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★*AETC MILITARY AIRCRAFT MAINTENANCE TRAINING PROGRAM*

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFPD 21-1, *Managing Aerospace Equipment Maintenan*ce. It establishes objectives, standards, procedures, and responsibilities for management of the AETC Military Aircraft Maintenance Training Programs. It also directs the use of the instructional system development (ISD) process to develop and validate training programs. This publication applies to all officers, enlisted, and civil service personnel, who plan, conduct, administer, evaluate and manage AETC military aircraft maintenance training programs. This instruction does not apply to Air National Guard, Air Force Reserve Command units, the Inter-American Air Forces Academy (IAAFA), AETC civil service aircraft maintenance (CSAM) organizations, or contractor aircraft/trainer maintenance (CAM) operations. This instruction requires collecting and maintaining information protected by the Privacy Act of 1974 authorized by Title 10, United States Code, Section 8013 and E.O. 9397. System of Records notice FO21 AF IL A, Core Automated Maintenance System (CAM) applies. Attachment 1 contains a glossary of references and supporting information used in this publication. Maintain and dispose of records created as a result of processes prescribed in this publication in accordance with AFMAN 37-139, *Records Disposition Schedule*.

Send comments, questions, or requests for waivers to this publication on AETC Form 1236, **Request for Improving/Changing AETC Maintenance Regulations/Instructions**, through the maintenance training flight (MTF) chief and the MXG/CC, to HQ AETC/LGMMR, 555 E Street East, Randolph AFB TX 78150-4440, DSN 487-6400, FAX 487-6054.

SUMMARY OF REVISIONS

This document has been substantially revised and must be completely reviewed. The previous instruction contained guidance pertaining to *all* AETC aircraft maintenance training programs. Deletes AETC CSAM organizations and CAM operations maintenance training programs guidance from this instruction and places them in AETCI 21-112, *AETC Civil Service and Contractor Aircraft Maintenance Training.*

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Chapter 1

GENERAL

1.1. Objective. The objective is to establish aircraft maintenance training policy and procedures for military aircraft maintenance organizations. It provides guidance on conducting initial, recurring, and advanced training to the level required so maintenance personnel can effectively perform their jobs.

1.2. General. The maintenance training flight (MTF) is the single point of contact for aircraft maintenance training within the maintenance (MX) group. Commanders and supervisors will ensure training programs are effective and completed on time to meet mission requirements.

1.3. Training Resources. Wing leadership must ensure training resources are available and provided to support the MTF and training detachment (TD) course requirements. Identify aircraft, major support equipment, and special test equipment needed for training in the monthly maintenance plan, and include in the weekly and daily maintenance schedules. Commit these resources to accomplish required maintenance training in accordance with AFI 21-101, *Aerospace Equipment Maintenance Management.*

1.4. Operational Risk Management (ORM). ORM is a decision-making process to systematically evaluate possible courses of action, identify risks and benefits, and determine the best course of action for any given situation. Consider ORM principles, concepts and techniques in the development, implementation, and application of new or existing training programs. Additional guidance can be found in AFI 90-901, *Operational Risk Management Program*, and AFPAM 90-902, *Operational Risk Management (ORM) Guidelines and Tools*.

1.5. Mission Ready Airman (MRA). The MRA training program certifies 3-level apprentice/technical training graduates on selected tasks most frequently performed during their first 12 months on station. Major command (MAJCOM) functional managers identify MRA task/training requirements during utilization and training workshops. When MRA graduates cannot perform the tasks certified on, supervisors must identify the training deficiencies to HQ AETC via graduate assessment surveys.

1.6. Graduate Assessment Surveys (GAS). Supervisors use GAS to report positive or negative feedback on graduates to HQ AETC training provider agencies (Air Force specialty code [AFSC] awarding and TD courses). These surveys assist Air Education and Training Command (AETC) with improving the training provided to their customers.

1.7. Block Training. The objective of block training is to group as many training requirements as possible into a single training session. Initially, the training session should provide general information that everyone requires, and then reduce to the point where only certain categories of personnel are required to remain in the session. Some examples of courses taught in block training include fire extinguisher, forms documentation, corrosion control, foreign object damage (FOD), security awareness, egress, resource protection, etc.

1.8. Cross-Utilization Training (CUT). The CUT program provides units flexibility to train individuals to perform tasks that are not a part of their primary AFSC. Maintenance personnel must have the opportunity to learn their primary Air Force specialty code (PAFSC) before being utilized for tasks outside of their PAFSC. Individuals selected for CUT will be 5-levels or highly qualified 3-levels that have satisfied all upgrade training requirements, and have 12 months experience in their AFSC.

1.9. Air Force Distance Learning (DL) Training Program. The base education services flight (ESF) is the office of primary responsibility (OPR) for Air Force distance learning. The MTF and ESF will establish a memorandum of agreement (MOA) prescribing the administration of DL in maintenance. The MOA will include as a minimum, scope of training courses provided by the MTF, facilitator support, equipment and facility support, distribution of course materials, schedules and announcements. The DL program administered in aircraft maintenance provides instruction through the use of computer based training (CBT), interactive courseware (ICW), video tele training (VTT), videodisk, and other distance learning training media. Supervisors must maximize the use of these programs to support upgrade and qualification training for assigned personnel.

1.10. Security Assistance Training Program (SATP). International students receive aircraft and support equipment task, and familiarization training at AETC units. Typically, training requirements dates and lengths of instruction cannot be easily changed; therefore, accomplish adequate preparation and course planning prior to the student's arrival. The following SATP management responsibilities apply:

1.10.1. The Air Force security assistance training (AFSAT) squadron originates the training request, and forwards it to HQ AETC/LGMMR for action/training support.

1.10.2. HQ AETC/LGMMR identifies the specific unit to conduct the training, and coordinates with the MTF to determine their capability to support the tasking. Once verified, the unit is provided information pertaining to the student, and a list of specific training requirements requested.

1.10.3. Training provided will be to the "B" knowledge or "2b" proficiency level.

1.10.4. The base international military student officer (IMSO) is responsible for student administration and coordination of student activities.

1.10.5. Since international students may not possess security clearances, care must be taken to ensure they are not exposed to classified material/equipment.

1.11. Maintenance Orientation Training. Schedule personnel assigned to the MXG to attend an MTF-conducted maintenance orientation course within 60 days of arrival in the work center. Develop the maintenance orientation to consolidate maintenance training requirements into one or more consecutive training sessions.

1.12. Air Force Engineering and Technical Services (AFETS), Contractor Engineering and Technical Services (CETS), and/or Field Service Representatives (FSR).

1.12.1. Use these personnel to conduct specialized systems/equipment training, and integrate them within the MTF instructional effort.

1.12.2. Coordinate through the MTF courses developed or taught by these personnel to ensure courses meet curriculum standards.

1.13. Engine Borescope Training Program (All Engines). All personnel whose duties require the use of borescope equipment will complete borescope training in accordance with AFI 21-101. Keep the number of qualified personnel to the absolute minimum required to meet mission requirements.

1.14. Utilization of Training Courses. AETC, TD, MTF and ancillary courses must be used to the fullest extent possible to satisfy continuation, upgrade, qualification, and CUT training needs and requirements. Assess a deviation for each occurrence when a squadron requests training and does not fill the requested seats, and report as such during the status of training (SOT) briefing.

1.15. AETC Training Detachment (TD). Utilize the TD (when assigned) as the primary maintenance training resource. The MTF will develop courses and supplement training only when the training requirements are beyond the capability and timely response of the TD. MTFs will not duplicate training provided by the TD, and they must work toward achieving a strong, mutually productive relationship that benefits wing personnel. The host wing will develop a support agreement with the TD in accordance with AFI 25-201, *Support Agreements Procedures,* and AFI 65-601, Volume 1, *Budget Guidance and Procedures*. The host-tenant support agreement should address: facilities, operation and maintenance (O&M) funding (AFMAN 65-604, *Appropriation Symbols and Budget Codes [Fiscal Year 2003]*), administrative support, government owned vehicles (GOV) allocation, aircraft support equipment to facilitate detachment training including sustainment costs for such support equipment (for example, precision measurement laboratory [PMEL] and time compliance technical orders [TCTO]), and organizational and intermediate maintenance support of equipment beyond the detachment's capability.

1.16. Curriculum Advisory Committee (CAC). The purpose of the CAC is to identify training requirements through coordination with subject matter experts (SME), and to investigate, analyze, and recommend the most cost effective and efficient method to satisfy training requests. The CAC will meet when a requirement to develop a new course is identified, when revising 25 percent or more of an existing course, or to determine which training agency is in the best position to provide requested training. The CAC can also be used to conduct MTF 18-month course reviews, or to coordinate and review the TD biennial analysis of technical training (BATT) process.

1.17. MTF Training Continuity Books. The MTF will develop and maintain duty position training continuity books depicting procedures for accomplishing tasks associated with each duty position in the MTF. Write training continuity books to a level of detail that permits a newly assigned person to comply with existing policy and procedures with little or no assistance.

1.18. Maintenance Operating Instruction (MOI). The MTF will develop and publish an MOI that describes local policy and procedures for managing the training programs they are responsible for administering and controlling. If not already described and published in other instructions or supplements, ensure the following topics are included in the MOI:

1.18.1. Frequency and distribution of automated training products.

1.18.2. Procedures for updating the MIS training subsystem to include selection/identification of authorized personnel.

1.18.3. Personnel processing procedures

1.18.4. Procedures for requesting training.

1.18.5. Formal course (AETC/TD) scheduling procedures.

1.18.6. Procedures for coordinating TD BATT and local MTF course control documents.

1.19. Aerospace Ground Equipment (AGE) Operator Training Program. Conduct AGE operator training in accordance with AFI 21-101. Operation of powered AGE, by model and type, requires initial qualification training and a practical evaluation by AGE personnel. Upon assignment to the unit, non-AGE personnel who are required to operate AGE must receive initial qualification training. Previous qualifications require a supervisory evaluation during the initial evaluation process. During this evaluation, the supervisor determines whether the individual is still qualified to operate the required equipment or if refresher training is needed. Only designated personnel are authorized to conduct initial and refresher training.

1.20. Aircraft Installed Engine Run Training Program. Maintenance personnel selected for engine start and run duties must receive qualification training, and be evaluated and certified according to AFI 11-218, *Aircraft Operation and Movement on the Ground,* and AFI 21-101. Use locally developed procedures and written tests for engine run training.

1.21. Engine-Blade Blending Training and Certification. Conduct engine-blade blending training and certification in accordance with AFI 21-101. The MTFs are responsible for ensuring the proper administration of blade-blending training and certification programs/courses. Only the minimum number of personnel will be trained/certified in engine-blade blending procedures in order to maintain a high degree of familiarity with inspection techniques, blending, equipment, and to maintain task proficiency.

1.22. Test Facility Operator Training Program. Test cell evaluators must be highly qualified 7-skill level technicians (or civilian equivalents) selected by the test facility supervisor and certified by the maintenance squadron supervisor.

1.22.1. Initial certification requires students to demonstrate proficiency to a designated test facility engine evaluator after successfully completing test facility engine operator training, a written examination on the test facility, and training on emergency procedures.

1.22.2. Accomplish annual recertification by demonstrating proficiency to the on-site test facility supervisor or evaluator.

1.22.3. Do not start, operate, or test engines unsupervised until the following criteria is met:

1.22.3.1. Possess a 5-skill level or higher (or civilian equivalent).

1.22.3.2. Be thoroughly familiar with all directives applicable to the facilities and engines involved.

1.22.3.3. Receive instruction from a qualified 7-skill level (or civilian equivalent) in the starting and operation, and emergency procedures for the test facility.

1.23. Flight Control Rigging Training and Certification Program. Maintenance personnel selected for flight control rigging must receive qualification training, be evaluated by the supervisor at least annually, and be certified by the applicable maintenance officer, maintenance supervisor, or civilian

equivalent. Break down the tasks to complete the rigging, for example, ailerons, rudder flaps, etc., and identify on a career field education and training plan (CFETP), AF Form 797, **Job Qualification Standard Continuation/Command JQS,** or equivalent document, and maintain in Maintenance Information System (MIS).

1.24. Special Certification Training and Production Inspector Programs. Administer these programs in accordance with AFI 21-101. Address local policies, procedures, and documentation requirements in unit operating instructions.

1.25. AFTO Forms 781, ARMS Aircrew/Mission Flight Data Document, Documentation. The MTF will develop and administer an AFTO Form 781 documentation-training program for all on-equipment maintenance personnel. Include, as a minimum, maintenance documentation procedures, types of discrepancies constituting grounding of aircraft, procedures for clearing discrepancies, and in-process inspection (IPI) requirements and procedures. Emphasize the importance of individual maintenance, and include automated forms and their use. Develop a MIS course code to manage the program, and document training completions.

1.26. Shop-Level Pollution Prevention Training. All shop-level personnel and their immediate supervisors, who work with, control (to include purchasing) or may come in contact with hazardous materials, must complete pollution prevention training in accordance with AFI 21-101.

1.27. Class Cancellation Policy:

1.27.1. TD and MTF classes with enroute, temporary duty (TDY), Air Reserve Component (ARC), or multiphase students will be supported, and will not be cancelled by the host unit.

1.27.2. Unit personnel will not be removed from TD/MTF courses due to appointments, local exercises, or higher headquarters inspections, unless approved by the respective group commander.

1.27.3. MXG/CC may cancel MTF courses during local exercises

1.27.4. Local students released from MTF/TD courses will report to their respective work centers.

1.28. Status of Training (SOT) Briefing. Use the SOT briefing to report the health and status of aircraft maintenance training programs. To be beneficial, the SOT briefing must be thorough and include a candid review of the overall status of MX training programs. Provide an information copy of the SOT briefing to HQ AETC/LGMMR monthly, and to the wing/vice commander at least quarterly.

1.28.1. The MXG/CC commander will chair the monthly SOT.

1.28.1.1. As a minimum, the following personnel must attend the formal SOT briefing monthly:

1.28.1.1.1. Squadron commanders and maintenance supervisors.

1.28.1.1.2. Flight commanders and chiefs.

1.28.1.1.3. MTF chief, training management and TD superintendents.

1.28.1.1.4. Noncommissioned officer in charge (NCOIC), MTF scheduling element.

1.28.1.1.5. Maintenance unit training managers (UTM).

1.28.2. Provide a copy of the briefing to attendees prior to the formal briefing.

1.28.3. The briefing will include, but is not limited to the following:

1.28.3.1. Identification and status of significant training problems.

1.28.3.2. TD demand response rate. Compute the ratio of TD responses and unit demand by dividing the number of quotas requested (total number from block 7b on AF Form 898, **Field Training Requirement Scheduling Document**) by the number allocated (total number of seats supported by the TD) and reflect the rate as a percentage. The percentage will not be above 100 percent.

1.28.3.3. TD instructor utilization rate (total production). Divide the total number of hours taught by the TD to include: formal courses, partial courses, training sessions, and total number of host support hours by the number of qualified instructors. TD will provide this data to the MTF when requested.

1.28.3.4. TD seat utilization rate. Divide the total number of seats built in all classes (total number from block 7e on AF Form 898, upper left), by the total number of seats filled, and reflect the rate as a percentage.

1.28.3.5. Scheduling effectiveness. Report the number of personnel scheduled for training, minus the number of walk-ins, minus the number of no-shows divided by number of personnel originally scheduled.

1.28.3.6. Seat utilization. Compute seat utilization by dividing the number of students trained by the number of seats available.

1.28.3.7. Special experience identifier (SEI). Report the status of the aircraft maintenance SEI program management/effectiveness. Identify personnel by name and AFSC (2AXXX and 2W1XX) who have been on station 18 months, or more who have not been awarded a wing relevant aircraft/engine SEI. ***NOTE:*** Maintenance supervision will provide the information for the SOT slide. Obtain required SEI program information/statistics from the local MPF. Additional SEI program management procedures are in AFI 21-101.

1.28.3.8. Report the overall status of the upgrade training program to include the following:

1.28.3.8.1. Number in upgrade training (UGT) by skill level.

1.28.3.8.2. Number in UGT over 28 months by skill level.

1.28.3.8.3. Number of career development course (CDC) examination passes and failures by unit, and CDC pass rate expressed as a percentage.

1.28.3.8.4. Number of CDC enrollments over 9 months.

1.28.3.8.5. Number of CDC extensions and reactivations.

1.28.3.8.6. Overdue training. Report total number of personnel overdue training by squadron. Consider personnel overdue for training (including those TDY, on leave, and scheduled for training) if training is not completed by the due date, or on the last day of the month for recurring training requirements (unless specified by other Air Force publications).

1.29. Civilian/Contractor Training. Procedures for procuring training for civilians and contractor personnel are outlined in the Education and Training Course Advisory (ETCA) located at website: (https://etca.randolph.af.mil).

