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Flying Operations

C-141 AIRCREW TRAINING

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This instruction implements AFPD 11-2, *Aircraft Rules and Procedures,* and *AFPD 11-4, Aviation Service.* It establishes the aircrew training program for the C-141 aircraft. It applies to all commanders, operations supervisors, and aircrew assigned or attached to all flying activities of commands operating C-141 aircraft. ***EXCEPTION***: Aeromedical evacuation crew members see AFI 11-2AE. Major commands (MAJCOM), field operating agencies and HQ USAF direct reporting units (DRU) may supplement this instruction. 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 62225-5302. 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. This instruction contains references to the following field (subordinate level) publications which, until converted to departmental level publications and forms, may be obtained from the respective MAJCOM publication office: AMCI 11-301, *Aircrew Life Support (ALS)*; MCR 55-18 Volume 1, *Nuclear Airlift Operations* (FOUO)*;* AMCH 33-1 (S), *Aircrew Communications Handbook,* and the AMC supplement to AFI 14-105, *Unit Intelligence Mission and Responsibilities.*

The Privacy Act of 1974 affects this instruction. The Privacy Act System Number F011 AF XO A, Air Force Operations Resource Management Systems (AFORMS) covers required information. The authority for maintenance of 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*; and Executive Order 9497.

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Chapter 1

GENERAL

1.1. General. This instruction prescribes basic policy and guidance for training United States Air Force C-141 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, limited war, and general war operations.

1.1.2. Any office requiring additional training will coordinate with HQ AMC/DOT through MAJCOM channels.

1.2. Waiver Authority:

1.2.1. Unless otherwise specified in this instruction, MAJCOM DO is the waiver authority for specific aircrew training requirements in this instruction that are not governed by AFI 11-202, Volume 1.

1.2.2. Waiver approval authority for all formal school prerequisites specified in AFCAT 36-2223 *U.S. Air Force Formal Schools,* is Headquarters Air Education and Training Command (HQ AETC)/DOF (***EXCEPTION***: Operations Group Commanders may waive flying hour requirements). Senior officer course waiver approval authority is HQ AETC/DO with concurrence of gaining MAJCOM/DO. 19 AF/DO is waiver approval authority for all AETC flying training syllabi (***EXCEPTION***: Senior officer syllabus waiver approval authority is HQ AETC/DO). Syllabus waiver requests will be in writing, to include the rationale for the waiver. A permanent record of all approved waivers will be maintained by the requesting wing. Units should request waivers through their MAJCOM headquarters or through the numbered air force (NAF) if specified in the MAJCOM supplement. Headquarters should submit waivers to HQ AETC/DOF with information copies to 19 AF/DO. Waivers must be submitted and approved prior to crew members arriving for formal training. Copies of all waivers should be filed in a trainee's training folder (AF Form 4022, **Aircrew Training Folder**) and hand-carried to the school. Refer to AFI 11-2AE, Volume 1, *AECM Aircrew Training* (forthcoming), for aeromedical evacuation crew member (AECM) waivers.

1.2.3. If required for squadrons' designated mission, accomplish events waived at formal schools in-unit before assigning mission ready (MR) status.

1.2.4. The operations group commander or Air Force Reserve Command (AFRC) or Air National Guard (ANG) equivalent may waive MAJCOM-directed ground or non-currency related flying continuation training requirements for individuals assigned to their unit on a case-by case basis. See paragraph **4.6.** of this instruction. The operations group commander will submit all other waiver requests through proper MAJCOM channels and send information copies to HQ AMC/DOT (see **Table 1.1.**). 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 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 information on the referenced individual in a waiver request as shown in **Figure 1.1.** and as outlined in **Table 1.1.**

Figure 1.1. Sample Waiver Request.

NOTE: Items should be ordered as below; those not utilized should be marked "N/A" ("not applicable").
Asterisked (*) items must be provided for all waivers; other items as appropriate.
MEMORANDUM FOR (Waiver Authority)
SUBJECT: Waiver Request – (Individual), (Type of Waiver)
FROM: (Requestor)

1. *Name, grade, and Social Security number.
2. *Flying organization (assigned or attached).
3. *Present crew qualification including special qualifications.
4. *Total flying time and primary aircraft inventory (PAI) time (include instructor or evaluator time if applicable).
5. *Specific nature of waiver.
6. *Reason and valid justification for waiver.
7. Crew qualification to which person is qualifying or upgrading.
8. Previous attendance at any formal instructor course (include course identifier and graduation date).
9. Training start date.
10. Mandatory upgrade or qualification date (current upgrade due date).
11. Date event last accomplished and normal eligibility period.
12. Remarks, to include formal school courseware required.
13. *Requesting unit point of contact (include name, rank, telephone number, and functional address symbol).

(Signature of Requestor)
(Title)

Table 1.1. Unit Waivers to AFI 11-2C-141, Volume 1.

If waiver is requested by:	**Send waiver request to:**	**Approval or disapproval will be sent to:**	**With information copies to:**
Active Duty AMC Wing	OG training office to HQ AMC/DOTA	OG training office	NAF Training Office and HQ AETC/DOF
97 AMW	Unit training office through 19AF/DOM to HQ AETC/DOF	97 AMW	HQ AMC/DOTA
AFRC Unit	Through 4 AF/DOT or 22 AF/DOT, as applicable, to HQ AFRC/DOTA	AFRC Unit	HQ AMC/DOTA and HQ AETC/DOF
ANG Unit	ANG/DOOM	ANG Unit	HQ AMC/DOTA and HQ AETC/DOF

NOTES:

1. Operations group commanders may waive MAJCOM-directed ground and non-currency related flying continuation training requirements in this regulation for individual crew members.
2. ANG/DOOM and HQ AFRC/DOTA are waiver authorities, as appropriate, for the secondary method of training.

1.2.6. Aircrew members whose status is "duty not including flying (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 Recommendations 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.

1.2.7. Aircrew members performing extended alert duty (more than 72 hours, or as specified by MAJCOM supplement) may accomplish any type of ground training during normal duty hours that does not degrade required response time or mission accomplishment.

1.3. Use of Flying Hours.

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 appropriate numbered Air Force commander (ANG/CF for Air National Guard). It is essential that all personnel at all levels prevent the misuse of air mobility resources as well as the perception of their misuse. ***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 AFRC/ANG 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.

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

1.4.1. MAJCOM Headquarters. HQ AMC, as lead command MAJCOM for the C-141 as specified in AFPD 11-2 and AFPD 10-9, *Lead Operating Command Weapon Systems Management*, is responsible for standardizing aircrew flying training requirements in coordination with other user MAJCOMs. 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 continuation training and local upgrade courses. AETC/DO is the approval authority for AETC Formal School courses. Send proposals for amending existing course prerequisites or deleting obsolete courses through the appropriate headquarters for approval. MAJCOMS will process the approved changes in coordination with the AFCAT 36-2223, *USAF Formal Schools*, 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. The CCRW reviews all training programs for currency, applicability, compliance and effectiveness. Attendees should include training representatives

from HQ AMC/DOT/DOV/DOK/SG, Air Mobility Warfare Center (AMWC)/ WCOX, Air Combat Command, AETC, AFRC, ANG, Pacific Air Forces, United States Air Forces in Europe, Air Force Special Operations Command, curriculum developers, formal schools, NAF training and standardization offices, selected unit representatives, and Aircrew Training System (ATS) contractors.

1.4.1.3. Programmed Flying Training (PFT). HQ AETC/DOF determines the number of training quotas available. HQ AMC/DOT allocates quotas according to AFCAT 36-2223 in coordination with other MAJCOM users, and applicable ATS contractors. HQ AETC/DOF (or designated representative) publishes PFT pamphlets and, if required, amends pamphlets through change notifications in coordination with respective training managers. HQ AMC/DOT in coordination with HQ AETC/DOF is responsible for the PFT as outlined in AFI 11-202, Volume 1.

1.4.1.3.1. Units will send projected PFT requirements to their respective MAJCOM. MAJCOMs (including ANG and AFRC) will send projected PFT requirements to HQ AMC/DOT. HQ AMC/DOT will consolidate and forward requirements to HQ USAF for validation. Upon validation by HQ USAF, HQ AMC will allocate quotas.

1.4.1.4. Progress Review Board (PRB). If at any time during a trainee's flight instruction (ATS ground instruction, see paragraph **6.5.**), progress is considered unsatisfactory by the formal schoolhouse, the training squadron will notify the responsible unit training manager. On receiving documentation and recommendations from the formal schoolhouse, the responsible unit will convene a Progress Review Board to review the trainee's record and determine whether to continue, modify, terminate training, or conduct a Flight Evaluation Board.

1.4.2. 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.

1.4.2.1. HQ AETC/DO is responsible for the formal school syllabus and is the approval authority for any changes. The syllabus will be designed to meet user requirements. All changes to the syllabus will be coordinated with user commands prior to implementation.

1.4.2.2. 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. Coordinate supplements through HQ AMC/DOT before publication, send two copies to HQ AMC/DOT and one copy to HQ USAF/XOOT after publication.

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

1.4.3.1. The OG will establish procedures with the servicing military personnel flight for individual counseling and personnel system updates for the active duty service commitment (ADSC) incurred (if applicable). 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. Requalification includes training for loss of currency exceeding six months. 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 requalification in air refueling, airdrop, aircraft commander, or instructor (formal school requalification will incur an ADSC).

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

1.4.3.3. The flying training unit (FTU) Operations Group is responsible for conducting all flight training at the formal school. The FTU Operations Group will publish a graduate summary report within 30 working days of each class completion.

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

1.4.4.1. 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 convene a Training Review Board for any crew member who exceeds training time limits and every 30 days thereafter. Document board recommendations in minutes and individual's training guide.

1.4.4.2. Ensure formal school post-graduate questionnaires are accomplished and returned to the formal schools. A copy of the questionnaire answer form will be retained by the gaining squadron for one year after completion of formal school training.

1.4.4.3. Ensure adequate training continuity and supervision of assigned and attached aircrew members. Unit commanders or appropriate AFRC/ANG Operations Supervisors may assign additional requirements based on individual crew member's experience and proficiency.

1.4.5. Formal School-ATS Contractor. The C-141 Aircrew Training System (ATS) contractor is responsible for all academic and training device instruction at the formal school and all C-141 ATS sites. This responsibility includes developing, updating, and publishing courseware and the formal school syllabus in accordance with the ATS contract. The syllabus will be reviewed annually and updated as required.

1.4.6. Formal School-Non-ATS. AFI 11-202, Volume 1 establishes requirements.

1.4.6.1. The MAJCOM/DOT is the approving authority for MAJCOM taught courses.

1.5. In-Unit Training Time Limitations. AFI 11-202, Volume 1 establishes in-unit training time limitations. In addition, comply with the time limitations in **Table 1.2.** Aircrew members entered in an in-unit training program leading to qualification or re-qualification should be dedicated to that program on a full-time basis. In-unit training should begin no later than 45 days (90 days AFRC/ANG) after reporting or being attached to a new duty station or unit. Aircrew members entered in an in-unit training program leading to qualification or requalification should be dedicated to that program on a full-time basis. Additional duties or details should not be assigned. (***NOTE***: squadron duty officer duty or equivalent is not prohibited.)

Table 1.2. In-Unit Training Time Limitations.

Training	Time Limit
Initial Qualification	90 days
Difference Qualification	90 days
Requalification	90 days
Mission Qualification	90 days
Instructor Upgrade	60 days

1.5.1. Units will notify MAJCOM/DOT (ANG/DOOM for ANG units) through channels of crew members exceeding upgrade training time limits. (Use the waiver format shown in **Table 1.1.**) Squadron commanders may extend upgrade training time up to 60 days. Extensions in excess of 60 days require MAJCOM/DO approval (or as specified in MAJCOM supplement). An extension of training time letter, signed by the unit commander, will state the training difficulty, unit corrective action to resolve and prevent recurrence, and estimated completion date.

1.5.2. Training time starts with the first significant training event (a training event directly contributing to qualification and upgrade: Computer-based training (CBT) lesson, part-task trainer (PTT), weapon system trainer (WST), ground training, flight, etc.), **or** 45 days after being attached or assigned to the unit after completion of the formal school, whichever occurs first (or as specified in MAJCOM supplement).

1.5.3. Aircraft commander upgrade. Maximum upgrade training period for first pilots entering aircraft commander (AC) training is 180 calendar days (or as specified in MAJCOM supplement) after course entry. Individuals unable to complete upgrade training within these limits may continue training; however, their units will immediately notify HQ AMC/DOT (or as specified in MAJCOM supplement), with a description of the difficulty and expected qualification date.

1.5.4. Second flight engineer (FF) certification will be completed within 60 days from the date of the first significant training event after C141FIQ by completing the flight engineer training guide, Volume 1, Part 2. Upgrade training to mission qualified first flight engineer (MF) will be completed within 1 year after certification to FF (or as specified in MAJCOM supplement). MF upgrade training ceases when the MF qualification evaluation begins. ***NOTE***: Once certified, FFs are considered MR for Status of Resources and Training System (SORTS) reporting.

1.5.5. Second loadmaster certification will be accomplished by completing the second loadmaster personnel certification guide. This must be accomplished within thirty days from the date of the first significant training event after C141LIQ. Certification will be documented by the squadron commander's signature in the training guide. ***NOTE***: Once certified, FLs are considered MR for SORTS reporting.

1.5.5.1. Upgrade training to mission qualified loadmaster (ML) will be completed within 90 days after certification to FL (or as specified in MAJCOM supplement). Initial qualification training ceases when the initial mission loadmaster evaluation begins. Trainees that do not successfully complete their initial evaluation will adhere to time restrictions for requalification established in AFI 11-2C-141, Volume 2, *C-141 Flight Evaluation Criteria* (forthcoming).

1.6. Recurrency Training.

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

1.6.2. Loss of currency exceeding 6 months. The individual is unqualified in the aircraft and must complete requalification as directed in paragraph **1.7.**

1.7. Requalification Training. AFI 11-202, Volume 1 specifies requalification training limits and requirements. When completion of the requalification academic course is required but not practical, or quotas are not available, units will request waivers from their parent MAJCOM, who will in-turn coordinate with HQ AMC/DOT.

1.7.1. Unless a specific requalification course is taken, upgrades will progress as a normal initial qualification. This may be accelerated as knowledge and experience permit.

1.8. Active Duty Service Commitment (ADSC). AFI 11-202, Volume 1 specifies ADSC requirements.

1.9. Training Folder Management: See instructions for completing AF Forms 4022, **Aircrew Training Folder,** 4023, **Aircrew Training Progress Report**, 4024, **Aircrew Training Accomplishment Report**, and 4025, **Aircrew Summary/Closeout Report** 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 who completes the training program should not administer the evaluation.

1.11. Instructor Training and Supervision Requirements:

1.11.1. All instructors should be MR (wing-level and below).

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

1.11.2.1. All non-current aircrew members (See paragraph **4.1.4.2.** for exceptions).

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

1.11.2.3. Flying training level (FTL) E and senior officers defined in AFI 11-202, Volume 1, and paragraph **2.7.** of this instruction.

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

1.11.3. For unqualified, non-current, and flying training level E pilots, an instructor pilot must be at a set of controls during critical phases of flight.

1.12. Administration of AFI 11-2C-141, Volume 1. Units will establish requirements for AFI 11-2C-141 volumes through MAJCOM publications distribution channels in accordance with AFI 37-161, *Distribution Management*. MAJCOM supplements to AFI 11-2C-141 volumes will be distributed within each MAJCOM using requirements from respective basic volumes.

1.13. Intracommand and Intercommand Transfer of Aircrews. Validated training completed prior to transfer will be honored by the gaining organization and will be used to determine the appropriate training phase where the newly assigned aircrew member is placed. Aircrew personnel qualified in the same mission-design-series (MDS) of AMC or AETC active duty or AMC gained AFRC/ANG units are considered qualified in that equipment throughout the force when used for the same mission. C-141B and C-141C aircraft are not considered the same MDS and require separate qualification or certification, depending on crew position. Differences training followed by a certification or qualification evaluation is required for a change in aircraft series. AMC does not recognize mission qualifications unless trained according to AMC mission qualification criteria. For intracommand and intercommand transfers and exchange officers, instructor training and qualifications may be accepted at the discretion of the gaining unit commander. These personnel must be transferring to the same MDS.

Chapter 2

INITIAL QUALIFICATION TRAINING (PHASE I)

2.1. General Requirements. AFI 11-202, Volume 1 defines initial qualification training. Unless otherwise indicated, the primary method of initial qualification is to attend and complete appropriate formal training course listed in AFCAT 36-2223. When attendance is not practical or quotas are not available, units will request waivers to conduct in-unit qualification training, using formal school courseware (see **Table 1.1.**).

2.1.1. Air Force enlisted aircrew qualification for flight engineers (FE) and loadmasters (LM) are not tied to AFMAN 36-2108, *Airman Classification*, skill-level upgrade.

2.1.2. FE training prior to C141FIQ. Basic flight engineer (BFE) graduates who are awaiting attendance at their respective aircraft initial qualification course may enter ground and flight training prior to attending their initial qualification course (C141FIQ). The squadron commander is authorized to certify eligibility for aviation service, and the local host operations systems management (HOSM) office will publish an aeronautical order IAW AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*.

2.1.3. LM training prior to C141LIQ. Basic loadmaster (BLM) graduates awaiting a class date for their initial qualification course (C141LIQ) may enter ground and flight orientation training prior to attending C141LIQ. This orientation training is not a prerequisite for C141LIQ attendance. The squadron commander is authorized to certify eligibility for aviation service, and the local HOSM will publish an aeronautical order IAW AFI 11-402.

2.2. Initial Qualification Training Prerequisites. Complete initial qualification prerequisites in accordance with AFI 11-202, Volume 1 and AFCAT 36-2223. Active duty service commitments (ADSC) are prescribed in AFI 36-2107 (officer and enlisted) and AFCAT 36-2223. In conjunction with the local military personnel flight, the unit training office will implement an ADSC program for in-unit training according to the publications and formal schools' catalog listed above.

2.2.1. Before entering qualification training, each aircrew member must comply with the appropriate formal course training prerequisites prescribed in AFCAT 36-2223.

2.3. Ground Training Requirements for Aircrew Members. Complete ground training requirements for initial qualification in accordance with AFI 11-202, Volume 1. Aircrew training device (ATD) requirements: Cockpit Procedural Trainer (CPT), WST, Operational Flight Trainer (OFT), Air Refueling Part Task Trainer (ARPTT), Loadmaster Part Task Trainer (LMPTT), Loadmaster Training Device (LMTD) and ground aircraft training for aircrew members will provide experience in normal and emergency procedures. The ATS contractor normally accomplishes device training. For in-unit qualification training, commanders will obtain and use the currently approved formal school courseware. For in-unit academic training, accomplish academic training requirements as directed in applicable courseware. For written examinations, satisfy requirements of AFI 11-2C-141, Volume 2, *C-141 Flight Evaluation Criteria* and MAJCOM guidance.

2.3.1. Applicable ground training (i.e., simulators, aircraft systems, etc.) accomplished at the formal school establishes due dates for subsequent continuation training. If the date of accomplishment is

unknown, use the date on the AF Form 8, **Certificate of Aircrew Qualification**, generated at the formal school.

2.4. Flying Training Requirements for Aircrew Members. Complete flying training requirements for initial qualification in accordance with AFI 11-202, Volume 1. Approved in-unit training must be accomplished according to applicable formal school courseware and the following guidance:

2.4.1. Flying training lessons should be completed in order; however, if mission scheduling or student progress dictates otherwise, the unit commander or designated training supervisor may change the order.

2.4.2. There should be a minimum time lapse between training missions and every effort should be made to complete qualification training requirements within the prescribed time period.

2.4.3. With the operations group commander's approval (or AFRC/ANG-equivalent), upgrade and special qualification training requirements may be completed during operational missions under the supervision of an instructor of like specialty. If passengers are carried, both pilots must be qualified.

2.4.4. Initial category II ILS qualification. Ground and flight training requirements for category II ILS training will normally be incorporated into initial qualification courses.

2.4.4.1. Copilot Category II ILS training will be accomplished in the right seat of the WST/OFT or aircraft for all initial qualifications. Certification will normally be accomplished by a 57th Airlift Squadron instructor pilot (IP) and annotated in the individual's training record.

2.4.4.2. AC Category II ILS training will be accomplished in the left seat of the WST/OFT or aircraft. ACs shall remain certified for copilot Cat II ILS duties in the right seat. Qualification will be IAW AFI 11-2C-141, Volume 2.

2.4.5. In-unit training of formal school courses (secondary method) is authorized only with HQ AMC/DOTA coordination, except when specifically exempted by this volume. Unit commanders using the secondary method will obtain and use the currently approved C-141 formal school courseware (See AFCAT 36-2223 and paragraph **1.5.** of this volume).

2.5. Conversion/Difference Qualification. 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 qualification requirements may be waived. The following conditions will 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 PAI time requirement. Send waivers through channels (see **Table 1.1.**) and include the information specified in paragraph **1.2.5.** Additionally, include the most recent aircraft flown and total time in that aircraft in the remarks' section of the waiver.

2.5.1.1. Initial cadre will not be designated in a crew position higher than currently held, e.g., C-130 mission pilot (MP) to C-141 IP unless previously qualified in the conversion aircraft.

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

2.6. Multiple Qualifications.

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

2.7. Senior Officer Qualification Requirements. AFI 11-202, Volume 1 identifies senior officer qualification requirements. 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 in their primary assigned aircraft. Those senior officers who were previously C-141 qualified via an initial qualification course, and are assigned to the C-141 as primary aircraft, may complete requalification training. Senior officers flying unsupervised must meet the above requirements, be current and qualified in the weapons system and maintain flying 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. Senior officers who maintain FTL E are considered basic aircraft qualified (BAQ) or basic mission capable (BMC) based upon their assessment of their ability to achieve MR status within the specified 45 days.

2.7.2. 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 an FE, NAF/CCs and OG/CCs must maintain a minimum of FTL E requirements, be BMC, and be flight examiner qualified IAW AFI 11-2MDS, Volume 2 (i.e., require a 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 FE status are not required. Also, FE status for additional aircraft assigned to the unit is not required. NAF/CCs and OG/CCs maintaining FTL E require instructor supervision when at the controls of an aircraft. (***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.)

2.7.3. Senior officers who were previously qualified as C-141 first pilot or higher are not required to attend the C141PSO course unless unqualified more than 5 years.

2.7.4. Wing commanders and vice wing commanders need only maintain familiarity (via jump seat) with air refueling and airdrop based on their unit's descriptions.

2.7.5. Squadron commanders and operations officers will accomplish initial and mission qualification as well as maintain basic and mission currency requirements. These individuals will also qualify in airdrop and air refueling based on their unit's description (or as specified in MAJCOM supplement).

