simulator evaluation. The PO/QAR will notify HQ AMC/DOTK and ensure corrective training/re-evaluation is accomplished by the ATS contractor at no additional cost to the government.

1.4.4. Squadrons. As a general rule, training management is at the squadron or detachment level; however, the wing or operations group commander is ultimately responsible for squadron training programs.

1.4.4.1. Squadron Commanders (AFRC: appropriate Operations Supervisor). Squadron commanders will ensure aircrew members complete training in a timely manner. Failure to reasonably progress mandates action for removal if appropriate. Squadron commanders will ensure each crew member possesses an adequate knowledge of applicable emergency procedures, survival equipment, and egress procedures prior to flying or flight training. The squadron commander or designated representative will ensure individuals receive training to successfully complete unit missions and maintain individual proficiency.

1.4.4.2. Flight commanders. Flight commanders are responsible for continuity and quality of training for crew members within their flights.

1.4.4.3. Crew members. Each crew member is responsible for monitoring and completing all training requirements.

1.4.4.3.1. Mission Accomplishment Report (MAR). Use AF Form 3526, **AFORMS OMR Event Accomplishment Report**, to document all accomplished or ATD continuation training activity. (AFRC units may use either AF Form 3526 or AFORMS/ADOTS MAR.) Flight activity will be credited toward the zulu date of takeoff. Evaluators conducting aircrew evaluations will not receive individual credit while evaluating, except P310. After the flight, the appropriate columns and blocks of the MAR will be completed by the crew member and turned in for mission review. AFRC units may develop procedures for scheduling, documenting, reviewing, and filing MARs; however, these procedures will be published by the AFRC unit and will adhere to the intent of the directives stated in the above paragraphs.

1.4.4.3.2. AFTO Form 781, **AFORM Aircrew/Mission Flight Data Document**. AFTO Form 781 will also be used to document flight and ATD activity.

1.4.4.3.3. Ground Training Activity Documentation. AF Form 1522, **AFORMS Additional Training Accomplishment Input**, or AF Form 3526 is used to document all ground training activity as prescribed in this AFI. (***EXCEPTION***: Contractor-administered ATD training will be documented on a MAR.) Units may develop procedures within AFORMS to track currency events in Phases I and II.

1.4.4.3.4. Critiques. Crew members will complete and submit three critiques during training. During Combat Crew Training School (CCTS), each student will complete the Contract Training Effectiveness Questionnaire centering on how well the student felt contractor training pre-

pared them for their flight phase. Three months after completing Phase IA, the student will complete a contractor-provided "graduate evaluation" critique. Each student also submits a critique at the end of each quarterly simulator refresher.

1.4.4.3.5. Attached flying personnel. MAJCOMs and NAFs will determine unit of attachment for their staff personnel in flying positions. In addition, all crew members except NAF/DOV who are not attached to the base at which they are flying will submit a copy of their current AF Form 8, current AF Form 702, **Individual Physiological Training Record,** and verification of current egress training to the squadron operations officer prior to flight in an AMC aircraft. Crew members who are not attached to any AMC flying squadron must be under the supervision of an AMC instructor of like specialty while performing duties in an AMC aircraft (not applicable to AFRC).

1.4.5. Formal School - ATS Contractor. Consistent with requirements and provisions of the KC-10 Aircrew Training Contract, the contractor is responsible for developing, updating, and maintaining courseware, task analysis listing objectives hierarchy, media selection and syllabus, and lesson specification reports associated with KC-10 aircrew qualification training (Phase IA). **Table 1.1.** lists KC-10 ATS Formal Courses. **Table 1.2.** lists KC-10 ATS Non-Formal Courses.

Table 1.1. KC-10 Formal Courses.

(ATS) Course #	Course Name	note	Course Title	Course Student	#	Training Events Ph-1A	Calendar Training Days Ph-1A
KC-10-3B	KC-10 BBQ		Boom Operator (Basic) Initial Qualification	No prior aviation experience : Requires BBOC (Altus AFB) prerequisite	1	18 BOTs 2 CPTs 6 CLTs	45 days 33 days + 2 CRM
KC-10-3A	KC-10 BLQ		Boom Operator (Loadmaster) Initial Qualification	Qualified Airlift Loadmaster Qualifying as KC-10 Boom Operator	2	36 BOTs 4 CPTs 10 CLTs	44 days 30 days + 2 CRM
KC-10-3	KC-10 BIQ		Boom Operator Initial Qualification	Qualified KC-135 Boom Operator Converting to KC-10	2	22 BOTs 4 CPTs 10 CLTs	31 days 23 days + 2 CRM
KC-10-13	KC-10 BRQ		Boom Operator Requalification	Prior KC-10 Boom Operator or Instructor Boom Operator	1	7 BOTs 1 CPT 3 CLTs	17 days 13 days
KC-10-18	KC-10 BIC	1	Boom Operator Instructor Course	Mission Qualified KC-10 Boom Operator	2	12 BOTs 2 CPTs 5 CLTs 2 Sims	24 days 18 days
KC-10-2B	KC-10 FBP		Flight Engineer (Basic) Precourse	No prior aviation experience : Requires BFE (Altus AFB) prerequisite	2	-	18 days 14 days
KC-10-2	KC-10 FIQ		Flight Engineer Initial Qualification	KC-10 FBP graduate or qualified MWS Flight Engineer converting to KC-10	1	17 SIMs 17 CPTs	59 days 43 days
KC-10-12	KC-10 FRQ	2	Flight Engineer Requalification	Prior KC-10 Flight Engineer or Instructor Flight Engineer	1	9 SIMs 11 CPTs	30 days 22 days
KC-10-18	KC-10 FIC	1	Flight Engineer Instructor Course	Mission Qualified KC-10 Flight Engineer	2	8 SIMs 2 CPTs	22 days 16 days
KC-10-1	KC-10 CPIQ		Co-Pilot Initial Qualification	UPT Graduate, MWS Co-Pilot, or low-time FAIP/OSA	1	17 SIMs 17 CPTs	59 days 43 days
KC-10-1	KC-10 PIQFO	4	Pilot Initial Qualification FAIP/OSA	FAIP/OSA aircraft commander converting to KC-10	1	17 SIMs 17 CPTs	59 days 43 days
KC-10-1	KC-10 PIQMWS	4	Pilot Initial Qualification MWS	MWS Aircraft Commander converting to KC-10	1	17SIMs 17 CPTs	59 days 43 days
KC-10-1A	KC-10 PIQ2MWS	4	Pilot Initial Qualification MWS (2 Students)	MWS Aircraft Commander converting to KC-10	2	24 SIMs 20 CPTs	80 days 56 days
KC-10-4	KC-10 PUP		Pilot Upgrade Program	Qualified KC-10 Co-Pilot	2	9 SIMs 1 CPTs	15 days 11 days
KC-10-11	KC-10 PRQ		Pilot Requalification	Prior KC-10 Pilot or Instructor Pilot	2	10 SIMs 11 CPTs	32 days 24 days
KC-10-18	KC-10 PIC	1	Pilot Instructor Course	Qualified KC-10 Pilot	2	8 SIMs 2 CPTs	22 days 16 days
KC-10-14	KC-10 SSF	3	Senior Staff Officer Familiarization	Senior Staff Officer (O-6 Above) requiring KC-10 familiarization only	2	2 SIMs 1 CPTs	3 days 3 days
KC-10-16	KC-10 SSQ	3	Senior Staff Officer Qualification	Senior Staff Officer (O-6 Above) requiring basic KC-10 Qualification	2	8 SIMs 3 CPTs	16 days 12 days

NOTES:

1. All Instructor Courses include 3 days for Academic Instructor Training (AIC). If the student has been qualified as an instructor before he is not required to accomplish this training and will start 3 days later.
2. KC-10 FRQ requires pilot classes KC-10 PRQ or KC-10 PUP to be scheduled at the same time.
3. See paragraph 2.7. for additional requirements.
4. Trainees will normally complete this course at the aircraft commander level, but may complete the course at the copilot level at the direction of a Progress Review Board.

Table 1.2. KC-10 Non-Formal Courses.

(ATS) Course #	Course Name	note	Course Title	Course Student	#	Training Events Ph-1A	Calendar Training days Ph-1A
KC-10-15A	KC-10 MEQ		Maintenance Engine Run Qualification	MX Member receiving initial training for KC-10 Engine Ground Operation	2	2 CPTs	1 day
KC-10-15B	KC-10 MER		Maintenance Engine Run Refresher	MX Member receiving refresher training for KC-10 Engine Ground Operation	4	2 CPTs	1 day
KC-10-17	KC-10 TEF		Two Engine Ferry Course	Highly experienced NAF / OG / HQ Stan Eval Pilots and Flight Engineers	2 1	1 Sim	2 days
KC-10-5/6	KC-10 PFREF		Pilot / Flight Engineer Refresher	Continuation Training for KC-10 Qualified Pilots and Flight Engineers	2 1	2 Sims	2 days
KC-10-7	KC-10 BREF		Boom Operator Refresher	Continuation Training for KC-10 Qualified Boom Operators	1	3 BOTS	2 days
KC-10-21	KC-10 PDC		Pilot Differences Course	Qualified KC-10 Pilots transitioning to FMS/ GPS modified aircraft	2	2 Sims	7 days
KC-10-22	KC-10 FDC		Flight Engineer Differences Course	Qualified KC-10 FEs transitioning to FMS/ GPS modified aircraft	1	2 Sims	7 days
KC-10-23	KC-10 PINS		Pilot INS Differences Course	FMS/GPS Qualified KC-10 Pilots requiring INS training	2	-	2 days
KC-10-24	KC-10 FINS		Flight Engineer INS Differences Course	FMS/GPS Qualified KC-10 FEs requiring INS training	1	-	2 days
KC-10-30	KC-10 ATT/L		Additional Training Time/ Long (7 + 00)	KC-10 qualified Pilots and Flight Engineers	2 1	1 Sim	1 day
KC-10-31	KC-10 ATT/S		Additional Training Time / Short (4+00)	KC-10 qualified Pilots and Flight Engineers	2 1	1 Sim	1 day
KC-10-40	KC-10 SR71	1	SR-71 Refueling Procedures Course	All KC-10 Crewmembers			
KC-10-41	KC-10 CAT II	1	Category II ILS Training	KC-10 qualified Pilots and Flight Engineers	2 1	1 Sim	1day
KC-10-42A	KC-10 HAZ	2	Hazardous Cargo Training	KC-10 qualified Boom Operators	-		
KC-10-42B	KC-10 HAZ	2	Hazardous Cargo Training	KC-10 qualified Pilots	-		
KC-10-43A	KC-10 CRM-IT	3	Crew Resource Management – Initial Training	All KC-10 Crewmembers			
KC-10-43B	KC-10 CRM-RT	3	Crew Resource Management – Recurring Training	All KC-10 Crewmembers			
KC-10-43C	KC-10 CRM-I/ET	3	Crew Resource Management – Instructor/ Evaluator Training	All KC-10 Instructors & Evaluators			

NOTES:

1. These courses are archived for future reference/use and are not updated nor maintained by the ATS contractor. They can be updated for use following HQ AMC/DOTK notification to the contractor.
2. This training is Computer Based training distributed on a CD.
3. CRM training is developed in accordance with AFI 11-290. Training is included in the requisite Initial Qual, Instructor Qual, and Refresher courses.

1.4.5.1. Contractor-Administered Training Documentation. The contractor will document contractor administered training (academic and ATD). Detailed grade sheets will remain on file at the contract training facility for 1 year following completion of training. The contractor will make gradesheets available on unit request. At the completion of an individual's training, a summary training report will be sent to the unit. (This information collection is exempt from the Office of Management and Budget review in accordance with Public Law 96-511, Paperwork Reduction Act of 1980, as amended, Title 44, U.S.C, chapter 35.) The report will contain appropriate instructor comments to include student strengths and weaknesses. This should ensure contractor and Air Force supervisors are kept apprised of the status of the overall contractor refresher training and student capabilities. Each squadron training manager will retain all contractor training documentation according to this AFI. This documentation will be used in conjunction with Det 1 AMCAOS and contractor-developed student critiques and contractor training effectiveness questionnaires to review and summarize contractor training.

1.4.5.2. For distribution of contractor-developed courseware, the training contractor will make copies of the following courseware available to Det 1 AMCAOS, who will be responsible for distribution to appropriate units.

Courseware	**Copies**
KC-10-18 (pilot [P], flight engineer [FE], and boom operator [BO])	8 each
All contractor-developed courseware	1 each

1.4.5.3. Critiques

1.4.5.3.1. Refresher Critiques. Det 1 and the training contractor will develop and make available to the student critique forms that encourage comments on continuation (refresher) contractor training. Critiques will be filled out by all crew members, submitted to the contractor. After the critique is reviewed by the contract site manager and the government PO/QAR, the original critique will be returned to the contract site manager's office. The critique is then sent to the main support center for tabulation of data and response to comments. The contractor will summarize these critique comments and number of received, then present results to Det 1 AMCAOS by the end of each month. At minimum, these critiques will solicit comments on the following:

1.4.5.3.1.1. Quality of instruction (overall effectiveness of the contractor training program)

1.4.5.3.1.2. Course content to include technical accuracy and applicability

1.4.5.3.1.3. Training fidelity

1.4.5.3.1.4. Trainer down-time and maintenance discrepancies

1.4.5.3.1.5. Quality of training materials and their applicability to training (includes sound and slide programs, handouts, visual aids, etc.)

1.4.5.3.2. Contract Training Effectiveness Questionnaire (Initial Qualification, Requalification, and Upgrade Training). With the aircrew training system (ATS) contractor, Det 1 AMCAOS will develop and distribute critique forms that will appropriately address the effectiveness of the contract portion of KC-10 aircrew qualification, requalification, and upgrade

training. These forms provide constructive feedback to Det 1 AMCAOS and aid in assessing the quality of ATS contractor formal training courses. The student's Phase IB instructor will ensure each student completes a critique centering on how well the student felt contractor training prepared them for their flight phase. The student's US Air Force CCTS instructor will complete a contract training effectiveness questionnaire (CTEQ). This questionnaire asks the instructor to judge how well contract training prepared the student for flight line training, point out possible deficiencies in contractor training, and solicit recommendations for improvement. After the instructor or student completes the critique, they will send the completed form to the squadron commander for review. Additionally, the original critique will be sent to Det 1 AMCAOS PO Box 619490, DFW Airport, TX 75261-9490. DET 1 will distribute a copy to the training contractor.

1.4.5.3.3. Three months after completion of Phase IA training, the ATS contractor will provide "graduate evaluation" and "operational supervisor graduate evaluation" critiques to the respective squadron/DO for distribution. Student information and stamped, return envelopes will be provided. The DO will send these critiques to the graduate and a cognizant supervisor to be filled out. The purpose of the critiques is to develop a test and evaluation database aimed at improving the overall KC-10 aircrew training system. The contractor will provide, on a monthly basis, a list of outstanding surveys to each PO/QAR. The PO/QAR will request immediate return of the outstanding surveys through the individual's squadron commander.

1.4.6. Formal School - Non-ATS. The unit develops, updates, and maintains courseware and training syllabi and performs task and media analysis associated with aircrew qualification training per AFI 36-2201, *Developing, Managing, and Conducting Training*, AFPAM 36-2211, *Guide for Management of Air Force Training Systems*, and AFMAN 36-2234, *Instruction System Development*. HQ AMC/DOTK is the approving authority for these courses.

1.5. Training Time Limitations. Aircrew members entered in a qualification, requalification, or upgrade training program should be dedicated to that program on a full time basis. Individuals who enter initial qualification, requalification, or upgrade training are subject to the time requirements in **Table 1.3.**

1.5.1. In order to assure training continuity, the student's first Phase 1B flight should occur no later than 7 days after completing CCTS in-processing to include indoctrination and block training.

1.5.2. When **Table 1.3.** time limits are exceeded.

1.5.2.1. Annotate the following data in the individuals training folder:

1.5.2.1.1. Date individual entered qualification training

1.5.2.1.2. Number of days time limit was exceeded

1.5.2.1.3. Detailed reasons for exceeding time limits

1.5.2.2. Enter in the training review panel (TRP) the names of all individuals not initially qualified or MR (qualified) within **Table 1.3.** time limits. Reasons for failure to complete training within these limits will be fully explained.

Table 1.3. Training Time Limitations.

Training	note	Course	Active			AFRC		
			1A & 1B	II	Total	1A & 1B	II	Total
Intial Qual	**5**	KC-10 BBQ	120	130	250	180	300	480
		KC-10 BLQ	120	130	250	180	300	480
		KC-10 BIQ	90	110	200	180	300	480
	4	KC-10 FBP	170	100	270	180	240	420
		KC-10 FIQ	125	90	215	180	120	300
		KC-10 CPIQ	125	90	215	180	120	300
	3	KC-10 PIQFO	140	90	230	180	120	300
	3	KC-10 PIQMWS	140	90	230	180	120	300
	3	KC-10 PIQ2MWS	140	90	230	180	120	300
Requal		KC-10 BRQ	120	90	210	180	120	300
		KC-10 FRQ	90	90	180	180	120	300
		KC-10 PRQ	90	90	180	180	120	300
Upgrade		KC-10 BIC	90		90	180		180
		KC-10 FIC	90		90	180		180
		KC-10 PIC	90		90	180		180
		KC-10 PUP	90	90	180	180	120	300

NOTES:

1. Phase 1 starts on first day of Contractor training.
2. Phase 2 starts on the day following completion of Phase 1B checkride. Mission qualification training events (ground and flight) may be accomplished concurrently with Phase IB training when deemed appropriate by the squadron DO, DOT, or equivalent.
3. For left seat initial qual pilots (LSIQP), Phase II limits are for completion of Phase IIA (MC) requirements (see paragraph **3.2.2.**) . If period to final SQ/CC certification as MP exceeds 365 days from beginning of Phase IIA, downgrade individual to MC. KC-10 PUP is required for subsequent MP qualification (not applicable for AFRC)
4. FBP limits include the FIQ portion of training. FBP Phase II limits are for completion of Phases IIA & IIB.(See paragraph **3.2.4.**)
5. BBQ limits are for completion of phase IIA. (See paragraph **3.2.6.**).

1.6. Recurrency Training. Place individuals delinquent in one or more currency events in supervised training status for that event and declare them NMR. If noncurrent for a particular training event, the crew member must be under supervision of an instructor of like specialty while accomplishing that event (direct supervision for critical phases of flight). Currency requirements are not applicable to TL E. Crew members are non-current the day after event currency expires; (i.e., a crew member who accomplished an event with monthly currency on 1 September becomes non-current on 1 November). Regain currency based on the time elapsed since becoming non-current as follows:

1.6.1. For loss of currency up to 6 months, an aircrew member must demonstrate proficiency with an instructor of like specialty in all delinquent items.

1.6.2. Loss of currency exceeding 6 months. This individual is unqualified in the aircraft and must complete requalification as directed in paragraph **1.7.** Controlling currencies per crew position are:

1.6.2.1. Pilots - P020 Takeoff, P070 Instrument Approach, P190 Landing, and R010 Receiver AR.

1.6.2.2. Flight Engineers – M010 Proficiency Sortie.

1.6.2.3. Boom Operators – R120 Contacts and P300 Cargo Loading.

1.7. Requalification Training. See AFI 11-202, Volume 1 for requalification training time limits. When completion of the requalification academic course is required but not practical, or quotas are not available, units will request waivers from HQ AMC/DOT through their parent MAJCOM. Requalification requirements are as follows for the KC-10.

1.7.1. Unqualified up to 2 years. Requires training as directed by the squadron commander and an inflight evaluation. Pilots and flight engineers require refresher simulator or phase training.

1.7.2. Unqualified 2 to 5 years. Complete appropriate AFCAT 36-2223 requalification academic course, formal school flying training, and an inflight evaluation.

1.7.3. Unqualified over 5 years. Complete the appropriate AFCAT 36-2223 formal initial qualification course.

1.7.4. Individuals requalifying as KC-10 crew members will complete training for the applicable crew position as outlined in **Table 2.1.** Individuals requalifying as instructors will complete basic qualification training as indicated in **Table 2.1.** and instructor training as outlined in **Table 5.1.** All individuals requalifying will complete those sections of mission qualification training (Phase II) listed in **Table 3.1.** in which they have expired or are overdue.

1.7.5. Training Procedures:

1.7.5.1. Individuals must successfully complete a qualification evaluation prior to participating in unsupervised flight.

1.7.5.2. Events specified are considered to be the minimum requirements and provide sufficient training to assure the desired level of proficiency.

1.7.5.3. The contractor administered requalification course (A034) must be completed prior to starting Phase IB training.

1.7.5.4. Mission qualification (if applicable) may be conducted concurrently with requalification.

1.7.6. **Table 1.4.** lists required training and type of evaluation for requalifying as an instructor. Those designated for requalification as instructors may complete the contractor-administered requalification course with a combined requalification and instructor simulator and Boom Operator Trainer (BOT) evaluation.

Table 1.4. Flight Instructor Requalification.

Is crew member qualified as a non-instructor in the KC-10?	Instructor Designation	Required Training	Instructor Evaluation
Qualified	Removed for less than 18 months	Directed by the squadron commander	Recurring
Qualified	Removed for 18 or more, but less than 36 months	Directed by the squadron commander and approved by the wing or group commander (see note 3)	Recurring
Qualified	Removed 36 months or more	according to **Table 5.1.**	Initial
Unqualified less than 2 years (Basic requal not required)	Removed for less than 36 months	Directed by the squadron commander and approved by the wing or group commander (see note 3)	Recurring
Unqualified 2 years or more (Basic requal required)	Removed for less than 36 months	according to **Table 5.1.** (may simultaneously requal with basic requal)	Recurring
Unqualified 2 years or more (Basic requal required)	Removed 36 months or more but less than 5 years	according to **Table 5.1.** (may simultaneously requal with basic requal)	Initial
Unqualified 2 years or more (Basic requal required)	Removed 5 years or more	according to **Table 5.1.** (May not simultaneously requal with basic requal)	Initial

NOTES:

1. Category is established at the start of requalification and does not change until instructor requalification is complete.
2. Those individuals requiring basic requalification will complete the requirements of requalification tables.
3. Wing and group DOT should provide a recommendation concerning training events to be accomplished to regain instructor status. See **Chapter 5** for a list of events.

1.8. Active Duty Service Commitment (ADSC). AFI 11-202, Volume 1 specifies ADSC requirements. ARC personnel do not incur an ADSC. Formal training conducted according to this instruction that is intended to result in initial qualification, requalification, or upgrade in a crew position will result in an ADSC according to AFI 36-2107, Active Duty Service Commitments (ADSC) and Specified Period of Time Contracts (SPTC), and AFCAT 36-2223. The ADSC only applies to basic requalification in the aircraft, not subsequent in-unit requalification to a crew qualification previously held in that aircraft, such as aircraft commander, or instructor (formal school requalification will incur an ADSC). Each unit CCTS, except ARC, will provide HQ AMC/DPPET with either a form letter or an annotated class roster indicat-

ing the date and names of crew members completing their flight evaluation. The reporting requirement in this paragraph is exempt from licensing in accordance with paragraph 2.11.12 of AFI 37-124.

1.9. Training Folder Management. See instructions for completing AF Forms 4022, 4023, 4024, and 4025 in **Attachment 3**.

1.10. Evaluator and Instructor Usage. Use flight evaluators and instructors for any phase of training to capitalize on their expertise and experience.

1.10.1. Units are encouraged to use flight evaluators as instructors for qualification and upgrade training programs as required. However, if an evaluator is used as a primary instructor to train an individual during a training program, the same evaluator should not administer the evaluation that completes the training program.

1.10.2. In order to ensure continuity of training, limit the number of different flight instructors to a maximum of four for students undergoing qualification or upgrade training (not applicable for all AFRC training and active duty initial cargo qualification). Squadron commanders may waive the four-instructor limit on a case-by-case basis. The flying squadron commander, operations officer, NAF instructors/evaluators, Chief FE, BO, and CCTS chief do not count against the four-instructor rule. A copy of the waiver (including waiver justification) will be filed in the AF Form 4022. Additionally, each student will have one instructor who will monitor the student's progress throughout their training. 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.

1.11. Instructor Training and Supervision Requirements:

1.11.1. Instructors will comply with requirements of this instruction. All instructors with the exception of formal school instructors should be MR (wing-level and below).

1.11.2. The following personnel must be under the supervision of an instructor of like specialty when performing aircrew duties:

1.11.2.1. All noncurrent aircrew members while accomplishing the noncurrent event (direct supervision for the event if noncurrent in a critical phase of flight).

1.11.2.2. All aircrew members in initial, upgrade, or requalification flying training.

1.11.2.3. FTL E and senior officers as defined in AFI 11-202, Volume 1, and paragraph **2.7.** of this volume.

1.11.2.4. Any other personnel designated by the wing, operations group, or squadron commanders.

1.11.3. For unqualified or training level E crew members, an instructor must be at a set of controls during critical phases of flight.

1.11.4. Assignment of Instructors:

1.11.4.1. Unit Instructor. After successful completion of instructor evaluations and squadron commander certification, instructor-candidates may perform any instructional duties required in their specialty. Active duty instructor assignments to an extended unit manpower document (UMD) instructor position will be in accordance with AFI 36-2110, *Assignments.*

1.11.4.2. Unit CCTS Instructors. Active duty OSSs are provided with staff authorizations (pilot, FE, and BO) over and above the crew force. Positions are allocated per AMC manpower standard (AMCMS) to support initial qualification, upgrade, and continuation training requirements at each KC-10 MOB. Personnel assigned to these positions must be very capable, highly experienced both as instructors and KC-10 crew members. All CCTS instructors (active duty and AFRC) must be thoroughly familiar with KC-10 course books, KC-10 training syllabus, KC-10 operational techniques, and the contractor training program.

1.11.4.3. Faculty Training Course (FTC). The FTC is taught at the CCTS to prepare newly assigned CCTS instructors for CCTS duties. All instructors conducting initial qualification flying training should be graduates of FTC.

1.12. Supplements. This AFI is a basic directive. Each MAJCOM or operational theater may supplement this AFI. These supplements will not be less restrictive than the basic document. MAJCOM/DOs initiate long-term waiver requests to the basic document. Specify long-term waiver approval authority, date, and expiration date in the appropriate MAJCOM supplement. Limit supplement information to unique requirements only.

1.12.1. Combined Operations. Use only the basic AFI for planning or operations involving forces from lead and user commands. Commanders may use approved MAJCOM supplement procedures with assigned and/or chopped forces provided these forces receive appropriate training and the duration is specified. Commanders should not assume or expect aircrews from another command to perform MAJCOM specific procedures from their supplements unless these provisions are met. Questions by aircrews, planners, and staff should be forwarded to the OPR.

1.12.2. Coordination Process. Forward MAJCOM approved supplements (with attached AF Form 673, ***Request To Issue Publication***) to HQ AMC/DOT, 402 Scott Dr., Unit 3A1, Scott AFB IL, 62225-5302 (Electronic version E-Mail: AMCDOT@SCOTT.AF.MIL). AMC/DOT will provide a recommendation to HQ AMC/DO and forward to HQ USAF/XOOT for approval.

1.12.3. Prior to publication, units will send one copy of **Chapter 7** - Local Procedures to the parent MAJCOM OPR for validation through their appropriate NAF for coordination. Send final copies to HQ USAF/XOOT, HQ AMC/DOT, parent MAJCOM, and the appropriate NAF.

1.13. Failure to Progress in Training. If at any time during a trainee's instruction, (Phase IA, IB, or Phase II), progress is considered unsatisfactory; the trainee's flying unit squadron commander will be notified. The flying unit squadron commander will convene a Progress Review Board (PRB) to review the trainee's record and determine whether to continue, retrain, modify training, or conduct a Flight Evaluation Board (FEB). OG/CC will have final approval of PRB recommendations. (See AFI 11-402, Aviation and Parachutist Service, Aeronautical Ratings and Badges, for flight evaluation board (FEB) or administrative procedures.)

1.13.1. Progress Review Board. The make-up of the PRB will be at the Squadron Commander's direction, but will include SQ/CC, OGT, OGV, Chief CCTS, and ATS/Det1 representation (for Phase IA review). Units will forward an information memo on action taken to HQ AMC/DOTK.

1.13.2. For LSIQP pilots only, the PRB may recommend that the trainee continue training at the copilot level with OG/CC as final approval.

Chapter 2

INITIAL QUALIFICATION TRAINING (PHASE I)

2.1. General Requirements. This chapter specifies the minimum training requirements for initial qualification and senior staff training. 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 and various types of approaches, and landings as well as experience in the differences of the real-world flight environment. Completing Phases IA and IB requirements results in initial qualification in the aircraft. See **Chapter 6** for unit scheduling responsibilities.

2.1.1. Instructor Requirements. All flight training conducted under this chapter must be supervised by a qualified instructor of like specialty. Crew members undergoing qualification training will be under "direct instructor supervision" during critical phases of flight. (***EXCEPTION***: The requirement for "direct instructor supervision" during tanker AR may be waived for pilots and FEs by their assigned instructor [transfer of training from the academic and ATD environment {Phase IA} to the flight environment and proficiency in tanker autopilot-off AR {R080} must first be demonstrated]). 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.

2.1.2. The training and upgrade folder of individuals undergoing training under this chapter must be reviewed by the instructor prior to each mission briefing for each sortie. Areas that were previously identified unsatisfactory or unsafe must be reviewed and corrective measures discussed in detail with the student. In coordination with the CCTS chief, the instructor will ensure that the training contractor is apprised of less than satisfactory activity of a student undergoing Phase IB training. If appropriate, additional academic and ATD training may be coordinated and scheduled with the training contractor.

2.1.3. All ACs will be dual seat qualified. Dual-seat qualified ACs must be capable of accomplishing AC duties from the left seat and copilot duties from the right (i.e., no requirement to be right-seat qualified in receiver AR).

2.1.3.1. Left Seat Initial Qualification Pilot (LSIQP) candidates will receive familiarization training in the right seat during Phase IA (contract training). Flight training will be conducted during Phase IB; however, units are authorized to delay right seat training to minimize impact on student throughput and concentrate on the individual's left-seat duties. In all cases, right seat training will be completed by the end of Phase II. Training will include, but will not be limited to, the following:

2.1.3.1.1. One mission where student will accomplish normal copilot duties during entire flight to include receiver AR.

2.1.3.1.2. Instrument approach, missed approach, and landing will be accomplished from the right seat if only one sortie is required.

2.1.3.2. Evaluation will be accomplished according to AFI 11-202, Volume 2. At minimum, inflight evaluation of a right seat approach and landing is required. No additional ground testing is required.

2.1.3.3. LSIQP candidates who have completed the copilot path at the formal school will utilize the CP column of Table 2.1 Initial Qualification Training Requirements.

2.1.3.4. LWIQP candidates who have completed the copilot path at the formal school will complete KC-10 PUP and the P column of Table 2.1 prior to certification as Aircraft Commanders.

2.2. 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 in **Table 2.1.** Specific course prerequisite, entry qualifications, and other requirements are listed below and in **Table 1.1.**

2.2.1. KC-10 CPIQ – Co-Pilot Initial Qualification: Qualifies UPT graduate as KC-10 co-pilot (MC). Also includes those pilots that do not meet the requirements outlined in Paragraphs **2.2.2.**, **2.2.3.**, and **2.2.4.** below.

2.2.2. KC-10 PIQFO–Pilot Initial Qualification FAIP/OSA: Qualifies FAIP (T-37, T-38, and T-1) or OSA (C-12, C-9, C-21, etc) aircraft commanders as KC-10 Aircraft Commander (MP). Flying hour requirement is 1000 hours total time and 100 hours as an aircraft commander (excluding “other” time). Trainees will normally complete this course at the aircraft commander level, but may complete the course at the copilot level at the direction of a Progress Review Board. This course is defined as a LSIQP course for Phase II training purposes.

2.2.3. KC-10 PIQMWS–Pilot Initial Qualification MWS: Qualifies non-KC-10, prior MWS fixed-wing aircraft commanders as KC-10 Aircraft Commanders (MP). Flying hour requirement is 1000 hours total time and 100 hours as an aircraft commander (excluding “other” time). Trainees will normally complete this course at the aircraft commander level, but may complete the course at the copilot level at the direction of a Progress Review Board. This course is defined as a LSIQP course for Phase II training purposes.

2.2.4. KC-10 PIQ2MWS – Same as paragraph **2.2.3.** except course is lengthened to permit two aircraft commanders sufficient training to meet course requirements. KC-10 PIQFO students may not be scheduled for this class.

2.2.5. KC-10 FBP – Flight Engineer (Basic) Precourse: Provides required training for Senior Airman and above with no prior MWS experience to successfully complete KC-10 FIQ follow on. Requires BFE (Altus AFB) prerequisite.

2.2.6. KC-10 FIQ – Flight Engineer Initial Qualification: Qualifies prior fixed wing MWS Flight Engineer Senior Airman and above as 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 **2.2.5.**) as KC-10 Flight Engineer.

2.2.7. KC-10 BBQ – Boom Operator (Basic) Initial Qualification: Qualifies enlisted member with no prior MWS experience as KC-10 Boom Operator. Requires BBO (Altus AFB) prerequisite.

2.2.8. KC-10 BIQ – Boom Operator Initial Qualification: Qualifies prior KC-135 Boom Operator as KC-10 Boom Operator.

2.2.9. KC-10 BLQ – Boom Operator (Loadmaster) Initial Qualification: Qualifies prior Airlift Loadmaster or KC-135 BIQ graduate as KC-10 Boom Operator. This course will not be scheduled without AMC/DOT approval as KC-10 BBQ (see paragraph **2.2.8.**) is preferred.

2.2.10. KC-10 SSF – See Paragraph **2.7.**

2.2.11. KC-10 SSQ – See Paragraph **2.7.**

2.3. Ground Training Requirements. Complete ground training requirements for initial qualification in accordance with AFI 11-202, Volume 1.

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

2.4.1. Prior to commencing Phase IB flight training in the KC-10, each crew member will be administered an evaluation (Q-005 or Q-006 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.

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

2.5.1. Form a nucleus of instructor and flight-examiner personnel (initial cadre) to begin aircrew conversion. Converting units may request initial cadre waiver of Primary Aircraft Inventory (PAI) time requirement. Send waivers through channels and include the information specified in paragraph **1.2.** Additionally, include the most recent aircraft flown and total time in that aircraft in the remarks' section of the waiver. Initial cadre will not be designated in a crew position higher than currently held, e.g. C-141 MP to KC-10 EP unless previously qualified in the conversion aircraft. After final approval, publish a unit letter to identify initial cadre of instructors and flight examiners by crew qualification.

2.5.1.1. The unit training manager or flight commander, after examining the training and evaluation records of the individual, will determine which training events are applicable.

2.5.2. GPS DQT. Until the entire KC-10 fleet is modified, pilots, and flight engineers will receive either GPS or INS qualification training. Only highly experienced crewmembers (or as specified by MAJCOM supplement) are allowed to be dual (GPS/INS) qualified. **Table 2.2.** specifies training required for Flight Management System (FMS) training.

2.5.2.1. INS training will consist of a computer based training (CBT) course in Phase IA followed by at least one training flight on an INS aircraft during Phase IB training.

2.5.2.2. GPS training will consist of CBT and simulator training in Phase IA followed by at least one training flight on a GPS aircraft during Phase IB training.

2.5.3. Individuals who do not receive GPS training during Phase IA will accomplish contractor training and at least one flight with an instructor of like specialty. The contractor training consists of the Pilot’s or Flight Engineer’s Difference Course (PDC/FDC), the computer based FMS-800 Emulation

Trainer (FET), the table top FMS/EHSI Part Task Trainer (if available), and eight hours of simulator training (if available).

2.5.4. Document difference training completion on an AF Form 4025, **Summary/Closeout Training Accomplishment Report**, and post in the individuals FEF to ensure training documentation follows the individual during PCS moves. This may be removed after the entire KC-10 fleet is GPS equipped.

2.6. Multiple Qualification.

2.6.1. Crew members maintaining dual qualification in different model aircraft will, as a minimum, maintain Flying Training Level (FTL) A currency requirements in each aircraft (N/A for senior officers; see paragraph **2.7.**).

2.7. Senior Officer Qualification Requirements. Reserved for senior officer (0-6 and above) positions requiring operational flying. Senior officers will complete the appropriate senior officer course (unless already qualified), must fly with an instructor and will maintain training level E continuation training requirements. ***EXCEPTION***: General officers in commander billets, NAF commanders, wing commanders and operations group commanders are eligible to fly without an instructor only in their primary assigned aircraft. These personnel must complete or have completed initial qualification and be at least Basic Mission Capable in their primary assigned aircraft. Those senior officers who were previously qualified in their primary assigned aircraft via an initial qualification course may complete requalification training, in accordance with paragraph **1.7.** Senior officers flying unsupervised must meet the above requirements, be current and qualified in the weapons system and maintain training level A continuation training requirements, including simulator requirements. Senior officer courses do not lead to unsupervised qualification in any weapon system.

2.7.1. Flying NAF/CCs and OG/CCs must be fully certified flight examiners in their primary assigned aircraft. These individuals do not require nor do they have to maintain instructor certification or mission ready status. To become a flight examiner, NAF/CCs and OG/CCs must maintain a minimum of TL E requirements and be flight examiner certified IAW AFI 11-2KC-10 Volume 2, *KC-10 Grading Criteria* (i.e., require an AF Form 8). This policy is based on the premise that these individuals already possess a strong history of experience, judgment, and superior airmanship to evaluate high standards of performance in the air. As a result, additional currency/proficiency requirements to maintain flight examiner status are not required. Also, flight examiner status for additional aircraft assigned to the unit is not required. NAF/CCs and OG/CCs maintaining TL E require instructor supervision when at the controls of an aircraft. Senior officers who were previously qualified as KC-10 AC or higher are not required to attend the initial qualification course unless unqualified more than 5 years. (Note: OG/CCs must attend either initial or requalification courses (as required) to qualify in their primary assigned aircraft. Use of senior officer course is not authorized.)

2.7.2. Training for designated senior staff officers may be accomplished through the following means: Senior Staff Officer Familiarization Course (KC-10-14, Phase IA), Senior Staff Officer Basic Qualification (KC-10-16, Phase IA) and associated Phase IB training requirements, or the complete initial qualification Phase IA course (KC-10-1) and associated Phase IB training requirements. The individual's DOT or equivalent (OG or numbered Air Force [NAF]) will coordinate with and receive approval from HQ AMC/DOTK as to which senior staff officer course is required and authorized. (HQ AFRC/DOT may approve and disapprove individuals for KC-10-16 in coordination with HQ AMC/DOTK.) HQ AMC/DOTK will then send this information to the affected training facility.

2.7.3. The contractor administered Senior Staff Officer Familiarization Course (KC-10-14) 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.

2.7.4. The 12-day Senior Staff Officer Basic Qualification Course (KC-10-16) consists of contractor administered academic and simulator training and a combined instrument and emergency procedures simulator evaluation. This course is followed by approximately four flights during Phase IB. Phase IB training consists of inflight training and evaluation detailed in **Table 2.1.** **This training is the minimum required to attain basic qualification in the aircraft with instructor supervision**.

2.7.5. All emergency procedures training and evaluation must be completed in the KC-10 simulator. **Chapter 4** details recurring training requirements necessary to maintain basic qualification status.

2.7.6. School Quotas for Senior Officer courses are controlled by HQ AMC/DOT. These courses are scheduled according to need in cooperation with the ATS contractor. Training throughput requirements may affect availability of these courses. Requests for training should be forwarded to HQ AMC/DOT through the respective NAF/DOVT or AFRC/DOTA. HQ AMC/DOT will work in conjunction with these offices and HQ AMC/DPA and AFRC/DPT to finalize course approvals and schedules. These requests must be submitted a minimum of 45 days prior to requested start date. HQ AMC/DO will be final authority should a disagreement arise regarding eligibility.

2.8. Flight Surgeons. AFI 11-202, Volume 1 establishes flight surgeon initial qualification requirements.

2.9. Reports: Reporting responsibilities are listed in paragraph **1.4.**

2.10. Failure To Complete Formal Training. If any crewmember fails to complete a formal course, the trainee's flying unit squadron commander will be notified. The flying unit squadron commander will convene a Progress Review Board IAW paragraph **1.13., 1.13.1.,** and **1.13.2.** of this instruction.

Table 2.1. Initial Qualification Training Requirements (Phase IB).

Note	Ground Training Events	Code	P	CP	FE	BO	SS
	Flight Physical	PP01	1	1	1	1	1
	Physiological Training	PP11	1	1	1	1	1
	AFRC Associate Program Orientation Indoctrination	A016	1	1	1	1	1
	Regulation, Directive Knowledge, and Use	A017	P	P	P	P	P
	AC Responsibilities	A018	1				1
	Aircraft Field Trip	G025	P	P	P	P	P
7	Communications Procedures	G080	1	1	1		1
	IRC	G130	P	P			P
7	Aircraft Servicing	G190	F	F	P	F	
7	Initial Crew Resource Management	G231	B	B	B	B	B
	Local Area Survival	LS01	1	1	1	1	1
	Life Support Equipment	LS06	1	1	1	1	1
4	Aircrew Ground Egress Training	LS08	1	1	1	1	1
	Open Book Examination	Q001	1	1	1	1	1
	Closed Book Examination	Q002	1	1	1	1	1
2,3	ATD Evaluation	Q005	1	1	1	1	
2,3	Senior Staff Basic Qualification ATD Evaluation	Q006					1
	Basic Qualification Evaluation	Q007					1

Note	Flight Training Events	Code	P	CP	FE	BO	SS
	Formation Departure and Join Up	F010	P	P			
7	Formation	F020	P	P			
	AR Formation	F060	P	F			
	Tanker Rendezvous	N010	*P	*P			
	Rendezvous and AR EMCON 1	N011	*P	*P		*P	
	Rendezvous and AR EMCON 2	N012	*P	*P		*P	
7	Rendezvous and AR EMCON 3	N013	B	B	B	B	
7	Rendezvous and AR EMCON 4	N014	B	B	B	B	
	Tanker Alternate Rendezvous	N015	*P	*P			
	Tanker Rendezvous Overrun Procedures	N016	*P	*P			
	En Route Rendezvous	N020	P	P			
	Point Parallel Rendezvous (Tanker)	N030	*P	*P			
	Tanker Anchor Rendezvous and AR	N040	*P	*P			
	Receiver Rendezvous	N130	P	P			
	Receiver Alternate Rendezvous	N135	P	P			
	Receiver Rendezvous Overrun Procedures	N136	*P	*P			
	General Navigation	N160	*P	*P	P		*P
	Taxi Exercise	P005	P	F	B	F	P
	Airwork Exercise	P006	F	F			F
	Takeoff, Initial	P010	*P	*P			*P
	Takeoff, Night	P011	*P	*P			*P
	Takeoff, Gyro Mode	P012	*P	*P			*P
	Instrument Departure	P015	*P	*P	F		*P
7	Copilot Takeoff and Climb Duties	P018	*P	*P			
	Takeoff and Departure	P025			*P		
	Instrument Approach	P070	*P	*P	F		*P
	Holding Pattern	P071	*P	*P			*P
	Penetration (Published)	P072	*P	*P			*P
	En Route Descent and Penetration	P073	*P	*P			*P
	Approach and Landing, Full Stop	P074			*P		
	Instrument Approach (Auto and Coupled)	P080	*P	*P	F		*P
	Instrument Approach (Manual)	P090	*P	*P			*P
	Precision Approach	P100	*P	*P	F		*P
	ILS Approach	P101	*P	*P			*P
	ILS (Gyro Mode)	P102	*P	*P			*P
	Precision Approach Radar (PAR) (if available)	P103	P	P			P
	Nonprecision Approach	P110	*P	*P	F		*P
8	VOR and TACAN Procedures	P111	*P	*P			*P
5	TACAN, VOR, or Localizer Approach	P112	*P	*P			*P
	ASR Approach (if available)	P113	P	P			P
	RMI-only Approach (ADF or VOR)	P114	*P	*P			*P
	Backcourse LOC (if available)	P115	*P	*P			*P
	Circling Approach	P130	P	P			P
	Visual Traffic Pattern	P140	P	P			P
	Missed Approach (Auto)	P150	*P	*P			*P
	Missed Approach (Manual)	P160	*P	*P			*P
	Landing (Total)	P190	P	P			P
	Landing, Full Stop (Reverse Thrust)	P191	P	P			P
	Landing, Night	P192	P	P			P
	Landing, 50-Degree Flaps	P193	P	P			P
	Touch-and-Go Landing	P200	P	P	*P		P
7	HAVE QUICK Radio Procedures	P260	P	P			

7	SECURE RADIO Operation	P270	P	P			
	Supervision of Copilot Takeoffs, Landings, Touch-and-Gos, and AR	P320	P				
	Weight and Balance	P322			P		
6,7	Briefing and Control of Passengers	P340				P	
	Main Cabin Door Procedures (Departure and Arrival)	P350			F	P	
	Mission Planning and Briefing	P360	P	P	P	P	P
10	Preflight and Cockpit Preparation	P361	*P	*P	P	*P	*P
	Pre-Takeoff	P362			*P		
	Climb	P363			*P		
	Cruise	P364			P		
7	Autopilot-Off Cruise	P365	1	1			1
10	Checklist Procedures and Use	P366	*P	*P	*P	*P	*P
	Crew Coordination	P367	P	P	P	P	P
	Postflight	P368			P		
	Performance Knowledge and Use	P370	*P	*P	*P		*P
8	FMS Operation	P371	*P	*P	*P		*P
	Fuel Management and Conservation	P372	P	F	P		P
	Equipment Operation	P373	*P	*P	*P	*P	*P
	Manual Throttle Operation	P374			*P		
	Manual Pressurization	P375			P		
8	INS Operation	P376	*P	*P	*P		*P
	Radar Operation	P377	P	P			P
	Communications	P378	*P	*P	*P	*P	*P
7	L-Band SATCOM	P379			P		
11	Receptacle Equipped Day Fighter Certification	Q022				1	
11	Receptacle Equipped Night Fighter Certification	Q023				1	
	Flight Evaluation	AA01	1	1	1	1	
9	Receiver AR	R010	P	F	*P		
	Receiver AR, Indoctrination	R011		P			
9	Receiver AR, Day	R012	P	F			
9	Receiver AR, Night	R020	P	F			
7	Receiver AR, Heavyweight	R030	P	B	*P		
	Receiver AR Breakaway or Emergency Separation	R040	*P	*P	*P		
	Receiver AR, Tanker Autopilot-Off	R050	P	F			
	Tanker AR	R060	*P	*P	*P		
	Tanker AR Breakaway or Emergency Separation	R070	*P	*P	*P	*P	
	Tanker AR, Autopilot-Off	R080	P	F			
	Slow Speed Tanker AR	R090	*P	*P	*P		
	Day Contacts	R125				P	
	Night Contacts	R130				P	
	Tanker Manual Contacts	R140				P	
11	Fighter Contacts	R150				P	
7	Radio Silent Breakaway	R160	*P	*P	*P	*P	
7	Radio Silent AR	R165				P	
7	Tanker Heavyweight Offload	R170			*P		
	Radio Silent Visual Signals	R180	P	1		P	
	Drogue System Operation	R190	B	B	B	P	
	WARP System Operation	R195	F	F	F	*P	
7	AR Operations	R200			F		

NOTES:

1. Events preceded by asterisk (*) are trained to proficiency by the contractor in the appropriate ATD during Phase IA; however, proficiency in the ATD may in some cases not equate to full aircraft proficiency due to differences

in the real-world flight environment. To ensure that transfer of training has occurred, the instructor should evaluate the student's proficiency and abilities in these events. At the discretion of the CCTS flight commander, proficiency need not be demonstrated in flight. If the student's performance is unsatisfactory, the training contractor will be notified either through the critique at flight three or an additional critique sheet after flight three.