1.30. MAJCOM Mandatory Course Listing (MMCL). Mandatory TD courses for each mission design series (MDS) have been determined through the establishment of MMCLs in each command. The purpose of the MMCLs is to ensure that all military personnel assigned to a specific MDS receive the same training and have the same training requirements throughout the Air Force. AETC policy is to follow the MMCLs as established by the lead command or the Combat Air Force (CAF), as applicable.

1.30.1. The MXG/CC may waive MMCL course requirements when warranted, however, waivers should be the exception. Do not waive students from course attendance merely to avoid overdue training status if MMCL requirements are not completed within the 180-day time limit.

1.30.1.1. Squadron commanders initiate waiver requests and forward to the MTF. The MTF commander/flight chief forwards recommendations to the MXG/CC for approval. Waiver requests will contain the individual's name, rank, primary AFSC, duty title, course to be waived, and full justification for the waiver.

1.30.1.2. If the waiver is approved, the MTF scheduler updates the individual's automated training record (CAMS) using course status code "W." The MTF files a copy of the waiver memorandum, and returns the original to the squadron.

Chapter 2

ORGANIZATIONAL RESPONSIBILITIES

2.1. Maintenance Group Commander (MXG/CC). The MXG/CC will:

2.1.1. Ensure the MTF is the single point of contact for aircraft maintenance training.

2.1.2. Ensure personnel assigned to the maintenance group attend required training.

2.1.3. Provide facilities to the MTF in support of aircraft maintenance-training programs to include sufficient offices, classrooms, local area network (LAN) connectivity, dedicated hangar space, and equipment.

2.1.4. Implement and support the Maintenance Officer Orientation and Training Program (MOOTP) in accordance with chapter 6 of this publication.

2.1.5. Provide highly qualified 2AXXX/2WXXX AFSC technicians to the MTF for assigned or attached instructor duty (paragraph 3.22). Assign instructors based on the training needs of the maintenance community. Personnel selected must possess superior job knowledge, a desire to instruct, and personal discipline.

2.1.6. Chair the monthly SOT meeting.

2.1.7. Provide O&M funds for AETC TD (when assigned).

2.1.8. Ensure the MMCL TD program is implemented and supported.

2.2. Maintenance Operation Squadron Commander (MOS/CC). The MOS/CC will:

2.2.1. Organize the MTF in accordance with this publication.

2.2.2. Ensure the MTF budget is sufficient to sustain maintenance training operations, and satisfy mission requirements.

2.2.3. Staff the MTF to authorized levels when assets are available.

2.2.3.1. Address education and training (AFSC 3S2X1) manpower distribution issues with the mission support squadron commander and base functional manager, when necessary.

2.2.3.2. Address MTF instructor manpower requirements to the MXG/CC and appropriate functional managers.

2.2.4. Ensure personnel assigned to the MTF do not perform additional duties that would detract from their primary AFSC duties and responsibilities.

2.3. Squadron Commander. The squadron commander will:

2.3.1. Ensure training programs required by Air Force and AETC directives are established and maintained to satisfy mission readiness and formal training needs, and effectively utilize the skills and resources of the UTM and MTF.

2.3.2. Ensure training programs in their organizations are administered in accordance with AFI 36-2201, *Air Force Training Program,* and this directive.

2.3.3. Ensure all work centers appoint a work center training monitor (WTM).

2.3.4. Ensure training monitors are trained and qualified to perform assigned training management duties and responsibilities, and qualifications are documented on AF Form 797.

2.4. Work Center Supervisor. The work center supervisor will:

2.4.1. Manage their section training programs and support the MTF, UTM, and WTM.

2.4.2. Conduct initial evaluations for all newly assigned personnel within 60 days of assignment to work center.

2.4.3. Establish work center training requirements, review and validate at least annually, and ensure they are identified in MIS.

2.4.4. Develop a master training plan that depicts how assigned personnel will be trained.

2.4.5. Ensure work center training programs are administered in accordance with AFI 36-2201, AFI 21-101, and this publication.

2.4.6. Ensure all TD courses required for basic job qualification are identified and loaded in MIS for assigned personnel. Review and validate TD course requirements when requirements change or when a MDS change, modification, or conversion occurs.

2.4.7. Notify the UTM which tasks constitute the work center training requirements listing. Load a work center training requirement when the majority (51 percent or more) of personnel in the work center perform/require the task.

2.4.8. Ensure duty related courses that apply to selected personnel are individually loaded against them in the MIS.

2.4.9. Notify the UTM when there is a need for improving or developing training courses or programs.

2.4.10. Ensure personnel requiring training are properly identified, scheduled, and released for training.

2.4.11. Coordinate all training needs/requirements with the UTM (including formal school annual screening, and out-of-cycle training requests).

2.4.12. Ensure MIS updates are accurate and timely.

2.4.13. Coordinate changes to class schedules with the UTM/WTM as applicable to prevent training deviations.

2.4.14. Attend unit training meetings.

2.4.15. Ensure the WTM is trained and accomplishes assigned duties and responsibilities.

2.5. Work Center Training Monitors (WTM). The WTM will:

2.5.1. Assist supervisors in identifying and projecting training requirements, and managing the work center's training program.

2.5.2. Serve as the work center's single point of contact for training.

2.5.3. Request training quotas for known backlogs on the unit forecast sheet.

2.5.4. Attend training meetings conducted by the UTM/MTF.

2.5.5. Update (when authorized) training related actions in MIS at least weekly.

2.6. Training Detachment (TD). The TD is the primary source for aircraft maintenance training for aircraft/systems assigned to the base on which a TD is located. See AFI 36-2201, and the Education and Training Course Announcement web site at https://etca.randolph.af.mil for additional TD information. TDs will:

2.6.1. Coordinate unit training requests with the MTF.

2.6.2. Review and sign AF Form 898 or an automated facsimile.

2.6.3. Attend monthly status of training (SOT) meeting (detachment chief or superintendent).

2.6.4. Attend MTF monthly training scheduling meeting (detachment chief, superintendent or scheduler).

2.6.5. Develop written procedures with MTF to ensure TD BATTs are coordinated with required maintenance agencies.

2.6.6. Provide MTF copies of current TD course chart (CC) if not available through the 982 Training Group https://webm.sheppard.af.mil/982trg/index.htm web page.

2.6.7. Certify students on required tasks when requested by units.

Chapter 3

MAINTENANCE TRAINING FLIGHT ORGANIZATION AND RESPONSIBILITIES

3.1. General. Overall responsibility for all wing aircraft maintenance-training programs rests with the maintenance training flight (MTF) commander/chief. The MTF is organized as a centralized aircraft MTF (see Attachment 2) and consists of two sections: training management (TM) and development, application and distance learning (DADL) (Attachment 2). All aircraft maintenance training technicians and UTMs (AFSC 3S2X1) are assigned to the MTF. However, UTMs may be physically located in the various squadrons within the maintenance group they support. The MTF is responsible for the functional management, utilization, control, and training of assigned 3S2X1 personnel. This structure provides the best possible environment to ensure the MTF can fulfill their responsibilities, support all MXG customer needs, and effectively manage, utilize, train and mentor assigned 3S2X1 personnel to be productive and progress within their career field. When designated to support a specific squadron, the UTM's primary duty is training program management for that unit.

3.2. Manning:

3.2.1. The flight commander position, when authorized, should be a maintenance officer AFSC. The flight chief position is AFSC 3S2XX and manned accordingly.

3.2.2. Additional duties assigned to MTF personnel will not detract from their primary duties. For example, do not assign the individual filling the flight chief position full-time first sergeant duties.

3.3. Training. MTF flight chiefs must ensure squadron personnel are adequately trained to perform their duties. Periodically rotate unit training managers (AFSC 3S2X1) to different squadrons or sections to gain career broadening experience. Individuals should attend applicable formal schools, and be trained in current and new technologies offered by other commands, services, and civilian institutions. MTFs must ensure adequate funding is programmed and budgeted to meet TDY and training needs, and conduct in-house training for assigned personnel on a regular basis. Upgrade and qualification training are ongoing requirements. Complete in accordance with AFI 36-2201.

3.4. Maintenance Training Flight Commander/Flight Chief. The MTF commander/flight chief will:

3.4.1. Serve as the single point of contact for all maintenance training programs, and is the liaison between maintenance units and base training (including other outside agencies) to ensure upgrade, qualification, and enlisted specialty training programs are conducted in accordance with AFI 36-2201.

3.4.2. Assign all aircraft maintenance training personnel (3S2XX) to the MTF (for reporting official purposes) to provide economy of scale, coverage for all units, standardized maintenance training programs, and facilitate the training and supervisory development of assigned 3S2X1 personnel.

3.4.3. Designate training managers to support assigned squadrons and work with squadron commanders to ensure adequate space and equipment are available for the assigned UTM to conduct daily training business.

3.4.4. Serve as the functional manager for all 3S2X1 personnel assigned to the MXG.

3.4.5. Establish and implement a self-inspection program.

3.4.6. Determine and submit TDY and O&M MTF budget requirements annually to the MOS commander

3.4.7. Ensure an SOT briefing is produced and reported as required by paragraph 1.28.

3.4.8. Serve as the functional manager for the MIS training subsystem, and ensure it is the primary system used for scheduling and documenting training. Approve all course code additions and deletions. Establish MIS user screen authorizations to update training screens in the MIS training subsystem.

3.4.9. Coordinate and approve training requests identified on AF Form 898.

3.4.10. Ensure timely submission of aircraft and support equipment requirements to plans, scheduling, and documentation (PS&D).

3.4.11. Select only fully qualified maintenance personnel to be assigned or attached instructors.

3.4.12. Coordinate on MTF plans of instruction (POI) prior to course validation.

3.4.13. Review MTF class packages.

3.4.14. Review assigned instructor folders annually.

3.4.15. In accordance with AFI 36-2201 and this instruction develop a training program to qualify MTF personnel in the performance of their duties.

3.4.16. Establish and implement training plans and continuity books.

3.4.17. Develop and implement an MOI for training.

3.4.18. Develop and implement the MOOTP in accordance with chapter 5 of this publication.

3.4.19. Establish procedures to control and maintain aircraft ground trainers when assigned to the MTF.

3.4.20. Coordinate and approve TD BATT.

3.4.21. Establish procedures with quality assurance (QA) to review QA summaries for training deficiencies or trends.

3.4.22. Appoint a primary and alternate consolidated tool kit (CTK) custodian (as applicable).

3.4.23. Appoint a primary and alternate technical order distribution account (TODA) custodian (as applicable).

3.4.24. Appoint a primary and alternate supply custodian to manage MTF supply and equipment accounts in accordance with AFMAN 23-110, *Standard Base Supply Customer's Guide* (if applicable).

3.4.25. Manage and control the maintenance training program for international students.

3.4.26. Inform HQ AETC/LGMMR of training production requests such as video, CBT, and interactive courseware (ICW) that are not available locally.

3.4.27. Manage, control, and administer the MMCL TD program. AETC units will comply with the lead command mission design series (MDS) MMCL for each assigned aircraft. If no lead command MMCL has been published, the MTF will develop one locally for each MDS and that listing will become the AETC equivalent MMCL until such time that the lead command develops and publishes one. Waiver authority for course exemption/student attendance is delegated to the MXG/CC (see paragraph 1.29).

3.5. Superintendent, Training Management Section. The superintendent will:

3.5.1. Ensure a training plan is developed for training managers and MTF scheduling personnel.

3.5.2. Ensure UTM training continuity books are established and kept current.

3.5.3. Conduct informal squadron/work center visits to ensure training managers are actively involved in their unit's training program, and performing duties outlined in AFI 36-2201, this publication, and local training directives.

3.5.4. Ensure UTMs formally assess unit-training programs in accordance with AFI 36-2201. Provide information copies of the report to the MTF commander/chief, appropriate squadron commander (if applicable), and base training office.

3.5.5. Ensure UTMs schedule all newly assigned personnel for the MTF maintenance orientation.

3.5.6. Ensure monthly scheduling meetings are conducted.

3.5.7. Ensure work center training requirements are identified.

3.5.8. Ensure the SOT briefing is produced.

3.5.9. Establish manual backup procedures to overcome extensive MIS downtime.

3.5.10. Establish documentation procedures for training completions and task qualifications before data is entered into the MIS training subsystem, and ensure that only authorized personnel sign source documents before updating MIS.

3.5.11. Ensure UTMs and scheduling personnel are trained and qualified to perform their duties.

3.5.12. Review AF Form 898 to ensure squadrons manage backlogs.

3.6. NCOIC, Unit Training Management Element. The NCOIC will:

3.6.1. Establish a UTM training plan and provide a copy to the superintendent, training management.

3.6.2. Manage UTM resources.

3.6.3. Serve as a member of the CAC.

3.6.4. Manage and administer UTM training program.

3.6.5. Establish and maintain UTM section continuity book.

3.6.6. Ensure UTMs coordinate training requirements for their designated unit including AETC formal, TD, and MTF courses.

3.6.7. Coordinate with the application element on issues affecting students attending MTF courses.

3.6.8. Ensure UTMs manage and maintain MIS subsystem training products for their unit.

3.6.9. Validate UTM inputs to AF Form 898.

3.6.10. Attend the monthly training scheduling meeting.

3.6.11. Ensure UTMs assist supervisors in effectively managing the CDC program.

3.6.12. Ensure training updates are entered in MIS in a timely manner.

3.7. Unit Training Manager (UTM). The UTM will:

3.7.1. Manage the formal upgrade and qualification training program for the commander according to this instruction, AFI 36-2201, and local training directives.

3.7.2. Serve as the single point of contact (POC) within the squadron for all training matters.

3.7.3. Process personnel in/out during permanent change of assignment (PCA), permanent change of station (PCS), or TDY.

3.7.4. Brief the status of the squadron training program to the unit commander at least monthly. The briefing should include personnel exceeding minimum time for upgrade training, slow CDC progression, training problem areas, and successes.

3.7.5. Formally assess unit training programs according to AFI 36-2201, this instruction, and local training directives, and provide a copy of the written report to the squadron commander, MTF, and base training.

3.7.6. Assist commanders and supervisors in evaluating the training needs of permanently and temporarily assigned personnel.

3.7.7. Ensure all work center training requirements have been loaded to the MIS.

3.7.8. Manage MIS training products by distributing products as scheduled, and ensure all products are up-to-date.

3.7.9. Coordinate with the MTF scheduling element to obtain training beyond the squadron's capability.

3.7.10. Provide squadron inputs to AF Form 898 training requirements scheduling document.

3.7.11. Ensure quotas allocated for training are utilized.

3.7.12. Ensure late changes to scheduled training are coordinated with MTF scheduling element to prevent no-shows and cancellations.

3.7.13. Monitor training deviations, overdues, no-shows, and forward requested statistical data to the MTF in a timely manner for input into the monthly SOT briefing.

3.7.14. Identify no-shows to the squadron commander and work center supervisor.

3.7.15. Manage the squadron's CDC program with the goal of eliminating CDC slow progression, extensions, reactivation, and failures.

3.7.16. Assist supervisors and trainers in preparing course outlines, task breakdowns, and training plans for training sessions conducted within the squadron.

3.7.17. Establish and maintain the WTM training plan, and train WTMs on their duties and responsibilities (as applicable).

3.7.18. Coordinate with the superintendent, training management and MTF commander/chief **prior** to forwarding any training issues or correspondence to higher headquarters.

3.7.19. Develop and maintain a UTM squadron training continuity book.

3.7.20. Manage enlisted specialty training visual information products within the squadron (as applicable).

3.7.21. Ensure TD and MTF questionnaires are completed and returned to the originator.

3.8. NCOIC, Scheduling Element. The NCOIC will:

3.8.1. Schedule all maintenance, ancillary, MTF, TD, and other formal structured training classes (Attachment 3).

3.8.2. Manage the MIS training subsystem.

3.8.3. Develop and maintain a scheduling element training plan, and provide a copy to the superintendent, training management section.

3.8.4. Manage scheduling element resources effectively.

3.8.5. Produce the monthly SOT report in accordance with paragraph 1.28.

3.8.6. Manage the scheduling element training program.

3.8.7. Develop and maintain a scheduling element continuity book.

3.8.8. Coordinate requests for training provided by AFETS or CETS (FSR) personnel with the AFETS or CETS (as applicable) supervisor as designated by AFI 21-110; include and report AFETS/CETS student training production in the monthly SOT.