2.7.5.1. Airdrop currency is required for those individuals performing mission commander duties.

2.7.5.2. AFRC/ANG squadron commanders and operations officers will maintain crew qualification according to their position descriptions.

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

2.9. Reports. The ATS has a post-training feedback system that elicits information and comments from students, supervisors, and evaluators in order to continually improve, update, and refine the ATS. Commanders and supervisors should promote use of this feedback system to its fullest extent.

2.10. Failure to Progress. If a student fails to progress according to syllabus requirements, the command accomplishing the training will conduct a progress review (PR). The PR can recommend continuation in training or AFI 11-402 action, e.g., a Flying Evaluation Board (FEB) to the individual's unit commander. (***NOTE***: The ATS contractor will identify students who fail to progress IAW the applicable ATS contract as outlined in **Chapter 6**.)

2.10.1. Failure to Complete Training. If any crew member fails to complete a formal course for reasons other than those described in 2.10., the formal school will send a recommendation to the individual's unit on whether he or she should complete training in-unit, or return to the formal school to complete training.

Chapter 3

MISSION QUALIFICATION TRAINING (PHASE II)

3.1. Time Periods for Mission Qualification. Pilots and navigators must complete mission qualification training (primary, supervisory, or staff) within 90 calendar days (or as specified in MAJCOM supplement) of return from formal school or completion of in-unit training. Training time starts with accomplishment of the first significant training event following completion of the formal or in-unit training described in **Chapter 2**.

3.1.1. Crossflow program selectees will be entered into AC mission qualification training upon arrival at the unit. Delays to mission AC upgrade are contrary to the intention of the crossflow program and will be avoided.

3.1.2. The minimum experience prior to a first flight engineer flight evaluation (MF) is 300 PAI primary/secondary flight engineer hours or 500 total flight engineer hours.

3.1.3. After completing C-141LIQ and in-unit certification, loadmasters are qualified as second loadmasters (FL) and perform loadmaster duties on missions requiring two loadmasters. After completing in-unit LMQ training and an initial mission qualification evaluation, loadmasters are mission qualified (ML).

3.1.3.1. Second loadmaster (FL) certification will be completed within 45 days (or as specified in MAJCOM supplement) of arrival on station. This 45 day period is intended to include two weeks for the purposes of in-processing, contractor conducted local indoctrination training (formerly the 3 day LMQ), and the 30 day passenger certification process. Mission qualification training starts immediately following completion of all FL certification requirements.

3.1.3.2. LMs must be recommended for ML upgrade using the applicable training guide by an instructor or flight examiner LM and satisfactorily complete a qualification flight evaluation (AFI 11-2C-141, Volume 2).

3.1.3.3. The number of airlift missions required to transition or qualify will depend upon trainee progress and demonstrated proficiency. Instructors will use the C141LMQ training guide for all LMs transitioning or initially qualifying in C-141 aircraft. Trainees will receive training and be graded in each training guide subarea. Instruction in each subarea will be repeated until the student attains the appropriate knowledge and performance levels.

3.2. Ground Training Requirements. All academic ground training required for mission qualification will be completed prior to certification or qualification in the unit operational mission (Senior officers or staff personnel that will maintain BAQ or BMC are only required to accomplish egress training, Instrument Refresher Course (IRC) (if applicable), flight physical and physiological training as specified in AFI 11-202, Volume 1.)

3.2.1. Academic ground training required for mission qualification will be conducted by the ATS contractor as specified by the contract. Portions of the ATS contractor mission qualification may include Air Force instruction e.g., upgrade training folders used in conjunction on operational missions. Additional ground training not covered by the ATS contract will be provided by the unit.

3.2.2. Emergency Nuclear Airlift Force (ENAF). ENAF training will be completed within 6 months of completing initial qualification (MF or ML qualification for flight engineers and loadmasters). The

one-time requirement will be according to AMCR 50-16. If ENAF training is not completed within the 6-month period after the initial qualification checkride, the crew member will not be scheduled for operational missions. Load training as well as academic training must be completed to credit this event.

Table 3.1. Mission Qualification Ground Training Requirements. (NOTE: If conventional taskings prevent completion of mission qualification training prior to deployment, contact parent MAJCOM for waiver approval. Waivers will be approved on a case-by-case basis.)

Code	Training Event 1,2,6	Pilot	Copilot	Nav	FE	LM	*Note*
G002	Aircraft Marshaling Training and Examination	x	x	x	x	x	
G003	Flightline Drivers Training and Examination	x	x	x	x	x	5
G010	Chemical Biological Warfare Training	x	x	x	x	x	4
G031	Initial Command and Control Procedures	x	x	x	x	x	
G060	Tactics	x	x	x	x	x	6
G070	Aircrew Intelligence Training	x	x	x	x	x	6
G080	Communications Procedures	x	x	x	x		6
G090	Anti hijacking	x	x	x	x	x	
G100	Laws of Armed Conflict	x	x	x	x	x	
G110	Force Protection Requirements	x	x	x	x	x	6
G120	ISOPREP Review	x	x	x	x		4,6
G130	IRC	x	x	x			
G150	TERPS				x		
G182	Hazardous Cargo Training	x	x			x	6
G230	CRM	x	x	x	x	x	
G280	Combat Arms Training	x	x	x	x	x	6
LS04	Aircrew Chemical Defense Training	x	x	x	x	x	4,6
LS05	Egress Training with ACDE	x	x	x	x	x	6,7
LS08	Egress Training	x	x	x	x	x	
LS10	Hanging Harness Training	x	x	x	x	x	3
LS12	Hanging Harness Training with ACDE	x	x	x	x	x	3,6,7
PP01	Flight Physical	x	x	x	x	x	
PP11	Physiological Training	x	x	x	x	x	
P280	ACDTQT	x	x	x	x	x	
S-V80-A	Initial Combat Survival Training	x	x	x	x	x	3
S -V90-A	Initial Water Survival Training	x	x	x	x	x	3

NOTES:

1. Events may be accomplished at formal school or in-unit. Previously certified and qualified mission-ready crew members transferring between units or in a cross-flow program (between flying units) only need G002, G003, G120 and any applicable events in which they have lost currency. Cross-flow crew members also require G060.
2. AC Upgrades only need G002 and other applicable events in which they are non-current.
3. Required if unit mission requires that parachutes be carried on the aircraft.
4. Flight Surgeons only need PP01, PP11, G010, LS08, G120 and LS04.
5. Required only for crew members who need to drive on the flightline as determined by the squadron commander.
6. AETC crew members as specified in MAJCOM supplement.
7. LS12 is a one-time only event in each MDS.

3.2.3. Ground training accomplished during mission qualification establishes due dates for subsequent continuation training. 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 High-threat 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 Requirements (G110) training.

3.3. Flying Training Requirements:

3.3.1. Basic aircraft qualified (BAQ) aircrew members pursuing MR status will accomplish Training Level "D" continuation training requirements (see paragraph **4.3.**).

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).

3.3.3. Formal school aircraft commander trainees, as well as graduates of the prior qualified AC (PAQ) course and graduates of the pilot requalification (PRQ) course, may attend air refueling training in succession. Graduates of the pilot requalification (PRQ) may attend airdrop training in succession provided they have had 6 months of airdrop experience within the last five years. Formal school initial training for flight engineers may include training in areas other than airland. Navigators will complete airland and airdrop training prior to being considered mission qualified.

NOTE:

For trainees attending the aircraft commander air refueling and airdrop formal school courses in succession, their airland operational mission evaluation will occur after returning to home station.

3.3.4. When participating in unilateral training and joint airborne air transportability training (JA/ATT) missions, trainees may be utilized in their respective crew positions provided the unqualified crew position is supervised by an instructor or flight examiner of like specialty.

Chapter 4

CONTINUATION TRAINING (PHASE III)

4.1. Aircrew Status.

4.1.1. Mission Ready (MR). For Status of Resources and Training System (SORTS) and operational tasking, a mission-ready aircrew member is defined as one who is available, qualified, and certified in the squadron's mission (completed mission qualification training for applicable crew position).

4.1.2. Basic Mission Capable (BMC). A Non-Mission Ready aircrew member assigned to MAJCOM headquarters, NAF, Air Mobility Warfare Center (AMWC), Tanker Airlift Control Element (TALCE), Air Mobility Operations Group (AMOG), formal schoolhouse, or DRU who has completed mission qualification training, does not maintain MR status, but maintains familiarization in the command or unit operational mission. BMC Crew members must be capable of attaining MR status within 45 days.

4.1.3. Basic Aircraft Qualified (BAQ). An aircrew member who has satisfactorily completed initial qualification training and is qualified to perform aircrew duties in the unit's aircraft in accordance with AFI 11-202, Volume 1. (Example: Uncertified FLs and FFs, FPs, and FNs)

4.1.4. Non-Mission Ready (NMR). An individual who is non-current or unqualified in the aircraft, incomplete in required continuation training, or not certified to perform the unit mission is a NMR crew member. A crew member is non-current the day after the event currency expires. Regain currency based on time elapsed since becoming non-current as described in paragraph **1.6.**

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

4.1.4.1.1. Waive the required training in accordance with paragraph **4.6.** The individual is then a MR crew member.

4.1.4.1.2. Place the crew member in supervised status (individual flies with an instructor of like specialty) until required training is accomplished. The operations group commander may allow individuals to fly unsupervised on continental United States (CONUS) sorties if loss of MR status was for failure to complete ground/flight continuation training. ***NOTE:*** For flight continuation training events that have a currency and are listed in **Table 4.1.**, OG/CC approval is not required and the individual may fly under the same rules as **4.1.4.2.**

4.1.4.2. If the crew member is NMR for failure to maintain currency per paragraph **4.6.1.**, place the crew member in supervised status for that event (individual flies with an instructor of like specialty) until required training is accomplished. Individuals noncurrent for an event in **Table 4.1.** may fly unsupervised on CONUS sorties for which that event will not be accomplished. The crew member cannot deploy until currency is regained.

4.1.4.2.1. Noncurrency in the applicable currency events of the ground and flying continuation training tables have the following consequences:

Table 4.1. Noncurrency Flying/Flight Continuation Training.

Non-current In	Result
Isoprep Review	May only fly CONUS missions
PNAF	Restricted from peacetime PNAF
Airland	Restricted from Airland, AR, AD and SOLL II
Airdrop	Restricted from AD and SOLL II
Formation Air Refueling	Restricted from formation AR
SOLL II	Restricted from SOLL II
Air Refueling	Restricted from AR, SOLL II, and Overseas Sortie
Overseas Sortie	Restricted from Overseas Sortie

4.1.5. In addition to the above, MR, BMC and BAQ crew members must have accomplished and/or maintained the requirements in AFI 11-202, Volume 1 for their respective status, as well as all events listed in the applicable ground and semiannual flying continuation tables.

4.2. Responsibilities.

4.2.1. Squadron Commander. The squadron commander or designated representative determines the training level (TL) of each assigned crew member and will ensure individuals receive training to successfully complete unit missions and maintain individual proficiency.

4.2.1.1. Training Levels (TL). Before each semiannual period, the squadron commander will assign each crew member a TL. TL assignment is based on experience and aircraft proficiency. Airlift aircrew members may have a different TL for different flying qualifications, i.e., a crew member may be an FTL "A" airland AC, but an FTL "C" AD copilot (CP). Crew members may be assigned ground training levels that are more restrictive, but never less restrictive than the requirements in paragraph **4.2.1.1.2.** Use the date of the initial qualification inflight evaluation for determining an individual's time in the weapon system. TL definitions follow:

4.2.1.1.1. Flying Training Levels (FTL):

4.2.1.1.1.1. FTL "A"-highly experienced crew members. This may include MR or NMR AMC headquarters and Tanker Airlift Control Center (TACC) personnel; AETC instructors; NAF personnel; Air Mobility Warfare Center (AMWC) instructors; wing, operations group, and squadron commanders; operations officers, personnel assigned to OG evaluator 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. ***NOTE***: Crew members assigned to MAJCOM headquarters, NAF, TACC, AMWC, Tanker Airlift Control elements (TALCE), Air Mobility Operations Groups (AMOG), Combat Crew Training School (CCTS), or a direct reporting unit may be categorized as Basic Mission Capable (BMC) and assigned to FTL "A" and ground training level (GTL) "4." In addition to GTL "4" requirements, these individuals must also accomplish annual CRM training requirements.

4.2.1.1.1.1.1. BMC individuals may fly unsupervised on local training missions provided they are current and qualified. They require instructor supervision on all other missions. If refresher simulator training requirements are not met, the individual must fly with an instructor of like specialty unless waived (see paragraph **4.6.**)

4.2.1.1.1.2. FTL "B" - experienced, mission ready crew members.

4.2.1.1.1.3. FTL "C" - MR crew members. Copilots, FLs and FFs should be assigned to FTL "C." If highly proficient, squadron commanders may assign these crewmembers to FTLs "A" or "B."

4.2.1.1.1.4. FTL "D" - BAQ crew members. Designated primarily for unqualified and BAQ crew members who are pursuing MR status.

4.2.1.1.1.5. FTL "E" - BAQ or BMC, non-instructor 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. This training level does not apply to enlisted crew positions.

4.2.1.1.2. Ground Training Levels (GTL) (See **Table 4.2.**):

4.2.1.1.2.1. GTL “1” - Highly experienced crew members with greater than ten years of operational flying in their rated specialty.

4.2.1.1.2.2. GTL "2" - Experienced crew members with greater than five but less than ten years of operational flying in their rated specialty.

4.2.1.1.2.3. GTL "3" - Inexperienced crew members with less than five years of operational flying in their rated specialty.

4.2.1.1.2.4. GTL “4’” - Assigned to senior officers and staff personnel that will not maintain MR status.

4.2.1.1.3. Change of FTL or GTL. Once the semiannual period begins, personnel should not be moved to a level requiring fewer events. ***EXCEPTION***: Crew members that have upgraded from BAQ to BMC or MR may be placed in a different FTL any time after attaining MR status. ***NOTE***: Established TLs do not preclude the squadron commander from scheduling an individual for additional training if deemed appropriate.

4.2.2. Centralized aircrew training. Unit training offices will:

4.2.2.1. Provide all annual ground training required to maintain currency for aircrew members assigned or attached to airlift units. (***EXCEPTIONS***: Physiological training, physical examination, aircrew proficiency and refresher ground training provided by the ATS contractor, and open and closed book examinations, or as specified in MAJCOM supplement.)

4.2.2.2. Establish and administer non-ATS centralized aircrew training. This will include staff assistant visits to squadron training sections.

4.2.2.3. Work with the ATS contractor to construct centralized aircrew training to provide effective training in minimum time with the least disruption of aircrew productive time.

4.2.2.4. Publish training schedules and quotas in the wing operations plan.

4.2.2.5. Ensure aircrew members entered into training are not removed from training until training is completed or member is eliminated.

4.2.2.6. Determine instructor augmentation. Operations group commander will direct augmentation as required.

4.2.3. Flight commanders. Flight commanders will check quality of training accomplished, identify deficiencies, and advise squadron staff of additional training needs.

4.2.4. Unit schedulers. Tailor training sorties to increase training and use flying time effectively.

4.2.5. Crew members**.** Each crew member is responsible for monitoring and completing training requirements.

4.2.6. MAJCOMs and NAFs. Determine unit of attachment for their staff personnel in flying positions.

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. Crediting Event Accomplishment:

4.3.1.1. 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 the individual's currency requirements and establishes a subsequent due date.

4.3.1.2. 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. Crew members unqualified for other than an unsatisfactory flight evaluation may log ground continuation training if in phase.

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

4.3.1.4. Aircrew members who graduate from the following courses will be credited with ATD, including CBTs, in the semiannual period in which they graduate:

4.3.1.4.1. Pilot initial qualification (PIQ)

4.3.1.4.2. Aircraft commander qualification (ACQ)

4.3.1.4.3. Prior qualified aircraft commander qualification (PAQ)

4.3.1.4.4. Pilot requalification (PRQ)

4.3.1.4.5. First pilot qualification (FPQ)

4.3.1.4.6. Navigator initial qualification (NIQ)

4.3.1.4.7. Navigator requalification (NRQ)

4.3.1.4.8. FE initial qualification (FIQ)

4.3.1.4.9. First flight engineer (FFE)

4.3.1.4.10. Loadmaster initial qualification (LIQ)

4.3.1.4.11. Loadmaster Mission Qualification (LMQ)

4.3.1.5. Aircrew members who graduate from Flight Engineer Instructor (FEI) course will be credited with Aircraft Systems Refresher (G220) and related CBT lessons for the semiannual period in which they graduate (no ATD credit).

4.4. Currency for Aircrew Members.

4.4.1. Ground Continuation Training Events. Aircrew members will comply with requirements of **Table 4.2.** All items are MR events except flight records review. See **Attachment 1** for course descriptions. AECMs comply with requirements in AFI 11-2AE.Volume 1.

4.4.1.1. Crew members attached to units (i.e., NAF, MAJCOM, AMWC, etc.) may accomplish 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.

Table 4.2. Ground Continuation Training Events.

Event	Code	GTL 1	GTL 2	GTL 3	GTL 4
Chem-biological warfare defense [9]	G010	B	B	B	
Tactics [9]	G060	A	A	A	
Aircrew intelligence [9]	G070	A	A	A	
Comm Procedures [9]	G080	B	B	B	
Anti-hijack	G090	B	B	B	B
Laws of armed conflict	G100	A	A	A	A
Force Protection Requirements [9]	G110	A	A	A	A
ISOPREP review [4, 9]	G120	180	180	180	180
Instrument refresher course [6]	G130	C	C	C	C
TERPS [3]	G150	T	B	A	
Hazardous cargo training [5, 9]	G182	A	A	A	
CRM refresher	G230	A	A	A	A
CRM simulator (Pilot, Flt Engr)	G240	A	A	A	
CRM simulator (Nav, LM) [7]	G240	T	T	T	
Combat arms training [4, 9]	G280	B	B	B	
Combat survival training [8]	LS02	T	T	T	T note 8
Water Survival Training [9]	LS03	T	T	T	
Aircrew chemical defense training [9]	LS04	B	B	B	

Event	Code	GTL 1	GTL 2	GTL 3	GTL 4
Acft ground egress training [1]	LS08	T	T	B	B
Flight physical [1,4]	PP01	A	A	A	A
Physiological training [1,4]	PP11	T	T	T	T
Flight records review [2]	RR01	A	A	A	A
A-Annual	*B-Biennial*	C-Check Cycle	SA-Semiannual	T-Triennial	

NOTES:

1. Mandatory grounding item on expiration date; individual will not fly until required training is accomplished.
2. Not required to maintain mission ready status, although should be accomplished when due.
3. Applies to flight engineers only.
4. See event description in **Attachment 2** for additional information on currency requirements.
5. N/A for navigators and flight engineers.
6. Applies to pilots and navigators only.
7. OG/CCs may waive G240 for Navigators and Loadmasters when either the unit is not co-located with a simulator or when the simulator is not equipped with the applicable crew position.
8. Aircrew whose mission does not involve flight in high-threat areas may substitute Low-Threat Combat Survival Training (LS11)
9. AETC crew members as specified in MAJCOM supplement.

4.4.1.2. Flight Surgeons comply with requirements of **Table 4.3.**

Table 4.3. Flight Surgeon Ground Continuation Training Events.

Event	Code	Frequency
Chemical-biological defense training [2]	G010	B
Anti-hijack [2]	G090	B
Laws of armed conflict [2]	G100	A
Force Protection Requirements [2]	G110	A
ISOPREP review [3]	G120	180
CRM [4]	G230	One-time
High-threat combat survival [2]	LS02	T

Event	Code	Frequency
Aircrew chemical defense training [2]	LS03	B
Water survival [2]	LS04	T
Aircraft ground egress training [1]	LS08	B
Flight physical [1]	PP01	A
Physiological training [1]	PP11	T
Written Exam	Q001	C
Flight records review	RR01	A

A-Annual	*B-Biennial*	*C-17 Months*	SA-Semian-nual	T-Triennial

NOTES:

1. Mandatory grounding item.
2. Flight Surgeons without a mobility requirement may substitute Low-Threat Combat Survival Training (LS11)
3. See event description in **Attachment 2** for additional information on currency requirements.
4. CRM is a one-time requirement in primary assigned aircraft.

4.4.1.3. Annual ground training requirements not listed in AFI 11-202, Volume 1 are not required for those aircrew members who will not remain in the command or will be assigned non-flying positions within four months after their due date. Requirements apply if the individual is transferred to another command that requires the training requirements.

4.4.1.4. Second flight engineers will complete the First Flight Engineer Qualification (FFE) course in lieu of the FE Continuation Training (FCT) course.

4.4.1.5. Annual egress training requirement for SOLL II aircrew members may be accomplished on an actual SOLL II exercise during ground static training.

4.4.1.6. ATS continuation training for all crew positions is mandatory unless waived by HQ AMC/DOTA, or as specified in MAJCOM supplement with HQ AMC/DOTA coordination.

4.4.1.6.1. Aircraft systems refresher training is taught in conjunction with continuation training.

4.4.1.7. LMs maintaining mission-ready airdrop qualification receive their annual aerial delivery refresher course during ATS continuation training. LMs may satisfy initial requirements by attaining qualification through successful completion of the C141LAD or approved in-unit training.

4.4.1.8. Navigators and LMs will attend Crew Resource Management (CRM) Mission Oriented Simulator Training (MOST) simulator profiles on a triennial basis. Any active participation in the MOST scenarios must be pre-coordinated with the ATS instructors conducting the profile.

4.4.1.9. Aircrew chemical defense task qualification training (ACDTQT). Units without simulators may make arrangements with the main operating base (MOB) training office where simulator refreshers are performed to meet this requirement.

4.4.1.10. Hot refueling training. All SOLL II crew members will be certified in hot refueling procedures. Initial training for all crew positions will consist of academic training and at least one actual hot refueling.

4.4.2. Flying Continuation Training Requirements. **Table 4.4.** thru **Table 4.6.** list standardized flying. See **Attachment 2** for event descriptions.

4.4.2.1. Dual-Seat Qualification. First pilots and higher qualified pilots will be dual seat qualified, and may accomplish training events in either seat. Copilots may not fly in the left seat unless under direct IP supervision.

4.4.2.2. ATD Credit for Training Events. Crew members may credit flight training events in ATDs as indicated in **Table 4.8.**

4.4.2.3. Senior officers and staff crew members maintaining basic qualification will, as a minimum, maintain FTL E requirements. This requirement also applies to additional aircraft in which an individual may be qualified. In addition to always flying with an instructor of like specialty, FTL E senior pilots must be current in takeoffs, landings, and instrument approaches prior to carrying passengers.

4.4.2.4. Flight Surgeons comply with requirements of AFI 11-202, Volume 1.

4.4.2.5. Pilots who have completed an approved aircraft commander air refueling course, but have not been certified as an AC, should maintain air refueling (AR) currency on operational or local missions under the supervision of an IP after the required mission fuel onload is received. This may be accomplished on operational missions.