2. Must be completed prior to starting Phase IB training.
3. Will include the requirements of an instrument flight evaluation for all pilots.
4. May be accomplished in conjunction with the aircraft field trip (G025).
5. Student must demonstrate proficiency in one of these three approaches. If others are performed, they must be performed to "P" levels. If not flown, approaches will be trained to "B" level.
6. Proficiency must be demonstrated prior to passenger handling evaluation.
7. May be accomplished during Phase II if not accomplished in Phase I. Initial CRM (G231) is normally incorporated into all initial qualification courses.
8. Based on version of training (GPS or INS).
9. Student must be day receiver KC-135 proficient before proceeding to night AR. Student must demonstrate proficiency in KC-135 night AR. Proficiency in receiver refueling from a KC-10 tanker must also be demonstrated in either day or night conditions during Phase II training if not demonstrated in Phase IB.
10. Asterisk applies only to air refueling operator (ARO) station inspection, BOs preparation for contact and post AR (boom and drogue), AR, emergency and abnormal procedures checklists.
11. May be completed in Phase 1B or II. Units will not delay students in phase 1B for excessive periods in an attempt to get fighter contacts. In such cases, students may be trained and given checkrides with heavy receivers only. Certification will be documented on AF Form 4025, Summary/Close-Out Training Accomplishment Report and AF Form 1381, USAF Certification of Aircrew Training. Q022 and Q023 certification must be completed on separate sorties. Contacts can be completed in Phase IB or Phase II training. See paragraphs **3.2.6.1.** and **5.6.1.**

Table 2.2. FMS Qualification Training Requirements.

Note	Training Event	Code	P	PUP	SS	CP	FE	BO
	FMS Overview and Crew Coordination Challenges	C001	B	B	B	B	B	
	FMS Components, Controls, and Indicators	C002	*P	*P	*P	*P	*P	
	EHSI Components, Controls, and Indicators	C097	*P	*P	*P	*P	*P	
	FMS Initialization and Data Cartridge Loading	C009	*P	*P	*P	*P	*P	
	Direct-To, Steering, and VNAV Operations	C004	*P	*P	*P	*P	*P	
	Integrated Nav and Position Operations	C005	*P	*P	*P	*P	*P	
	Flight Plan Management	C011	*P	*P	*P	*P	*P	
	Status and Index Operations	C024	*P	*P	*P	*P		
	TACAN, ADF, and IFF Operations	C006	*P	*P	*P	*P	*P	
	FMS Holding Operations	C016	*P	*P	*P	*P		
	FMS Orbit Rendezvous Operations	C015	*P	*P	*P	*P		
	Patterns, and Intercept Operations	C007	*P	*P	*P	*P		
	FMS Approach Operations	C022	*P	*P	*P	*P		
	Waypoint and Markpoint Operations	C026	*P	*P	*P	*P		
	SID/STAR Operations	C027	*P	*P	*P	*P		
	FMS Checklist Procedures	C021	*P	*P	*P	*P	*P	
	FMS Alternate Flight Planning	C014	*P	*P	*P	*P	*P	
	FMS Abnormal Procedures	C023	*P	*P	*P	*P	*P	

NOTE:

If simulator training is accomplished, events preceded by asterisk (*) are trained to proficiency by the contractor in the appropriate ATD; however, proficiency in the ATD may in some cases not equate to full aircraft proficiency due to differences in the real-world flight environment. To ensure that transfer of training has occurred, the instructor should evaluate the student's proficiency and abilities in these events inflight. Major training efforts in these areas are not required if student proficiency is demonstrated based on the judgment of the instructor and the parameters established in this volume.

Chapter 3

MISSION QUALIFICATION TRAINING (PHASE II)

3.1. General Requirements. This chapter prescribes Mission Qualification Training (Phase II) requirements an individual must accomplish on completion of, or concurrently with, Phase IB training (initial qualification, requalification, or pilot upgrade training) to qualify individuals in unit missions. For those crewmembers with limited prior experience, Phase IIB provides additional seasoning in those areas deemed mission critical to the KC-10. All crew members will complete mission qualification prior to entering other qualification or upgrade training (exception: may accomplish Special Qualifications & Certifications or Differences Qualifications as outlined in paragraphs **5.6.** and **5.7.**).

3.1.1. Phase II training begins on the calendar date following completion of the applicable phase 1B flight check (AA01). See **Table 1.3.** and paragraph **3.2.** for Phase II training time limitations.

3.1.2. Phase II training may be administered in conjunction with training required by other chapters of this volume; however, OG commanders must carefully weigh mission demands and requirements as well as student abilities.

3.1.3. Phase II training is not applicable for SSQ, SSF, or instructor upgrade courses.

3.1.4. Mission Ready (MR) individuals who transfer between units need only complete training that may differ dependent on unit's locations and missions. This training will include a supervised familiarization/orientation flight and local flying area/associated hazards brief.

3.2. Mission Qualification Training (Phase II). Flight training will be conducted by KC-10 Instructors. (Phase IIB training may be with any MR crew member except MC or MF). Phase II training requirements are listed in **Table 3.1.** The training events listed may be accomplished during Phase IB. For continuation purpose, individuals will train at level D according to **Chapter 4** until completion of Phase II. Specific Phase II requirements and policy are listed below and in **Table 3.1.**

3.2.1. Graduates of course KC-10 CPIQ: Complete the requirements as outlined in **Table 3.1.** May fly with any IP or MP as FC on local training sorties.

3.2.2. Graduates of courses KC-10 PIQFO, PIQMWS, and PIQ2MWS: The object of Phase II training for LSIQPs is to provide graduated exposure to the duties of a KC-10 aircraft commander prior to certification. The LSIQP can perform left or right seat duties with any MP (as certified: see paragraph **3.2.**) or IP (EXCEPTION: With an MP in the right seat, LSIQPs may not perform left seat touch-and-go landings) There are two parts to this training, Phase IIA & IIB.

3.2.2.1. Phase IIA: Complete the requirements of **Table 3.1.** (except R030). May fly with any IP or MP (as certified-see paragraph **3.2.**) as FP on local training sorties. Log FP time.

3.2.2.1.1. Upon completion of Phase IIA, the LSIQP will be counted as a Mission Ready Copilot for SORTS and TRP purposes.

3.2.2.2. Phase IIB: The LSIQP gains additional experience flying with other MPs and IPs. ATPRs should be completed but are not required. Accomplish R030 if not completed in Phase IIA. During this period the LSIQP can fill the MC position on any crew including operational deployments and can occupy either seat. Log FP or MC time in accordance with crew makeup.

3.2.2.3. The LSIQP must be Phase IIB complete and have 150 hours of KC-10 time after the Phase 1B checkride (AA01) before being certified as an Aircraft Commander unless waived by the OG/CC.

3.2.2.3.1. If period to final SQ/CC certification as Aircraft Commander exceeds 365 days from beginning of Phase IIA, downgrade individual to MC. KC-10 PUP is required for subsequent MP qualification (not applicable for AFRC).

3.2.2.4. The LSIQP may not fly in the seat with an unqualified pilot. The LSIQP may not fly in the seat with an FC, MC or another FP during critical phases of flight until certified as an Aircraft Commander. The LSIQP may fly in the seat with an FC, MC or another FP during non-critical phases of flight under the supervision of an IP.

3.2.2.5. LSIQP graduates who have completed the copilot path through the formal school course as the result of PRB action refer to paragraph 3.2.1. for Phase II training requirements.

3.2.3. Graduates of course KC-10 PUP : complete the requirements as outlined in **Table 3.1.** May not fly as Aircraft Commander until certified by SQ/CC.

3.2.4. Graduates of course KC-10 FBP/FIQ : The object of Phase II training for FBPs is to provide graduated exposure to the duties of a KC-10 flight engineer prior to Mission FE (MF) certification. There are two parts to this training, Phase IIA & IIB.

3.2.4.1. Phase IIA: Complete the requirements of **Table 3.1.** May fly local training sorties under IF supervision, log FF time.

3.2.4.2. Phase IIB: The FBP gains additional experience. May fly local training sorties unsupervised, log FF time. For off station missions, must complete an additional M261 and M262. ATPRs must be completed. The following apply:

3.2.4.2.1. During Phase IIB the FBP may fill the 2nd engineer requirement for augmentation as outlined in AFI 11-2KC-10 Vol 3 for cargo missions only provided the other engineer is an IF.

3.2.4.2.2. During Phase IIB the FBP may not fill the engineer requirement for a basic crew except local sorties as outlined in 3.2.4.2. above.

3.2.4.3. The FBP must complete Phase IIB and have 150 hours of KC-10 time after the Phase 1B checkride (AA01) before being declared an MF unless waived by the OG/CC.

3.2.5. Graduates of course KC-10 FIQ : complete the requirements as outlined in **Table 3.1.** May Fly local sorties unsupervised, log FF time.

3.2.6. Graduates of course KC-10 BBQ : The object of Phase II training for BBQs is to provide graduated exposure to the duties of a KC-10 Boom Operator prior to permitting solo off-station cargo missions. There are two parts to this training, Phase IIA & IIB.

3.2.6.1. Phase IIA: Complete the requirements of **Table 3.1.** Complete fighter checkout (Q022 & Q023) if not accomplished in Phase 1B. May fly local training sorties unsupervised, log FB time.

3.2.6.1.1. The BBQ may be declared an MB at the completion of Phase IIA.

3.2.6.2. Phase IIB: The BBQ gains additional experience. ATPRs are not required.

3.2.6.2.1. May not fly a cargo mission as a single boom until accomplishing 5 additional P300 cargo loads.

3.2.7. Graduates of course KC-10 BIQ: Complete the requirements as outlined in **Table 3.1.** May fly local training sorties unsupervised during Phase II, log FB time.

3.2.8. Graduates of course KC-10 BLQ: Complete the requirements as outlined for BBQ in paragraph **3.2.6.**

3.2.9. Graduates of courses KC-10 PRQ, FRQ, BRQ (to include instructor requals): Complete the requirements as outlined in Paragraph **1.7.4.** and **Table 3.1.**

3.3. Flying Training Requirements: See **Table 3.1.** of this AFI.

3.3.1. Basic aircraft qualification (BAQ) aircrew members pursuing MR status will accomplish Training Level "D" continuation training requirements.

3.3.2. After arrival at duty station, crew members must receive a supervised duty familiarization or orientation flight and local flying area or associated hazards brief **(not applicable for in-unit initial, requal, or upgrade training)**.

Table 3.1. Mission Qualification Training Requirements.

Note	Short Title	Ground Training Events	Code	P	CP	FE	BO
4		Aircraft Marshalling Training and Examination	G002	1	1	1	1
4	CWD	Chemical-Biological Warfare Defense Training	G010	1	1	1	1
		Tactics	G060	1	1	1	1
4	AIT	Aircrew Intelligence	G070	1	1	1	1
2,4	CEO	Communications Procedures	G080	1	1	1	
4		Anti-hijack	G090	1	1	1	1
4,9	LAC	Laws of Armed Conflict	G100	1	1	1	1
4,9	FP	Force Protection	G110	1	1	1	1
		ISOPREP Review	G120	1	1	1	1
8		TERPS	G150			1	1
4	HZC	Hazardous Cargo	G182	1	1		1
2	AT	Aircraft Servicing	G190	F	F	P	F
4	CAT	Combat Arms Training	G280	1	1	1	1
4,9	CST	Combat Survival Training	LS02	1	1	1	1
4,9	WST	Water Survival Training	LS03	1	1	1	1
4	ACDT	Aircrew Chemical Defense Training	LS04	1	1	1	1
7		Egress with ACDE	LS05	1	1	1	1
9		Initial Combat Survival Training	S-V80-A	1	1	1	1
9		Initial Water Survival Training	S-V90-A	1	1	1	1
Note	**Short Title**	**Flight Training Event**	**Code**	**P**	**CP**	**FE**	**BO**
2		Formation	F020	P	P		
		Deployment Mission Planning	M260	P	P	P	
		Airlift Deployment Operations	M261	P	P	P	
		Fighter Deployment Operations	M262	P	P	P	P
2		Rendezvous and AR EMCON 3	N013	B	B	B	B
2		Rendezvous and AR EMCON 4	N014	B	B	B	B
3		Holding Pattern	P071			F	
3		Penetration (Published)	P072			F	
3		En Route Descent and Penetration	P073			F	
3		ILS Approach	P101			F	
3		ILS (Gyro Mode)	P102			F	
3		PAR	P103			F	
3		VOR and TACAN Procedures	P111			F	
3		TACAN, VOR, or Localizer Approach	P112			F	
3		ASR Approach	P113			F	
3		RMI-only Approach (ADF or VOR)	P114			F	
3		Backcourse LOC	P115			F	
3		Circling Approach	P130			F	
3		Missed Approach (Auto)	P150			F	
3		Missed Approach (Manual)	P160			F	
2		HAVE QUICK Radio Procedures	P260	P	P		
2		SECURE RADIO Operation	P270	P	P		
		ACDTQT	P280	1	1	1	1
		Alert Start	P290	B	B	B	B
		Cargo Loading	P300				P
2		Briefing and Control of Passengers	P340				P
2		Autopilot-Off Cruise	P365	1	1		
2		L-BAND SATCOM	P379			P	
2,1		Receptacle Equipped Day Fighter Certification	Q022				1
2,1		Receptacle Equipped Night Fighter Certification	Q023				1

2,6		Receiver AR, Heavyweight	R030	P	B	P	
2,5		RADIO SILENT Breakaway	R160	P	P	P	P
2		RADIO SILENT AR	R165				P
2		Tanker Heavyweight Offload	R170			P	
2		Drogue System Operation	R190	B	B	B	P
3		AR Operations	R200			P	

NOTES:

1. Certification will be documented on AF Form 4025, Summary/Close-Out Training Accomplishment Report and AF Form 1381, USAF Certification of Aircrew Training. Q022 and Q023 certification must be completed on separate sorties. Contacts can be completed in Phase IB or Phase II training. See Paragraph **5.6.1.**
2. Required only if not accomplished during Phase IB training.
3. Required for FEs if not accomplished during Phase IB training.
4. If "comparable training" accomplished in another weapons system is current according to MAJCOM instructions, mission qualification training for the following events is not required: LS04, G010, G070, G100, G110, and G280. "Comparable training" accomplished in commands other than AMC must be approved by the MAJCOM OPR according to **Attachment 1**. As indicated, crossflow pilots are required to take Egress (LS08), Tactics (G060), ISOPREP (G120), Aircraft Servicing (G190), and CRM (G231) since the workshop covers aircraft specific CRM issues during the initial qualification course.
5. At the assigned instructor's discretion, proficiency need not be demonstrated inflight if trained to proficiency in SIM and BOT.
6. Direct IP supervision required if not already deemed proficient in Phase IB.
7. Accomplish concurrently with P280
8. TERPS is incorporated into Phase IA for flight engineers.
9. Completion of S-V80-A, S-V90-A, and initial life support equipment training during formal school establishes the due date (based on date of first completed course) for recurring Combat Survival (LS02) and Water Survival (LS03) training. Completion of S-V80-A establishes the due date for recurring Law of Armed Conflict (G100), and Force Protection (G110) training.

Chapter 4

CONTINUATION TRAINING (PHASE III)

4.1. Continuation Training (Phase III). This chapter specifies the minimum training requirements to maintain qualification in KC-10 aircraft. The squadron commander will also determine the training level of each assigned crew member. KC-10 aircrew are assigned to either mission ready (MR) or basic aircraft qualification (BAQ) status.

4.1.1. Mission Ready (MR). For SORTS, operational tasking, and deployments, a mission ready aircrew member is defined as one who is current, qualified, and certified in the squadron's mission (completed mission qualification training for applicable crew position). For additional information, see AFI 11-202, Volume 1.

4.1.2. Basic Mission Capable (BMC). A Non-Mission Ready aircrew member assigned to MAJCOM headquarters, NAF, TACC, AMWC, TALCEs, AMOGs, Formal Schoolhouse, or direct reporting unit who has satisfactorily completed mission qualification training, does not maintain MR status, but maintains familiarization in the command or unit operational mission. The aircrew member may maintain qualification in some aspects of the unit mission, and is able to attain full qualification in the unit mission within 45 days. See note after paragraph **4.2.1.1.** for training level requirement.

4.1.3. Basic Aircraft Qualification (BAQ). See AFI 11-202, Volume 1.

4.1.4. Minimum Requirements. In addition to the above, MR, BMC, and BAQ crew members must have accomplished and/or maintained the following minimum requirements for the KC-10:

4.1.4.1. Annual physical

4.1.4.2. Physiological training

4.1.4.3. Flight evaluation in the unit's mission

4.1.4.4. Flight currency events, except special mission qualifications that do not affect the wartime mission

4.1.4.5. All events including CRM, IRC, ground egress, and life support training listed in the applicable ground continuation training tables in this AFI (see paragraph **4.1.5.** for waiver requirements).

4.1.4.6. Semiannual flying continuation training requirements including CRM, IRC, and life support training listed in this AFI (see paragraph **4.1.5.** for waiver requirements).

4.1.5. Non-Mission Ready (NMR). An individual who is noncurrent or unqualified in the aircraft, incomplete in required continuation training, or not certified to perform the unit mission is a nonmission ready (NMR) crew member.

4.1.5.1. If the crew member is NMR for failure to maintain currency per paragraph **4.5.1.**, place the crew member in supervised status for that event (individual flies with an instructor of like specialty while accomplishing that event) until required training is accomplished. Crew members non-current for less than 6 months will maintain their current training level and a training folder need not be accomplished**.** Crew members are non-current the day after event currency expires; (i.e., a crew member who accomplished an event with monthly currency on 1 September becomes

non-current on 1 November). Regain currency based on the time elapsed since becoming non-current as described in paragraph **1.6.** Loss of currency prohibits an individual from flying outside of the CONUS without instructor supervision or accomplishing unsupervised inflight duties in the noncurrent event(s). For example, if the individual is noncurrent for an event such as tanker air refueling or tanker rendezvous, the individual may fly unsupervised on CONUS sorties which are not scheduled for and do not accomplish tanker air refueling. EXCEPTION: an individual noncurrent in INS operations (N001), takeoffs (P010 or P020), full stop landings (P190), approaches (P070), and night landings (P192) may not fly unsupervised. The crew member cannot deploy without supervision until currency is regained. MAJCOMs outside of the CONUS may allow individuals to fly local, routine, and noncontingency overseas sorties in their respective AOR.

4.1.5.2. If a crew member is NMR for failure to complete required continuation training, the operations group commander has two options:

Waive the required training in accordance with paragraph **4.5.2.** The individual is then a MR crew member.

Place the crew member in supervised status (individual flies with an instructor of like specialty) until required training is accomplished. Make-up training (ground or flying) is creditable towards the new training period. NOTE: The operations group commander may allow individuals to fly unsupervised on CONUS sorties if loss of MR status was for failure to complete ground/flying continuation training. MAJCOMs outside of the CONUS may allow individuals to fly local, routine, and noncontingency overseas sorties in their respective AOR.

4.1.5.2.1. Flight Training. At the end of the semiannual training period, the squadron commander will review AFORMS products for those crew members who failed to accomplish all required semiannual flying training events (includes all events listed in the flying continuation training tables). The squadron commander will either direct training necessary for the individual to regain MR status or request an operations group commander waiver. If the AFORMS review shows enough flying events were recently accomplished to ensure MR proficiency, the operations group commander or equivalent may waive the requirements. The same flying training events will not be waived for two consecutive training periods. This waiver authority must be used judiciously. The intent is to ensure crew members receive the proper quantity of flying events to remain proficient and allow the operations group commander to determine MR status and additional training requirements when those training quotas are not met. ***EXCEPTION***: Flight currency will only be waived under extreme circumstances and only at the MAJCOM level. Flight currency is associated with those events denoted in the flying continuation training tables by a specific period of time (monthly, quarterly, semiannual, or annual) within which an event must be accomplished (listed in the "CUR" column).

4.1.5.2.2. Ground Training. The OG/CC or equivalent may waive ground continuation training. This waiver authority must be used judiciously. The decision to grant a waiver will be based on the individual crew member's experience and proficiency level (i.e., waivers will not be based on a crew member's availability). The operations group commander will determine the allowable time period of the waiver (the training should be completed at the earliest opportunity). This waiver is allowed for unforeseen circumstances and only for events that will not degrade mission accomplishment.

4.1.5.2.2.1. Refer to AFI 11-202, Volume 1 for individuals transferring between aircraft or leaving active flying status. These provisions also apply to all simulator training.

4.1.5.2.2.2. Failure to accomplish recurring ground egress training (G020), flight physical (PP01), or physiological training (PP11) results in immediate grounding until the training is accomplished.

4.2. Responsibilities for Training Levels. Before each semiannual period, the squadron commander or designated representative determines the flying training level (FTL) and ground training level (GTL) of each assigned crew member.

4.2.1. Training Levels (TL): TL assignment is based on experience and aircraft proficiency. Crew members may be assigned ground training levels that are more restrictive, but never less restrictive than the requirements in paragraph **4.2.1.2.** Use the date of the initial qualification inflight evaluation for determining an individual's time in the weapon system. TL definitions follow:

4.2.1.1. Flying Training Levels (FTL):

NOTE: NMR staff instructors/evaluators assigned to HQ AMC, HQ AFRC, a NAF, TACC, AMWC, TALCE, AMOGs, CCTS, or a direct reporting unit may be assigned to FTL "A" and GTL "4." In addition to GTL "4" requirements, these individuals must also accomplish annual CRM training (G240) and quarterly simulator training (G250/G255) requirements. These individuals may fly unsupervised on local training missions provided they are current and qualified. If assigned to FTL "A" and GTL "4," they require instructor supervision on all other missions. Since these GTL "4" crew members do not maintain MR status, they cannot log MP, MF, or MB time. For example, a pilot may log EP, IP, or FP time. If G240, G250, or G255 requirements are not met, the individual must fly with an instructor of like specialty unless waived (see paragraph **4.1.5.1.**)

4.2.1.1.1. FTL "A"–highly experienced crew members. This may include MR or NMR MAJCOM headquarters and TACC personnel; AETC instructors; NAF personnel; AMWC instructors; wing, operations group, and squadron commanders; operations officers, personnel assigned to OG evaluation positions, and any instructors assigned primarily to staff duties. Squadron commanders have the discretion to assign highly experienced MR line crew members to this level.

4.2.1.1.2. FTL "B"– experienced, mission ready crew members.

4.2.1.1.3. FTL "C"– MR crew members. Copilots should be assigned to FTL "C." If desired, squadron commanders may assign highly proficient copilots or first pilots to FTLs "A" or "B."

4.2.1.1.4. FTL "D"– BAQ crew members. Designated for basic qualified crew members who are pursuing MR status.

4.2.1.1.5. FTL "E"—BAQ, noninstructor staff (may include senior officers, MAJCOM, NAF, and TACC individuals who are not maintaining MR or instructor status). FTL E requirements are insufficient for MR status. Crew members assigned to FTL E will fly with an instructor of like specialty at all times.

4.2.1.2. Ground Training Levels (GTL):

4.2.1.2.1. GTL "1"– highly experienced crew members with 10 or more years operational flying.

4.2.1.2.2. GTL "2"– experienced crew members with at least 5 but less than 10 years operational flying.

4.2.1.2.3. GTL "3"– inexperienced crew members with less than 5 years operational flying.

4.2.1.2.4. GTL "4'–Assigned to NMR senior officers and staff. For GTL 4, use **Table 4.4.**

4.2.1.3. Change of TL. Once the semiannual period begins, personnel should not be moved to a level requiring fewer events. ***EXCEPTION***: Basic aircraft qualification crew members may be placed in a different FTL any time after attaining MR status.

4.2.1.4. For change of status, the squadron commander may assign an individual to NMR or supervised status at any time. When this occurs, the wing or group DOT will be notified in writing; downgrading will be documented in TRP minutes; and training will be started to return the individual to unsupervised status.

4.3. Training Events/Tables. Standardized AFORMS training event identifiers and descriptions are located in **Attachment 2**. Unit defined events will be designated "X" events (i.e. X020).

4.3.1. Credit Event Accomplishment. In addition to events accomplished on training and operational missions, those flight events accomplished on a satisfactory qualification, mission qualification, specialized mission qualification, or requalification evaluation may be credited towards individual's currency requirements and establishes subsequent due date.

4.3.1.1. Aircrew members who are unqualified in the aircraft due to an unsatisfactory flight evaluation will not log continuation training requirements for those events graded Q-3 until requalified.

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

4.3.1.3. Flight training events accomplished during Phase I training are not creditable toward continuation training except for those events successfully accomplished during the individual's flight checkride. Completion of ground training items before or during qualification is also creditable and establishes due dates for those events.

NOTE:

FEs and BOs who are fully qualified in their crew position on entering upgrade training may continue to log continuation training events. Log FF, FB, MF, and MB time as appropriate.

4.4. Currency and Continuation Training for Aircrew Members.

4.4.1. **Ground Continuation Training Events.** Aircrew members will comply with requirements of **Table 4.1.**, **Table 4.2.**, **Table 4.3.**, and **Table 4.4.** See **Attachment 2** for course descriptions.

4.4.1.1. Crew members attached to units (i.e., NAF, MAJCOM, AMWC, etc.) may accomplish applicable ground training events at locations other than their units of attachment. Individuals are responsible for reporting accomplished training to their unit of attachment AFORMS office.

4.4.1.2. Flight Surgeons comply with requirements of **Table 4.5.**

4.4.1.3. Lesson Plans and Course Materials. Det 1 AMCAOS lesson plans and course materials will be used when conducting academic training (or as specified by MAJCOM supplement). In

cases where lesson plans and course materials have not been developed or where the wing or group is responsible for curriculum development, units will develop a lesson plan and course materials to meet the purpose of the event and course descriptions.

4.4.1.4. Senior Officer Ground Continuation Training Requirements. Senior officers and all other crew members maintaining BMC and BAQ (FTL E) in the KC-10 are required to complete, as a minimum, the courses listed in **Table 4.4.** Senior officers maintaining MR status will comply with **Table 4.2.**

4.4.2. Flying Continuation Training Requirements. KC-10 flying continuation training requirements are in **Table 4.6.** Senior officers and staff crew members maintaining basic aircraft qualification will, as a minimum, maintain FTL E requirements. This requirement also applies to additional aircraft an individual may be qualified in.

4.4.2.1. IPs may fly in either seat. Additionally, aircraft commanders will be dual-seat qualified. These dual-seat qualified individuals must accomplish recurring qualification checks according to AFI 11-202, Volume 2 or MAJCOM publications. Copilots may not fly in the left seat unless under direct IP supervision.

4.4.2.2. Dual-seat aircraft commanders may accomplish training events in either seat.

4.4.2.3. Training events that are required in Phase III (continuation) for both pilots and copilots may be accomplished in either seat and logged toward the assigned crew position training event requirement.

4.4.2.4. ATD Credit for Training Event Requirements. Training events listed in **Table 4.7.** may be accomplished and credited in the KC-10 simulator or BOT for continuation training or evaluation. Credit may also be given for these events during rechecks or training assigned as a result of less than qualified activity. The individual ATD must complete the DET 1's AMCAOS SIMCERT program. The certification process will be in accordance with the training contract and pertinent portions of AFR 36-2211, Guide for Management of Air Force Training Systems. The accomplishment of training requirements in the KC-10 simulator or BOT is not intended to replace flying time allocated for crew training. It is intended to augment and enhance flying training in the aircraft. Because the training devices are not "Level C+" certified, only one of each event listed may be credited in any one simulator or BOT training period (Exception: R140 and P070--2 maximum). A simulator training period is defined as one of the 2 days required that constitutes the quarterly simulator refresher. A BOT period is defined as a 2.5 hour block of training utilizing the KC-10 BOT. Actual aircraft flight must be the primary means of accomplishing these listed training events and ensuring crew members attain and maintain aircraft qualification and MR status.

Table 4.1. Continuation Training Definitions.

1. Use the following definitions for the regular frequency of continuation training:
1.1. **B—*Biennial***. Accomplished every 2 calendar years. Initial accomplishment establishes a currency reference year.
1.2. **A—*Annual***. Accomplished once each calendar year. Initial accomplishment establishes a currency reference year.
1.3. **SA—*Semiannual.*** Accomplished once each 6-month training period.
1.4. **T—*Triennial***. Accomplished every 3 calendar years. Initial accomplishment establishes a currency reference year.
1.5. **Q—*Quarterly***. Accomplished twice each training period, once in the first 3 months and once in the second 3 months.
1.6. **M—*Monthly***. Accomplished each calendar month.
1.7. **A/R—*As Required***.
1.8. **C—*Cycle***. In conjunction with qualification evaluation (i.e., every 17 months).
1.9. ***Rolling***. Accomplished once per number of days specified (i.e., 120 = once every 120 calendar days)

Table 4.2. Ground Continuation Training Requirements.

Notes	Training Event	Code	P/CP 1	P/CP 2	P/CP 3	FE 1	FE 2	FE 3	BO 1	BO 2	BO 3
	Chem and Bio Warfare Defense	G010	B	B	B	B	B	B	B	B	B
	Tactics	G060	T	A	A	T	A	A	T	A	A
	Aircrew Intelligence Training	G070	A	A	A	A	A	A	A	A	A
	Communications Procedures	G080	A	A	A	A	A	A			
	Antihijacking	G090	B	B	B	B	B	B	B	B	B
6	Laws of Armed Conflict	G100	A	A	A	A	A	A	A	A	A
6	Force Protection	G110	A	A	A	A	A	A	A	A	A
6	ISOPREP Review	G120	180	180	180	180	180	180	180	180	180
	Instrument Refresher Course	G130	C	C	C						
	TERPS	G150				A	A	A	T	B	A
	Hazardous Cargo Training	G182	A	A	A				A	A	A
	Aircraft Servicing	G190	T	B	A	T	B	A	T	B	A
7	Aircraft Systems Refresher	G220				Q	Q	Q	A	A	A
3	Crew Resource Management (CRM)	G230	A	A	A	A	A	A	A	A	A
3	CRM Simulator	G240	A	A	A	A	A	A	A	A	A
4	Refresher Simulator	G250	Q	Q	Q	Q	Q	Q			
	Boom Operator Trainer	G255							Q	Q	Q
2	Tactics Simulator	G270	A	A	A	A	A	A			
5,10	Combat Arms Training (CAT)	G280	B	B	B	B	B	B	B	B	B
	Combat Survival Training	LS02	T	T	T	T	T	T	T	T	T
	Water Survival Training	LS03	T	T	T	T	T	T	T	T	T
	Aircrew Chemical Defense Training (ACDT)	LS04	B	B	B	B	B	B	B	B	B
1	Aircrew Ground Egress Training	LS08	T	T	B	T	T	B	T	T	B
1	Flight Physical	PP01	A	A	A	A	A	A	A	A	A
1,8,9	Physiological Refresher	PP11	T	T	T	T	T	T	T	T	T
6	Flight Records Review	RR01	A	A	A	A	A	A	A	A	A

NOTES:

1. Mandatory grounding item on expiration date; individual will not fly until required training is accomplished. Flight Physical expires after the last day of the birth month.
2. Accomplished concurrently with refresher simulator.
3. G230 and G240 are not required if Phase IA qualification or instructor upgrade training was accomplished during that year.
4. G250 is not required if Phase IA qualification or any upgrade training was accomplished during that quarter. Instrument Simulator (G260) requirement is integrated into KC-10 simulator training.
5. G280 expires 2 years after date accomplished.
6. These events do not effect mission ready status as defined by this regulation.
7. For boom operators, accomplished during G255.
8. Physiological refresher (PP11) expires 3 years after the last day of the month in which accomplished.
9. PP11 currency is 5 years for accomplishment after 1 Oct 98.
10. G280 currency for ARC personnel is Triennial and expires 3 years after date accomplished.

Table 4.3. Deleted.

Table 4.4. Ground Training Level 4 Continuation Training Requirements (NMR Senior Officers, BMC, and BAQ).

Notes	Event	Code	Frequency
	Instrument Refresher Course (IRC) (Pilots Only)	G130	C
	Crew Resource Management	G230	A
1	Aircraft Ground Egress Training	LS08	T
1	Flight Physical	PP01	A
1,2,3,4	Physiological Training	PP11	T
	Flight Records Review	RR01	A

NOTES:

1. Mandatory grounding item on expiration date; individual will not fly until required training is accomplished. Flight Physical expires after the last day of the birth month.
2. Physiological refresher expires 3 years after the last day of the month in which accomplished.
3. Rated officers with greater than 25 years time-in-service currency is 5 years.
4. PP11 currency is 5 years for accomplishment after 1 Oct 98.

Table 4.5. Flight Surgeon Ground Continuation Training Events.

Notes	Event	Code	Frequency
2	Chemical-biological defense training	G010	B
2	Anti-hijack	G090	B
2	Laws of armed conflict	G100	A
2	Force Protection	G110	A
	ISOPREP review	G120	180
	CRM (One time requirement in primary assigned aircraft)	G230	1 time
2	Combat survival	LS02	T
2	Water survival	LS03	T
2	Aircrew chemical defense training	LS04	B
1	Aircrew ground egress training	LS08	B
1	Flight physical	PP01	A
1,3	Physiological training	PP11	T
	Written Exam	Q001	C
	Flight records review	RR01	A

NOTES:

1. Mandatory grounding item. Flight Physical expires after last day of the birth month. Physiological refresher expires 3 years after the last day of the month in which accomplished.
2. Flight Surgeons without a mobility requirement do not need to accomplish this training
3. PP11 currency is 5 years for accomplishment after 1 Oct 98.

Table 4.6. Flying Continuation Training Semiannual Requirements (KC-10).

			Pilot						Copilot					Flight Engineer					Boom Operator					
Note	Event	Code	A	B	C	D	E	CUR	A	B	C	D	CUR	A	B	C	D	CUR	A	B	C	D	E	CUR
	Formation Departure and join-up	F 010	2	2	2	2		Q	2	2	2	2	Q											
	Formation	F 020	3	3	4	5		Q	3	3	4	5	Q											
	Large formation departure and join-up	F 030	1	1	1	1			1	1	1	1												
	Large formation	F 040	1	1	1	1			1	1	1	1												
	AR formation	F 060	2	2	2	2		Q	2	2	2	2	Q											
	Proficiency sortie	M 010	2	2	2	2			2	2	2	2		3	4	6	8	60	2	2	2	2	1	
	Unit-specific training sortie	M 020	6	6	6	7			6	6	6	7												
4	Overseas sortie	M 030	1	2	2	2			2	2	2	2												A
8	INS Operation	N 001						Q					Q					Q						
8	FMS Operation	N 002						M					M					60						
	Tanker rndz	N 010	4	5	6	7		Q	4	5	6	7	Q											
	On course and en route rndz	N 020	1	1	1	1			1	1	1	1												
	Point parallel rndz	N 030	2	2	2	2			2	2	2	2												
	Tanker anchor rndz and AR	N 040	1	1	1	1			1	1	1	1												
	Receiver rendezvous	N 130	4	4	4	4			4	4	4	4												
	Taxi exercise	P 005	2	2	2	2																		
	Takeoff—initial	P 010	2	4	6	7	2	Q	2	4	6	7	Q											
	Takeoff	P 020	12	18	24	30	6	M	12	18	24	30	M											
9	Spiral Up Departure	P 053	A	A	A	A																		
9	VFR Overhead	P 061	A	A	A	A																		
9	Random Steep Arrival	P 064	A	A	A	A																		
9	Curvilinear Approach	P 065	A	A	A	A																		
	Instrument approach	P 070	15	20	26	32	6	M	15	20	26	32	M											
	Instrument approach (auto and coupled)	P 080	2	2	2	2	2		2	2	2	2												
	Instrument approach (manual)	P 090	4	5	6	7			4	5	6	7												
	Precision Appr	P 100	6	6	8	10	2		6	6	8	10												
	Nonprecision approach	P 110	6	6	8	10			6	6	8	10												
	NDB approach	P 116	2	2	2	2			2	2	2	2												
	GPS Approach	P 117	2	2	2	2			2	2	2	2												
	Circling	P 130	2	2	2	2			2	2	2	2												
	Visual traffic pattern	P 140	2	2	2	2			2	2	2	2												
	Missed approach (auto)	P 150	2	3	3	3			2	3	3	3												
	Missed approach (manual)	P 160	2	3	3	3			2	3	3	3												
	Landing	P 190	12	18	24	30	6	M	12	18	24	30	M											
7	Landing, night	P 192	2	2	2	2	2	Q	2	2	2	2	Q											
6	Touch -and-go landing	P 200						30																
	HAVE QUICK radio procedures	P 260	2	2	2	2			2	2	2	2												
	SECURE RADIO operation	P 270	2	2	2	2			2	2	2	2												
	ACDTQT	P 280	A	A	A	A			A	A	A	A		A	A	A	A		A	A	A	A		
1	Cargo loading	P 300																					1	120
	Boom Operator APU Start	P 332																						A
2	Receiver AR	R 010	4	5	6	7		M						2	2	4	4							
2	Receiver AR (Night)	R 020	1	2	3	3																		
	Receiver AR (Heavy Weight)	R 030						A						1	1	2	2	SA						
	Rcvr AR bkwy and emerg separation	R 040	1	1	1	1			1	1	1	1												
	Receiver AR tanker autopilot off	R 050	2	2	2	2																		
	Tanker AR	R 060	4	5	6	7		Q	4	5	6	7	Q	2	2	4	4							
	Tanker AR bkwy procedures	R 070	2	2	2	2			2	2	2	2												
	Tanker AR autopilot off	R 080	1	1	1	1			1	1	1	1												
	Slow speed tanker AR	R 090	1	1	1	1			1	1	1	1												
3	Contacts	R 120																	15	18	24	30	8	45
	BOT Contacts	R 122																	10	15	20	25	10	
	Night contacts	R 130																	4	5	6	7	2	
	Tanker manual contact	R 140																	3	3	4	5	2	
	Fighter contact	R 150																	2	2	6	10	2	180
	Tanker heavyweight offload	R 170												1	1	2	2	SA						

NOTES:

1. P 300 currency is Semiannual for MAJCOM, NAF, AMOG, AMWC, and Det 1 AMCAOS staff.
2. Senior staff officers who qualified through a Senior Staff course are not permitted to refuel with passengers onboard the aircraft.
3. R 120 currency is Quarterly for personnel identified in note 1.
4. Two overseas sortie may be credited if total mission time exceeds 30 flight hours.
5. Currency events do not apply to FTL E crew members.
6. P200 currency for non-instructors who are touch-and-go certified is 30 days. There is no touch-and-go currency for IPs. Loss of currency does not result in loss of mission ready status.
7. MAJCOMS may substitute “180” for “Q” in the currency (CUR) column for P192 at their discretion. However, substitution of “SA” for “Q” is not authorized.
8. Applies only to dual qualified (INS/GPS) crewmembers. Loss of currency in one type of aircraft does not effect mission ready status in the other.
9. Only required for MR status when certified.

Table 4.7. ATD Creditable Training Events.

Event	Code	Simulator	BOT	CPT
Crew Resource Management	G240	X		
Two-Engine Ferry Continuation Training	M240	X		
INS Operation	N001	X		
FMS Operation	N002	X		
Tanker Rendezvous	N010	X		
Rendezvous and AR EMCON 1	N011	X	X	
Rendezvous and AR EMCON 2	N012	X	X	
Tanker Alternate Rendezvous	N015	X		
En Route Rendezvous	N020	X		
Point Parallel Rendezvous (Tanker)	N030	X		
Tanker Anchor Rendezvous and AR	N040	X		
Receiver Rendezvous	N130	X		
Airwork Exercise and Inflight Demonstrations	P006	X		
Takeoff, Initial	P010	X		
Instrument Departure	P015	X		
Takeoff	P020	X		
Takeoff and Departure	P025	X		
Spiral Up Departure	P051	X		
VFR Overhead	P061	X		
Random Steep Approach	P064	X		
Curvilinear Approach	P065	X		
Instrument Approach	P070	X		
Approach and Landing, Full Stop (FE Only)	P074	X		
Instrument Approach (Auto and Coupled)	P080	X		
Instrument Approach (Manual)	P090	X		
Precision Approach	P100	X		
ILS Approach	P101	X		
ILS Gyro Mode	P102	X		
Nonprecision Approach	P110	X		
VOR and TACAN Procedures	P111	X		
TACAN, VOR, or Localizer Approach	P112	X		
RMI-only Approach (ADF or VOR)	P114	X		
NDB Approach	P116	X		
GPS Approach	P117	X		
Missed Approach (Auto)	P150	X		
Missed Approach (Manual)	P160	X		
ACDTQT	P280	X	X	
Alert Start	P290	X	X	X
Instructor and Evaluator Duties and Techniques	P310	X	X	
Receiver AR (FE Only)	R010	X		
Receiver AR, Heavyweight (FE Only)	R030	X		
Receiver AR Breakaway or Emergency Separation	R040	X		
Tanker AR	R060	X		
Tanker AR Breakaway or Emergency Separation	R070	X	X	

Event	Code	Simulator	BOT	CPT
Slow Speed Tanker AR	R090	X		
BOT Contacts	R122		X	
Tanker Manual Contacts	R140		X	
Radio Silent Breakaway (BO Only)	R160		X	
Tanker Heavyweight Offload	R170	X		

4.5. Proration of Training. AFI 11-202, Volume 1 outlines proration of training requirements for aircrew members not available for flying duties.

4.5.1. Use the following formula to determine training requirements: number of months available times the event volume divided by the number of months in the training period. Round down to the nearest whole number but not less than 1 (e.g. 5.6 rounds to 5). Use **Table 4.8.** to determine the number of months available. ***EXCEPTION***: When an individual permanently changes station to a unit flying the same model aircraft and enters the same training level or lower, credit may be taken for training accomplished at the previous base. Prorate training requirements based on the time available (time at former base, plus time at new base, minus number of days not available) during the training period. Time available starts 7 days after sign-in for CONUS and 14 days after sign-in for OCONUS. Subtract previous accomplishments from the prorated total to determine remaining requirements.

4.5.2. Change of Training Level. Prorate requirements for individuals changing training levels. When an individual changes training levels, currencies are creditable, and new training level requirements are prorated. Units may elect to credit past accomplishments, but if they elect to do this they may not prorate new training requirements. Individuals moving from level A to level B must complete any new training currencies required in level B. Individuals moving from level C to level A or B must requalify in the events they are not qualified in and complete mission qualification requirements.

Table 4.8. Individual Availability.

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

4.6. Failure to Complete Training Requirements. Declare individuals NMR if they fail to complete ground or semiannual flying continuation training requirements. See paragraph **4.1.5.** for NMR crew member flying policy.

4.7. Requirements Before PCS or TDY by Rated Members on Active Flying Status. AFI 11-202, Volume 1 specifies requirements before PCS or TDY.

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

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

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

4.11. Aircrews Flying With Other Than US Air Force Units. AFI 11-202, Volume 1 addresses individuals flying in this status.

4.12. Flight Surgeon Requirements. Flight surgeons will comply with the flying requirements in AFI 11-202, Volume 1.

4.13. Predeparture Training. The airfield qualification program (AQP) video tapes should be viewed by aircrews prior to departure to an unfamiliar destination. Squadrons will develop their own predeparture procedures with associated checklists and training programs as required. Approving official signature on the TDY orders signifies all training was completed.

4.14. Aircrew Chemical Defense Equipment Training. Combat crew members and staff should be prepared to conduct combat operations in chemically contaminated environments. Training prescribed in this volume, AFI 11-301, *Life Support Program*, and AFI 32-4001, *Disaster Preparedness Planning and Operations*, should be considered the minimum required to train crew members in chemical defense actions and equipment.

4.15. Aircraft Flights for Contract Training Instructors:

4.15.1. General. Training contractor instructors are authorized to fly on KC-10 missions in order to ensure they receive and maintain familiarity with actual KC-10 flight operations. In accordance with AFJI 10-220 Volume 1, *Contractor's Flight and Ground Operations*, and the training contract, the contractor will develop applicable procedures to prepare their instructors for KC-10 flights. Flights by contractor personnel will be on an as available basis and accomplishment of training events will be on a non-interference basis; however, inflight training is authorized when directly supervised by an Air Force instructor of like specialty. Flights by contractor personnel will be coordinated and approved through the wing or group commander according to the appropriate MAJCOM instruction.

4.15.2. Training Event Accomplishment. Contract training IPs, IFEs, and IBOs are authorized to accomplish flight training events in paragraphs **4.15.2.1.**, **4.15.2.2.**, and **4.15.2.3.** Except for receiver air refueling and landing, each event will be practiced to proficiency in the simulator or BOT as applicable, within 45 days prior to flight activity.

4.15.2.1. Pilot:

4.15.2.1.1. P015 Instrument Departure

4.15.2.1.2. P080 Instrument Approach (Auto or Coupled)

4.15.2.1.3. P160 and P150 Missed Approach (Manual and Auto)

4.15.2.1.4. P010 Takeoff, Initial

4.15.2.1.5. P190 Landing or P200 Touch-and-Go

4.15.2.1.6. R010 Receiver AR

4.15.2.1.7. R060 Tanker AR

4.15.2.2. FE:

4.15.2.2.1. P074 Approach and Landing, Full Stop

4.15.2.2.2. P025 Takeoff and Departure

4.15.2.2.3. R010 Receiver AR

4.15.2.2.4. R060 Tanker AR

4.15.2.3. BO:

4.15.2.3.1. R120 Contact

4.15.2.3.2. R150 Fighter Contact

4.15.2.3.3. P300 Cargo Loading (For contractor instructors this event, will consist of observation only of each phase of loading.)

4.15.3. Although the events listed above are not currency items and are to be accomplished on a non-interference basis, every effort should be made to have them accomplished semiannually (***EXCEPTION***: P300 is annually). Contract training instructors require direct IP supervision (Exception: instructors who are current and qualified ARC members).

Chapter 5

UPGRADE TRAINING

5.1. General Requirements. This chapter prescribes upgrade training programs and requirements for KC-10 Instructors (all crew positions) and Aircraft Commanders (AC). Upgrade 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. This chapter also prescribes requirements for special qualifications and certifications that aircrew members earn after completion of formal training programs.

5.1.1. In Unit Upgrade. In unit upgrade is not applicable for KC-10 training.

5.1.2. Instructor Requirements. A qualified instructor of like specialty must supervise all flight training conducted under this chapter. During AC upgrade 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.

5.1.3. The training and upgrade folder of individuals undergoing training under this chapter must be reviewed by the instructor prior to each mission briefing for each sortie. Areas that were previously identified unsatisfactory or unsafe must be reviewed and corrective measures discussed in detail with the student. In coordination with the CCTS chief, the instructor will ensure that the training contractor is apprised of less than satisfactory activity of a student undergoing Phase IB training. If appropriate, additional academic and ATD training may be coordinated and scheduled with the training contractor.

5.1.4. Individuals formally entered into upgrade training will be removed from continuation training and will not be scheduled to perform alert duty; however, individuals remain an MR resource for real-world, non-exercise, non-operational readiness inspection (ORI) generation purposes. With OG/CC approval, unit commanders may remove individuals from training to meet real world requirements (units will forward memo authorizing removal to AMC/DOTK for info). In such cases, individuals revert to prior qualification as long as their last checkride has not expired. Currencies revert to previous accomplishments. Events performed to a P level in Phase I may be counted if required.

5.1.5. Unless specifically prohibited, upgrade training may be administered on operational missions provided the mission responsibility rests with the instructor and training will not interfere with mission accomplishment.

5.1.6. Upgrade training quotas are managed by AMC/DOTK and AFRC/DOT. No later than 45 days prior to class start, wing or group DOTs will forward names and SSNs to DOTK, (email KC10PFT@SCOTT.AF.MIL) AMC/DOTF or AFRC/DPTF (for entry into TMS) and unit MPFs. Quotas with no names assigned 45 days prior will be subject to change or cancellation. Further, after initial notification, the wing or group DOT will report any changes, such as adjustments to projected upgrade date, qualification or elimination from training.

5.1.7. Units will insure ground training currency events that result in grounding (see **Table 4.2.**) do not expire during student training. Currency for these events must cover the scheduled period of Phase 1 training prior to starting upgrade training.

5.2. Aircraft Commander. Unit commanders select AC upgrade candidates based on upgrade potential, retainability, and mission requirements. Flying time prerequisites required for upgrade are based on a copilot having gained knowledge and judgment required to effectively accomplish unit missions. Unit commanders must ensure continuation training programs emphasize these areas. Flying experience should include left-seat time prior to entering formal school upgrade training. AC candidates must have an in-depth knowledge of systems, procedures, and instructions before entering the formal upgrade program. Specific course prerequisites, entry qualifications, and other requirements are listed below and in **Table 5.1.**

5.2.1. Left Seat Initial Qual Pilots: LSIQPs will qualify as Aircraft Commander or Copilot in accordance with Chapter 2 of this regulation.