3.8.9. Submit requests for TDY instructor assistance and mobile training teams.

3.9. MTF Schedulers. MTF schedulers will:

3.9.1. Distribute training forecasts and quota request forms for TD, ancillary, and MTF training to the UTMs.

3.9.2. Conduct the monthly scheduling meeting in accordance with paragraph 3.14.

3.9.3. Collect, consolidate, and verify unit AF Form 898 ancillary and MTF request inputs.

3.9.4. Submit a consolidated quota request to the appropriate training provider.

3.9.5. Collect class dates (schedules) from training providers, and build classes in the MIS.

3.9.6. Publish TD class schedules prior to the 15th calendar day of the month.

3.9.7. Allocate quotas to UTMs.

3.9.8. Identify open TD course seats to other assigned units prior to the 20th of each month. Include aircraft type, course number, course title, and class dates.

3.9.9. Provide printed class rosters to training providers at least 3 duty days prior to class start date.

3.9.10. Request training attendance data from training providers.

3.9.11. Verify attendance data and closeout classes in the MIS.

3.9.12. Collect and update class rosters from local training agencies within 2 duty days after course completion.

3.9.13. Notify UTMs of class deviations, and maintain data for the SOT briefing.

3.9.14. Maintain the following items on active file for a minimum period of one year, and in inactive file for an additional year or until no longer applicable:

3.9.14.1. Class rosters.

3.9.14.2. Course code documentation (additions, deletions, and changes).

3.9.14.3. Monthly training documentation (for example, forecasts, AF Forms 898, training schedules, etc).

3.9.14.4. Deviation memorandums (for example, course cancellations, etc.)

3.9.14.5. MIS training products.

3.9.14.6. Messages, (for example, out of command requests, TDY instructor assist, open training seats/requirements memorandum, etc.).

3.10. Maintenance Information System (MIS). The MTF chief is the training subsystem functional manager and will ensure the system is used to the fullest extent possible to determine, validate, and schedule aircraft maintenance training requirements.

3.10.1. Data loaded into the MIS will not be duplicated on manual forms or in other automated systems unless specifically exempted in this or other applicable publications.

3.10.2. The MTF commander/chief may authorize work center supervisors/WTMs to update the MIS for the training they conduct in their work center only. Work center supervisors/WTMs are not authorized to update any training conducted by MTF personnel or other outside providers.

3.11. Training Products. Use the following products to manage the maintenance training program:

3.11.1. Maintenance Personnel Roster (TRIC: MPL). Use to reference employee numbers, work centers, supervisors, squadrons, organization IDs, etc.

3.11.2. Training Forecast (TRIC: TMA). Use to assist with forecasting and scheduling training requirements.

3.11.3. Training Course Table (TRIC: TQE). Use to identify MIS course codes, narratives, frequency, duration, etc.

3.11.4. Consolidated Training Report (TRIC: CRT). Use to identify class rosters, class schedules, etc.

3.11.5. Course Status Reports (TRIC: CSR). Use to identify specific course information.

3.11.6. Special Certification Roster (TRIC: SCR). Use to assist with the control and monitoring of certification and inspection programs. This product is produced and distributed to affected work centers at least quarterly.

3.11.7. Uncompleted Event List (TRIC: UEL) (Not Applicable for GO81). Contains the listing of all training events that are uncompleted during the period of report. Produce monthly to monitor outstanding class rosters. ***NOTE:*** For MIS Users. Special purpose course status reports provided to non-MTF personnel are the sole responsibility of the requesting individual/agency. The MTF may retain a copy of these products if desired.

3.12. Training Documents. Specific requirements and responsibilities on the use of training documents are identified in AFI 36-2201, and other AF publications. The more commonly used maintenance training forms are:

3.12.1. AF Form 2426, **Training Request and Completion Notification.** Use to request or record training completions, and the supervisor or a designated representative must sign in order to be valid.

3.12.2. AF Form 898. Use to manage and forecast TD training requirements, and can be used to manage and forecast local and ancillary training requirements.

3.12.3. AETC Form 666, **Change to Inspector/Special Certification Listing.** Use to add or remove personnel on the special certification roster (SCR).

3.13. Annual Course Code Review. Review local MIS course codes annually. Review semiannually or quarterly a percentage of the course codes to ensure 100 percent course code review is accomplished on time.

3.14. Monthly Scheduling Meeting:

3.14.1. The NCOIC, scheduling element will conduct a monthly training scheduling meeting not later than the 5th duty day of each month to review and project training requirements, determine schedules, capabilities, and mission impacts. Meeting topics include, but are not limited to the following:

3.14.1.1. Review of the AF Form 898 with emphasis on satisfying priority backlogs and TD course requirements.

3.14.1.2. Initiatives to reduce course backlogs/overdues identified in the MIS.

3.14.1.3. Impacts on training due to mobility exercises, local deployments, surges, higher headquarters visits, etc.

3.14.1.4. Ability of TD to satisfy training demands (for example, TDY commitments, conversion support requirements, manning shortfalls, instructor qualifications, etc.).

3.14.1.5. Availability of aircraft and support equipment.

3.14.1.6. Availability of instructors to support training.

3.14.1.7. Review of ancillary training (for example, CWDT, M-16, etc.) allocations and changes.

3.14.2. Publish and file meeting minutes, and provide copies to squadron commanders, MTF, TD chiefs and all attendees.

3.14.3. Attendees will include, but are not limited to the following personnel:

3.14.3.1. Superintendent, training management section.

3.14.3.2. Unit training managers.

3.14.3.3. TD scheduler.

3.14.3.4. NCOIC, application element.

3.15. AF Form 898. Use this form to identify, prioritize, and request wing TD course requirements. MTFs and TDs supporting AETC units will use the AF Form 898 (or an automated product when mutually agreed upon by MTF and TD) for scheduling TD systems and associate courses. Units who use an automated product must ensure all areas identified on the AF Form 898 are included. Document the AF Form 898 or automated product in accordance with Attachment 4.

3.16. Priority Backlog Management:

3.16.1. A priority backlog is the total number of personnel awaiting training in a MAJCOM mandatory course. Local MTFs and TDs share the prime responsibility for effective scheduling. The MTFs must carefully screen all TD training backlogs for each course to ensure they are realistic and valid. When requesting TD training, the MTF must verify that the training demand for each course is valid and supportable by the work center. Concurrently, upon receipt of training demands, the TD must do everything within its capability to satisfy those demands.

3.16.2. The MTF forwards the completed AF Form 898 to the TD not later than the 10th day of each month.

3.16.3. The TD schedules requested courses (priority courses first) and returns the AF Form 898 to the MTF not later than the 15th day of the month.

3.16.4. MTFs resolve priority backlog issues with the TD to the maximum extent possible.

3.16.5. MTF/TD should consider the following local alternatives to aid backlog reductions:

3.16.5.1. Temporarily increase instructor-student ratios.

3.16.5.2. Adjust class start dates.

3.16.5.3. Temporarily adjust hours taught each day.

3.16.5.4. Add shifts based on instructor availability.

3.16.6. The following procedures and responsibilities apply when requesting training from another command-supported TD (MTF-to-MTF):

3.16.6.1. The MTF requesting open seats will contact the lateral MTF (message, fax, or e-mail), to request seats and provide the name, grade, and social security numbers (SSN) of attendees.

3.16.6.2. Lateral MTFs will confirm (message, fax, or e-mail) training availability to the requesting MTF, and provide class start and graduation dates, number of quotas, reporting instructions, and billeting confirmation number.

3.17. Requesting AETC Mobile Training Team (MTT) and TDY Instructor Assistance:

3.17.1. The MTF scheduler submits the training request to the on-base TD (memorandum, fax, or e-mail) for assistance at least 90 days in advance of requested class start date. If there is no on-base TD, submit the request to HQ AETC/LGMMR. Requests must include the following information:

3.17.1.1. Complete course titles and course numbers the TDY instructor will teach.

3.17.1.2. Statement indicating that the capability to instruct the course does/does not exist at the host TD, or the reason why the host TD instructor is unavailable to provide requested training (if applicable).

3.17.1.3. Number of students confirmed for requested training.

3.17.1.4. Statement that adequate training facilities, necessary equipment, and technical data to support training are/are not available.

3.17.1.5. A proposed primary and secondary time period when training is required.

3.17.2. If request is submitted to HQ AETC/LGMMR, they will contact the 982 TRG, Weapon System Training Manager, Sheppard AFB, TX. When the 982 TRG confirms the ability to support requested training, the TDY TD instructor will contact the MTF/TD scheduler to confirm training dates, and identify any special or support equipment required.

3.18. Obtaining Funding for Off-Station TD (TDY-to-School) Courses:

3.18.1. Except for ANG/AFRC personnel, AETC will pay all travel and per diem cost for students attending off-station TD courses; however, authorization for a special conveyance (for example, rental car) is a parent unit responsibility to fund.

3.18.2. MAJCOM instructions will outline procedures for requesting these funds from 982 TRG/CCR.

3.19. Superintendent, Development, Application, and Distance Learning Section (DADL). The superintendent will:

3.19.1. Develop, manage**,** and conduct standardized training for aircraft maintenance personnel. Maintenance training flight courses developed will not duplicate TD course objectives.

3.19.2. Maintain an active interface with work center supervisors, TD, and the scheduling element.

3.19.3. Participate as a member of the CAC.

3.19.4. Ensure new training programs are prioritized.

3.19.5. Ensure tests maintained (in the development element) are properly managed and controlled.

3.19.6. Ensure necessary supplies, tools, equipment, classrooms, and personnel are available for scheduled MTF classes.

3.19.7. Ensure aircraft and support equipment are identified to MXOP plans and resources.

3.19.8. Send a representative to the daily maintenance scheduling meeting (as applicable).

3.19.9. Review MTF class packages.

3.19.10. Periodically observe MTF classes for both student and instructor performance.

3.19.11. Participate in the selection of maintenance instructors (MI).

3.19.12. Ensure development, distance learning, and instructor personnel are qualified to perform their duties.

3.19.13. Manage and maintain Community College of the Air Force (CCAF) affiliation in accordance with AFI 36-2304, *Community College of the Air Force*.

3.19.14. Review task/academic evaluations on maintenance instructors, and recommend retention on staff or return to the parent organization, if applicable. The recommended maximum tour length for MTF maintenance instructors is three years.

3.19.15. Ensure MI folders are developed and maintained for each assigned and attached MI.

3.19.16. Develop procedures with QA to ensure mandatory student task evaluations are performed.

3.19.17. Annually review and approve MI plan of instruction (POI) and lesson plans.

3.19.18. Ensure QA performs initial and recurring instructor personnel (task) evaluations in accordance with this instruction.

3.19.19. Provide QA with a list of phase 2 course graduates.

3.19.20. Ensure a technical order (TO) file is established and maintained in accordance with TO 00-5-1, *Air Force Technical Order System*, and TO 00-5-2, *Technical Order Distribution System* (as applicable).

3.19.21. Ensure configuration tool kits (CTK) if required, are maintained in accordance with AFI 21-101. Tool rooms should follow as closely as possible, the management procedures used by the local aircraft maintenance squadron maintenance unit to control equipment inventory, issue, and receipt.

3.19.22. Review and validate all MTF courses at least every 18 months.

3.19.23. Conduct a preliminary assessment when a test compromise is suspected.

3.19.24. Review and forward tentative POIs to the MTF chief prior to course validation.

3.19.25. Ensure MTF elements develop training plans for assigned personnel.

3.19.26. Ensure MTF assigned audiovisual equipment is periodically cleaned and serviced.

3.19.27. Review QA assessments/summaries, and take action to correct negative trends/discrepancies.

3.19.28. Attend the monthly scheduling meeting

3.20. NCOIC, Development Element. The NCOIC will:

3.20.1. Develop and manage course control documents (CCD) and associated training materials to support MTF courses.

3.20.2. Apply the instructional systems development (ISD) process for MTF formal training programs in accordance with Chapter 5 of this instruction and Attachment 5.

3.20.3. Ensure MTF CCDs (including attached instructor CCDs) are reviewed at least every 18 months.

3.20.4. Ensure assigned personnel attend an ISD course.

3.20.5. Ensure an ISD project plan is used for MTF courses under development or revision.

3.20.5.1. Establish an ISD project status board or automated system to monitor course development, coordination, and status.

3.20.5.2. Track and maintain the status of ISD projects using an ISD project plan.

3.20.5.3. Ensure ISD project plans and status boards contain the course number, course title, project start date, required completion date, project subject matter expert (SME) or OPR, ISD phase (development only), OPR office symbol, and status.

3.20.5.4. Maintain the initial and most current ISD project plan with the CCDs.

3.20.6. Upon receipt of TO or publication changes update CCDs identified by the SME, course administrator, or CAC.

3.20.7. Submit recommended TD course changes to the TD superintendent. Coordinate requests through the MTF commander/chief and the MXG/CC (MXG/CC may delegate approval authority to MTF chief).

3.20.8. Coordinate course development with affected work center, SME, and other applicable agencies.

3.20.9. Develop training plans for assigned personnel.

3.20.10. Maintain a master CCD file for courses taught by the maintenance community (optional if TD and MTF are collocated or on central LAN).

3.20.11. Develop and maintain a course catalog.

3.20.12. Advise the maintenance community on audiovisual training media available.

3.20.13. Manage MTF testing program, and implement written test analysis and control procedures.

3.20.14. Chair CAC meetings.

3.20.15. Maintain active interface with the application and distance learning elements, TD, and training management section.

3.20.16. Ensure proper maintenance and utilization of assigned equipment.

3.20.17. Ensure course validation is completed prior to activation.

3.20.18. Review and sign TD course documents, and coordinate on TD BATTs when required.

3.20.19. Develop and maintain the development section continuity book.

3.21. NCOIC, Application Element. The NCOIC will:

3.21.1. Conduct, evaluate, and certify student training.

3.21.2. Develop and manage a maintenance instructor (MI) training plan, and provide a copy to the DADL section superintendent.

3.21.3. Manage MI resources effectively.

3.21.4. Provide the instructor utilization report to the scheduling element for inclusion into the monthly status of training (SOT).

3.21.5. Coordinate with, and schedule, QA to conduct MI initial and recurring task evaluations.

3.21.6. Maintain a folder for each assigned and attached MI in accordance with paragraph 3.27.

3.21.7. Establish and maintain an MI continuity book.

3.21.8. Perform periodic visits to TD and work centers.

3.21.9. Provide inputs for training schedules and reports, as required.

3.21.10. Record and report lost training time daily to the DADL section superintendent.

3.21.11. Monitor student performance, and take corrective action when necessary.

3.21.12. Brief MTF chief, DADL section superintendent, applicable training manager, and the immediate supervisor when a student's progression is substandard.

3.21.13. Ensure MIs fulfill their responsibilities as described in paragraph 3.25.

3.22. Maintenance Instructor. The MIs primary duty is to support maintenance training programs, however, MIs may be used for other MTF duties as determined by the MTF commander/chief.

3.22.1. MTF assigned MIs will possess AFSC 2A3X3X (tactical aircraft maintenance specialists), 2A5X1X (airlift aircraft maintenance specialists), 2A5X2 (helicopter maintenance specialists), 2A6XX (systems specialists), or 2W1X1 (armament systems specialists) and occupy valid funded authorizations on the MTF unit manning document to meet wing maintenance training needs. Other instructor AFSCs may be authorized (for example, AGE, avionics, etc.) at wing discretion.

3.22.2. When trained personnel requirements (TPR) do not warrant full time instructors, appoint attached MIs to teach specialized or unique courses. These part-time instructors are assigned to their respective squadrons and will conduct training using approved POIs.

3.22.3. To preclude stagnation of the instructor workforce, the MTF chief will evaluate assigned/attached instructors for possible return to their PAFSC duty prior to completing a 3-year instructor tour of duty. Identify assigned MIs that are not fully utilized to the MXG/CC for possible reassignment to another group maintenance unit.

3.22.4. Criteria to consider when determining the need for instructors:

3.22.4.1. Number of instructors required to support TPRs.

3.22.4.2. Quantity, length and type of maintenance courses.

3.22.4.3. Instructor utilization and retainability (time on station, overseas return date, and expiration of current enlistment).

3.23. Minimum Instructor Qualifications:

3.23.1. Senior airman, 5-skill level, with one-year experience on the unit's assigned aircraft, and awarded the relevant aircraft/engine special experience identifier (SEI).

3.23.2. Red-X certified for course objectives that require production inspections.

NOTE: The MTF commander/chief is the approval authority for instructor minimum requirements waivers.

3.24. Maintenance Instructor Duties. The MI will:

3.24.1. Successfully complete an Air Force academic/MI course, and the applicable TD courses prior to performing instructor duty (highly encouraged for attached instructors, not required for prior "T" prefix instructors).

3.24.2. Serve as SME, when required.

3.24.3. Attain and maintain qualification/certification on units/blocks of instruction assigned to teach.

3.24.4. Use approved CCDs and POIs to conduct training.

3.24.5. Develop personalized lesson plans (part 2) for each course designated to teach, and obtain POI approval from the NCOIC application element prior to their use.