4.4.2.6. Airdrop proficiency and currency requirements. The AC, copilot, navigator, and LM may take credit concurrently for an AD, provided they are occupying their respective crew positions.

NOTE:

LM airdrop evaluations will be administered on actual platform heavy equipment AD missions (AFI 11-2C-141, Volume 2).

4.4.2.7. SOLL II: Crews must stand down for a minimum of 1 day for extensive mission planning and coordination prior to flights. (***EXCEPTION***: Flight engineers and loadmasters need not stand down prior to local training SOLL II flights.) A typical sortie should include a low-level route, an airdrop, or night-vision goggles (NVG) landings (SOLL II).

4.4.2.8. Senior Officer Aircrew Currency Requirements:

4.4.2.8.1. Senior officers designated to fly as ACs “in command” must maintain full MR status.

4.4.2.8.2. Senior officers maintaining basic qualification or basic mission capable status in the C-141 will, as a minimum, maintain FTL E requirements. This requirement also applies to additional aircraft an individual may be qualified in. In addition to always flying with an

instructor of like specialty, FTL E senior pilots must be current in takeoffs, landings, and instrument approaches prior to carrying passengers. ***NOTE***: Wing commanders may designate other staff officers to fly with an instructor or flight examiner. Those designated will have a restriction statement on their AF Form 8, **Certificate of Aircrew Qualification**.

Table 4.4. Pilot/Copilot Semiannual Continuation Flying Requirements.

		Pilot						**First Pilot/Copilot**				
Event	**Code**	**A**	**B**	**C**	**D**	**E**	**Cur**	**A**	**B**	**C**	**D**	**Cur**
Formation departure and join-up [1]	F 010	2	3	4	5							
AR formation [1]	F 060	2	2	2	2			1	1	1	1	
Visual day (lead) [1]	F 070	1	1	1	2			1	1	1	2	
Visual day (wing) [1]	F 080	2	2	2	3							
Visual night (lead) [1]	F 090	1	1	1	2			1	1	1	2	
Visual night (wing) [1]	F 100	2	2	2	3							
SKE lead [1]	F 110	2	2	2	3			1	1	1	2	
SKE wing (L) [1]	F 120	1	1	1	2							
SKE wing [1]	F 130	2	3	3	4							
LL SKE lead [1]	F 140	1	2	2	3			1	1	1	2	
LL SKE wing (L) [1]	F 150	1	1	1	2							
LL SKE wing [1]	F 160	2	3	3	4							
LL visual lead [1]	F 170	1	2	2	3			1	1	1	2	
LL visual wing (L) [1]	F 180	1	1	1	2							
LL visual wing [1]	F 190	3	4	4	5							
Formation recovery [1]	F 200	2	3	4	5							
Proficiency sortie	M 010	2	2	2	2			3	3	4	5	
Overseas sortie [3,4]	M 030	2	2	4	4			4	4	4	4	
PNAF [1]	M 040						180					180
Air Drop (L/W/SS) [1]	M 070	5	6	8	10		Q	4	5	6	8	Q
Personnel [1]	M 080							1	1	1	1	
Heavy [1]	M 090							1	1	1	1	
CDS [1]	M 100	2	2	2	2							
Threat scenario sortie [1]	M 110	1	1	1	1			1	1	1	1	

		Pilot						First Pilot/Copilot				
Event	**Code**	**A**	**B**	**C**	**D**	**E**	**Cur**	**A**	**B**	**C**	**D**	**Cur**
Unfamiliar routes [1]	M 120	2	2	2	2			1	1	1	1	
Low-levels (SKE or vis) [1]	M 140	5	6	8	10			4	5	6	8	
Takeoff	P 020	12	18	24	30	6	M	12	18	24	30	M
Spiral Up Departure [1]	P053						A					A
VFR Overhead [1]	P061						A					A
Random Steep Arrival [1]	P064						A					A
Curvilinear Approach [1]	P065						A					A
Instrument approach	P 070	15	20	26	32	6	M	15	20	26	32	M
Precision approach	P 100	6	6	8	10	2		6	6	8	10	
Non-precision approach	P 110	6	6	8	10			6	6	8	10	
NDB approach	P 116	2	2	2	2			2	2	2	2	
Category II ILS	P 120	2	2	2	2			1	1	1	1	
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	P 160	2	3	3	3			2	3	3	3	
Approach and GA (simulated engine-out)	P 170	2	3	3	3							
Approach and landing (simulated eng out)	P 180	2	2	2	2							
Landing	P 190	12	18	24	30	6	M	12	18	24	30	M
Landing, night [6]	P 192	2	2	2	2		Q	2	2	2	2	Q
T&G landing (Certified ACs only; N/A IPs) [1]	P 200						M					
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	
Authentication procedures	P 271	1	1	1	1			1	1	1	1	
ACDTQT	P 280	A	A	A	A			A	A	A	A	
Receiver AR [1]	R 010	4	5	6	7		M					
Receiver AR (night) [1]	R 020	1	2	2	2							
Receiver AR (heavy weight) [1]	R 030	1	1	1	1							

		Pilot						First Pilot/Copilot				
Event	**Code**	**A**	**B**	**C**	**D**	**E**	**Cur**	**A**	**B**	**C**	**D**	**Cur**
Rcvr AR bkwy/emer separation [1,2]	R 040	1	1	1	1			1	1	1	1	
Receiver AR tanker autopilot off [1]	R 050	2	2	2	2							
M – Monthly	*Q – Quarterly*					A – Annual						

NOTES:

1. Air refueling, formation, airdrop, threat scenario, unfamiliar routes, and low level flying requirements apply if qualified/certified in those events.
2. First pilot (MCF)/Copilot requirement may be accomplished in the ARPTT or WST.
3. Det 2 AMCAOS and 97 AMW personnel (maintaining MR status) must participate as primary or additional crew members on 1 overseas sortie during each semiannual period. Alternation between 21 AF and 15 AF areas of responsibility is encouraged.
4. (Not applicable to 97 AMW and Det 2 AMCAOS personnel) Operations group commanders may authorize substituting CONUS operational sorties for overseas when either or both airlift requirements or crew member availability are insufficient to provide overseas sortie accomplishment. This authority will not be delegated to lower levels. Consecutive CONUS sortie substitution is not permitted.
5. Instructors and flight examiners may credit half of their requirements (e.g., airland, AR, AD, etc.) while instructing or evaluating. (***EXCEPTION***: Instructor and flight examiner pilots may not credit any takeoffs or landings flown by another pilot.)
6. MAJCOMs may substitute "180" for "Q" in the currency (CUR) column of this table at their discretion. (For AFRC and ANG units, currency is 180 days.)

Table 4.5. Navigator Semiannual Continuation Flying Requirements.

Event	Code	A	B	C	D	E	CUR
Formation departure and join-up 1	F 010	2	3	4	5		
AR formation 1	F 060	2	2	2	2		
Visual day (lead) 1	F 070	1	1	1	2		
Visual day (wing) 1	F 080	2	2	2	3		
Visual night (lead) 1	F 090	1	1	1	2		
Visual night (wing) 1	F 100	2	2	2	3		
SKE lead 1	F 110	2	2	2	3		
SKE wing (L) 1	F 120	1	1	1	2		
SKE wing 1	F 130	2	3	3	4		

Event	Code	A	B	C	D	E	CUR
LL SKE lead 1	F 140	1	2	2	3		
LL SKE wing (L) 1	F 150	1	1	1	2		
LL SKE wing 1	F 160	2	3	3	4		
LL visual lead 1	F 170	1	2	2	3		
LL visual wing (L) 1	F 180	1	1	1	2		
LL visual wing 1	F 190	3	4	4	5		
Formation recovery 1	F 200	2	3	4	5		
Proficiency sortie 1	M 010	3	3	4	5	6	Q
Overseas sortie 2,3	M 030	1	1	1	1		
PNAF 1	M 040						180
Air Drop (L/W/SS) 1	M 070	5	6	8	10		Q
CDS 1	M 100	1	1	2	2		
Threat scenario sortie 1	M 110	1	1	1	1		
Unfamiliar routes 1	M 120	2	2	2	2		
Low-levels (SKE or vis) 1	M 140	5	6	8	10		
FE Approach TERPS Monitor 1	P 145	A	A	A	A		
SECURE RADIO operation 1	P 270	A	A	2	2		
ACDTQT 1	P 280	A	A	A	A		

NOTES:

1. Air refueling, formation, airdrop, threat scenario, unfamiliar routes, and low level flying requirements apply if qualified/certified in those events.
2. Det 2 AMCAOS and 97 AMW personnel must participate as primary or additional crew members on 1 overseas sortie during each semiannual period. Alternation between 21 AF and 15 AF areas of responsibility is encouraged.
3. (Not applicable to 97 AMW and Det 2 AMCAOS personnel) Operations group commanders may authorize substituting CONUS operational sorties for overseas when

either or both airlift requirements or crew member availability are insufficient to provide overseas sortie accomplishment. This authority will not be delegated to lower levels. Consecutive CONUS sortie substitution is not permitted.

4. Instructors and flight examiners may credit half of their requirements (e.g., airland, AR, AD, etc.) while instructing or evaluating. (***EXCEPTION***: Instructor and flight examiner pilots may not credit any takeoffs or landings flown by another pilot.)

Table 4.6. Flight Engineer/Loadmaster Semiannual Continuation Flying Requirements.

		Flight Engineer					**Loadmaster**				
Event	**Code**	**A**	**B**	**C**	**D**	**CUR**	**A**	**B**	**C**	**D**	**CUR**
Proficiency sortie	M010	3	4	6	8	60	3	4	6	8	60
Overseas sortie 2,3	M030										A
PNAF 1	M040					180					180
Air Drop (L/W/SS) 1	M070						4	5	6	7	
Personnel 1	M080						2	2	2	2	
Heavy 1	M090						2	2	2	2	
CDS 1	M100						2	2	2	2	
Threat scenario sortie 1	M110	1	1	1	1		1	1	1	1	
Approach/Dept TERPS Monitor	P145	A	A	1	1						
ACDTQT	P280	A	A	A	A		A	A	A	A	

NOTES:

1. PNAF and/or airdrop qualified personnel only.
2. Det 2 AMCAOS and 97 AMW personnel must participate as primary or additional crew members on 1 overseas sortie during each semiannual period. (Alternating between 21 AF and 15 AF areas of responsibility is encouraged.)
3. (Not applicable to 97 AMW and Det 2 AMCAOS personnel.) Operations group commanders may authorize crediting overseas sorties on CONUS operational sorties when airlift requirements or crew member availability are insufficient to provide overseas sortie accomplishment. This authority will not be delegated to lower levels. Consecutive CONUS sortie substitution is not permitted.

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 4.7.** 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.

Table 4.7. 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

4.5.2. Prorate requirements for individuals changing training levels.

Table 4.8. Flight Events Creditable In WST.

Code	Training Event	Crew Position	Number CreditablePer SA Period	*Note*
F010	Formation departure and join-up	MP	2	
F060	AR Formation	All	1	
F080	Visual day (wing)	All	1	
F100	Visual night (wing)	All	1	
F120	SKE wing (L)	MP, MC	1	1
F130	SKE wing	MP, MC	1	1
F150	LL SKE wing (L)	MP, MC	1	
F160	LL SKE wing	MP, MC	1	
F180	LL visual wing (L)	All	1	
F190	LL visual wing	All	1	
F200	Formation recovery	All	1	
M010	Proficiency sortie	MP, MC	1	
M070	Air Drop (W/SS)	MP, MC	4	
M080	Personnel	MC	1	
M090	Heavy	MC	1	
M100	CDS	MP	1	
M110	Threat scenario sortie	All	1	

Code	Training Event	Crew Position	Number CreditablePer SA Period	*Note*
M120	Unfamiliar route	All	1	
M140	Low level (SKE or vis)	All	2	
P020	Takeoff	All	6	
P053	Spiral Up Departure	MP, MC	1	
P061	VFR Overhead	MP, MC	1	
P064	Random Steep Arrival	MP, MC	1	
P065	Curvilinear Approach	MP, MC	1	
P070	Instrument approach	All	6	1
P100	Precision approach	All	6	1
P110	Non-precision approach	All	6	1
P116	NDB approach	All	2	1
P120	Category II ILS	All	2	1
P130	Circling	All	1	
P140	Vis traffic pattern	All	1	
P145	Approach/Dept TERPS Monitor	FF, MF	1	1
P160	Missed approach	All	2	1
P170	Approach and go-around (engine out)	MP	2	1
P180	Approach and landing (engine out)	MP	2	
P190	Landing	All	6	
P192	Landing, night	All	2	
P200	T&G landing	MP		2
P280	ACDTQT	MP, MC, FE	1	
R040	Rcvr AR breakaway/emer separation	All	1	

NOTES:

1. Events accomplished in the C-141 OFT may also be credited .
2. All currency may be accomplished in the WST for touch & go certified aircraft commanders.

Table 4.9. Special Operations Low Level (SOLL) II Currency Requirements.

Event	Right/ Left Seat			Jump Seat			Radar Nav			Map Nav			FE/LM		
	S	Q	M	S	Q	M	S	Q	M	S	Q	M	S	Q	M
Sortie [2]	6	3	1	4	2	-	6	3	1	4	2	-	-	-	-
ARA	6	3	-	-	-	-	6	3	-	6	3	-	-	-	-
Unfamiliar Route [3]	2	-	-	-	-	-	2	-	-	2	-	-	-	-	-
Loading Exercise [4,8]	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-
Airdrop	1	-	-	1	-	-	1	-	-	1	-	-	-	-	-
Hot Refueling [5, 6,7]	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-

NOTES:

1. All events must be accomplished in a minimum illumination or NVG environment.
2. Includes entire mission planning sequence. To credit the sortie, a low level to a blacked-out AD or landing must be accomplished. A SOLL II sortie may be dual credited with a basic low level sortie.
3. To qualify, a route and LZ will not be used by the same crew within the previous semiannual period.
4. To credit a loading exercise requires accomplishing in-flight duties, performing infill and exfill checklists, and conducting an offload or onload operation. Local group special operations office will determine extent of the loading exercise.
5. To credit a hot refueling event requires participation in the pre-hot refueling, hot refueling, and post-hot refueling checklists.
6. Paragraph 4.11.10 in this volume applies to all SOLL II crew members.
7. One hot refueling event per year will involve actual pumping of fuel into any “hot” receiver. The remaining semiannual requirements will involve actually pumping fuel into any receiver. Additionally, one academic training or video presentation will be accomplished annually. The academic training or video presentation may not satisfy consecutive V260 training events.
8. All loading exercises will be conducted using a validated user package. FEs and LMs may credit one loading event per semiannual period while performing static loading operations.

4.6. Failure to Complete Continuation Training Requirements. Declare individuals NMR if they fail to complete ground or semiannual flying continuation training requirements. See paragraph **4.1.4.1.** for additional guidance on NMR crew members.

4.6.1. 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 squad-

ron commander will either direct training necessary for the individual to regain MR status or request an operations group commander waiver. ***EXCEPTION***: Flight currency (listed in the "CUR" column of the flying continuation training tables) will only be waived under extreme circumstances and only at the MAJCOM level.

4.6.1.1. Loss of Currency. Place individuals delinquent in one or more currency events in supervised training status for that event and declare them NMR in those unit missions requiring that event. 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 October). Regain currency as described in paragraph **1.6.**

4.6.1.1.1. Air refueling and airdrop. Units may accomplish any required recurrency or requalification training in-unit without MAJCOM waiver. Contact HQ AMC/DOTA to order formal school courseware, if required. ***EXCEPTION***: If the period of non-currency is 15 days or less, pilots may regain AR currency under the supervision of an AR IP or EP on operational AR missions once the fuel required for mission completion is onloaded with **no** passengers on board the aircraft. (See AFI 11-2C-141, Volume 3, *C-141 Operations Procedures* (forthcoming).)

NOTE:

Pilots who are non-current for AR must regain currency in the aircraft (not in the ARPTT or WST) under the supervision of an AR IP or EP.

4.6.1.1.2. SOLL II. Crew members non-current for airland, AD, AR, or SOLL II currency items will not fly "in-command" or as a primary crew member on SOLL II missions until currency is regained. Crew members who are non-current for AR may fly primary or in command without instructor supervision during SOLL II training missions if no AR events are conducted.

4.6.1.1.3. Prime Nuclear Airlift Forces (PNAF). Loss of nuclear evaluation currency will be regained by receiving a PNAF evaluation according to AFI 11-2C-141, Volume 2.

4.6.1.1.3.1. PNAF aircrew members will participate as primary or evaluator, as appropriate, in an actual nuclear airlift mission, not to exceed 180 days between events. Those individuals who lose 180-day currency cannot participate in peacetime nuclear missions; however, these individuals may perform duties on operational (non-nuclear) missions or contingency nuclear airlift missions. Loss of 180-day currency is regained by participating on a nuclear mission under the supervision of an instructor in the same crew position. (***EXCEPTION***: Navigators and FEs may regain currency under the supervision of an IP.) PNAF aircrew members may maintain 180-day currency by attending AMCR 50-16 PNAF load training or by using bomb dummy units (BDU) on training missions if enough actual missions are not received. Aircrew members using BDUs for currency should be scheduled first when actual missions become available.

4.6.2. 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.

4.6.3. 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.

4.7. Requirements Before PCS or TDY by 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. Training Period. Continuation training program is based on static 6-month periods (1 January - 30 June and 1 July - 31 December).

4.14. Multiple Aircraft Qualification. Crew members maintaining qualification in different model aircraft will, as a minimum, maintain FTL "A" currency requirements in each aircraft (not applicable for senior officers maintaining FTL E)

Chapter 5

UPGRADE TRAINING

5.1. General. This chapter identifies general prerequisites and training requirements for upgrade. See **Chapter 6** for related ATS courseware.

5.2. First Pilot:

5.2.1. The first pilot program is part of a building block approach leading to aircraft commander upgrade.

5.2.2. Training, as a minimum, will include taxi, take-off, and landings from the left seat. Emergency procedures will be trained to proficiency prior to the first pilot qualification evaluation. The evaluation will include normal left-seat procedures, to include taxi, take-off, approach, and landing. This evaluation can be combined with a composite qualification evaluation.

5.2.3. First pilots will qualify via the ATS FPQ course.

5.3. Aircraft Commander (AC):

5.3.1. General. Flying time prerequisites required for upgrade are based on a copilot or first pilot 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. Additionally, the following guidance applies: Select upgrade candidates based on upgrade potential, retainability, and mission requirements; fill all available quotas before requesting in-unit upgrade; use the approved ATS courseware (or command approved courseware for non-ATS); and complete applicable ground and flying requirements of this instruction.

5.3.2. In-Unit Upgrade. Formal school attendance is the primary method for AC qualification training. In-unit upgrade using courseware provided by the formal school is the secondary method. Send waiver request for in-unit upgrade to HQ AMC/DOT.

5.3.3. Graduates of an aircraft commander course will be designated NMR aircraft commanders. NMR aircraft commanders will accomplish aircraft commander continuation training requirements (training level assigned by squadron commander) and can serve as a MCF or CP augmentee while non-mission ready if MR requirements for MCF or CP are met. (***EXCEPTION***: Graduates of an AC course whose background was not a large, multi-engine aircraft (i.e., OSA/FAIP) will maintain the continuation training requirements of an MCF until certified as an MP.) A review and certification board will validate MR status on completion of mission qualification training and associated evaluation and certification. There is no flying-hour requirement for MR status.

5.3.4. AMC mobility enhancement crossflow program-selects will attend aircraft commander training for the crossflow aircraft. Crossflow selects will be entered into AC mission qualification training upon arrival at the unit. Delays to mission AC upgrade are contrary to the intention of the crossflow program and will be avoided.

5.4. Aircrew Instructor Program. Program is designed to teach selected crew member fundamentals and concepts of instructing.

5.4.1. Instructor upgrade prerequisites:

5.4.1.1. General. Instructor candidates will be selected based on experience, judgment, ability to instruct, flying skill, and technical knowledge. Instructors who are in basic qualification status may keep their basic qualification instructor status while they are in mission qualification training. However, before instructing mission events, these instructors must finish mission qualification training and satisfactorily complete an instructor flight evaluation on a flight representative of the unit's mission. FEs who are basic qualification instructors may be certified as MR instructors by their unit commander when they finish mission qualification training

5.4.1.1.1. Instructor qualifications. Unit commanders will personally review each instructor candidate's qualifications to ensure the individual possesses the following standards:

5.4.1.1.2. Instructional ability. An instructor is a teacher and, therefore, must understand the principles of instruction as outlined in the C-141 ATS instructor upgrade courseware.

5.4.1.1.3. Judgment. Instructors must possess judgment necessary to meet unexpected or induced emergencies and the ability to exercise sound judgment through mature realization of their own, their students, and the aircraft limitations.

5.4.1.1.4. Personal qualities. The instructor must have patience, tact, understanding, and the desire to instruct others. Instructors must have a personality that inspires and wins the respect of each student.

5.4.1.1.5. Technical knowledge. Instructors will be thoroughly familiar with respective aircraft systems and equipment, normal and emergency operating procedures, and, for pilots and flight engineers, prohibited maneuvers and aircraft performance under all conditions of flight. Additionally, all instructors will be thoroughly familiar with applicable portions of AFI 11-401, AFI 11-202, Volume 1, AFI 11-2C-141, Volume 3, this publication, and other applicable 11 series publications.

5.4.1.1.6. Flying experience. Instructors must possess reasonable background of flying experience to include desired standards of knowledge, judgment and proficiency in both aircraft and assigned missions. Normally, these qualities progress together. However, flying hours alone cannot be accepted as criteria for any one or all qualities.

5.4.1.2. All initial instructor upgrade candidates must be mission-ready in their unit's mission for a minimum of 6 months, including special qualifications, e.g., AD, SOLL II, etc., prior to instructing the special qualification. ***EXCEPTIONS***: As specified in MAJCOM supplement.

5.4.1.3. Aircrew members will complete instructor upgrade training within 90 calendar days after course entry.

5.4.1.4. Ground and flight training requirements: Before being designated an instructor, candidates will demonstrate to a flight examiner their ability to instruct and perform selected maneuvers and items according to applicable directives.

5.4.1.5. Pilot instructor candidates:

5.4.1.5.1. Initial pilot instructor candidates will qualify in the ATS IAC course at Altus AFB. Send waiver requests for initial in-unit instructor upgrade with rationale to HQ AMC/DOTA.

5.4.1.5.2. Pilot instructor candidates who have previously attended a formal instructor course for instructor qualification and were certified in any US Air Force aircraft may upgrade in-unit without completing the ATS IAC course. Unit commanders determine the training required to complete the upgrade. However, unit commanders may still require prior instructors to attend the ATS IAC course. In-unit IP upgrade requires OG commander approval. Approval will be documented and a copy forwarded to HQ AMC/DOTA and the appropriate Numbered Air Force (NAF).