5.2.2. KC-10 PUP – Pilot Upgrade Program (PUP): Trains currently qualified KC-10 copilots who have been designated by the unit commander for upgrade to AC. Flying hour requirement is 1200 hours total and 350 hours in the KC-10.

5.2.2.1. Units will insure that PUPs have ready access to items required by A017, Instructions and Directive Orientation, prior to commencing PUP training.

5.2.2.2. With squadron commander approval, qualified copilots (within 90 days of entering Phase IA contractor training for PUP) may be allowed to occupy the left seat on training local missions provided they are under direct IP supervision and passengers are not carried. Within this time period, copilots occupying left seat will be considered in upgrade training and will log UP time on AFTO Form 781 for all time spent in the left seat.

5.2.2.3. Graduates of KC-10 PUP will be designated NMR aircraft commanders. NMR aircraft commanders will accomplish aircraft commander continuation training requirements (training level assigned by squadron commander). MR training will be in accordance with paragraph **3.2.3.**

5.2.2.4. All ACs will be dual seat qualified. Dual-seat qualified ACs must be capable of accomplishing AC duties from the left seat and copilot duties from the right (i.e., no requirement to be right-seat qualified in receiver AR).

5.2.2.4.1. Copilots upgrading to AC will retain their right-seat qualification following completion of upgrade training.

5.2.2.4.2. Evaluation will be accomplished according to AFI 11-202, Volume 2. At minimum, inflight evaluation of a right seat approach and landing is required. No additional ground testing is required.

5.3. Other Crew Positions. *Not used at this time.*

5.4. Aircrew Instructor Program. Courses are designed to teach selected crew members fundamentals and concepts of instructing. Instructor candidates will be selected based on experience, judgment, ability to instruct, flying skills, and technical knowledge.

5.4.1. For ground and flight training requirements, all initial instructor upgrade candidates will complete training on the principles of instruction at the appropriate formal school. KC-10 instructor upgrade training course is designed to provide highly qualified crew members training in the fundamentals and concepts of instruction in order to qualify them as flight instructors. The overall goal of the program is to provide an "instructor methodology" oriented curriculum balanced with advanced

instruction in aircraft performance, aerodynamics and aircraft characteristics, aircraft operations, and miscellaneous areas related to each crew position. Instructor techniques as well as duties and responsibilities are stressed while the instructor-candidate's job knowledge and flight skills are sharpened. Two instructors tracks are available. Instructor candidates who have previously attended a formal Air Force fixed-wing instructor course will attend Track II course. All other instructor candidates will attend the full Track I training course. Units may mix Track I and Track II candidates in the same class. Track II candidates will join the class at a later start date.

5.4.2. The KC-10-18 instructor training program provides a combined course for each crew position and will qualify a candidate of any specialty as a ground instructor, or an inflight instructor. Contractor training will be accomplished according to Air Force-approved course material and training device scenarios.

5.4.3. Contractor training will be completed prior to beginning the Air Force administered flight phase of instruction.

5.4.4. Pre-course materials will be provided by the contractor to the unit CCTS 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.

5.4.4.1. First day activities will include a pre-course test on the material covered in the workbook. Results of the test will be used to assist contractor instructors during assignment of demonstration-performance presentations.

5.4.5. Specific course prerequisites, entry qualifications, and other requirements are listed below and in **Table 5.1.** All instructor candidates will be trained to a level of proficiency that will ensure their ability to instruct and supervise student activity. Successful completion of ground and flight requirements, including completing an AFI 11-202, Volume 2, as supplemented, evaluation, qualifies the individual to be placed in instructor status.

5.4.5.1. KC-10 PIC – Pilot Instructor Course: Qualifies current and qualified KC-10 AC as a KC-10 IP. Flying hour requirement is 1500 hours total time and 300 hours in the KC-10 or 1800 hours total time and 150 hours in the KC-10 provided the individual has one year or more MWS instructor experience in a multiengine aircraft. Additional requirements are:

5.4.5.1.1. Individuals should have at least 6 months of experience as a KC-10 AC.

5.4.5.1.2. Commanders will ensure that all AC certifications outlined in paragraph **5.6.** are complete prior to selecting an individual for KC-10 PIC.

5.4.5.1.3. The wing or group commander may authorize pilots that demonstrate exceptional performance to be entered into the upgrade program with less than required KC-10 experience. Total flying experience requirements must still be met.

5.4.5.2. KC-10 FIC – Flight Engineer Instructor Course: Qualifies current and qualified KC-10 FE as a KC-10 IF. Flying hour requirement is 1500 hours total time and 300 hours in the KC-10 or 1800 hours total time and 150 hours in the KC-10 provided the individual has one year or more MWS instructor experience in a previous aircraft.

5.4.5.3. KC-10 BIC – Boom instructor Course: Qualifies current and qualified KC-10 MB as a KC-10 IB. Flying hour requirement is 1500 hours total time and 300 hours in the KC-10 or 1800

hours total time and 200 hours in the KC-10 provided the individual has had previous experience as a KC-135 Instructor Boom Operator.

5.5. Flight Examiner Certification. Use locally developed training program. Include a review of the following: review of applicable AFIs, examiner responsibilities, local procedures, "over the shoulder" simulator/BOT evaluation and "over the shoulder" flight evaluation.

5.6. Special Qualifications and Certifications: Certain KC-10 aircrew qualifications and certifications are trained after completion of formal qualification programs. Special qualifications and certifications may require an evaluation or only an AF Form 1381 entry. These programs are usually taught at the line level by Air Force instructors of like specialty.

5.6.1. Fighter Contact Certification.

5.6.1.1. Training Program: Q022, Q023, Day and Night Receptacle Equipped Fighter Certification, will be documented on AF Form 4025, Aircrew Summary/Close-Out Training Accomplishment Report and AF Form 1381, USAF Certification of Aircrew Training. Q022 and Q023 certification must be completed on separate sorties. Contacts can be completed in Phase IB or Phase II training.

5.6.2. Aircraft Commander Supervision of Copilot Touch-and-Go Landings:

5.6.2.1. Training Program. Following initial touch-and-go training, a single inflight evaluation will be accomplished to demonstrate the aircraft commander's ability to perform touch-and-go landings. This evaluation will normally be accomplished during initial qualification. After successful evaluation the aircraft commander must fly a minimum of 50 hours (not including other time), to be eligible to be certified by the squadron commander. Aircraft commander certification may be a phased item such as, Phase I aircraft commanders may accomplish touch-and-go landings while Phase II aircraft commanders may supervise copilot touch-and-go landings. For copilot touch-and-go landings, the aircraft commander and the copilot must each be certified, but the copilot does not require an evaluation. The touch-and-go certification training process is determined by the squadron commander. When the training, evaluation (for ACs), and certification process is complete, the squadron commander will document the certification in the Flight Evaluation Folder. Aircraft commanders will also be evaluated on touch-and-go procedures on recurring evaluations.

5.6.2.2. Touch-and-go landings may be performed by:

5.6.2.2.1. Current and qualified instructor pilots and any pilot under their direct supervision.

5.6.2.2.2. Current and qualified pilots who are certified by the squadron commander to accomplish touch-and-go landings.

5.6.2.2.3. Copilots who are designated by the squadron commander and supervised by a current and qualified pilot who is certified by the squadron commander to supervise copilot touch-and-go landings.

5.6.2.3. Non-current aircraft commanders must be under the direct supervision of an IP to regain currency in touch-and-go landings.

5.6.3. Aircraft Commander Supervision of Right Seat Air Refueling:

5.6.3.1. Training Program. The certification process is determined by the squadron commander. The aircraft commander and the right seat occupant must each be certified for right seat air refueling. The squadron commander will document the certification in the Flight Evaluation Folder.

5.6.3.2. Right seat air refueling may be performed by:

5.6.3.2.1. Current and qualified instructor pilots and any pilot under their direct supervision.

5.6.3.2.2. Copilots and dual seat qualified aircraft commanders who are designated by the squadron commander and supervised by a current and qualified pilot who is certified by the squadron commander to supervise right seat AR.

5.6.3.3. Current aircraft commanders may update AR currency from the right seat. Non-current aircraft commanders must be under the direct supervision of an IP to regain currency.

5.6.4. Formation Lead Certification. The squadron commander is responsible for developing a formation lead qualification training program. See **Attachment 2** (Q011) in this volume for requirements.

5.6.5. Large Formation Certification. The squadron commander is responsible for developing a large formation qualification training program for all pilots. FEs do not require training. See **Attachment 2** (F030) in this volume for requirements.

5.7. Differences Qualifications: The KC-10 is entering a period of numerous modifications to keep pace with changing world airspace requirements and aircraft reliability issues. These modifications are managed by the aircraft Systems Program Office (SPO) at Tinker AFB in conjunction with AMC XP and DO. DOT and DOV review each modification and set training and standards policy for each modification based on experience, FAA requirements, AFIs , AFRC, and unit input. Direction for each program will originally come from HQ AMC/DOT and DOV in message format. These training programs may involve the ATS contractor depending on timing and simulator modification status. Some modifications will be smaller in nature and be taught by other means such as CBT, briefings, and familiarization flights. The checkride or certification requirements for each modification will be determined by HQ AMC/DOV after thorough review of the training program and modification impacts to operations.

5.7.1. GPS/FMS Differences Training. See Paragraph **2.5.** and **Table 2.2.** of this volume for requirements.

5.7.2. TCAS/TAWS Differences Training. The KC-10 fleet will be undergoing congressionally mandated Navigation Safety enhancements during FY00 and FY01. This modification will install a Traffic Collision Avoidance System (TCAS) and a Terrain Awareness Warning System (TAWS). Certification is required for all pilots and flight engineers prior to flying a modified aircraft. Training will be in three parts, CBTs, Instructor Guided Review (IGR), and aircraft familiarization (flight not required). A checkride is not required. Units will use the AMC/DOTK approved "Nav-Safety Training Guide" which can be found on the DOTK www-site http://scoisntw02.scott.af.mil/hqamc/do/dot/dotk/index.htm. The training guide will have a SQ/CC signature block which will serve as the certification approval. Make an AF Form 1381 entry in the crewmember's FEF annotating Nav-Safety Certification. Use the training guide as documentation. Students in Phase 1 of initial or upgrade training may fly modified aircraft provided they have completed the CBT and familiarization training. Their CCTS closeout TAPR will reflect Nav-Safety certification as appropriate. For Senior Staff Officers, training is not required provided they receive a briefing and Tech Order review from the IP prior to flight

Table 5.1. Upgrade Training Requirements.

Note	Ground Training Events	Code	PUP	IP	IF	IB
	Instructor Academic Training	A010		1	1	1
	AFRC Associate Program Orientation Indoctrination	A016	1			
	Regulation, Directive Knowledge, and Use	A017	P	P	P	P
	AC Responsibilities	A018	1			
	Instructor Pre-Course Exercise (Workbook)	A044		1	1	1
	Aircraft Field Trip	G025		P	P	P
	IRC	G130	P	P		
7	Aircraft Servicing	G190	F		P	
11	Crew Resource Management	G231	B			
11	Instructor/Evaluator CRM	G232		B	B	B
4	Aircrew Ground Egress Training	LS08		P	P	P
	Open Book Examination	Q001	1	1	1	1
	Closed Book Examination	Q002	1	1	1	1
2,3	ATD Evaluation	Q005	1	1	1	1
Note	**Flight Training Events**	**Code**	**PUP**	**IP**	**IF**	**IB**
	Formation Departure and Join Up	F010	P	P		
7	Formation	F020	P	P		
	Large Formation Departure and Join Up	F030		B		
	AR Formation	F060	P	P		
	Deployment Mission Planning	M260		B	B	
	Airlift Deployment Operations	M261		B	B	
	Fighter Deployment Operations	M262		B	B	B
	Tanker Rendezvous	N010	*P	*P		
	Rendezvous and AR EMCON 1	N011	*P	B		B
	Rendezvous and AR EMCON 2	N012	*P	B		B
7	Rendezvous and AR EMCON 3	N013	B	B		B
7	Rendezvous and AR EMCON 4	N014	B	B		B
	Tanker Alternate Rendezvous	N015	*P	*P		
	Tanker Rendezvous Overrun Procedures	N016	*P	*P		
	En Route Rendezvous	N020	P	*P		
	Point Parallel Rendezvous (Tanker)	N030	*P	*P		
	Tanker Anchor Rendezvous and AR	N040	*P	*P		
	Receiver Rendezvous	N130	P	*P		
	Receiver Alternate Rendezvous	N135	P	*P		
	Receiver Rendezvous Overrun Procedures	N136	*P	*P		
	General Navigation	N160	*P	*P	B	
	Taxi Exercise	P005	P	P	B	B
	Airwork Exercise	P006	F	P	B	
	Takeoff, Initial	P010	*P	*P		
	Takeoff, Night	P011	*P	*P		
	Takeoff, Gyro Mode	P012	*P	*P		
	Instrument Departure	P015	*P	*P	B	
	Takeoff and Departure	P025			*P	
	Instrument Approach	P070	*P	*P	B	
	Holding Pattern	P071	*P	*P	B	
	Penetration (Published)	P072	*P	*P	B	
	En Route Descent and Penetration	P073	*P	*P	B	
	Approach and Landing, Full Stop	P074			*P	
	Instrument Approach (Auto and Coupled)	P080	*P	*P	B	
	Instrument Approach (Manual)	P090	*P	*P		
	Precision Approach	P100	*P	*P	B	

	ILS Approach	P101	*P	*P	B	
	ILS (Gyro Mode)	P102	*P	*P	B	
	Precision Approach Radar (PAR) (if available)	P103	P	P	B	
	Nonprecision Approach	P110	*P	*P	B	
	VOR and TACAN Procedures	P111	*P	*P	B	
5	TACAN, VOR, or Localizer Approach	P112	*P	*P	B	
	ASR Approach (if available)	P113	P	P	B	
	RMI-only Approach (ADF or VOR)	P114	*P	*P	B	
	Backcourse LOC (if available)	P115	*P	*P	B	
	Circling Approach	P130	P	P	B	
	Visual Traffic Pattern	P140	P	P		
	Missed Approach (Auto)	P150	*P	*P	B	
	Missed Approach (Manual)	P160	*P	*P	B	
	Landing (Total)	P190	P	P		
	Landing, Full Stop (Reverse Thrust)	P191	P	P		
	Landing, Night	P192	P	P		
	Landing, 50-Degree Flaps	P193	P	P		
	Touch-and-Go Landing	P200	P	P	B	
7	HAVE QUICK Radio Procedures	P260	P	P		
7	SECURE RADIO Operation	P270	P	P		
	Cargo Loading	P300				P
	Instructor and Evaluator Duties and Techniques	P310		P	P	P
	Supervision of Copilot Takeoffs, Landings, Touch-and-Gos, and AR	P320	P			
	Weight and Balance	P322			B	
6,7	Briefing and Control of Passengers	P340				P
	Main Cabin Door Procedures (Departure and Arrival)	P350				P
	Mission Planning and Briefing	P360	P	P	P	P
10	Preflight and Cockpit Preparation	P361	*P	*P	P	
	Pre-Takeoff	P362			P	
	Climb	P363			P	
	Cruise	P364			P	
7	Autopilot-Off Cruise	P365	1	P		
10	Checklist Procedures and Use	P366	*P	*P	*P	*P
	Crew Coordination	P367	P	P	P	P
	Postflight	P368			P	
	Performance Knowledge and Use	P370	*P	*P	P	
8	FMS Operation	P371	*P	*P	*P	
	Fuel Management and Conservation	P372	P	B	P	
	Equipment Operation	P373	*P	*P	P	
	Manual Throttle Operation	P374			*P	
	Manual Pressurization	P375			P	
8	INS Operation	P376	*P	*P	*P	
	Radar Operation	P377	P	P		
	Communications	P378	*P	*P	*P	
7	L-Band SATCOM	P379			P	
	Flight Evaluation	AA01	1	1	1	1
9	Receiver AR	R010	P	P	*P	
9	Receiver AR, Day	R012	P	P		
9	Receiver AR, Night	R020	P	P		
7	Receiver AR, Heavyweight	R030	P	B	B	
	Receiver AR Breakaway or Emergency Separation	R040	*P	*P		
	Receiver AR, Tanker Autopilot-Off	R050	P	P		
	Tanker AR	R060	*P	*P	*P	
	Tanker AR Breakaway or Emergency Separation	R070	*P	*P		*P

	Tanker AR, Autopilot-Off	R080	P	P		
	Slow Speed Tanker AR	R090	*P	*P	B	
	Day Contacts	R125				P
	Night Contacts	R130				P
	Tanker Manual Contacts	R140				*P
	Fighter Contacts	R150				P
7	Radio Silent Breakaway	R160	*P	B	B	B
	Radio Silent AR	R165				B
	Tanker Heavyweight Offload	R170			B	
	Radio Silent Visual Signals	R180	P	P		*P
	Drogue System Operation	R190	B	B	B	B
	WARP System Operation	R195	F	B	B	B
	AR Operations	R200			B	

NOTES:

1. Events preceded by asterisk (*) are trained to proficiency by the contractor in the appropriate ATD during Phase IA; however, proficiency in the ATD may in some cases not equate to full aircraft proficiency due to differences in the real-world flight environment. To ensure that transfer of training has occurred, the instructor should evaluate the student's proficiency and abilities in these events. At the discretion of the CCTS flight commander, proficiency need not be demonstrated in flight. If the student's performance is unsatisfactory, the training contractor will be notified either through the critique at flight three or an additional critique sheet after flight three.
2. Must be completed prior to starting Phase IB training.
3. Will include the requirements of an instrument flight evaluation for all pilots.
4. May be accomplished in conjunction with the aircraft field trip (G025).
5. Student must demonstrate proficiency in one of these three approaches. If others are performed, they must be performed to "P" levels. If not flown, approaches will be trained to "B" level.
6. Proficiency must be demonstrated prior to passenger handling evaluation.
7. May be accomplished during Phase II if not accomplished in Phase I (PUP training only).
8. Based on version of training (GPS or INS).
9. For PUP training only, student must be day receiver KC-135 proficient before proceeding to night AR. Student must demonstrate proficiency in KC-135 night AR. Proficiency in receiver refueling from a KC-10 tanker must also be demonstrated in either day or night conditions during Phase II training if not demonstrated in Phase IB.
10. Asterisk applies only to air refueling operator (ARO) station inspection, BOs preparation and post AR (boom and drogue), AR, emergency and abnormal procedures checklists.
11. Initial CRM (G231) and Instructor/Evaluator CRM (G232) is normally incorporated into Phase 1A contractor training.

Chapter 6

AIRCREW TRAINING SYSTEM (ATS)

6.1. Aircrew Training System (ATS). The ATS is civilian contractor-provided aircrew training. The ATS contractor provides academic and simulator training. The Air Force conducts all flight training and administers all evaluations. The ATS contract guarantees trained students meet government standards. This chapter applies to all aircrew members attending formal schools using ATS courseware or attending ATS refresher or phase training

6.2. Dedicated Training Time. Although KC-10 ATS training is collocated at KC-10 bases, it is imperative that students complete their training in a timely and uninterrupted manner. Students will enroll on a full-time basis. Relieve students of duties not directly related to training. ***EXCEPTION***: Supervisory personnel may continue their normal duties as time permits.

6.3. ATS Course Prerequisites. Each ATS 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 training guides.

6.4. Lesson Objectives. Contractor-developed lesson objectives are based on requirements in this instruction.

6.4.1. The training contractor will provide KC-10 aircrew members with ground-based training required to meet objectives for initial qualification, requalification, upgrade, senior staff, and ATD refreshers.

6.4.2. General. Recurring academic and ATD training is designed to ensure that prescribed subject material is presented in a realistic manner on a programmed basis. Instruction will be provided by instructors trained and employed by the training contractor and through course materials developed by the training contractor.

6.4.2.1. Objective. Ensure all aircrews maintain proficiency required to safely operate the aircraft and effectively perform the assigned mission. Crew members will utilize training devices to enhance training areas that ATDs are particularity well suited to accomplish (e.g., windshear and microburst training, low visibility approaches, systems knowledge, emergency and abnormal procedures, etc.).

6.5. Unsatisfactory Student Progress.

6.5.1. If a student's training progress is unsatisfactory, the contractor will notify the trainee's flying squadron commander, OGT, Det 1, and the on-site government representative. The flying unit squadron commander will convene a Progress Review Board IAW paragraph **1.13., 1.13.1.,** and **1.13.2.** of this instruction.

6.5.2. The contractor will provide written feedback to the unit commander or training office for students who display substandard performance.

6.6. Courseware Changes. Make changes through the aircrew critique program run by the contractor or by contacting Det 1 AMCAOS.

6.7. Aircrew Evaluation:

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

6.7.1.1. Initial Qualification Evaluations. Prior to commencing Phase IB flight training in the KC-10, each crewmember will be administered an evaluation (Q-005 or Q-006 as appropriate) in the applicable ATD. The evaluation will be used to evaluate the effectiveness of contractor training as well as the capabilities and proficiency of the student. 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 (***EXCEPTION***: BO evaluations will be conducted using contractor-developed / Air Force-approved scenarios). For unit-developed profiles, the evaluator must coordinate with the contractor a minimum one day prior to the evaluation and ensure the profile is compatible with ATD software. In the event of an unqualified rating (ATD or inflight), a Qualification Level 3 AF Form 8 is issued to document the unqualified performance, and the contractor is responsible for all retraining (ground-based) in those phases and subphases determined to be under the direct control of the contractor. A joint contractor and Air Force PRB (see paragraph **1.13.**) will review the aircrew member's performance and determine those phases of the ground-based courses that require modification or additional training to meet qualification levels. In such cases the final approval for PRB recommendations may be at the SQ/CC level.

6.7.1.2. Recurring Evaluations. Recurring ATD evaluations will be given using either contractor-developed refresher profiles or Air Force evaluator provided profiles. (***EXCEPTION***: BO evaluations will be conducted using contractor developed (Air Force approved) scenarios.) For unit-developed profiles, the evaluator must coordinate with the contractor a minimum one day prior to the evaluation and ensure it is compatible with ATD software. In the event of an evaluation failure (inflight 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. In all cases, the unit must coordinate with the training contractor for ATD or instructor availability. In some cases, it may be necessary to cancel or reschedule training to accomplish the desired corrective actions.

6.8. Responsibilities. See also scheduling responsibilities in paragraph **6.11.**

6.8.1. Training Contractor:

6.8.1.1. In the event that a crew member is not capable of achieving initial aircrew qualification, the contractor will coordinate with Det 1 AMCAOS and the applicable unit to determine a course of action.

6.8.1.2. Provide the units with the following training documentation:

Course completion diploma

Applicable ATD grade slips

Objective completion statements of computer-based courseware

Errata sheet documenting any training, to include reasons, that was not accomplished

6.8.1.3. Ensure the simulator, BOT, CPT, and CLT, along with other devices and training aids, enhance flight training programs. The instructor will conduct scheduled lessons and mission overviews prior to each ATD lesson. All necessary data to complete the ATD mission or assigned task will be provided during the premission period.

6.8.1.4. Maintain an aircraft systems refresher program (Air Force-approved) to supplement the simulator refresher training course specified by G220. Squadrons are encouraged to expand on this training. Det 1 AMCAOS will provide technical assistance to squadron DOTs or equivalent for courseware and lesson plan format development when possible.

Ensure their instructors:

6.8.1.4.1. Provide an environment for the simulator training that is as realistic as possible. Attention will be directed to crew coordination throughout all phases of flight. Crews will utilize equipment in the trainer the same as inflight. This includes communications, personal, and emergency equipment. Correct communications phraseology, techniques, checklist usage and regimentation, as well as instrument, flight, and AR procedures will be stressed at all times. Realistic aircraft systems and navigation aid (NAVAID) failures and malfunctions will be included in a logical and timely manner.

6.8.1.4.2. Conduct a briefing on aircraft systems and flight manual procedures as outlined in each quarterly simulator refresher handout.

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

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

6.8.1.4.5. Provide all students with a refresher training critique, which will be completed and processed according to guidance in **Chapter 1** of this volume.

6.8.2. HQ AMC/DOT:

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

6.8.2.2. Serve as OPR for this volume.

6.8.2.3. Ensure that contractor provided academic and ATD training complies with the policies, guidelines, and directives established by AMC headquarters and the current training contract.

6.8.2.4. Ensure that KC-10 contractor aircrew training performance objectives are achieved by monitoring overall contractor performance and submitting quality assurance program documentation when required.

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

6.8.2.6. Convene and chair KC-10 command curriculum review workshop to periodically review the entire program for currency, applicability, and effectiveness. Publish minutes of the meeting and assign taskings to appropriate agencies and monitor suspenses.

6.8.3. NAF/DOVT (AFRC—HQ AFRC/DOTA):

6.8.3.1. Monitor all actions associated with the KC-10 training program through close coordination with their associated KC-10 units, Det 1 AMCAOS, and HQ AMC/DOT (HQ AFRC/DOTA). Provide constructive reports and inputs concerning the training program as required.

6.8.3.2. Provide assistance and support to HQ AMC/DOT (program manager) and other appropriate agencies as required to support the overall KC-10 training program.

6.8.4. Det 1 AMCAOS:

6.8.4.1. Evaluate contractor instruction through the review of crew member critiques, evaluator feedback, CCTS feedback, and their own evaluations. Inform HQ AMC/DOTK if standards are compromised with recommendations for action/resolution by the KC-10 ATS Program Manager.

6.8.4.2. Review and evaluate the KC-10 Task Listing, Objectives Hierarchy, Media Selection and Syllabus, Lesson Specification Reports for contractor developed courses and training materials when available for accuracy, currency, and effectiveness.

6.8.4.3. Coordinate Air Force training requirements with the contractor to ensure effective utilization of all contractor-provided academic and ATD training.

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

6.8.4.5. Participate in development or oversee development of Air Force administered training (i.e., training courses, syllabi, etc.) as directed by HQ AMC. Act as the government’s contract training liaison at the contractor’s Main Support Center (MSC). Act as administrative contracting officer’s MSC project officer/quality assurance representatives (PO/QAR). Det 1 AMCAOS will ensure that the training contractor's recurring simulator or BOT instructor program meets the training contract requirements. This will primarily be accomplished during scheduled Det 1 AMCAOS quarterly simulator or BOT refresher training. In addition, Det 1 AMCAOS will review the contractor simulator certification program documentation along with unit inputs on training devices (i.e., critiques, etc.).

6.8.4.6. Conduct a semiannual SIMCERT on all ATDs. SIMCERT is run on a two-cycle system and includes inventory inspection and quality assurance issues inspection for the contract.

6.8.4.7. Review KC-10 training projects (contractor and Air Force) to ensure these projects are coordinated with any similar projects for other AMC weapon systems.

6.8.4.8. Review all refresher training courses and mission scenarios. Changes should be made as necessary when aircraft systems, operating procedures, or mission and command training requirements are modified or changed. Additionally, Det 1 AMCAOS will ensure the Aircrew Systems Refresher (G220) supports and complements each quarter of simulator refresher training.

6.8.4.9. Review and approve quarterly refresher course handouts. Contractor-developed, Air Force-approved, refresher course handout will contain the following:

6.8.4.9.1. Simulator Mission Scenario and Profile Overview.

6.8.4.9.2. Study Assignments. Course handout will identify suggested study assignments that will help the student prepare for each simulator period.

6.8.4.9.3. Simulator Mission Flight Plan. Refresher course handout will contain contractor-developed, Air Force-approved, mission flight plans and profiles that will be used for each quarterly refresher simulator period. Mission scenarios and profiles will be varied throughout the course of the year to keep crew members challenged and to ensure that all applicable training items listed under training event G250 are accomplished. Simulator refresher should be designed to complement systems refresher covered in G220.

6.8.4.9.4. Aircraft Performance. Each quarterly simulator refresher will address performance areas and computations specified in G250. Squadron DOTs or equivalent will supplement this training as required to meet the training needs of their personnel.

6.8.4.9.5. Systems Briefing. Each quarterly simulator systems refresher will address aircraft systems as outlined in the simulator refresher course handout.

6.8.5. Wing and Group:

6.8.5.1. Provide constructive reports and inputs concerning the KC-10 training program as specified in **Chapter 1** of this volume.

6.8.5.2. Provide assistance and support such as subject matter expertise (SME) when requested by HQ AMC/DOTK, Det 1 AMCAOS, or NAF/DOVT.

6.8.5.3. Review AFCAT 36-2223 and adhere to its guidance and procedures concerning requesting, allocating, suballocating and confirming attendance at scheduled formal training courses. Close coordination is imperative to ensure effective utilization of training slots and contractor resources.

6.8.5.4. Ensure that students have been issued all required publications and equipment required for the course.

6.8.5.5. Coordinate with Det 1 AMCAOS and the training contractor on proper course of action when any student fails to obtain aircrew qualification. (See paragraph **2.10.**)

6.8.5.6. Units must provide Det 1 AMCAOS personnel with quarterly simulator and BOT refresher periods. These refreshers are necessary for Det 1 AMCAOS to monitor contractor performance and ATD operations as described in paragraph 6.3.4. Det 1 AMCAOS will coordinate quarterly training activity with applicable units no later than the 15th day of the month preceding each calendar quarter.

6.8.5.7. Units must provide MAJCOM, NAF, TACC staff, AMWC/WC personnel with quarterly simulator or BOT refresher periods. These personnel should coordinate quarterly training activity with applicable units no later than the 15th day of the month preceding each calendar quarter. The reporting requirement in this paragraph is exempt from licensing in accordance with paragraph 2.11.12 of AFI 37-124.

6.8.6. Unit Standardization-Evaluation (Stan/Eval). Stan/eval personnel will perform duties specified in AFI 11-202, Volume 2, and the applicable crew position volumes.

6.8.7. Unit Responsibilities:

6.8.7.1. Ensure student interruptions are kept to the absolute minimum.

6.8.7.2. Ensure students have been issued all required manuals and equipment required for the course of instruction.

6.8.7.3. Evaluation requirements are coordinated to include updating stan/eval on any scheduling changes.

6.8.7.4. All pre-course requirements have been accomplished (i.e., instrument course, precourse study guides, etc.).

6.8.8. Each squadron DOT will:

6.8.8.1. Ensure student interruptions are kept to the absolute minimum. To this end, ensure students receive at least two pure refresher training periods per evaluation cycle (i.e., not supporting an evaluation).

6.8.8.2. Reproduce and distribute simulator refresher course handouts to pilot and FE crew members. Close coordination between active duty and AFRC units is required to minimize printing costs at base-level.

6.8.8.3. Brief students on uniform requirements, conduct, and requirement to maintain military standards.

6.8.8.4. Review simulator refresher training courseware and provide the contractor through Det 1 AMCAOS with recommendations for improving the refresher program (e.g., improving mission profiles and scenarios, updating course content to address known problem areas, etc.). Squadron DOTs or equivalent may request minor changes to refresher curriculum to customize the course to meet their unit's training needs.

6.8.8.5. Ensure students have been provided the applicable quarterly refresher handout in sufficient time to accomplish all required pre-study to prepare for the refresher.

6.8.8.6. Award an individual credit for ATD refresher training only when all scheduled premission, mission, and post-mission training and critique is accomplished.

6.9. Training Implementation:

6.9.1. 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. The FE IVD and CBT systems review will be accomplished during the quarter for those systems topics.

6.9.2. Mission Briefing. Prior to each ATD period, the instructor will brief crew members on mission objectives, specific training items to be accomplished, scheduled systems and performance training, crew resource 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 prepositioned data and a review of the overall mission and coordination of individual crew members responsibilities.

6.9.3. Debrief. Following each training device mission, all aspects of the mission will be discussed. Emphasis will be placed on all observed weak areas. The crew is required to enter maintenance discrepancies in the AFTO Form 781 and debrief the maintenance technician.

6.10. Documentation:

6.10.1. The contractor instructor will complete the required refresher grade sheet and forward it to the squadron training section for their review. The grade sheet may be used to validate training logged by the crew member on the MAR and AFTO Form 781. This information collection is exempt from Office of Management and Budget review in accordance with Public Law 96-511, *The Paperwork Reduction Act of 1980, as amended, Title 44, United States Code, Chapter 35*.

6.10.2. Requests or recommendations for additional training will be forwarded to the unit training manager for action. Additional training times must be coordinated with the unit training manager. Additional training will be accomplished as soon as possible, schedule permitting, but not later than the next scheduled refresher. Individuals will not be considered refresher complete until all additional training is completed.

6.10.3. Students may document the effectiveness of refresher training and instruction on the contractor developed critique in accordance with **Chapter 1**.

6.11. Scheduling:

6.11.1. HQ AMC/DOT Responsibilities:

6.11.1.1. Submit the following year's annual student training requirements to the contractor no later than 31 January of the current year.

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

6.11.1.3. Coordinate changes to the current PFT with OO-ALC/LIRA and the contractor and publish those changes.

6.11.2. Contractor Responsibilities: (These reports are exempt from Office of Management and Budget review in accordance with Public Law 96-511, *The Paperwork Reduction Act of 1980, as amended, Title 44, United States Code, Chapter 35*.)

6.11.2.1. Develop and submit the following year's PFT to HQ AMC/DOTK no later than 15 Apr of the current year.

6.11.2.2. Provide units with a quarterly pilot, FE, and BO refresher and additional training time schedule no later than 45 days prior to the start of the following quarter. The contractor will fill any vacancies in each quarter's draft simulator schedule with ATT periods. The goal is to ensure the squadrons have the opportunity to use 100% of available simulator time as long as the contracted ATT throughput is not exceeded. This means the contractor should not leave an available period unscheduled in the draft schedule due to lack of instructor availability. The training facility manager and all local KC-10 squadrons will establish mutually agreeable scheduling procedures.

6.11.3. NAF/DOVT (HQ AFRC/DOTA) Responsibilities:

6.11.3.1. No later than the last week in November of each year, provide HQ AMC/DOTK (HAF-XOO[AR]9722, Estimated KC-10 PFT Training Requirements) 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. This report is designated emergency status code C2, Continue reporting during emergency conditions. normal

precedence. Submit data requirements in this category as prescribed, or as soon as possible after submission of priority reports. Continue electronic reporting during MINIMIZE.

6.11.3.2. Coordinate with HQ AMC/DOTK when additional training slots are required. Additional requirements for training slots will be thoroughly justified.

6.11.4. Unit Responsibilities:

6.11.4.1. No later than the last week in October of each year, provide their respective NAF (HQ AFRC/DOTA for AFRC units) (RCS: HAF-XOO[AR]9722) with the estimated training requirements (initial qualification, requalification, upgrade, ATD refreshers, and additional simulator training time) of their units for the next fiscal year. This report is designated emergency status code C2—continue reporting during emergency conditions, normal precedence. Submit data requirements in this category as prescribed or as soon as possible after submission of priority reports. Continue electronic reporting during MINIMIZE.

6.11.4.2. When filling initial, requalification, PUP, and instructor allocations, ensure allocation RIPs are sent to the unit MPF with the minimum: course, class number, grade, name, and SSN of the individual scheduled for training. Crew members are to be reminded to receive a ADSC briefing by MPF prior to attending training. When training involves TDY, it is unit funded. In this case, units must provide fund cite to the applicable MPF. This reporting requirement is exempt from licensing according to of AFI 37-124, paragraph 2.11.12.

6.11.4.3. No later than 45 days prior to the class start date, units must inform HQ AMC/DOTF/DPPET (HQ AFRC/DPTF for AFRC units) and MPF or DPMPC (RCS: HAF-XOO(AR)9721, KC-10 PFT Class Attendance) with class number, name, and a SSN of personnel attending. This report is designated emergency status code C2—continue reporting during emergency conditions, normal precedence. Submit data requirements in this category as prescribed or as soon as possible after submission of priority reports. Continue electronic reporting during MINIMIZE.

6.11.4.3.1. DOTF will fax this information to contractor site managers at the beginning of every month. The contractor site manager will compare the DOTF list to the PFT to ensure every course on the DOTF list has the same number of students as the PFT. On the first day of class, the contractor will also ensure only the students designated on the DOTF list are trained. If no student or the wrong student attends the class, the contractor will coordinate with the unit and DOTF to correct the problem.

6.11.4.4. 30 days prior to the start of a new quarter, all units must notify HQ AMC/DOTF (RCS: HAF-XOO(Q)9723, Unused KC-10 PFT Allocations) of all allocations they do not plan to use during that quarter. This report is designated emergency status code C2—continue reporting during emergency conditions, normal precedence. Submit data requirements in this category as prescribed or as soon as possible after submission of priority reports. Continue electronic reporting during MINIMIZE.

6.11.4.5. Units desiring to use returned quotas will notify HQ AMC/DOTK and their command training office (HQ AMC/OTF/DPPET or HQ AFRC/DPTF). In the event that more than one unit desires to utilize the quota, final determination will be made by HQ AMC/DOTK and HQ AFRC/DOTA. Normally, AMC allocated slots remain AMC slots until relinquished by HQ AMC/DOTK/DPPET. Conversely, AFRC slots remain AFRC slots until relinquished by HQ AFRC/DOTA/DPTF. This reporting requirement is exempt from licensing according to AFI 37-124, paragraph 2.11.12.

6.11.4.6. Units desiring to trade quotas may do so without NAF or AMC headquarters' approval; however, they must inform all appropriate agencies and units as directed in paragraph 6.6.4.4 above.

6.11.4.7. Requests for additional training quotas will be submitted directly to HQ AMC/DOTK/DOTF with information copies to NAF/DOVT and HQ AFRC/DOTA (if applicable). HQ AMC/DOTK will take required action and inform applicable command formal training (DPPET-AMC and DPTF-AFRC) of any new authorized classes.

6.11.4.8. Provide HQ AMC/DPPET with either a form letter or an annotated class roster indicating the date and names of crew members completing their evaluation.

6.11.4.9. 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. As a minimum, in accordance with the contract, the contractor will provide 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 which is not needed. Units will then return the schedule with squadron assignment no later than 20 days prior to the start of the quarter. Each active duty and AFRC associate unit will coordinate closely when scheduling ATD training. Training slots that cannot be filled by one unit must be offered to the other unit in a timely manner. Training slots should not go unfilled unless absolutely unavoidable.

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

6.11.4.11. When practical, the contractor will schedule one ATT per week per active duty squadron. These ATTs will be scheduled so they may be used for crew member evaluations on the third consecutive day following a 2-day refresher. Intent is to move active duty simulator evaluations out of quarterly refresher periods and into ATT simulator periods.

6.11.4.12. When practical, squadrons will use these ATT periods to schedule active duty recurring simulator evaluations. If practical, try to schedule more than one evaluation during the same ATT, i.e., a pilot and flight engineer who are both in their eligibility window. Units should also strive to maintain crew integrity throughout the 3-day period to allow the crew the benefit of warming up together during their refresher profile.

6.11.5. Simulator Tours: Units will request tours at least 24 hours in advance through the KC-10 Project Officer/Quality Assurance Representative (PO/QAR). The PO/QAR will coordinate with the site contractor to ensure the contractor volunteers to provide the time at no additional cost to the government. The PO/QAR will also coordinate with the contractor and the OSS training branch to ensure the tour will not impact simulator maintenance or training. If approved, PO/QARs will notify the tour coordinator and emphasize times are approximate, because training will not be affected to meet a tour time. Tours which require whole periods or significant parts of simulator periods usually will not be supported, because these tours would require canceling a refresher training period. The fifteen minute break during each simulator is the most opportune time to accomplish an orientation without adversely affecting training.

Chapter 7
LOCAL PROCEDURES

7.1. Units define local aircrew training procedures in this chapter.

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

Abbreviations and Acronyms

A—Annual

AC—Aircraft commander

ACDE—Aircrew Chemical Defense Ensemble

ACDT—Aircrew chemical defense training

ACDTQT—Aircrew chemical defense task qualification training

AD—Airdrop

AECM—Aeromedical evacuation crew member

AECOT—Aeromedical evacuation contingency operations training

AEOO—Aeromedical evacuation operations officer

AET—Aeromedical evacuation technician

AFAIS—Air Force Advanced Instrument School

AFFSA—Air Force Flight Standards Agency

AFORMS—Air Force Operations Resource Management System

AFRC—Air Force Reserve Command

AFSIR—Air Force Spectrum Interference Resolution

AIFC—Advanced Instrument Flight Center

AMWC—Air Mobility Warfare Center

ANGRC—Air National Guard Readiness Center

APU—Auxiliary Power Unit

AQP—Airport qualification program

AR—Air refueling

ARC—Air Reserve component

ARDA—Airborne radar-directed approach

ARPTT—Air refueling part task trainer

ATD—Aircrew training device

ATMS—Automated Training and Maintenance Subsystem

ATOC—Air terminal operations center

ATS—Aircrew training system

ATSO—Ability To Survive and Operate

ATT—Additional training time

B—Brief

BAI—Back-up aircraft inventory

BAQ—Basic Aircraft Qualification

BBO—Basic Boom Operator

BBQ—Boom Operator Basic Initial Qualification

BFE—Basic Flight Engineer

BO—Boom operator

BOPS—Boom Operator Proficiency Sortie

BOT—Boom operator trainer

BMC—Basic Mission Capable

C—Cyclical (17-month qualification evaluation cycle)

CAT—Combat Arms Training

CBT—Computer-based training

CBWD—Chemical-Biological Warfare Defense

CCA—Contamination control area

CCP—Command and control procedures

CCRW—Command curriculum review workshop

CCT—Combat control team

CCTS—Combat crew training school

CFT—Cockpit Familiarization Trainer

CG—Center of gravity

CIS—Commonwealth of Independent States

CLRP—Cargo Loading Review Panel

CLT—Cargo Loading Trainer

CMI—Computer-managed instruction

CMRT—Continuing medical readiness training

COMSEC—Communications security

CONUS—Continental United States

COPAMC—Continuity of Operations, Air Mobility Command

CP—Copilot

CPT—Cockpit procedures trainer

CRAF—Civil Reserve Air Fleet

CRM—Crew resource management

CSD—Course summary document

CSO—Communication systems operator

CST—Combat survival training

CTA—Chemical threat area

CTEQ—Contractor training effectiveness questionnaire

CUR—Currency

CWD—Chemical warfare defense

CWDE—Chemical warfare defense equipment

D—Demonstrate

DNIA—Duties Not Including Alert

DNIF—Duty not including flying

DOC—Designed operational capability

DOT—Director of Training, Operations training office, officer, or equivalent

DQT—Difference qualification training

EAM—Emergency Action Message

EAR—Event Accomplishment Report

EB—Evaluator boom operator

EF—Evaluator flight engineer

EMCON—Emission control

EP—Evaluator pilot

ERCC—Engine-Running Crew Change

ERD—Evaluation reference date

ERO—Engines running onload or offload

ESD—Evaluator standards document

F—Familiarization

FB—Basic aircraft qualification boom operator

FBP—Engineer Basic Precourse

FC—Basic aircraft qualification copilot

FE—Flight engineer

FEF—Flight evaluation folder

FF—Basic aircraft qualification flight engineer

FH—Flight nurse

FLT CC—Flight Commander

FM—Flight mechanic

FMS—Flight Management System

FP—Basic aircraft qualification aircraft commander

FTC—Faculty Training Course

FTD—Field Training Detachment

FTL—Flying Training Level

GPS—Global Positioning System

GTAR—Ground Training Accomplishment Report

GTL—Ground Training Level

HOSM—Host operations systems management

HQ—HAVE QUICK or Headquarters

IADS—Integrated air defense systems

IBO—Instructor boom operator

IBT—Instructor-Based Training

ICAO—International Civil Aviation Organization

IFE—Instructor flight engineer

IFF SIF—Identification, Friend or Foe, Selected Identification Features

INS—Inertial Navigation System

IP—Instructor pilot

IPSS—Inflight passenger service specialist

IQT—Initial qualification training

IR—Infrared

IRC—Instrument Refresher Course

ISD—Instructional systems development

ISOPREP—Isolated personnel report

ISS—Instrument simulator sortie

ITUD—Integral Tanker Unit Deployment

L—Lead

L-BAND—Satellite communications frequency

LA—Low Altitude

LAAR—Low Altitude Air Refueling

LL—Low-level

LSE—Life support equipment

LSIQP— Left Seat Initial Qual Pilot

JA/ATT—Joint Airborne/Air Transportability Training

MAR—Mission Accomplishment Report

MB—Mission boom operator

MC—Mission copilot

MCF—First Pilot

MDS—Mission-design-series (i.e., KC-135R)

MF—Mission (first) flight engineer

MOB—Main operating base

MOST—Mission-oriented simulator training

MP—Mission pilot **(not applicable for copilots or first pilots)**

MQT—Mission Qualification Training

MR—Mission ready

MRP—Mission Review Panel

MSC—Medical Service Corps

MTL—Master task listing

MTOGW—Maximum takeoff gross weight

MWS—Major Weapons System

NAF—Numbered Air Force

NMR—Nonmission-ready

NVG—Night-vision goggles

OCONUS—Outside the 48 conterminous states of the United States

OFT—Operational flight trainer

OG—Operations group

OPORD—Operations order

OPR—Office of primary responsibility

OPT—Optional

P—Proficient

PAI—Primary aircraft inventory

PDO—Publications distribution office

PFT—Programmed flying training

PNAF—Primary nuclear airlift force

PPS—Pilot Proficiency Sortie

PR—Progress Review

PTT—Part task trainer

PUP—Pilot upgrade program

RAIM—Receiver Autonomous Integrity Monitoring

REL BO—Reduced Entry Level Boom Operator

RQT—Requalification training

SAAF—Small, austere airfield

SATCOM—Satellite communications

SG—Surgeon general

SIOP—Single-integrated operations plan

SKE—Station-keeping equipment

SPO — Systems Program Office

SOAR—Special Operations Air Refueling

SORTS—Status of Resources and Training System

SS—Senior staff

SIM—Simulator

STAN/EVAL—Standardization and evaluation

TACAN—Tactical air navigation

TACC—Tanker Airlift Control Center (AMC)

TALCE—Tanker airlift control element

TEQ—Training Effectiveness Questionnaire

TERPS—Terminal instrument procedures

TG—Training guide

TL—Training level

TMO—Tanker Manual Operation

TMS—Training management system

TOSM—Tenant Operations Systems Management

TRP—Training review panel

TTF—Tanker task force

TVT—Tactical visual flight rule (VFR) training

UB—Unqualified boom operator

UC—Unqualified copilot

UE—Unit-equipped

UF—Unqualified flight engineer

UMD—Unit manning document

UP—Unqualified aircraft commander

UST—Unit-specific training sortie

UTA—Unit training assembly

VNAV—Vertical Navigation

VOR—VHF omnidirectional range

WARP—Wing aerial refueling pods

WST—Weapon system trainer or water survival training

Terms

Academic training—A course of instruction that includes, but is not limited to, classroom instruction related to aircraft systems and operation, flight characteristics and techniques, performance, normal procedures, abnormal procedures, and emergency procedures. To adequately prepare students, academic courses should be completed prior to simulator or flight training.

Additional Training Time (ATT)—Additional simulator training time used for other than quarterly refresher requirements. ATT is defined as a 2-hour prebrief, a 4-hour simulator period, and a 1-hour debrief. ATTs can be used to conduct aircrew evaluations.

Aeromedical evacuation (AE)—The movement of patients under medical supervision to and between medical treatment facilities by air transportation.

Aeromedical evacuation crew member (AECM)—Qualified flight nurses, AE technicians, and unqualified student trainees performing AE duties under the direct supervision of a qualified instructor or flight examiner.

Aeromedical Evacuation Technician (AET)—An enlisted medical corps technician who has completed a recognized course of study in aerospace nursing and has current aeronautical orders in that Air Force specialty code (AFSC).

Aeromedical readiness missions (ARM)—Training missions using simulated patients to prepare AECMs for moving patients during wartime.

Aircraft commander (AC)—Pilot who has been certified to perform "pilot-in-command" duties.

Aircraft systems refresher—Aircraft and crew position unique systems refresher courses.

Airland aircrew—Basic or augmented crew qualified to conduct an airland mission.

Airland mission—A flight that involves the delivery of cargo or personnel between airfields.

AR mission—Flight that involves AR procedures as a tanker or receiver aircraft.