3.24.6. Instruct students on equipment sign-in, inventory, and sign-out procedures in accordance with AFI 21-101.

3.24.7. Administer and control written and performance evaluation instruments.

3.24.8. Consolidate weapon systems and support equipment requirements for TD and MTF classes, and send to plans and resources for inclusion in the maintenance planning cycle (include these procedures in the training MOI).

3.24.9. Ensure tool rooms (if required) are managed and controlled in accordance with AFI 21-101.

3.24.10. Assist TD instructors (if required) during the hands-on phase of training.

3.24.11. Assist other instructors (TD/MTF) with obtaining necessary supplies, tools, equipment, and aircraft (as required) to support MTF and TD training courses.

3.24.12. Document MTF training on applicable forms.

3.24.13. Annotate student task qualifications (start and completion date, and certification) on applicable POI tasks in the career field education and training plan (CFETP), and AF Forms 797 in accordance with AFI 36-2201. List the MI as the trainer/certifier in the student's AF Form 623, **On-The-Job Training Record.**

3.24.14. Monitor student performance and take corrective action (if required). Brief the NCOIC application element, DADL section superintendent, MTF flight chief, applicable UTM, and immediate supervisor when student progression is substandard.

3.24.15. Instruct maintenance orientation and MTF block training programs.

3.24.16. Operate and maintain visual information equipment.

3.24.17. When required, prepare training deficiency reports, administer student course critiques, questionnaires, and other forms of feedback.

3.24.18. Participate in the AETC BATT requirements process as requested.

3.24.19. Record and report lost training time to the DADL section superintendent.

3.25. Maintenance Instructor Course Qualification Process. MTF MIs and attached MIs must be qualified to teach their respective courses. As a minimum, new MIs will:

3.25.1. Observe the course they will teach at least once before being assigned and attached to teach a course.

3.25.2. Be observed by a qualified MI when teaching individual units/blocks of instruction the first time.

3.25.3. Be observed by a qualified MI when teaching the entire course (academic and hands-on) the first time. The qualified MI will inform the NCOIC application element when the new MI is qualified to teach unassisted.

3.25.4. Teach the entire course a second time with the NCOIC, application element conducting an academic evaluation. Document the evaluation results on AETC Form 281, **Instructor Evaluation Checklist**. If evaluation results are satisfactory, certify the new instructor to teach the course independently without assistance.

3.26. Maintenance Instructor Evaluations (Assigned and Attached):

3.26.1. QA will conduct initial and annual MI task proficiency evaluations.

3.26.2. The NCOIC, application element (or designated representative) will conduct initial and semiannual MI academic evaluations.

3.26.3. Outline procedures for conducting initial and annual instructor evaluations in the MTF MOI.

3.27. Instructor Records. Maintain an instructor folder for each assigned and attached MI that includes the following:

3.27.1. Initial and recurring QA evaluation results.

3.27.2. Initial and recurring academic evaluations.

3.27.3. A listing of the courses they are qualified to instruct.

3.27.4. MTF commander/chief approved instructor appointment memorandum.

3.27.5. CCAF and other degree documentation (as applicable).

3.28. Student Evaluation Program. The NCOIC, applications element will develop procedures with QA to ensure mandatory student evaluations are accomplished (as required) in a timely manner. Randomly evaluate, as a minimum, task items trained to the Go/No Go or 3c proficiency level to ensure 100 percent CC/TS coverage within a 1-year period. Units with low student (25 or less) TPRs are exempt from the 1-year time requirement. Make every effort to ensure required QA evaluations are scheduled and accomplished to satisfy the following program requirements:

3.28.1. Prior to graduation, evaluate at least 50 percent of all maintenance, proficiency class, or course students. When not feasible, accomplish required evaluations no later than 15 days after graduation.

3.28.2. The applications element will provide QA the applicable CC/TS with items requiring evaluation. QA determines which tasks (50 percent) will be evaluated.

3.28.3. Maintain copies of all student personal evaluations (PE) or AF Forms 803, **Report of Task Evaluations,** with the appropriate class package.

3.29. NCOIC, Distance Learning Element. The NCOIC will:

3.29.1. Develop and manage applicable distance learning (DL), CBT and ICW programs, and manage the Maintenance Training Resource Center (MTRC), and associated training materials in support of maintenance/proficiency training courses.

3.29.2. Develop an element training plan and provide a copy to the superintendent, development, application, and distance learning section.

3.29.3. Monitor and order distance learning resources.

3.29.4. Manage and administer the element training program.

3.29.5. Establish and maintain the distance learning element continuity book.

3.30. Logistics Training Resource Center. The center will:

3.30.1. Develop MTRC operating policies and procedures, and submit to the MTF commander/chief for approval and inclusion in the MTF MOI.

3.30.2. Establish budget requirements for MTRC equipment maintenance and repairs, and submit to the MTF commander/chief for approval.

3.30.2.1. Request and maintain command-approved multimedia training programs (ICW/CBT) to support wing training requirements.

3.30.2.2. Establish written procedures to maintain, manage, and administer multimedia training programs and equipment.

3.30.2.3. Oversee the administration of all multimedia maintenance training courses.

3.30.2.4. Perform duties of test control officer (TCO) and administer, verify, and/or grade course measurement tests.

3.30.2.5. Schedule and coordinate course requirements and use of equipment.

3.30.2.6. Coordinate with the wing distance learning office on all matters concerning DL.

3.30.2.7. Coordinate with the training management section to survey units for annual job site training (JST) requirements.

3.30.2.8. Ensure a primary JST representative is established and identified to HQ AETC/DOO.

3.30.2.9. Establish a course catalog (may be part of the MTF course catalog).

3.30.2.10. Distribute copies of the DL course catalog to appropriate work centers.

Chapter 4

INSTRUCTIONAL SYSTEMS DEVELOPMENT (ISD)

4.1. Application of the ISD Process:

4.1.1. Apply the ISD process to all maintenance training programs. The governing publication for ISD is AFI 36-2201. Additional information on ISD development can also be found in AFMAN 36-2234, *Instructional Systems Development,* and AFH 36-2235, *Information for Designers of Instructional Systems Development*.

4.1.2. Use the ISD process to plan, develop, and manage instructional programs. Before instruction begins, identify task statements and develop learning objectives and tests to support them. Identify the instructional methods to be used along with the supplies and resources required. Evaluations provide valuable information and are established to determine course validity and the student's attainment of the learning objectives. Feedback from both internal and external sources provides a continual source of data upon which course revision decisions can be made.

4.1.3. Use an ISD project plan (or facsimile) during initial development or revision (20 percent or more of the objectives change, or a change of 8 hours or more is required) for all structured maintenance training courses that provide task qualification or certification. Maintain the completed plan for historical purposes with the respective course control documents (CCDs). Retain only the initial and most current ISD project plan on file.

4.2. ISD Project Management. Manage the status of ISD projects through the various stages of production and coordination. Monitor this information through the use of wall charts, automated products, general purpose forms, etc. Regardless of the method used, keep the program status current at all times, and include the information identified below, as a minimum:

4.2.1. Course number.

4.2.2. Course title.

4.2.3. Start date.

4.2.4. Required completion date.

4.2.5. Project SME or OPR.

4.2.6. ISD phase (development only).

4.2.7. OPR office symbol.

4.2.8. Status.

4.3. File Plan. Establish a file plan in accordance with AFMAN 37-123, *Management of Records*, and AFMAN 37-139, *Records Disposition Schedule* (will become AFMAN 33-322, Volume 4). As a

minimum, keep the following items current and maintain (paper based or automated) in the development element:

4.3.1. Master CCD inventory log.

4.3.2. Master sets of CCDs.

4.3.3. Master visual information inventory log.

4.3.4. Folders for audiovisual programs.

4.3.5. Student and supervisor questionnaires.

4.3.6. Course critiques/assessments.

4.3.7. Tests and test analyses.

4.3.8. Completed MTF class packages.

4.3.9. Master copy of the course catalog.

4.3.10. Master copy of student training materials.

4.4. Course Control Documents (CCD). Instructors use CCDs to identify and standardize training requirements for specific course of instruction.

4.4.1. Structured formal maintenance training provided by the MTF will have CCDs, for example, egress, engine trim, weapons load training, borescope, etc., or when directed by publications, higher headquarters, MXG/CC, or when recommended by the CAC, and approved by the MXG/CC or designated representative (Attachment 6).

4.4.2. Identify CCDs by course number, course title, and date (Attachment 7). Contents will include, as a minimum:

4.4.2.1. Cover page.

4.4.2.2. ISD project plan (or facsimile).

4.4.2.3. Course chart/training standard (CC/TS) (Attachment 8).

4.4.2.4. POI.

4.4.2.5. AF Form 1768, **Staff Summary Sheet** (Attachment 9).

4.4.2.6. Course background material (results of CAC, project plan, etc.).

4.4.3. Do not change CCD instructional content without sending a copy of the change to CCAF (if applicable) for evaluation purposes. Pen and ink changes are allowed to all pages of the CCDs or POI, as

applicable, as long as the instructional content is not changed. If the cover memorandum's signature page course content is changed, send the CCDs or POI through the appropriate approval process at the time of the change. The development section will publish pen and ink page changes to the course documents, and provide necessary changed page copies to the instructor for updating of the personalized copies. The development element will update the master copy of the CCDs or POI as applicable.

4.4.4. Maintain data for each audiovisual training program and include, as a minimum:

4.4.4.1. Script (if available).

4.4.4.2. Course critique.

4.4.4.3. Background material pertaining to the particular course.

4.4.4.4. Certification sheet.

4.4.4.5. Eighteen-month reviews (AF Form 1768).

4.4.5. MTF course critiques and class packages (maintain on file by course name or number, and training completion date.)

4.5. MTF Class Packages. MTFs will establish and maintain a class package for each course they teach.

4.5.1. Class packages will include the following:

4.5.1.1. Class roster.

4.5.1.2. Name of the MI.

4.5.1.3. QA evaluations (if applicable).

4.5.1.4. Course critique/assessment.

4.5.1.5. Student and supervisor questionnaires (if applicable).

4.5.1.6. Copy of the field evaluation questionnaire summary (FEQS) (as applicable).

4.5.1.7. AF Form 1768 or locally developed routing page.

4.5.1.8. Instructor summary of information contained in the class package, for example, number of students, attitude of students, comments noted from student critiques, assessments, or questionnaires, and QA evaluation results (as applicable).

4.5.2. Do not begin the coordination process until all required information and documentation is received to prevent review process duplication.

4.5.3. Forward completed class packages to the MTF commander/chief for review and coordination, and dispose of them after the 18-month review is accomplished. ***NOTE:*** Report CCAF applicable class

packages to CCAF prior to disposal. Maintain for a minimum of 10 years course graduate data as directed by CCAF Campus Relations Policies, Procedures, and Guidelines (PPG), Appendix F.

4.6. MTF Course Catalog:

4.6.1. MTFs will develop and maintain a current catalog that shows available courses, course numbers, course durations, a brief synopsis of each course, and course prerequisites. The catalog will be of local design and include, as a minimum, a listing of:

4.6.1.1. AFETS/CETS field services representative (FSR) conducted courses (if applicable).

4.6.1.2. MTF courses offered.

4.6.1.3. ICW and CBT programs.

4.6.1.4. Applicable TD courses (not required if a separate TD course catalog is available).

4.6.2. Catalog distribution (display electronically on the local intranet in lieu of distributing hard copies). Provide a copy to each work center, AMX/MX CC, UTMs, and an electronic or paper copy to HQ AETC/LGMMR.

4.7. Curriculum Advisory Committee (CAC). The CAC will:

4.7.1. Convene when a requirement to develop a new course is identified. ***NOTE.*** Units must identify their requirements (in writing) to the MTF commander/chief.

4.7.2. Use the ISD process to determine if a training need exists.

4.7.3. Identify training constraints and possible workarounds.

4.7.4. Discuss all possible alternatives to satisfy the training request.

4.7.5. Determine the most cost effective and efficient methods to conduct training.

4.7.6. Identify tasks that may be certified (Go-level) during training.

4.7.7. Recommend to the MTF commander/chief the training agency that is in the best position to conduct requested training.

4.7.8. Determine the best course of action to resolve training issues.

4.7.9. Publish minutes and coordinate inputs/recommendations with appropriate organizations.

4.7.10. Forward written minutes/recommendations to the MTF commander/chief for approval or disapproval.

4.7.11. File all documented results in the development element in accordance with AFMAN 37-123 and AFMAN 37-139.

4.7.12. Be composed of the development element (chairperson), MTF commander/chief (optional), UTM (as required), SMEs, application element, TD (as required), and all applicable work center supervisors/superintendents.

4.8. Combined Course Chart/Training Standard (CC/TS). The CC/TS is an official CCD that defines the training specifications for a particular course. It prescribes qualitative requirements in terms of tasks, knowledge, and proficiency levels. The signature page identifies the course training number, MIS course code, date, course title, purpose, course description, qualitative requirements, attachment tables, and recommendations. Entries on Table I of the CC/TS consists of course number, OPR, security classification, course length, effective date, instructor to student ratio, student prerequisites, and a summary of course content that is broken down by time blocks or units. This data correlates with the applicable POI. Entries on Table II consists of course number, required equipment, administrative, operational, and facility support, and summary of changes. Use the CC/TS as the basis for the development of the POI. As a minimum, the CC/TS will contain the following:

4.8.1. Cover Memorandum/Approval Page. Prepare the cover memorandum/approval page

4.8.2. Proficiency Code Key. Use the standard proficiency code key and overprint on the reverse side of the approval page (Attachment 10).

4.8.3. Table I. (Attachment 11).

4.8.4. Table II. The format for Table II is determined by the type and amount of equipment, administrative, operational and facilities support detail needed to obtain/schedule course support (see format at Attachment 12). The development element establishes the format and content of the course support resources list.

4.9. Plan of Instruction (POI). Use POIs to manage and conduct training programs, and use to convert task and knowledge statements identified in the CC/TS into behavioral objectives. Each unit of instruction will have criterion objectives that include: a condition, behavior and standard statement, teaching steps, CC/TS references, student measurement, duration, support materials, and other guidance factors as applicable.

4.9.1. POIs must have a course orientation unit (unmeasured) that is limited to a maximum of one hour. If necessary, provide student handouts to supplement orientation and introductory material.

4.9.1.1. As a minimum, the course orientation will cover course overview, completion criteria, student critique/assessment program, and benefits/credits awarded by the CCAF (if applicable).

4.9.1.2. Include these subjects in the course, if applicable: conservation of energy, environmental awareness, Privacy Act, MIS, fraud, waste, and abuse, security, and forms documentation.

4.9.2. Except for the orientation and graduation units, instructional units will contain one or more objectives, supporting teaching steps, and instructional guidance.

4.9.3. Integrate job-oriented safety, environmental issues, forms documentation, MIS inputs, the Air Force technical data system, and other publications applicable to the Air Force specialty throughout the course.

4.9.4. Actual instructional times may vary due to difference in class size or student ability.

4.9.5. Print POI pages on one side only.

4.9.6. The standard POI contains the pages:

4.9.6.1. Cover Page. The cover page may be of local design with unit aircraft or emblem (Attachment 13).

4.9.6.2. Page A. Page A (Attachment 14).

4.9.6.3. Page I. Page I is signed by MXG/CC or designated representative (Attachment 15).

4.9.6.4. Orientation and introduction (Attachments 16, 17, 18, 19).

4.9.7. POI Continuation Sheets. Center the heading COURSE CONTENT (CONTINUED) at the top of the page, and type the POI course number, block, unit, date, and page number at the bottom of the page.

4.9.8. Each unit of instruction should cover one or more criterion objectives. Begin each criterion objective statement on a separate POI continuation sheet. Each objective within a unit of instruction begins at the top of a continuation sheet followed by its teaching steps and instructional guidance.

4.9.9. When outlining POIs, apply general outlining rules. For example, if using a "1" you must use a "2" if using an "a" you must use a "b" and so forth. When numbering multiple blocks of instruction, each unit of a new block of instruction will start with the number 1. For example, Block 1, Units 1 through 5, Block 2, Units 1 through 3, etc.

4.9.10. Time. Enter the time that corresponds to the hours shown in Table I of the CC/TS. Enter the time to the right of each objective if the unit of instruction contains more than one objective.

4.9.11. Teaching Steps. These are steps of learning, presented in statements of subject matter content or in behavioral (action) terms that lead to the attainment of a criterion objective. Each teaching step should be directly related to and support the objective.

4.9.12. Instructional Guidance. Required for each criterion objective and provides standardized guidance to instructors on how to develop the lesson. Do not introduce new material that should be included as teaching steps, or repeat teaching steps unless further explanation is required. ***NOTE:*** Include the following instructional guidance in the course orientation for all courses that contain progress checks (PC) for task performance objectives: Inform the students that instructors will assess accomplishment of each course objective through the use of a progress checklist. The instructor is the evaluator and does not become involved in student performance unless, in the instructor's judgment, an assist should be given to prevent any violation of technical data or action that could result in personal injury, damage to equipment, or render the equipment unreliable. An instructor assist will also be accorded when the student is unable to proceed toward the accomplishment of the objective due to lack of knowledge.