5.4.1.5.3. Conduct instructor certification according to AFI 11-202, Volume 2 and AFI 11-2C-141, Volume 2.

5.4.1.5.4. C-141 ATS courseware will be used for all instructor upgrades. ADSCs will be incurred according to AFI 36-2107 and AFCAT 36-2223.

5.4.1.5.5. Air refueling IPs will qualify via the ATS IAR course. AR IPs must be able to instruct both KC-135 and KC-10 AR receiver procedures.

5.4.1.5.6. Airdrop IPs will qualify via the ATS IAD course.

5.4.1.6. Navigator, FE, and LM instructor candidates will qualify in respective ATS courses (i.e., Instructor Navigator Qualification [INQ], Instructor Flight Engineer [IFE], Instructor Loadmaster Qualification ILM]).

5.4.1.6.1. Instructor candidates who have previously attended a formal instructor course for instructor qualification and were certified in any US Air Force aircraft may upgrade in-unit without completing the ATS instructor course. Unit commanders determine the training required to complete the upgrade. However, unit commanders may still require prior instructors to attend the ATS course. In-unit instructor upgrades for navigators require OG commander approval. Enlisted upgrades may be approved by the squadron CC. Approval will be documented in letter or memo for record with a copy forwarded to HQ AMC/DOTA and the appropriate NAF.

5.4.1.7. All instructor candidates will satisfactorily complete a written examination on this regulation prior to qualification or requalification. Examinations will be prepared, administered, and controlled by the unit Standardization/Evaluation section.

5.4.2. For ground and flight training requirements, all initial instructor upgrade candidates will complete training on the principles of instruction at the appropriate formal school if available. Individuals may upgrade in-unit if formal school course slots are not available with a waiver in accordance with paragraph **1.2.**

5.5. Flight Examiner Qualifications. Squadron commanders will recommend instructors for flight examiner certification. Instructors identified for certification as flight examiner must possess satisfactory knowledge of Air Force and applicable MAJCOM training and evaluation policies and procedures and the ability to administer an evaluation according to AFI 11-2C-141, Volume 2.

5.5.1. Initial flight examiner candidates (pilots, navigators, FEs and LMs) will attend the ATS flight examiner course for their crew position.

5.5.2. Initial qual flight examiner candidates should observe an evaluation prior to certification.

5.6. Special Qualifications.

5.6.1. Air Refueling Training:

5.6.1.1. Aircraft commander. The normal method for AC AR qualification will be via the ATS pilot AR qualification (PAR) course, accomplished by the Altus formal school.

5.6.1.1.1. Units possessing a certified ARPTT will provide AC AR candidates training in the ARPTT prior to reporting to the Altus PAR course. Instruction should be administered by unit ARPTT instructor personnel and will include a minimum of 2 ARPTT sessions of 1.5 hours each. Units without available ARPTT instructors may utilize AR qualified pilots after receiving an ARPTT device checkout. Emphasis should be on maintaining pre-contact, closure, and contact. Each trainee will receive the full ATS PAR course at Altus AFB and may proficiency advance into the flight phase.

5.6.1.1.2. Units should schedule candidates for ARPTT training as close to the Altus reporting date as practical14 days is preferred. ARPTT training, once started, should continue uninterrupted—one session per day is preferred. This training need not take precedence over normal continuation training. ARPTT crew-pair training for 3-hour sessions is encouraged.

5.6.1.2. Copilot AR Training. Copilots will qualify via the copilot AR qualification (CAR) course. The IP or EP will make an appropriate entry in the copilot's AF Form 4022 or pilot training guide documenting academic and ARPTT phases as well as flight certification. Each wing or group operation systems manager will establish procedures to track certified copilots in AFORMS.

5.6.1.2.1. Copilot AR Training in the ARPTT. The IP or EP will instruct and assist the copilot in performing normal copilot AR duties, including checklists and radio procedures. The instructor will stabilize aircraft in a position 50-100 feet in-trail of the tanker and allow the copilot to practice holding this position until reasonable degree of stability is attained. The instructor will then demonstrate correct pre-contact and contact positions. ***EXCEPTION***: As specified in MAJCOM supplement.

5.6.1.2.2. Copilot AR Aircraft Training. Flying training will consist of at least one AR sortie with the copilot in the right seat and an IP or EP in the left seat. The IP or EP will determine if the copilot can effectively act as a safety observer during AR profile and maintain aircraft position between 100 feet in-trail and the pre-contact position. If, in the IP or EP's judgment, the copilot cannot meet these requirements, either additional sorties will be scheduled or the copilot will be removed from the AR training program. Flight evaluation will not be administered.

5.6.1.3. FE AR Training. Initial FE AR ground training is accomplished during the ATS FIQ course. Mission qualification training and evaluation is accomplished during upgrade to MF. (***NOTE***: AR evaluation may be accomplished as part of second flight engineer local training evaluation. See AFI 11-2C-141, Volume 2. If this occurs, AR will still be evaluated during MF upgrade evaluation.)

5.6.2. Airdrop Training:

5.6.2.1. Pilot. AD (wing) qualification for AD wing position will be via the ATS pilot AD qualification (PAD) course at Altus AFB. Pilot candidates will demonstrate ability to plan, brief, and execute maneuvers in **Table 4.4.** (to include both SKE and VFR departure and arrival procedures) prior to receiving a recommendation for evaluation. Emphasis during training will also be on crew coordination, mission preparation, and inter- and intra-cockpit crew resource management. PAD will also emphasize deputy element lead tasks. AD (lead) qualification will be via the ATS lead formation AC (LFU) course. FAR is a mandatory follow-on course for both PAD and LFU. Pilots are not considered AD qualified (or lead qualified for LFU trainees) until the FAR course is completed. (See paragraph **5.6.2.4.**)

5.6.2.2. Copilot. AD (wing) qualification for AD wing position will be via the ATS copilot AD (CAD) course. Copilots will complete course and requirements of the applicable training guide prior to recommendation for AD evaluation. Emphasis during training will also be on crew coordination, mission preparation, en route navigation and copilot responsibilities. FAR is a mandatory follow-on course for CAD. Copilots are not considered AD qualified until the FAR course is completed. (See paragraph **5.6.2.4.**)

5.6.2.3. Navigator. AD (wing) qualification will be via ATS navigator AD qualification (NAD) course (NAD is phase II of NIQ). Navigator candidates will demonstrate ability to plan, brief, and execute navigator-required maneuvers in **Table 4.5.** prior to receiving a recommendation for evaluation. Special emphasis will be placed on pilot-navigator coordination, thorough chart preparation, and integration of all navigation equipment and low-level AD procedures. NAD will also emphasize deputy lead tasks. AD (lead) qualification will be via the ATS navigator AD element lead qualification (NAL) course. NAR is a mandatory follow-on course for both NAD and NAL. Navigators and lead navigators are not considered AD qualified until the NAR course is completed. (See paragraph **5.6.2.4.**)

5.6.2.4. Formation air refueling. AD ACs and CPs will qualify via the ATS formation AR qualification (FAR) course. Lead and wing qualified navigators will qualify via the ATS navigator formation AR qualification (NAR) course. Lead pilots and navigators must complete FAR/NAR to be considered lead AD-qualified. Emphasis in these courses will also include inter-and intra-cockpit CRM training. The FAR or NAR is a mandatory follow-on course to PAD, CAD, NAD, LFU, and NAL courses.

5.6.2.5. Loadmaster. AD qualification will be via the ATS LM AD (LAD) qualification course.

5.6.2.6. Flight Engineer. Mission qualification training and evaluation is accomplished during upgrade to MF. (***NOTE***: AD evaluation may be accomplished as part of second flight engineer local training evaluation. See AFI 11-2C-141, Volume 2. If this occurs, AD will still be evaluated during MF upgrade evaluation.)

5.6.2.7. Container delivery system (CDS) certification. Pilot and navigator CDS certification consists of a minimum of two CDS drops with a CDS qualified AD instructor for the applicable crew position. One CDS drop will be conducted during the day and one CDS drop will be conducted at night. CDS ground training will emphasize the difference between CDS and heavy equipment AD procedures and CDS and heavy equipment rigging procedures. Loadmasters are CDS-qualified by an evaluation.

5.6.3. Night-Vision Goggles (NVG) Training:

5.6.3.1. Ground training. In-unit NVG training for pilots and navigators will consist of one-time ground training to include the following as a minimum:

5.6.3.1.1. Goggle preflight to include proper care of the NVGs

5.6.3.1.2. Focusing of the lenses

5.6.3.1.3. Battery loading

5.6.3.1.4. Headgear adjustments

5.6.3.1.5. Post-flight procedures to include removal of the batteries, packing care of the NVGs, and damage reporting procedures

5.6.3.1.6. NVG effectiveness, glare, and visual illusions

5.6.3.1.7. Documentation in AFORMS is required

5.6.3.2. NVG flight training. In-unit inflight NVG training for AD and SOLL II AD pilots and navigators will consist of a one-time flight. Instruction will be given by an NVG-qualified IP or navigator to include the following:

5.6.3.2.1. Effects of illumination on NVG effectiveness

5.6.3.2.2. Effects of glare from cockpit lighting, and techniques for reducing the glare

5.6.3.2.3. Use of the NVGs to acquire ground reference points

5.6.3.2.4. Use of the NVGs to identify other aircraft and towers

5.6.3.2.5. Problems associated with depth perception and visual acuity

5.6.4. SOLL II Training:

5.6.4.1. SOLL II was developed to support unconventional warfare forces. SOLL II forces may be called on to operate over a broad spectrum of activities requiring highly trained crews and special security measures to support and protect the operation and its user.

5.6.4.2. AMC NAFs and unit commanders will ensure SOLL II training and currency missions receive dedicated support. Aircraft and aircrews scheduled in SOLL II will receive priority over all other training missions.

5.6.4.3. Prerequisite: **Table 6.2.** outlines prerequisites for entry into the SOLL II training program.

5.6.4.4. SOLL II policy:

5.6.4.4.1. Ground training requirements will be accomplished prior to flight training

5.6.4.4.2. Train and document all SOLL II related events in one AF Form 4022

5.6.4.4.3. SOLL II crews will accomplish extensive mission planning and briefings prior to the day of the flight

5.6.4.5. SOLL II ground training. Crew members will be trained in the areas applicable to their crew positions. The training program will cover the following and include joint tasks, conditions, and standards (TCS) and standing operating procedures (SOP) as applicable:

5.6.4.5.1. Introduction (AFI 11-2C-141 Volume 3):

5.6.4.5.1.1. Security briefing

5.6.4.5.1.2. SOLL II mission

5.6.4.5.1.3. Explanation of terms

5.6.4.5.1.4. Command and control

5.6.4.5.1.5. Crew complement and qualification

5.6.4.5.2. Aircraft Capabilities:

5.6.4.5.2.1. Performance

5.6.4.5.2.2. Normal and additional equipment

5.6.4.5.2.3. Airland

5.6.4.5.2.4. Limitations

5.6.4.5.3. Landing zone configuration:

5.6.4.5.3.1. Lighting (type and pattern)

5.6.4.5.3.2. NAVAIDs

5.6.4.5.4. NVGs:

5.6.4.5.4.1. ANVIS-6 / 4949:

5.6.4.5.4.1.1. General characteristics

5.6.4.5.4.1.2. Adjustments

5.6.4.5.4.1.3. Proper fitting

5.6.4.5.4.2. Operation:

5.6.4.5.4.2.1. Precautions

5.6.4.5.4.2.2. Focusing

5.6.4.5.4.2.3. Infrared (IR) illuminator

5.6.4.5.4.2.4. De-misting shields

5.6.4.5.4.2.5. Environmental considerations

5.6.4.5.4.2.6. Scanning techniques

5.6.4.5.4.2.7. Capabilities

5.6.4.5.4.2.8. Limitations

5.6.4.5.4.2.9. Maintenance

5.6.4.5.4.2.10. Effect of ambient light

5.6.4.5.4.2.11. Emergency procedures for NVG malfunctions or failures

5.6.4.5.5. Enemy capabilities:

5.6.4.5.5.1. Long-range RADARs

5.6.4.5.5.2. GCI

5.6.4.5.5.3. Fire control RADARs

5.6.4.5.5.4. SAM and AAA

5.6.4.5.6. Enemy limitations

5.6.4.5.7. Feasibility analysis:

5.6.4.5.7.1. Publications required for threat assessment

5.6.4.5.7.2. Threat

5.6.4.5.7.3. Range

5.6.4.5.7.4. Objective

5.6.4.5.8. Mission Planning:

5.6.4.5.8.1. Route selection (primary, alternate, abort)

5.6.4.5.8.1.1. Terrain avoidance

5.6.4.5.8.1.2. Threat avoidance

5.6.4.5.8.1.3. Weather planning

5.6.4.5.8.1.4. Radar check points

5.6.4.5.8.2. Route profile:

5.6.4.5.8.2.1. High and low

5.6.4.5.8.2.2. AR requirements

5.6.4.5.8.2.3. Time control

5.6.4.5.8.3. Route Planning:

5.6.4.5.8.3.1. Chart preparation

5.6.4.5.8.3.2. Point descriptions

5.6.4.5.8.3.3. Compatibility of update point selection with NVGs and FLIR

5.6.4.5.8.3.4. Illumination requirements

5.6.4.5.8.3.5. Depth perception

5.6.4.5.8.3.6. SAR and E and E provisions

5.6.4.5.8.4. Plan for maximum autopilot, GPS and INS use

5.6.4.5.8.5. Crew coordination

5.6.4.5.9. Aircraft preparation:

5.6.4.5.9.1. Exterior. Wheel-well lights off

5.6.4.5.9.2. Interior:

5.6.4.5.9.2.1. Circuit breakers

5.6.4.5.9.2.2. Lights

5.6.4.5.9.2.3. Curtains

5.6.4.5.9.2.4. Instrument preparation

5.6.4.5.9.2.5. Cargo compartment

5.6.4.5.10. En Route Procedures:

5.6.4.5.10.1. Crew coordination and duties

5.6.4.5.10.2. Airspeed and altitude control

5.6.4.5.10.3. Terrain masking

5.6.4.5.10.4. Navigation

5.6.4.5.10.5. Checklists

5.6.4.5.10.6. Communications and authentication

5.6.4.5.10.7. Approach and departure procedures

5.6.4.5.11. ARA (airborne radar approach) procedures

5.6.4.5.11.1. Radar predication of objective area

5.6.4.5.11.2. Glide path selection

5.6.4.5.11.3. Crew duties and coordination; verbal and reduced verbal cues approaches

5.6.4.5.11.4. Use of NAVAIDs

5.6.4.5.11.5. Radar interpretation

5.6.4.5.12. Landing and missed approach and go-around procedures

5.6.4.5.13. Ground and taxi operations

5.6.4.5.14. Briefing

5.6.4.5.14.1. Special requirements:

5.6.4.5.14.1.1. LZ setup and communications

5.6.4.5.14.1.2. Code words and authentication

5.6.4.5.14.1.3. Crew coordination

5.6.4.5.14.1.4. Ground operations

5.6.4.5.14.1.5. Supported unit briefing

5.6.4.5.14.1.6. Intelligence brief

5.6.4.5.14.1.7. Weapon requirements

5.6.4.5.14.1.8. Blacked-out aircraft egress

5.6.4.5.14.2. Security

5.6.4.6. SOLL II flight training. The number of training missions is based on individual proficiency. Crew members will be trained in areas applicable to their crew position:

5.6.4.6.1. Stage I—Initial (Night Profile). Emphasis during this stage will be on aircraft preparation, normal procedures, and crew coordination. The crew will also fly a minimum of four approaches and landings. See applicable training guides. The mission will be planned for at least 20 percent moon illumination (5 percent for 4949) for pilot training. The requirements of this stage are optional only for crew members with previous SOLL II qualifications.

5.6.4.6.2. Stage II—Low-Level Navigation (Night Profile). The emphasis during this stage will be on mission planning and execution, emergency and normal procedures, and crew coordination. A minimum of eight landings and two missed approaches will also be accomplished on two missions over different routes.

5.6.4.6.3. Stage III. Qualification missions are flown over an unfamiliar route and LZ (unfamiliar route and LZ not required for the copilot, FE, or LM). This stage includes:

5.6.4.6.3.1. Missed approach

5.6.4.6.3.2. ARA and NVG landing

5.6.4.6.3.3. Low-level ingress using NVGs

5.6.4.6.3.4. NVG takeoff and low-level egress

5.6.4.6.3.5. Ground operations, LM loading exercise

5.6.4.6.3.6. Comprehensive mission planning and chart study

5.6.4.6.3.7. En route aircraft and aircrew night time preparation

5.6.4.6.3.8. Discussion of and planning for inflight and ground emergencies

5.6.4.6.4. SOLL II Qualification. Crew members will be initially qualified by a SOLL II aircraft SPOT evaluation after satisfactory completion of all ground and flight training items. Due to the differences in crew duties, pilots and navigators will be qualified only in the position as flown on the Stage III mission. Dual qualification requires dual training through Stage III. ***EXCEPTION***: Any SOLL II pilot or copilot may fly as a safety after receiving one orientation flight.

5.6.4.7. Boat Drop Alert Certification. Crews selected to fulfill the alert requirement for a boat drop crew which are not already boat-drop certified will meet the following prerequisites:

5.6.4.7.1. Must be AR-qualified

5.6.4.7.2. Must be single ship AD-qualified

5.6.4.7.3. Must be CDS-qualified

5.6.4.7.4. During ground training, boat drop crews will be briefed on the following items:

5.6.4.7.4.1. Operations security (OPSEC) and communication security (COMSEC)

5.6.4.7.4.2. Availability of and channels for intel and mission planning data

5.6.4.7.4.3. Drop zone procedures

5.6.4.7.4.4. Silent AR procedures

5.6.4.7.4.5. Employment scenarios

5.6.4.7.4.6. Use, care, and limitations of NVGs

5.6.4.7.4.7. Command and control

5.6.4.7.4.8. Visual illusions over water (with and without NVGs)

5.6.4.7.4.9. Boat drop procedures

5.6.4.7.5. Flying training. LMs will accomplish an actual inflight drift back and rigging of a blivet prior to being fully qualified.

5.6.5. Prime Nuclear Airlift Force (PNAF) Upgrade. Crews selected should be the best qualified crew members as determined by the squadron commander and operations officer. PNAF aircrews will complete the following:

5.6.5.1. PNAF academics according to AMCR 50-16

5.6.5.2. Applicable crew position training guide

5.6.5.3. Evaluation as required

NOTE:

PNAF training applies only to those personnel identified as part of the nuclear airlift force structure established in MCR 55-18, Volume 1, Nuclear Airlift Operations. Accomplish ground and flight training according to AMCR 50-16 and AMC PNAF training courseware.

Chapter 6

AIRCREW TRAINING SYSTEM (ATS)

6.1. Applicability. As defined in AFI 11-202, Volume 1.

6.1.1. C-141 Aircrew Training System (ATS):

6.1.1.1. Purpose. C-141 ATS is a system of academics, ATD sessions, and ground and flight training phases. This system provides for qualification, upgrade, and continuation training required to maintain the appropriate qualification for C-141 pilots, copilots, navigators, FEs, LMs, maintenance officer (orientation), and maintenance engine run. The ATS contractor provides training courseware for all phases. The ATS contractor normally provides academic and ATD instructions, and the Air Force provides flight instruction.

6.1.1.2. Goal. The ATS goal is to optimize aircrew training through the integrated use of academics, ATDs and C-141 aircraft. Performance requirements are established in the C-141 ATS statement of work and system specification (ATS contract). The ATS master task listing (MTL), evaluation standards document (ESD), objective media analysis report (OMAR), and media selection syllabus report (MSSR), as approved by HQ AMC/DOT in coordination with HQ AETC/DOF, HQ AFRC/DOT and ANG/DOOM, define C-141 course content, standards, and media selected for each task and objective respectively.

6.1.2. General. This chapter is a "how to" book on working within the ATS and was developed as a tool for C-141 aircrew managers at squadron, group, and wing levels. This chapter is directive; it complements guidance elsewhere in this volume, the ATS contract, quality assurance publications, and contractor-provided courseware procedures.

6.1.3. Responsibilities:

6.1.3.1. ATS Contractor. Each ATS site will provide academic and ATD training for C-141 aircrew requalification, upgrade, senior staff, difference and continuation training programs to meet course objectives.

6.1.3.1.1. HQ AMC/DOT:

6.1.3.1.2. Provide overall management authority for C-141 contract training.

6.1.3.1.3. Serve as OPR for AFI 11-2C-141 Volume 1.

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

6.1.3.1.5. Ensure C-141 contractor aircrew training performance objectives are achieved by monitoring overall contractor performance and submitting quality assurance program documentation when required.

6.1.3.1.6. Act as AMC focal point for review of all recommended initiatives directed toward the C-141 training contract. This includes recommendations for changes submitted by contractor or other Air Force agencies.

6.1.3.1.7. Convene and chair C-141 Command Curriculum Review Workshop to periodically review the entire program for currency, applicability, and effectiveness. Publish meeting minutes, assign taskings to appropriate agencies, and monitor suspenses.

6.1.3.2. HQ AETC/DOFA, HQ AFRC/DOTA, ANG/DOOM:

6.1.3.2.1. Monitor all actions associated with the C-141 training program through close coordination with their associated C-141 units, Det 2 AMCAOS, HQ AETC/DOF, and HQ AMC/DOT. Provide constructive reports and inputs concerning the training program as required.

6.1.3.2.2. Provide assistance and support to HQ AMC/DOT (program manager) and other appropriate agencies, as required, to support the overall C-141 training program.

6.1.3.3. HQ AETC/DOF:

6.1.3.3.1. Provide overall syllabus management for C-141 Altus formal school courses.

6.1.3.3.2. Ensure that contractor provided academic and ATD Altus Formal School Course training complies with policies, guidelines, and directives established by AETC headquarters and the current training contract .

6.1.3.3.3. Ensure Altus Formal School C-141 contractor aircrew training performance objectives are achieved by monitoring overall contractor performance and submitting quality assurance program documentation when required.

6.1.3.3.4. Act as AETC focal point for review of all recommended initiatives directed toward the C-141 training contract. This includes recommendations for changes submitted by contractor or other Air Force agencies.

6.1.3.3.5. Ensuring instruction is of the highest quality through the review of crew member critiques, evaluator feedback, CCTS feedback, and their own evaluations.

6.1.3.3.6. Reviewing and evaluating the task analysis, objective hierarchy, and contractor courses and training materials for accuracy, currency, and effectiveness.

6.1.3.4. Detachment 2 AMCAOS:

6.1.3.4.1. Det 2 will conduct SIMCERT on all ATDs in accordance with the ATS contract.

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

6.1.3.4.3. Det 2 AMCAOS will conduct contract compliance evaluations on all C-141 ATS sites and report to HQ AMC/DOT on the results.