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

Aircrew Training Device (ATD)—Includes cockpit procedures trainer, boom operator part task trainer, weapons systems trainer, operational flight trainer, celestial training device, table top navigation and rendezvous trainer, cargo loading trainer, and other flight simulators.

Aircrew Training System (ATS)—Integrated qualification, upgrade, and continuation training program for crew members. Civilian contractors conduct most academic and ATD training: Air Force conducts all flight training.

Annual—Training required once every calendar year.

Basic aircraft qualification—Aircrew member who has successfully completed an inflight evaluation but is not mission qualified in his or her assigned aircraft.

Biennial—Training required once every two calendar years.

Boom operator—Crew member qualified in boom operator duties.

Brief Items (B)—Training events listed with a "B" are briefed items. Instructor-upgrade students will demonstrate a thorough knowledge of the appropriate event by providing an in-depth briefing to the instructor. All other students will thoroughly discuss the event with an instructor. Aircraft flight is not required.

Boom Operator Trainer (BOT)—Training device for training BOs in AR procedures and operations.

Cargo Loading Trainer (CLT)—Training device utilized for initial qualification and recurring training to attain and maintain proficiency in cargo load-planning operations.

Charge medical technician (CMT)—A qualified AET who supervises other AETs in aircrew positions on an AE mission.

Cockpit Procedures Trainer (CPT)—Training device used to train flight crew members on aircraft systems and procedures. It has no motion or visual system, but replicates the KC-10 cockpit environment.

Combat Crew Training School (CCTS)—Designated instructors tasked with Phase IB training located in the operations support squadron (OSS) for active duty and in the flying squadron for ARC.

Communication systems operator (CSO)—Crew member fully qualified to perform all communication systems operator functions.

Communications security (COMSEC) aid—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.

COMSEC responsible officer (CRO)—Individual appointed by a unit commander to oversee the unit's COMSEC program as outlined in AFI 33-211, *Communications Security (COMSEC) User Requirements*.

Computer-based training (CBT)—Ground training system that uses computer-generated graphics or text in conjunction with interactive programs as the primary medium of instruction.

Continuation training—Ground and flight training events necessary to maintain mission-ready or basic qualification status.

Copilot (CP)—Pilot qualified to perform duties in the right seat only.

Crew resource management (CRM) training—Training to improve the teamwork, dynamics, and effectiveness of aircrews.

Critical phases of flight—Take-off, AR, AD, approach, landing, or any flight maneuver stipulated in AFI 11-2KC-10, Volume 2 instructions specifically requiring direct (access to controls) instructor supervision for qualified or unqualified crew members.

Currency Event—Flying continuation training events with prescribed maximum interval between accomplishment shown in the "CUR" column.

Cycle—17-month cycle based on inflight evaluation completion date. Instrument refresher course (IRC), open and closed-book testing, and inflight evaluations are required 17 months after previous inflight evaluation. Testing and evaluation will be accomplished during the 6-month period that includes the qualification expiration month and the 5 preceding months. See AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program-Organization and Administration*, and appropriate MAJCOM supplement.

Difference qualification training (DQT)—Training necessary to qualify an individual in a different tactic or system within the same aircraft or an aircraft that is a different series other than the one in which currently qualified.

Direct instructor supervision—Instructor of like specialty with immediate access to controls (for pilots, instructor will occupy either aircraft commander or copilot seat).

Event or task—A training item to be accomplished. Several events or tasks constitute a training profile.

Familiarization (F)—Training events listed with an "F" are familiarization items. The operations group (OG) commander will determine whether those items are completed by briefing, demonstration, observation, or in-seat experience.

Flight examiner or evaluator—A crew member designated to administer evaluations IAW AFI 11-202, Volume 2.

Flight mechanic—Crew member qualified to perform flight mechanic duties.

Flight nurse (FN)—A nurse corps officer who has completed a recognized course of study in aerospace nursing and has current aeronautical orders in that AFSC.

Flight surgeon (FS)—Medical doctor qualified to perform flight surgeon duties and has current aeronautical orders in that AFSC.

Flight Training—Inflight instruction phase of training, not including flight simulator, CPT, CBT, BOT, and ground instruction.

Flying Training Level (FTL)—A standard assigned to crew members, by the squadron commander, directing flying continuation training requirements.

Ground Training Level (GTL)—A standard assigned to crew members, based upon experience and

squadron commander recommendation, directing ground continuation training requirements.

Inflight passenger service specialist—Crew member qualified in inflight passenger service specialist duties.

Initial Qualification Training (Phase IA)—Contractor-administered academic and ATD training necessary to initially qualify a crew member in their aircrew position.

Initial Qualification Training (Phase IB)—Air Force-administered training accomplished after contractor-administered Phase IA training. Training is necessary to initially qualify a crew member in their aircrew position and consists primarily of aircraft flight training. Completion of Phase IB training and evaluation constitutes initial qualification in the aircraft.

Instructor—Crew member trained, qualified, and certified by the squadron commander as an instructor IAW AFI 11-2 KC-10 Volume 2.

Instructor-candidate—An aircrew member undergoing upgrade training to instructor.

Instructor supervision—A qualified instructor of like specialty supervising a maneuver or training event. For critical phases of flight, the instructor must occupy one of the seats or stations, with immediate access to the controls.

Instrument simulator sortie—Simulator training focusing primarily on instrument procedures.

Local Qualified Flight Engineer—KC-10 flight engineer who has completed Phase IB training and evaluation, is fully qualified in basic weapon system (FF), and is qualified to fly unsupervised on local area flights.

Medical crew director (MCD)—A qualified flight nurse who supervises patients and manages AECMs during aeromedical evacuation.

Mission accomplishment report (MAR)—The AMC or MAJCOM-equivalent form for recording continuation training activity.

Mission clinical coordinator (MCC)—A qualified AECM, in addition to the basic crew and instructors or examiners.

Mission-oriented simulator training (MOST)—Part of a training program (e.g., crew resource management) that includes a practical application, full-mission scenario in the simulator or weapons system trainer.

Mission Qualification Training (Phase II)—Training necessary to transition a nonmission-ready (NMR) initial qualification, requalification, or pilot upgrade asset to mission-ready (MR) status as directed by **Chapter 3**.

Mission-ready (MR)—Aircrew member who is current, qualified, and certified in the unit's designated missions.

Mission Review Panel—Locally established panel to review previous day's flight and ground training accomplishment.

Monthly—Training required once every month.

Night—Defined as after official sunset until before official sunrise.

Nonmission-ready (NMR)—Individual who is non-current or unqualified in the aircraft, incomplete in

required continuation training, or not certified to perform the unit missions.

Overseas Sortie (OCONUS Sortie)—A sortie that includes a takeoff or landing outside the 48 conterminous states of the United States.

Proficiency (P)—Ability to accomplish an event to the designated training standard without the aid of an instructor. Proficiency events, not accomplished during contractor-administered ATD training, must be accomplished in-unit prior to declaring the individual MR. For copilots (CP), proficiency may involve actual aircraft control or CP duties only. For instructors, proficiency includes the ability to demonstrate, instruct, and supervise ground and inflight activity. See AFI 11-202, Volume 2.

Progress Review Board (PRB)—Review board which makes training recommendations for students in a formal training course who fail to progress in ground or flying training.

Quarterly—3-month periods defined as 1 January to 31 March, 1 April to 30 June, and 1 July to 30 September. 1 October to 31 December.

Refresher simulator—Simulator training emphasizing aircraft systems, normal and emergency procedures, and mission-specific training requirements. Refresher simulators may be integrated into a block of training termed "phase training" for some weapon systems.

Refresher Training—Contractor-conducted continuation training in KC-10 ATDs or using a variety of training devices (e.g., sound-on slide programs, mock ups, or computer-assisted instruction).

Requalification training—Training required to qualify aircrew members in an aircraft in which they have been previously qualified. See **Chapter 1** for requalification training requirements.

Semiannual—6-month training periods from 1 January to 30 June and 1 July to 31 December.

Simulator—Motion-based visual system-equipped mission trainer that includes stations for pilot, copilot, and FE and is capable of operating pilot stations independently from the FE or integrated to replicate coordinated crew mission activity. The KC-10 simulator is considered a weapons system trainer (WST).

Special mission—Any mission requiring special qualification (AD, SOLL II, boat drop, primary nuclear airlift force (PNAF), container delivery system (CDS), low-level AR, etc.).

Staff Instructor—May perform the wing or group mission if certified.

Supervised training status—Crew member will normally fly under instructor supervision as designated by the squadron commander or evaluator. This status is a result of loss of currency or qualification, or due to less-than-qualified evaluation.

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

Training level (TL)—A standard assigned to crew members, by the squadron commander, directing continuation training requirements.

Triennial—Training required once every three calendar years.

Upgrade Training—Training conducted to qualify an aircrew member in a higher crew position such as aircraft commander or flight instructor.

Weapon system trainer (WST)—Device that provides synthetic flight and tactics environment in which aircrews learn, develop, improve, and integrate skills associated with their crew position. Aircrew members may operate individually or as a team. The KC-10 simulator is considered a weapons system trainer (WST).

Attachment 2

TRAINING EVENT DESCRIPTION

A2.1. Event Descriptions. Listed by function.

A2.2. Academic "A" 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 syllabus.

A001-Initial Qualification Academic Course. Contractor course of instruction leading to initial qualification in the KC-10 that includes academic and ATD instruction. Flight training will not commence until all A001 requirements are satisfactorily completed. Contractor training course numbers are as follows:

Pilot	KC-10-1	FE	KC-10-2
Copilot	KC-10-1	BO	KC-10-3
Loadmaster Cross Trainee	KC-10-3A		

A002-Pilot Upgrade Qualification Course (PUP). Contractor course (KC-10-4) of instruction leading to pilot qualification in the KC-10 that includes academic and training device instruction.

A003-Senior Staff Officer Familiarization Course. Contractor course of instruction (KC-10-14) that provides training for authorized senior staff-level personnel requiring familiarization in KC-10 and associated training program. Does not involve any form of aircraft qualification.

A004-Senior Staff Officer Basic Qualification Course. A contractor course of instruction (KC-10-16) which provides Basic Qualification academic and simulator training for authorized senior staff-level personnel. Flight training will not commence until all A004 requirements are satisfactorily completed.

A010-Instructor Academic Training. Contractor course of instruction (KC-10-18) leading to instructor qualification in the KC-10 that includes academic and training device instruction. Formal flight training will not commence until all A010 requirements are satisfactorily completed.

A016-AFRC Associate Program Orientation Indoctrination. Course of instruction that includes concepts, policies, techniques, operating procedures, working relationships and other appropriate information to ensure that both active duty and AFRC associate personnel thoroughly understand the AFRC Associate Program. Instruction will be locally-developed by host wing and associate unit using applicable instructions and documents.

A017-Regulation, Directive Knowledge, and Use-Initial and Mission Qualification. Includes all publications, directives, and pamphlets students must utilize in operating KC-10 except for flight, AR, and performance manuals. At minimum, student will demonstrate knowledge of publications listed in **Table A2.1.** that apply to their specific crew position. Requirement consists of locating information requested by instructor and providing accurate interpretation. ACs, senior staff, and PUPs may accomplish event in conjunction with A018 (Aircraft Commander Responsibilities). Senior staff need only review publications pertinent to their level of qualification. Review of items 1, 4, 5, 6, 9, 13, 16, 17, and 19 may occur during mission qualification (Phase II) training.

Table A2.1. Associated Directives (Initial/Requalification).

	PUBLICATION	POSITION
1	AFMAN 11-217 Volume 1 (*Instrument Flight Procedures*)	P
2	AFI 11-401 (*Flight Management*)	ALL
3	AFI 11-218 (*Aircraft Operation and Movement on the Ground*)	ALL
4	AFI 13-207 (*Preventing and Resisting Aircraft Piracy (Hijacking)*)	ALL
5	AFI 11-202, Volume 3 (*General Flight Rules*)	ALL
6	AFI 11-207 (*Flight Delivery of Fighter Aircraft*)	ALL
7	AFJMAN 24-204 (*Preparing Hazardous Materials for Military Air Shipments*)	P,BO
8	*AFI 34-246 (*Lodging Program*)	ALL
9	AFI 11-202, Volume 1 (*Aircrew Training)*	ALL
10	AFI 11-2KC-10, Volume 1 (*KC-10 Aircrew Training*)	ALL
11	AFI 11-2KC-10, Volume 2 (*KC-10 Operations*)	ALL
12	AFI 11-208 (AMC *Operations*)	ALL
13	AFI 11-301 (*Life Support Program*)	ALL
14	AMCPAM 11-215 (*KC-10 Operational Techniques*)	ALL
15	AFI 11-202, Volume 2 (*Aircrew Standardization/Evaluation Program*)	ALL
16	AMCI 24-101 (*Military Airlift*) (applicable volumes)	P,BO
17	ATP 56 (NATO Air Refueling) (Usually carried in Mission Kits)	P
18	1C-10(K)A-1-2 (Minimum Equipment List)	ALL
19	Foreign Clearance Guide	ALL
20	Squadron Read File and FCIF	ALL
21	AFJI 11-204 (Operational Procedures for Aircraft Carrying Hazardous Materials)	ALL

NOTE:

Instructor Upgrade. This area includes all publications, directives, and pamphlets instructor-candidate must utilize and be knowledgeable of to perform KC-10 instructor duties. At minimum, instructor-candidate will demonstrate knowledge of the publications listed in **Table A2.2.** that apply to their specific crew position. This requirement consists of locating information requested by the instructor and providing an accurate interpretation.

Table A2.2. Associated Directives (Instructor Qualification).

	Publication	Position
1	AFCAT 36-2223, *USAF Formal Schools* (chapters 7 and 8)	ALL
2	AFI 11-401, *Flight Management*, as supplemented	ALL
3	AFI 11-218, *Aircraft Operation and Movement on the Ground*, as supplemented)	ALL
4	AFJMAN 11-226, *US Standard for Terminal Instrument Procedures* (forthcoming)	P,FE
5	AFI 11-2KC-10, Volume 1, *KC 10 Aircrew Training*	ALL
6	AFI 11-2KC-10, Volume 3 (*KC-10 Operations*)	ALL
7	AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program*	ALL
8	KC-10 Flight Training Syllabus	ALL
9	Contractor Course Book (applicable course numbers)	ALL

A018-Aircraft Commander Responsibilities. Pilots must receive a comprehensive briefing on their responsibilities to the mission and to the flight crew while performing AC duties. This briefing will include, but not be limited to C2, chain of command, FCG, ICAO procedures, passenger handling, cargo handling, customs, Uniform Code of Military Justice (UCMJ), billeting, security, aircraft performance and limitations, crew rest, crew duty day, volumes of AFI 11-2KC-10, Volume 3, and flight crew qualifications. Review of the KC-10 AC's duties and responsibilities (4400-1 through 4400-4) will be accomplished as part of this event. Senior staff need only receive a briefing on those areas pertinent to their level of qualification.

A022-Two-Engine Ferry 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 will consist of two instructor or evaluator pilots and one instructor or evaluator FE. See volumes of AFI 11-2KC-10 Vol 2 for crew selection criteria.

A023-Two-Engine Ferry Certification Training. At minimum, certification training will consist of the contractor course and reviewing the following items:

Command guidance on two-engine ferry operations (AFI 11-2KC-10, Volume 3)

Mission planning

Coordination of overflight

Aircraft preparation for ferry flight

TO KC-10(K)A-1-4

A034-Requalification Course. Contractor course of instruction for requalification of pilots, FEs, and BOs using an abbreviated version of the initial qualification course (A001). Flight training will not commence until all A034 requirements are satisfactorily completed. Administer when a specific course is not designated. Contractor training course numbers are as follows:

Pilot—KC-10-11

FE—KC-10-12

BO—KC-10-13

A044-Instructor Precourse Exercise (Workbook). Must be completed prior to beginning KC-10 instructor courses (A010). This is a vital portion of the training program and must be completed prior to the course in order to achieve desired results.

A2.3. FMS Qualification/Conversion (C) Training Events C001 - FMS Overview and Crew Coordination Challenges: During contractor CBT, student will be taught how the FMS 800 navigational system integrates the Global Positioning System (GPS) network with the KC-10 inertial navigation units, providing precise navigational information during aircraft operation. Flightline briefing must emphasize greater importance of crew coordination to prevent heads down in the cockpit and to prevent inadvertent changes to active flight plans. Student must understand how the system uses magnetic variation for route of flight and magnetic variation for ground based navaids. Student must understand the need to check accuracy of all points loaded from the data base.

C002-FMS Components, Controls, and Indicators: Student must demonstrate knowledge of the location, function, and operational characteristics of the components required for integration of the FMS, with embedded GPS, into the KC-10.

C004-Direct-To, Steering, and VNAV Operations: Details access to the flight plan page and explains monitoring and modification of the flight plan based on operational needs. Use of VNAV feature must be explained and how to add an intermediate waypoint along the route of flight.

C005-Integrated Navigation and Position Operations: Student must be able to address the difference between seven possible navigation solutions available to pilots of the KC-10 and explains navigational data available on these CDU pages. Student must also be able to access and interpret the operational information available on the CDU position pages. Student must understand the limitations of the estimated time of arrival/required time of arrival (ETA/RTA) function. Student must understand which times are rounded and that the FMS-800 does not take turns into account for time computations.

C006-Navigation and IFF Operations: Student must be proficient in operations of the IFF function key, the IFF control page, as well as, CDU pages for ADF and TACAN radios.

C007-Patterns and Intercept Operations: Student must demonstrate proficiency in establishing patterns (particularly the 'racetrack' pattern) and intercepts accessed through the Edit function key.

C009-FMS Initialization and Data Cartridge Loading: Student must demonstrate proficiency in the actions required to initialize the FMS and load a flight plan from the data cartridge.

C011-Flight Plan Management: Student must demonstrate proficiency in managing the flight plan, by inserting, modifying, and deleting waypoints. Student must also demonstrate knowledge of the characteristics of steering navigation sources, performing FMS track hold procedures, from-to navigation, and parallel course offsets.

C014-FMS Alternate Flight Planning: Student must be proficient in use of the alternate flight plan page sets.

C015-FMS Orbit Rendezvous Operations: Student must demonstrate proficiency in accessing the refuel pages, interpreting the information they present and setting up an orbit rendezvous. Students must understand navigation check points on air refueling tracks are not included in the database.

C016-FMS Holding Procedures: Student must demonstrate proficiency in holding pattern data entry to include how to execute and exit the holding pattern. Student must be aware of holding restrictions.

C021-Checklist Procedures: Student must demonstrate proper FMS checklist procedures.

C022-FMS Approach Procedures: Student must demonstrate proficiency in FMS approach operations to include transition from STAR to instrument approach, data entry for GPS/visual approaches, and go-around procedures.

C023-FMS Abnormal Procedures: Student must be knowledgeable in FMS abnormal conditions and corrective actions associated with the FMS to include RAIM alerts, as well as, CDU, BSIU, and data loader failure procedures.

C024-Status and Index Operations: Student must be able to access status monitoring of FMS components, the interfaced line replacement units (LRUs) and their continuous built-in test routines. Student must understand the necessity to check the status page with every check status annunciation to ascertain the cause of the annunciation and take appropriate action. Student must also be proficient in accessing the lower level pages available through the Index function key and their use.

C026-Waypoint and Markpoint Operations: Student must demonstrate proficiency in waypoint and markpoint page operations.

C027-SID/STAR Operations: Student must demonstrate proficiency in SID/STAR operations. Flightline instruction must emphasize proper resolution of discontinuity within flight plans.

C097-EHSI Components, Controls, and Indicators: Student must demonstrate knowledge of the location, function, and operational characteristics of the components of the KC-10 EHSI.

A2.4. Formation (F) Training Events. Copilots will log applicable events when performing copilot duties.

F010-Formation Departure and Join-Up. Accomplish according to procedures in AR technical orders (TO) and AFI 11-2KC-10, Volume 3. For pilot initial or requalification training, accomplish once in lead and once in trail. Proficiency is required in trail position (***EXCEPTION***: For IP requalification, proficiency in lead and trail is required.) Additionally, EMCON procedures and techniques will be incorporated as described in event F020. Not creditable to lead aircraft for continuation training. Includes a thorough pre-brief of procedures and techniques and a debrief with all aircrews involved. Copilots must demonstrate proficiency in copilot duties to receive credit.

F020-Formation. Follow procedures from AFTTP 3-1 and AFI 11-2KC-10, Volume 3. At least 30 minutes of formation should be planned and accomplished. Credit may be taken for all formation positions. Each crew commander must brief that portion of the mission their crew will lead. Accomplish using EMCON 2. Accomplish P260 and P270 during each formation flight. Essential radio communications required for safety of flight or failure to accomplish a P260 or P270 does not preclude crediting the event. Log only one F020 per sortie. Credit awarded under the following parameters:

Qualification training—For initial and requalification training in formation procedures and techniques, units must incorporate emission options described in TO 1-1C-1. At minimum, students must be proficient in emission option 2 procedures and techniques at the conclusion of Phase IB training. In this case, remaining applicable emission options will be covered during mission qualification (Phase II) training.

Mission Qualification and Continuation Training.

EMCON procedures and techniques will be stressed at all times. Standard option to be used is emission option 2; however, this does not preclude using radios when necessary for safety of flight or Federal Aviation Administration (FAA) identification purposes.

All aircrews participating in operational deployments and redeployments (off-station missions) may take credit regardless of formation position.

Approximately 30 minutes of formation should be planned and accomplished. Formation flown in conjunction with rendezvous or refueling is creditable toward minimum time required.

Each crew commander must brief the portion of the formation they are to lead. Log only one F020 per sortie.

Copilots must demonstrate proficiency in copilot duties to receive credit.

F030-Large Formation Departure and Join-Up. Three or more aircraft in cell formation (do not have to be the same type aircraft). Dual log with F010. Accomplish this activity according to Multicommand Pamphlet (MCP) 3-1 and volumes of AFI 11-2KC-10, Volume 3. Any position is creditable. Must be flown through completion of level-off or join-up, whichever occurs first. Emission options 2 and 3 procedures should be used the entire flight to include preflight, formation departure, and join-up. Does not preclude required air traffic control (ATC) reporting procedures on peacetime training missions or other emissions required for safety of flight. For training purposes, crews must be squadron commander certified by accomplishing this maneuver under supervision of an instructor of like specialty prior to unsupervised accomplishment. If instructor manning prevents placing IPs in all aircraft, units may place an IP in one aircraft of the formation. The optimum aircraft is the last aircraft, so that the IP may monitor all aircraft of the formation. Tanker task force (TTF) commanders may certify TDY crew members and will send certification paperwork to the crew member's home unit for filing in the member's training folders. Log with F010. Requires pre-coordination with all formation participants and associated AR support.

F040-Large Formation. In addition to F020 requirements, accomplish 30 minutes of formation with a flight of three or more aircraft (do not have to be the same type aircraft). Dual log with F020. Copilots must demonstrate proficiency in copilot duties to receive credit.

F060-AR Formation. 15 minutes of AR formation required (tanker or receiver). Consists of rendezvous and AR procedures prescribed by AR TOs, MCP 3-1, and volumes of AFI 11-2KC-10, Volume 3. Credit may be taken if receiver aborts or if conducting KC-10 on KC-10 formation and AR, provided all other tactics are accomplished. Not creditable in lead position.

A2.5. Ground Training Course Descriptions. This section describes specific ground training courses for KC-10 aircrews.

A2.5.1. Responsibilities:

A2.5.1.1. Designated lesson plans will be used when conducting academic training. In cases where one has not been developed or where the unit is responsible for curriculum development, units will develop a lesson plan to meet the purpose of the event or course description.

A2.5.1.2. An individual who instructs a class receives credit for that academic training requirement.

A2.5.1.3. All agencies desiring to establish aircrew training requirements must coordinate with HQ AMC/DOTK. A request to include ground training requirements in this volume must be accompanied by course description coordinated through the OPR.

A2.5.1.4. The wing commander will ensure the program is supported by all agencies. Coordinated efforts must be established between tenant and host units, if applicable, to provide required training.

A2.5.1.5. The unit operations group commander (OG/CC) is responsible for establishing and maintaining the academic training program for non-ATS courses. The OG/CC may delegate to unit OPRs, or a designated representative in the OG, the responsibility for complying with applicable requirements. The operations group or squadron OPR will:

A2.5.1.6. Appoint primary and alternate instructors for each non-ATS course to be taught.

A2.5.1.7. Publish a weekly academic training schedule for all personnel undergoing required training. (This requirement may be supplemented by AFRC.) Identify date, time, location, and instructor for each course scheduled. If designated instructor for any course is not available, another academic instructor may teach the course. The substitute instructor must be approved by the squadron commander or designated representative (non-ATS only) and must be given sufficient time to prepare. If either condition is not met, the course will be rescheduled.

A2.5.1.8. Utilize AMC coordinated products for all courses for which data exist. Local supplements to courseware are encouraged. Units will locally-reproduce MAJCOM provided courseware. (This requirement may be supplemented by AFRC.)

A2.5.1.9. When computer-based training (CBT) programs and interactive courseware (ICW) products are made available to the unit, develop a plan to manage and administer unit-level CBT and ICW.

A2.5.1.10. Develop a procedure to monitor the academic training program for course content, currency of materials, instructor availability, and status of training aids.

A2.5.1.11. Recommend to the commander changes to existing courses or additional academic training courses required, based on crew member feedback.

A2.5.1.12. Send recommendations for changes, additions, and deletions of courses to Det 1 AMCAOS.

A2.5.1.13. Complete and return training product evaluation questionnaires.

A2.5.2. Instructor Selection and Training: The operations group commander will select course instructors for non-ATS courses on the basis of professional qualifications and aptitude to teach. Instructors must complete either a formal school or a local training program before assuming instructor duties. Local academic instructor program will follow guidance in AFMAN 36-2236, *Guidebook for Air Force Instructors*.

NOTE:

An individual who instructs a class receives credit for that academic training requirement.

A2.5.3. Records and Documentation. Units should use AF Form 1522, **AFORMS Additional Training Accomplishment Input**, and AF Form 3526, **AFORMS OMR Event Accomplish Report**,

to record training accomplishments. Course instructors will deliver these forms to the appropriate scheduling and training documentation sections within one duty day after the class is taught. Combat arms training will be recorded on AF Form 522, **USAF Ground Weapons Training Data**.

A2.5.4. Ground Training Events:

G002-Aircraft Marshalling Training and Examination.

Purpose. To ensure crew members understand proper marshalling procedures preventing aircraft taxi incidents.

Description. Review of AFI 11-218, *Aircraft Operation and Movement on the Ground*, followed by a 20-question test.

OPR:

MAJCOM: HQ AMC/DOT

Unit: Squadron

G003-Flightline Security and Drivers Examination.

Purpose. To ensure crew members understand proper flightline driving and security procedures. Crew members who are required to drive on the flightline must receive this course.

Description. Training, examination, and certification to drive vehicles on the flightline according to local procedures. Also, includes a briefing by the flightline constable covering the physical layout of restricted areas and owner or user responsibility for security reporting and detection.

OPR:

MAJCOM: HQ AMC/DOA/SFO

Unit: Chief, Airfield Management and Flightline Constable

G010-Chemical-Biological Warfare Defense (CWD) Training.

Purpose. To successfully survive and fight in a chemical or biological environment while wearing ground crew individual protective equipment.

Description. Lesson summary—academic and hands-on training on the ground crew protective equipment components (AFI 32-4001). Units may combine this training with LS04 (Aircrew Chemical Defense Training), provided both aircrew and ground ensembles are fully covered. (AFI 32-4001, *Disaster Preparedness Planning and Operations*). Aircrew specific procedures will be covered by Aircrew Life Support personnel. Ground crew protective equipment will be instructed by qualified CE readiness personnel under the auspices of the CE Readiness Flight.

OPR:

MAJCOM: HQ AMC/CEO

Unit: Civil engineering readiness flight

Curriculum development:

HQ AFCESA/CEX

Local civil engineering readiness flight

Instructor: Qualified CE Readiness instructor

G020-Deleted

G025-Aircraft Field Trip:

Purpose. Student must demonstrate proficiency in:

Operating the cabin doors in the normal (electric) mode. Both interior and exterior door controls will be covered.

Manually opening the cabin doors to include free fall to the closed position. Both interior and exterior door controls will be covered.

Operating clearview windows.

Using the cockpit door smoke screen. All demonstrations and explanations must be according to flight manual procedures and data. Minor omissions, deviations, and errors which do not detract from the safe and effective use of the equipment are acceptable.

Demonstrate entry through forward avionics bay, nose gear wheel well, and center accessory compartment.

Access cargo, avionics, center accessory, body tank, and ARO station compartments, and identify and discuss the following components to include flight manual procedures for manual or alternate operation and visual inspections (i.e., gear position, etc.) (*not applicable for senior staff basic qualification*).

Boom and drogue valves (All)

UARRSI valve and T-handle (All)

UARRSI hydraulic system manual shutoff valve (All)

Forward body tank fill valves (All)

APU start circuit breakers (All)

A/R isolation valve manual override handle (All)

Aft tank by-pass valve handles (All)

Aircraft batteries (All)

All landing gear visual indications for gear "UP" and "DOWN"
(All)

Installation of ladder and discuss limitations (All)

Generator control panel (FE)

Manual ram air valve T-handle. (All)

Discuss and accomplish preflight procedures for pressurizing the boom flight controls (FE)

INS batteries (P,CP,FE)

Power-up the aircraft using the APU (All)

Exterior Preflight Inspection: (P,FE)

Using the exterior preflight inspection guide, accomplish a walk-around of the aircraft: (P,FE)

Discuss the inspection flow pattern.

Locate, identify, and discuss each inspection item and area. Discuss the following:

Inspection requirements

Limitations (pressures, leakage, wear, condition, etc.)

Normal appearance of components (i.e., latch, panel, cowlings, and doors when properly secured, strut extension, boom and drogue, radome, etc.)

Items to be inspected under inspection guide areas (such as nose gear wheel well, main gear wheel well, fuselage skin, etc.)

Discuss inspection of panel and engine cowling for security. Emphasis will be placed on techniques for checking cowling security to include differences between wing engine and tail engine cowling.

Discuss inspection techniques for items and areas that are not readily accessible or are hard to inspect, e.g., empennage area, number two engine cowling, radome, and boom.

Identify known problem areas:

Components that are known to leak or fail frequently

Inspection of aircraft with camouflage paint scheme

Discuss accomplishment and pacing of all pre-takeoff duties to ensure that sufficient time is available to properly accomplish the exterior inspection.

After training is completed on the exterior preflight inspection, provide additional training on aircraft components not specifically addressed in the exterior preflight guide. Open main gear doors, center gear doors and all cowlings on one of the wing engines. If possible, gain access to the tail section and discuss location and operation of components located in tail compartment.

If not previously accomplished, have the student view the KC-10 exterior walk-around video program after the field trip is completed. Use Det 1 AMCAOS lesson plan provided with the training program. This is required prior to initial flight check.

Description:

Lesson summary—Units use 436 STS courses 4404 and 4407 to supplement this training

Lesson length—4 hours:

Instruction—3 hours

Test—45 minutes

Critique—15 minutes

Method of instruction:

Instructor briefing and demonstration

Aircraft field trip

Method of evaluation—Demonstrated performance

OPR:

Det 1 AMCAOS

Unit—Squadron training section

Curriculum development—Det 1 AMCAOS

Training aids—As required

Instructor—Squadron

G060-Tactics.

Purpose. To provide the crew member with information necessary for the effective and successful completion of the unit's assigned employment mission.

Description. Course will include both specialized briefings and individual or crew study of all areas pertinent to completing the unit's assigned tasking. The lesson will be based on information in Multicommand Manual 3-1, volumes 1, and 2, AMCI 11-11, and any documents pertinent to completing the unit's assigned mission. Staff specialists will be available during periods of crew self-study to assist in strengthening weak areas and answering questions. Each unit's tactics training should be tailored to their mission; however, as a minimum, the course should cover the following:

Unit Mission Brief:	**Composite Force Structure**:
Mission Planning Technologies	Operations theory
Conventional employment	Threat warning and information dissemination
Tasking under regional OP plans	Close control versus broadcast (bullseye) control
Peacekeeping operations	High value airborne asset (HVAA) protection
Aircraft Systems:	Low level navigation and AR (if required)
Defensive Systems (DS)	Large formation operations
Have Quick	
KY-58	**Exercise and Conflict Lessons Learned**:
Unit specific equipment (NVG, etc.)	Unit lessons learned
ATO and SPINS:	MAJCOM and theater lessons learned
ATO breakout and use	**Threat System Description and Capabilities**:
SPIN usage	Surface-to-air and air-to-air systems (including Blue and Gray threat)
Use of code words	Threat employment doctrine
IFF procedures	
Aircraft Aerodynamics:	**SAFE PASSAGE**:
Energy Management	Friendly air defense systems
Fighter maneuvers against AMC aircraft	Authentication procedures
Tactical maneuvering against threat	Airspace control and air defense measures
Compare threat aircraft to AMC aircraft	Unit and theater specific SAFE PASSAGE procedures
Defensive Maneuvering:	**Tactical Deception**:
Long range and radar missile defense	Basic principle and concepts
Short range IR and guns	AMC aircraft participation and involvement

OPR:

MAJCOM: AMWC, HQ AMC/DOK

Unit: Tactics Branch

Training Aids: As required (video--SAFE PASSAGE Procedures for Aircrews)

Instructors: Tactics instructors and applicable wing staff agencies as required

Additional Information. Written criterion tests (as required) may be given individually or as a crew effort.

G070-Aircrew Intelligence.

Purpose. To enhance crew member understanding of the threat to unit assets and directly contribute to mission success and aircrew survival. Includes unit mission intelligence brief. Training will be conducted by intelligence personnel in coordination with tactics officers, staff judge advocate and security police, as appropriate, to meet aircrew training requirements. This is a 3-hour annual training requirement. Credit event on completion of all required training.

Description. See AFI 14-105, *Unit Intelligence Mission and Responsibilities*. (AFI 14-103, *Threat Recognition Training Program).*

OPR:

MAJCOM: HQ AMC/INF

Unit: Intelligence officer, JA, SF

Curriculum development: Units

Instructor: Qualified intelligence instructor

Additional Information. "Laws of armed conflict" (LOAC) and "force protection" may be taught in conjunction with Aircrew Intelligence Training (requires scheduling additional time beyond 3 hours scheduled for AIT). Coordinate with the staff judge advocate for LOAC training and the security police for PFT training. The unit intelligence officer may administer an aircrew intelligence related test to determine if additional training is required.

G080-Communications Procedures.

Purpose. To ensure crew members possess a thorough knowledge of all communication and COMSEC requirements.

Description. This course includes detailed discussion of equipment operation, procedures, and training requirements applicable to peacetime and wartime communications operations. Also, included is the proper use, protection, disposition, and accountability of COMSEC aids (See AFI 33-211, *Communications Security (COMSEC) User Requirements*. The following subjects will be covered:

Authentication procedures	SIOP (as applicable)
IFF SIF codes and equipment operation	AFSIR
HAVE QUICK	Flight Information Handbook
KY-58, SECURE VOICE Radio	AMCH 33-1, *Aircrew Communications Handbook*

Authentication procedures	SIOP (as applicable)
L-BAND SATCOM	COMSEC user requirements

Other communications information pertinent to unit

OPR:

MAJCOM: HQ AMC/DOT/DOA and CPSS/STSP

Unit:

Combat Crew Communications

COMSEC responsible officer (CRO)

Wing, operations group, and squadron training personnel if instructor led

ATS instructors (if included in ATS contract)

G090-Anti-Hijacking.

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

Description. This training will consist of a review of AFI 13-207 and a criterion test. (AFI 13-207, *Preventing and Resisting Aircraft Piracy [Hijacking]*).

OPR:

MAJCOM: HQ AMC/DOT

Unit: Squadron

Curriculum development: As required

Training aids: AFI 13-207 and unit developed criterion test

Instructor: Unit designated instructor

G100-Laws of Armed Conflict.

Purpose. To ensure crew members understand the LOAC.

Description. This training includes the principles and rules of the LOAC for aircrews to carry out their duties and responsibilities according to the Hague Convention IV 1907, 1949 Geneva Conventions, and status of forces agreements.

OPR:

MAJCOM: HQ AMC/JAG

Unit: JA

Training aids: As required

Instructor: JA or intelligence officer

Additional Information. Due to the different mission requirements, units have the option of putting increased emphasis on those areas in the course of particular interest to them. During wartime or contingency operations, the intelligence officer may brief LOAC with prior coordination between JA and intelligence. Intelligence is only responsible for presenting the JA's scripted briefing.

G110-Force Protection.

Purpose. To provide detailed guidance for reporting and preventing terrorist activity.

Description. Course covers information on threat conditions, security reporting, safe guarding aircraft and COMSEC equipment, and individual responsibilities and protective measures. (AFI 31-210, *The Air Force Antiterrorism (AT) Program*).

OPR:

MAJCOM: HQ AMC/SFP

Unit: Security police squadron

Curriculum development: Units

Instructor: Flightline Constable/Resource Protection NCO

G120-ISOPREP Review. Review of isolated personnel report (ISOPREP) card

Purpose. To generate (if necessary), review, and ensure accuracy of crew member isolated personnel reports.

Description. (AFDD 34, *Combat Search and Rescue Operations*).

OPR:

MAJCOM: HQ AMC/IN

Unit: Intelligence officer

G130-Instrument Refresher Course.

Purpose. To ensure pilots and navigators possess sufficient knowledge of all applicable directives, procedures, and techniques to assure safe and professional instrument flying.

Description. Guidance for development of unit IRC programs, including topics and subject outlines, course length, instructor prerequisites, and methods of instruction is contained in AFMAN 11-210, *Instrument Refresher Course Program.* IRC is accomplished according to AFI 11-202, Volume 2. However, the IRC test must be completed within the checkride eligibility period. (AFMAN 11-210, *Instrument Refresher Course (IRC) Program).*

The following topics will also be addressed where applicable to unit mission:

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

VFR flight rules, maneuvers, and procedures

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

Minimum Navigation Performance Specifications (MNPS) airspace and procedures

Reduced Vertical Separation Minimums (RVSM) airspace and procedures

Required Navigation Performance (RNP) airspace and procedures

OPR:

MAJCOM: HQ AMC/DOT

Unit: Operations group commander

Curriculum development: Air Force Flight Standards Agency (AFFSA),

Training Aids: USAF Core IRC available from HQ AFFSA at URL http://www.aon.af.mil/affsa/irc.htm fulfills part of AFMAN 11-210 IRC requirements. Additional resources include

the 436th Training Squadron (ACC) Dyess, AFB, Texas, Program 1115, Instrument Refresher Course (instructor guide, student guide, and 35mm slide presentation) (***NOTE***: Although this program is an ACC product, it can be modified, based on the unit mission, for application on all AMC weapon systems.)

G150-TERPS (Continuation Training). Contractor-developed course of instruction designed to review terminal instrument procedures (TERPS).

Purpose. Provide 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. Course includes:

A breakdown of standard DoD approach plates

Explanation of aircraft navigation equipment

Departure and terminal arrival procedures

Instrument approach types

The initial approach portion to the final approach portion

Final approach procedures

FEs: Training will be accomplished as follows:

Contractor-provided training. All active duty units *(optional for AFRC)* will use the contractor TERPS course (training and testing) to accomplish refresher training.

Unit Provided Training. For scheduling flexibility, AFRC units may accomplish this training in-unit providing the following conditions are met:

The contractor course must be used. AFRC units may obtain one copy of the contractor training materials from their contractor training facility. The unit will be responsible for obtaining course changes and keeping the courseware current.

Two criterion tests (each with a minimum of 30 questions) will be developed. These test will be based on the course objectives and must be approved by the unit IRC instructor.

BOs: Training will be accomplished as follows:

Contractor-provided training—All active duty units (*optional for AFRC*) will use contractor TERPS course (training and testing) to accomplish refresher training.

Unit-provided training—For scheduling flexibility, AFRC units may accomplish training in-unit provided contractor course is used. AFRC units may obtain copy of contractor training materials from their contractor training facility. Unit will be responsible for obtaining course changes and keeping courseware current.

NOTES:

1. G150 is minimum training required for TERPS refresher training. Units are encouraged to expand or supplement this training as appropriate.
2. Successful completion of IRC (G130) will satisfy this event.

Description:

Lesson summary—Course may be accomplished using one of the two options below. Units are encouraged to supplement these options.

Option 1—Utilizes contractor-developed course materials and computer-generated criterion test. Training is accomplished at the appropriate KC-10 training center. Training contractor will administer criterion test. If student passes test, contractor will provide unit with documentation showing successful course completion. If the criterion test is not mastered, student will return to unit for additional training. Unit will provide any required training and coordination with the training contractor for criterion testing.

Training will be pre-coordinated with the contractor training facility scheduler to ensure learning center space is available.

Contractor will provide printed course material to all units.

Option 2: Allow AFRC units to accomplish training in-unit utilizing contractor-developed course materials. The AFRC unit training section engineer must develop a bank of criterion test questions, which will be based on contractor-developed course objectives and must be approved by the base instrument school.

Contractor will provide printed course material through the local KC-10 training center to all units.

Contractor will provide copies of sound-on-slide programs (to include revisions and changes) to all AFRC units utilizing option 2.

Lesson length—2 hours 30 minutes:

Instruction—2 hours

Test—30 minutes

Critique—As required

Method of instruction:

Sound-on-slide programs

Contractor developed workbook and study guide

Method of evaluation—Criterion test.

OPR:

MAJCOM—HQ AMC/DOTK

Unit—Training section

Curriculum development and maintenance:

Course materials—Training contractor

Criterion tests for option 2—AFRC unit training section

Training aids—As required

G180-Cargo and Passenger Handling Procedures.

Purpose: To insure that KC-10 crew members are knowledgeable in cargo planning and loading procedures, and are able to properly handle passengers when they are transported on KC-10 aircraft.

Description:

Lesson summary—Course will teach proper and effective interaction with passengers. It will define acceptable and unacceptable behaviors, and will teach communication skills and problem solving when dealing with passengers.

Lesson length—4 hours.

Method of instruction—Guided discussion and exercises

Method of evaluation—Demonstrated Performance

OPR:

MAJCOM—Det 1, AMCAOS

Unit—Mission squadron

Curriculum development—Det 1 AMCAOS

Training Aids-AMR Customer Service Challenge Coursebooks and Videotapes

Instructor—Squadron.

G182-Hazardous Cargo (HZC) (Mission Qualification and Continuation):

Purpose. To ensure KC-10 pilots and boom operators are knowledgeable in performing loading and transporting tasks involving hazardous cargo.

Description. Complete ATS provided CBT lesson reviewing AMC aircrew hazardous materials handbook and AFI 11-204. (AFJMAN 24-204, *Preparing Hazardous Materials for Military Air Shipments;* AFI 11-204, *Operations 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
Certification	

Lesson length—Pilots: 3 hours. Boom Operators: 4 hours.

Instruction—Pilots: 2 hours. Boom Operators: 3 hours.

Test—1 hour.

Critique—As required.

Method of instruction—CBT.

Method of evaluation—CBT tests.

OPR:

MAJCOM—Det 1, AMCAOS

Unit—Mission squadron

Curriculum development—Det 1 AMCAOS

Instructor—Squadron, Self paced CBT.

G190-Aircraft Servicing (AS):

Purpose. Course provides crew members with training for turning their aircraft (recovery, servicing, and launch) when maintenance support is not available. See Det 1 AMCAOS training courseware for additional information.

Description:

Lesson Summary:

Initial training—Course consists of an aircraft field trip with hands-on training for ground handling and servicing of KC-10. FEs will be trained to proficiency on ground handling and servicing procedures and requirements when maintenance support is not available. Pilots, copilots, and BOs will be trained on their responsibilities for assisting FE during aircraft turn operations.

Lesson length—6 hours:

Instruction—4 hours

Test—1 hour 30 minutes

Critique—30 minutes

Refresher training—Pilots, copilots, FEs, and BOs may view Det 1 AMCAOS video training program (course number 4407) to receive refresher credit. Refresher training may also consist of an aircraft field trip with hands-on training for ground handling and servicing of KC-10.

Lesson length—1 hour and 30 minutes:

Instruction—1 hour

Test—15 minutes

Critique—15 minutes

Method of Instruction:

Initial training: Instructor briefing, demonstration and field trip.

Refresher training: Video

Method of Evaluation:

Initial training—Crew member performance

Refresher training—Criterion test

OPR:

MAJCOM—HQ AMC/DOTK

Unit—CCTS

Curriculum development— Det 1 AMCAOS

Training aids—Det 1 AMCAOS course 4407

Instructor—Squadron

G220-KC-10 Aircrew Systems Refresher. Additional systems training designed to supplement training provided during each quarterly simulator refresher. The 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 will be highlighted during each quarterly simulator refresher. Squadron training mangers will reproduce and

distribute the course book, track this training, and ensure FEs complete this training quarterly. Though not mandatory, squadrons are encouraged to expand on this training.

January-March training quarter (simulator missions 1 and 2 or 9 and 10): hydraulics, air conditioning and pressurization, and flight instruments

Apr-Jun training quarter (missions 3 and 4 or 11 and 12): flight controls, APU, and power plant

Jul-Sep training quarter (missions 5 and 6 or 13 and 14): electrics and landing gear and brakes

Oct-Dec training quarter (missions 7 and 8/15 and 16): pneumatics, fuel and anti-ice

G230-Crew Resource Management (CRM).

Purpose. Mission-specific continuation CRM training conducted according to AFI 11-290, *Cockpit/Crew Resource Management Program,* as supplemented. Course provides crew members with training on how to successfully use all crew members to resolve problem situations. Taught by contractor using building block approach. G230 training will consist of 2-hour briefing prior to CRM simulator (G240). G230 must be accomplished before G240, CRM Simulators. Although crew training is more effective with BO present, BO need not be present for crew to receive credit.

Description. Reinforces initial CRM training through an academic review of the AMC common core subjects (according AFI 11-290, as supplemented) with specific emphasis on an annual refresher topic.

OPR:

MAJCOM: HQ AMC/DOT

Unit: ATS contractor

G231-Initial CRM.

Purpose. Aircraft and crew-specific CRM training conducted according to AFR 11-290, as supplemented. Course provides new crew members with aircraft-specific training on how to successfully use all crew members to resolve problem situations. Taught by contractor immediately after simulator evaluation using building block approach. G231 training will consist of 2-day workshop. Part of Phase IA training for all initial qualification crew members regardless of previous weapons system experience. Initial CRM is not required for requalification or upgrade courses.

Description. Introduces AMC common core subjects (according to AFI 11-290, as supplemented. If initial CRM is not accomplished at the formal school, it must be accomplished within 1 year of reporting to home station. Dual log with G230 for AFORMS tracking purposes.

OPR:

MAJCOM: HQ AMC/DOT

Unit: ATS contractor

G232-Instructor/Evaluator CRM. Taught by contractor during instructor upgrade. Training emphasizes the instructor's role by reinforcing CRM concepts during prebriefs, simulator missions, and post mission critiques.

G240-CRM Simulator.

Purpose. To provide hands-on application of classroom-presented CRM refresher concepts through CRM simulator training addressing human factors issues in a realistic mission scenario. Simulator training with a full crew complement, addressing human factors issues in a realistic mission scenario. Although crew training is more effective with BO present, BO need not be present for crew to receive credit.

Description. CRM mission-oriented simulator training (MOST) conducted according to AFI 11-290, as supplemented.

OPR:

MAJCOM: HQ AMC/DOT

Unit: ATS contractor

G250-Refresher Simulator. Specific training accomplished must be annotated on a MAR. (See **Chapter 4** for training events that can be accomplished or logged in ATD.) Contractor-administered simulator refresher courses (KC-10-5/6) of instruction for pilots, copilots, and FEs. Consists of two simulator periods per quarter emphasizing crew coordination, normal, abnormal, emergency procedures, aircraft performance, as well as aircraft systems. One simulator period may be utilized for recurring simulator evaluation. Evaluation will consist of complete instrument check (pilot or copilot) and applicable portions of a qualification check. Recurring simulator evaluations should be administered to two pilots and one FE as much as possible. This will minimize number of evaluation periods required as well as minimize negative impacts on refresher training. At minimum, the following training areas will be accomplished during each quarterly refresher.