Inform the students they are being evaluated, and how many instructor assists will be allowed before each PC.

4.9.13. Special Instructions. Include any needed special instructions, for example, use of audiovisual aids, specific use of equipment, use of host technician assistance, safety precautions, environmental awareness, FOD prevention, and administration of egress checks, etc. When students use egress equipped aircraft or cockpit configured trainers to perform course objectives, include the following statement: "The instructor will demonstrate egress safety inspection procedures during the first course objective that requires cockpit entry. The instructor will observe the student performing egress safety inspections on each additional objective requiring cockpit entry."

4.9.14. Course critique/assessment and graduation page. Entries shown in Attachment 20 reflect the items that are normally covered in all courses.

4.10. Course Validation Process. Validate new or existing MTF courses that require major revisions (a change in 20 percent or more of the criterion objectives) prior to approval. Course validation is a process by which curriculum materials, instructional procedures, training media, and training materials are reviewed for instructional accuracy, adequacy, suitability for presentation, and training effectiveness. Validation is a process that assesses the effectiveness of a course as it is developed, and is a quality improvement tool that helps identify problems during development so revisions are made. Accomplish validation while developing segments, units, or blocks of instruction.

4.10.1. Develop a plan prior to the start of the course validation process. This plan provides curriculum developers and instructors with a roadmap for validating the course. Include the following:

4.10.1.1. Description of the course to be validated (objectives, method, and media).

4.10.1.2. Individuals used to validate the course.

4.10.1.3. Validation procedures.

4.10.1.4. Validation schedule.

4.10.1.5. Number of tryouts conducted.

4.10.1.6. Number of students used in small group tryouts.

4.10.1.7. Sources of how results are documented.

4.10.1.8. How problems are resolved.

4.10.1.9. Revision schedule.

4.10.2. Prior to the course validation process develop a tentative POI and have the development element review it before the start date of the first validation class.

4.10.3. Avoid training deficiencies; ensure training conducted during validation satisfies all course proficiency codes or behavioral statements listed in the training standard.

4.10.4. As a minimum, conduct two small group tryouts (selected students) during course validation to determine whether the instruction is appropriate and effective for the targeted student population. Award course credit to students upon completion of the small group tryout. ***NOTE:*** If problems arise during small group tryouts, convene a working group to resolve.

4.10.5. Additionally, conduct one operational tryout on the target population. Award course credit to students upon completion of operational tryout.

4.10.6. After validation has been completed and revisions accomplished, coordinate the POI with appropriate agencies prior to final MXG/CC approval.

4.10.7. Maintain validation documentation with the master CCD.

4.11. Dating of CCDs. Normally, the CC/TS and POI have the same date. If changes are made to the POI that don't affect the CC/TS, only the POI will have the most current date (dates on the CC/TS will not change). Initially, to ensure that the POI, CC/TS, and AF Form 1768 have the same dates, do not date the course control documents until they are completely coordinated, and submitted to the MXG/CC for approval.

4.12. Numbering System for CCDs. Use a standardized numbering system for all local CCDs (Attachment 7).

4.13. Review and Approval of CCDs:

4.13.1. All CCDs are subject to an 18-month review with the exception of deactivated courses.

4.13.2. Establish a suspense file to ensure CCDs are reviewed on time.

4.13.3. Use the AF Form 1768 (Attachment 9) to coordinate both initial and 18-month CCD reviews. An automated system may be used for coordination. Maintain printed copies of automated coordination.

4.13.4. Completed AF Forms 1768 are a permanent part of the master CCD files.

4.13.5. The MTF commander/chief signs the AF Form 1768. As a minimum, coordinate with the following individuals or offices:

4.13.5.1. SMEs.

4.13.5.2. QA and MXG/CC, as applicable, for structured maintenance training courses that provide task qualification or certification.

4.13.5.3. Development element.

4.13.5.4. Wing safety, as applicable.

4.13.5. Once coordination is complete and the CCDs, or POI, is approved, file the AF Form 1768 in the master CCDs or POI. Update the course documents in the master CCDs, or POI maintained in

development section. The development section will forward applicable course documents changes to the instructors. ***NOTE:*** CCAF affiliated MTFs will forward one copy of the master CCD for degree/certification evaluation in accordance with AFI 36-2304.

4.13.6. If the MXG/CC or designated representative changes after the course documents have been approved, signature pages for the "CC/TS and Foreword" remain valid until the next course revision.

4.13.7. Coordinate new or revised TD CC/TSs on AF Form 1768 with work centers and other agencies to ensure course content and accuracy.

4.13.8. CCDs:

4.13.8.1. Provide each instructor with the approved CCDs for the courses they will teach.

4.13.8.2. The instructor copy of CCDs will be current and match the master file set maintained in the development section. Except for instructor personalization of the teaching guide (lesson plan part two), no other CCD written entries are authorized.

4.14. Test Development. The primary purpose of testing is to assess the student's attainment of the behavior specified in the objectives. To ensure tests adequately measure the objective, the performance required in the test must match the performance required in the objective. Test development should happen immediately after objectives have been written. For additional guidance on test development see AFMAN 36-2234, *Instructional System Development*.

4.14.1. Course developers must consider several characteristics (validity, reliability and usability) when developing tests, and ensure tests measure exactly what they are designed to measure every time.

4.14.2. Test items selected should be clear, concise, and well written to minimize misunderstanding. Within AETC aircraft maintenance training, multiple-choice tests are the most commonly used type of written test. Use matching, short answer essay, fill-in-the-blank, and true and false questions sparingly.

4.14.3. Avoid duplicate test items if possible. If circumstances limit the variety of test items supporting an objective, reword items, resequence answers, or scramble items on the alternate version to deter test compromise.

4.14.4. Test booklets may be of local design and as a minimum will include:

4.14.4.1. Cover page.

4.14.4.2. Instruction page.

4.14.4.3. Control number.

4.14.4.4. Date.

4.14.4.5. Test compromise statement.

4.14.5. Sequentially numbered test booklets. One copy, labeled, as the "MASTER" will identify the references used to develop each test question. Develop a "MASTER" answer key too. ***NOTE:*** Structure engine run tests so emergency procedure questions are readily identifiable. For example, Part I - emergency procedures; Part II - normal engine run procedures.

4.15. Test Analysis. Analyze all test items to determine if there are any potential problems or trends.

4.15.1. To determine the validity and reliability of written test questions, accomplish an ongoing analysis using AETC Form 18 (Attachment 21), or an automated testing program.

4.15.2. Analyze both primary (A) and alternate tests (B) to ensure validity and reliability of tests. Accomplish this by rotating the test used for each class.

4.15.3. Maintain the completed test analysis worksheet or automated testing program on file.

4.16. Management of Unclassified Testing Materials. Control test materials at all times to prevent compromise. Use written or automated tests to evaluate an individual's knowledge and understanding of information contained in applicable technical data or management directives. Administer open or closed book; however, closed book is required for all courses requiring certification, for example, engine run. Unit procedures are as follows:

4.16.1. Store testing materials and computer disks used for testing in a locked cabinet, and identify on the master test control log.

4.16.2. Inventory tests quarterly using either the master test control log or a locally developed inventory sheet.

4.16.3. Control tests through a sign-in/out log.

4.16.4. Review test materials with the respective CCD on an 18-month basis, or when changes to course objectives warrant a review. Accomplish this review on the same AF Form 1768 used for the CCD 18-month review. Identify the test separately on the AF Form 1768, and review at the MTF during the 18-month review.

4.16.5. If a test compromise is suspected, refer to procedures outlined in Attachment 22.

4.17. Student Training Materials:

4.17.1. Student training materials, such as handouts, programmed texts, and study guides will have the following statement in bold memorandums placed on the bottom of the cover page of each publication: **“FOR TRAINING PURPOSES ONLY. DO NOT USE ON THE JOB.”**

4.17.2. Student training materials will display the course identification number plus one of the following codes:

4.17.2.1. Handout (HO).

4.17.2.2. Programmed text (PT).

4.17.2.3. Study guide (SG).

4.17.2.4. Workbook (WB).

4.17.3. Cover sheets for student training materials may be of local design.

4.17.4. Student training materials will not contain technical data or serve as a replacement for it. Appropriately mark and control classified materials, if used.

4.17.5. Reference student training materials in the applicable POI.

4.18. Student Measurement. Student measurement in AETC maintenance training is a systematic process used to determine whether a student can perform the behaviors specified in an objective. Use measurement devices such as performance evaluations, written tests, and oral questions to evaluate student achievement of course objectives. Additionally, also use tests to evaluate an individual's knowledge of procedures contained in applicable technical data or management directives as applicable. ***NOTE:*** Student measurements (standards) are not required in behavioral statement for familiarization or orientation criterion objectives.

4.18.1. Student measurement process:

4.18.1.1. Ensure students are measured on course objective before graduation.

4.18.1.2. Identify students who need special individual assistance or additional training.

4.18.1.3. Inform students of their progress in the course, stimulate effective learning, and reinforce knowledge and skills.

4.18.2. Student measurement requirements. The following courses have written tests and, when required, a performance evaluation (or both in some instances):

4.18.2.1. Certification courses.

4.18.2.2. AETC formal courses.

4.18.2.3. Objectives that require the student to perform a task.

4.18.3. Subject knowledge evaluations may be written or oral evaluations. If oral evaluations are used, the instructor must develop a list of questions to ensure standardization for each class.

4.18.3.1. The number of test questions required is generally determined by the complexity and criticality of the subject matter being taught. The test must be comprehensive in nature and sample all course objectives. For additional test development information refer to AFH 36-2235, Volume 9 or 12.

4.18.3.2. Written tests are based on a pass or fail system with 70 percent as the minimum passing score. This standard does not apply to other training programs that have different requirements already established.

4.18.4. Students failing a written test must wait at least 24 hours before retesting. Readdress students' weak areas prior to retesting and provide an alternate test.

4.18.5. Provide remedial instruction to students failing a behavioral objective and reevaluate on the failed behavioral objective.

4.18.6. Use task/performance evaluations for criterion objectives that require students to perform tasks.

4.18.7. A criterion objective checklist may be developed and used for task/performance evaluations. However, do not use this checklist in lieu of technical data, and measure all evaluations using applicable technical reference.

4.18.8. Base task /performance evaluations on the Go/No Go system with a 100 percent pass rate.

4.18.9. Students who fail the task/performance evaluation will receive remedial on-the-job training (OJT) and be reevaluated on the failed task. If the student repeatedly fails the performance evaluation, the instructor will document the student's training record showing noncertification of that task.

4.18.10. Refer to AFH 36-2235, Volumes 1-12 and AFMAN 36-2236, *Guidebook for Air Force Instructors*, for further guidance on test development.

4.19. Technical Data for Training:

4.19.1. Technical data such as TOs, job guides, inspection work cards, and checklists will serve as the primary instructional material when conducting training on maintenance or operational aircraft systems and equipment.

4.19.2. Students will use published technical data when operating or performing maintenance on aircraft systems, subsystems, or aerospace ground equipment (AGE).

4.19.3. Supplemental literature may be developed when technical data is unavailable or insufficient. Course SMEs will approve this material.

4.20. Course Critiques/Assessments:

4.20.1. Course critiques/assessments look at the training system from within to determine system effectiveness and quality. They are required for all maintenance training programs and may be completed individually or as a group (Attachment 23). However, individual critiques/assessments are highly recommended. Dispose of course critiques/assessments after the 18-month course review.

4.20.2. Maintain blank critique/assessment forms on file. An overprinted general purpose form may be used to develop critiques/assessments.

4.20.2.1. File MTF course critiques/assessments with the appropriate class package.

4.20.2.2. File MOOTP course critiques/assessments in a separate folder.

4.20.2.3. Maintain a supply of blank critique/assessment forms in each classroom.

4.20.3. Instructor or course administrator will answer negative comments and comments recommending improvement. The MFT commander/chief will review and endorse.

4.20.4. Periodically critique stand-alone audiovisual programs, and send a copy of the critique to the OPR for review. Programs that are a part of a course of instruction, such as maintenance orientation, do not require a separate critique/assessment.

4.21. Field Questionnaires. Use field questionnaires to gather and analyze data from outside the training environment in order to determine how well recent graduates are meeting job performance requirements.

4.21.1. Administer field questionnaires to graduates and their supervisors 90 days after course completion.

4.21.2. Establish a suspense of no more than 10 days for supervisors and students to complete and return questionnaires.

4.21.3. File completed questionnaires in the class package.

4.22. Visual Information (VI) Media (Production and Documentation). Training programs using videotapes, CBT, and ICW as the primary instructional media are very effective in satisfying course objectives. The Joint Visual Information Services Distribution Activity (JVISDA) distributes DOD, Air Force, and MAJCOM videotapes through online ordering on the Defense Automated Visual Information Service (DAVIS) web site at http://dodimagery.afis.osd.mil/**.** For assistance call DSN 795-7937, or commercial (717) 895-7937. Use the following information to manage this medium:

4.22.1. Visual media production:

4.22.1.1. Coordinate video production requests through your base visual information manager.

4.22.1.2. Maintain a copy of the visual production requests on file.

4.22.1.3. Maintain approval and disapproval documents on file.

4.22.2. SMEs will certify all visual programs to ensure they are technically correct prior to use (Attachment 24). ICW does not require unit SME visual certification prior to use.

4.22.3. Visual program review:

4.22.3.1. SMEs or a QA representative will review visual programs that support CCDs during the 18-month course review. Document the review (can be accomplished on the same staff summary sheet used during the CCD 18-month review; however, units may use a general purpose form or automated system).

4.22.3.2. Establish a suspense system to ensure visual programs are reviewed on time.

4.22.3.3. ICW does not require an 18-month review.

4.22.4. Visual program and equipment control:

4.22.4.1. If visual programs are not used for a period of six months or more, notify all users and flight line maintenance agencies that the program is subject to removal from the MTF inventory if not used.

4.22.4.2. If visual/ICW programs are not used for a period of 12 months or more, identify the program to the MTF commander/chief for permanent removal from the MTF inventory.

4.22.4.3. Use AF Form 1297, **Temporary Issue Receipt,** to sign out visual equipment

4.22.4.4. Establish a preventive maintenance inspection program for all visual equipment assigned to the MTF. Use an AFTO Form 95, **Significant Historical Data,** or automated system for this purpose.

4.23. Lesson Plans (LP) Personalization. Lesson plans are an approved plan for instruction that provides specific definition and direction to the instructor on the learning objectives, equipment, instructional media material requirements, and conduct of training.

4.23.1. Instructors will maintain a current approved LP for each course they are qualified to teach.

4.23.2. The NCOIC, application element (or designated representative) will approve LPs, and annotate the instructor’s copy of the course cover sheet.

4.23.3. LP approval is required prior to initial use, when revised, and within 12 months since the last review.

4.23.4. The LP consists of an introduction, body, and conclusion for each topic, task knowledge, and subject knowledge statement (Attachments 25, 26, 27). Incorporate the orientation into the courses' first introduction section. The introduction includes the attention, motivation, overview, and transition steps.

4.23.4.1. Use the attention step to gain the students’ attention, and alert them that the instructor is ready to begin the lesson.

4.23.4.2. Use the motivation step to gain the students’ interest in the training and may be combined with the attention step. The instructor should explain why it is important for the students to learn the information presented during the training session.

4.23.4.3. The overview step provides an explanation of what to expect during the lesson and normally includes an explanation of the objectives and the major teaching steps. The overview provides a roadmap to help the student follow the lesson.

4.23.4.4. The transition step allows the instructor to move from the introduction to the body of the instruction, and it is used to focus the students’ attention on the first major teaching step.

4.23.5. The body identifies the objective, teaching steps, and substeps. Use interim summaries for longer blocks/units of instruction, as needed.

4.23.6. A summary of the information is presented after the last teaching step of each objective. The conclusion should contain summary, remotivation, and closure steps.

4.23.6.1. Use the summary to remind the student of the objective, and the major teaching steps of the lesson. This step allows the student to review the information learned and clear up any misconceptions. The summary should reemphasize safety and the use of TOs, if applicable, and reiterate the importance of understanding material presented, and summarize key points. Include any other items deemed appropriate by the instructor. It should not introduce new material.

4.23.6.2. The remotivation step allows the instructor to remind the student why it is important to remember what was taught and how the information applies to the student.