6.1.3.4.4. Det 2 will schedule subject matter experts for technical interchange meetings with the ATS contractor. Det 2 will also schedule crew members required by the contractor for courseware development in Individual Tryouts (ITO) and Small Group Tryouts (SGTO).

6.1.3.5. Air Force-Appointed ATS Project Officers (PO) and Quality Assurance Representatives (QAR). Unit POs and QARs are primary focal points and liaisons between the Air Force and contractors at each ATS site. Unit POs and QARs are the only Air Force personnel empowered to evaluate contractor compliance with the ATS contract. These individuals are the only unit-level office that can direct the contractor to perform or stop work.

6.1.3.6. Wings and Groups:

6.1.3.6.1. Provide constructive reports and inputs concerning the C-141 training program.

6.1.3.6.2. Provide assistance and support with subject matter expertise (SME) when requested by HQ AMC/DOT, Det 2 AMCAOS, or HQ AETC/DOF.

6.1.3.6.3. Review AFCAT 36-2223 and adhere to guidance and procedures concerning requesting, allocating, sub-allocating, and confirming attendance at scheduled formal training courses. Close coordination with the formal school quota manager (HQ AMC/DOTF) is imperative to ensure effective utilization of training slots and contractor resources.

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

6.3. ATS Course Prerequisites. The ATS is designed and based upon student prerequisites being met. Comply with **Table 6.1.** and **Table 6.2.**

6.3.1. ATS Course Preparation. ATS courses may require trainee preparation prior to class. This preparation is considered an integral portion of the course and must be accomplished in order to receive course completion credit. Preparation may consist of reviewing study references, quizzes, performance data preparation, workbooks, etc. Required preparation is described in the appropriate student training guide. When required, the ATS contractor will ensure student training guides and workbooks are distributed to units in time for preparation completion.

Table 6.1. Mission Qualification and Upgrade Training.

***NOTE*:** Simulator and UPT time are creditable toward total time for prerequisite minimum flying hour upgrade requirements. Prerequisite times must be met prior to entry into AC and IAC upgrade training.			
FROM	**TO**	**PREREQUISITES**	**TASKS AND EVENTS REQUIRED PRIOR TO CERTIFICATION/QUALIFICATION**
PILOT			
Unqualified Copilot	Formal School Grad	AFSC: 11XX	PIQ course at 97 AMW.
Formal School Graduate	Airland Copilot	AFSC: 11A1M	CPM course and duty familiarization mission. Complete level I of pilot training guide.
Airland Copilot	Airland First Pilot	AFSC: 11A2M Recommendation of sqdn commander.	Complete levels II and III of pilot training guide and FPQ. Qualification evaluation.

***NOTE*:** Simulator and UPT time are creditable toward total time for prerequisite minimum flying hour upgrade requirements. Prerequisite times must be met prior to entry into AC and IAC upgrade training.

FROM	TO	PREREQUISITES	TASKS AND EVENTS REQUIRED PRIOR TO CERTIFICATION/QUALIFICATION
Airland First Pilot	Airland AC	Grade: 02 AFSC: 11A2M Flying hours—total PAA 2000 200* 1600 300 1300 400 *100 hours for previous qual 4-engine jet, KC-10, or C-130 AC. Recommendation of sqdn commander.	Complete level IV of pilot training guide. ACQ course at 97 AMW (1045L1) (not required for previous qualification fixed wing ACs who have completed PAQ course). Qualification evaluation.
Airland AC	Airland Instructor AC	AFSC: **11A3M** Flying hours: 200 hours after AC certification. Recommendation of sqdn commander.	IAC course at 97 AMW (1045L2) (not required for previous qualification). Qual eval.
Airland Instructor AC	Airland Flight Examiner AC	AFSC: K11A3M Recommendation of sqdn commander.	PFE course.
Airland Copilot	AD Copilot	AFSC: 11A1M AR Copilot	CAD course and qual eval. FAR course completion required within 90 days.
AD Copilot	SOLL II Safety Pilot	AFSC: 11A2M AD copilot, AR copilot. Medical screening by flight surgeon.	SOLL II training according to **Chapter 5**. Qual eval.
Airland AC and AD Copilot	Wing AC	AFSC: 11A3M AR AC	PAD training course at 97 AMW (1045L4). 6 months' AD experience. FAR course completion required within 90 days. Qual eval.
Wing AC	Lead AC	AFSC: 11A3M	LFU course. FAR course completion required within 90 days. Qual eval.

***NOTE*:** Simulator and UPT time are creditable toward total time for prerequisite minimum flying hour upgrade requirements. Prerequisite times must be met prior to entry into AC and IAC upgrade training.			
FROM	**TO**	**PREREQUISITES**	**TASKS AND EVENTS REQUIRED PRIOR TO CERTIFICATION/QUALIFICATION**
Lead AC	SOLL II AC	AFSC: K11A3M AR AC, Lead Instructor AC. Medical screening by flight surgeon. Recommendation by sqdn commander.	SOLL II training according to chap 5. Qual eval.
Wing AC	SOLL II Copilot	AFSC: 11A3M AR AC. Medical screening by flight surgeon.	SOLL II training according to chap 5; qual eval.
Airland Copilot	AR Copilot	AFSC: 11A1M	CAR course.
Airland AC	AR AC	AFSC: 11A3M	PAR course at 97 AMW (1045L6); qual eval.
Airland Copilot	Prime nuclear airlift force copilot	AFSC: 11A2M	PNAF upgrade training according to chap 5; qual eval.
Airland AC	Prime nuclear airlift force AC	AFSC: 11A3M	PNAF upgrade training according to training guide; qual eval.

FROM	**TO**	**PREREQUISITES**	**TASKS AND EVENTS REQUIRED PRIOR TO CERTIFICATION/QUALIFICATION**
NAVIGATOR			
Unqual Navigator	Formal School Graduate	AFSC: 12XX	NIQ course at 97 AMW.
Formal School Graduate	Wing Navigator	AFSC: 12XX	NAD course at 97 AMW; qual eval. NAR course completion required within 90 days.
Wing Navigator	Single-Ship Navigator	AFSC: 12A3E	NAD course or in-unit upgrade; qual eval.
Single-Ship Navigator	Lead Navigator	AFSC: 12A3E	NAL course; qual eval. NAR course completion with 90 days of NAL course completion.

FROM	TO	PREREQUISITES	TASKS AND EVENTS REQUIRED PRIOR TO CERTIFICATION/QUALIFICATION
Single-Ship Navigator	SOLL II Map Navigator	AFSC: 12A3E	According to chap 5.
SOLL II Map Navigator	SOLL II Radar Navigator	AFSC: 12A3E	Lead navigator and training according to chap 5.
Lead Navigator	Instructor Navigator	AFSC: 12A3E	INQ course and qual eval.
Instructor Navigator	Flight Examiner Navigator	AFSC: K12A3E Recommendation of squadron commander.	Navigator Flight Examiner (NFE) course.
FLIGHT ENGINEER			
Helper FE	Apprentice FE	Basic FE Course (BFE) (AFCAT 36-2223).	BFE certificate of completion.
Apprentice FE	Second FE	C141FIQ course at 97 AMW.	C141FIQ qual eval. Sqdn commander certification.
Second FE	First FE (Mission Qual)	C141FFE course and minimum flight hours	Qual eval.
First FE (Mission Qual)	PNAF First FE	Recommendation of flight commander	Completion of nuclear airlift training guide.
First FE (Mission Qual)	Instructor FE	Recommendation of sqdn commander	FEI course at 97 AMW. Qualification Evaluation
First FE (Mission Qual)	SOLL II FE	Medical screening by flight surgeon.	SOLL II training according to **Chapter 5**; qual eval.
Instructor FE	Flight Examiner FE	Recommendation of squadron commander	Flight Engineer Flight Examiner (FEE) course.
LOADMASTER			
Helper LM	Apprentice LM	Basic LM Course (BLM) (AFCAT 36-2223)	BLM certificate of completion.
Apprentice LM	Second LM	C-141 LIQ course at 97 AMW and completion of training guide.	Qual eval.
Second LM	Airland LM	LMQ course and completion of training guide.	Qual eval.
Airland LM	AD LM	Complete LAD course at 97 AMW	Qual eval.
Airland LM	PNAF LM	Complete PNAF upgrade training guide.	Qual eval.

FROM	TO	PREREQUISITES	TASKS AND EVENTS REQUIRED PRIOR TO CERTIFICATION/QUALIFICATION
AD LM	SOLL II LM	Medical screening by flight surgeon.	SOLL II training according to chap 5; qual eval.
Airland LM	Instructor LM	Recommendation of sqdn commander.	ILM course. Qualification evaluation.
Instructor LM	Flight Examiner LM	Recommendation of sqdn commander.	Loadmaster Flight Examiner (LFE) course
NOTE: All enlisted aircrew qualification is separate and distinct from skill level qualification. When AF Form 8 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 or certifier designation and are reflected in AFSC by use of "K" prefix (aircrew instructor) and "Q" prefix (aircrew standardization and flight examiner).			

Table 6.2. SOLL II Prerequisites and Upgrade Requirements.

NOTE: The following table identifies minimum requirements for upgrade into the SOLL II program. Unless specifically addressed, non-integral crew members must be basically qualified prior to upgrading to next higher position.

LS--Left seat JS--Jump seat MN--Map Nav SLM--Secondary LM
RS--Right seat RN--Radar Nav FE--Flight Engineer PLM--Primary LM MR--Mission-ready

SOLL II Upgrade Requirements	LS	RS	JS	RN	MN	FE	PLM	SLM
Airland	AC	AC	CP	MR	MR	MR	MR	MR
AD	Lead	AC	CP	Lead	SShip	MR	MR	MR
CDS	X			X	X		X	X
Boat drop				X		X	X	X
AR	X[1]	X[1,6]	CP	X	X	MR		
JS Orientation	AC	AC						
RS Orientation	X[2,4]	X[2,4]						
Large Scale Joint Exercise[5]	X[3,4]	X[4]		X		X[9]	X	
Bilateral Trainer[6]	X			X		X[9]	X	
Loading Exercise	X						X[7]	X
FARP Trained	X[8]	X[8]				X	X[1]	X

NOTES:
1. Must have participated in at least one event within the previous 12 months.
2. Not required if SOLL II qualified within the previous 24 months.
3. Not required if RS qualified within the last 12 months.
4. May be waived at the discretion of the OG/CC.
5. A large scale joint exercise consists of three or more units, operates under joint command and control, and includes tactical events for the aircrew.
6. A bilateral trainer is a tactical training mission using actual loads with special operations forces.
7. Must participate in primary user packages prior to evaluation.
8. May substitute academics for "live" trainer.
9. The core FE must have attended a large scale joint exercise. FEs must attend a minimum of two bilateral trainers and one large scale joint exercise or three bilateral trainers prior to upgrade.

6.4. Lesson Objectives:

6.4.1. Master Task Listing (MTL) and Evaluation Standards Document (ESD) Purpose. The MTL and ESD were developed through a joint contractor and Air Force effort to provide the basis for ATS courseware development. Flight examiners and instructors who evaluate or train C-141 crew members will use criteria established in these documents to determine the ability of an individual to meet the performance levels required to be mission qualified.

6.4.2. ESD Use. The ESD defines evaluation and measurement standards for use by Air Force or contractor personnel conducting flight, ground, or simulator events for all C-141 ATS courses.

6.5. Unsatisfactory Student Progress.

6.5.1. The ATS contractor will provide written feedback to the unit operations officer and PO or QAR for trainees displaying substandard performance, lack of preparation or participation, or poor attitude during any ATS contractor-conducted training.

6.5.2. If at any time during a trainee's ATS ground instruction progress is considered unsatisfactory, ATS contractor will notify responsible Air Force representative (wing or group training office, squadron operations officer, flight commander, etc.). On receiving ATS contractor documentation and recommendations, Air Force will review the identified trainee's record. Air Force will determine whether or not to continue, modify, or terminate training.

6.5.3. Remediation procedures. ATS contractor and PO or QAR must receive prompt notification of failed flight evaluations culminating an ATS course. Local procedures must ensure notification is completed within 24 hours of failure for local evaluations, and within 24 hours after return to home station for off station evaluations. The appropriate ESD task must be referenced for all failed evaluations. Remediation subsequent to a failed flight evaluation may be the ATS contractor's responsibility, Air Force's responsibility, or a joint responsibility, depending on the nature of the failure. In every case, close coordination is required to achieve maximum trainee progress. Direct contact with the appropriate ATS instructor supervisor is encouraged.

6.5.4. Flight Training and Evaluation—Upgrade Qualification:

6.5.4.1. ATS contract provides the opportunity for the Air Force flight instructor to observe the trainee's last flight in the WST. Likewise, the ATS instructor may observe the trainee's first air-

craft flight. In some cases, ATS courseware may state these specific occurrences. Every reasonable effort should be made to ensure this type of interface continues at each MOB.

6.5.4.2. Evaluations should be conducted in a timely manner, subsequent to the trainee's completion of the ground-based or flight training, to guarantee standards.

6.5.5. Crew Resource Management (CRM) Training:

6.5.5.1. CRM Development. CRM trains aircrew members to cope with potential problems in human behavior affecting crew performance. Documented studies of aircraft accidents and additional data suggests most human behavior problems observed among aircrews could be grouped into 6 categories: situational awareness, crew coordination/flight integrity, communication, risk management/decision making, task management, and mission planning/debrief.

6.5.5.2. CRM Program. CRM is presented on recurring basis throughout the C-141 ATS. Introduction to CRM is presented during initial qualification training.

6.5.5.3. CRM Preparation. Completion of CRM preparation is required prior to attending CRM workshop. Materials for preparation will be distributed to organizations in ample time and quantity to allow completion. The preparation booklet acts as a primer for theories, concepts, and terminology used in the workshop and during MOST pre-mission or post-mission briefings.

6.6. Courseware Changes. Changes to ATS courseware, including the MTL and ESD, may be proposed by any C-141 crew member. Complete recommended change on the ATS contractor's change proposal form and submit to the local PO or QAR. The change proposal will be sent through wing or group training and ATS PO and QAR offices to Det 2, AMCAOS at Altus AFB, Oklahoma. Det 2, AMCAOS will coordinate with AETC, the ATS contractor and the originator and will provide feedback to reflect the action taken. Change proposal forms are available from the ATS contractor training manager at each site.

6.7. Aircrew Training System Courses. Qualification levels within each continuum reflect progression of crew-member training from entry status through upgrade to flight examiner. A crew member's point of entry into continuum depends on previous experience and training, current crew qualification in C-141, and currency status. Use of ATS courses (**Attachment 2**) for qualification, upgrade, and refresher is mandatory unless waived by HQ AMC/DOTA. (ANG units through ANG/DOOM, and AFRC units through HQ AFRC/DOTA). ***NOTE***: 97 AMW personnel waivers are approved through 19 AF/DOT with HQ AMC/DOTA coordination.

6.8. Scheduling:

6.8.1. Local procedures will be developed at each MOB for scheduling ATS trainees. MOB wing or group training offices are responsible to ensure procedures are sufficient to minimize schedule changes and turbulence.

6.8.2. Enrollment for all ATS courses (upgrade and continuation) will be accomplished through the MOB wing or group training office (ANG/DOOM for ANG and HQ AFRC/DOT for AFRC upgrades). Each active duty wing and group training office will establish procedures to accommodate ANG and AFRC training requirements. Names and other personal data required by ATS contractor will be passed to their scheduler not later than the time established by host wing or group training office.

6.8.3. Class surging. The ATS is capable of surge, within limits of the contract. Contact HQ AMC/DOT for increased requirements.

6.8.4. Class size:

6.8.4.1. Annual throughput for specific ATS courses is established in the ATS contract. The program flying training (PFT) document reflects the planned annual Altus formal school throughput based on Air Force requirements and what is authorized by the contract. If the contract throughput for any MOB (formal school or otherwise) will be exceeded, then HQ AMC/DOTA will coordinate those requirements through appropriate Air Force and ATS contractor channels. Wing or group training offices, in conjunction with their project officer (PO) or quality assurance representative (QAR office), must monitor the annual throughput (current or projected) according to their MOB ATS authorized throughput and notify HQ AMC/DOTA of differences either above or below what is authorized in the contract.

6.8.4.1.1. Individual course class size is established in the appropriate course summary document. Every attempt will be made by the MOB wing or group training office to ensure all classes are filled before requesting a secondary method. ATS may accommodate less than full classes on a case-by-case basis when the class is needed to obtain mission ready status, e.g., pilot requalification via the secondary method.

6.8.4.2. ATS training at alternate sites: The ATS contractor determines the required number of ATS instructors and resources needed to accommodate the annual throughput. Projected annual throughput is based on Air Force manpower data which includes assigned, on-loan, and attached active duty as well as designated ANG, AFRC, and other units specified to be trained at that MOB. Trainee scheduling, at a particular MOB, should be kept within the units designated for that MOB. If a unit is unable to complete their requirements at the designated MOB, wing and group training offices must contact HQ AMC/DOTA prior to receiving training at another MOB. (AFRC/ANG personnel will coordinate with their respective Headquarters, who in turn will contact HQ AMC/DOTA.)

6.8.4.3. Fill-ins. Fill-in time will be made available for FEs in support of pilot ATD courses and vice versa. The fill-in trainee can gain valuable experience and needed upgrade training during these periods. Mission profiles will be flown to support the scheduled course. Additional training or currency items may be accomplished as time and conditions permit. ***EXCEPTION***: Trainees receiving formal school training are not required to fill-in for odd-numbered classes.

6.8.5. Remediation Scheduling:

6.8.5.1. When a trainee is required to return to the ATS for remediation regarding deficient areas, the trainee's unit, appropriate wing or group training office, and ATS training manager will coordinate a training start date and completion date and time.

6.8.5.2. The ATS contractor will contact the trainee's flight commander if a trainee is identified during the ATS contractor's instruction to need remediation or additional training. (Formal School: ATS contractor will inform the 97 OSS/DOT.) If the ATS contractor determines no further amount of remediation or additional instruction will result in the individual attaining required MTL or ESD proficiency level, the contractor will expeditiously inform the trainee's flight commander and wing or group training office verbally and follow up in writing. At a minimum, the Air Force ATS PO or QAR will receive a courtesy copy of this documentation. Air Force will review ATS contractor documentation and recommendations regarding trainee performance. Air

Force will determine whether or not to continue any further training for that trainee, using ATS instruction or their own methods.

6.8.6. Late or no-show. Course completion credit may be withheld when trainee tardiness interferes with class training. For WST and CPT sessions, tardiness is defined as 15 minutes after mission briefing time. Those classes which cannot be conducted, without the late trainee's presence, will be canceled at the 30 minute point; e.g., a WST session with pilot no-show will be canceled if the mission cannot be effectively conducted. Missions may be conducted with only one FE with the approval of the squadron commander or operations officer provided prior coordination with the ATS contractor is made. ATS contractor personnel are not required to substitute or fill-in for missing or late crew members. ***EXCEPTION***: emergency leave.

6.8.7. Cancellations. Deletions from the ATS schedule will vary at each training site because of the training courses offered and the impact to scheduling. Bear in mind, continued cancellations will greatly impact the overall annual training plan, whereby the contractor may not be able to accommodate based on the original, planned throughput.

6.8.7.1. Cancellation for MOB ATS continuation courses. Deletions from these training courses will be made not later than 1200 the duty day before class start. This cancellation will not be counted against trainee throughput. Deletions made after that time will be considered no-shows.

6.8.7.2. Cancellation for MOB ATS upgrade courses. Deletions from these training courses should be made not later than 10 working days before the class start date.

6.8.7.3. Cancellation for the Altus ATS formal school courses. According to AFCAT 36-2223, HQ AMC/DOTF and HQ AETC/DOFA must be notified 45 days prior to formal school start date if a course allocation cancellation or no-fill is pending. This suspense should enable the class quota to be reallocated. Altus formal school cancellations must be made not later than 30 days prior to class start date, due to the impact of scheduling changes on the PFT. ***EXCEPTION***: emergency leave. At that time, HQ AMC/DOTF will remove quotas and either reallocate or cancel the affected quota or class.

6.8.7.3.1. Most formal school quotas are scheduled in even numbers due to simulator requirements. Whenever an odd numbered class occurs, the formal school ATS contractor provides a fill-in for the ATD sessions.

6.8.7.3.2. Unit managers will make every attempt to prevent cancellations and assist in thwarting odd-numbered situations.

6.8.8. Wing Option Time:

6.8.8.1. ATS contractor is required to provide 300 hours per year (not to exceed 100 hours per month), per device, per site, for Air Force use of training equipment. Using this time (other than SIMCERT) is at the discretion of the operations group commander, and the time must be coordinated through wing or group training office channels. Air Force Use Time is in addition to time allowed by the ATS contract to provide instrument simulator sortie/local proficiency sorty training. Contractor will provide a minimum of an ATD operator (not necessarily an ATS instructor) during this option time.

6.8.8.2. If an Air Force instructor is required, in lieu of an ATS instructor, the Air Force instructor should provide the ATD operator with a lesson plan or outline prior to entering the ATD.

6.9. Administration:

6.9.1. Air Force-appointed ATS POs and QARs are primary focal points and liaison agency between Air Force and contractors. POs and QARs are the only Air Force personnel empowered to evaluate any component of contract compliance. These individuals are entrusted with ensuring quality assurance, are the only "legal" office (unit-level) to direct contractor to perform or stop work via the ACO/PCO's direction, and are accountable for these actions. Each wing or group commander will establish ATS PO and QAR positions and enforce directives, requirements, and procedures established by DoD and major command directives and publications. ATS PO and QAR must maintain a current copy of each ATS contracts, designated quality assurance publications and directives, and quality assurance procedures. ***NOTE***: Det 2 AMCAOS at Altus AFB will operate in accordance with AFPAM 36-2211, *Guide for Management of Air Force Training Systems*, AMC Supplement 1.

6.9.2. ATS feedback:

6.9.2.1. Operational evaluation. The ATS contractor is required to evaluate the ATS program and its graduates' on-the-job performance. The objective of this ongoing "operational evaluation" is to assure the ATS produces qualified graduates. The ATS contractor's established system ensures a steady flow of information to maintain the quality, effectiveness, and currency of the ATS. Revisions to the ATS will be based on this information.

6.9.2.2. Feedback. Includes inputs from graduates, flight commander or designated representative, and evaluators. Analysis of actual performance (Air Force checkrides) and trainee critique data helps to determine if graduates' on-the-job performance meets MTL and ESD standards. The importance of this on-the-job performance feedback from graduates, flight commander or designated representative, and evaluators cannot be overemphasized. This data is vital to establishing a database to identify trends and support revisions to the ATS.