Pilots and copilots:

Loss of all electrical power

Engine fire or severe damage

Hydraulic system abnormal and emergency

Second engine fails on final approach (P185) (CP: CP duties only required)

Single-engine operation (P184) (CP: CP duties only required)

Engines-out approach and landing (P180) (CP: CP duties only required)

Engines-out approach and missed approach (P170). (CP: CP duties only required)

Simulated engine failure, takeoff continued after V1 (P040) or aborted takeoff (P183).

Performance problems

Contractor brief satisfies G220 requirements

FEs, at minimum, will accomplish the areas listed above as well as the following:

Tanker (R170) and receiver (R030) heavyweight AR real time training using contractor-developed profile

Aircraft Performance. One or more of the following performance areas will be selected by Det 1 AMCAOS for use during quarterly refresher training:

Compute AR performance data for slow speed and heavyweight missions.

Obstacle clearance where runway cut-back is required in order to make the takeoff with a given gross weight (GW).

CFCC

VMCG limited GW.

Reduced thrust takeoff with V1 equal to VMCG and assumed temperature must be checked and reduced.

Takeoff GW exceeds tire speed limiting weight.

V1 limited by VMBE.

Windshear takeoff.

Compute landing data (to include speeds and landing distance) for a landing at or near the 436,000 GW with a wet runway and abnormal flap or slat configuration.

Compute the landing distance using performance manual charts for dual hydraulic system failure with dry and wet runway.

Compute reference ground speed for landing with a:

Headwind

Tailwind

Compute time and fuel to alternate using fighter drag abort scenario.

Compute time and fuel to alternate after completing a local flying mission and weather is below minimums at home base.

Compute brake cooling time following an aborted takeoff.

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).

Compute brake energy.

Compute driftdown performance data.

Compute endurance speed for a given endurance scenario.

Compute takeoff data whereby multiple obstacles are present along the flight path.

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.

Compute takeoff data with an RSC.

G255-Refresher BOT. Contractor-administered refresher course (KC-10-7) utilizing BOT and CLT. Course is administered quarterly and consists of three 2.5-hour training periods. (At least 2 periods must be accomplished to receive credit.)

G256-Additional Training Time (ATT). Additional simulator 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 must be annotated on an MAR.

G260-Instrument Simulator. Review and practice of instrument procedures is integrated into every KC-10 refresher simulator (G250).

G270-Tactics Simulator. To practice tactical maneuvers applicable to the KC-10 in the simulator.

Description: Units may tailor the simulator to their specific taskings through coordination with DET 1, AMCAOS. The tactics program manager is responsible for forwarding simulator

profiles to DET 1 prior to incorporating profile into the simulator period. Tactics training should be incorporated into refresher training profiles to ensure all crew members accomplish the training. However, this does not preclude using Additional Training Time (ATT) simulators for tactics training.

OPR:

MAJCOM—HQ AMC/DOKT

Unit—Tactics Program Manager

Instructor—ATS contractor

G280-Combat Arms Training.

Purpose. To train aircrew members to meet Air Force arming requirements.

Description. Academics on markmanship fundamentals and operator skills to include firing and qualifying in accordance with AFM 36-2227, Volume 2, *Combat Arms Training and Maintenance Programs.*

OPR:

MAJCOM: HQ AMC/SFPT

Unit: Security Forces Squadron (SFS)

Instructor: Qualified SFS combat arms instructor

Additional Information. Course will meet requirements of AFM 36-2227 and include use of force training from AFI 31-207, *Arming and Use of Force by Air Force Personnel*.

G290-AMC Airport Qualification Program. (AQP)

Purpose. Aircrews are required, for global operations, to familiarize themselves with worldwide destination airfields. Although this familiarization should be accomplished prior to every mission, the squadron commander will determine the need and associated currency requirement for logging G290 prior to departure.

Description. Familiarization includes applicable review of: FLIP documents, AMC Summary of Airfield Restrictions, AQP video tapes (24 audiovisual documentaries of 168 select worldwide airports), DoD Foreign Clearance Guide, and notices to airmen. A review of the Theater Indoctrination Program is also included when applicable for deployment or as directed by unit commanders. The commander, operations officer, or their designee's signature on the flight orders signifies the aircrew has accomplished all required pre-departure training.

OPR:

MAJCOM: HQ AMC/DOT

Unit: Squadron or airfield management (reference material and video tapes)

Instructor: Self paced

A2.6. Life Support (LS) Training Events.

LS01—Local Area Survival

Purpose. One time event conducted prior to first flight at the home station to familiarize aircrew members with local equipment and rescue procedures.

Description. Unit specific equipment and local rescue procedures may be peculiar to home station or local training area. See AFI 11-301, Aircrew Life Support (ALS) Program, and MAJCOM supplement.

OPR:

MAJCOM: HQ AMC/DOTL

Unit: Aircrew Life Support

Additional Information. Each unit is responsible for tailoring training to meet unit needs. For KC-10, accomplished during LS06 as part of initial training.

LS02—Combat Survival Training (CST):

Purpose. To provide aircrews with the information necessary to survive in any peacetime or wartime environment.

Description. This course includes in-depth instruction in parachuting, physiological and psychological factors, personal protection, land navigation, combat recovery and signaling, survival medical training, Code of Conduct, and SAR communications. See AFI 11-301 for course description. Course satisfies self-aid and buddy-care requirements of AFI 36-2238, *Self-Aid and Buddy Care Training* (AFPD 11-3, AFI 11-301, AMCI 11-301).

OPR:

MAJCOM: HQ AMC/DOTL

Unit: Aircrew Life Support

Additional Information. Each unit is responsible for tailoring training to meet unit needs, IAW AFI 36-2209, Survival and Code of Conduct Training. CST "hands on" requirement may be met by classroom or field training at unit commander discretion based on unit mission. Units may schedule crew members to complete both CST and WST events in a single training day.

LS03—Water Survival Training:

Purpose. To provide the opportunity to demonstrate their ability to use weapon system specific flotation devices and LSE components available during an overwater emergency.

Description. Crew members will demonstrate the ability to employ water survival techniques and rescue procedures. Survivor needs using water related equipment, accessories, and procedures will be stressed. An emphasis will be placed on the appropriate use of the passenger support equipment and the proper care of passengers during a survival situation. See AFI 11-301, Aircrew Life Support (ALS) Program, and MAJCOM supplement.

OPR:

MAJCOM: HQ AMC/DOTL

Unit: Aircrew Life Support

Additional Information. Each unit is responsible for tailoring training to meet unit needs. WST "hands on" requirement may be met by classroom or pool training at unit commander discretion based on unit mission. Units may schedule crew members to complete both WST and CST in a single training day.

LS04-AircrewChemical Defense Training (ACDT)

Purpose. Provide training to all crew members stationed in or subject to deployment or operations through a chemical threat area (CTA).

Description. See AFI 11-301 for complete course description. This course includes in-depth instruction in donning the aircrew defense ensemble, post bailout procedures, and decontamination and doffing. Donning, decontamination, and doffing equipment during exercises fulfills training requirement. Units may combine this training with G010 (Chemical-Biological Warfare Training), provided both aircrew and ground ensembles are fully covered.(AFPD 11-3, AFI 11-301, AFI 11-301).

OPR:

MAJCOM: HQ AMC/DOT

Unit: Aircrew Life Support

LS05—Egress with ACDE:

Purpose. Provide training required to safely egress assigned aircraft while wearing ACDE.

Description. One time event. Aircrew member must demonstrate the ability to safely egress while wearing ACDE. Training must be accomplished at least once in each assigned MWS aircraft. See AFI 11-301 for course description.

OPR:

MAJCOM: HQ AMC/DOTL

Unit: Squadron

Additional Information. Each unit is responsible for tailoring training to meet unit needs. For KC-10, will be accomplished as part of initial P280 training in Phase II. May be accomplished in simulator or aircraft.

LS06-Life Support Equipment (LSE).

Purpose. Provides training on the use of available life support equipment and the principles, procedures, and techniques needed to permit survival in varying climatic conditions and environmental regions based on the unit's mission (AFPD 11-3, AFI 11-301, AMCI 11-301). LSE for continuation training will be taught as part of LS02, LS03, and LS08.

OPR:

MAJCOM: HQ AMC/DOTL

Unit: Aircrew Life Support

Additional Information. Each unit is responsible for tailoring training to meet unit needs. For KC-10, incorporates Local Area Survival (LS01) training to familiarize aircrew members with local equipment and rescue procedures. Dual Log with LS01 for initial training.

LS08 - Aircrew Ground Egress Training (ET):

Purpose. To ensure all crew members can explain ground and inflight egress procedures, are able to identify and document equipment discrepancies, can perform required egress procedures, and are able to identify, locate and utilize appropriate emergency equipment. Also, to ensure all crew members understand the operation of fire extinguishers located in the aircraft and fire bottles positioned outside the aircraft.

Description. See AFI 11-301. (AFPD 11-3, Life Support, AFI 11-301, Life Support Program and AFOSH Standard 127-57).

Lesson summary—Use DET 1 instructor guide booklet for course map.

Lesson length—2 hours annually:

Instruction—1 hour.

Aircrew performance—1 hour.

Critique—As required.

Method of instruction—Lecture, demonstration, and guided discussion relating to crew coordination and responsibilities. Suggested sequence of class:

Fire Department conducts fire extinguisher training.

CCTS instructor shows KC-10 Egress video tape 5314.

Life Support Technician instructs and demonstrates aircrew and passenger egress equipment not covered in video tape.

CCTS conducts classroom training on egress procedures per DET 1 instructor guide.

CCTS conducts training at the aircraft (if applicable).

Method of evaluation—Written test or demonstrated performance.

OPR:

MAJCOM: HQ AMC/DOT

Unit: Squadron

Curriculum development: Unit

Training aids:

Actual in the aircraft performance of ground emergency egress procedures is desired

STS Video Tape: 5314.

Fire extinguisher and fire bottle.

Instructor: Squadron instructor assisted by life support technical expert and fire department personnel (fire extinguisher training).

Additional Information:

Initial and requalification training—Emergency equipment and egress training will be accomplished prior to first flight. This includes hands-on training at aircraft, such as door opening procedures, use of escape ropes, emergency equipment operation and use, etc. When applicable, show the reference in the checklist for each item shown. Opening a cabin door pneumatically is required for initial , but not requalification, training.

Slide Raft Training – Slide raft training is required for initial qual training. Units should make every effort to ensure a training slide raft is maintained and available for use by squadron and aircrew instructors. Funds for repair, replacement, and maintenance of the training slide raft and its components are a wing or group responsibility. If a usable raft is not available, OG/CCs may waive the requirement for unit training. Forward a copy of the waiver to HQ AMC/DOTK. In such cases slide raft training is not required for mission ready status but units

should keep track of waived students for possible training at a latter date. In all cases, students must view the video tape for slide raft training credit.

Continuation training—Recurring egress training will not include slide raft training unless unit so desires. This is an effort to increase the life of training rafts by reducing wear and tear.

Scheduling will coordinate with maintenance to ensure aircraft availability for training if aircraft is used. Also, contact the fire department for extinguisher training.

An appropriate maintenance stand and safety equipment must be immediately below windows, hatches, and escape slides being used.

A safety observer or instructor must be positioned on the maintenance stand to assist as necessary.

A2.7. Mission-Specific (M) Events.

M010-Proficiency Sortie. The following requirements are listed by crew position:

Pilots—Must be accomplished with an IP (formal school instructors are exempt from the IP requirement). IPs should accomplish their M010 requirements with another IP on board the aircraft. Once the exercise commences, it should not be disrupted for any other type of training. A minimum of 1.5 hours *(1 hour for ARC)* should be scheduled for this event. As a minimum, a pilot proficiency sortie will consist of the following:

Three instrument approaches

Missed approach

VFR traffic pattern (weather permitting)

In addition, the following should be accomplished when available and applicable:

Circling approach

Holding pattern or procedure turn (to include entry) (***NOTE:*** Because holding is incorporated into the refresher simulator profile, M010 flying time need not be spent on holding unless further training is necessary.)

If circumstances prevent completion on one sortie, credit may be taken after a second IP-supervised sortie, provided the combined activity fulfills the intent of this paragraph. Instructors should tailor each M010 to the individual pilot's needs. Particular emphasis should be placed on simulated systems malfunctions, simulated-engine out operations and instrument procedures.

Flight engineers—To credit a proficiency sortie, flight engineers must complete a full preflight inspection, perform the required predeparture activities, and applicable panel duties and checklists for the type mission flown. 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. (***NOTE***: When through-flight inspections are accomplished in conjunction with proficiency sorties, log M012 instead of M010.) All training and crew qualification levels will accomplish at least one proficiency sortie in the basic crew position monthly. Instructors and flight examiners may credit the remaining semiannual proficiency sorties (M010) while instructing or evaluating the duties associated with the basic sortie requirement.

EXCEPTION: ARC flight engineers may credit a sortie for missions flown where a preflight inspection was not possible (e.g., ERCC,), and a preflight inspection was accomplished at another time. When a proficiency sortie is accomplished without a preflight inspection log a through-flight proficiency sortie M012. When a preflight is accomplished (not associated with or after flight), log a preflight event P361. When required, combine the preflight and through-flight proficiency sortie events by logging a M013. Logging a combined M013 will dual credit to M010 and update the monthly proficiency sortie currency requirement

Boom operators—Must accomplish pre-flight through engine shutdown checklist items and an AR contact, channel sortie, or cargo load operations. Instructor and examiner boom operators may credit a proficiency sortie (M010) while instructing or evaluating.

M013-Flight Engineer Proficiency Sortie, Combined (ARC Only). See M010 flight engineer requirement.

M020-Unit Specific Training Sortie (UST). Unit defined sortie to accomplish mission specific training events. The following is a suggested listing of events that can be used on a M020:

Any individual training event (approaches, landings, 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

M030-Overseas Sortie. Sortie that includes takeoff or landing outside the 48 conterminous states of the United States. Primary crew and crew members performing instructor or evaluator duty may log accomplishment of M030. This event does not apply to units that are permanently based overseas. For KC-10 and KC-135 crews, two overseas sorties may be credited if total mission time exceeds 30 hours of flight time.

M240-Two-Engine Ferry Continuation Training. Contractor-administered academic and ATD instruction designed to provide selected crew members (pilots and FEs) with two-engine ferry refresher training. At minimum, the course will cover procedures, techniques, tech order review, aircraft preparation, performance, and crew coordination.

M260-Deployment Mission Planning. Event includes mission planning duties and requirements for both fighter deployments and airlift operations. At minimum, student must be able to demonstrate knowledge of current operations functions and responsibilities, customs and agricultural requirements, and command control requirements (i.e., required coordination with command and

control centers (CCC), air terminal operations centers (ATOC), tanker airlift control elements (TALCE), TTFs, etc.). Specifically, student must be able to accomplish the following::

Coordinate for billeting, diplomatic clearances, transportation, and meals..

Given various types of flight plans utilized by the KC-10 (ACC Fighter Profile, AMC-PLAN, locally produced), demonstrate knowledge of flight plan format and information by explaining what various headings and columns of numbers represent.

Given a computer flight plan, demonstrate how to verify accuracy of the flight plan fuel load to include receiver offload updates.

Demonstrate knowledge of mission planning documents (e.g., Foreign Clearance Guide [FCG], flight information publications [FLIP], airfield suitability information, DD Form 1801, **DoD International Flight Plan,** altitude reservation [ALTRV]) by locating information requested by instructor and providing accurate interpretation.

Special emphasis will be placed on utilization of the IFR Supplement to determine airfield support capability, services (i.e., civilian vendors who have been contracted to provide fuel, etc.), weight bearing capability, runway or airfield restrictions, etc.

Using simulated or actual mission conditions and requirements, a pilot or the instructor FE will demonstrate how to manually accomplish flight plan using AF Form 4090, **KC-10 Flight Plan/ Fuel Log**, or equivalent MAJCOM form. FE student will then complete fuel computations. This exercise familiarizes student with the complete flight planning process as it applies to tactical fighter deployment or airlift mission.

M261-Airlift Deployment Operations. Event trains crew members in duties and crew coordination required to effectively and safely operate 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. Ideally, event would be accomplished on joint airborne air transportability training (JA/ATT), special assignment airlift missions (SAAM), and AMC channel missions; however, squadron commander will determine or define which airlift missions (CONUS or OCONUS) are suitable for mission qualification training. (May be dual-logged with M262 (Fighter Deployment Operations) when requirements of both events are accomplished on the same mission.) At minimum, crew member will 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 must be carried out according to Air Force and MAJCOM instructions, flight manuals, AMC command-to-command agreements with ACC, Pacific Air Forces (PACAF), and United States Air Forces in Europe (USAFE), and volumes of AFI 11-2KC-10, Volume 3 (if applicable).

Pilot:

Required communications (position reports, change in flight plan, command and control (C2) monitoring requirements, operational reports, etc.)

Required C2 coordination, particularly with AMC agencies (i.e., coordination with TACC, ATOCs, aerial port, or TALCEs)

Awareness of cargo requirements and restrictions (i.e., manifest, hazardous cargo, human remains (HR), etc.)

Awareness of passenger requirements and restrictions (i.e., manifest, waivers, etc.)

Air defense identification zone (ADIZ) procedures and restrictions

International Civil Aviation Organization (ICAO) procedures and restrictions

Non-DOD (including Jeppesen) approaches and restrictions

Operations at airports without operating control towers (including UNICOM requirements)

FE:

Coordinate with crew to establish maximum allowable cabin load (ACL) capability prior to or after arriving on station:

Collect all required data and perform necessary coordination needed to accurately compute maximum ACL.

Demonstrate proficiency in utilizing performance manual to compute MTOGW (P370 Performance Knowledge and Use).

Coordinate with BO prior to cargo loading and downloading on the following:

Tipping center of gravity (CG)

Restrictions on moving or redistributing fuel after BO has computed tipping CG

Zone loading limitations

Fuel ballast requirements

Hazardous cargo awareness—concerning type, location, and quantity of hazardous cargo, airfield restrictions, route of flight, etc.

Optimized CG at or near the aft limit for mission conditions (both for takeoff and inflight) when practical

M262—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 position's 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; however, squadron commander will determine and define which missions (CONUS and or OCONUS) are suitable for mission qualification training. (May be dual-logged with M261 (Airlift Deployment Operations) when requirements of both events are accomplished on the same mission.) At minimum, crew members will demonstrate knowledge or ability to perform the following: (Only minor omissions or deviations that would not compromise safety or detract from overall efficient conduct of the mission are permissible.)

Pilot:

Required communications (position reports, change in flight plan, C2 monitoring requirements, operational reports, etc.)

Tracking mission progress (i.e., refueling points, abort or divert base requirements, etc.)

Required C2 coordination (i.e., coordination with TACC, TTF, HQ ACC/AOS etc.)

ADIZ procedures and restrictions

ICAO procedures and restrictions

FE:

Utilize computer flight plan (CFP) to determine AR points. Student must track AR points using inertial navigation system (INS) and coordinate refueling times to ensure offloads are accomplished on schedule. Instructor will explain "bingo points" and stress importance of starting and ending each refueling on time.

Effectively utilize general navigation skills (N160), required FLIPs (or navigational charts if required), flight plan and fuel log, INS (P376), and performance manual to accomplish actual or simulated inflight replanning of fuel requirements (tanker and fighter) to alternate or abort recovery airfield. Student must effectively coordinate with crew to accurately assess the situation for replanning fuel requirements. Student must complete these tasks in sufficient time to prevent delays or unsuccessful completion of the mission. Fuel computation error cannot exceed tolerances listed in AFI 11-2KC-10V2. Instructor will stress importance of being prepared for mission changes and inflight replanning at any time.

Maintain fuel log and flight plan to accurately show fuel status and fuel consumption trends at all times.

Record appropriate data from each AR using unit approved worksheets.

Utilize radios or L-BAND SATCOM to send appropriate AR information to keep higher headquarters informed of mission progress program.

A2.8. Navigation (N) Events.

N001-INS Operation. Demonstration of proficiency in INS knowledge and procedures. Creditable in any of three ways: by performing primary duties inflight on an INS aircraft, by accomplishing four hours of training in an INS simulator, or by accomplishing two CBT lessons in the ATS facility: 34N-2 “INS Startup and Test” and 34N-13 “INS Mission Scenario.” Total time for both lessons is approximately one hour. A passing score on the lessons is not necessary, because incorrect answers are remediated during the lesson.

N002-FMS Operation. Demonstration of proficiency in FMS knowledge and procedures. Creditable in any of two ways: by performing primary duties inflight on an FMS aircraft or by accomplishing four hours of training in an FMS simulator.

N010-Tanker Rendezvous. Does not include tanker buddy procedures. (Do not credit unless actually accomplishing a rendezvous.) Accomplish in accordance with AR TOs.

N011-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 and feedback and maximum safety. (Dual-log with type rendezvous accomplished and R010 or R060.)

N012-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 AR TOs. (Dual log with type of rendezvous accomplished and R010 or R060.)

N013-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 will

normally take place during mission planning. Unless waived by squadron commander for mission priority reasons, crews will not use emission options 3 and 4 unless coordination with receiver unit has been accomplished. Crew members must be squadron commander certified prior to accomplishing emission option 3 or 4. Certification training requirements will be determined by squadron commander based on the individual's experience and unit mission except for BO. BOs with less than 200 hours of flight time as BO must receive minimum of two flights with instructor stressing Radio Silent procedures, at least one under EMCON 3 conditions, prior to squadron commander certification. (Dual-log with R165.) Credit may be awarded on all operational support sorties when mission requirements are met. (Dual-log with type of rendezvous accomplished and R010 or R060.)

N014-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 (Information, Friend or Foe), exterior lighting, etc. Due to FAA identification requirements, this option will not be practiced during peacetime operations unless specifically addressed by tasking order.

N015-Tanker Alternate Rendezvous. Any rendezvous accomplished when primary means are not available. During formation tactics, limit credit to the tanker actually available. (Dual-credit with N010 and specific type rendezvous.)

N016-Tanker Rendezvous Overrun Procedures. Accomplish according to AR technical orders.

N020-En Route Rendezvous. (Tanker or receiver. Dual-log with N130 or N010.)

N030-Point Parallel Rendezvous (Tanker). Tanker must conduct rendezvous to include maintaining offset, monitoring range to receiver, and initiating final turn. (Dual-credit with N010.)

N040-Tanker Anchor Rendezvous and AR. (Dual-log with N010, R060, and N030.)

N130-Receiver Rendezvous. Accomplish in accordance with AR TOs. (Do not credit unless actually accomplishing rendezvous.)

N135-Receiver Alternate Rendezvous. Any rendezvous accomplished when primary means are not available. During formation tactics limit credit to receiver actually accomplishing rendezvous. Automatic direction finder (ADF) should be utilized if available. (Dual-log with N130.)

N136-Receiver Rendezvous Overrun Procedures. Accomplished in accordance with AR TOs.

N160-General Navigation:

Pilot and copilot—Includes maintaining inflight log and chart information, fixing, maintaining track, establishing reliable estimated times of arrival (ETA) and meeting control times.

FE—Student will be able to compute required information to utilize INS for inflight fuel planning. At minimum, this will consist of:

Extract coordinates for new destination from FLIP documents and navigation charts (errors in computing coordinates cannot exceed 10 nautical miles [NM]).

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

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

Extract required information from flight plans for mission planning and inflight replanning.

A2.9. Crew and Individual Proficiency (P) Events.

P005-Taxi Exercise. Pilot must 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 AFI 11-2KC-10, Volume 3) 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, and AFI 11-218, *Aircraft Operations and Movement on the Ground*, requirements, and marshaling procedures. Instructor supervision is required for this event. IPs should accomplish their P005 requirements with another IP on board the aircraft. For FE and BO, event will be accomplished for familiarization purposes. In particular, BO will become familiar with scanner duties and responsibilities that may be required when taxing in tight or congested areas.

P006-Airwork Exercise and Inflight Demonstrations:

This exercise and demonstration is intended to acquaint flight crews with handling properties of the aircraft under normal and abnormal conditions. For initial qualification or requalification training, the following must be accomplished:

Slow speed tanker refueling (R090).

Abnormal configuration practice (to be accomplished in simulator only):

No flap and no slat approach

0/EXT approach

22/RET or 35/RET approach

Landing attitude demonstration.

VOR and TACAN procedures (P111).

Vertical S exercises (optional).

Steep turns (optional).

Minimum of two of the above items must be accomplished for continuation training credit.

Senior staff officers who will fly under IP supervision need only accomplish landing attitude demonstration.

Items 3 and 6 require direct IP supervision at all times.

FE initial qualification students will be briefed on airwork exercise and inflight demonstration procedures, limitations, and performance data computations and requirements.

When approved by MAJCOM, KC-10 tactics procedures may be added to this event.

P007-Stick Shaker, and Approach To Stall Demo. Event will be accomplished in simulator only. See **Attachment 4** in this volume for further guidance.

P010-Takeoff, Initial. The takeoff following a touch-and-go landing is not creditable. EXCEPTION: Senior staff pilots (colonels and above) who require inflight supervision and instructor pilots may log a P010 after accomplishing (pilot flying) an initial take-off or touch-and-go. Dual log with P020.

P011-Takeoff, Night. (Dual log with P010.)

P012-Takeoff, Gyro Mode. (Dual log with P010 and P011 as appropriate.) Accomplish with flight director off.

P015-Instrument Departure.

P018-Copilot Takeoff and Climb Duties. Perform copilot (pilot not flying) takeoff duties according to aircraft flight manual through aircraft clean-up and initial climb.

P020-Takeoff. Initial takeoff or takeoff following touch and go landing.

P025-Takeoff and Departure:

Event includes all activity from completing Before Takeoff Checklist until completing departure. Student will:

Ensure the FGS (flight guidance system) is programmed as briefed in the Before Takeoff Checklist to include changes in ATC clearances. Pilot must be notified 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 comprise safety or detract from the overall efficient conduct of the mission.

P040-Simulated Engine Failure, Takeoff Continued. Accomplish in simulator only.

P053-Spiral Up Departure. See AFI 11-2KC10, Volume 3 for procedures.

P061-VFR Overhead. See AFI 11-2KC10, Volume 3 for procedures.

P064-Random Steep Approach. See AFI 11-2KC10, Volume 3 for procedures.

P065-Curvilinear Approach. See AFI 11-2KC10, Volume 3 for procedures.

P070-Instrument Approach. (Dual-log with any instrument approach.)

P071-Holding Pattern.

P072-Penetration (Published). Does not include en route descent.

P073-En Route Descent and Penetration.

P074-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 Checklist. Student must demonstrate ability to perform duties prescribed by flight manual and other governing directives. Omissions and deviations cannot affect safety of flight. Areas of emphasis are:

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

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

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.

NOTE:

Instrument approach events may be dual-logged where appropriate. For instance, P100 may be dual-logged with P101, P102, P103, and either P080 or P090, whichever is accomplished.

P080-Instrument Approach (Auto and Coupled).

P090-Instrument Approach (Manual).

P100-Precision Approach.

P101-Instrument Landing System (ILS) Approach.

P102-ILS (Gyro Mode). Accomplish with flight director and autopilot-off.

P103-PAR Approach.

P110-Nonprecision Approach.

P111-VOR and TACAN Procedures. Includes problems in course interception, tracking, holding, and fix-to-fix navigation.

P112-TACAN, VOR, and Localizer Approach.

P113-Air Surveillance Radar (ASR) Approach.

P114-Radio Magnetic Indicator (RMI)-Only Approach (ADF or VOR).

P115-Backcourse Localizer Approach.

P116-NDB Approach. May substitute VOR RMI only approach, as applicable.

P117 - GPS Approach: Approach must be flown using certified approach from the FMS database.

P130-Circling Approach.

P140-Visual Traffic Pattern.

P150-Missed Approach (Auto). For initial or requalification training, event will not be accomplished in flight until thorough briefing has been conducted by IP on power requirements and programmed aircraft attitude.

P160-Missed Approach (Manual).

P170-Approach and Go-Around (Simulated Engine-Out). Accomplish in simulator only.

P180-Approach and Landing (Simulated Engine-Out). Accomplish in simulator only.

P183-Aborted Takeoff. Practice in simulator only.

P184-Simulated Single-Engine Operation. Accomplish in simulator only.

P185-Simulated Second Engine Fails On Final Approach. Accomplish in simulator only.

P190-Landing. Used to record total landings accomplished by individual. All landings will be multiple-logged under this item. Additionally, student pilots must be made aware of hazards and difficulty in accomplishing crosswind landings. If crosswind conditions exist during transition training, special emphasis will be placed in accomplishing maximum number of student landings during this period. If

unable to accomplish landings with crosswind conditions, student pilots will be thoroughly and completely briefed on all procedures and techniques of crosswind landings by IP.

P191-Landing, Full Stop (Reverse Thrust).

P192-Landing, Night. Dual log with P190.

P193-Landing, 50-Degree Flaps

P200-Touch-and-Go Landing. Currency requirement for AC. Loss of currency does not result in a loss of mission ready status. Dual log with P020, P190, and P192 as applicable. Only current and qualified instructor pilots and squadron commander certified aircraft commanders (touch-and-go qualified ACs) will accomplish and supervise touch-and-go landings.

P215-Landing Attitude Demo.

P260-HAVE QUICK Radio Procedures. Training consists of properly configuring the radio for HAVE QUICK operation and making at least one transmission and reception using HAVE QUICK mode of operation with any source. When practical, rendezvous and refueling should be accomplished utilizing the HAVE QUICK mode of operation. The TOD should be updated from a ground station master clock when possible.

P270-SECURE RADIO Operation. Training consists of properly loading SECURE VOICE code and making at least one transmission and reception using SECURE VOICE with like-equipped aircraft.

P271-Authentication Procedures. Training consists of demonstrating proper challenge and reply authentication procedures using the TRIAD authenticator. For KC-10 crews, this training is conducted in conjunction with the G080 Communications Procedures course.

P280-Aircrew Chemical Defense Task Qualification Training (ACDTQT). An exercise emphasizing hands-on training, dressed out in partial chemical defense (CD) ensemble. Do not accomplish in conjunction with a formation takeoff. The purpose of the exercise is to enable crew members to become aware of their limitations while wearing the equipment. Complications of heat exhaustion, fatigue, hyperventilation, limited dexterity, and hampered communication can all be experienced during the exercise. Observers must closely monitor crew member actions during the exercise. If a crew member experiences difficulties such as excessive thermal stress, hyperventilation, headaches, etc., and either the observer or crew member believes it is unsafe to continue, the equipment will be immediately removed.

The following aircrew CD items will be used:

MBU-19/P hood and mask assembly or MBU-13/P CBO mask w/ HGU-41/P hood

CQU-7/P blower assembly with filter canisters/batteries or CRU-80/P filter pack assembly w/filters

MXU-835 intercom assembly w/ battery

Required suspension straps

Glove set (cotton, butyl, Nomex")

ACDTQT should be accomplished in a simulator with visual displays, provided a simulator exists or is available. If accomplished in a simulator, ATS instructors will observe the exercise, no other supervision is required, and no restrictions apply on who and how many crew members may wear the gear.

If performed in the aircraft, only one pilot will be dressed out at any time. For KC-10s, the FE and BO will not dress out simultaneously.

The aircraft commander will be supervised by an instructor pilot occupying the copilot seat. Copilot will be supervised by an instructor pilot or experienced aircraft commander (determined by the squadron commander) in the pilot seat. A safety observer crew member will occupy the jump seat. 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.

Boom operators, FMs, and FEs, supervised by crew members of like specialty, will wear the gear during takeoff, approach, and landing.

Prior to being scheduled for this event, each aircrew member must have completed LS04.

P290-Alert Start. Event is intended to ensure crew members have thorough knowledge of scramble (constant state of readiness) procedures in flight manual as well as understanding the many operational considerations for utilizing these procedures. Training will consist of:

Mission qualification (Phase II training)—Individuals and their instructor will utilize discussion period in aircraft to review all aspects of flight manual procedures and various operational considerations. All crew positions will be represented. Scramble response is not required.

Flight manual procedures—Generally, procedures and techniques used in scramble situation are same as those used during normal operation of the airplane except time element may be reduced. Safety of flight will not be sacrificed and every attempt to conform to normal procedures should be made if time permits. Crew members will follow current flight manual procedures. Unique aspects of scramble procedures that demand careful consideration are:

Aircraft acceptance and cocking.

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

Using **BOLDFACE** checklist procedures.

Loading INS waypoints after takeoff.

Operational considerations—Many scenarios may warrant using scramble procedures: conventional and contingency, humanitarian assistance, aircraft evacuation, exercises, etc. In any scenario and at any location, AC will ensure entire crew receives complete guidance from the tasking agency (or as deemed appropriate in the absence of such agency). At minimum, guidance will include:

Real or exercise scenario

Response timing required

Means of notification

Means of response

Aircraft security

Mission tasking, flight planning, and DD Forms 175, **Military Flight Plan**, and 1801, **DoD International Flight Plan**

Performance capabilities, limitations, and takeoff and landing data

Maintenance status and recurring inspections

NOTE:

For local scenarios, review local base and wing operations series publications.

P300-Cargo Loading. Event ensures KC-10 BOs are trained to and maintain proficiency in airlift procedures supporting worldwide cargo, contingency and unit move, and organic transportation operations. A side benefit of this event is to help ensure MAJCOM operating agencies and support personnel are trained and proficient in KC-10 contingency and unit movements. (May be dual-logged by not more than two cargo-qualified BOs on each leg of the following cargo missions: AMC channel, SAAM, JA/ATT, or combination and dual-role AR mission.) Two cargo-qualified BOs will work together to ensure all aspects of the cargo mission are completed. On each leg of the mission, one of the cargo-qualified BOs will assume the role of cargo loading supervisor. The following list includes minimum items required for Phase II training: (For Phase III training, maximum number of items practicable will be accomplished dependent on type of airlift mission scheduled for maintenance of proficiency.)

Utilizing KC-10 aircraft, BO will accomplish loading and offloading of palletized cargo or rolling stock through the cargo door and positioning cargo at the appropriate aircraft station. Compliance with applicable checklists, accomplishing load plans, or verifying load plans comply with technical data and restrictions will be utilized to determine proficiency.

Become familiar with and understand functions of TACC, ATOC, TALCE, aerial port, fleet service, and CCC. Demonstrate and maintain proficiency in:

Worldwide customs and agriculture procedures for crew, passengers, cargo, and permits-to-proceed (PTP).

Hazardous cargo and materials—documentation and transportation such as explosives, poisons, etiological and biological materials, radioactive and corrosive materials, flammables, etc.

Special handling procedures for HR, life or death urgency shipments, very very important parts (VVIP), signature service cargo and transfer of accountability, and classified courier escort duties.

Requesting, controlling, and transferring aircraft tiedown equipment and passenger comfort items.

SAAM to and from points other than major aerial ports to include rolling stock and or pre-palletized support equipment, i.e., movement of ACC units.

JA/ATT missions for combat airlift training supporting US Army, US Navy, and US Marine Corps unit deployments or redeployments including planning, documentation, loading, securing, and unloading of combat support equipment and vehicles.

When suitable off-station cargo missions are unavailable, home-station static load training may be used for BO cargo training.

Units using home-station static loading operations for BO cargo training requirements in this volume must adhere to the following guidelines:

All qualification training must be supervised by cargo-qualified instructor BO.

Each home station static load may be logged by only one cargo-qualified BO.

Consecutive logging of static loading for P300 credit is not authorized.

Cargo loading evaluation (initial, recurring, or no-notice) will not be conducted on home-station static loads.

Prior to static loading, units must ensure coordination with all agencies has been accomplished concerning: aircraft, cargo, type of loader, load crew, etc. To be creditable, loads must be verified by senior training section BO. Using one canned load over and over is not conducive to quality cargo load training.

All static load operations will be accomplished as if cargo were to be airlifted and must have all required cargo documentation, i.e., load plans, manifests, hazardous certificates, joint inspections, etc. The BO logging event or being trained in event must complete weight and balance clearance form up to and including zero fuel weight. Restraint calculations must be computed on all required items. All TO 1C-10K(A)-9 and command directives and restrictions apply.

For resource protection and safety, aircrew personnel supervising, instructing, or being trained in event must have received ample crew rest according to AFI 11-202, Volume 3.

P310-Instructor and Evaluator Duties and Techniques:

Instructor upgrade:

At minimum, instructor-candidate will receive training in responsibilities for quality assurance of contractor-administered training programs.

Instructor-candidates must demonstrate proficiency in all of the following areas:

Student briefing

Student critique

Training documentation

Effectively conveying knowledge of aircraft operation and systems to their student

Knowledge and use of the KC-10 training syllabus

Knowledge and use of AFI 11-2KC-10, Volume 3, and this volume

Teaching ground training courses

Evaluator upgrade—Each evaluator candidate will receive training in the following areas:

Evaluator's responsibilities in quality assurance of contractor training

Administrative functions

Review of AFI 11-202, Volume 1, AFI 11-202, Volume 2 and AFI 11-2KC-10 (applicable volumes)

P320-Supervision of Copilot Takeoffs, Landings, Touch-and-Go Landings, and Receiver Air Refueling. An IP must occupy the copilot’s seat to certify proficiency in this event. Squadron commanders must certify in writing which copilots and activities an aircraft commander may supervise. The squadron commander will document the certification in the Flight Evaluation Folder.

P322-Weight and Balance. Event trains FEs to accomplish DD Form 365-4, **Weight and Balance Clearance Form F-Transport**, when aircraft is operated with minimum crew (i.e., pilot, copilot, and FE). Training will be limited to noncargo mission scenario. Student must demonstrate proficiency in accomplishing the form. Completed form must be accomplished according to and contain all information required by the basic weight list and loading data manual. It cannot have omissions or discrepancies in format. Minor discrepancies (without omission of required information) are permissible.

P330-Preflight Proficiency. Accomplish preflight up through the Before Start Checklist at aircraft (includes interior and exterior inspection).

P332-APU Start Procedures. Event ensures BOs maintain proficiency in APU starting procedures. BOs will perform one APU start in the aircraft annually.

P340-Briefing and Control of Passengers. Event ensures KC-10 BOs are trained to properly load and care for passengers inflight, ensure passengers are properly documented, and ensure BOs are:

Able to brief, assist, and safely evacuate passengers

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

Familiar with the operation of aircraft emergency equipment to include:

Fire extinguishers

Fire protection equipment

Normal and emergency oxygen equipment

Signaling devices

Overwater emergency equipment

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

P350-Main Cabin Door Procedures (Departure and Arrival). Procedures include door operation, installation, and removal of portable ladder, and briefing slide exit procedures. 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.

P360-Mission Planning and Briefing:

For initial qualification, requalification, and upgrade training, all applicable phases of mission planning must be accomplished as prescribed by governing directives. If data is preplanned, student will be responsible for ensuring accurate data prior to use. Student must demonstrate proficiency in accomplishing mission planning without using computer-generated or preplanned information (i.e., flight plans, fuel logs etc.); however, training in computer mission planning will also be accomplished. All required forms, flight plans, fuel logs, and graphs must be completed according to flight manual and applicable directives. Activity must be supervised by instructor of like specialty for each training sortie. For instructor upgrade, candidate will brief all phases of flight and maneuvers to be performed with emphasis on correct techniques, procedures, and safety.

For recurring training (basic qualification only), accomplish crew mission planning and mission briefing according to volumes of AFI 11-2KC-10, Volume 3. During mission planning, discuss AFI 11-2KC-10, Volume 3, chapter 22, *Tactics* (SECRET), and appropriate AR TOs as they apply to the scheduled activity on the mission.

P361-Preflight and Cockpit Preparation. Student must demonstrate ability to perform preflight procedures prescribed and required by flight manual, which must be accomplished with no omissions or deviations that would detract from flight and ground safety or overall efficient conduct of the mission. Aircraft limitations must not be exceeded. Student must recognize and report all abnormal indications or maintenance discrepancies. Inspection must be accomplished in sufficient time to allow completion of pre-takeoff duties. Thorough understanding and use of aircraft forms must be demonstrated.

P362-Pre-Takeoff. Pre-takeoff applies from aircrew assembly time through the Before Takeoff Checklist (***EXCEPTION***: Preflight inspection [P330] will be graded separately). Student must perform pre-takeoff duties prescribed by flight manual and other governing directives. Procedures required by flight manual, checklist, and applicable directives must be accomplished with no omission or deviation that would detract from overall efficient conduct of the mission. Student must demonstrate effective coordination with their crew and support personnel to ensure aircraft is MR by briefed engine start time.

P363-Climb. Event includes all activity from completing departure until level-off or stabilized cruise. Student will demonstrate 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.

P364-Cruise. Event includes all activity not specifically covered in other areas of flight. Student must demonstrate proficiency in the following:

Procedures required by flight manual, checklist, and applicable directives must be accomplished with no omissions or deviations that would detract from overall efficient conduct of the mission.

Inflight data logs (structural assessment, engine monitoring, and flight plan and fuel log) must be completed and updated according to pertinent directives. Errors or omissions cannot detract from accuracy and effectiveness of the log.

For inflight fuel replanning, student must effectively utilize general navigation skills (N160), required FLIPs (or navigational charts if required), flight plan and fuel log, INS (P376), and performance manual to accomplish actual or simulated inflight replanning of fuel requirements due to mission changes. Student must effectively coordinate with crew to accurately assess the situation for replanning fuel requirements. Student must complete these tasks in sufficient time to prevent delays or unsuccessful completion of the mission. Fuel computation error cannot exceed tolerances in volumes of AFI 11-2KC-10, Volume 3. Instructor will stress importance of being prepared for mission changes and inflight replanning at any time.

P365-Autopilot-off Cruise. Accomplish any time during flight for a minimum of 15 minutes with autopilot disengaged. Do not credit during takeoff, departure, approach, or transition phase.

P366-Checklist Procedures and Use. Accomplish all checklist according to governing TOs.

P367-Crew Coordination. 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 must understand the need for close crew coordination.

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

FE initial qualification and requalification include all phases of operation during which two or more crew members must coordinate information or actions. Student must coordinate 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 must not affect overall efficient conduct of mission. Areas of emphasis are:

Coordination with BO during aircraft preflight

Coordination with AC and support personnel to ensure aircraft is MR by briefed engine start time

Coordination with BO before flight concerning:

Zone loading restrictions (cargo missions only)

Fuel load distribution (identify fuel location for takeoff and ballast fuel requirements for cargo loading or unloading)

Aircraft zero fuel weight and zero fuel CG

Coordination between student and crew during AR

Coordination with BO on aircraft emergencies and abnormals

BO initial qualification and requalification. Includes all phases of operations during which two or more crew members must coordinate information or actions. Student must coordinate 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 must not affect overall efficient conduct of the mission. Areas of emphasis are:

Coordination with FE during all phases of the mission that affect aircraft CG.

Coordination with other crew members concerning aircraft emergencies or abnormals.

Coordination with support agencies to ensure orderly flow during cargo operations. (Phase II.)

Coordination with other mission BOs to ensure they work together as team to complete all phases of each mission.

Coordination with and brief AC concerning hazardous cargo. (Proficiency in Phase II.)

P368-Postflight. Event covers all activity from completing the Parking Checklist through maintenance debriefing. Student will demonstrate ability to:

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

Complete all forms and logs, including AFTO Forms 781A (Maintenance Discrepancy and Work Document) and 781H (Aerospace Vehicle Flight Status and Maintenance) and required maintenance debrief forms. Forms must be accomplished with no more than minor omissions or errors that did not affect accuracy and effectiveness of forms. AFTO Form 781A entries must contain sufficient data (to include inflight troubleshooting) to facilitate maintenance troubleshooting the write-up.

Accomplish all post-mission duties if maintenance support is not available (G190 Aircraft Servicing).

P370-Performance Knowledge and Use:

Pilot and copilot initial qualification and requalification—Student must verify accuracy of takeoff data computed by FE according to flight manual.

FE initial qualification and requalification—Student must correctly apply performance manual procedures and charts when computing data for mission planning and aircraft operations. Data must not exceed tolerances in volumes of AFI 11-2KC-10, Volume 3. Sample problems will be used to determine student proficiency in performance areas not normally encountered during local training missions. At minimum, the following areas will be covered:

Obstacle limited takeoff (maximum ACL)

Screen height

Vmcg limited takeoff (maximum ACL)

Takeoff with contaminated runway (runway surface condition) (maximum ACL)

Windshear takeoff

Derated takeoff (runway condition reading—10)

Performance computations with WARP installed

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

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

Driftdown

P371 – FMS Operation: Demonstrate proficiency in FMS knowledge and procedures. See **Table 2.2.** for specific requirements by crew position.

P372-Fuel Management and Conservation. FE student must accomplish fuel management, including transfer when applicable, with no more than minor deviations from procedures outlined by flight manual. TO 1C-10(K)-5 limitations cannot be exceeded. Pilots and FE students must demonstrate knowledge and practical application of fuel conservation techniques and procedures addressed in flight manual, performance manual, local operating instructions, and applicable directives.

P373-Equipment Operation. Student must demonstrate proficiency in operating all applicable aircraft systems and equipment as prescribed by flight manual, supplementary or partial flight manuals, KC-10-1/2/3 initial qualification or KC-10-11/12/13, and requalification course books. 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.

P374-Manual Throttle Operation. Student will 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 (ATS OFF) during takeoff and climb. Charted takeoff performance is based on charted takeoff N1 being set prior to 80 knots indicated airspeed (KIAS). Throttles should not be adjusted except to prevent exceeding engine limitations. CL thrust should be recomputed every 5,000-foot pressure altitude for lapse rate temperature deviation.

P375-Manual Pressurization. Student will operate pressurization system in "manual" from takeoff through landing and must maintain cabin rate of climb acceptable for crew and passenger comfort. Cabin altitude will be maintained according to altitude schedule placard on FE's upper panel. Student must demonstrate ability to prioritize cockpit duties to monitor and maintain manual control of pressurization system during flight from takeoff through landing.

P376-INS Operation:

Pilot or copilot—Demonstration of proficiency in INS knowledge and procedures, to include TACAN updating and orbit or rendezvous mode according to flight manual.

FE—Student must demonstrate proficiency in INS knowledge and procedures according to flight manual and applicable directives. Procedures required by flight manual and applicable directives

must be accomplished with no omissions or deviations that would detract from overall efficient conduct of the mission. Areas of emphasis are:

Loading waypoints and remote loading

Remote ranging

Triple mixing

Malfunctions and malfunction codes

Documenting error rate and limitation

Determining present position

Cross-checking newly loaded waypoints with flight plan

P377-Radar Operation. Operation of radar according to TO 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.

P378-Communications. Student must demonstrate proficiency in the application of communications and interphone procedures required by flight manual and governing directives.

P379-L-BAND SATCOM. Student must 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.

A2.10. Qualification (Q) Training Events. To be credited, applicable examination or check must be satisfactorily completed according to AFI 11-202, Volume 2.

Q001-Open Book Qualification Examination. Administered and graded according to AFI 11-202, Volume 2. Must be accomplished as part of all qualification training.

Q002-Closed Book Qualification Examination. Administered and graded according to AFI 11-202, Volume 2. Must be accomplished as a part of all qualification training.

Q005-ATD Evaluation (Qualification and Upgrade). Administered in ATD (SIM or BOT) according to AFI 11-202, Volume 2. Required as course completion item for qualification, requalification, and upgrade training in this volume. Does not qualify individual for unsupervised flight. For pilots and copilots, evaluation must include all inflight requirements of an AFI 11-202, Volume 2 instrument check.

Q006-Senior Staff Basic ATD Evaluation.

Q007-Senior Staff Basic Qualification Evaluation.

Q008-Instructor Evaluation.

Q011-Formation Lead Certification. Squadron commander is responsible for developing a formation lead qualification training program and certifying experienced ACs as formation lead qualified. Program intent is to certify only ACs who posses significant experience in flying all aspects of unit formation missions and are specifically qualified to lead formations. Program should include the following items:

Minimum of 4 hours of supervised study on formation procedures in AFI 11-2KC-10, Volume 3 and AR TOs, as well as additional study materials provided by unit CCTS (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 NAF or MAJCOM headquarters).

Closed-book examination administered by training section.

Minimum of three formation flights (two as lead) under supervision of an experienced IP designated by the squadron commander for formation lead training. At least one of the formation lead flights will be planned 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).

Certification in writing by the squadron commander.