4.23.6.3. The closure statement lets the student know the lesson is over.

Chapter 5

MAINTENANCE OFFICER ORIENTATION AND TRAINING PROGRAM (MOOTP)

5.1. General. The purpose of the MOOTP is to ensure every maintenance officer has a thorough knowledge and understanding of the maintenance mission, weapon systems, directives, organization, and management procedures. This training is mandatory for maintenance and munitions officers (second lieutenants through captains) with no prior weapon system experience. Maintenance officers who have attended a previous MOOTP course for the same weapon system are not required to attend this course unless directed by the MXG/CC. Start this program within 90 days after completion of the Aircraft Maintenance Officer Course (AMOC). All officers will receive training based on their individual knowledge, experience, and unit requirements. At the MXG/CC discretion, any officer or senior NCO without prior assigned weapon system experience may attend this program.

5.2. Responsibilities:

5.2.1. The Maintenance Group Commander will:

5.2.1.1. Ensure MOOTP is fully implemented and tailored to meet unit and individual needs.

5.2.1.2. Ensure a point of contact (POC) is appointed in writing for each agency participating in MOOTP.

5.2.1.3. Appoint a field grade officer, when assigned, as program manager.

5.2.1.4. Ensure an initial evaluation/interview is conducted for each officer within 60 duty days of assignment. The MXG/CC may appoint a designated representative to conduct this interview.

5.2.1.5. Ensure all eligible officers receive required training.

5.2.1.6. Determine the officer's task familiarization training requirements.

5.2.2. The MTF will:

5.2.2.1. Develop a standardized training program to satisfy requirements.

5.2.2.2. Provide guidance and coordination on the MOOTP.

5.2.2.3. Coordinate and schedule all training requirements, as required.

5.2.2.4. Update MOOTP completions in MIS.

5.2.2.5. Use a general purpose checklist or locally approved product to satisfy MOOTP course requirements.

5.2.2.6. Ensure current POC memorandums are on file in the MTF.

5.2.2.7. Review the MOOTP at least every 18 months using AF Form 1768. ***NOTE:*** CCDs are not required for this program. However, an 18-month program review must be accomplished.

5.2.3. The Program Manager will:

5.2.3.1. Monitor the officer's progress throughout the program.

5.2.3.2. Act as the officer's POC for training.

5.2.3.3. Tailor each officer's program based on the initial interview.

5.2.3.4. Provide needed assistance with scheduling staff agency visits in the wing.

5.2.3.5. Ensure training progress is tracked through a general purpose checklist or locally approved product.

5.2.4. The MXG/CC POCs will:

5.2.4.1. Familiarize the officer with the physical location, layout of facilities, and key personnel within the maintenance group.

5.2.4.2. Provide the officer with an understanding of the mission, duties, and responsibilities of each applicable work center.

5.3. Maintenance Officer Orientation and Training Program. The MOOTP is a four-phased program. Phase I consists of an initial interview, phase II consists of a maintenance group orientation, phase III consists of aircraft familiarization, and phase IV consists of task familiarization. The MOOTP may vary in length depending upon the individual's prior maintenance experience.

5.3.1. Phase I, Initial Interview. The MXG/CC, or the designated representative, accomplishes the initial interview to determine the individual's experience, background, and identify which portions of MOOTP will be required.

5.3.2. Phase II, Maintenance Group Orientation. These orientations are intended to familiarize the officer with the duties, responsibilities, key personnel, and physical location of each agency in the group, and other group/wing agencies with an integral role in sortie production. Due to varied wing structures, the following areas are recommended (if applicable) and appropriate tours and briefings should include:

5.3.2.1. Environmental (MXE) and its area of responsibility.

5.3.2.2. Quality assurance (MXQ) and the various inspections and evaluations.

5.3.2.3. Executive services (MXS) and the areas of responsibility.

5.3.2.4. AFETS (MXV) responsibilities and the support supplied by engineering and technical services personnel, and any maintenance training they provide.

5.3.2.5. Weapons standardization (MXW) and area of responsibility.

5.3.2.6. Maintenance operation squadron (MOS), the functions of the MOS, tour, and receive a briefing on each section.

5.3.2.6.1. Maintenance training flight (MXOT), its functions, and the various products and courses produced by the MTF. Discuss the SOT briefing.

5.3.2.6.2. Plans and resource (MXOP) and its functions and responsibilities.

5.3.2.6.3. Maintenance operations (MXOO) and its responsibilities and functions.

5.3.2.7. Aircraft maintenance squadron (AMXS) and its mission and responsibilities, and assigned maintenance flights. Tour and receive a briefing on each flight.

5.3.2.8. Maintenance squadron (MXM) and the mission and responsibilities of the accessories, fabrication, propulsion, avionics, munitions, TMDE, AGE, and armament flights. Understand the interface between the aircraft maintenance squadron flights and maintenance squadron flights. Tour and receive a briefing on each flight.

5.3.2.9. Wing support functions and the interface and responsibilities of other group/wing support functions.

5.3.2.9.1. Logistics readiness squadron (LRS) and the wing's operations plans and tasking (including AEF tasking, and how they affect the maintenance operations).

5.3.2.9.2. Security forces squadron, and the security requirements associated with unit operations and tasking through an orientation with the resources protection monitor.

5.3.2.9.3. Wing weapons safety and become familiar with the weapon safety requirements associated with unit tasking.

5.3.2.9.4. AETC training detachment (TD) and the functions and services they provide.

5.3.3. Phase III, Aircraft Familiarization Training:

5.3.3.1. This portion of MOOTP provides MDS specific familiarization training to maintenance officers. The course is designed to provide maximum exposure to actual aircraft including limited hands-on training. It also affords the officer the opportunity to observe basic maintenance actions with emphasis on aircraft trouble spots and high break areas.

5.3.3.2. Aircraft familiarization training will provide a general familiarization on basic aircraft systems including: general aircraft, egress, engine power plant, environmental, fuel, electrical, pneudraulic, landing gear, flight controls, avionics, instrument auto-pilot, and weapons system. ***NOTE:*** Phase III requirements can be accomplished by use of formal TD or MTF developed courses.

5.3.4. Phase IV, Task Familiarization. This training allows the maintenance officer the opportunity to observe maintenance actions and events in the sortie production environment. Schedule all officers for

this training within 30 days after completing phase III. The MXG CC determines those items required for task familiarization. The following items may be included:

5.3.4.1. Tow team operation.

5.3.4.2. Engine run operation.

5.3.4.3. Operation of specific flight line vehicles.

5.3.4.4. Phase/isochronical inspections.

5.3.4.5. Preflight, thru-flight, and basic post-flight inspections.

5.3.4.6. Engine change.

5.3.4.7. Aircraft jacking.

5.3.4.8. AGE operations.

5.3.4.9. Blade-blending operation.

5.3.4.10. Boroscope operations.

5.4. Critiques and Training Documentation:

5.4.1. Each officer will critique the MOOTP upon completion. The critique provides invaluable information that determines if the program is meeting required objectives. The MTF commander/chief review the critiques and coordinate through the MXG/CC. The critiques remain on file until the next program review.

5.4.2. After completion of the MOOTP requirements, the MTF updates MIS, and provides forms (except course critique) to the individual officer for his/her records.

5.5. Forms Prescribed. AETC Forms 17, 18, and 19.

5.6. Forms Adopted. AF Form 623, AF Form 797, AF Form 803, AF Form 898, AF Form 1297, AF Form 1768, AF Form 2426, AFTO Form 95, AETC Form 95, AETC Form 281, and AETC Form 666.

JOE F. HARRISON, Colonel, USAF
Deputy Director of Logistics

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 11-218, *Aircraft Operation and Movement on the Ground*
AFI 21-101*, Aerospace Equipment Maintenance Management*
AFI 25-201**,** *Support Agreements Procedures*
AFI 36-2201, Volume 2, *Air Force Training Program Training Management*
AFI 36-2304, *Community College of the Air Force (CCAF)*
AFI 65-601, *Budget Guidance and Procedures, Volume 1*
AFI 90-901, *Operational Risk Management*
AFMAN 36-2234, *Instructional Systems Development*
AFMAN 36-2236, *Guidebook for Air Force Instructors*
AFMAN 37-123, *Management Of Records*
AFMAN 37-139, *Records Disposition Schedule*
AFMAN 65-604, *Appropriation Symbols and Budget Codes (Fiscal Year 2003)*
AFH 36-2235, Volume 1*, Information for Designers of Instructions Systems-ISD Executive Summary for Commanders and Managers*
AFH 36-2235, Volume 2*, Information For Designers Of Instructional Systems ISD Automated Tools/What Works*
AFH 36-2235, Volume 3*, Information For Designers Of Instructional Systems Application To Acquisition*
AFH 36-2235, Volume 4*, Managers Guide To New Education And Training Technologies*
AFH 36-2235, Volume 5*, Information For Designers Of Instructional Systems Interactive Courseware (ICW) Design, Development, And Management Guide*
AFH 36-2235, Volume 6*, Information For Designers Of Instructional Systems Guide To Needs Assessment*
AFH 36-2235, Volume 7*, Information For Designers Of Instructional Systems Design Guide For Device-Based Aircrew Training*
AFH 36-2235, Volume 8*, Information For Designers Of Instructional Systems Application To Aircrew Training*
AFH 36-2235, Volume 9*, Information For Designers Of Instructional Systems Application To Technical Training*
AFH 36-2235, Volume 10*, Information For Designers Of Instructional Systems Application To Education*
AFH 36-2235, Volume 11*, Information For Designers Of Instructional Systems*
AFPAM 90-902, *Operational Risk Management (ORM) Guidelines and Tools*
AFCSM 21-570*, Core Automated Maintenance System (MIS) Training Management*
TO 00-5-1, *Air Force Technical Order System*
TO 00-5-2, *Technical Order Distribution System*

Abbreviations and Acronyms

ADPE—automated data processing equipment
AETC—Air Education and Training Command
AFCFM—Air Force career field manager

AFETS—Air Force engineering and technical services
AFI—Air Force instruction
AFJQS—Air Force job qualification standard
AFMAN—Air Force manual
AFPAM—Air Force pamphlet
AFPD—Air Force policy directive
AFRC—Air Force Reserve Command
AFSAT—Air Force security assistance training
AFSC—Air Force specialty code
AFTMS—Air Force Training Management System
AGE—aerospace ground equipment
AWACT—awaiting action
BATT—biennial analysis of technical training
CAC—curriculum advisory committee
CAF—combat Air Force
CAMS—Core Automated Management System
CBT—computer based training
CC—course chart
CCAF—Community College of the Air Force
CCD—course control document
CC/TS—course chart/training standard
CDC—career development course
CETS—contract engineering technical services
CFETP—career field education and training plan
CTK—composite tool kit
CUT—cross utilization training
DADL—development, application, and distance learning
DCC—dedicated crew chief
DITIS—Defense Instructional Technology Information System
DL—distance learning
EMS—equipment maintenance squadron
ERTP—engine run training program
ESO—education services officer
ETCA—education and training course advisory
FEQS—field evaluation questionnaire summary
FM—functional manager
FMS—foreign military sales
FOD—foreign object damage
FS—flying squadron
FSR—field services representative
FTT—field training team
GAS—graduate assessment survey
GO81—Core Automated Maintenance System for Mobility
GOV—government owned vehicle
HO—handout
IAW—in accordance with
ICW—interactive courseware
ICWTS—Interactive Courseware Training System

IMDS—Integrated Maintenance Data System
IMI—interactive multimedia instruction
IMSO—international military student officer
IPI—in-process inspection
ITMO—international training management officer
ISD—instructional system development
JOAP—Joint Oil Analysis Program
JQS—job qualification standard
JST—job site training
LAN—local area network
MX—logistics group
LP—lesson plan
MTF—maintenance training flight
MAJCOM—major command
MEO—most efficient organization
MDS—mission, design and series
MI—maintenance instructor
MIS—Management Information System (Core Automated Maintenance System/GO81)
MMCL—MAJCOM mandatory course listing
MOA—memorandum of agreement
MO—maintenance operations
MOI—maintenance operating instruction
MOOTP—Maintenance Officer Orientation and Training Program
MRA—mission readiness airmen
MTT—mobile training team
OJT—on-the-job training
O&M—operations and maintenance
OPR—office of primary responsibility
PCA—permanent change of assignment
PMEL—precision measurement equipment laboratory
POC—point of contact
POI—plan of instruction
PS&D—plans, scheduling, and documentation
QA—quality assurance
QMIS—Quality Management Information System
QT—qualification training
SATP—Security Assistance Training Program
SAV—staff assistance visit
SEI—special experience identifier
SME—subject matter expert
SOT—status of training
STS—specialty training standard
TCO—test control officer
TCTO—technical compliance technical order
TD—training detachment
TO—technical order
TODA—technical order distribution account
TPR—trained personnel requirement

TRIC—training requester identifier code
UTM—unit training manager
UGT—upgrade training
VI—visual information
VTT—video teletraining
WB—workbook
WQTP—work center qualification and training plan
WTM—work center training monitor

Terms

Ancillary Training—Training programs that contribute to mission accomplishment, but are separate from requirements in an individual primary Air Force specialty (AFS) or occupational series.

Awaiting Action (AWACT)—A code used in MIS to alert personnel that training is due completion. There are two types of AWACT, AWACT with a due date and AWACT without a due date.

AWACT Without a Training Due Date—This type of AWACT means that the initial training has not been performed.

AWACT With a Due Date—This type of AWACT indicates that training of a recurring nature is due completion. This AWACT will change to an OVERDUE if not completed by the last day of the month.

Backlogs—The total number of persons awaiting training in a particular course.

Career Field Education and Training Plan (CFETP)—A comprehensive core training document that identifies life-cycle education and training requirements, training support resources, and minimum core task requirements for a specialty. The CFETP aims to give personnel a clear career progression path and instill a sense of industry in career field training.

Certification—The process that authorizes individuals to perform special tasks after they have demonstrated proficiency.

Certifier—A person designated, authorized and empowered by the commander to make a declaration of competency and proficiency on tasks being performed. This declaration of competency is usually annotated in training documents, through the certifier's signature or initials.

Continuation Training—Advanced and qualification training that develops indepth expertise within a specialty, broadens knowledge to new specialties, introduces new technologies and systems, develops analytical skills, or increases understanding of the relationship between maintenance specialties.

Course Control Documents (CCD)—Specialized publications used to control the quality of training instruction. CTS, POIs, and CC are parts of the course control documents.

Course Status Report (CSR)—The CSR is a MIS background product that identifies the course status for a specific course identifier.

Consolidated Training Report (CTR)—The CTR is a MIS background product that identifies personnel scheduled for training.

Deviation—Any changes to a published class roster (no-show, nonutilization or cancellation).

Distance Learning—Exportable training that is centrally produced and delivered from a distance. Includes paper, computer based, interactive, and satellite-delivered material, etc.

Formal Training—Any training conducted by AETC. Formal courses are listed in the Education and Training Course Advisory.

Freeflow Personnel—Maintenance personnel coming from a weapon system different than the one they will be working on, or have not worked the system/MDS for 3 years.

Master Task Listing—A listing that identifies all the tasks required to be accomplished within a duty section.

Maintenance Information System (MIS)—The approved, automated information system used to manage and track the training requirements for the organization. These may consist of CAMS, IMDS, GO81, or another system approved by HQ AETC/LGMMR or higher headquarters.

Mission Design Series (MDS)—Aircraft/weapons system designator, for example, F-15, F-16, C-130, etc.

No-Show—Any individual scheduled for training who does not attend the training regardless of the reason.

Overdue Training—Any training listed in MIS not completed by the last day of the training month, unless designated by other directives.

Proficient—The condition or state where one performs a task correctly and completely without supervision.

Qualification Training—Training that is designed to qualify a person in a specific duty position. This training occurs both during and after the upgrade training process.

Recurring Training—Refresher training periodically required ensuring personnel are qualified.

Scheduled/Allocated Seats—Seats or quotas given to a squadron, unit, or person according to the request.

Special Certification Roster (SCR)—A roster that identifies personnel authorized to perform production inspector duties.

Subject Matter Expert (SME)—A technically competent individual with broad experience in a specific AFSC.

Target Population—The person or group of persons for whom the instruction or training is designed.

TMAA—Identifies only those training items that are awaiting action (AWACT), overdue, awaiting TD (AWFTD), or failed (FAILED).

TMAAA—Identifies all training items loaded against each person assigned to a particular work center.

Trainer—A trained and qualified person who teaches students to perform specific tasks through OJT methods. Also, equipment that the trainer uses to teach students specified tasks.

Training Forecast (TMA)—An MIS background product that shows the status of individual training requirements. The TMA is produced in two types -- the TMAA and the TMAAA.