6.9.3. ATS data collection. Evaluator feedback questionnaires, post-training graduate questionnaires, and personal interviews are used to collect feedback data on the ATS. The ATS contractor will send the appropriate questionnaires through appropriate Air Force channels approximately 90 days after a trainee graduates from all ATS initial and upgrade courses. Each graduate and flight commander or designated representative will individually complete the questionnaires. Flight commanders will ensure these questionnaires are completed and returned not later than 30 days after receipt. For more information regarding these questionnaires and interviews, contact the local ATS training supervisor. Additionally, flight commanders are encouraged to provide either written or verbal feedback to the local Air Force ATS PO and QAR regarding any ATS component.

6.9.4. (Not applicable to 97 AMW personnel) Evaluator Feedback Questionnaires. These questionnaires should be completed for **every** flight evaluation, regardless of whether or not the person evaluated is a graduate of the ATS. The MOB ATS contractor will provide the wing or group training office a copy of these questionnaires. Air Force ATS PO and QAR will maintain a collective data base of these results.

6.9.5. Personal interviews. These interviews are used to obtain first-hand information from graduates, flight commanders, and evaluators on how well ATS is performing. The ATS contractor will coordinate directly with the unit and will provide names of individuals selected for interviews. A date, time, and location will be selected so as not to interfere with either the unit's mission or the individual's schedule. ATS instructors or management personnel conduct interviews. Additionally, Det 2,

AMCAOS, Altus AFB, Oklahoma, will conduct interviews with both trainees and supervisory personnel during annual contract compliance evaluation visits.

6.9.6. Notification of evaluations. All ATS training folders will be returned to the ATS contractor, complete with evaluation results to include a completed evaluation feedback questionnaire, within 5 working days after flight evaluation or unit certification. For off-station evaluations, use 5 working days after return to home station as a guide.

6.10. Browsing:

6.10.1. Application. This paragraph applies to trainees browsing using the academic portion of the ATS. Students browsing may review all lessons and courses regardless of their current or previous crew qualification.

6.10.2. Procedures:

6.10.2.1. Time for students to browse is on a space-available basis.

6.10.2.2. All requests for browsing will be coordinated with ATS training supervisor.

6.10.2.3. Trainees are not to be scheduled to browse in order to review a lesson for remediation. Remediation will be scheduled by coordinating with the ATS contractor.

6.11. Aircraft Flights for Contract Training Instructors:

6.11.1. Contractor Personnel Flight Operations. The contractor shall identify, publish and update (as appropriate) to HQ AMC/DOT and HQ AETC/DOF, a list of designated aircrew training instructors to fly aboard C-141 aircraft. Contractor instructors (including site and training managers) are permitted to fly and accompany AMC and AETC aircrew on C-141 aircraft with HQ AMC/DO (HQ AETC/DO) approval as additional crew members (ACM) observer on local training flights; observers in Mission Essential Ground Personnel (MEGP) passenger status; or simulator-certification pilots. DFARS 252.228-7001, *Ground and Flight Risk* applies.

6.11.2. ACM (Observer) on Local Training Flights. The contractor shall coordinate with HQ AMC/DOT (HQ AETC/DOF) and mutually agree on the frequency of these flights. Contractor instructors shall be considered unqualified aircrew members and are authorized an ACM seat in the cockpit (if available) during any phase of flight. Emergency procedures and touch-and-go landings may be accomplished when the observer is on a local training flight. Contractor personnel in this status will not be allowed access to aircraft controls nor shall they occupy a primary crew position. The contractor shall prepare and maintain current written procedures (IAW AFI 10-220, Volume 1, *Contractor's Flight and Ground Operations*,) applicable to the training requirements of observer crew members. Training requirements include, but are not limited to the following:

6.11.2.1. Personal and life support equipment training

6.11.2.2. Egress training

6.11.2.3. Emergency procedures training

6.11.3. Observer in MEGP Passenger Status. Designated contractor personnel may observe AMC and AETC flight activities on operational cross-country and overwater missions. Except in rare cases, contractor personnel are required to remain with their home station departure aircrew. (***EXCEPTION*:** Mission reroute to sensitive or possible hostile areas, diplomatic restrictions, etc.). In such

cases, contractor MEGP may join an AMC or AETC aircraft mission en route to home station or return at contractor expense. Contractor personnel in this status will not be allowed access to aircraft controls nor shall they occupy a primary crew position. HQ AMC/DO (HQ AETC/DO for AETC missions) will approve transportation authorization for contractor instructors. These individuals will have in their possession a copy of the transportation authorization and will be listed as MEGP on the travel orders. MEGP approval does not fulfill the requirements of the Foreign Clearance Guide (FCG), nor constitute theater clearance.

6.11.4. Simulator Certification Pilot. One designated contractor pilot at each MOB with a WST/OFT is authorized to fly at the aircraft controls as a crew member on local training flights while under the direct supervision of an AMC or AETC instructor pilot. These simulator certification pilots may accomplish the following events: takeoff, precision approaches, non-precision approaches, circling approaches, missed approaches, full-stop landings, touch-and-go landings, simulated emergencies, and other standard maneuvers required to compare simulator handling characteristics to that of the actual aircraft. Purpose of the flights is to ensure the simulators remain at a level consistent with the aircraft and contract requirements of fidelity. These flights will be conducted on a quarterly basis or as mutually determined by the contractor and HQ AMC/DOT. Each simulator certification pilot must pre-fly a minimum of a one hour simulator profile within 10 calendar days prior to the aircraft sortie. Simulator certification pilots are not required to maintain aircraft currency or qualification requirements but will comply with the physiological training requirements of AFR 55-22 and must possess a current FAA Class II physical.

6.11.5. Contractor Medical Examinations and Toxicological Testing. Contractor designated flight personnel are subject to medical examination and toxicological testing if involved in an aircraft mishap. Contractor personnel will also provide written statements and other information relating to the mishap as required by the mishap investigator. Contractor statements are protected under the privileged, limited use provisions of AFI 91-204, *Safety Investigations and Reports*.

6.11.6. Flight Authorization and Flight Time Log. Contractor instructors flying as observer crew members on local flights shall be designated “ACM” in the crew position column of the flight authorization and log “XA” in the duty position column. Simulator certification pilots flying at the controls on local flights shall be designated “XP” in the crew position column of the flight authorization and log “UP” in the duty position column.

6.12. C-141 ATS Course Descriptions. The following are brief course descriptions of the C-141 ATS:

6.12.1. Pilot Initial Qualification (PIQ) is for recent undergraduate pilot training graduates and for pilots who have not flown fixed-wing aircraft in the last five years. It emphasizes normal and emergency procedures for the airland mission. Indoctrination into AMC aircrew duties is provided.

6.12.2. Copilot Mission Qualification (CPM) is for graduates of the PIQ course. It reviews copilot duties and responsibilities and includes the traditional copilot familiarization flight.

6.12.3. Copilot Air Refueling (CAR) provides AR training for the C-141 qualified copilot. Normal copilot AR duties and practice in holding the aircraft in a stabilized pre-contact position is emphasized.

6.12.4. Copilot Airdrop (CAD) provides AD upgrade training for qualified C-141 copilots. This course emphasizes crew coordination, mission preparation, en route navigation, and AD procedures.

6.12.5. First Pilot Qualification (FPQ) upgrades C-141 qualified copilots to first pilots. Course presents a study of normal and emergency procedures and presents advanced systems knowledge. Flying the aircraft from the left seat safely in normal and abnormal configurations is emphasized.

6.12.6. Aircraft Commander Qualification (ACQ) provides airland upgrade training for C-141 qualified first pilots. The course emphasizes crew management and mission management.

6.12.7. Pilot Requalification (PRQ) is for former C-141 pilots who have been unqualified more than 2 years, but less than 5 years. This course reviews aircraft systems, normal procedures, emergency procedures, and AC duties.

6.12.8. Prior Qualified Aircraft Commander Qualification (PAQ) is a C-141 initial training course for pilots who have been AC qualified in another aircraft (cross flow). Course contains material from PIQ, FPQ, and ACQ.

6.12.9. Pilot Air Refueling Qualification (PAR) provides AR training for qualified and current C-141 ACs. Course emphasizes normal and emergency AR procedures as well as AMC AR publications, forms and policies.

6.12.10. Pilot Airdrop (PAD) provides single-ship and wing formation AD training to qualified ACs who have completed CAD training and have six months AD experience.

6.12.11. Formation Air Refueling (FAR) gives formation AR procedure training to AR and AD qualified ACs and copilots.

6.12.12. Lead Formation Airdrop Aircraft Commander Upgrade (LFU) qualifies wing AD ACs in formation lead AD procedures.

6.12.13. Instructor Aircraft Commander Qualification (IAC) provides training for qualified ACs to perform duties on airland and local training missions. Course covers the principles and techniques on instruction and the duties and responsibilities of the IP.

6.12.14. Instructor Air Refueling (IAR) provides training for an IP who is AR qualified to perform duties as an AR instructor.

6.12.15. Instructor Aircraft Commander Airdrop Qualification (IAD) provides training for an IP who is AD qualified to perform duties as an AD IP.

6.12.16. Pilot Flight Examiner (PFE) qualifies IPs for flight examiner duties.

6.12.17. Pilot Continuation Training (PCT) is a compilation of simulator refresher training, simulator procedures training, systems refresher and detailed review of aircraft systems, emergency procedures, performance data computations, instructor and flight examiner duties (as required), crew resource management (CRM), AR, and AD (as required) training.

6.12.18. Pilot Senior Officer (PSO) qualifies colonels and higher ranking pilots to fly the C-141 with an IP. Familiarization with aircraft systems and normal procedures is provided.

6.12.19. Navigator Initial Qualification (NIQ) provides initial qualification in strategic airlift (phase I) and tactical AD (phase II) mission procedures. Indoctrination into AMC aircrew duties is provided.

6.12.20. Navigator Airdrop Qualification (NAD) provides initial qualification for airland qualified C-141 navigators in tactical AD missions procedures. This course is equivalent to phase II of NIQ.

6.12.21. Navigator Requalification (NRQ) provides retraining for former C-141 navigators who have been unqualified for 2-5 years.

6.12.22. Navigator Airdrop Lead Qualification (NAL) provides training to upgrade single-ship and wing AD qualified navigators to lead. Course emphasizes lead AD normal and emergency procedures for VFR and SKE missions.

6.12.23. Navigator Air Refueling Qualification (NAR) gives formation AR procedure training to AR and AD qualified navigators.

6.12.24. Instructor Navigator Qualification (INQ) provides training for lead AD qualified navigators to perform instructor duties in airland and AD training missions. This course covers principles and techniques of instruction and the duties and responsibilities of an aircrew instructor.

6.12.25. Navigator Flight Examiner Qualification (NFE) qualifies lead AD instructor navigators for flight examiner duties.

6.12.26. Navigator Continuation Training (NCT) is a detailed review of airland, instructor, and flight examiner duties (as required), CRM, instrument procedures, AR, and AD emergencies training.

6.12.27. Basic Flight Engineer (BFE) Qualification trains students in basic math skills, aerodynamics, weight and balance, and emphasizes aircraft performance calculations.

6.12.28. Flight Engineer Initial Qualification (FIQ) provides BFE graduates with the training needed to qualify in the C-141. Course emphasizes normal and emergency procedures training and also covers aircraft systems, AR, and CRM.

6.12.29. First Flight Engineer (FFE) Qualification provides upgrade training for second engineers in C-141. Systems and normal procedures are taught primarily in CBT lessons. Instruction in AD, and AR procedures are also included.

6.12.30. Instructor Flight Engineer (IFE) Qualification provides training for qualified FEs to perform instructor duties. This course covers principles and techniques of instruction and the duties and responsibilities of an aircrew instructor.

6.12.31. Flight Engineer Flight Examiner (FEE) Qualification qualifies instructor FEs for flight examiner duties.

6.12.32. Flight Engineer Continuation Training (FCT) is a compilation of simulator refresher training, simulator procedures training, systems refresher and detailed review of FE duties, and CRM training.

6.12.33. Loadmaster Initial Qualification (LIQ) provides the training needed to qualify in the C-141. Course emphasizes normal and emergency procedures training.

6.12.34. Loadmaster Mission Qualification (LMQ) provides training to upgrade second loadmasters to mission loadmasters.

6.12.35. Loadmaster Airdrop Qualification (LAD) provides training for qualified airland LMs in personnel and equipment ADs. This includes preflight, systems, rigging, and emergency procedures training.

6.12.36. Instructor Loadmaster Qualification (ILM) provides training for qualified LMs to perform instructor duties on airland, AD, and local missions. Course covers principles and techniques of instruction and the duties and responsibilities of an aircrew instructor.

6.12.37. Loadmaster Flight Examiner (LFE) Qualification qualifies instructor LMs for flight examiner duties.

6.12.38. Loadmaster Continuation Training (LCT) is a detailed review of LM procedures for air-land and AD missions (as required), instructor and flight examiner (as required), and CRM training.

6.12.39. Maintenance Officer Systems Orientation (MSO) provides an overview of C-141 systems and operations. These students are trained in conjunction with PIQ students.

6.12.40. Maintenance Engine Run Qualification (MIQ) includes instruction on normal and emergency engine procedures.

6.12.41. Maintenance Engine Run Refresher Training (MRT) reviews engine and aircraft systems for previously qualified maintenance engine run personnel and provides practice of normal and emergency procedures.

Table 6.3. Responsibility for Training.

ITEM	Code	Responsibility
Chemical-Biological Defense Training	G010	US Air Force
Aircraft Ground Egress Training (includes fire extinguisher training)	LS08	Both
Nuclear Weapons Airlift Training (PNAF qualified crews)	G050	US Air Force
Tactics	G060	ATS
Aircrew Intelligence	G070	US Air Force
Communications Procedures	G080	ATS
Anti-Hijack	G090	ATS
Laws of Armed Conflict	G100	US Air Force
Force Protection Requirements	G110	US Air Force
ISOPREP Review	G120	US Air Force
Instrument Refresher Course	G130	ATS
Hazardous Cargo Training	G182	ATS
CRM Refresher	G230	ATS
CRM Simulator	G240	ATS
Refresher Simulator	G250	ATS
Instrument Simulator Sortie (not applicable for AFRC/ANG)	G260	Both
Tactics Simulator	G270	ATS
Small Arms Training	G280	US Air Force
Aircrew Chemical Defense Training	LS04	US Air Force
High-threat combat survivalTraining	LS02	US Air Force
Water Survival Training	LS03	US Air Force
Flight Physical	PP01	US Air Force

ITEM	Code	Responsibility
Physiological Training	PP11	US Air Force
Flight Records Review	RR01	US Air Force
Aircrew Chemical Defense Task Qualification Training	P280	Both
AMC Flightline Security	G003	US Air Force
Nuclear Weapons Loading Exercise (ENAF) (paragraph 3.4.2, this volume)	G055	US Air Force
Aircraft Marshaling Training and Examination	G002	US Air Force
Aircraft Systems (Navigator, FE, LM)	G220	ATS
TERPS (FE)	G150	ATS
Hazardous Cargo and Passenger Handling	G180	ATS
HAVE QUICK and SECURE RADIO (Aircraft Currency Event)	P260/P270	US Air Force

Table 6.4. ATS Courseware Availability.

Course	PFT/AFCAT 36-2223 Course ID	Name	Altus	W/ Device	W/O Device
PIQ	C141CIQ	Pilot Initial Qualification	F		
CPM		Copilot Mission Qualification		P	P
FPQ		First Pilot Qualification		P	A
PAQ	C141ACIQ	Prior AC Qualification	F	W	RCO
ACQ	C141AC	AC Qualification	F	W	RCO
PAR	C141ACAR	Pilot AR Qualification	F	W	RCO
CAR		Copilot AR Qualification		P	A
FAR	C141ACFAR	Formation AR Qualification	F	P	P
PAD	C141ACAD	Pilot AD Qualification	F	W	RCO
CAD		Copilot AD Qualification		P	RCO
IAC	C141IAC	Instructor AC Qual	F	W	RCO
IAR		Instructor Acft Cmdr AR Qual	P	P	P
IAD		Instructor Acft Cmdr AD Qual	P	P	P
PFE		Flt Examiner Acft Cmdr Qual	P	P	P
PRQ	C141ACRQ	Pilot Requalification	F	W	RCO
PSO	C141SOC	Pilot Senior Officer Course	F(OC)	W	W
PCT		Pilot Continuation Training	P	P	A
LFU		Lead Formation Upgrade (AC)	P	P	RCO
NIQ	C141NIQ	Navigator Initial Qualification	F		
NAD		Navigator AD Qualification	F	W	W

Course	PFT/AFCAT 36-2223 Course ID	Name	Altus	W/ Device	W/O Device
NAL		Navigator AD Lead Qualification		P	RCO
INQ		Instructor Navigator Qualification	P	P	P
NFE		Navigator Flight Examiner Qualification	P	P	P
NRQ		Navigator Requalification	P	W	RCO
NCT		Navigator Continuation Training	P	P	A
NAR		Navigator Formation AR Qualification	P	P	P
FIQ	C141FIQ	FE Initial Qualification	F		
FFE		First FE Qualification		P	P
FEI	C141IFE	Instructor FE Qualification	F	W	W
FEE		Flight Examiner FE Qual	P	P	P
FCT		FE Continuation Training	P	P	A
BFE		Basic FE Qualification	F		
LIQ	C141LIQ	LM Initial Qualification	F		
LMQ		LM Mission Qualification		P	P
LAD	C141LAD	LM AD Qualification	F	W	W
ILM		Instructor LM Qualification	P	P	P
LFE		Flight Examiner LM Qual	P	P	P
LCT		LM Continuation Training	P	P	P
MIQ		Maintenance Engine Run Qualification	P	P	A
MRT		MER Recurrent Training	P	P	A
MSO	4021 C141 001	Maintenance Officer System Orientation	P	RCO	RCO

A--Academics only	F--Formal school	P--Primary method
RCO--Review CBT only	OC--On call (requires prior coordination)	W--Requires AMC waiver

NOTE:

"W" coded events (waiver) require 90 days for HQ AMC to coordinate. This training is at additional cost and may be conducted at another unit; e.g., if two units request PRQ, both student training would be conducted at one location. Primary method courses are courses designed for the units, and may also be available at Altus (e.g., PFE, NFE, FEE, LFE). Academics only is essentially the entire course without the

device training. Device includes WSTs, OFT, ARPTTs, and CPTs (whatever is required to conduct that particular phase of training.)

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

Executive Order 9497

37 U.S.C. 301a, *Incentive Pay*

Public Law 92-204, Section 715,*Appropriations Act for 1973*

Public Law 93-294, *Aviation Career Incentive Act of 1974*

Public Law 93-570, *Appropriations Act for 1974*

AFOSH Standard 127-100, *Aircraft Flight Line - Ground Operations and Activities*

DFARS 252.228-7001, *Ground and Flight Risk*

DoDD 7730.57, *Aviation Career Incentive Act and Required Annual Report*

AFDD 34, *Combat Search and Rescue Operations*

AFPD 11-3, *Life Support*

AFPD 11-4, *Aviation Service*

AFPD 10-9, *Lead Operating Command Weapon Systems Management*

AFI 11-2AE, Volume 1, *AECM Aircrew Training* (forthcoming)

AFI 11-2C-141, Volume 2, *C-141 Flight Evaluation Criteria* (forthcoming)

AFI 11-2C-141, Volume 3, *Flight Operations*

AFI 11-202, Volume 1, *Aircrew Training*

AFI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Materials*

AFI 11-218, *Aircraft Operation and Movement on the Ground*

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

AFI 11-301, *Aircrew Life Support (ALS) Program*

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

AFI 11-403, *Aerospace Physiological Training Program*

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

AFI 14-103, *Threat Recognition Training Program*

AFI 14-105, *Unit Intelligence Mission and Responsibilities*

AFJMAN 24-204, *Preparing Hazardous Materials for Military Air Shipments*

AFI 31-210, *The Air Force Antiterrorism (AT) Program*

AFI 32-4001, *Disaster Preparedness Planning and Operations*

AFI 33-211, *Communications Security (COMSEC) User Requirements*

AFI 36-2107, *Active Duty Service Commitments (ADSC) and Specified Period of Time Contracts (SPTC)*

AFMAN 36-2108, *Airman Classification*

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AFI 36-2209, *Survival and Code of Conduct Training*

AFPAM 36-2211, *Guide for Management of Air Force Training Systems*

AFCAT 36-2223, *USAF Formal Schools*

AFMAN 36-2227, Volume 2, *Combat Arms Training and Maintenance Rifle, Handgun, Shotgun, Grenade Launcher, M72 Light Antitank Weapon, Submachine Gun, and M249 Squad Automatic Weapon Training Programs*

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

AFI 37-124, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections*

AFI 37-161, *Distribution Management*

AFI 48-123, *Medical Examination and Standards*

AFI 91-204, *Safety Investigations and Reports*

AFI 10-220, Volume 1, *Contractor's Flight and Ground Operations*

Abbreviations and Acronyms

A—Annual

AC—Aircraft commander

ACDE—Aircrew Chemical Defense Ensemble

ACDTQT—Aircrew chemical defense task qualification training

ACQ—Aircraft commander qualification

AD—Airdrop

ADSC—Active duty service commitment

AECM—Aeromedical evacuation crew member

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

ALS—Aircrew Life Support

AMWC—Air Mobility Warfare Center

ANG—Air National Guard

AQP—Airport qualification program

AR—Air refueling

ARDA—Airborne radar-directed approach

ARPTT—Air refueling part task trainer

ATD—Aircrew training device

ATS—Aircrew training system

BFE—Basic Flight Engineer

BLM—Basic loadmaster

C—Cyclical (17-month qualification evaluation cycle)

CAT—Combat Arms Training

CBT—Computer-based training

CCRW—Command curriculum review workshop

CCTS—Combat Crew Training School

CDS—Container delivery system

COMSEC—Communications security

CONUS—Continental United States

CP—Copilot

CPT—Cockpit procedures trainer

CRM—Crew resource management

CSD—Course summary document

CSO—Communication systems operator

CST—Combat survival training

CUR—Currency

DNIF—Duty not including flying

DOC—Designed operational capability

DoD—Department of Defense

DOT—Director of Training

DRU—Direct reporting unit

EMCON—Emission control

EN—Evaluator navigator

ENAF—Emergency Nuclear Airlift Force

EP—Evaluator pilot

ESD—Evaluator standards document

FCT—Flight Engineer Continuation Training

FE—Flight examiner or Flight Engineer

FEF—Flight evaluation folder

FF—Second flight engineer

FIQ—Flight Engineer Initial Qualification

FL—Basic aircraft qualified loadmaster

FN—Basic aircraft qualified navigator

FPQ—First pilot qualification

FTD—Field Training Detachment

FTL—Flying Training Level

FTU—flying training unit

GTL—Ground Training Level

HOSM—Host operations systems management

HQ—HAVE QUICK or Headquarters

IBT—Instructor-Based Training

IF—Instructor engineer

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

IL—Instructor loadmaster

IN—Instructor navigator or intelligence officer or branch

IP—Instructor pilot

IR—Infrared

IRC—Instrument Refresher Course

ISD—Instructional systems development

ISOPREP—Isolated personnel report

LAD—Loadmaster Airdrop Qualification

LCT—Loadmaster Continuation Training

LFE—Loadmaster Flight Examiner

LIQ—Loadmaster initial qualification

LL—Low-level

LMQ—Loadmaster Mission Qualification

LSE—Life support equipment

MC—Mission copilot

MCF—First pilot

MDS—Mission-design-series (i.e., C-141B)

MF—Mission (first) flight engineer

MIQ—Maintenance Engine Run Qualification

ML—Mission loadmaster

MN—Mission navigator

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

MRT—Maintenance Engine Run Refresher Training

MSO—Maintenance Officer Systems Orientation

MTL—Master task listing

MWS—Major Weapons System

NAF—Numbered air force

NCT—Navigator Continuation Training

NIQ—Navigator initial qualification

NMR—Non-mission-ready

NRQ—Navigator requalification

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

OSS—operations support squadron

PAI—Primary aircraft inventory

PFT—Programmed flying training

PNAF—Primary nuclear airlift force

PO—Project Officer (ATS)

PRQ—Pilot requalification

QAR—Quality Assurance Representative (ATS)

PR—progress review

PTT—Part task trainer

RATS—Receiver Activity Training System

SAAF—Small, austere airfield

SATCOM—Satellite communications

SKE—Station-keeping equipment

SOLL II—Special-operations low-level II

SORTS—Status of Resources and Training System

SS—Single-ship

TACC—Tanker Airlift Control Center (AMC)

TALCE—Tanker airlift control element

TERPS—Terminal instrument procedures

TG—Training guide

TL—Training level

TRP—Training review panel

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.