NOTES:

1. Formation lead certification activity should not be accomplished concurrently with initial qualification or formal upgrade training. Phase IB training is not creditable for formation lead qualification. (***EXCEPTION***: IP qualification or requalification.) All instructor ACs will be formation lead-qualified.
2. 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 (nonfighter) aircraft fly in formation during phases of flight other than refueling operations.

Q015-Special Missions and Operations Certification. Event will be used to document training and preparation for special missions and operations. Unit commanders will determine requirements for this event, missions to be certified using the event, and documentation requirements.

Q022—Receptacle Equipped Day Fighter Certification: Includes all types of receptacle equipped fighter aircraft. For initial, and requalification training. Certification will be documented on AF Form 4025, Aircrew Summary/Close-Out Training Accomplishment Report and AF Form 1381, USAF Certification of Aircrew Training. These contacts must be completed in two or more sorties. Contacts can be completed in Phase IB or Phase II training.

Q023—Receptacle Equipped Night Fighter Certification: Includes all types of receptacle equipped fighter aircraft. For initial, and requalification training. Certification will be documented on AF Form 4025, Aircrew Summary/Close-Out Training Accomplishment Report and AF Form 1381, USAF Certification of Aircrew Training. Must demonstrate satisfactory progression in Q022 activity prior to accomplishing Q023 activity. These contacts must be completed in two or more sorties. Contacts can be completed in Phase IB or Phase II training.

Q039-Two-Engine Ferry Qualification Certification. Accomplish at direction of HQ AMC/DOT/DOV.

Q090-Flight Publications Check

Q160-IRC Exam

Q170-Flight Evaluation Folder Review

A2.11. Air Refueling (R) Training Events.

R010-Receiver AR:

Pilot qualification—Consists of practice in AR, including closure and contacts. Instructor will demonstrate all limits. Student must be able to establish contact under simulated conditions of radio silence, amplifier override (manual boom latching), pilot director lights out, and tanker autopilot-off. Students will demonstrate proficiency in day activity to an instructor prior to advancing to night activity **(not applicable for instructor upgrade)**. During hours of darkness, conduct 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. ***NOTE***: See paragraph **5.6.3.** for restrictions.

Pilot continuation training—Receiver pilot should accomplish 10 minutes of toggles-engaged time. Toggles-engaged time does not apply during tanker autopilot-off refueling or during higher headquarters missions.

FE qualification—Student must demonstrate ability to perform duties prescribed by flight manual, AR TOs, 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:

Fuel transfer and management

Checklist initiation and accomplishment

Crew coordination and monitoring rendezvous

Breakaway procedures

Aircraft performance capabilities (holding speed, AR speeds, overrun speed, formatting altitude)

FE continuation training—Accomplishing FE duties prescribed by flight manual, AR TOs, and other governing directives (rendezvous through post AR checklist).

R011-Receiver AR, Indoctrination. Consists of instructor-supervised AR for the copilot (in the right seat) to assure ability of taking control of the aircraft to safely clear the tanker in emergency and execute a breakaway maneuver.

R012-Receiver AR, Day. (Dual-log with R010.)

R020-Receiver AR, Night. (Dual-log with R010.)

R030-Receiver AR, Heavyweight: (Dual-log with R010.)

Pilot—Requires minimum onload of 10,000 pounds with an end refueling GW of 556,000 pounds or greater. Event need not be accomplished before initial qualification. However, event must be accomplished under direct IP supervision prior to unsupervised accomplishment, and individual may not be declared MR until it is complete. To maximize training, recommend event be accomplished behind KC-135.

FE—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 must be equal to or greater than 414,000 pounds at end of refueling.

Qualification training—Instructor will evaluate student knowledge of receiver heavyweight mission planning, fuel management, AR TO 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 inflight, instructor may evaluate student proficiency by discussion, oral examination, or using sample problems or scenarios.

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 will be the primary method for accomplishing FE training requirement for this event.

R040-Receiver AR Breakaway or Emergency Separation. Initiated with receiver in AR envelope. Pilots must demonstrate proficiency in executing breakaway. Copilots must demonstrate proficiency in copilot procedures while pilot executes breakaway. Flight engineers must demonstrate proficiency in flight engineer duties during a breakaway.

R050-Receiver AR, Tanker Autopilot-Off. The tanker autopilot must be disengaged and AR contacts must be practiced.

R060-Tanker AR:

Credit only one R060 for each receiver formation and air refueling control time (ARCT) refueled regardless of number of aircraft. Credit may be awarded if AR contact can be established. 10-minute toggles-engaged time is desired. Pilots may receive credit when occupying either pilot or copilot position. Additional pilots and FEs may also log R060 provided they actually accomplish refueling in their primary position.

For FE qualification, student must demonstrate ability to perform duties prescribed by flight manual, AR TOs, and other governing directives without omissions or deviations that would detract from overall efficient conduct of the mission. Primary areas of responsibility are:

Fuel transfer and management

Checklist initiation and accomplishment

Crew coordination and monitoring rendezvous

Breakaway procedures

Aircraft performance capabilities (orbit speed, minimum AR speed, formatting altitude, maximum tanker GW)

For FE continuation training, accomplishing crew-specific duties prescribed by flight manual, AR manual, and other governing directives (rendezvous through post AR checklist).

R070-Tanker AR Breakaway or Emergency Separation. Breakaway should be initiated with the receiver in the AR envelope. Pilots and boom operators must demonstrate proficiency in executing breakaway. Copilots must demonstrate proficiency in copilot procedures while the pilot executes the breakaway. Navigators must demonstrate proficiency in navigator duties during a breakaway. Flight engineers must demonstrate proficiency in flight engineer duties during a breakaway.

R080-Tanker AR, Autopilot-Off. All axes of the tanker autopilot must be disengaged and AR contacts must be practiced for a minimum of 10 minutes.

R090-Slow Speed Tanker AR. Rendezvous and tanker AR with any aircraft (i.e., A-10, B-52, or C-130) that might require using minimum AR speed. If this AR is unavailable, a "slow speed tanker refueling demonstration" may be substituted. Each student will explain TO 1-1C-1-33 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 will compute minimum AR speed and maximum tanker GW for various KC-10 configurations and altitudes.

R120-Contacts. Total Number. For qualification, satisfactory progress in day contacts must be demonstrated prior to attempting radio silent or night contacts.

R122—BOT Contacts: Total number. May be logged under all environmental conditions. May be dual logged with R140 contacts.

R125-Day Contacts. For initial qualification or requalification, day contact proficiency must be demonstrated prior to attempting Radio Silent or Night Contacts. These day contacts must be completed on two or more sorties with student accomplishing AR contacts on each sortie.

R130-Night Contacts. Must be declared proficient in day activity prior to commencing night activity.

R140-Tanker Manual Contacts. Prior to attempting tanker manual contacts, students must demonstrate knowledge of tanker manual operation (TMO) equipment and procedures.

R150-Fighter Contacts: Log the actual number of contacts accomplished. Boom operators must obtain a contact with the fighter. Additional boom operators may also log a R150 if they accomplish a contact. Formal school, AMWC, and NAF/DOV may credit one R150 accomplished in the BOPTT/BOT between actual contacts in the aircraft.

To receive credit for R125, R130, R140 or R150, all contacts must be accomplished with boom receptacle equipped receivers.

For qualification, individuals who have been noncurrent for less than 3 years need only complete a minimum of 15—R120 contacts. R120 contacts must include at least 5—R120, 6—R130, and 6—R140 contacts. Must complete initial BOT training prior to flight training.

All contacts are dual-credited with R120.

R160-Radio Silent Breakaway. 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. For the event to occur from the contact position, prior coordination must take place among the boom operator, tanker pilot and receiver pilot. As a minimum, the time of occurrence must be coordinated. Should this event be scheduled as part of a radio silent AR, coordination can be done any time prior to the flight. This event may also be accomplished during an AR that does not involve radio silent procedures.

R165-Radio Silent AR. BOs must demonstrate their ability to AR Radio Silent to an instructor BO during actual AR. Any type receiver may be used for training. Individual training records must show qualified in Radio Silent AR prior to their achieving mission qualification status or participating in EMCON operations.

R170-Tanker Heavyweight Offload. Requires either aircraft GW be equal to or greater than 556,000 pounds or total of all body tank fuel and zero fuel weight be equal to or greater than 414,000 pounds at start of refueling.

Qualification training—Instructor will evaluate student knowledge of tanker heavyweight mission planning, fuel management, TO procedures, performance, and limitations. Objective is to ensure Phase IA heavyweight tanker training objectives were achieved and retained. If scheduling

restrictions prevent accomplishing event inflight, instructor may evaluate student's proficiency by oral examination or using sample problems and scenarios.

Continuation training—Primary purpose of event is to reinforce fuel management procedures and techniques and review aircraft and performance limitations associated with heavyweight tanker AR. ATD will be primary method for accomplishing the training requirement for this event.

R180-Radio Silent Visual Signals. Applies to receiver pilots and tanker BOs. For BOs, this will include giving the applicable boom signal and using pilot director light coaching switches to direct receiver from pre-contact through post AR. Oral coordination between pilots and BOs prior to Radio Silent operation is mandatory. BO may accomplish in BOT or aircraft.

R190-Drogue System Operation:

Contractor qualification training—Utilizing BOT, BO demonstrates procedures for deploying and rewinding AR drogue. Applicable emergency procedures for jettisoning drogue will be demonstrated.

In-flight training—BO will accomplish procedures for deploying and rewinding AR drogue. Additionally, reel response check is required.

Initial qualification training—Pilots and FEs will be briefed on all drogue procedures to include reel response check.

R195—WARP System Operation. All crew members are required to be familiar with WARP system. Training will emphasize unique performance considerations, preflight procedures, system operation, and system malfunctions. Training will include an aircraft field trip. In addition, BOs will demonstrate proficiency in operating WARP system in BOT or inflight by accomplishing checklist procedures for deploying and rewinding both wing-mounted drogues.

R200-AR Operations. Event is designed to provide student with knowledge of procedures, techniques, and crew coordination requirements of the FE. Student will demonstrate knowledge of terminology, procedures, and FE responsibilities for the following operations:

Buddy departure and join-up (vertical, horizontal separation, and interplane communications)

Formation (vertical, horizontal separation, and interplane communications)

AR formation (vertical, horizontal separation, and interplane communications)

Point parallel rendezvous (altitude separation, receiver armament, turn range and offset computations)

En route rendezvous (timing, aircraft separation)

Rendezvous overrun (airspeed as a receiver and as a tanker)

Radio silent visual signals (location in the AR TOs and application)

Breakaway

Rendezvous, AR and formation emission option.

R210-Low Altitude AR. Any AR accomplished below 12,000-foot mean sea level (MSL) (10,000-foot AGL). See AFI 11-2KC-10, Volume 3, chapter 17, for additional information. (Dual-log with R060.)

A2.12. Special-Operations Low-Level (SOLL) II (V) Events. *Not used.*

A2.13. Air Force Specified (XX) Training Events.

AA01-Qualification Check. Administered inflight according to AFI 11-202, Vol 2 and 11-2KC-10, Vol 2 as supplemented. Required prior to unsupervised flight. Required as a course completion item for qualification, requalification, and upgrade training as directed by this volume.

AA12-Instrument Check, Simulator

AA21-Combined Qualification

PP01-Flight Physical

PP11-Physiological Training

RR01-Flight Records Review

S-V80-A-Initial Combat Survival Training

S-V90-A-Initial Water Survival Training

A2.14. Additional Event Identifiers. These identifiers will be used if units choose to track the associated events and items in AFORMS:

E010-Standards of Conduct Briefing

E020-AMC Escort Training

E030-Passport

E040-Base Populace Briefing

E050-Newcomer Substance Abuse Awareness Briefing

E060-Newcomers Social Actions Briefing

E070-Protection of the President

E080-Report Counter Human Resources Intelligence Threat Briefing

E090-Hostile Human Intelligence Threat Briefing

E100-Security and Awareness Training

C010-CWD Driver Operations

C020-Mass Casualty Exercise

C030-Mobility Briefing

C040-Mobility Folder Review

C050-Unit Disaster Training

LE01-Helmet Inspection

LE02-Oxygen Mask Inspection

H010-Ergometer Testing

H020-Dental Exam

H030-Cholera

H040-Flu Shot

H050-Smallpox

H060-Oral Polio

H070-Tetanus

H080-Yellow Fever

H090-TB Tine

H100-Meningococcola

H110-Typhoid

H120-Hepatitis A

H130-Hepatitis B

H140-Anthrax (Initial Series)

H141-Anthrax (Recurrent)

Attachment 3
AIRCREW TRAINING DOCUMENTATION

A3.1. General Information. This attachment provides standardized guidelines on proper training documentation. Instructions are provided for Air Force (AF) Form 4022, **Aircrew Training Record**, AF Form 4023, **Aircrew Training Progress Report**, AF Form 4024, **Aircrew Training Accomplishment Report**, and AF Form 4025, **Summary/Closeout Training Accomplishment Report**, and aircrew training guides.

A3.1.1. Initiate a training folder (AF Form 4022) for **Table 1.1** formal training (either at formal school or in-unit), mission qualification, 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.

A3.1.1.1. The unit operations officer may waive the training folder requirement if corrective action or additional training is limited. If initiated, the instructor or flight examiner who evaluated the aircrew member's performance will enter comments pertinent to the training deficiency on AF Form 4023 or the training guide. Use the existing training folder for end-of-course evaluations that result in additional training.

A3.1.1.2. At the unit's discretion, training folders for an individual undergoing more than one training program in a short period of time may combine all training into one AF Form 4022; e.g., a tanker copilot upgrading to AC may have his or her upgrade, mission qualification, and formation lead training combined in one folder.

A3.1.1.3. Formal Schools may use temporary/contractor training folders in lieu of the AF Forms 4022. Upon completion of training all records will be transferred to the AF 4022 before being forwarded to the gaining unit.

A3.1.2. Formal schools will send AF Form 4022 with all training records to the trainee's gaining unit. Squadron commanders will review formal school training records and enter appropriate comments on the training guide progress record or AF Form 4023.

A3.1.3. Squadrons will maintain the training folders for their personnel in a location readily accessible to instructors and supervisory personnel. The trainee may review his or her folder at any time.

A3.1.4. Upon completion of training, place the AF Form 4025 (summary/closeout report) in the individual's flight evaluation folder (FEF) and place a copy of the form in the individual's training folder. Squadrons will retain all AF Forms 4022 for 1 year, then returned to the crew member. Do not insert AF Forms 4022, 4023, or 4024 or training guide into FEFs.

A3.1.5. Training Guides, AF Forms (4023,4024, 4025), and/or unit overprints may be used for all KC-10 continuation and formal training. The current HQ AMC/DOTK approved formal school training guides are available on the DOTK web page at http://scoisntw02.scott.af.mil/hqamc/do/dot/dotk/index.htm.

A3.1.6. If additional forms are needed, see AFI 37-160, Volume 8, *The Air Force Publications and Forms Management Program--Developing and Processing Forms*, for this guidance.

A3.1.7. For purposes of training documentation, classroom only training conducted at the unit should be identified as Academic Training (AT). Ground Training (GT) will be considered all training conducted outside the classroom not associated with a flight or artificial training device.

A3.2. Instructions for AF Form 4022. This form is a folder constructed of hard stock paper. The inside covers have tables for documenting training. AF Forms 4023, 4024, and 4025 and additional information (waivers, memorandums, etc.) will be attached through the centered holes of the folder. Training guides will be placed inside the folder. The form is available through unit publications distribution offices or the AMC Command Publication Distribution Center. Comply with the following when documenting aircrew training on the form.

NOTE:

Formal school instructors using ATS courseware or training guides are not required to complete the following sections of the AF Form 4022: ground training summary, written evaluations, and flying training summary. This information must be tracked by other means and sent to the gaining unit with AF Form 4022.

A3.2.1. Trainee Information (cover): Provides trainee and course information.

Name and grade. Self-explanatory.

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

Unit of assignment. Self-explanatory.

Type of training. Enter formal course title or, for special mission qualification, enter type, e.g., AD, SOLL II, formation lead etc. For other types of training, enter a descriptive identifier.

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

Course number: Enter only the AFCAT 36-2223 formal course number, e.g., "KC10P." Otherwise, leave blank.

A3.2.2. Ground Training Summary (inside left). (This section provides a chronological record of ground training events). Record non-flying training events. Entries are required for CTD, SIM, OFT, PTT, CPT, WST, GT. Entries are required for in-unit academic instruction conducted according to formal school courseware. Classroom academic training will be identified as AT. Units will not record academic training on the AF Form 4022 summary (even thought it appears on the AF Form 4022 as a training period designator).

Date. Self-explanatory.

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

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.

Instructor or trainer or course (qualification). Enter title of the course.

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

A3.2.3. Training Period Designators. Codes to describe training periods. Formal training schools may use more descriptive designators if required.

A3.2.4. Written Evaluations. If applicable and desired, record data for the inflight evaluation required to complete the training program.

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

Type. Enter the AFI 11-2KC-10, Volume 2 description or other appropriate identifier.

Grade. Enter according to AFI 11-2KC-10, Volume 2.

A3.2.5. Performance Evaluation Summary. Record data on required evaluations including re-evaluations (if applicable).

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

Type evaluation. Enter AFI 11-2KC-10, Volume 2 evaluation description or other appropriate identifier.

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

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

Date evaluated. Enter the date the evaluation was completed.

Evaluator. Self-explanatory.

Grade. Enter according to AFI 11-202, Volume 2.

A3.2.6. Flying Training Summary. This section provides a chronological record of flying training sorties. Log all sorties scheduled even if canceled by external factors such as weather (WX) or maintenance (MX).

Date. Self-explanatory. On operational missions, enter inclusive dates, e.g., 28 Jul - 7 Aug 95.

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

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.

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

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

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

A3.2.7. Performance and Knowledge Standards. (For use with AF Form 4024, see paragraph **A3.4.11.**).

A3.2.8. Grading Codes. (For use with AF Form 4024, see paragraph **A3.4.8.**).

A3.3. Instructions for the AF Form 4023. This form provides a narrative description of training missions and is also used for documenting operations review of training progress. File AF Forms 4023 in order with the most recent flight on top. ***NOTE***: Training guides may be used to document training instead of the AF Form 4023. This form may be used for ATS and formal school courses.

A3.3.1. Training Period and Date (Item 1). Training period is either ground, simulator, or flight, i.e., AT-1, GT-1, SIM-3, S-4, etc. Also, annotate the date the training occurred.

A3.3.2. AT, GT, FLY, and ATD (Items 2, 4, and 6). Annotate time allocated for training and keep a running total (Items 3, 5 and 7) by adding previous totals to current training period time **(not applicable for AETC)**. Classroom academic training periods will be annotated as AT and tabulated under the ground training block.

A3.3.3. Total Training Time (Item 8). Keep a running total of all training time (add Items 3, 5, and 7).

A3.3.4. Remarks and Recommendations (Item 9). Describe the mission scenario. Local overprints are authorized. Comments will elaborate on trainee strengths and weaknesses, identify problem areas, record unusual circumstances, and indicate student progress. Recommendations will be specific and include tasks requiring further training and the type of training required. If more space is required for annotating remarks, draw vertical arrows through sortie information heading section (items 1 through 8) of following block or form and continue remarks.

A3.3.4.1. Operations Review. In addition to reviewing all AF Form 4023 entries, the flight commander or squadron training representative will conduct a monthly review of active status AF Forms 4022. The squadron commander or operations officer will review active status AF Forms 4022 at least once each quarter. Document reviews on an AF Form 4023. The reviewer will annotate "monthly review" or "quarterly review," as applicable, in the training period block. Write comments concerning the trainee's progress, status, or recommendations in the mission profile, comments, and recommendations block.

A3.3.4.2. Monthly reviews are not required for formal school courses except in documented cases of unsatisfactory progress. ATS personnel will review the students records and ensure all required training is completed prior to entering flight training. If problems are encountered during the flying phase, the squadron will conduct reviews necessary to document unsatisfactory progress.

A3.3.5. Instructor Block (Item 10). Instructors will print and sign their name and annotate their rank and crew qualification.

A3.3.6. Students Block (Item 11). Students will print and sign their name.

A3.3.7. Reviewer Block (Item 12). For monthly and quarterly reviews, squadron commanders, operations officers, or flight commanders will print and sign their name and indicate their position. Flight

commanders may use their initials in the review block after reviewing individual AF Form 4023 entries.

A3.3.8. AF Form 4023 will be completed and reviewed by the student prior to his or her next training period.

A3.4. Instructions for the AF Form 4024. This form tracks, for each sortie, individual event and task accomplishment and grades. Units will overprint event and task listings, total number of repetitions required, and the required proficiency level (RPL) for each event and task. Use separate AF Forms 4024 for simulator and flight training. Maintain AF Forms 4024 on the right side of AF Form 4022.

NOTE:

Training guides may be used to document training instead of the AF Form 4024. The AF Form 4024 may be used for ATS and formal school courses.

A3.4.1. Name. Self-explanatory.

A3.4.2. Crew Position. Self-explanatory.

A3.4.3. Course or Phase of Training. Enter the AFCAT 36-2223 formal course identifier, e.g., KC10P. For special mission qualification, enter the type and identify the method of training, e.g., WST training, flying training, etc.

A3.4.4. Sortie. Enter sortie number e.g., S-1, S-2, CPT-1, etc.

A3.4.5. Date.

A3.4.6. Training Event and Task Listing. Reflects the tasks and subtasks in the training program that require specific student performance or knowledge proficiency standards.

A3.4.7. Number Accomplished. Reflects the number of times an event was accomplished on that sortie.

A3.4.8. Grade. Enter a “B,” “F,” “P,” “S,” or “U” as appropriate.

“1”–Item must be accomplished once by the crew member, but does not require proficiency.

"B"–Briefing item only.

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

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

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

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

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 phase 1A or in phase 1B), the only subsequent grade allowed is either “P” or “U”. Likewise, too many “S” grades in a row may indicate lack of progression and warrant a “U”. Any event graded “U” must have an associated remark on AF Form 4023.

A3.4.9. Total Number Required. Indicates the total repetitions of an event or task required by the course syllabus.

A3.4.10. Total Number Accomplished. Total of the number of repetitions actually accomplished.

A3.4.11. Required Proficiency Level (RPL). RPL for the specific event and task. Each event and task will have a performance standard designated for the required proficiency level the crew member must achieve. In addition, each event and task may have (optional) a knowledge standard designated and used in the same manner as a performance standard. The standards for specific events are either listed in the applicable master task list (MTL) and evaluation standards document (ESD) for each weapon system or identified in this volume. For the KC-10, all events will 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.

A3.5. Instructions for the AF Form 4025.

A3.5.1. For each formal training program, a single summary/closeout report will be completed detailing the individual's strengths, weaknesses, overall performance, and other pertinent information. This report will be filed in the crew members FEF.

A3.5.2. Squadron commanders, operations officers and flight commanders will ensure the comments on this form do not reflect personnel opinions or biases. All comments must be supported by information contained in the AF Forms 4023 and 4024 or training guides as applicable. At formal schools, the instructor will accomplish the AF Form 4025 and the squadron commander's signature is optional.

A3.6. Aircrew Training Guides. If available, use aircrew training guides (TG) for training programs.

A3.6.1. The ATS contractor will develop TGs. Units may produce TGs when the ATS contractor is unable to provide them. TGs will be developed in accordance with AFI 36-2201. Coordinate TG development through appropriate MAJCOM with an info copy sent to HQ AMC/DOT.

A3.6.2. Initiating TGs. Training and resource management personnel in each unit will initiate a TG on crew-members prior to their entering any phase of qualification training. These TGs will be inserted in AF Form 4022 (or the temporary training folder for CCTS) and may be used in lieu of AF Forms 4023 or 4024.

A3.6.3. Use of TGs. Specific instructions for annotating training are included in each TG.

A3.6.3.1. Active status TGs will be carried by the student during all training and operational missions and made available to the instructor for review and annotation (Temporary training folders need not be carried on each sortie during CCTS). The student will review the TG and initial the training progress record prior to the next training period.

A3.6.3.2. Complete the training progress record portion of the TG in sufficient detail to specify areas of training accomplished, areas needing improvement, recommended specific study areas for the trainee, and recommended training for the next training period. When the trainee attains

sufficient knowledge, experience, and prerequisites for upgrade, the instructor will recommend an evaluation and state: "Recommend evaluation for (crew position)" on the training progress record. Trainees will not be recommended for an evaluation if a TG required event is incomplete or requires corrective action. ***EXCEPTION***: Copilot flight simulator ATS progress reviews (evaluations) may be administered with open areas in the TG.

A3.6.3.3. On missions without an instructor or examiner, the senior qualified counterpart (e.g., AC for copilots, first FE for second FEs, qualified LM for LMs, etc.) will accomplish required training for those areas not requiring an instructor. Annotate applicable training information in the TG.

A3.6.3.4. When an initial qualification flight evaluation is not successfully completed and additional training is required, the flight commander will annotate deficient areas on reproduced pages of the appropriate TG and training progress record. This mini-TG will be placed in the AF Form 4022 and used to document completion of additional training.

A3.6.3.5. At the conclusion of training, when all requirements of the TG are met, fill-out an AF Form 4025 in accordance with this volume. Maintain completed TG and associated AF Form 4025 in a training folder according to paragraph **A3.1.4.**

A3.6.3.6. Do not maintain the training guide in the flight evaluation folder.

A3.6.4. Review Procedures:

A3.6.4.1. Instructors and students will review the TG after each training period and discuss training accomplished, problem areas, and immediate goals. The following are areas that should be covered in the comments' section:

A3.6.4.1.1. 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.

A3.6.4.1.2. Flight Engineers.

AR missions. Indicate whether contact was heavy- or light-weight.

A3.6.4.1.3. Boom Operators:

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 5 passengers.

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.

A3.6.4.2. The flight commander or squadron training representative will conduct a monthly review of TGs. Entering initials and date in the review block of the TG will indicate this review. Monthly and quarterly reviews are not required during CCTS training except in documented cases of unsatisfactory progress.

A3.6.4.3. The commander or operations officer will review active TGs at least once each calendar quarter and prior to an evaluation. This review will be a separate entry on the TG and will include comments on weak areas and upgrade potential. Indicate review by signing the instructor-trainer

block of the training progress record, and enter "quarterly review" in the training period identifier block.

A3.6.4.4. Records of crew members, not receiving training (but in an active status), will be reviewed monthly and quarterly as indicated above. If applicable, the statement, "no training accomplished during this period," the reason why, and the projected date when training will resume will be entered on the student's training progress record.

A3.6.5. Disposition of TGs:

Place completed TGs in AF Form 4022 and maintain according to paragraph **A3.1.4.**

Formal schools will maintain copies of the aircrew training records on incomplete trainees for 6 months.

Attachment 4

KC-10 FLIGHT MANEUVERS

A4.1. General. The AC or IP will ensure all crew members are advised of maneuver and procedures to be used. Flight maneuvers in this attachment may also be accomplished in simulator. (See **Chapter 4** of this volume.) During all airwork and flight maneuver training, the IP or pilot in command as applicable will ensure that actions taken follow these priorities.

A4.1.1. Fly-the-Aircraft. Pilot should establish attitude and power setting that will control aircraft performance and flight path.

A4.1.2. Direct Crew Actions. While continuing to fly aircraft, pilot will initiate necessary checklist actions and coordinate crew activity as necessary to accomplish maneuver or demonstration.

A4.2. Slow Speed Tanker Refueling Demonstration.

A4.2.1. Purpose. Demonstrate slow speed flying characteristics of KC-10 aircraft and proper pitch and power inputs required to maintain an effective tanker platform. Maneuver also demonstrates proper computation of minimum allowable air refueling (AR) speed (1.2g buffet onset plus additives).

A4.2.2. Conditions.

Slow speed tanker refueling demonstration will be practiced only under direct IP supervision for Phase IB students. A FE instructor must supervise when student FE occupies FE position.

Slow speed tanker refueling demonstration will be conducted at a minimum altitude of 10,000 feet (AGL).

All crew members will be briefed on maneuver and procedures to be used.

A4.2.3. Procedures.

A4.2.3.1. Compute and record the following data (units will develop procedures to compute and record the following data):

Aircraft gross weight (GW)

Aircraft center of gravity (CG)

Pressure altitude

Temperature deviation

0/RET minimum maneuver speed

0/EXT minimum maneuver speed

Minimum AR speed (0/RET)

Minimum AR speed (0/EXT)

A4.2.3.2. Set airspeed reference bugs to 0/RET minimum maneuver speed, minimum AR speed (0/RET).

A4.2.3.3. Turn on FASTEN SEAT BELTS and RETURN TO CABIN signs.

A4.2.3.4. Thrust rating computer—set MCT.

A4.2.3.5. Decelerate to minimum AR speed (0/RET). Trim aircraft to maintain level flight.

A4.2.3.6. Perform a series of 15-degree bank turns in level flight. Emphasize importance of controlling airspeed and minimizing load factor. Note pitch required to maintain level flight.

A4.2.3.7. Return to wings-level condition.

A4.2.3.8. If at any time stick shaker or buffet onset occurs, recover using the following procedures:

Pitch—as required.

Power—maximum continuous thrust.

Flap and slat handle—0/EXT.

Accelerate to minimum AR speed (0/RET) speed.

Retract slats and push SLAT RESET switch light.

NOTE:

If stick shaker occurred, observe SLAT DISAGREE light on, SLAT RESET switch light on, and 1-3 or 2-3 HYDRAULIC PUMP VALVE OPEN lights on.

A4.2.3.9. Set airspeed reference bugs to 0/RET minimum maneuver speed, 0/EXT minimum maneuver speed, minimum AR speed (0/EXT).

A4.2.3.10. Slats—extend.

A4.2.3.11. Decelerate to minimum AR speed (0/EXT). Trim aircraft to maintain level flight.

A4.2.3.12. Perform a series of 15-degree bank turns in level flight. Emphasize importance of controlling airspeed and minimizing load factor. Note pitch required to maintain level flight.

A4.2.3.13. If at any time stick shaker or buffet onset occurs, recover using the following procedure

Pitch—as required.

Power—maximum continuous thrust.

Accelerate to 0/EXT minimum maneuver speed.

Slats—retract.

Accelerate to 0/RET minimum maneuver speed.

A4.2.3.14. Turn off FASTEN SEAT BELTS and RETURN TO CABIN lights.

A4.2.3.15. Reset thrust rating computer as required.

A4.3. Stick Shaker and Approach To Stall Demonstration.

A4.3.1. Purpose . Demonstrate slow speed flying characteristics of KC-10 aircraft and relationship and recovery from stick shaker and or buffet onset. Normally, accomplished in conjunction with slow speed AR demonstration.

A4.3.2. Conditions.

A4.3.2.1. ACCOMPLISH IN SIMULATOR ONLY.

A4.3.2.2. All crew members will be briefed on maneuver and procedures to be used.

A4.3.3. Procedures.

A4.3.3.1. Compute and record the following data: (Units will develop procedures to compute and record the following data):

Aircraft GW

Aircraft CG

Pressure altitude

Temperature deviation

0/RET minimum maneuver speed

0/EXT minimum maneuver speed

Minimum AR speed (0/RET)

Minimum AR speed (0/EXT)

Stick shaker speed (0/ASE)

Stick shaker speed (0/EXT)

A4.3.3.2. Set airspeed reference bugs to 0/RET minimum maneuver speed, minimum AR speed (0/RET), and stick shaker (0/ASE) speeds.

A4.3.3.3. Set engine ignition selector switch to CONT A or CONT B.

A4.3.3.4. Turn on FASTEN SEAT BELTS and RETURN TO CABIN signs.

A4.3.3.5. Thrust rating computer—set MCT.

A4.3.3.6. Decelerate to minimum AR speed (0/RET). Trim aircraft to maintain level flight. After aircraft is trimmed, do **not** change trim until minimum AR speed (0/RET) is regained.

A4.3.3.7. Adjust power to decelerate at approximately one knot per second in 1g level flight. This will normally require flight idle RPM. Do not trim aircraft at speeds below minimum AR speed (0/RET).

A4.3.3.8. At stick shaker or buffet onset, whichever occurs first, recover. **Do not allow airspeed to decay after stick shaker or buffet onset before initiating recovery**. Recovery procedures are:

Pitch—as required

Power—maximum continuous thrust.

Flap and slat handle—0/EXT

Accelerate to minimum AR speed (0/RET).

Retract slats and push SLAT RESET switch light.

NOTE:

If stick shaker occurred, observe SLAT DISAGREE light on, SLAT RESET switch light on, and 1-3 or 2-3 HYDRAULIC PUMP VALVE OPEN lights on.

A4.3.3.9. Set airspeed reference bugs to 0/RET minimum maneuver speed, 0/EXT minimum maneuver speed, minimum AR speed (0/EXT), and stick shaker speed (0/EXT).

A4.3.3.10. Slats—extend.

A4.3.3.11. Adjust power to decelerate to stick shaker speed (0/EXT) at a rate of one knot per second in 1g level flight. This will normally require flight-idle RPM. Do **not** trim below minimum AR speed (0/EXT).

A4.3.3.12. At stick shaker or buffet onset, whichever occurs first, recover. **Do not allow airspeed to decay after stick shaker or buffet onset before initiating recovery**. Recovery procedures are:

Pitch—as required.

Power—maximum continuous thrust.

Accelerate to 0/EXT minimum maneuver speed.

Slats—retract

Accelerate to 0/RET minimum maneuver speed.

A4.3.3.13. Turn off ignition selector switch and FASTEN SEAT BELTS and RETURN TO CABIN lights.

A4.3.3.14. Reset thrust rating computer as required.

A4.4. Practice Abnormal Configuration Approach Demonstration.

A4.4.1. Purpose. To demonstrate visual illusions and the power and pitch required to maintain proper airspeed and glide slope during approaches in abnormal aircraft configurations. Maneuver also demonstrates level of crew coordination required and importance of proper pacing during abnormal configuration approaches.

A4.4.2. Conditions. ACCOMPLISH IN THE SIMULATOR ONLY.

A4.5. Steep Turns Demonstration:

A4.5.1. Purpose. To demonstrate pitch, power, and bank relationships during turning maneuvers.

A4.5.2. Conditions:

A4.5.2.1. Perform steep turns at an altitude between 10,000 feet AGL and FL250 in VMC conditions. Direct IP supervision is required.

A4.5.2.2. Maximum aircraft GW—450,000 pounds.

A4.5.2.3. Maximum bank angle—45 degrees.

A4.5.2.4. Minimum airspeed—180 KIAS or cruise buffet-onset boundary speed (clean configuration) for a 55-degree bank, whichever is greater. Recommended airspeed is AR orbit speed or 275 KIAS, whichever is greater.

A4.5.2.5. A 2000-foot block altitude is required for this demonstration. Plan to begin demonstration in the middle of the block.

A4.5.2.6. Clean configuration.

A4.5.2.7. Set thrust rating computer to climb thrust.

A4.5.3. Procedure. Perform a 360-degree turn to the left and to the right using a maximum bank angle of 45 degrees. Note pitch, power, and trim changes compared to level flight settings. Attempt to control altitude to within ± 100 feet, airspeed ± 5 knots, and bank ± 5 degrees. N1 settings must be monitored carefully to prevent exceeding climb thrust N1. If at any time aircraft enters a spiral turn or if control of any parameter is lost, recover to level flight and restart maneuver if desired.

A4.6. Vertical "S" Demonstration:

A4.6.1. Purpose. This series of maneuvers is designed to improve pilot's instrument cross-check and aircraft control.

A4.6.2. Procedures. Perform vertical "S" series of maneuver described in AFMAN 11-217. Observe flight manual restrictions and limitations. Request at least three consecutive altitudes (2000-foot blocks).

A4.7. Landing Attitude Demonstration:

A4.7.1. Purpose. To establish and maintain landing attitude picture long enough to observe all visual cues so that consistent, correct landing attitude can be learned.

A4.7.2. Conditions. Spoilers disarmed. Normal touch-and-go restrictions apply, except that ground contact is optional. Go-around procedures should be initiated after climb-out is established. Direct IP supervision is required.

A4.7.3. Procedure:

A4.7.3.1. Flare aircraft into landing attitude at the normal point, adjusting power to maintain level flight just above the runway surface in the landing attitude (7- to 8-degree pitch).

A4.7.3.2. Hold level flight attitude pitch constant, noting relative movement, peripheral and horizon cues, at the end of the runway.

A4.7.3.3. No later than 2000-foot runway remaining, advance power and initiate normal climbout, including go-around procedures.

A4.8. VOR and TACAN Procedures (P111):

A4.8.1. Purpose. To provide pilots practice in course interceptions, maintaining an arc, course tracking, holding, and fix-to-fix navigation.

A4.8.2. Procedures. Perform according to guidance established in AFMAN 11-217 and KC-10 flight manual.

Attachment 5

KC-10 FLYING HOUR PROGRAMMATICS

A5.1. KC-10 Flying Hour Programmatics. This attachment identifies the flying hour requirements associated with initial qualification, upgrade, and continuation training programs. Total aircrew flying hour requirements are defined in terms of training events. Training events displayed are the average requirements for crew members in training levels B and C. This information is used to determine aircrew flying hour requirements.

A5.1.1. AMC's flying hour requirements are designed to attain mission ready (MR) status.

A5.1.1.1. Sorties and individual events listed in **Table 4.6.** provide a combination of training event frequency, volume, and mix to assure aircrews are minimally capable of meeting AMC's primary mission requirements. Flying training is recognized as an individual undertaking. For this reason, approximately 25% of the hours necessary to obtain and maintain MR levels are identified for individualized or unit-specific training requirements (i.e., unit-specific training sortie). Failure to attain this number of training events results in an individual being placed in non-mission-ready status.

A5.1.1.2. Training accomplished above the MR line allows for unit-specific training focused on deficiencies, specialized tactics, and enhancing mission ready status, as well as a graduated capability to train for collateral missions and taskings.

A5.1.1.3. Continuous operation at only the MR level will result in a rapid decline in overall crew proficiency, degrading primary mission capability. Trying to achieve the MR level without a fully funded flying hour program could seriously strain available resources. Units must therefore carefully manage all available training resources to optimize training benefits.

A5.2. Program Development and Objective. The development of AMC's aircrew training program starts with the DOC requirements. Training events are established to train to proficiency on each phase of the DOC mission. HQ AMC and unit evaluation and management systems provide feedback needed to identify training requirements to maintain aircrews at the desired level of proficiency. The objective is that a crew must maintain the capability to launch with minimum notice; complete formation join-up and en route formation operations using minimum emissions; effect a rendezvous, complete air refueling at any altitude, and accomplish any additional assigned activity; land at a recovery base, onload or download cargo, and turn and relaunch without assistance. This must be accomplished in any weather conditions on a worldwide basis without supervision or additional training.

A5.3. Establishment of Training Requirements. In response to mission requirements, individual training requirements are developed for all crew positions. Individual differences in experience and ability, criticality of event accomplishment for safety, and prioritized events essential for mission success are considered when determining the quantity, frequency, and mix of training prescribed. In addition to the requirements for inflight training activity, academics and ATDs are integrated into the total training program to the maximum extent possible.

A5.4. Evaluation Systems. The following evaluations are used as an aid in determining the validity of the training program: Operational Readiness Inspections (ORI), the NAF visitation program, unit evaluations, all exercises, and safety data. The results of these events, coupled with statistical analysis of training data, yield a quantitative and qualitative measure of unit, aircrew, and individual proficiency, reflecting the effectiveness of the training program.

A5.5. Program Changes. To effectively respond to developments in tactics and technology as well as deficiency trends identified, the entire training program is reviewed annually. Changes in the response to flying safety deficiencies and the need for increased or decreased mission requirements are made as required.

A5.6. Safety. Safety is a prime factor in determining training requirements. All incidents and accidents receive in-depth analysis and study to determine if any training deficiencies were involved. Whenever a reduction in training requirements is considered, the possible impact on safety is a major consideration.

A5.7. Qualification and Upgrade/Mission Qualification Training (Phase IB). Phase IB flying training is accomplished in-unit to qualify aircrew and aircrew members who have completed initial qualification (Phase IA) contractor-administered academic/ATD training. Mission Qualification (Phase II flying training) is also accomplished in-unit, overlaying Phase IB/III Qualification and Continuation training. **Table A5.1.** lists Phase IB flying hour requirements for all KC-10 crew positions based on the KC-10 Aircrew Flight Training Syllabus. **Table A5.2.** lists semiannual training requirements by training level for mission ready crew members.

Table A5.1. Phase IB Flying Hour Requirements

Training	Position	Flying Hours
Initial Qualification	All	50.2
Requalification	All	36.0
Pilot Upgrade Program	Pilot	36.0
Instructor Upgrade	All	32.0
Mission Qualification	All	33.3

Table A5.2. Semiannual Training Requirements for Mission Ready Crew Members

		Training Level (4)							
		A		B/C (3)		D		E	
Event	Time Per Event (Hrs)	Req'd Events	Time Req'd (Hrs)	Req'd Events	Time Req'd (Hrs)	Req'd Events	Time Req'd (Hrs)	Req'd Events	Time Req'd (Hrs)
Initial Takeoff (T/O) Climb	0.5	2	1.0	10.0(1)	5.0	7	3.5	2	1.0
Receiver Air Refueling (A/R)	1.0	4	4.0	5.5	5.5	7	7.0	0	0
Tanker A/R	1.5	4	6.0	5.5	8.3	7	10.5	0	0
A/R Transit(2)	1.2	8	9.6	11.0	13.2	14	16.8	0	0
Formation	1.0	3	3.0	3.5	3.5	5	5.0	0	0
Instrument Transition	0.3	15	4.5	46.0(1)	13.8	32	9.6	6	1.8
Overseas Missions (6)	15.0	1	3.0	2.0	30.0	2	30	0	0
Landings/Touch & Go	0.1	12	1.2	42.0(1)	4.2	30	3.0	6	0.6
Unit Specific Sorties (6)	4.0	6	9.1	6.0	24.0	7	28.0	0	0
TOTAL HOURS (5)			41.4		107.5		113.4		3.4
HRS/MONTH			6.9		17.9		18.9		.6

NOTES:

1. These events are not dual loggable. Mission ready requirements listed for these events are the sum of pilot and copilot requirements.
2. A/R transit time includes preparation for contact and post A/R checklist accomplishment, including time required to reach the air refueling track.
3. Assumes that approximately one-half of the crew force will be in training level B and the other half in training level C. Based on this assumption the hours shown are an average of the requirements for levels B and C (e.g., Receiver A/R: 5 required for level B and 6 required for Level C, resulting in 5.5 for semiannual period).
4. Training levels B and C are crew hours. Training levels A, D, and E are individual hours.
5. All flight engineer and boom operator training can be accomplished in conjunction with pilot flying training.
6. Overseas missions and unit specific sorties frequently involve both line and staff crew members. For these events, all crew members take credit for the applicable sortie. However, 20% of the overseas flying time and 38% of unit specific flying time is dedicated to staff-only flying to maintain proficiency.

Attachment 6

IC 99-1 TO AFI 11-2KC-10 VOLUME 1, KC-10 AIRCREW TRAINING

22 JUNE 1999

SUMMARY OF REVISIONS

This interim change (IC) 99-1 changes the OPR to Maj Keith R. Kreeger and incorporates changes recommended by AMC, other major commands (MAJCOM), units, and the Command Curriculum Review Workshop approved by the Training Review Panel (TRP). Waiver authority has changed from MAJCOM DOs to MAJCOM DOTs. Left Seat Initial Qualification Pilot training is defined and Phase II requirements modified. Basic boom operator and flight engineer courses are defined and Phase II requirements set. Ground continuation training requirements in Table 4.2 are reduced. Certain ancillary ground training events are identified as not affecting mission ready status. Numerous "bullet" paragraphs have been deleted and replaced with new condensed verbiage to reduce regulation size and ease readability. See the last attachment of the publication for the complete IC. A **black vertical line** indicates a major change or addition.

The following Paragraphs are deleted:

1.4.4.1.1. Deleted
1.7.5.5. Deleted
1.7.7. Deleted
2.2.1.1. Deleted
2.2.1.2. Deleted
2.2.1.3. Deleted
2.2.2. *NOTE* Deleted
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The Purpose statement at beginning of publicatin is changed to delete reference to MC Form 53 (AMC).

1.2.1. Unless specified in this instruction, MAJCOM DOTs, or equivalent level, are the waiver authority for specific aircrew training requirements in this instruction. For currency training, MAJCOM DOs are the waiver authority.

1.3.1. Each training mission must be structured to achieve optimum training. Any by-product airlift opportunity resulting from training must not degrade the intended training in any way and must comply with applicable Department of Defense (DoD) instructions. Any use of flying training hours to accomplish other than direct training requirements must be approved by the MAJCOM/DO or appropriate NAF commander. EXCEPTION: The approval authority for Off-Station Training Flights is the Wing Commander.

1.4.3. Operations Groups. The operations group will convene a training review panel (TRP). The operations group will determine frequency, format and content of the meetings. The TRP should review staff and aircrew management actions necessary to complete the squadron's flight and ground training programs.

1.4.5. Formal School - ATS Contractor. Consistent with requirements and provisions of the KC-10 Aircrew Training Contract, the contractor is responsible for developing, updating, and maintaining courseware, task analysis listing objectives hierarchy, media selection and syllabus, and lesson specification reports associated with KC-10 aircrew qualification training (Phase IA). Table 1.1 lists KC-10 ATS Formal Courses. Table 1.2 lists KC-10 ATS Non-Formal Courses.

Table 1.1. KC-10 Formal Courses.

(ATS) Course #	Course Name	note	Course Title	Course Student	#	Training Events PH-1A	Calendar Training days PH-1A
KC-10-3B	KC-10 BBQ		Boom Operator (Basi)c Initial Qualification	No prior aviation experience: Requires BBOC (Altus AFB) prerequsisite	1	18 BOTs 2 CPTs 6 CLTs	45 days 33 days + 2 CRM

(ATS) Course #	Course Name	note	Course Title	Course Student	#	Training Events PH-1A	Calendar Training days PH-1A
KC-10-3A	KC-10 BLQ		Boom Operator (Loadmaster) Initial Qualification	Qualified Airlift Loadmaster Qualifying as KC-10 Boom Operator	2	36 BOTs 4 CPTs 10 CLTs	44 days 30 days +2 CRM
KC-10-3	KC-10 BIQ		Boom Operator Initial Qualification	Qualified KC-135 Boom Operator Converting to KC-10	2	22 BOTs 4 COTs 10 CLTs	31 days 23 days +2 CRM
KC-10-13	KC-10 BRQ		Boom Operator Requalification	Prior KC-10 Boom Operator or Instructor Boom Operator	1	7 BOTs 1 CPTs 3 CLTs	17 days 13 days
KC-10-18	KC-10 BIC	1	Boom Operator Instructor Couse	Mission Qualified KC-10 Boom Operator	2	12 BOTs 2 CPTs 5 CLTs 2 SIMs	24 days 18 days
KC-10-2B	KC-10 FBP		Flight Engineer (Basic) Precourse	No prior aviation experience: Requires BFE (Altus AFB) prerequisite	2	-	18 days 14 days
KC-10-2	KC-10 FIQ		Flight Engineer Initial Qualification	KC-10 FBP graduate or qualified MWS Flight Engineer converting to KC-10	1	17 SIMs 17 CPTs	50 days
KC-10-12	KC-10 FRQ	2	Flight Engineer Requalification	Prior KC-10 Flight Engineer or Instructor Flight Engineer	1	9 SIMs 11 CPTs	30 days 22 days
KC-10-18	KC-10 FIC	1	Flight Engineer Instructor Course	Mission Qualified KC-10 Flight Engineer	2	8 SIMs 2 CPTs	22 days 16 days
KC-10-1	KC-10 CPIQ		Co-Pilot Initial Qualification	UPT Graduate, MWS Co-Pilot, or low-time FAIP/OSA	1	17 SIMs CPTs	59 days 43 days
KC-10-1	KC-10 PIQFO		Pilot Initial Qualification FAIP/OSA	FAIP/OSA aircraft commander converting to KC-10	1	17 SIMs 17 CPTs	59 days 43 days
KC-10-1	KC-10 PIQMWS		Pilot Initial Qualification MWS	MWS Aircraft Commander converting to KC-10	1	17 SIMs 17 CPTs	59 days 43 days
KC-10-1A	KC-10 PIQ2MWS		Pilot Initial Qualification MSW (2 Students)	MWS Aircraft Commander converting to KC-10	2	24 SIMs 20 CPTs	80 days 56 days
KC-10-4	KC-10 PUP		Pilot Upgrade Program	Qualified KC-10 Co-Pilot	2	9 SIMs 1 CPTs	15 days 11 days
KC-10-11	KC-10 PRQ		Pilot Requalification	Prior KC-10 Pilot or Instructor Pilot	2	10 SIMs 11 CPTs	32 days 24 days
KC-10-18	KC-10 PIC	1	Pilot Instructor Course	Qualified KC-10 Pilot	2	8 SIMS 2 CPTs	22 days 16 days
KC-10-14	KC-10 SSF	3	Senior Staff Officer Familiarization	Senior Staff Officer (O-6 Above) requiring KC-10 familiarization only	2	2 SIMs 1 CPTs	3 days 3 days
KC-10-16	KC-10 SSQ	3	Senior Staff Officer Qualification	Senior Staff Officer (O-6 Above) requiring basic KC-10 Qualification	2	8 SIMs 3 CPTs	16 days 12 days

NOTES:

1. All Instructor Courses include 3 days for Academic Instructor Training (AIC). If the student has been qualified as an instructor before he is not required to accomplish this training and will start 3 days later.
2. KC-10 FRQ requires pilot classes KC-10 PRQ or KC-10 PUP to be scheduled at the same time.