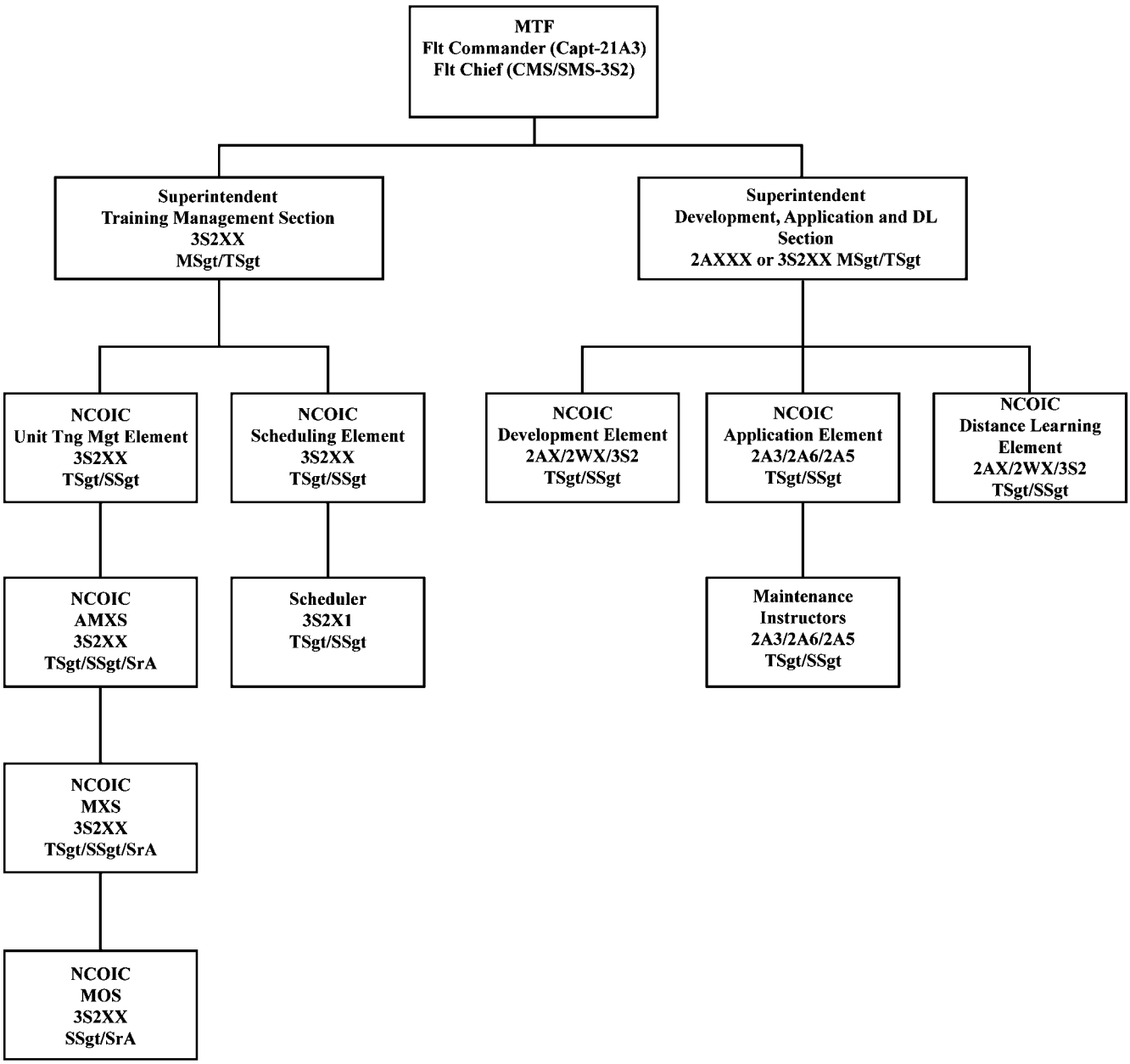
Trained Personnel Requirement (TPR)—A projected number of personnel needing training or retraining to meet production requirements.

Work Center Training Requirement (WCT)—Training that is required for 51 percent or more of personnel assigned to a work center.

Attachment 2

MTF ORGANIZATIONAL STRUCTURE CHART

NOTE: References to rank are recommendations only.



Attachment 3

SAMPLE FORMAT FOR SCHEDULING RESPONSIBILITIES GUIDE

Figure A3.1 provides a list of some key scheduling responsibilities, tasks and processes associated with the duties of an MTF scheduler. This list is not all inclusive of each responsibility outlined in this instruction; however, it will provide assistance in accomplishing day-to-day scheduling activities. Ensure that all duties are accomplished in the most effective means possible.

Figure A3.1. Scheduling Guide.

RESPONSIBILITY	TASK	PROCESS
Establish and publish training schedule.	Review UTMs training requirements. Create training schedule. Publish training schedule.	Request training requirements from UTMs. Consolidate UTMs training requirements. Forward requirements to training agencies. Create a schedule of events for UTMs. Allocate seats to UTMs.
Load training events.	Create training event identification.	Create event identification. Update applicable data. Run CRT for event identification verification.
Create monthly scheduling meeting.	Conduct monthly scheduling meeting.	Schedule meeting. Send agenda to UTMs. Conduct meeting. Distribute schedule to UTMs. Forward a copy to Plans, Scheduling & Documentation (PS&D) if required. Complete meeting minutes. Forward a copy to UTMs.
Provide class rosters to instructor	Print class rosters.	Ensure classroom and instructor availability. Print class rosters.
Update completed classes in MIS.	Close out event ID. Verify updates.	Update deficiencies (for example, No/Shows & Withdrawls [N/S & WI]). Update class completion. Attach class roster and sign-in sheet. File class package.
Manage SOT data.	Compile statistical data for the previous month.	Identify over dues. Identify deficiencies. Compute schedule/training effectiveness. Identify CBT/TD utilization rates (if applicable).
Forward requests to TD for processing.	Complete AF Form 898.	Compile TD requests from UTMs. Consolidate requests on AF Form 898. Provide consolidated requests to TD.
Manage MIS background products.	Request background product.	Gather inputs from UTMs. Establish product requirements thru the analysis section. Distribute as applicable upon receipt.

Attachment 4

INSTRUCTIONS FOR COMPLETING AF FORM 898, FIELD TRAINING REQUIREMENTS SCHEDULING DOCUMENT

A4.1. AF Form 898. Use this form to identify civilian and military personnel in need of training provided by the training detachment (TD). It provides a simple method of organizing who and when they receive the training. Another use of this form is for scheduling purposes. Training management completes items 1 through 7d. TD completes items 7e through 7k, and training management, or TD complete items 8 and 9.

A4.2. Item 1. Date the form at the start of the training period (when preparation begins).

A4.3. Item 2. Identify the training management office originating the training request.

A4.4. Item 3. Identify the supporting TD, FTT, or MTT.

A4.5. Item 4. Identify the training month that the form covers (for example, Apr).

A4.6. Item 5. Identify the 3-month training period that the form covers (for example, 1 Apr 03 – 30 Jun 03).

A4.7. Item 6a. List in numerical order:

A4.7.1. Authorization of all formal type-4 courses the servicing TD conducts.

A4.7.2. Other type-4 courses the serviced unit requires.

A4.7.3. Partial course requirements.

A4.8. Item 6b. Identify the MAJCOM and locally designated priority courses with an asterisk.

A4.9. Item 7a. Indicate the total backlog that will exist on the first day of the next training month for the corresponding course identified in item 6a.

A4.10. Item 7b. Indicate the number of students available to begin training during the next training month for the corresponding course identified in item 6a (for example, for the month of Apr 03).

A4.11. Item 7c. Indicate the number of students available to begin training during the second training month for the corresponding course identified in item 6a (for example, for the month of May 03).

A4.12. Item 7d. Indicate the number of students available to train during the third month for the corresponding course identified in item 6a (for example, for the month of Jun 03).

A4.13. Item 7e. Upper Left. Indicate the total number of seats available for training in the next training month for the corresponding course identified in item 6a (for example, for the month of Apr 03). Make every possible effort to get this entry to satisfy the available backlog (students available) in item 7b. If instructors do not plan to support a training request, the TD enters one or more of the following codes:

A4.13.1. "E" - Teaching enroute students.

A4.13.2. "F" - Teaching foreign military students.

A4.13.3. "L" - Leave.

A4.13.4. "M" - Minimum class size not met.

A4.13.5. "N" - No instructor authorized.

A4.13.6. "Q" - Qualification training.

A4.13.7. "T" - Teaching another course.

A4.13.8. "Y" - Temporary duty.

A4.13.9. "R" - Other circumstances. ***NOTE:*** Explain all “Rs” in block 8.

A4.14. Item 7e. Bottom Right. TD indicates the actual seats filled as of class start date.

A4.15. Item 7f. Indicate the total number of seats available during the second training month for the corresponding course identified in item 6a (for example, for the month of May 03). Make every possible effort to get this entry to satisfy the available backlog (students available) in item 7c. Use the instructor nonavailability codes in item 7e when an instructor does not plan to support a training request.

A4.16. Item 7g. Indicate the priority backlog for the applicable corresponding course in item 6a. Calculate as follows:

Priority backlog "g" = (b-e) (upper left) + (c-f).

NOTE: When a negative number is found in the results, use "zero" as the answer. Bring priority backlogs to the immediate attention of 82 Field Training Group and the supported MAJCOM (career field manager) by a joint TD/MA message. Make every possible effort to systematically and completely train the priority backlog.

A4.17. Item 7h. Indicate the total number of seats available during the third training month for the corresponding course identified in item 6a (for example, for the month of Jun 03). Make every possible effort to get this entry to satisfy the available backlog (students available) in item 7d. Use the instructor nonavailability codes in item 7e when an instructor does not plan to support a training request**.**

Attachment 5

SAMPLE FORMAT FOR DEVELOPMENT RESPONSIBLITIES GUIDE

A5.1. Development Guide. Figure A5.1 provides a list of ISD technician responsibilities, key tasks, and the processes associated with the task. This guide is provided to help the ISD technician to understand some of the tasks and responsibilities required of an ISD technician.

A5.2. ISD Responsibility. It is the ISD's responsibility to ensure that the process is used to develop an effective and cost-efficient instructional system while continually improving the quality of the process.

Figure A5.1. Development Guide.

ISD Responsibilities	Task	Process
Analyze existing course documents.	Develop CCDs.	Conduct needs assessment.
Determine if existing materials can be used.		Design instructions to meet the need.
Manage the development process.		Develop instructional materials.
		Implement instructions.
Initiate AF Form 1768 or locally approved form.	Conduct 18-month course review.	Review course control documents.
Assign subject matter expert.		Review class packages.
Incorporate changes.		Review visual information.
Oversee coordination process.		Review course test, if applicable.
File completed documents.		
Ensure primary and alternate test is developed.	Manage MTF testing program.	Avoid duplicate test items if possible. If circumstances limit the variety of test items supporting the objective, reword items, resequence answers, or scramble items on the alternate version to determine test compromise.
Manage the review process.		Develop master test/inventory logs.
Ensure testing and control program complies with this instruction.		Analyze/validate tests. Develop control procedures. Conduct 18-month test reviews.
Ensure catalog lists all available MTF programs.	Develop/maintain course catalog.	Determine design.
Ensure catalog meets requirements.		List all MTF courses/programs.
Ensure coordination by MTF supervision.	Consolidate all unit requirements and publish catalog.	Include all mandatory requirements identified by maintenance
Determine cost-effective reproduction of catalog.		Distribute catalog as required.

ISD Responsibilities	Task	Process
Identify most cost-effective equipment.	Manage VI equipment.	Develop inventory log.
Ensure preventive maintenance is done.		Establish a PM program.
Maintain inventory log.		Inspect equipment
File documents as required.		Establish sign-out procedures.
Manage the review process.	Manage/review VI programs.	Develop inventory log.
Track the use of visual programs.		Initiate visual folders.
Identify unused program to the MTF supervisor.		Establish an 18-month review program.
Ensure documentation of reviews.		Review each program for contents.
		Document reviews/findings.

Attachment 6

SAMPLE FORMAT FOR COURSE CONTROL DOCUMENTS/VISUAL INFORMATION (VI) PROGRAM REQUEST WORKSHEET

The course control document/VI program request worksheet is used to justify the development of training programs and courses.

MEMORANDUM FOR (Insert appropriate office)

FROM: (Insert your organization/office)

SUBJECT: COURSE CONTROL DOCUMENTS/VISUAL INFORMATION PROGRAM REQUEST WORKSHEET

1. The following information is provided as justification for the development of a course.

a. Why is this training needed?
(1) Directed by instruction _____.
(2) Directed by higher headquarters _____.
(3) Directed by the MXG/CC _____.
(4) Other _____.
b. What is the overall objective of this course?
c. Who is the target population?
d. How often will the course be taught?
e. Who will instruct the course?
f. Will the training be tracked in MIS?
g. Where will the training be conducted?
h. What is the class start date?
i. When are the CCDs needed?
j. Does the course require any test to be developed?
k. Who are the subject matter experts?
(1) NAME: _____.
(2) DUTY PHONE: _____.
(3) SECTION: _____.

2. Provide any additional remarks concerning request.

_____
_____
_____
_____

Signature of Requester

Attachment 7

SAMPLE FORMAT FOR COURSE CONTROL DOCUMENT (CCD) NUMBERING SYSTEM

Figure A7.1 displays the codes used to standardize the numbering system for all MTF course control documents:

Figure A7.1. Course Numbering System.

AC	AIRCRAFT (INCLUDES ALL ON - AIRCRAFT ACTIONS)
AV	AVIONICS MAINTENANCE TRAINING
CC	CORROSION CONTROL TRAINING
EG	EGRESS TRAINING
EM	ENGINE MANAGEMENT TRAINING
FM	FORMS MANAGEMENT TRAINING
GE	GENERAL SUBJECT TRAINING PROGRAM
MM	MUNITIONS TRAINING
SE	SUPPORT EQUIPMENT TRAINING
ST	SAFETY TRAINING
SU	SUPPLY TRAINING

EXAMPLE #1 - COURSE NUMBER
SE33/1090-191

SE	SUPPORT EQUIPMENT TRAINING
33	WING DESIGNATION NUMBER
1090	MTF TRAINING PROGRAM NUMBER
191	MIS COURSE CODE (IF APPLICABLE)

EXAMPLE #2 - COURSE NUMBER
AC355/2A656-002

AC	AIRCRAFT
355	WING DESIGNATION NUMBER
2A656	AFSC NUMBER DESIGNATION
002	MIS COURSE CODE (IF APPLICABLE)

Attachment 8

SAMPLE FORMAT FOR COURSE CHART/TRAINING STANDARD (CC/TS)

The CC/TS is a qualitative course control document that states the course purpose, description, identity, length, security classifications, major items of equipment, and summary of the subject matter covered. The course training standard identifies specific behavior to be attained by each student.

DEPARTMENT OF THE AIR FORCE — COURSE TRAINING NUMBER
WING DESIGNATION — PDS CODE (if applicable)
BASE, STATE AND ZIP — DATE

COURSE CHART AND TRAINING STANDARD

COURSE TITLE

1. Purpose. This course has been developed by the (SQUADRON DESIGNATION), and the maintenance training flight in response to requirements of regulatory guidance and/or local need.

2. Course Description. This course is designed to provide (AS APPLICABLE TO THE COURSE). Problem solving, interpersonal relationships, and communicative skills are integrated throughout the course. Appropriate STS/JQS/CFETPs, Air Force, and Air Education and Training Command instructions and technical orders are correlated with course content. Students are given the opportunity in the classroom and on the aircraft to apply the skills and knowledge that will enable them to accomplish the required maintenance duties.

3. Qualitative Requirements. The proficiency code key.

4. Attached Tables:

a. Table I, Course Chart/Training Standard (CC/TS). Provides an outline of course instructional units, training time (hours) per unit, and explanatory remarks concerning course operation. The Course Training Standard identifies specific behavior to be attained by each student for task/knowledge elements included in the course.

b. Table II, Course Support Resources. Identifies host/unit course user furnished equipment and other support requirements.

5. Recommendations. Comments and recommendations are invited concerning the quality of maintenance training programs and graduates. Use this CC/TS as a reference. Address correspondence to: MTF ADDRESSS

MXG/CC Signature Block

Attachment:

Proficiency Code Key

_____

Supersedes CC/TS: (COURSE NUMBER, DATE)
DISTRIBUTION: Listed on page "A"

Attachment 9

SAMPLE FORMAT FOR THE AF FORM 1768 (STAFF SUMMARY SHEET)

A9.1. Coordination Block: Coordinating agencies.

A9.2. Subject Block: Review/approval of course training materials.

A9.3. Summary Block:

A9.3.1. Request the attached course control documents (CCDs) be reviewed by a subject matter expert (SME) before approval by the maintenance group commander in accordance with AETCI 21-103, *AETC Military Aircraft Maintenance Training Program.*

A9.3.2. The attached CCDs pertain to:

A9.3.2.1. Course Title: _____

A9.3.2.2. Course Number: _____

A9.3.3. The tests and visual information associated with this course have been reviewed by a SME as required by AETCI 21-103.