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 commander upgrade—A pilot having received notification from unit supervisors of their AC formal school selection to include class number and date.

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

AD loadmaster—Loadmaster on specific AD missions performing duties he or she is specifically qualified and certified to accomplish.

AD mission—Flight that involves the aerial delivery of personnel, supplies, or equipment from an aircraft. If multiple aircraft are involved in formation, lead and wing mission qualifications apply.

AD qualified crew—Required complement of crew members qualified to perform a specific AD mission.

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

Airland loadmaster—Crew member fully qualified to function as a loadmaster on airland missions.

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.

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 qualified—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.

Change Proposal form (CP)—ATS contractor developed form used to submit proposed courseware changes.

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

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 to landing, landing, or any flight maneuver stipulated in 11-2C-141 Volume 3 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 11-2C-141, Volume 2, and appropriate MAJCOM supplement.

Difference qualification training—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 Item—An item completed by demonstration, observation or in-seat experience. Proficiency is not required.

First flight engineer—Crew member fully qualified to perform flight engineer duties.

First pilot—Experienced copilot qualified in both the left and right seats of an aircraft.

First pilot upgrade—A set time determined by the Training Review Panel when a copilot enters the formal first pilot ground and flight instruction.

Flight examiner or evaluator—A crew member designated to administer evaluations IAW AFI 11-2C-141, Volume 2.

Flight nurse—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.

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

Formal school courseware—Training syllabi and all other materials used to conduct formal school courses (**not** necessarily associated with instruction taught only at Altus AFB).

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.

Instructor—Crew member trained, qualified, and certified by the squadron commander as an instructor IAW AFI 11-2C-141, 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.

Lead airdrop crew—AD crew qualified to plan AD missions and lead AD formations

Loadmaster—Crew member fully qualified to perform loadmaster duties.

Main operating base (MOB)—An active duty, ANG, or AFRC training location.

Map navigator—Secondary navigator on a special-operations low-level (SOLL) II mission who aids in en route navigation and approaches.

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

Mission Clinical Coordinator—A qualified AECM, in addition to the basic crew and instructors or examiners, who completes duties per AFI 11-2AE.

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

Mission Qualified—Aircrew member who is 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.

Navigator—Crew member fully qualified in navigator duties.

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

Non-mission-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 take-off or landing outside the 48 conterminous states of the United States.

Part Task Trainer (PTT)—A device used to practice a specific task such as cargo door operation, cargo loading training, or receiver AR.

Pipe-line—An initial qualification trainee directed for training via the Air Force Personnel Center

process, e.g., pilot initial qualification, pilot requalification, prior qualified AC, navigator initial qualification, flight engineer (FE) initial qualification, and loadmaster (LM) initial qualification.

Primary method—Training conducted normally at a location designated to train a course using a major command (MAJCOM) approved syllabus, e.g., pilot initial qualification (PIQ) course conducted at Altus AFB, first pilot qualification (FPQ) course conducted at a line unit.

Prime nuclear airlift force (PNAF) mission—Flight involving airlift of nuclear weapons.

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

Requalification training—Training required to qualify aircrew members in an aircraft in which they have been previously qualified. See **Chapter 2** for requalification training requirements.

Radar navigator—Primary navigator on a SOLL II crew who directs airborne radar approaches.

Safety pilot—A pilot qualified to perform safety duties on a SOLL II crew.

Second flight engineer—Crew member qualified to perform flight engineer duties under limited supervision.

Second loadmaster—Crew member qualified to perform loadmaster duties under limited supervision.

Secondary method—Training conducted at a location **NOT** normally designated to train a specific MAJCOM approved syllabus, e.g., pilot requalification (PRQ) course conducted at a line unit.

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

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.).

Special-operations low-level II (SOLL II) aircrew—An aircrew specially trained and capable of providing support to special forces or combat units committed to unconventional warfare.

Supervised training status—Crew member will 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.

Throughput—Quantity of personnel "put through" a given category.

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.

Training Management System—C-141 ATS training accomplishment tracking and management system

Training Review Panel—The operations group will determine frequency, format, and content of the meetings to review staff and aircrew management actions necessary to complete the squadrons' flight and ground training programs.

Triennial—Training required once every three calendar years.

Upgrade Training—Training to qualify an aircrew member in a higher crew position.

Unit—Unless otherwise specified in this volume, "unit" refers to squadron-level activity.

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.

Wing airdrop crew—AD crew qualified to assist in planning AD formation missions and fly as the follower in a formation. Wing AD crews may be trained and certified in second (and subsequent) element lead procedures. Wing AD crews may be trained and certified for single-ship airdrop operations.

Attachment 2

AFORMS TRAINING EVENT IDENTIFIERS AND DESCRIPTIONS

A2.1. Event Identifiers and Descriptions. Listed by function.

A2.2. Academic Training Identifiers. Not used for C-141 ATS

A2.3. Formation ("F") Training Events. Copilots and first pilots will log applicable events when performing copilot duties.

F010 Formation Departure and Join-Up. Credit may be taken for all formation positions.

F060 AR Formation. 15 minutes of AR formation required.

F070 AD Visual Day Lead. Credit in accordance with M070 requirements and dual log with M070. Copilots and first pilots log this event for either visual day lead or wing position.

F080 AD Visual Day Wing. Credit in accordance with M070 requirements and dual log with M070.

F090 AD Visual Night Lead. Credit in accordance with M070 requirements and dual log with M070. Copilots and first pilots log this event for either visual night lead or wing position.

F100 AD Visual Night Wing. Credit in accordance with M070 requirements and dual log with M070.

F110 AD SKE Lead. Credit in accordance with M070 requirements and dual log with M070. Copilots and first pilots log this event for either SKE lead or wing position.

F120 AD SKE Wing (L). Lead qualified, flying the wing position. Credit in accordance with M070 requirements and dual log with M070.

F130 AD SKE Wing. Credit in accordance with M070 requirements and dual log with M070.

F135 AD Multi-Element SKE. Multi-element SKE AD mission comprised of at least three aircraft split in two elements. Mission will include takeoff, assembly or rejoin, simulated or actual air drop, and a formation recovery.

F136 AD Multi-Element Visual. Multi-element visual AD mission comprised of at least three aircraft split in two elements. Mission will include takeoff, assembly or rejoin, simulated or actual AD, and a formation recovery.

F140 LL SKE Lead. Credit in accordance with M140 requirements and dual log with M140. Copilots and first pilots log this event for either LL SKE lead or wing position.

F150 LL SKE Wing (L). Lead qualified, flying the wing position. Credit in accordance with M140 requirements and dual log with M140.

F160 LL SKE Wing. Credit in accordance with M140 requirements and dual log with M140.

F170 LL Visual Lead. Credit in accordance with M140 requirements and dual log with M140. Copilots and first pilots log this event for either LL visual lead or wing position.

F180 LL Visual Wing (L). Lead-qualified, flying the wing position. Credit in accordance with M140 requirements and dual log with M140.

F190 LL Visual Wing. Credit in accordance with M140 requirements and dual log with M140.

F200 Formation Recovery. Visual or SKE recovery.

A2.4. Ground (G) Training Events.

A2.4.1. Responsibilities:

A2.4.1.1. The wing commander will ensure ground training programs are supported by all agencies involved. Host and tenant units will develop agreements to provide required support for training.

A2.4.1.2. The operations group commander is responsible for establishing and maintaining the academic training program for non-ATS courses. The operations group commander may delegate this responsibility to squadron OPRs. The operations group or squadron OPR will:

A2.4.1.2.1. Appoint primary and alternate instructors for each non-ATS course to be taught.

A2.4.1.2.2. Publish a weekly (or as specified in MAJCOM supplement) ground training schedule to include date, time, location, attending students and instructor for each course (ATS and non-ATS) scheduled. If a designated instructor for any course is not available, another academic instructor may teach the course. This substitute instructor must be approved either 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.

A2.4.1.2.3. Utilize MAJCOM, ATS, or unit-developed products or syllabus for all courses as applicable. Local supplements to courseware is encouraged. Units will locally-reproduce MAJCOM provided courseware. Also, units will manage and administer computer-based training (CBT) programs and interactive courseware (ICW) products when made available.

A2.4.1.2.4. Develop a procedure to monitor the academic training program for course content, currency of materials, instructor availability, and status of training aids. Recommend to the commander changes to existing courses or additional academic training courses required, based on crew member feedback.

A2.4.1.2.5. Send recommendations for changes, additions, and deletions of courses through appropriate channels to appropriate MAJCOM with an information copy to HQ AMC/DOT.

A2.4.1.3. 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 AFM 36-2236, *Guidebook for Air Force Instructors*.

NOTE:

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

A2.4.1.4. Records and Documentation. Units will use AF Form 1522, **AFORMS Additional Training Accomplishment Input**. 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**.

A2.4.2. Ground Training Course Descriptions: G002 Aircraft Marshaling Training and Examination.

Purpose. To ensure crew members understand proper marshaling 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, *Disaster Preparedness Planning and Operations*). Units may combine this training with LS04 (Aircrew Chemical Defense Training), provided both aircrew and ground ensembles are fully covered. (AFI 32-4001 . Aircrew specific procedures will be covered by Aircrew Life Support personnel. Ground crew protective equipment will be covered by qualified disaster preparedness personnel.

OPR:

MAJCOM: HQ AMC/CEO

Unit: Civil engineering readiness flight

Curriculum development:

HQ AFCESA/CEX

Local civil engineering readiness flight

Instructor: Qualified disaster preparedness instructor

G050 Primary Nuclear Airlift Force (PNAF) Training.

G055 Emergency Nuclear Airlift Force (ENAF) Training.

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 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**:
Tasking under regional OP plans	Operations theory
Peacekeeping operations	Threat warning and information dissemination
Aircraft Systems:	Close control versus broadcast (bullseye) control
NVGs	High value airborne asset (HVAA) protection
Defensive systems	Low level navigation and AR
Have Quick	Large formation operations
KY-58	**Exercise and Conflict Lessons Learned**:
Unit specific equipment	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
Use of code words	Threat employment doctrine
IFF procedures	**SAFE PASSAGE**:
Aircraft Aerodynamics:	Friendly air defense systems
Energy Management	Authentication procedures
Fighter maneuvers against AMC aircraft	Airspace control and air defense measures
Tactical maneuvering against threat	Unit and theater specific SAFE PASSAGE procedures
Compare threat aircraft to AMC aircraft	**Tactical Deception**:
Defensive Maneuvering:	Basic principle and concepts
Long range and radar missile defense	AMC aircraft participation and involvement
Short range IR and guns	

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, base judge advocate general and security police, as appropriate, to meet aircrew training requirements. This 3-hour annual training requirement may be separated into two 1.5 hour sessions taught semiannually. Credit event on completion of all required training.

Description. See AFI 14-103, *Threat Recognition Training Program* and MAJCOM guidance

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 Requirements 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. The following subjects will be covered:

Authentication procedures	AFSIR
IFF SIF codes and equipment operation	Flight Information Handbook
HAVE QUICK	*AMCH 33-1, Aircrew Communications*

KY-58, SECURE VOICE Radio	*Handbook (S)*
L-BAND SATCOM	COMSEC user requirements

OPR:

Other communications information pertinent to unit

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/JAM

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 Requirements .

Purpose. To provide detailed guidance for reporting and preventing terrorist activity IAW AFI 31-210, *The Air Force Antiterrorism [AT] Program*.

Description. Course covers information on threat conditions, security reporting, safe guarding aircraft and COMSEC equipment, and individual responsibilities and protective measures. (AFI 31-210).

OPR:

MAJCOM: HQ AMC/SFP

Unit: Security police squadron

Curriculum development: Units

Instructor: Local AFOSI or AF AT Level II trained instructor (IAW AFI 31-210).

G120 ISOPREP Review. Semiannual review of isolated personnel report (ISOPREP) card

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

Description. (AFI 14-105, *Unit Intelligence Mission and Responsibilities, and* AFDD 34, *Combat Search and Rescue Operations*). Currency expires 180 days from date of accomplishment.

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*. Familiarity with AFMAN 11-210 is essential for unit program developers and IRC instructors. Log IRC upon completion of the ATS course. The IRC test must be completed within the checkride eligibility period.

OPR:

MAJCOM: HQ AMC/DOT

Unit: Operations group commander, ATS contractor

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 support is available from HQ AMC/DOT. Unit program development assistance can be obtained by contacting HQ AFFSA, as part of their IRC road show.

G150 TERPS.

Purpose. Provide flight engineers with the knowledge and skills necessary to monitor the briefed departure and approach and advise the pilots of any deviations that would compromise safety.

Description. Training for flight engineers to monitor navigation equipment for correct settings and pilots instruments to ensure the departure and approach procedures are being accomplished as briefed. Course includes:

A breakdown of standard DoD approach plates

Explanation of aircraft navigation equipment

Departure and terminal arrival procedures

Instrument approach types

The initial approach portion to the final approach portion

Final approach procedures

OPR:

MAJCOM: HQ AMC/DOT

Unit: ATS contractor, squadron

G182 Hazardous Cargo. Procedures for handling hazardous cargo.

Purpose. To familiarize crew members with procedures and restrictions when carrying hazardous materials.

Description. Complete ATS/squadron provided instruction reviewing AMC aircrew hazardous materials handbook and AFI 11-204, then complete the 50-question open-book test. (AFJMAN 24-204, *Preparing Hazardous Materials for Military Air Shipments;* AFI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Materials*).

The syllabus includes:

Hazardous classification	Aircraft loading and passenger movement
Packaging	Tactical and contingency airlift
Marking and labeling	Aircrew responsibility
Certification	

OPR:

MAJCOM: HQ AMC/DOT/DOJ

Unit: ATS contractor or squadron instructor

G220 Aircraft Systems Refresher.

G230 Crew Resource Management (CRM) Refresher.

Purpose. Mission-specific continuation CRM training conducted according to AFI 11-290, *Cockpit/Crew Resource Management Training Program*, and MAJCOM supplement. May be accomplished in conjunction with CRM simulator.

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

OPR:

MAJCOM: HQ AMC/DOT

Unit: ATS contractor

Additional Information. G230 must be accomplished before G240, CRM Simulator.

G231 Initial Crew Resource Management (CRM) Training.

Purpose. Aircraft and crew-specific CRM training conducted according to AFI 11-290 and MAJCOM Supplement .

Description. Introduces AMC common core subjects (according to AFI 11-290 and MAJCOM Supplement). 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

Additional Information. Completion of any CRM pre-work, if applicable, is required prior to attending CRM training. Pre-work will be distributed to organizations in sufficient time and supply to allow completion. Dual log accomplishment of G231 with G230 for AFORMS tracking purposes.

G232 Instructor/Evaluator CRM

G240 Crew Resource Management (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.

Description. CRM mission-oriented simulator training (MOST) conducted according to AFI 11-290 and MAJCOM Supplement.

OPR:

MAJCOM: HQ AMC/DOT

Unit: ATS contractor

Additional Information. Should be accomplished in conjunction with G230, CRM Refresher. Optimal scheduling of G240 is not later than 5 days following completion of G230.

G250 Refresher Simulator. (May be termed "phase training.")

Purpose. Simulator training emphasizing aircraft systems, normal and emergency procedures, and mission specific training requirements.

G260 Instrument Simulator Sortie.

Purpose. Simulator training focused on instrument procedures.

Description. See AFI 11-2C-141, Volume 3.

G270 Tactics Simulator.

G280 Combat Arms Training.

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

Description. Academics on marksmanship fundamentals and operator skills to include firing and qualifying in accordance with AFMAN 36-2227, Volume 2, *Combat Arms Training and Maintenance Rifle, Handgun, Shotgun, Grenade Launcher, M72 Light Antitank Weapon, Submachine Gun, and M249 Squad Automatic Weapon Training Programs.* Currency expires two years from date of accomplishment

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.

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. (See AFI 11-2C-141, Volume 3 for additional information.)

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 videotapes)

Instructor: Self paced

A2.5. 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/DOT

Unit: Aircrew Life Support

Additional Information. Each unit is responsible for tailoring training to meet unit needs.

LS02 High-Threat Combat Survival Training (CST):

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

Description. Aircrew members demonstrate their ability to operate LSE, employ survival/evasion techniques, and rescue procedures under simulated combat conditions. Course satisfies self-aid and buddy-care requirements of AFI 36-2238, *Self-Aid and Buddy Care Training*. See AFI 11-301 and MAJCOM supplement for course description.

OPR:

MAJCOM: HQ AMC/DOT

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. Course length will not exceed one training day. Units may schedule crew members to complete both CST and WST events in a single training day.

LS03 Water Survival Training (WST):

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 and MAJCOM supplement.

OPR:

MAJCOM: HQ AMC/DOT

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. Course length will not exceed six hours. Units may schedule crew members to complete both WST and CST in a single training day.

LS04 Aircrew Chemical Defense Training (ACDT).

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

Description. Academic and equipment training in which the aircrew member demonstrates and performs donning, doffing, buddy dressing procedures using either first generation ACDE or Aircrew Eye/Respiratory Protection (AERP) equipment and Contamination Control procedures. Donning, doffing of equipment, and decontamination 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. See AFI 11-301 MAJCOM supplements for complete course description. (AFPD 11-3, *Life Support*, AFI 11-301,and MAJCOM supplements).

OPR:

MAJCOM: HQ AMC/DOT

Unit: Aircrew Life Support

LS05 Egress Training with ACDE:

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

Description. Each aircrew member must demonstrate the ability to safely egress while wearing ACDE. Training must be accomplished at least once in each assigned MDS aircraft. Accomplishing this training also satisfies the requirements in LS08. See AFI 11-301 for course description.

OPR:

MAJCOM: HQ AMC/DOT

Unit: Aircrew Life Support

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 mission.

Description. The class is conducted as part of the training for initial qualification students. LSE for continuation training will be taught as part of WST, CST and Egress. See AFI 11-301 and the MAJCOM supplement for course description.

OPR:

MAJCOM: HQ AMC/DOT

Unit: Aircrew Life Support

LS08 Egress Training

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. The course should also address egress difficulties associated with the Aircrew Chemical Defense Ensemble (ACDE) and emergency contamination control when combined with LS05.

Description. Training will include discussion of primary and secondary air and ground egress exit points. If unit elects to conduct training at the aircraft, practice "hands-on" egress scenarios to enforce the importance of aircrew coordination actions required for emergency situations. See AFPD 11-3, AFI 11-301, AFOSH Standard 127-100, *Aircraft Flight Line - Ground Operations and Activities*, and applicable MAJCOM guidance.

OPR:

MAJCOM: HQ AMC/DOT

Unit: Squadron

Curriculum development: Unit

Instructor: Certified aircrew and life support instructors will provide egress training to all aircrew and operational support crew members. Fire department personnel will provide fire extinguisher training.

Training aids:

CBT (for continuation training)

Fire extinguisher and fire bottle

Aircrew Eye/Respiratory Protection (AERP) equipment (if unit-equipped)

Additional Information. Accomplish initial egress training in the aircraft. CBT may be used to accomplish continuation training (with the exception of the fire extinguisher and fire bottle training) Actual performance of ground emergency egress procedures at the aircraft is desired. Scheduling will coordinate with maintenance to ensure aircraft availability for training. An appropriate maintenance stand and safety equipment must be immediately below windows and hatches being used. A safety observer or instructor must be positioned on the maintenance stand to assist as necessary. Contact the fire department for extinguisher training

LS10 Hanging Harness Training (HHT):

Purpose. To ensure aircrew members can perform critical post egress and parachute malfunction procedures while suspended under the parachute canopy. Parachute malfunction procedures while suspended under the parachute canopy.

Description. Aircrew members demonstrate the ability to modify, steer, and land parachutes. This training is required for all aircrew members who carry parachutes aboard their aircraft. See AFI 11-301 and MAJCOM supplement for course description.

OPR:

MAJCOM: HQ AMC/DOT

Unit: Aircrew Life Support

LS11 Low-Threat Combat Survival Training

Purpose. An academic and equipment training program designed for aircrews whose duties do not require them to fly over enemy territory (i.e., staff positions, training unit instructors, etc.).

Description. Aircrew members demonstrate their ability to use LSE and explain survival techniques and rescue procedures. Course satisfies self-aid and buddy-care requirements of AFI 36-2238, *Self-Aid and Buddy Care Training.* See AFI 11-301 and MAJCOM supplement for course description.

OPR:

MAJCOM: HQ AMC/DOT

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. Course length will not exceed one training day. Units may schedule crew members to complete both CST and WST events in a single training day.

LS12 Hanging Harness Training with ACDE. Dual log with LS10

Purpose. To ensure aircrew members can perform critical post egress and parachute malfunction procedures while suspended under the parachute canopy. parachute malfunction procedures while suspended under the parachute canopy.

Description. Aircrew members demonstrate the ability to modify, steer, and land parachutes while wearing ACDE. This training is required for all aircrew members who carry parachutes aboard their aircraft. This is a one-time event.