3. See paragraph 2.7 for additional requirements.

Table 1.2. KC-10 Non-Formal Courses.

(ATS) Course #	Course Name	note	Course Title	Course Student	#	Training EventsPh-1A	Calendar Training daysPh-1A
KC-10-15A	KC-10 MEQ		Maintenance Engine Run Qualification	MX Member receiving initial training for KC-10 Engine Ground Operation	2	2 CPIs	1 day
KC-10-15B	KC-10 MER		Maintenance Engine Run Refresher	MX Member receiving refresher training for KC-10 Engine Ground Operation	4	2 CPIs	1 day
KC-10-17	KC-10 TEF		Two Engine Ferry Course	Highly experienced NAF / OG / HQ Stan Eval Pilots and Flight Engineers	2 1	1 Sim	2 days
KC-10-5/6	KC-10 PFREF		Pilot / Flight Engineer Refresher	Continuation Training for KC-10 Qualified Pilots and Flight Engineers	2 1	2 Sims	2 days
KC-10-7	KC-10 BREF		Boom Operator Refresher	Continuation Training for KC-10 Qualified Boom Operators	1	3 BOTS	2 days
KC-10-21	KC-10 PDC		Pilot Differences Course	Qualified KC-10 Pilots transitioning to FMS/GPS modified aircraft	2	2 Sims	7 days
KC-10-22	KC-10 FDC		Flight Engineer Differences Course	Qualified KC-10 FEs transitioning to FMS/GPS modified aircraft	1	2 Sims	7 days
KC-10-23	KC-10 PINS		Pilot INS Differences Course	FMS/GPS Qualified KC-10 Pilots requiring INS training	2	-	2 days
KC-10-24	KC-10 FINS		Flight Engineer INS Differences Course	FMS/GPS Qualified KC-10 FEs requiring INS training	1	-	2 days
KC-10-30	KC-10 ATT/L		Additional Training Time / Long (7 + 00)	KC-10 qualified Pilots and Flight Engineers	2 1	1 Sim	1 day
KC-10-31	KC-10 ATT/S		Additional Training Time / Short (4 + 00)	KC-10 qualified Pilots and Flight Engineers	2 1	1 Sim	1 day
KC-10-40	KC-10 SR71	1	SR-71 Refueling Procedures Course	All KC-10 Crewmembers			
KC-10-41	KC-10 CAT II	1	Category II ILS Training	KC-10 qualified Pilots and Flight Engineers	2 1	1 Sim	1day
KC-10-42A	KC-10 HAZ	2	Hazardous Cargo Training	KC-10 qualified Boom Operators	-		
KC-10-42B	KC-10 HAZ	2	Hazardous Cargo Training	KC-10 qualified Pilots	-		
KC-10-43A	KC-10 CRM-IT	3	Crew Resource Management – Initial Training	All KC-10 Crewmembers			
KC-10-43B	KC-10 CRM-RT	3	Crew Resource Management – Recurring Training	All KC-10 Crewmembers			
KC-10-43C	KC-10 CRM-I/ET	3	Crew Resource Management – Instructor/ Evaluator Training	All KC-10 Instructors & Evaluators			

NOTES:

1. These courses are archived for future reference/use and are not updated nor maintained by the ATS contractor. They can be updated for use following HQ AMC/DOTK notification to the contractor.
2. This training is Computer Based training distributed on a CD.
3. CRM training is developed in accordance with AFI 11-290. Training is included in the requisite Initial Qual, Instructor Qual, and Refresher courses.

1.5. Training Time Limitations. Aircrew members entered in a qualification, requalification, or upgrade training program should be dedicated to that program on a full time basis. Individuals who enter initial qualification, requalification, or upgrade training are subject to the time requirements in Table 1.3.

Table 1.3. Training Time Limitations.

Training	note	Course	Active			AFRC		
			1A & 1B	II	Total	1A & 1B	II	Total
Intial Qual	5	KC-10 BBQ	120	130	250	180	300	480
		KC-10 BLQ	120	130	250	180	300	480

		KC-10 BIQ	90	110	200	180	300	480
	4	KC-10 FBP	170	100	270	180	240	420
		KC-10 FIQ	125	90	215	180	120	300
		KC-10 CPIQ	125	90	215	180	120	300
	3	KC-10 PIQFO	140	90	230	180	120	300
	3	KC-10 PIQMWS	140	90	230	180	120	300
	3	KC-10 PIQ2MWS	140	90	230	180	120	300
Requal		KC-10 BRQ	120	90	210	180	120	300
		KC-10 FRQ	90	90	180	180	120	300
		KC-10 PRQ	90	90	180	180	120	300
Upgrade		KC-10 BIC	90		90	180		180
		KC-10 FIC	90		90	180		180
		KC-10 PIC	90		90	180		180
		KC-10 PUP	90	90	180	180	120	300

NOTES:

1. Phase 1 starts on first day of Contractor training.
2. Phase 2 starts on the day following completion of Phase 1B checkride. Mission qualification training events (ground and flight) may be accomplished concurrently with Phase IB training when deemed appropriate by the squadron DO, DOT, or equivalent.
3. For left seat initial qual pilots (LSIQP), Phase II limits are for completion of Phase IIA (MC) requirements (see paragraph 3.2.2.) . If period to final SQ/CC certification as MP exceeds 365 days from beginning of Phase IIA, downgrade individual to MC. KC-10 PUP is required for subsequent MP qualification (not applicable for AFRC)
4. FBP limits include the FIQ portion of training. FBP Phase II limits are for completion of Phases IIA & IIB. (See paragraph 3.2.4.)
5. BBQ limits are for completion of phase IIA. (See paragraph 3.2.6.).

1.5.2. When Table 1.3 time limits are exceeded:

1.5.2.2. Enter in the training review panel (TRP) the names of all individuals not initially qualified or MR (qualified) within Table 1.3 time limits. Reasons for failure to complete training within these limits will be fully explained.

1.6.2. Loss of currency exceeding 6 months. This individual is unqualified in the aircraft and must complete requalification as directed in paragraph 1.7. Controlling currencies per crew position are:

1.6.2.1. Pilots - P020 Takeoff, P070 Instrument Approach, P190 Landing, and R010 Receiver AR.

1.6.2.2. Flight Engineers – M010 Proficiency Sortie.

1.6.2.3. Boom Operators – R120 Contacts and P300 Cargo Loading.

1.7.4. Individuals requalifying as KC-10 crew members will complete training for the applicable crew position as outlined in Table 2.1. Individuals requalifying as instructors will complete basic qualification training as indicated in Table 2.1 and instructor training as outlined in table 5.1. All individuals requalifying will complete those sections of mission qualification training (Phase II) listed in Table 3.1 in which they have expired or are overdue.

1.8. Active Duty Service Commitment (ADSC). AFI 11-202, Volume 1 specifies ADSC requirements. ARC personnel do not incur an ADSC. Formal training conducted according to this instruction that is intended to result in initial qualification, requalification, or upgrade in a crew position will result in an ADSC according to AFI 36-2107, Active Duty Service Commitments (ADSC) and Specified Period of Time Contracts (SPTC), and AFCAT 36-2223. The ADSC only applies to basic requalification in the aircraft, not subsequent in-unit requalification to a crew qualification previously held in that aircraft, such as aircraft commander, or instructor (formal school requalification will incur an ADSC). Each unit CCTS, except ARC, will provide HQ AMC/DPPET with either a form letter or an annotated class roster indicating the date and names of crew members completing their flight evaluation. The reporting requirement in this paragraph is exempt from licensing in accordance with paragraph 2.11.12 of AFI 37-124.

1.10.2. In order to ensure continuity of training, limit the number of different flight instructors to a maximum of four for students undergoing qualification or upgrade training (not applicable for all AFRC training and active duty initial cargo qualification). Squadron commanders may waive the four-instructor limit on a case-by-case basis. The flying squadron commander, operations officer, NAF instructors/evaluators, Chief FE, BO, and CCTS chief do not count against the four-instructor rule. A copy of the waiver (including waiver justification) will be filed in the AF Form 4022. Additionally, each student will have one instructor who will monitor the student's progress throughout their training. 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.

1.12. Supplements. This AFI is a basic directive. Each MAJCOM or operational theater may supplement this AFI. These supplements will not be less restrictive than the basic document. MAJCOM/DOs initiate long-term waiver requests to the basic document. Specify long-term waiver approval authority, date, and expiration date in the appropriate MAJCOM supplement. Limit supplement information to unique requirements only.

1.12.1. Combined Operations. Use only the basic AFI for planning or operations involving forces from lead and user commands. Commanders may use approved MAJCOM supplement procedures with assigned and/or chopped forces provided these forces receive appropriate training and the duration is specified. Commanders should not assume or expect aircrews from another command to perform MAJCOM specific procedures from their supplements unless these provisions are met. Questions by aircrews, planners, and staff should be forwarded to the OPR.

1.12.2. Coordination Process. Forward MAJCOM approved supplements (with attached AF Form 673, Request To Issue Publication) to HQ AMC/DOT, 402 Scott Dr., Unit 3A1, Scott AFB IL, 62225-5302 (Electronic version E-Mail: AMCDOT@SCOTT.AF.MIL). AMC/DOT will provide a recommendation to HQ AMC/DO and forward to HQ USAF/XOOT for approval.

1.12.3. Prior to publication, units will send one copy of Chapter 7 - Local Procedures to the parent MAJCOM OPR for validation through their appropriate NAF for coordination. Send final copies to HQ USAF/XOOT, HQ AMC/DOT, parent MAJCOM, and the appropriate NAF.

2.1.3. All ACs will be dual seat qualified. Dual-seat qualified ACs must be capable of accomplishing AC duties from the left seat and copilot duties from the right (i.e., no requirement to be right-seat qualified in receiver AR).

2.1.3.1. Left Seat Initial Qualification Pilot (LSIQP) candidates will receive familiarization training in the right seat during Phase IA (contract training). Flight training will be conducted during Phase IB; however, units are authorized to delay right seat training to minimize impact on student throughput and con-

centrate on the individual's left-seat duties. In all cases, right seat training will be completed by the end of Phase II. Training will include, but will not be limited to, the following:

2.1.3.1.1. One mission where student will accomplish normal copilot duties during entire flight to include receiver AR.

2.1.3.1.2. Instrument approach, missed approach, and landing will be accomplished from the right seat if only one sortie is required.

2.1.3.2. Evaluation will be accomplished according to AFI 11-202, Volume 2. At minimum, inflight evaluation of a right seat approach and landing is required. No additional ground testing is required.

2.2. 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 in Table 2.1. Specific course prerequisite, entry qualifications, and other requirements are listed below and in Table 1.1.

2.2.1. KC-10 CPIQ – Co-Pilot Initial Qualification: Qualifies UPT graduate as KC-10 co-pilot (MC). Also includes those pilots that do not meet the requirements outlined in Paragraphs 2.2.2, 2.2.3, and 2.2.4. below.

2.2.2. KC-10 PIQFO – Pilot Initial Qualification FAIP/OSA: Qualifies prior FAIP (T-37, T-38, and T-1) or OSA aircraft commander (C-12,C-9,C-21,etc) as KC-10 Aircraft Commander (MP). Flying hour requirement is 1000 hours total time and 100 hours as an aircraft commander (excluding "other" time). This course is defined as a LSIQP course for Phase II training purposes.

2.2.3. KC-10 PIQMWS – Pilot Initial Qualification MWS: Qualifies prior MWS aircraft commander as KC-10 Aircraft Commander (MP). Flying hour requirement is 1000 hours total time and 100 hours as an aircraft commander (excluding "other" time). This course is defined as a LSIQP course for Phase II training purposes.

2.2.4. KC-10 PIQ2MWS – Same as paragraph 2.2.3 except course is lengthened to permit two aircraft commanders sufficient training to meet course requirements. KC-10 PIQFO students may not be scheduled for this class.

2.2.5. KC-10 FBP – Flight Engineer (Basic) Precourse: Provides required training for Senior Airman and above with no prior MWS experience to successfully complete KC-10 FIQ follow on. Requires BFE (Altus AFB) prerequisite.

2.2.6. KC-10 FIQ – Flight Engineer Initial Qualification: Qualifies prior fixed wing MWS Flight Engineer Senior Airman and above as 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 2.2.5.) as KC-10 Flight Engineer.

2.2.7. KC-10 BBQ – Boom Operator (Basic) Initial Qualification: Qualifies enlisted member with no prior MWS experience as KC-10 Boom Operator. Requires BBO (Altus AFB) prerequisite.

2.2.8. KC-10 BIQ – Boom Operator Initial Qualification: Qualifies prior KC-135 Boom Operator as KC-10 Boom Operator.

2.2.9. KC-10 BLQ – Boom Operator (Loadmaster) Initial Qualification: Qualifies prior Airlift Loadmaster or KC-135 BIQ graduate as KC-10 Boom Operator. This course will not be scheduled without AMC/DOT approval as KC-10 BBQ (see paragraph 2.2.8.) is preferred.

2.2.10. KC-10 SSF – See Paragraph 2.7.

2.2.11. KC-10 SSQ – See Paragraph 2.7.

2.4.1 Prior to commencing Phase IB flight training in the KC-10, each crew member will be administered an evaluation (Q-005 or Q-006 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.

2.7.5. All emergency procedures training and evaluation must be completed in the KC-10 simulator. Chapter 4 details recurring training requirements necessary to maintain basic qualification status.

2.7.6. School Quotas for Senior Officer courses are controlled by HQ AMC/DOT. These courses are scheduled according to need in cooperation with the ATS contractor. Training throughput requirements may affect availability of these courses. Requests for training should be forwarded to HQ AMC/DOT through the respective NAF/DOVT or AFRC/DOTA. HQ AMC/DOT will work in conjunction with these offices and HQ AMC/DPA and AFRC/DPT to finalize course approvals and schedules. These requests must be submitted a minimum of 45 days prior to requested start date. HQ AMC/DO will be final authority should a disagreement arise regarding eligibility.

Table 2.1. Initial Qualification Training Requirements (Phase IB).

Note	Ground Training Events	Code	P	CP	FE	BO	SS
	Flight Physical	PP01	1	1	1	1	1
	Physiological Training	PP11	1	1	1	1	1
	AFRC Associate Program Orientation Indoctrination	A016	1	1	1	1	1
	Regulation, Directive Knowledge, and Use	A017	P	P	P	P	P
	AC Responsibilities	A018	1				1
	Aircraft Field Trip	G025	P	P	P	P	P
7	Communications Procedures	G080	1	1	1		1
	IRC	G130	P	P			P
7	Aircraft Servicing	G190	F	F	P	F	
7	Initial Crew Resource Management	G231	B	B	B	B	B
	Local Area Survival	LS01	1	1	1	1	1
	Life Support Equipment	LS06	1	1	1	1	1
4	Aircrew Ground Egress Training	LS08	1	1	1	1	1
	Open Book Examination	Q001	1	1	1	1	1
	Closed Book Examination	Q002	1	1	1	1	1
2,3	ATD Evaluation	Q005	1	1	1	1	
2,3	Senior Staff Basic Qualification ATD Evaluation	Q006					1
	Basic Qualification Evaluation	Q007					1
Note	**Flight Training Events**	**Code**	**P**	**CP**	**FE**	**BO**	**SS**
	Formation Departure and Join Up	F010	P	P			
7	Formation	F020	P	P			
	AR Formation	F060	P	F			
	Tanker Rendezvous	N010	*P	*P			
	Rendezvous and AR EMCON 1	N011	*P	*P		*P	
	Rendezvous and AR EMCON 2	N012	*P	*P		*P	
7	Rendezvous and AR EMCON 3	N013	B	B	B	B	
7	Rendezvous and AR EMCON 4	N014	B	B	B	B	
	Tanker Alternate Rendezvous	N015	*P	*P			

	Tanker Rendezvous Overrun Procedures	N016	*P	*P			
	En Route Rendezvous	N020	P	P			
	Point Parallel Rendezvous (Tanker)	N030	*P	*P			
	Tanker Anchor Rendezvous and AR	N040	*P	*P			
	Receiver Rendezvous	N130	P	P			
	Receiver Alternate Rendezvous	N135	P	P			
	Receiver Rendezvous Overrun Procedures	N136	*P	*P			
	General Navigation	N160	*P	*P	P		*P
	Taxi Exercise	P005	P	F	B	F	P
	Airwork Exercise	P006	F	F			F
	Takeoff, Initial	P010	*P	*P			*P
	Takeoff, Night	P011	*P	*P			*P
	Takeoff, Gyro Mode	P012	*P	*P			*P
	Instrument Departure	P015	*P	*P	F		*P
7	Copilot Takeoff and Climb Duties	P018	*P	*P			
	Takeoff and Departure	P025			*P		
	Instrument Approach	P070	*P	*P	F		*P
	Holding Pattern	P071	*P	*P			*P
	Penetration (Published)	P072	*P	*P			*P
	En Route Descent and Penetration	P073	*P	*P			*P
	Approach and Landing, Full Stop	P074			*P		
	Instrument Approach (Auto and Coupled)	P080	*P	*P	F		*P
	Instrument Approach (Manual)	P090	*P	*P			*P
	Precision Approach	P100	*P	*P	F		*P
	ILS Approach	P101	*P	*P			*P
	ILS (Gyro Mode)	P102	*P	*P			*P
	Precision Approach Radar (PAR) (if available)	P103	P	P			P
	Nonprecision Approach	P110	*P	*P	F		*P
8	VOR and TACAN Procedures	P111	*P	*P			*P
5	TACAN, VOR, or Localizer Approach	P112	*P	*P			*P
	ASR Approach (if available)	P113	P	P			P
	RMI-only Approach (ADF or VOR)	P114	*P	*P			*P
	Backcourse LOC (if available)	P115	*P	*P			*P
	Circling Approach	P130	P	P			P
	Visual Traffic Pattern	P140	P	P			P
	Missed Approach (Auto)	P150	*P	*P			*P
	Missed Approach (Manual)	P160	*P	*P			*P
	Landing (Total)	P190	P	P			P
	Landing, Full Stop (Reverse Thrust)	P191	P	P			P
	Landing, Night	P192	P	P			P
	Landing, 50-Degree Flaps	P193	P	P			P
	Touch-and-Go Landing	P200	P	P	*P		P
7	HAVE QUICK Radio Procedures	P260	P	P			
7	SECURE RADIO Operation	P270	P	P			
	Supervision of Copilot Takeoffs, Landings, Touch-and-Gos, and AR	P320	P				
	Weight and Balance	P322			P		
6,7	Briefing and Control of Passengers	P340				P	
	Main Cabin Door Procedures (Departure and Arrival)	P350			F	P	
	Mission Planning and Briefing	P360	P	P	P	P	P

10	Preflight and Cockpit Preparation	P361	*P	*P	P	*P	*P
	Pre-Takeoff	P362			*P		
	Climb	P363			*P		
	Cruise	P364			P		
7	Autopilot-Off Cruise	P365	1	1			1
10	Checklist Procedures and Use	P366	*P	*P	*P	*P	*P
	Crew Coordination	P367	P	P	P	P	P
	Postflight	P368			P		
	Performance Knowledge and Use	P370	*P	*P	*P		*P
8	FMS Operation	P371	*P	*P	*P		*P
	Fuel Management and Conservation	P372	P	F	P		P
	Equipment Operation	P373	*P	*P	*P	*P	*P
	Manual Throttle Operation	P374			*P		
	Manual Pressurization	P375			P		
8	INS Operation	P376	*P	*P	*P		*P
	Radar Operation	P377	P	P			P
	Communications	P378	*P	*P	*P	*P	*P
7	L-Band SATCOM	P379			P		
11	Receptacle Equipped Day Fighter Certification	Q022				1	
11	Receptacle Equipped Night Fighter Certification	Q023				1	
	Flight Evaluation	AA01	1	1	1	1	
9	Receiver AR	R010	P	F	*P		
	Receiver AR, Indoctrination	R011		P			
9	Receiver AR, Day	R012	P	F			
9	Receiver AR, Night	R020	P	F			
7	Receiver AR, Heavyweight	R030	P	B	*P		
	Receiver AR Breakaway or Emergency Separation	R040	*P	*P	*P		
	Receiver AR, Tanker Autopilot-Off	R050	P	F			
	Tanker AR	R060	*P	*P	*P		
	Tanker AR Breakaway or Emergency Separation	R070	*P	*P	*P	*P	
	Tanker AR, Autopilot-Off	R080	P	F			
	Slow Speed Tanker AR	R090	*P	*P	*P		
	Day Contacts	R125				P	
	Night Contacts	R130				P	
	Tanker Manual Contacts	R140				P	
11	Fighter Contacts	R150				P	
7	Radio Silent Breakaway	R160	*P	*P	*P	*P	
7	Radio Silent AR	R165				P	
7	Tanker Heavyweight Offload	R170			*P		
	Radio Silent Visual Signals	R180	P	1		P	
	Drogue System Operation	R190	B	B	B	P	
	WARP System Operation	R195	F	F	F	*P	
7	AR Operations	R200			F		

NOTES:

1. Events preceded by asterisk (*) are trained to proficiency by the contractor in the appropriate ATD during Phase IA; however, proficiency in the ATD may in some cases not equate to full aircraft proficiency due to differences in the real-world flight environment. To ensure that transfer of training has occurred, the instructor should evaluate the student's proficiency and abilities in these events. At the discretion of the CCTS flight commander, proficiency need

not be demonstrated in flight. If the student's performance is unsatisfactory, the training contractor will be notified either through the critique at flight three or an additional critique sheet after flight three.

2. Must be completed prior to starting Phase IB training.
3. Will include the requirements of an instrument flight evaluation for all pilots.
4. May be accomplished in conjunction with the aircraft field trip (G025).
5. Student must demonstrate proficiency in one of these three approaches. If others are performed, they must be performed to "P" levels. If not flown, approaches will be trained to "B" level.
6. Proficiency must be demonstrated prior to passenger handling evaluation.
7. May be accomplished during Phase II if not accomplished in Phase I. Initial CRM (G231) is normally incorporated into all initial qualification courses.
8. Based on version of training (GPS or INS).
9. Student must be day receiver KC-135 proficient before proceeding to night AR. Student must demonstrate proficiency in KC-135 night AR. Proficiency in receiver refueling from a KC-10 tanker must also be demonstrated in either day or night conditions during Phase II training if not demonstrated in Phase IB.
10. Asterisk applies only to air refueling operator (ARO) station inspection, BOs preparation for contact and post AR (boom and drogue), AR, emergency and abnormal procedures checklists.
11. May be completed in Phase 1B or II. Units will not delay students in phase 1B for excessive periods in an attempt to get fighter contacts. In such cases, students may be trained and given checkrides with heavy receivers only. Certification will be documented on AF Form 4025, Summary/Close-Out Training Accomplishment Report and AF Form 1381, USAF Certification of Aircrew Training. Q022 and Q023 certification must be completed on separate sorties. Contacts can be completed in Phase IB or Phase II training. See paragraphs 3.2.6.1. and 5.6.1.

3.1. General Requirements. This chapter prescribes Mission Qualification Training (Phase II) requirements an individual must accomplish on completion of, or concurrently with, Phase IB training (initial qualification, requalification, or pilot upgrade training) to qualify individuals in units missions. For those crewmembers with limited prior experience, Phase IIB provides additional seasoning in those areas deemed mission critical to the KC-10. All crew members will complete mission qualification prior to entering other qualification or upgrade training.

3.1.1. Phase II training begins on the calendar date following completion of the applicable phase 1B flight check (AA01). See Table 1.3 and paragraph 3.2 for Phase II training time limitations.

3.1.2. Phase II training may be administered in conjunction with training required by other chapters of this volume; however, OG commanders must carefully weigh mission demands and requirements as well as student abilities.

3.1.3. Phase II training is not applicable for SSQ, SSF, or instructor upgrade courses.

3.1.4. Mission Ready (MR) individuals who transfer between units need only complete training that may differ dependent on unit's locations and missions. This training will include a supervised familiarization/ orientation flight and local flying area/associated hazards brief.

3.2. Mission Qualification Training (Phase II). Flight training will be conducted by KC-10 Instructors. (Phase IIB training may be with any MR crew member except MC or MF). Phase II training requirements are listed in Table 3.1. The training events listed may be accomplished during Phase IB. For continuation purpose, individuals will train at level D according to chapter 4 until completion of Phase II. Specific Phase II requirements and policy are listed below and in Table 3.1.

3.2.1. Graduates of course KC-10 CPIQ : Complete the requirements as outlined in Table 3.1. May fly with any IP or MP as FC on local training sorties.

3.2.2. Graduates of courses KC-10 PIQFO, PIQMWS, and PIQ2MWS: The object of Phase II training for LSIQPs is to provide graduated exposure to the duties of a KC-10 aircraft commander prior to certification. The LSIQP can perform left or right seat duties with any MP (as certified : see paragraph 3.2) or IP (EXCEPTION: With an MP in the right seat, LSIQPs may not perform left seat touch-and-go landings) There are two parts to this training, Phase IIA & IIB.

3.2.2.1. Phase IIA: Complete the requirements of Table 3.1 (except R030). May fly with any IP or MP (as certified-see paragraph 3.2) as FP on local training sorties. Log FP time.

3.2.2.1.1. Upon completion of Phase IIA, the LSIQP will be counted as a Mission Ready Copilot for SORTS and TRP purposes.

3.2.2.2. Phase IIB : The LSIQP gains additional experience flying with other MPs and IPs. ATPRs should be completed but are not required. Accomplish R030 if not completed in Phase IIA. During this period the LSIQP can fill the MC position on any crew including operational deployments. Log FP or MC time in accordance with crew makeup.

3.2.2.3. The LSIQP must be Phase IIB complete and have 150 hours of KC-10 time after the Phase 1B checkride (AA01) before being certified as an Aircraft Commander unless waived by the OG/CC.

3.2.2.3.1. If period to final SQ/CC certification as Aircraft Commander exceeds 365 days from beginning of Phase IIA, downgrade individual to MC. KC-10 PUP is required for subsequent MP qualification (not applicable for AFRC).

3.2.2.4. The LSIQP may not fly in the seat with an MC or another LSIQP until certified as an Aircraft Commander.

3.2.3. Graduates of course KC-10 PUP : complete the requirements as outlined in Table 3.1. May not fly as Aircraft Commander until certified by SQ/CC.

3.2.4. Graduates of course KC-10 FBP/FIQ : The object of Phase II training for FBPs is to provide graduated exposure to the duties of a KC-10 flight engineer prior to Mission FE (MF) certification. There are two parts to this training, Phase IIA & IIB.

3.2.4.1. Phase IIA: Complete the requirements of table 3.1. May fly local training sorties under IF supervision, log FF time.

3.2.4.2. Phase IIB: The FBP gains additional experience. May fly local training sorties unsupervised, log FF time. For off station missions, must complete an additional M261 and M262. ATPRs must be completed. The following apply:

3.2.4.2.1. During Phase IIB the FBP may fill the 2nd engineer requirement for augmentation as outlined in AFI 11-2KC-10 Vol 3 for cargo missions only provided the other engineer is an IF.

3.2.4.2.2. During Phase IIB the FBP may not fill the engineer requirement for a basic crew except local sorties as outlined in 3.2.4.2. above.

3.2.4.3. The FBP must complete Phase IIB and have 150 hours of KC-10 time after the Phase 1B checkride (AA01) before being declared an MF unless waived by the OG/CC.

3.2.5. Graduates of course KC-10 FIQ: complete the requirements as outlined in Table 3.1. May Fly local sorties unsupervised, log FF time.

3.2.6. Graduates of course KC-10 BBQ: The object of Phase II training for BBQs is to provide graduated exposure to the duties of a KC-10 Boom Operator prior to permitting solo off-station cargo missions. There are two parts to this training, Phase IIA & IIB.

3.2.6.1. Phase IIA: Complete the requirements of table 3.1. Complete fighter checkout (Q022 & Q023) if not accomplished in Phase 1B. May fly local training sorties unsupervised, log FB time.

3.2.6.1.1. The BBQ may be declared an MB at the completion of Phase IIA.

3.2.6.2. Phase IIB: The BBQ gains additional experience. ATPRs are not required.

3.2.4.2.1. May not fly a cargo mission as a single boom until accomplishing 5 additional P300 cargo loads.

3.2.7. Graduates of course KC-10 BIQ: Complete the requirements as outlined in Table 3.1. May fly local training sorties unsupervised during Phase II, log FB time.

3.2.8. Graduates of course KC-10 BLQ: Complete the requirements as outlined for BBQ in paragraph 3.2.6.

3.2.9. Graduates of courses KC-10 PRQ, FRQ, BRQ (to include instructor requals): Complete the requirements as outlined in Paragraph 1.7.4. and table 3.1.

Table 3.1. Mission Qualification Training Requirements.

Note	Short Title	Ground Training Events	Code	P	CP	FE	BO
4		Aircraft Marshalling Training and Examination	G002	1	1	1	1
4	CWD	Chemical-Biological Warfare Defense Training	G010	1	1	1	1
		Tactics	G060	1	1	1	1
4	AIT	Aircrew Intelligence	G070	1	1	1	1
2,4	CEO	Communications Procedures	G080	1	1	1	
4		Anti-hijack	G090	1	1	1	1
4,9	LAC	Laws of Armed Conflict	G100	1	1	1	1
4,9	FP	Force Protection	G110	1	1	1	1
		ISOPREP Review	G120	1	1	1	1
8		TERPS	G150			1	1
4	HZC	Hazardous Cargo	G182	1	1		1
2	AT	Aircraft Servicing	G190	F	F	P	F
4	CAT	Combat Arms Training	G280	1	1	1	1
4,9	CST	Combat Survival Training	LS02	1	1	1	1
4,9	WST	Water Survival Training	LS03	1	1	1	1
4	ACDT	Aircrew Chemical Defense Training	LS04	1	1	1	1
7		Egress with ACDE	LS05	1	1	1	1
9		Initial Combat Survival Training	S-V80-A	1	1	1	1
9		Initial Water Survival Training	S-V90-A	1	1	1	1
Note	**Short Title**	**Flight Training Events**	**Code**	**P**	**CP**	**FE**	**BO**
2		Formation	F020	P	P		
		Deployment Mission Planning	M260	P	P	P	
		Airlift Deployment Operations	M261	P	P	P	
		Fighter Deployment Operations	M262	P	P	P	P
2		Rendezvous and AR EMCON 3	N013	B	B	B	B

2		Rendezvous and AR EMCON 4	N014	B	B	B	B
3		Holding Pattern	P071			F	
3		Penetration (Published)	P072			F	
3		En Route Descent and Penetration	P073			F	
3		ILS Approach	P101			F	
3		ILS (Gyro Mode)	P102			F	
3		PAR	P103			F	
3		VOR and TACAN Procedures	P111			F	
3		TACAN, VOR, or Localizer Approach	P112			F	
3		ASR Approach	P113			F	
3		RMI-only Approach (ADF or VOR)	P114			F	
3		Backcourse LOC	P115			F	
3		Circling Approach	P130			F	
3		Missed Approach (Auto)	P150			F	
3		Missed Approach (Manual)	P160			F	
2		HAVE QUICK Radio Procedures	P260	P	P		
2		SECURE RADIO Operation	P270	P	P		
		ACDTQT	P280	1	1	1	1
		Alert Start	P290	B	B	B	B
		Cargo Loading	P300				P
2		Briefing and Control of Passengers	P340				P
2		Autopilot-Off Cruise	P365	1	1		
2		L-BAND SATCOM	P379			P	
2,1		Receptacle Equipped Day Fighter Certification	Q022				1
2,1		Receptacle Equipped Night Fighter Certification	Q023				1
2,6		Receiver AR, Heavyweight	R030	P	B	P	
2,5		RADIO SILENT Breakaway	R160	P	P	P	P
2		RADIO SILENT AR	R165				P
2		Tanker Heavyweight Offload	R170			P	
2		Drogue System Operation	R190	B	B	B	P
3		AR Operations	R200			P	

NOTES:

1. Certification will be documented on AF Form 4025, Summary/Close-Out Training Accomplishment Report and AF Form 1381, USAF Certification of Aircrew Training. Q022 and Q023 certification must be completed on separate sorties. Contacts can be completed in Phase IB or Phase II training. See Paragraph 5.6.1.
2. Required only if not accomplished during Phase IB training.
3. Required for FEs if not accomplished during Phase IB training.
4. If "comparable training" accomplished in another weapons system is current according to MAJCOM instructions, mission qualification training for the following events is not required: LS04, G010, G070, G100, G110, and G280. "Comparable training" accomplished in commands other than AMC must be approved by the MAJCOM OPR according to attachment 1. As indicated, crossflow pilots are required to take Egress (LS08), Tactics (G060), ISO-PREP (G120), Aircraft Servicing (G190), and CRM (G231) since the workshop covers aircraft specific CRM issues during the initial qualification course.
5. At the assigned instructor's discretion, proficiency need not be demonstrated inflight if trained to proficiency in SIM and BOT.
6. Direct IP supervision required if not already deemed proficient in Phase IB.
7. Accomplish concurrently with P280
8. TERPS is incorporated into Phase IA for flight engineers.

9. Completion of S-V80-A, S-V90-A, and initial life support equipment training during formal school establishes the due date (based on date of first completed course) for recurring Combat Survival (LS02) and Water Survival (LS03) training. Completion of S-V80-A establishes the due date for recurring Law of Armed Conflict (G100), and Force Protection (G110) training.

4.4.1.4. Senior Officer Ground Continuation Training Requirements. Senior officers and all other crew members maintaining BMC and BAQ (FTL E) in the KC-10 are required to complete, as a minimum, the courses listed in Table 4.4. Senior officers maintaining MR status will comply with Table 4.2.

4.4.2.1. IPs may fly in either seat. Additionally, aircraft commanders will be dual-seat qualified. These dual-seat qualified individuals must accomplish recurring qualification checks according to AFI 11-202, Volume 2 or MAJCOM publications. Copilots may not fly in the left seat unless under direct IP supervision.

4.4.2.2. Dual-seat aircraft commanders may accomplish training events in either seat.

4.4.2.3. Training events that are required in Phase III (continuation) for both pilots and copilots may be accomplished in either seat and logged toward the assigned crew position training event requirement.

4.4.2.4. ATD Credit for Training Event Requirements. Training events listed in Table 4.7 may be accomplished and credited in the KC-10 simulator or BOT for continuation training or evaluation. Credit may also be given for these events during rechecks or training assigned as a result of less than qualified activity. The individual ATD must complete the DET 1's AMCAOS SIMCERT program. The certification process will be in accordance with the training contract and pertinent portions of AFR 36-2211, Guide for Management of Air Force Training Systems. The accomplishment of training requirements in the KC-10 simulator or BOT is not intended to replace flying time allocated for crew training. It is intended to augment and enhance flying training in the aircraft. Because the training devices are not "Level C+" certified, only one of each event listed may be credited in any one simulator or BOT training period (Exception: R140 and P070--2 maximum). A simulator training period is defined as one of the 2 days required that constitutes the quarterly simulator refresher. A BOT period is defined as a 2.5 hour block of training utilizing the KC-10 BOT. Actual aircraft flight must be the primary means of accomplishing these listed training events and ensuring crew members attain and maintain aircraft qualification and MR status.

Table 4.1. Continuation Training Definitions.

1. Use the following definitions for the regular frequency of continuation training:
1.1. **B—*Biennial***. Accomplished every 2 calendar years. Initial accomplishment establishes a currency reference year.
1.2. **A—*Annual***. Accomplished once each calendar year. Initial accomplishment establishes a currency reference year.
1.3. **SA—*Semiannual.*** Accomplished once each 6-month training period.
1.4. **T—*Triennial***. Accomplished every 3 calendar years. Initial accomplishment establishes a currency reference year.
1.5. **Q—*Quarterly***. Accomplished twice each training period, once in the first 3 months and once in the second 3 months.
1.6. **M—*Monthly***. Accomplished each calendar month.
1.7. **A/R—*As Required***.
1.8. **C—*Cycle***. In conjunction with qualification evaluation (i.e., every 17 months).
1.9. ***Rolling***. Accomplished once per number of days specified (i.e., 120 = once every 120 calendar days)

Table 4.2. Ground Continuation Training Requirements.

Notes	Training Event	Code	P/CP 1	P/CP 2	P/CP 3	FE 1	FE 2	FE 3	BO 1	BO 2	BO 3
	Chem and Bio Warfare Defense	G010	B	B	B	B	B	B	B	B	B
	Tactics	G060	T	A	A	T	A	A	T	A	A
	Aircrew Intelligence Training	G070	A	A	A	A	A	A	A	A	A
	Communications Procedures	G080	A	A	A	A	A	A			
	Antihijacking	G090	B	B	B	B	B	B	B	B	B
6	Laws of Armed Conflict	G100	A	A	A	A	A	A	A	A	A
6	Force Protection	G110	A	A	A	A	A	A	A	A	A
6	ISOPREP Review	G120	180	180	180	180	180	180	180	180	180
	Instrument Refresher Course	G130	C	C	C						
	TERPS	G150				A	A	A	T	B	A
	Hazardous Cargo Training	G182	A	A	A				A	A	A
	Aircraft Servicing	G190	T	B	A	T	B	A	T	B	A
7	Aircraft Systems Refresher	G220				Q	Q	Q	A	A	A
3	Crew Resource Management (CRM)	G230	A	A	A	A	A	A	A	A	A
3	CRM Simulator	G240	A	A	A	A	A	A	A	A	A
4	Refresher Simulator	G250	Q	Q	Q	Q	Q	Q			
	Boom Operator Trainer	G255							Q	Q	Q
2	Tactics Simulator	G270	A	A	A	A	A	A			
5,10	Combat Arms Training (CAT)	G280	B	B	B	B	B	B	B	B	B
	Combat Survival Training	LS02	T	T	T	T	T	T	T	T	T
	Water Survival Training	LS03	T	T	T	T	T	T	T	T	T
	Aircrew Chemical Defense Training (ACDT)	LS04	B	B	B	B	B	B	B	B	B
1	Aircrew Ground Egress Training	LS08	T	T	B	T	T	B	T	T	B
1	Flight Physical	PP01	A	A	A	A	A	A	A	A	A
1,8,9	Physiological Refresher	PP11	T	T	T	T	T	T	T	T	T
6	Flight Records Review	RR01	A	A	A	A	A	A	A	A	A

NOTES:

1. Mandatory grounding item on expiration date; individual will not fly until required training is accomplished. Flight Physical expires after the last day of the birth month.
2. Accomplished concurrently with refresher simulator.
3. G230 and G240 are not required if Phase IA qualification or instructor upgrade training was accomplished during that year.
4. G250 is not required if Phase IA qualification or any upgrade training was accomplished during that quarter. Instrument Simulator (G260) requirement is integrated into KC-10 simulator training.
5. G280 expires 2 years after date accomplished.
6. These events do not effect mission ready status as defined by this regulation.
7. For boom operators, accomplished during G255.
8. Physiological refresher (PP11) expires 3 years after the last day of the month in which accomplished.
9. PP11 currency is 5 years for accomplishment after 1 Oct 98.
10. G280 currency for ARC personnel is Triennial and expires 3 years after date accomplished.

Table 4.3. Deleted

Table 4.4. Ground Training Level 4 Continuation Training Requirements (NMR Senior Officers, BMC, and BAQ).

Notes	Event	Code	Frequency
	Instrument Refresher Course (IRC) (Pilots Only)	G130	C
	Crew Resource Management	G230	A
1	Aircraft Ground Egress Training	LS08	T
1	Flight Physical	PP01	A
1,2,3,4	Physiological Training	PP11	T
	Flight Records Review	RR01	A

NOTES:

1. Mandatory grounding item on expiration date; individual will not fly until required training is accomplished. Flight Physical expires after the last day of the birth month.
2. Physiological refresher expires 3 years after the last day of the month in which accomplished.
3. Rated officers with greater than 25 years time-in-service currency is 5 years.
4. PP11 currency is 5 years for accomplishment after 1 Oct 98.

Table 4.5. Flight Surgeon Ground Continuation Training Events.

Notes	Event	Code	Frequency
2	Chemical-biological defense training	G010	B
2	Anti-hijack	G090	B
2	Laws of armed conflict	G100	A
2	Force Protection	G110	A
	ISOPREP review	G120	180
	CRM (One time requirement in primary assigned aircraft)	G230	1 time
2	Combat survival	LS02	T
2	Water survival	LS03	T
2	Aircrew chemical defense training	LS04	B
1	Aircrew ground egress training	LS08	B
1	Flight physical	PP01	A
1,3	Physiological training	PP11	T
	Written Exam	Q001	C
	Flight records review	RR01	A

NOTES:

1. Mandatory grounding item. Flight Physical expires after last day of the birth month. Physiological refresher expires 3 years after the last day of the month in which accomplished.
2. Flight Surgeons without a mobility requirement do not need to accomplish this training
3. PP11 currency is 5 years for accomplishment after 1 Oct 98.

Table 4.6. Flying Continuation Training Semiannual Requirements (KC-10).

			Pilot						Copilot					Flight Engineer					Boom Operator					
Note	Event	Code	A	B	C	D	E	CUR	A	B	C	D	CUR	A	B	C	D	CUR	A	B	C	D	E	CUR
	Formation Departure and join-up	F 010	2	2	2	2		Q	2	2	2	2	Q											
	Formation	F 020	3	3	4	5		Q	3	3	4	5	Q											
	Large formation departure and join-up	F 030	1	1	1	1			1	1	1	1												
	Large formation	F 040	1	1	1	1			1	1	1	1												
	AR formation	F 060	2	2	2	2		Q	2	2	2	2	Q											
	Proficiency sortie	M 010	2	2	2	2			2	2	2	2		3	4	6	8	60	2	2	2	2	1	
	Unit-specific training sortie	M 020	6	6	6	7			6	6	6	7												
4	Overseas sortie	M 030	1	2	2	2			2	2	2	2												A
8	INS Operation	N 001						Q					Q					Q						
8	FMS Operation	N 002						M					M					60						
	Tanker rndz	N 010	4	5	6	7		Q	4	5	6	7	Q											
	On course and en route rndz	N 020	1	1	1	1			1	1	1	1												
	Point parallel rndz	N 030	2	2	2	2			2	2	2	2												
	Tanker anchor rndz and AR	N 040	1	1	1	1			1	1	1	1												
	Receiver rendezvous	N 130	4	4	4	4			4	4	4	4												
	Taxi exercise	P 005	2	2	2	2																		
	Takeoff—initial	P 010	2	4	6	7	2	Q	2	4	6	7	Q											
	Takeoff	P 020	12	18	24	30	6	M	12	18	24	30	M											
9	Spiral Up Departure	P 053	A	A	A	A																		
9	VFR Overhead	P 061	A	A	A	A																		
9	Random Steep Arrival	P 064	A	A	A	A																		
9	Curvilinear Approach	P 065	A	A	A	A																		
	Instrument approach	P 070	15	20	26	32	6	M	15	20	26	32	M											
	Instrument approach (auto and coupled)	P 080	2	2	2	2	2		2	2	2	2												
	Instrument approach (manual)	P 090	4	5	6	7			4	5	6	7												
	Precision Appr	P 100	6	6	8	10	2		6	6	8	10												
	Nonprecision approach	P 110	6	6	8	10			6	6	8	10												
	NDB approach	P 116	2	2	2	2			2	2	2	2												
	GPS Approach	P 117	2	2	2	2			2	2	2	2												
	Circling	P 130	2	2	2	2			2	2	2	2												
	Visual traffic pattern	P 140	2	2	2	2			2	2	2	2												
	Missed approach (auto)	P 150	2	3	3	3			2	3	3	3												
	Missed approach (manual)	P 160	2	3	3	3			2	3	3	3												
	Landing	P 190	12	18	24	30	6	M	12	18	24	30	M											
7	Landing, night	P 192	2	2	2	2	2	Q	2	2	2	2	Q											
6	Touch -and-go landing	P 200						30																
	HAVE QUICK radio procedures	P 260	2	2	2	2			2	2	2	2												
	SECURE RADIO operation	P 270	2	2	2	2			2	2	2	2												
	ACDTQT	P 280	A	A	A	A			A	A	A	A		A	A	A	A		A	A	A	A		
1	Cargo loading	P 300																					1	120
	Boom Operator APU Start	P 332																						A
2	Receiver AR	R 010	4	5	6	7		M						2	2	4	4							
2	Receiver AR (Night)	R 020	1	2	3	3																		
	Receiver AR (Heavy Weight)	R 030						A						1	1	2	2	SA						
	Rcvr AR bkwy and emerg separation	R 040	1	1	1	1			1	1	1	1												
	Receiver AR tanker autopilot off	R 050	2	2	2	2																		
	Tanker AR	R 060	4	5	6	7		Q	4	5	6	7	Q	2	2	4	4							
	Tanker AR bkwy procedures	R 070	2	2	2	2			2	2	2	2												
	Tanker AR autopilot off	R 080	1	1	1	1			1	1	1	1												
	Slow speed tanker AR	R 090	1	1	1	1			1	1	1	1												
3	Contacts	R 120																	15	18	24	30	8	45
	BOT Contacts	R 122																	10	15	20	25	10	
	Night contacts	R 130																	4	5	6	7	2	
	Tanker manual contact	R 140																	3	3	4	5	2	
	Fighter contact	R 150																	2	2	6	10	2	180
	Tanker heavyweight offload	R 170												1	1	2	2	SA						

NOTES:

1. P 300 currency is Semiannual for MAJCOM, NAF, AMOG, AMWC, and Det 1 AMCAOS staff.
2. Senior staff officers who qualified through a Senior Staff course are not permitted to refuel with passengers onboard the aircraft.
3. R 120 currency is Quarterly for personnel identified in note 1.
4. Two overseas sortie may be credited if total mission time exceeds 30 flight hours.
5. Currency events do not apply to FTL E crew members.
6. P200 currency for non-instructors who are touch-and-go certified is 30 days. There is no touch-and-go currency for IPs. Loss of currency does not result in loss of mission ready status.
7. MAJCOMS may substitute “180” for “Q” in the currency (CUR) column for P192 at their discretion. However, substitution of “SA” for “Q” is not authorized.
8. Applies only to dual qualified (INS/GPS) crewmembers. Loss of currency in one type of aircraft does not effect mission ready status in the other.

9. Only required for MR status when certified.

Table 4.7. ATD Creditable Training Events.