OPR:

MAJCOM: HQ AMC/DOT

Unit: Aircrew Life Support

A2.6. Mission-Specific (M) Training Events:

M001 Sortie

M010 Proficiency Sortie. The following requirements, or as specified in MAJCOM supplement, 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 should be scheduled for this event. As a minimum, a pilot proficiency sortie will consist of the following:

Review of boldface emergency procedures

Three instrument approaches

Missed approach

VFR traffic pattern (weather permitting)

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

Holding pattern or procedure turn (to include entry)

Circling approach

Simulated engine-out landing (not applicable to copilots)

Simulated engine-out go-around or missed approach (not applicable to copilots)

Partial flap landing

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.

Navigators. May credit a sortie when they perform navigation duties. Two navigators may credit a sortie if they accomplish sortie events on the same route segment when the mission profile requires the use of two navigators, e.g., SOLL II.

Communication system operators (CSO). May credit a proficiency sortie when they complete predeparture activities applicable to the mission being flown and accomplish all normal tasks through post-mission debriefing.

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.

EXCEPTION: Flight engineers may credit a sortie for missions flown where a preflight inspection was not possible (e.g., Engine-Running Crew Change), and a preflight inspection was accomplished at another time.

Loadmasters. Must accomplish a preflight or through-flight inspection, inflight duties, and an onload or offload of either cargo or passengers. All training and crew qualification levels will accomplish at least one proficiency sortie in the basic crew position every 60 days. Instructor and examiner loadmasters may credit the remaining semiannual proficiency sortie (M010) requirements while instructing or evaluating the duties associated with the basic sortie requirement. Loadmasters may credit proficiency sorties for each positioning and depositioning leg of a static load training mission for which they accom-

plish a preflight or through-flight inspection, accomplish inflight duties, and participate in onload or off-load training activities.

M030 Overseas Sortie. To receive credit for an overseas sortie, crew members must log time in their primary crew position while operating on a sortie that includes take-off or landing outside the CONUS. (***EXCEPTION***: Flight examiners and instructors administering an evaluation/mission observation or conducting training may receive credit. A supervisor conducting an observation flight may also receive credit) Navigator overseas sorties will be scheduled so as to maintain theater familiarization. Copilots may regain currency while being supervised by a current and qualified copilot or higher. The supervising copilot or higher will occupy the jump seat when the non-current copilot is occupying the right seat. When a copilot or higher is not available to occupy the jump seat, the non-current copilot must be supervised by an instructor or higher in the left seat.

M040 PNAF Sortie. To credit a PNAF sortie, one onload or offload of nuclear weapons or components and a transfer of custody is required. Copilot may credit a sortie without performing the take-off or landing provided all other duties pertinent to the crew position are completed.

M070 Air Drop Event:

Pilots and navigators may credit an AD event if no-drop is made and the cause of the no-drop is not pilot or navigator induced. They may also substitute training bundles for personnel or heavy equipment drops. All drops will be credited under the following criteria:

A circular error (CE) or adjusted CE will not exceed 300 yards or 270 meters for heavy equipment and personnel, and 225 yards or 203 meters for CDS. The following adjustments will be made:

For each 100 feet above the minimum drop altitudes specified for the type of load being dropped, add 20 yards or 18 meters to the allowable CE.

VFR wingmen will score drops in relation to an adjusted point of impact (PI), 50 yards or 45 meters right of the lead's drop for right wingmen, 50 yards or 45 meters left of the lead's drop for left wingmen and abeam the PI.

For night VFR ADs, add 50 yards or 45 meters to the allowable CE.

SKE wingmen will score their drops in relation to lead's drop or an adjusted PI when the drift correction setting for 2 degrees or less is set in the SKE secondary control panel. The adjusted PI will be abeam lead's drop, perpendicular to the drop-zone (DZ) axis, and offset as the following indicates, in yards and meters:

Degrees Drift	Right Wingman	Left Wingman
3×+ right	0	0
2× right	55/49.5 left	125/112.5 right
1× right	75/67.5 left	110/99 right
0×	100/90 right	100/90 left
1× left	75/67.5 right	110/99 left
2× left	55/49.5 right	125/112.5 left
3×+ left	0	0

Loadmasters must accomplish actual heavy equipment, CDS, and personnel drops to satisfy requirements. The loadmaster may still credit a drop if a no-drop occurs after completion of the one-minute warning provided the no-drop was **not** due to loadmaster error.

M080 AD—Personnel. Credit in accordance with M070 requirements and dual log with M070.

M090 AD—Heavy. Credit in accordance with M070 requirements and dual log with M070.

M100 AD—CDS. Credit in accordance with M070 requirements and dual log with M070.

M110 Threat Scenario Sortie. To credit a threat scenario sortie, a comprehensive threat package must be developed with wing intelligence and tactics assistance. Crew members must plot threats, assess threat impact, and plan routes or tactics that will be employed to safely complete the AD tasking. Tactics used may include (as applicable), but are not limited to, the following: actual or simulated tactical air force or ground support, SAFE PASSAGE, Air Force spectrum interference resolution (AFSIR), and HAVE QUICK and SECURE VOICE radio procedures. Flight engineers and loadmasters must accomplish an evasion plan of action (EPA).

M120 Unfamiliar Routes. To credit this event, the same route should not have been flown by the aircrew member within the previous 6 months. These routes must be planned and flown using VFR procedures.

M140 Low-Level Sortie. These events (includes LL formation events F140 through F190) are designed to maintain proficiency in low altitude techniques required to deliver airborne forces, equipment, or special forces. Each route will be a minimum of 30 minutes and will include a slowdown for an actual or simulated drop. Lead navigators must not exceed the TOT by $\pm$ 60 seconds to credit the event.

A2.7. Navigation (N) Training Events: Not used for C-141 ATS

A2.8. Crew and Individual Proficiency (P) Training Events.

P020 Takeoff. Initial takeoff or takeoff following a touch-and-go landing.

P025 Takeoff and Departure

P053 Spiral Up Departure

P061 VFR Overhead

P064 Random Steep Arrival

P065 Curvilinear Approach

P070 Instrument Approach.

P100 Precision Approach.

P101 ILS Approach

P103 PAR Approach

P110 Non-precision Approach.

P111 VOR/TACAN Procedures

P112 TACAN/VOR/Localizer Approach

P113 ASR Approach

P114 BDHI Only Approach (ADF/VOR)

P115 Back course LOC

P116 NDB Approach

P120 CAT II ILS

P130 Circling.

P140 Visual Traffic Pattern.

P145 FE Approach-TERPS Monitor. Application of TERPS (G-150) objectives during an approach or departure. C-141 flight engineers will occupy the jump seat during this event and assist the pilots monitoring an instrument approach or departure procedure. Pilot participation is encouraged, clearly emphasizing to the scanner the critical indications to monitor during the instrument procedure. WST/OFT may be used for this training.

P160 Missed Approach

P170 Approach and Go-Around (Simulated Engine-Out).

P180 Approach and Landing (Simulated Engine-Out).

P190 Landing.

P192 Night Landing.

P200 Touch-and-Go Landing. Currency requirement for certified AC. Loss of currency does not result in a loss of mission ready status. Dual log with P020, P190, and P192 as applicable.

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. Units will determine how best to accomplish the training (i.e., authenticate a transmission with command post, between aircraft in formation, etc.)

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 take-off or a night formation departure. 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:

Flying helmet (if applicable)

MBU-19/P hood and mask assembly

Filter pack with filters and CQU-7/P blower assembly with filter canisters and batteries

MXU-835 intercom assembly

Filter pack suspension straps

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.

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 take-off, approach, and landing, and complete all crew position checklists associated with approach and landing.

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

FEs, supervised by crew members of like specialty, will wear the gear during take-off, approach, and landing.

Loadmasters, supervised by another loadmaster will wear the gear while either up-loading or down-loading cargo or vehicles.

AECMs, supervised by another AECM will wear the applicable gear for a minimum of 30 minutes while performing AECM duties. This event will be accomplished on an aircraft, while on the ground or inflight.

Prior to being scheduled for this event, each aircrew member must have completed LS04

P361 Flight Engineer Preflight.

A2.9. Qualification and Certification (Q) Training Events:

Q001 Open-Book Qualification Examination

Q002 Closed-Book Qualification Examination

Q005 ATD Evaluation (Qualification and Upgrade)

Q006 Senior Staff Basic ATD Evaluation

Q007 Senior Staff Basic Qualification Evaluation

Q008 Instructor Evaluation

Q011 Formation Lead Certification

Q012 Airdrop Evaluation

Q015 Special Missions and Operations Qualification

Q018 Tactical Examinations (open and/or closed book)

Q019 Tactical Evaluation

Q020 AR Evaluation

Q034 SOLL II Evaluation

Q041 Category II ILS Certification

Q050 Aircraft Commander Touch & Go Landing Certification

Q060 EMCON 3 Certification

Q070 EMCON 4 Certification

Q080 PNAF Evaluation

Q100 OME Evaluation

Q110 Personal Reliability Program

Q160 Instrument Refresher Course Examination

Q170 Flight Evaluation Folder Review

A2.10. Air Refueling (R) Training Events:

R010 Receiver AR. Aircraft commanders may credit one AR event per sortie by accomplishing closure from the pre-contact position and maintaining sustained contact. Instructor and evaluator pilots will accomplish at least two sorties semiannually (ideally, one per quarter) while occupying the right seat. An R010 may also be credited in the ARPTT by accomplishing the following:

An AC may credit a receiver AR event (R010) by accomplishing 30 minutes of closures, a minimum sustained contact of 5 minutes or greater, or both. Night (R020) and heavy weight (R030) events may also be credited in the ARPTT.

AR instructors may credit an R010 by providing ARPTT instruction on a minimum of two separate ARPTT sessions.

Two AR events may be accomplished in the ARPTT semiannually. The ARPTT may not satisfy consecutive R010 training events.

R020 Receiver AR (Night). May dual log with R010 and R030.

R030 Receiver AR (Heavyweight): AR at or above 290,000 pounds. May dual log with R010 and R020.

R040 Receiver AR Breakaway and Emergency Separation. Initiated with the receiver in the AR envelope. Pilots must demonstrate proficiency in executing the breakaway. Copilots must demonstrate proficiency in copilot procedures while the pilot executes the breakaway. Copilot may credit event accomplished in ARPTT or WST.

R050 Receiver AR Tanker Autopilot-Off. The tanker autopilot must be disengaged and AR contacts must be practiced.

A2.11. SOLL II (V) Training Events:

V200 Sortie

V210 Airborne Radar-Directed Approach (ARDA) (required for pilots and navigators)

V220 Unfamiliar Routes (dual log with M120)

V230 Loading Exercise

V240 AD

V250 Hot Refueling

A2.12. Unit Defined ("X") Events. (See AFI 11-401, *Flight Management*, and MAJCOM Supplements.)

A2.13. Air Force Specified ("XX") Training Events:

AA01 Qualification Check.

- Governed by AFI 11-202, Volume 2, and AFI 11-2C-141, Volume 2.

AA02 Qualification Check, Simulator

- Governed by AFI 11-202, Volume 2, and AFI 11-2C-141, Volume 2.

AA11 Instrument Check

- Governed by AFI 11-202, Volume 2, and AFI 11-2C-141, Volume 2.

AA12 Instrument Check, Simulator

- Governed by AFI 11-202, Volume 2, and AFI 11-2C-141, Volume 2.

AA21 Combined Qualification and Instrument Check

- Governed by AFI 11-202, Volume 2, and AFI 11-2C-141, Volume 2.

AA22 Combined Qualification and Instrument Check, Simulator

- Governed by AFI 11-202, Volume 2, and AFI 11-2C-141, Volume 2.

PP01 Flight Physical

Description. (AFI 48-123, *Medical Examination and Standards*). Examination expires on the last day of the birth month annually (example: if an individual's birth month is March, and a physical was accomplished 19 Jan 1995, the next physical is due not later than 31 Mar 1996.)

PP11 Physiological Training

Description. (AFI 11-403, *Aerospace Physiological Training Program*). Currency expires 3 years after the last day of the month in which accomplished. (example: if training was accomplished 19 Oct 1995, training is due not later than 31 Oct 1998.) Rated officers with greater than 25 years time in service only require physiological training every 5 years.

RR01 Flight Records Review

- Governed by AFI 11-401.

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

E035 Passport (2 Yr)

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

Attachment 3

AIRCREW TRAINING DOCUMENTATION

A3.1. General Information. This attachment provides guidelines on proper training documentation. Instructions are provided for AF Form 4022, **Aircrew Training Folder**, AF Form 4023, **Aircrew Training Progress Report**, AF Form 4024, **Training Accomplishment Report**, and AF Form 4025, **Summary and Close-out Report**, and aircrew training guides.

A3.1.1. Initiate a training folder (AF Form 4022) for AFCAT 36-2223 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.

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.

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 upgrade, mission qualification, and formation lead training combined in one folder.

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. Trainees may review their folder at any time.

A3.1.3.1. Training Folders. A training folder will be initiated for initial qualification, requalification, mission qualification, special qualification, difference, upgrade, and additional training directed by the squadron commander or a flight examiner. The training folder will include training reports (AF Form 4023, AF Form 4024, , and AF Form 4025,), training guides, all waivers, and other records as applicable. The training documents will be placed in chronological order. Flight Engineers and Loadmasters are exempt from maintaining AF Form 623, **On-the-Job Training Records** (Ref : HQ USAF/XOOT).

A3.1.3.2. Formal school records will be sent or hand-carried by the individual to the gaining unit for review and incorporation into the individual's training folder.

A3.1.3.3. When a crew member permanently changes station (PCS) or permanently changes assignment (PCA), training folders will be hand-carried by the individual to the gaining unit. Any incomplete training will be clearly identified on contractor-provided documentation or AF Forms 4023 through 4025 as appropriate.

A3.1.4. Training Folder Review:

A3.1.4.1. The instructor or trainer will review the training folder, to include AF Forms 4023 and 4025 or the training guide, prior to all training periods in order to develop a training plan. 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. After each period, instructors will document training in sufficient detail to accurately assess student performance and make recommendations for subsequent training. At the satisfactory completion of all required training, the instructor will make a recommendation for an inflight evaluation. Students will review and initial training records (AF Form 4023 or training guide) after each training period. Instructors and students will review the training guide (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:

A3.1.4.1.1. 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.

AD missions. List number and types of drops.

SOLL II missions. Include the number of night-vision goggles (NVG) landings, low-level routes, and the number or types of NVG drops.

A3.1.4.1.2. Navigators:

AD missions. Include number and type of drop.

SOLL II missions. Include the number and types (verbal, reduced verbal cues) of airborne radar-directed approachs (ARDAs), low-level routes, and the number and type of NVG drops.

A3.1.4.1.3. Loadmasters:

Operational flights or static loads. Enter a specific description of the payload and method of on/offload to include item nomenclature. Ensure comments describe “where, what, how, and how many.”

AD missions. Enter the words "no drop" when the load did not exit the aircraft.

Personnel ADs. Enter the number of personnel dropped on each pass, e.g., "first pass-2," "second pass-2," etc.

Heavy equipment drops. Enter a general description of the load, e.g., "modular platform (jeep), sequential platform (one mass load, one jeep), etc." The instructor or trainer will sign and enter his or her crew qualification on the training progress report (AF Form 4023). The trainee will initial the training progress AF Form 4023.

A3.1.4.1.4. Flight Engineers. Document all special operations, AD, and hot refueling training in one locally-developed (HQ AMC/DOTA approved) TG.

A3.1.4.2. Monthly review. Designated training managers or flight commanders will review active training folders/guides monthly for continuity and student progression. Document this review by including any recommendations and initialing the reviewer block for the applicable training periods on the AF Form 4023 in the training folder/guide. 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. ***NOTE*:** For LM training, an Operations Review should be conducted initially, at the mid-training milestone, and prior to the

flight evaluation. 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. Operations Review should be an accurate and detailed account of student's progress thus far. Compare number/percent of days into upgrade training to number/percent of open areas in the training guide to judge student's ability to complete training on time. Include trainee strengths and weaknesses, identify problem areas, and note unusual circumstances.

A3.1.4.3. Operations review. The squadron commander, operations officer, or a designated representative will review active training folders quarterly and prior to a flight evaluation required to complete the training program **(**not applicable for formal school training**)**. Operations review will be a separate entry in the training record and should include comments on the student's progress. Review should be an accurate and detailed account of student's progress thus far. Compare number/percent of days into upgrade training to number/percent of open areas in the training guide to judge the student's ability to complete training on time. Include trainee strengths and weaknesses, identify problem areas, and note unusual circumstances. Indicate review by signing the instructor-trainer block of the training progress record, and enter "quarterly review" in the training period identifier block.

A3.1.4.4. 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.

A3.1.5. History of Training:

A3.1.5.1. Documentation Procedures. The flight evaluation folder (FEF) maintains basic source documents to provide a current history of each individual's flying qualification in accordance with AFI 11-2C-141 Volume 2 and appropriate MAJCOM Supplement. Under the AF Forms 942, **Record of Evaluation**, in section I of the FEF, include all certifications and special mission qualifications not annotated on AF Forms 8 (i.e., touch-and-go-certification, single-ship airdrop, etc.). Use AF Forms 1381, **USAF Certification of Aircrew Training**. Do not replicate the AF Form 1381 for the purpose of adding a required entry. In addition, every formal training course (including courses taught at Altus) requires the completion of an AF Form 4025.

A3.1.5.2. Maintain aircrew training folders in assigned squadron for one year following completion of training or on completion of a subsequent upgrade program. For example, a pilot successfully completes first pilot upgrade, then 6 months later the crew member successfully completes aircraft commander upgrade. At this time, his or her first pilot training documents may be purged.

A3.1.5.3. Upon completion of training, place the AF Form 4025 **(**not applicable for additional training**)**, in section I of the FEF under AF Forms 942 and 1381. Squadrons will retain all Forms 4022 for 1 year, then returned to the crew member. All other records may be returned to the individual. Do not insert AF Forms 4022, 4023, 4024, or training guide into FEFs. See AFMAN 37-139, *Records Disposition Schedule* for additional information.

A3.1.6. If training guides are not used, AF Forms 4023 , 4024, and 4025 should be used for ATS and formal school courses.

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.

A3.1.8. 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 folder is constructed of hard stock paper and is not available as an electronic form. 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. ATS training guides will be placed inside the folder. Obtain the folder through the Air Force publications distribution system IAW AFI 37-161. Comply with the following when documenting aircrew training. ***NOTE***: Formal school instructors using ATS courseware are not required to complete the following sections of the AF Form 4022: ground training summary, written evaluations, and flying training summary if this information is tracked by other means and sent to the gaining unit with AF Form 4022.

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., "C141AC," "C141LAD," etc. 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 celestial training device, SIM, OFT, PTT, CPT, WST, GT. Entries are required for in-unit academic instruction conducted according to formal school courseware. Classroom academic training will be identified as AT. Units will not record academic training on the AF Form 4022 summary (even though it appears on the AF Form 4022 as a training period designator).

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

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 11-2C-141 Volume 2 description or other appropriate identifier.

Grade. Enter according to AFI 11-2C-141 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 11-2C-141 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.

Date evaluated. Enter the date the evaluation was completed.

Evaluator. Self-explanatory.

Grade. Enter according to AFI 11-2C-141 Volume 2.

A3.2.6. Flying Training Summary (inside right). This section provides a chronological record of flying training sorties. Log all sorties scheduled even if canceled by external factors such as weather (WX) or maintenance (MX).

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, Aircrew Training Progress Report: This form provides a narrative description of training missions and is also used for documenting operations review of training progress. It is imperative that all training and non-training events are documented on this form in order to provide a complete history of training progress. Document all non-training events that impact upgrade training, e.g., appointments, DNIF status, leave, etc. File AF Forms 4023 in order with the most recent flight on top. ***NOTE***: AF Form 4023 is optional if a training guide is used to record training. This form may be used for ATS courses at their discretion or they may develop their own training forms approved by the appropriate MAJCOM, with information copy sent to HQ AMC/DOT.

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.

A3.3.5. 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, Aircrew Training Accomplishment Report. 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:

The AF Form 4024 is optional if a training guide is used to record training.

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., C141IAC. For special mission qualification, enter the type and identify the method of training, e.g., WST training, flying training.

A3.4.4. Sortie. Enter sortie number e.g., S-1, S-2, CPT-1.

A3.4.5. Date.

A3.4.6. Training Event and Task Listing. Reflects the tasks and sub-tasks 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 "P," "S," or "U," as appropriate.

"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:

Once a crew member has received "P" for an event, the only subsequent grade allowed is either "P" or "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.

“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.

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 the specific weapons system instruction. For those weapons systems that do not have any RPL listing, all events will have an RPL of "3" for performance and "C" for knowledge (if knowledge standards are used in addition to performance standards). ***EXCEPTION***: One-time events required for familiarization and not listed in the MTL and ESD or specific weapons system instruction will not have performance and knowledge standard assigned. Performance and knowledge standards follow:

Event and Task Performance Standard

Code	Performance is:	Definition:
1	Extremely Limited	Individual can do most activities only after being told or shown how.
2	Partially Proficient	Individual can do most of the behaviors, but not necessarily to the desired levels of speed, accuracy, and safety.
3	Proficient	Individual can do and show others how to do the behavior in an activity at the minimum acceptable levels of speed, accuracy, and safety without the assistance of an instructor. For copilots, proficiency may involve actual aircraft control or copilot duties only. For instructors, proficiency includes the ability to demonstrate, instruct, and supervise ground and flight activity.
4	Highly Proficient	Individual can do behaviors in an activity at the highest level of speed, accuracy and safety.

Event and Task Knowledge Standard

Code	Knowledge of:	Definition:
A	Facts and Nomenclature	Individual can identify basic facts and terms about the subject and when used with a performance code, can state nomenclature, simple facts, or procedures involved in an activity.
B	Principles and Procedures	Individual can explain relationship of basic facts and state general principles about the subject and when used with a performance code, can determine step-by-step procedures for sets of activities.
C	Analysis, and Operating Principles	Individual can analyze facts and principles and draw conclusions about the subject and when used with a performance code, can describe why and when each activity must be done and tell others how to accomplish activities.
D	Evaluation and Complete Theory	Individual can evaluate conditions and create new rules or concepts about the subject and when used with a performance code, can inspect, weigh, and design solutions related to the theory involved with activities.

A3.5. Instructions for the AF Form 4025, Aircrew Summary and Close-Out Report:

A3.5.1. For each formal training program, a Summary and Close-Out 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, AF Forms 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, *Developing, Managing, and Conducting Training*. 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 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. TGs will be placed in an AF Form 4022 and maintained in accordance with paragraph **A3.1.5.**

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. 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. It is imperative that all training and non-training events are documented on this form in order to provide a complete history of training progress. Document all non-training events that impact upgrade training, e.g., appointments, DNIF status, leave, etc. 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 and second FE 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 paragraph **A3.5.** Maintain TG and associated AF Form 4025 in a training folder according to paragraph **A3.1.5.**

A3.6.3.6. Do not maintain the training guide in the flight evaluation folder.