Event	Code	Simulator	BOT	CPT
Crew Resource Management	G240	X		
Two-Engine Ferry Continuation Training	M240	X		
INS Operation	N001	X		
FMS Operation	N002	X		
Tanker Rendezvous	N010	X		
Rendezvous and AR EMCON 1	N011	X	X	
Rendezvous and AR EMCON 2	N012	X	X	
Tanker Alternate Rendezvous	N015	X		
En Route Rendezvous	N020	X		
Point Parallel Rendezvous (Tanker)	N030	X		
Tanker Anchor Rendezvous and AR	N040	X		
Receiver Rendezvous	N130	X		
Airwork Exercise and Inflight Demonstrations	P006	X		
Takeoff, Initial	P010	X		
Instrument Departure	P015	X		
Takeoff	P020	X		
Takeoff and Departure	P025	X		
Spiral Up Departure	P051	X		
VFR Overhead	P061	X		
Random Steep Approach	P064	X		
Curvilinear Approach	P065	X		
Instrument Approach	P070	X		
Approach and Landing, Full Stop (FE Only)	P074	X		
Instrument Approach (Auto and Coupled)	P080	X		
Instrument Approach (Manual)	P090	X		
Precision Approach	P100	X		
ILS Approach	P101	X		
ILS Gyro Mode	P102	X		
Nonprecision Approach	P110	X		
VOR and TACAN Procedures	P111	X		
TACAN, VOR, or Localizer Approach	P112	X		
RMI-only Approach (ADF or VOR)	P114	X		
NDB Approach	P116	X		
GPS Approach	P117	X		
Missed Approach (Auto)	P150	X		
Missed Approach (Manual)	P160	X		
ACDTQT	P280	X	X	
Alert Start	P290	X	X	X
Instructor and Evaluator Duties and Techniques	P310	X	X	
Receiver AR (FE Only)	R010	X		
Receiver AR, Heavyweight (FE Only)	R030	X		
Receiver AR Breakaway or Emergency Separation	R040	X		
Tanker AR	R060	X		
Tanker AR Breakaway or Emergency Separation	R070	X	X	
Slow Speed Tanker AR	R090	X		

Event	Code	Simulator	BOT	CPT
BOT Contacts	R122		X	
Tanker Manual Contacts	R140		X	
Radio Silent Breakaway (BO Only)	R160		X	
Tanker Heavyweight Offload	R170	X		

5.1 General Requirements. This chapter prescribes upgrade training programs and requirements for KC-10 Instructors (all crew positions) and Aircraft Commanders (AC). Upgrade 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. This chapter also prescribes requirements for special qualifications and certifications that aircrew members earn after completion of formal training programs.

5.1.1 In Unit Upgrade. In unit upgrade is not applicable for KC-10 training.

5.1.2. Instructor Requirements. A qualified instructor of like specialty must supervise all flight training conducted under this chapter. During AC upgrade 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.

5.1.3. The training and upgrade folder of individuals undergoing training under this chapter must be reviewed by the instructor prior to each mission briefing for each sortie. Areas that were previously identified unsatisfactory or unsafe must be reviewed and corrective measures discussed in detail with the student. In coordination with the CCTS chief, the instructor will ensure that the training contractor is apprised of less than satisfactory activity of a student undergoing Phase IB training. If appropriate, additional academic and ATD training may be coordinated and scheduled with the training contractor.

5.1.4. Individuals formally entered into upgrade training will be removed from continuation training and will not be scheduled to perform alert duty; however, individuals remain an MR resource for real-world, non-exercise, non-operational readiness inspection (ORI) generation purposes. With OG/CC approval, unit commanders may remove individuals from training to meet real world requirements (units will forward memo authorizing removal to AMC/DOTK for info). In such cases, individuals revert to prior qualification as long as their last checkride has not expired. Currencies revert to previous accomplishments. Events performed to a P level in Phase I may be counted if required.

5.1.5. Unless specifically prohibited, upgrade training may be administered on operational missions provided the mission responsibility rests with the instructor and training will not interfere with mission accomplishment.

5.1.6. Upgrade training quotas are managed by AMC/DOTK and AFRC/DOT. No later than 45 days prior to class start, wing or group DOTs will forward names and SSNs to DOTK, (email KC10PFT@SCOTT.AF.ML) AMC/DOTF or AFRC/DPTF (for entry into TMS) and unit MPFs. Quotas with no names assigned 45 days prior will be subject to change or cancellation. Further, after initial notification, the wing or group DOT will report any changes, such as adjustments to projected upgrade date, qualification or elimination from training.

5.1.7. Units will insure ground training currency events that result in grounding (see table 4.2) do not expire during student training. Currency for these events must cover the scheduled period of Phase 1 training prior to starting upgrade training.

5.2 Aircraft Commander. Unit commanders select AC upgrade candidates based on upgrade potential, retainability, and mission requirements. Flying time prerequisites required for upgrade are based on a copilot having gained knowledge and judgment required to effectively accomplish unit missions. Unit commanders must ensure continuation training programs emphasize these areas. Flying experience should include left-seat time prior to entering formal school upgrade training. AC candidates must have an in-depth knowledge of systems, procedures, and instructions before entering the formal upgrade program. Specific course prerequisites, entry qualifications, and other requirements are listed below and in table 5.1.

5.2.1. Left Seat Initial Qual Pilots: LSIQPs will qualify as Aircraft Commander in accordance with chapter 2 of this regulation.

5.2.2. KC-10 PUP – Pilot Upgrade Program (PUP): Trains currently qualified KC-10 copilots who have been designated by the unit commander for upgrade to AC. Flying hour requirement is 1200 hours total and 350 hours in the KC-10.

5.2.2.1. Units will insure that PUPs have ready access to items required by A017, Instructions and Directive Orientation, prior to commencing PUP training.

5.2.2.2. With squadron commander approval, qualified copilots (within 90 days of entering Phase IA contractor training for PUP) may be allowed to occupy the left seat on training local missions provided they are under direct IP supervision and passengers are not carried. Within this time period, copilots occupying left seat will be considered in upgrade training and will log UP time on AFTO Form 781 for all time spent in the left seat.

5.2.2.3. Graduates of KC-10 PUP will be designated NMR aircraft commanders. NMR aircraft commanders will accomplish aircraft commander continuation training requirements (training level assigned by squadron commander). MR training will be in accordance with paragraph 3.2.3.

5.2.2.4. All ACs will be dual seat qualified. Dual-seat qualified ACs must be capable of accomplishing AC duties from the left seat and copilot duties from the right (i.e., no requirement to be right-seat qualified in receiver AR).

5.2.2.4.1. Copilots upgrading to AC will retain their right-seat qualification following completion of upgrade training.

5.2.2.4.2. Evaluation will be accomplished according to AFI 11-202, Volume 2. At minimum, inflight evaluation of a right seat approach and landing is required. No additional ground testing is required.

5.4. Aircrew Instructor Program. Courses are designed to teach selected crew members fundamentals and concepts of instructing. Instructor candidates will be selected based on experience, judgment, ability to instruct, flying skills, and technical knowledge.

5.4.1. For ground and flight training requirements, all initial instructor upgrade candidates will complete training on the principles of instruction at the appropriate formal school. KC-10 instructor upgrade training course is designed to provide highly qualified crew members training in the fundamentals and concepts of instruction in order to qualify them as flight instructors. The overall goal of the program is to provide an "instructor methodology" oriented curriculum balanced with advanced instruction in aircraft performance, aerodynamics and aircraft characteristics, aircraft operations, and miscellaneous areas related to each crew position. Instructor techniques as well as duties and responsibilities are stressed while the instructor-candidate's job knowledge and flight skills are sharpened. Two instructors tracks are available. Instructor candidates who have previously attended a formal Air Force fixed-wing instructor

course will attend Track II course. All other instructor candidates will attend the full Track I training course. Units may mix Track I and Track II candidates in the same class. Track II candidates will join the class at a later start date.

5.4.2. The KC-10-18 instructor training program provides a combined course for each crew position and will qualify a candidate of any specialty as a ground instructor, or an inflight instructor. Contractor training will be accomplished according to Air Force-approved course material and training device scenarios.

5.4.3. Contractor training will be completed prior to beginning the Air Force administered flight phase of instruction.

5.4.4. Pre-course materials will be provided by the contractor to the unit CCTS 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.

5.4.4.1. First day activities will include a pre-course test on the material covered in the workbook. Results of the test will be used to assist contractor instructors during assignment of demonstration-performance presentations.

5.4.5. Specific course prerequisites, entry qualifications, and other requirements are listed below and in table 5.1. All instructor candidates will be trained to a level of proficiency that will ensure their ability to instruct and supervise student activity. Successful completion of ground and flight requirements, including completing an AFI 11-202, Volume 2, as supplemented, evaluation, qualifies the individual to be placed in instructor status.

5.4.5.1. KC-10 PIC – Pilot Instructor Course: Qualifies current and qualified KC-10 AC as a KC-10 IP. Flying hour requirement is 1500 hours total time and 300 hours in the KC-10 or 1800 hours total time and 150 hours in the KC-10 provided the individual has one year or more MWS instructor experience in a multiengine aircraft. Additional requirements are:

5.4.5.1.1. Individuals should have at least 6 months of experience as a KC-10 AC.

5.4.5.1.2. Commanders will ensure that all AC certifications outlined in paragraph 5.6 are complete prior to selecting an individual for KC-10 PIC.

5.4.5.1.3. The wing or group commander may authorize pilots that demonstrate exceptional performance to be entered into the upgrade program with less than required KC-10 experience. Total flying experience requirements must still be met.

5.4.5.2. KC-10 FIC – Flight Engineer Instructor Course: Qualifies current and qualified KC-10 FE as a KC-10 IF. Flying hour requirement is 1500 hours total time and 300 hours in the KC-10 or 1800 hours total time and 150 hours in the KC-10 provided the individual has one year or more MWS instructor experience in a previous aircraft.

5.4.5.3. KC-10 BIC – Boom instructor Course: Qualifies current and qualified KC-10 MB as a KC-10 IB. Flying hour requirement is 1500 hours total time and 300 hours in the KC-10 or 1800 hours total time and 200 hours in the KC-10 provided the individual has had previous experience as a KC-135 Instructor Boom Operator.

5.6. Special Qualifications and Certifications: Certain KC-10 aircrew qualifications and certifications are trained after completion of formal qualification programs. Special qualifications and certifications may require an evaluation or only an AF Form 1381 entry. These programs are usually taught at the line level by Air Force instructors of like specialty.

5.6.1. Fighter Contact Certification.

5.6.1.1. Training Program: Q022, Q023, Day and Night Receptacle Equipped Fighter Certification, will be documented on AF Form 4025, Aircrew Summary/Close-Out Training Accomplishment Report and AF Form 1381, USAF Certification of Aircrew Training. Q022 and Q023 certification must be completed on separate sorties. Contacts can be completed in Phase IB or Phase II training.

5.6.5. Large Formation Certification. The squadron commander is responsible for developing a large formation qualification training program for all pilots. FEs do not require training. See attachment 2 (F030) in this volume for requirements.

5.7. Differences Qualifications: The KC-10 is entering a period of numerous modifications to keep pace with changing world airspace requirements and aircraft reliability issues. These modifications are managed by the aircraft Systems Program Office (SPO) at Tinker AFB in conjunction with AMC XP and DO. DOT and DOV review each modification and set training and standards policy for each modification based on experience, FAA requirements, AFIs , AFRC, and unit input. Direction for each program will originally come from HQ AMC/DOT and DOV in message format. These training programs may involve the ATS contractor depending on timing and simulator modification status. Some modifications will be smaller in nature and be taught by other means such as CBT, briefings, and familiarization flights. The checkride or certification requirements for each modification will be determined by HQ AMC/DOV after thorough review of the training program and modification impacts to operations.

5.7.1. GPS/FMS Differences Training. See Paragraph 2.5 and Table 2.2 of this volume for requirements.

Table 5.1. Upgrade Training Requirements.

Note	Ground Training Events	Code	PUP	IP	IF	IB
	Instructor Academic Training	A010		1	1	1
	AFRC Associate Program Orientation Indoctrination	A016	1			
	Regulation, Directive Knowledge, and Use	A017	P	P	P	P
	AC Responsibilities	A018	1			
	Instructor Pre-Course Exercise (Workbook)	A044		1	1	1
	Aircraft Field Trip	G025		P	P	P
	IRC	G130	P	P		
7	Aircraft Servicing	G190	F		P	
11	Crew Resource Management	G231	B			
11	Instructor/Evaluator CRM	G232		B	B	B
4	Aircrew Ground Egress Training	LS08		P	P	P
	Open Book Examination	Q001	1	1	1	1
	Closed Book Examination	Q002	1	1	1	1
2,3	ATD Evaluation	Q005	1	1	1	1
Note	Flight Training Events	**Code**	**PUP**	**IP**	**IF**	**IB**
	Formation Departure and Join Up	F010	P	P		
7	Formation	F020	P	P		
	Large Formation Departure and Join Up	F030		B		
	AR Formation	F060	P	P		
	Deployment Mission Planning	M260		B	B	
	Airlift Deployment Operations	M261		B	B	
	Fighter Deployment Operations	M262		B	B	B
	Tanker Rendezvous	N010	*P	*P		
	Rendezvous and AR EMCON 1	N011	*P	B		B
	Rendezvous and AR EMCON 2	N012	*P	B		B
7	Rendezvous and AR EMCON 3	N013	B	B		B
7	Rendezvous and AR EMCON 4	N014	B	B		B
	Tanker Alternate Rendezvous	N015	*P	*P		
	Tanker Rendezvous Overrun Procedures	N016	*P	*P		
	En Route Rendezvous	N020	P	*P		
	Point Parallel Rendezvous (Tanker)	N030	*P	*P		
	Tanker Anchor Rendezvous and AR	N040	*P	*P		
	Receiver Rendezvous	N130	P	*P		

Note	Ground Training Events	Code	PUP	IP	IF	IB
	Receiver Alternate Rendezvous	N135	P	*P		
	Receiver Rendezvous Overrun Procedures	N136	*P	*P		
	General Navigation	N160	*P	*P	B	
	Taxi Exercise	P005	P	P	B	B
	Airwork Exercise	P006	F	P	B	
	Takeoff, Initial	P010	*P	*P		
	Takeoff, Night	P011	*P	*P		
	Takeoff, Gyro Mode	P012	*P	*P		
	Instrument Departure	P015	*P	*P	B	
	Takeoff and Departure	P025			*P	
	Instrument Approach	P070	*P	*P	B	
	Holding Pattern	P071	*P	*P	B	
	Penetration (Published)	P072	*P	*P	B	
	En Route Descent and Penetration	P073	*P	*P	B	
	Approach and Landing, Full Stop	P074			*P	
	Instrument Approach (Auto and Coupled)	P080	*P	*P	B	
	Instrument Approach (Manual)	P090	*P	*P		
	Precision Approach	P100	*P	*P	B	
	ILS Approach	P101	*P	*P	B	
	ILS (Gyro Mode)	P102	*P	*P	B	
	Precision Approach Radar (PAR) (if available)	P103	P	P	B	
	Nonprecision Approach	P110	*P	*P	B	
	VOR and TACAN Procedures	P111	*P	*P	B	
5	TACAN, VOR, or Localizer Approach	P112	*P	*P	B	
	ASR Approach (if available)	P113	P	P	B	
	RMI-only Approach (ADF or VOR)	P114	*P	*P	B	
	Backcourse LOC (if available)	P115	*P	*P	B	
	Circling Approach	P130	P	P	B	
	Visual Traffic Pattern	P140	P	P		
	Missed Approach (Auto)	P150	*P	*P	B	
	Missed Approach (Manual)	P160	*P	*P	B	
	Landing (Total)	P190	P	P		
	Landing, Full Stop (Reverse Thrust)	P191	P	P		
	Landing, Night	P192	P	P		
	Landing, 50-Degree Flaps	P193	P	P		
	Touch-and-Go Landing	P200	P	P	B	
7	HAVE QUICK Radio Procedures	P260	P	P		
7	SECURE RADIO Operation	P270	P	P		
	Cargo Loading	P300				P
	Instructor and Evaluator Duties and Techniques	P310		P	P	P
	Supervision of Copilot Takeoffs, Landings, Touch-and-Gos, and AR	P320	P			
	Weight and Balance	P322			B	
6,7	Briefing and Control of Passengers	P340				P
	Main Cabin Door Procedures (Departure and Arrival)	P350				P
	Mission Planning and Briefing	P360	P	P	P	P
10	Preflight and Cockpit Preparation	P361	*P	*P	P	
	Pre-Takeoff	P362			P	
	Climb	P363			P	
	Cruise	P364			P	
7	Autopilot-Off Cruise	P365	1	P		
10	Checklist Procedures and Use	P366	*P	*P	*P	*P
	Crew Coordination	P367	P	P	P	P
	Postflight	P368			P	
	Performance Knowledge and Use	P370	*P	*P	P	
8	FMS Operation	P371	*P	*P	*P	
	Fuel Management and Conservation	P372	P	B	P	
	Equipment Operation	P373	*P	*P	P	
	Manual Throttle Operation	P374			*P	
	Manual Pressurization	P375			P	
8	INS Operation	P376	*P	*P	*P	
	Radar Operation	P377	P	P		
	Communications	P378	*P	*P	*P	
7	L-Band SATCOM	P379			P	
	Flight Evaluation	AA01	1	1	1	1
9	Receiver AR	R010	P	P	*P	
9	Receiver AR, Day	R012	P	P		
9	Receiver AR, Night	R020	P	P		
7	Receiver AR, Heavyweight	R030	P	B	B	
	Receiver AR Breakaway or Emergency Separation	R040	*P	*P		
	Receiver AR, Tanker Autopilot-Off	R050	P	P		
	Tanker AR	R060	*P	*P	*P	

Note	Ground Training Events	Code	PUP	IP	IF	IB
	Tanker AR Breakaway or Emergency Separation	R070	*P	*P		*P
	Tanker AR, Autopilot-Off	R080	P	P		
	Slow Speed Tanker AR	R090	*P	*P	B	
	Day Contacts	R125				P
	Night Contacts	R130				P
	Tanker Manual Contacts	R140				*P
	Fighter Contacts	R150				P
7	Radio Silent Breakaway	R160	*P	B	B	B
	Radio Silent AR	R165				B
	Tanker Heavyweight Offload	R170			B	
	Radio Silent Visual Signals	R180	P	P		*P
	Drogue System Operation	R190	B	B	B	B
	WARP System Operation	R195	F	B	B	B
	AR Operations	R200			B	

NOTES:

1. Events preceded by asterisk (*) are trained to proficiency by the contractor in the appropriate ATD during Phase IA; however, proficiency in the ATD may in some cases not equate to full aircraft proficiency due to differences in the real-world flight environment. To ensure that transfer of training has occurred, the instructor should evaluate the student's proficiency and abilities in these events. At the discretion of the CCTS flight commander, proficiency need not be demonstrated in flight. If the student's performance is unsatisfactory, the training contractor will be notified either through the critique at flight three or an additional critique sheet after flight three.
2. Must be completed prior to starting Phase IB training.
3. Will include the requirements of an instrument flight evaluation for all pilots.
4. May be accomplished in conjunction with the aircraft field trip (G025).
5. Student must demonstrate proficiency in one of these three approaches. If others are performed, they must be performed to "P" levels. If not flown, approaches will be trained to "B" level.
6. Proficiency must be demonstrated prior to passenger handling evaluation.
7. May be accomplished during Phase II if not accomplished in Phase I (PUP training only).
8. Based on version of training (GPS or INS).
9. For PUP training only, student must be day receiver KC-135 proficient before proceeding to night AR. Student must demonstrate proficiency in KC-135 night AR. Proficiency in receiver refueling from a KC-10 tanker must also be demonstrated in either day or night conditions during Phase II training if not demonstrated in Phase IB.
10. Asterisk applies only to air refueling operator (ARO) station inspection, BOs preparation and post AR (boom and drogue), AR, emergency and abnormal procedures checklists.
11. Initial CRM (G231) and Instructor/Evaluator CRM (G232) is normally incorporated into Phase 1A contractor training.

Chapter 7

LOCAL PROCEDURES

7.1. Units define local aircrew training procedures in this chapter.

ATTACHMENT 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

BBQ - Boom Operator Basic Initial Qualification

FBP – Flight Engineer Basic Precourse

LSIQP – Left Seat Initial Qual Pilot

SPO – Systems Program Office

Attachment 2

G020 – Deleted

LS01—Local Area Survival

Purpose. One time event conducted prior to first flight at the home station to familiarize aircrew members with local equipment and rescue procedures.

Description. Unit specific equipment and local rescue procedures may be peculiar to home station or local training area. See AFI 11-301, *Aircrew Life Support* (ALS) Program, and MAJCOM supplement.

OPR:

MAJCOM: HQ AMC/DOTL

Unit: Aircrew Life Support

Additional Information. Each unit is responsible for tailoring training to meet unit needs. For KC-10, accomplished during LS06 as part of initial training.

LS02—Combat Survival Training (CST):

Purpose. To provide aircrews with the information necessary to survive in any peacetime or wartime environment.

Description. This course includes in-depth instruction in parachuting, physiological and psychological factors, personal protection, land navigation, combat recovery and signaling, survival medical training, Code of Conduct, and SAR communications. See AFI 11-301 for course description. Course satisfies self-aid and buddy-care requirements of AFI 36-2238, *Self-Aid and Buddy Care Training* (AFPD 11-3, AFI 11-301, AMCI 11-301).

OPR:

MAJCOM: HQ AMC/DOTL

Unit: Aircrew Life Support

Additional Information. Each unit is responsible for tailoring training to meet unit needs, IAW AFI 36-2209, *Survival and Code of Conduct Training*. CST "hands on" requirement may be met by classroom or field training at unit commander discretion based on unit mission. Units may schedule crew members to complete both CST and WST events in a single training day.

LS03—Water Survival Training:

Purpose. To provide the opportunity to demonstrate their ability to use weapon system specific flotation devices and LSE components available during an overwater emergency.

Description. Crew members will demonstrate the ability to employ water survival techniques and rescue procedures. Survivor needs using water related equipment, accessories, and procedures will be stressed. An emphasis will be placed on the appropriate use of the passenger support equipment and the proper care of passengers during a survival situation. See AFI 11-301, *Aircrew Life Support* (ALS) Program, and MAJCOM supplement.

OPR:

MAJCOM: HQ AMC/DOTL

Unit: Aircrew Life Support

Additional Information. Each unit is responsible for tailoring training to meet unit needs. WST “hands on” requirement may be met by classroom or pool training at unit commander discretion based on unit mission. Units may schedule crew members to complete both WST and CST in a single training day.

LS05—Egress with ACDE:

Purpose. Provide training required to safely egress assigned aircraft while wearing ACDE.

Description. One time event. Aircrew member must demonstrate the ability to safely egress while wearing ACDE. Training must be accomplished at least once in each assigned MWS aircraft. See AFI 11-301 for course description.

OPR:

MAJCOM: HQ AMC/DOTL

Unit: Squadron

Additional Information. Each unit is responsible for tailoring training to meet unit needs. For KC-10, will be accomplished as part of initial P280 training in Phase II. May be accomplished in simulator or aircraft.

LS06-Life Support Equipment (LSE).

Purpose. Provides training on the use of available life support equipment and the principles, procedures, and techniques needed to permit survival in varying climatic conditions and environmental regions based on the unit's mission (AFPD 11-3, AFI 11-301, AMCI 11-301). LSE for continuation training will be taught as part of LS02, LS03, and LS08.

OPR:

MAJCOM: HQ AMC/DOTL

Unit: Aircrew Life Support

Additional Information. Each unit is responsible for tailoring training to meet unit needs. For KC-10, incorporates Local Area Survival (LS01) training to familiarize aircrew members with local equipment and rescue procedures. Dual Log with LS01 for initial training.

LS08 - Aircrew Ground Egress Training (ET):

Purpose. To ensure all crew members can explain ground and inflight egress procedures, are able to identify and document equipment discrepancies, can perform required egress procedures, and are able to identify, locate and utilize appropriate emergency equipment. Also, to ensure all crew members understand the operation of fire extinguishers located in the aircraft and fire bottles positioned outside the aircraft.

Description. See AFI 11-301. (AFPD 11-3, *Life Support*, AFI 11-301, *Life Support Program* and AFOSH Standard 127-57).

Lesson summary—Use DET 1 instructor guide booklet for course map.

Lesson length—2 hours annually:

Instruction—1 hour.

Aircrew performance—1 hour.

Critique—As required.

Method of instruction—Lecture, demonstration, and guided discussion relating to crew coordination and responsibilities. Suggested sequence of class:

Fire Department conducts fire extinguisher training.

CCTS instructor shows KC-10 Egress video tape 5314.

Life Support Technician instructs and demonstrates aircrew and passenger egress equipment not covered in video tape.

CCTS conducts classroom training on egress procedures per DET 1 instructor guide.

CCTS conducts training at the aircraft (if applicable).

Method of evaluation—Written test or demonstrated performance.

OPR:

MAJCOM: HQ AMC/DOT

Unit: Squadron

Curriculum development: Unit

Training aids:

Actual in the aircraft performance of ground emergency egress procedures is desired

STS Video Tape: 5314.

Fire extinguisher and fire bottle.

Instructor: Squadron instructor assisted by life support technical expert and fire department personnel (fire extinguisher training).

Additional Information:

Initial and requalification training—Emergency equipment and egress training will be accomplished prior to first flight. This includes hands-on training at aircraft, such as door opening procedures, use of escape ropes, emergency equipment operation and use, etc. When applicable, show the reference in the checklist for each item shown. Opening a cabin door pneumatically is required for initial , but not requalification, training.

Slide Raft Training – Slide raft training is required for initial qual training. Units should make every effort to ensure a training slide raft is maintained and available for use by squadron and aircrew instructors. Funds for repair, replacement, and maintenance of the training slide raft and its components are a wing or group responsibility. If a usable raft is not available, OG/CCs may waive the requirement for unit training. Forward a copy of the waiver to HQ AMC/DOTK. In such cases slide raft training is not required for mission ready status but units should keep track of waived students for possible training at a latter date. In all cases, students must view the video tape for slide raft training credit.

Continuation training—Recurring egress training will not include slide raft training unless unit so desires. This is an effort to increase the life of training rafts by reducing wear and tear.

Scheduling will coordinate with maintenance to ensure aircraft availability for training if aircraft is used. Also, contact the fire department for extinguisher training.

An appropriate maintenance stand and safety equipment must be immediately below windows, hatches, and escape slides being used.

A safety observer or instructor must be positioned on the maintenance stand to assist as necessary.

P117 - GPS Approach: Approach must be flown using certified approach from the FMS database.

P371 – FMS Operation: Demonstrate proficiency in FMS knowledge and procedures. See Table 2.2 for specific requirements by crew position.

Q022—Receptacle Equipped Day Fighter Certification: Includes all types of receptacle equipped fighter aircraft. For initial, and requalification training. Certification will be documented on AF Form 4025, Aircrew Summary/Close-Out Training Accomplishment Report and AF Form 1381, USAF Certification of Aircrew Training. These contacts must be completed in two or more sorties. Contacts can be completed in Phase IB or Phase II training.

Q023—Receptacle Equipped Night Fighter Certification: Includes all types of receptacle equipped fighter aircraft. For initial, and requalification training. Certification will be documented on AF Form 4025, Aircrew Summary/Close-Out Training Accomplishment Report and AF Form 1381, USAF Certification of Aircrew Training. Must demonstrate satisfactory progression in Q022 activity prior to accomplishing Q023 activity. These contacts must be completed in two or more sorties. Contacts can be completed in Phase IB or Phase II training.

R122—BOT Contacts: Total number. May be logged under all environmental conditions. May be dual logged with R140 contacts.

R195—WARP System Operation. All crew members are required to be familiar with WARP system. Training will emphasize unique performance considerations, preflight procedures, system operation, and system malfunctions. Training will include an aircraft field trip. In addition, BOs will demonstrate proficiency in operating WARP system in BOT or inflight by accomplishing checklist procedures for deploying and rewinding both wing-mounted drogues.

140Anthrax (Initial Series)

141Anthrax (Recurrent)

A2.7. Mission-Specific (M) Events.

M262—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 position's 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; however, squadron commander will determine and define which missions (CONUS and or OCONUS) are suitable for mission qualification training. (May be dual-logged with M261 (Airlift Deployment Operations) when requirements of both events are accomplished on the same mission.) At minimum, crew members will demonstrate knowledge or ability to perform the following: (Only minor omissions or deviations that would not compromise safety or detract from overall efficient conduct of the mission are permissible.)

Pilot:

Required communications (position reports, change in flight plan, C2 monitoring requirements, operational reports, etc.)

Tracking mission progress (i.e., refueling points, abort or divert base requirements, etc.)

Required C2 coordination (i.e., coordination with TACC, TTF, HQ ACC/AOS etc.)

ADIZ procedures and restrictions

ICAO procedures and restrictions

FE:

Utilize computer flight plan (CFP) to determine AR points. Student must track AR points using inertial navigation system (INS) and coordinate refueling times to ensure offloads are accomplished on schedule. Instructor will explain "bingo points" and stress importance of starting and ending each refueling on time.

Effectively utilize general navigation skills (N160), required FLIPs (or navigational charts if required), flight plan and fuel log, INS (P376), and performance manual to accomplish actual or simulated inflight replanning of fuel requirements (tanker and fighter) to alternate or abort recovery airfield. Student must effectively coordinate with crew to accurately assess the situation for replanning fuel requirements. Student must complete these tasks in sufficient time to prevent delays or unsuccessful completion of the mission. Fuel computation error cannot exceed tolerances listed in AFI 11-2KC-10V2. Instructor will stress importance of being prepared for mission changes and inflight replanning at any time.

Maintain fuel log and flight plan to accurately show fuel status and fuel consumption trends at all times.

Record appropriate data from each AR using unit approved worksheets.

Utilize radios or L-BAND SATCOM to send appropriate AR information to keep higher headquarters informed of mission progress program.

ATTACHMENT 3

A3.1.6. Training Guides, AF Forms (4023,4024, 4025), and/or unit overprints may be used for all KC-10 continuation and formal training. The current HQ AMC/DOTK approved formal school training guides are available on the DOTK web page at http://scoisntw02.scott.af.mil/hqamc/do/dot/dotk/index.htm.

A3.4.8. (Note Only)

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 phase 1A or in phase 1B), the only subsequent grade allowed is either “P” or “U”. Likewise, too many “S” grades in a row may indicate lack of progression and warrant a “U”. Any event graded “U” must have an associated remark on AF Form 4023.

Attachment 7

TEXT OF IC 2000-1

1.4.1.4. DELETED.

1.5.1. In order to assure training continuity, the student's first Phase 1B flight should occur no later than 7 days after completing CCTS in-processing to include indoctrination and block training.

1.13. Failure to Progress in Training. If at any time during a trainee's instruction, (Phase IA, IB, or Phase II), progress is considered unsatisfactory; the trainee's flying unit squadron commander will be notified. The flying unit squadron commander will convene a Progress Review Board (PRB) to review the trainee's record and determine whether to continue, retrain, modify training, or conduct a Flight Evaluation Board (FEB). OG/CC will have final approval of PRB recommendations. (See AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges,* for flight evaluation board (FEB) or administrative procedures.)

1.13.1 Progress Review Board. The make-up of the PRB will be at the Squadron Commander's direction, but will include SQ/CC, OGT, OGV, Chief CCTS, and ATS/Det1 representation (for Phase IA review). Units will forward an information memo on action taken to HQ AMC/DOTK.

1.13.2. For LSIQP pilots only, the PRB may recommend that the trainee continue training at the copilot level with OG/CC as final approval.

Table 1.1. KC-10 Formal Courses.

(ATS) Course #	**Course Name**	**note**	**Course Title**	**Course Student**	#	Training Events Ph-1A	**Calendar Training-days*Ph-1A***
KC-10-3B	KC-10 BBQ		Boom Operator (Basic) Initial Qualification	No prior aviation experience : Requires BBOC (Altus AFB) pre-requisite	1	18 BOTs 2 CPTs 6 CLTs	45 days 33 days + 2 CRM
KC-10-3A	KC-10 BLQ		Boom Operator (Load-master) Initial Qualifi-cation	Qualified Airlift Loadmaster Qualifying as KC-10 Boom Oper-ator	2	36 BOTs 4 CPTs 10 CLTs	44 days 30 days + 2 CRM
KC-10-3	KC-10 BIQ		Boom Operator Initial Qualification	Qualified KC-135 Boom Operator Converting to KC-10	2	22 BOTs 4 CPTs 10 CLTs	31 days 23 days + 2 CRM
KC-10-13	KC-10 BRQ		Boom Operator Requali-fication	Prior KC-10 Boom Operator or Instructor Boom Operator	1	7 BOTs 1 CPT 3 CLTs	17 days 13 days
KC-10-18	KC-10 BIC	1	Boom Operator Instruc-tor Course	Mission Qualified KC-10 Boom Operator	2	12 BOTs 2 CPTs 5 CLTs 2 Sims	24 days 18 days
KC-10-2B	KC-10 FBP		Flight Engineer (Basic) Precourse	No prior aviation experience : Requires BFE (Altus AFB) pre-requisite	2	-	18 days 14 days
KC-10-2	KC-10 FIQ		Flight Engineer Initial Qualification	KC-10 FBP graduate or qualified MWS Flight Engineer converting to KC-10	1	17 SIMs 17 CPTs	59 days 43 days
KC-10-12	KC-10 FRQ	2	Flight Engineer Requali-fication	Prior KC-10 Flight Engineer or Instructor Flight Engineer	1	9 SIMs 11 CPTs	30 days 22 days
KC-10-18	KC-10 FIC	1	Flight Engineer Instruc-tor Course	Mission Qualified KC-10 Flight Engineer	2	8 SIMs 2 CPTs	22 days 16 days
KC-10-1	KC-10 CPIQ		Co-Pilot Initial Qualifi-cation	UPT Graduate, MWS Co-Pilot, or low-time FAIP/OSA	1	17 SIMs 17 CPTs	59 days 43 days
KC-10-1	KC-10 PIQFO	4	Pilot Initial Qualification FAIP/OSA	FAIP/OSA aircraft commander converting to KC-10	1	17 SIMs 17 CPTs	59 days 43 days
KC-10-1	KC-10 PIQMWS	4	Pilot Initial Qualification MWS	MWS Aircraft Commander con-verting to KC-10	1	17SIMs 17 CPTs	59 days 43 days
KC-10-1A	KC-10 PIQ2MWS	4	Pilot Initial Qualification MWS (2 Students)	MWS Aircraft Commander con-verting to KC-10	2	24 SIMs 20 CPTs	80 days 56 days
KC-10-4	KC-10 PUP		Pilot Upgrade Program	Qualified KC-10 Co-Pilot	2	9 SIMs 1 CPTs	15 days 11 days
KC-10-11	KC-10 PRQ		Pilot Requalification	Prior KC-10 Pilot or Instructor Pilot	2	10 SIMs 11 CPTs	32 days 24 days
KC-10-18	KC-10 PIC	1	Pilot Instructor Course	Qualified KC-10 Pilot	2	8 SIMs 2 CPTs	22 days 16 days
KC-10-14	KC-10 SSF	3	Senior Staff Officer Familiarization	Senior Staff Officer (O-6 Above) requiring KC-10 familiarization only	2	2 SIMs 1 CPTs	3 days 3 days
KC-10-16	KC-10 SSQ	3	Senior Staff Officer Qualification	Senior Staff Officer (O-6 Above) requiring basic KC-10 Qualifica-tion	2	8 SIMs 3 CPTs	16 days 12 days

NOTES:

1. All Instructor Courses include 3 days for Academic Instructor Training (AIC). If the student has been qualified as an instructor before he is not required to accomplish this training and will start 3 days later.

2. KC-10 FRQ requires pilot classes KC-10 PRQ or KC-10 PUP to be scheduled at the same time.

3. See paragraph 2.7. for additional requirements.

4. Trainees will normally complete this course at the aircraft commander level, but may complete the course at the copilot level at the direction of a Progress Review Board.

2.1.3.3. LSIQP candidates who have completed the copilot path at the formal school will utilize the CP column of **Table 2.1** Initial Qualification Training Requirements.

2.1.3.4. LSIQP candidates who have completed the copilot path at the formal school will complete KC-10 PUP and the P column of **Table 2.1** prior to certification as Aircraft Commanders.

2.2.2. KC-10 PIQFO–Pilot Initial Qualification FAIP/OSA: Qualifies FAIP (T-37, T-38, and T-1) or OSA (C-12, C-9, C-21, etc) aircraft commanders as KC-10 Aircraft Commander (MP). Flying hour requirement is 1000 hours total time and 100 hours as an aircraft commander (excluding “other” time). Trainees will normally complete this course at the aircraft commander level, but may complete the course at the copilot level at the direction of a Progress Review Board. This course is defined as a LSIQP course for Phase II training purposes.

2.2.3. KC-10 PIQMWS–Pilot Initial Qualification MWS: Qualifies non-KC-10, prior MWS fixed-wing aircraft commanders as KC-10 Aircraft Commanders (MP). Flying hour requirement is 1000 hours total time and 100 hours as an aircraft commander (excluding “other” time). Trainees will normally complete this course at the aircraft commander level, but may complete the course at the copilot level at the direction of a Progress Review Board. This course is defined as a LSIQP course for Phase II training purposes.

2.10. Failure To Complete Formal Training. If any crewmember fails to complete a formal course, the trainee's flying unit squadron commander will be notified. The flying unit squadron commander will convene a Progress Review Board IAW paragraph **1.13., 1.13.1.,** and **1.13.2.** of this instruction.

2.10.1. DELETED.

2.10.1.1. DELETED.

2.10.1.1.1. DELETED.

2.10.1.1.2. DELETED.

2.10.1.2. DELETED.

2.10.1.2.1. DELETED.

2.10.1.2.2. DELETED.

2.10.1.2.3. DELETED.

2.10.2. DELETED.

3.1. General Requirements. This chapter prescribes Mission Qualification Training (Phase II) requirements an individual must accomplish on completion of, or concurrently with, Phase IB training (initial

qualification, requalification, or pilot upgrade training) to qualify individuals in unit missions. For those crewmembers with limited prior experience, Phase IIB provides additional seasoning in those areas deemed mission critical to the KC-10. All crew members will complete mission qualification prior to entering other qualification or upgrade training (exception: may accomplish Special Qualifications & Certifications or Differences Qualifications as outlined in paragraphs **5.6.** and **5.7.**).

3.2.2.2. Phase IIB : The LSIQP gains additional experience flying with other MPs and IPs. ATPRs should be completed but are not required. Accomplish R030 if not completed in Phase IIA. During this period the LSIQP can fill the MC position on any crew including operational deployments and can occupy either seat. Log FP or MC time in accordance with crew makeup.

3.2.2.4. The LSIQP may not fly in the seat with an unqualified pilot. The LSIQP may not fly in the seat with an FC, MC or another FP during critical phases of flight until certified as an Aircraft Commander. The LSIQP may fly in the seat with an FC, MC or another FP during non-critical phases of flight under the supervision of an IP.

3.2.2.5. LSIQP graduates who have completed the copilot path through the formal school course as the result of PRB action refer to paragraph **3.2.1.** for Phase II training requirements.

5.2.1. Left Seat Initial Qual Pilots: LSIQPs will qualify as Aircraft Commander or Copilot in accordance with **Chapter 2** of this regulation.

5.7.2. **TCAS/TAWS Differences Training.** The KC-10 fleet will be undergoing congressionally mandated Navigation Safety enhancements during FY00 and FY01. This modification will install a Traffic Collision Avoidance System (TCAS) and a Terrain Awareness Warning System (TAWS). Certification is required for all pilots and flight engineers prior to flying a modified aircraft. Training will be in three parts, CBTs, Instructor Guided Review (IGR), and aircraft familiarization (flight not required). A checkride is not required. Units will use the AMC/DOTK approved "Nav-Safety Training Guide" which can be found on the DOTK www-site http://scoisntw02.scott.af.mil/hqamc/do/dot/dotk/index.htm. The training guide will have a SQ/CC signature block which will serve as the certification approval. Make an AF Form 1381 entry in the crewmember's FEF annotating Nav-Safety Certification. Use the training guide as documentation. Students in Phase 1 of initial or upgrade training may fly modified aircraft provided they have completed the CBT and familiarization training. Their CCTS closeout TAPR will reflect Nav-Safety certification as appropriate. For Senior Staff Officers, training is not required provided they receive a briefing and Tech Order review from the IP prior to flight.

6.5.1. If a student's training progress is unsatisfactory, the contractor will notify the trainee's flying squadron commander, OGT, Det 1, and the on-site government representative. The flying unit squadron commander will convene a Progress Review Board IAW paragraph **1.13., 1.13.1.,** and **1.13.2.** of this instruction.

6.7.1.1. Initial Qualification Evaluations. Prior to commencing Phase IB flight training in the KC-10, each crewmember will be administered an evaluation (Q-005 or Q-006 as appropriate) in the applicable ATD. The evaluation will be used to evaluate the effectiveness of contractor training as well as the capabilities and proficiency of the student. 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 (***EXCEPTION***: BO evaluations will be conducted using contractor-developed / Air Force-approved scenarios). For unit-developed profiles, the evaluator must coordinate with the contractor a minimum one day prior to the evaluation and ensure the profile is compatible with ATD software. In the event of an unqualified rating (ATD or inflight), a Qual-

ification Level 3 AF Form 8 is issued to document the unqualified performance, and the contractor is responsible for all retraining (ground-based) in those phases and subphases determined to be under the direct control of the contractor. A joint contractor and Air Force PRB (see paragraph **1.13.**) will review the aircrew member's performance and determine those phases of the ground-based courses that require modification or additional training to meet qualification levels. In such cases the final approval for PRB recommendations may be at the SQ/CC level.

Attachment 2

F020-Formation. Follow procedures from AFTTP 3-1 and AFI 11-2KC-10, Volume 3. At least 30 minutes of formation should be planned and accomplished. Credit may be taken for all formation positions. Each crew commander must brief that portion of the mission their crew will lead. Accomplish using EMCON 2. Accomplish P260 and P270 during each formation flight. Essential radio communications required for safety of flight or failure to accomplish a P260 or P270 does not preclude crediting the event. Log only one F020 per sortie. Credit awarded under the following parameters:

Qualification training—For initial and requalification training in formation procedures and techniques, units must incorporate emission options described in TO 1-1C-1. At minimum, students must be proficient in emission option 2 procedures and techniques at the conclusion of Phase IB training. In this case, remaining applicable emission options will be covered during mission qualification (Phase II) training.

Mission Qualification and Continuation Training:

EMCON procedures and techniques will be stressed at all times. Standard option to be used is emission option 2; however, this does not preclude using radios when necessary for safety of flight or Federal Aviation Administration (FAA) identification purposes.

All aircrews participating in operational deployments and redeployments (off-station missions) may take credit regardless of formation position.

Approximately 30 minutes of formation should be planned and accomplished. Formation flown in conjunction with rendezvous or refueling is creditable toward minimum time required.

Each crew commander must brief the portion of the formation they are to lead. Log only one F020 per sortie.

Copilots must demonstrate proficiency in copilot duties to receive credit.

G230-Crew Resource Management (CRM).

Purpose. Mission-specific continuation CRM training conducted according to AFI 11-290, *Cockpit/ Crew Resource Management Program*, as supplemented. Course provides crew members with training on how to successfully use all crew members to resolve problem situations. Taught by contractor using building block approach. G230 training will consist of 2-hour briefing prior to CRM simulator (G240). G230 must be accomplished before G240, CRM Simulators. Although crew training is more effective with BO present, BO need not be present for crew to receive credit.

Description. Reinforces initial CRM training through an academic review of the AMC common core subjects (according AFI 11-290, as supplemented) with specific emphasis on an annual refresher topic.

OPR:

MAJCOM: HQ AMC/DOT

Unit: ATS contractor

G231-Initial CRM.

Purpose. Aircraft and crew-specific CRM training conducted according to AFR 11-290, as supplemented. Course provides new crew members with aircraft-specific training on how to successfully use all crew members to resolve problem situations. Taught by contractor immediately after simulator evaluation using building block approach. G231 training will consist of 2-day workshop. Part of Phase IA training for all initial qualification crew members regardless of previous weapons system experience. Initial CRM is not required for requalification or upgrade courses.

Description. Introduces AMC common core subjects (according to AFI 11-290, as supplemented. If initial CRM is not accomplished at the formal school, it must be accomplished within 1 year of reporting to home station. Dual log with G230 for AFORMS tracking purposes.

OPR:

MAJCOM: HQ AMC/DOT

Unit: ATS contractor

G240-CRM Simulator.

Purpose. To provide hands-on application of classroom-presented CRM refresher concepts through CRM simulator training addressing human factors issues in a realistic mission scenario. Simulator training with a full crew complement, addressing human factors issues in a realistic mission scenario. Although crew training is more effective with BO present, BO need not be present for crew to receive credit.

Description. CRM mission-oriented simulator training (MOST) conducted according to AFI 11-290, as supplemented.

OPR:

MAJCOM: HQ AMC/DOT

Unit: ATS contractor

M260-Deployment Mission Planning. Event includes mission planning duties and requirements for both fighter deployments and airlift operations. At minimum, student must be able to demonstrate knowledge of current operations functions and responsibilities, customs and agricultural requirements, and command control requirements (i.e., required coordination with command and control centers (CCC), air terminal operations centers (ATOC), tanker airlift control elements (TALCE), TTFs, etc.). Specifically, student must be able to accomplish the following:

Coordinate for billeting, diplomatic clearances, transportation, and meals.

Given various types of flight plans utilized by the KC-10 (ACC Fighter Profile, AMC-PLAN, locally produced), demonstrate knowledge of flight plan format and information by explaining what various headings and columns of numbers represent.

Given a computer flight plan, demonstrate how to verify accuracy of the flight plan fuel load to include receiver offload updates.

Demonstrate knowledge of mission planning documents (e.g., Foreign Clearance Guide [FCG], flight information publications [FLIP], airfield suitability information, DD Form 1801, **DoD International**

Flight Plan, altitude reservation [ALTRV]) by locating information requested by instructor and providing accurate interpretation.

Special emphasis will be placed on utilization of the IFR Supplement to determine airfield support capability, services (i.e., civilian vendors who have been contracted to provide fuel, etc.), weight bearing capability, runway or airfield restrictions, etc.

Using simulated or actual mission conditions and requirements, a pilot or the instructor FE will demonstrate how to manually accomplish flight plan using AF Form 4090, **KC-10 Flight Plan/ Fuel Log**, or equivalent MAJCOM form. FE student will then complete fuel computations. This exercise familiarizes student with the complete flight planning process as it applies to tactical fighter deployment or airlift mission

A3.1.1. Initiate a training folder (AF Form 4022) for **Table 1.1** formal training (either at formal school or in-unit), mission qualification, 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.

A3.1.1.1. The unit operations officer may waive the training folder requirement if corrective action or additional training is limited. If initiated, the instructor or flight examiner who evaluated the aircrew member's performance will enter comments pertinent to the training deficiency on AF Form 4023 or the training guide. Use the existing training folder for end-of-course evaluations that result in additional training.

A3.1.1.2. At the unit's discretion, training folders for an individual undergoing more than one training program in a short period of time may combine all training into one AF Form 4022; e.g., a tanker copilot upgrading to AC may have his or her upgrade, mission qualification, and formation lead training combined in one folder.

A3.1.1.3. Formal Schools may use temporary/contractor training folders in lieu of the AF Forms 4022. Upon completion of training all records will be transferred to the AF 4022 before being forwarded to the gaining unit.

A3.1.4. The instructor or trainer will review the training folder prior to all training periods. 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. Operations officers will review active training folders quarterly, and flight commanders or squadron training representatives will conduct a monthly review. Monthly and quarterly reviews will be annotated in the training folder. Monthly and quarterly reviews are not required during CCTS training except in documented cases of unsatisfactory progress.

A3.2 Note only

NOTE: Formal school instructors using ATS courseware or training guides are not required to complete the following sections of the AF Form 4022: ground training summary, written evaluations, and flying training summary. This information must be tracked by other means and sent to the gaining unit with AF Form 4022.

A3.6.2. Initiating TGs. Training and resource management personnel in each unit will initiate a TG on crew-members prior to their entering any phase of qualification training. These TGs will be inserted in AF Form 4022 (or the temporary training folder for CCTS) and may be used in lieu of AF Forms 4023 or 4024.

A3.6.3. Use of TGs. Specific instructions for annotating training are included in each TG.

A3.6.3.1. Active status TGs will be carried by the student during all training and operational missions and made available to the instructor for review and annotation (Temporary training folders need not be carried on each sortie during CCTS). The student will review the TG and initial the training progress record prior to the next training period.

A3.6.4.2. The flight commander or squadron training representative will conduct a monthly review of TGs. Entering initials and date in the review block of the TG will indicate this review. Monthly and quarterly reviews are not required during CCTS training except in documented cases of unsatisfactory progress.