A9.4. Test Number/Title.

A9.5. Visual Information Program Number/Title: _____

A9.6. Reviewing SME: _____ Date: _____

A9.7. VIEWS OF OTHERS. Identify and attach to this package all comments or recommendations to include corrections. If you have any questions concerning this document, please contact the Development Element of the XXX/MOS Maintenance Training Flight (MTF), ext. X-XXXX.

A9.8. RECOMMENDATION. All coordinating and approving agencies sign and date the staff summary sheet.

MTF Commander/Chief
(Signature Block)

Attachment
Course Control Documents

Attachment 10

SAMPLE FORMAT FOR PROFICIENCY CODE KEY

The proficiency code key is used to identify the task performance and knowledge levels for a specific task or several tasks. The scale value should be referred to when writing task and knowledge objectives.

Figure A10.1. Proficiency Code Key.

SUBJECT	SCALE VALUE	DEFINITION
Task performance levels	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. **(EXTREMELY LIMITED)**
	2	Can do most parts of the task. Needs help on the hardest parts. May not meet local demands for speed or accuracy. **(PARTIALLY PROFICIENT)**
	3	Can do all parts of the task. Needs only a spot check of completed work. **(COMPETENT)**
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. **(HIGHLY PROFICIENT)**
Task knowledge levels*	a	Can name parts, tools, and simple facts about the tasks. **(NOMENCLATURE)**
	b	Can determine step- by- step procedures for doing the task. **(PROCEDURES)**
	c	Can explain why and when the task must be done, and why each step is needed. **(OPERATING PROCEDURES)**
	d	Can predict, identify, and resolve problems about the task. **(ADVANCED THEORY)**
Subject knowledge levels**	A	Can identify basic facts and terms about the subject. **(FACTS)**
	B	Can explain relationship of basic facts and state general principles about the subject. **(PRINCIPLES)**
	C	Can analyze facts and principles, and draw conclusions about the subject. **(ANALYSIS)**
	D	Can evaluate conditions and make proper decisions about the subject. **(EVALUATION)**

LEGEND:

* - A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task (for example, b or 1b)

** - A subject knowledge scale may be used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks

Attachment 11

SAMPLE FORMAT FOR COURSE CHART/TRAINING STANDARD, TABLE I

The course chart/training standard provides an outline of course instructional units, training time, and explanatory remarks concerning course operations.

COURSE CHART/TRAINING STANDARD, TABLE I

COURSE NUMBER: Locally developed (the locally developed course number as identified in Attachment 7).

OPR: Enter the organization conducting the training.

COURSE SECURITY CLASSIFICATION: CLASSIFIED or UNCLASSIFIED. Enter the highest security classification of information or material covered in any unit/block of instruction. If the course contains no classified information, enter UNCLASSIFIED.

COURSE LENGTH (8 HOURS/DAY): XX academic days (XX.X hrs). Enter the number of academic days based on the standard 8-hour training day. ***NOTE:*** CCDs for a course can be designed to prescribe training for more than one model of equipment where the course provides the same core information, but has different units/blocks of instruction to cover specific equipment available at the training location.

EFFECTIVE DATE: Determined by the development element.

CAC/BATT MONTH: Established by the development element.

ENTRY PREREQUISITES: Enter only mandatory prerequisites. If no course prerequisites are required then enter none.

INSTRUCTOR-TO-STUDENT RATIO: Academic and practical instructor-to-student ratios serve as a guide to effective class scheduling and planning. Failure to correctly establish these ratios can result in manpower waste, improper student instruction/evaluation, or excessive course lengths. Academic ratio: The optimum number of students one instructor can effectively manage through discussion, demonstration, and teaching activity to cover knowledge-oriented objectives in the prescribed combined CC/TS. Practical ratio: The optimum number of students (group and subgroup) one instructor can effectively manage during progress checks to determine student ability to complete performance-oriented objectives within the allotted time. This ratio may be equal to or smaller than the academic ratio. For courses that contain varying ratios for different performance activities, the practical performance activities should be further identified in the POI.

TECHNICIAN ASSISTANCE: When the instructor-to-student ratio is exceeded for practical application, the assistance of qualified technicians/instructor will be required.

COURSE CONTENT: Start each block/unit of instruction with COURSE MATERIAL - UNCLASSIFIED. If the course presents classified information, enter the highest classification of data in place of UNCLASSIFIED. Enter course orientation and introduction, and time allocated as the first unit

of instruction. Enter course critique/assessment, graduation, and time allocated as the last unit of instruction, total hours, and enter any notes applicable to Figure 1 (course is CCAF degree/certificate applicable).

Figure A11.1. Course Material.

COURSE MATERIAL	HOURS	PROFICIENCY LEVEL
1. COURSE ORIENTATIONS AND INTRODUCTION	**(0.5)**	
2. ENTER UNIT OF INSTRUCTION TITLE	**(XX)**	
Example: AFTO Form 781 Symbols and Documentation.		
a. Enter behavioral statement from objective. This should be an active statement.		**C**
Example: Identify symbols used in forms documentation.		
b. Enter behavioral statement from objective. This should be an active statement.		**3c**
Example: Document AFTO Form 781.		
3. ENTER UNIT OF INSTRUCTION TITLE	**(XX)**	
(If there is only one objective in the unit, make the unit title an active statement.)		**3c**
Example: Document AFTO Form 244.		
4. COURSE CRITIQUE AND GRADUATION	**(0.5)**	
	TOTAL HOURS: XX.X	

NOTE: If applicable, this is a CCAF degree/certificate course. Safety, environmental issues, corrosion identification or control, foreign object damage prevention, forms documentation, MIS input, the use of technical publications, and appropriate fraud, waste, and abuse information are integrated throughout the course.

Attachment 12

SAMPLE FORMAT FOR COURSE SUPPORT RESOURCES, TABLE II

Identifies host/unit course user furnished equipment and other support requirements.

COURSE SUPPORT RESOURCES, TABLE II

COURSE NUMBER: Course and block title.

1. EQUIPMENT: The development element establishes the format for this listing. Continue on additional pages as necessary to complete this and paragraph 2 below.

2. ADMINISTRATIVE, OPERATIONAL, AND FACILITIES SUPPORT.

a. At sites where there is an established MTF, support for training (normal, enroute, or special) is provided in accordance with AFI 36-2201.

b. When training is conducted at an alternate site (instructors TDY to the site to provide special training, conversion/activation), the unit hosting training provides support such as classroom, housing, unit equipment, etc. The hosting unit will coordinate with requesting unit to identify course support requirements and to obtain confirmation of resources available to support specific training objectives and firm training dates.

SUMMARY OF CHANGES: Summarize Table I and Table II changes, for example, addition/deletion of training elements, equipment changes, course length changes, BATT results, etc. Enter a brief summary of major course and/or equipment changes, time blocks, or units. This data in turn correlates with the applicable CC/TS and POI.

Attachment 13

SAMPLE FORMAT FOR PLAN OF INSTRUCTION (POI) COVER PAGE

The cover page is the first page of the course control document. It identifies the course number and title.

Instructor Name_____ **(COURSE NUMBER)**

PLAN OF INSTRUCTION (POI)

(CENTER THE COURSE TITLE AS SHOWN ON COURSE CHART/TRAINING STANDARD)

(OPR)

(DATE)

FOR TRAINING PURPOSES ONLY

_____

(Superintendent, Development, Application, and Distance Learning Section)

APPROVAL OF LESSON PLAN

SIGNATURE & DATE	**SIGNATURE & DATE**
_____	_____
_____	_____
_____	_____
_____	_____

Attachment 14

SAMPLE FORMAT FOR POI "A" PAGE

The POI "A" page identifies the total number of POI pages and distribution. The POI "A" page is normally printed on the reverse side of the POI cover page.

COURSE NUMBER: Enter the same title as on the CC/TS (abbreviate if necessary).

CLASSIFICATION: CLASSIFIED/ UNCLASSIFIED.

TOTAL NUMBER OF PAGES IN THIS PLAN OF INSTRUCTION IS XX CONSISTING OF THE FOLLOWING:

PAGE NUMBER	DATE	CHANGE NUMBER
POI Title Page	1 March 2002	Original
A page (POI Table of Contents)	1 March 2002	Original
I page (POI Cover Memorandum)	1 March 2002	Original
Page 1, POI Block 1, Unit 1	1 March 2002	Original
Page 2, POI Block 1, Unit 2	1 August 2002	Change 1
Page 3, POI Block 2, Unit 1	1 September 2002	Original

_____

This plan of instruction (POI) is based on Combined Course Chart/Training Standard (CC/TS) Course Number: XXXXX/XXXXXX-XXX, (DATE).

Supersedes POI: COURSE NUMBER, DATE

DISTRIBUTION: Enter applicable course users

Attachment 15

SAMPLE FORMAT FOR POI "I" PAGE

The "I" page is used to identify the course purpose, design and description, student measurement and objectives. This page is signed by the MXG/CC or designated representative to indicate his/her approval of the course.

DEPARTMENT OF THE AIR FORCE
WING DESIGNATOR
BASE, STATE, ZIP CODE

PLAN OF INSTRUCTION
COURSE NUMBER
DATE

COURSE TITLE

1. PURPOSE. This plan of instruction (POI) prescribes the qualitative requirements for the (COURSE TITLE) course. Units of instruction present criterion objectives in a logical teaching sequence. The POI shows duration, correlation with the course training standard, support materials, audiovisual aids and equipment, training, or instructional methods and guidance. This POI was developed in accordance with AFI 36-2201, Volume 2, *Air Force Training Program Training Management,* and AETCI 21-103, *AETC Military Aircraft Maintenance Training Program.*

2. COURSE DESIGN/DESCRIPTION. The instructional design for this course is (for example: GROUP PACED, SELFPACED). This (XX.X)-hour course trains (AS APPLICABLE TO THE COURSE). Problem solving, interpersonal relationships, and communicative skills are integrated throughout the course. Appropriate CFETP, STS/JQS, Air Force, and Air Education and Training Command publications and technical orders correlate with course content.

3. STUDENT MEASUREMENT. Evaluations of criterion objectives are accomplished by performance evaluation (P), written measurement (W), oral questions (O), or a combination thereof. (AS APPLICABLE).

4. OBJECTIVES. All objectives for this course are task/knowledge oriented and develop a skill. The standard of performance on knowledge-oriented objectives is (XX) percent on written measurement unless otherwise indicated. (AS APPLICABLE). CC/TS or TS reference number (enter the CC/TS or TS reference number that satisfies the objective).

MXG/CC Signature Block

Supersedes Plan of Instruction: COURSE NUMBER, DATE
OPR:
DISTRIBUTION: Listed on Page "A"

Attachment 16

SAMPLE FORMAT FOR COURSE ORIENTATION AND INTRODUCTION PAGE

This page is used to explain course objectives, facility requirements, and student and instructor introductions.

NAME OF INSTRUCTOR: _____

COURSE TITLE**:** _____

UNCLASSIFIED/CLASSIFIED (as applicable)

COURSE ORIENTATION AND INTRODUCTION TIME: 0.5 HR

SUPPORT MATERIAL AND GUIDANCE

NOTE: Show support materials and guidance for each unit of instruction. Instructional guidance should include any supplemental information not included in the objective or teaching step; for example, need for multiple instructors, when progress checks will be accomplished, etc.

Student Instructional Materials
Enter applicable information or none.

Audiovisual Aids
Enter applicable information or none.

Training Equipment
Enter applicable information or none.

Instructional Method
Lecture/discussion.

Brief students on the following subjects:

Introduction, course overview, course administration and classroom policies, course completion criteria and prerequisites, student critique/feedback program, safety, security, building orientation, and test compromise.

INSTRUCTIONAL GUIDANCE
Welcome students to the course. Ask students to identify themselves, and briefly state their background. Explain the location of facilities such as the break room and restrooms. Inform students of the importance of the critique program, how it works, and how they can benefit from it. (ANY OTHER INFORMATION AS APPLICABLE TO THE COURSE.)

PAGE____

COURSE NUMBER BLOCK UNIT DATE

Attachment 17

SAMPLE FORMAT FOR POI UNIT 2 AND FOLLOWING UNITS

The Unit 2 and following units page identifies the second unit of instruction as identified on the course chart/training standard.

PLAN OF INSTRUCTION

NAME OF INSTRUCTOR: _____COURSE TITLE: _____

UNCLASSIFIED/CLASSIFIED (as applicable)

COURSE CONTENT

UNIT TITLE AS IT APPEARS ON TABLE I OF CC/TS TIME: 4.0 HRS

EXAMPLE: AFTO Form 781 symbols and documentation.

SUPPORT MATERIAL AND GUIDANCE

Student Instructional Material
Enter applicable information for the entire unit or none.

Audiovisual Aids
Enter applicable information for the entire unit or none.

Training Equipment
Enter applicable information for the entire unit or none.

Instructional Method
Enter applicable information.

Attachment 18

SAMPLE FORMAT FOR POI UNIT 2

This sample identifies the objective, teaching steps, and instructional guidance for the second unit of instruction as identified on the course chart/training standard.

UNCLASSIFIED/CLASSIFIED (as applicable)

COURSE CONTENT (CONTINUED)

ENTER COURSE OBJECTIVE

EXAMPLE: Using applicable TOs, identify symbols used in forms documentation, and their purpose with no instructor assistance.

CC/TS: 2a PROF: XX MEAS: X TIME: X.X HRS

(EXAMPLE: C) ***(EXAMPLE: O)***

(1) ENTER TEACHING STEP AS APPLICABLE

EXAMPLE: Discuss symbols used in forms documentation

(a) ENTER ANY TEACHING SUBSTEPS AS APPLICABLE

EXAMPLE: Red X

(b) ENTER ANY TEACHING SUBSTEPS AS APPLICABLE

EXAMPLE: Red /

(2) ENTER TEACHING STEP AS APPLICABLE

EXAMPLE: Describe the purpose of each symbol.

INSTRUCTIONAL GUIDANCE

(2a) Enter any guidance on how to teach the lesson. Do not reiterate teaching steps.

Attachment 19

SAMPLE FORMAT FOR POI UNIT 3

POI UNIT 3. This sample identifies the objective, teaching steps, and instructional guidance for the third unit of instruction as identified on the course chart/training standard.

UNCLASSIFIED/CLASSIFIED (as applicable)

COURSE CONTENT (CONTINUED)

ENTER COURSE OBJECTIVE

EXAMPLE: Using the applicable TOs and AFTO Form 244, document the form with no instructor assistance.

CC/TS: 3 PROF: XX MEAS: X TIME: X.X HRS

(1) ENTER TEACHING STEP AS APPLICABLE

EXAMPLE: Demonstrate documentation of AFTO Form 244.

(2) ENTER TEACHING STEP AS APPLICABLE

EXAMPLE: Allow students to document AFTO Form 244.

INSTRUCTIONAL GUIDANCE

Enter any guidance on how to teach the lesson. Do not reiterate teaching steps.

Attachment 20

SAMPLE FORMAT FOR COURSE CRITIQUE AND GRADUATION PAGE

PLAN OF INSTRUCTION

NAME OF INSTRUCTOR: _____COURSE TITLE: _____

UNCLASSIFIED/CLASSIFIED (as applicable)
COURSE CONTENT

COURSE CRITIQUE AND GRADUATION **TIME: 0.5 HR**

SUPPORT MATERIAL AND GUIDANCE

Student Instructional Material
Student critique forms.
Audiovisual Aids
None.
Training Equipment
None.
Instructional Method
Lecture/discussion.
Administer the test (as applicable).
Conduct course critique.
INSTRUCTIONAL GUIDANCE
Brief students on test administration and test compromise. Explain the need for and importance of the student critique program. Pass out student critique forms to students, and provide instructions for completing the form. Inform students of the option of filling out the form as a group or individual (highly recommended). If possible have another instructor administer the critique.

Conduct graduation.

INSTRUCTIONAL GUIDANCE
Issue completed AF Form 1256, **Certificate of Training,** (if applicable). Turn in a signed class roster to the maintenance training flight scheduling section to ensure students who completed the course are updated in MIS through the corresponding course code.

Attachment 21

SAMPLE AETC FORM 18, TEST ANALYSIS WORKSHEET

A21.1. AETC Form 18. This form is used to analyze maintenance tests conducted by the MTF.

TEST ANALYSIS WORKSHEET

	1	2	3	4	5	6	TEST AVERAGE
COURSE NUMBER	AC-T-1A-01	AC-T-1A-01	AC-T-1A-01	AC-T-1A-01	AC-T-1A-01		94.28
NUMBER OF STUDENTS	6	6	5	5	6		
NO./NAME OF INSTRUCTORS	D.BASS	R.LLOYD	D.SMITH	E.BERNING	J.AMOS		NO OF CASES
RECERTIFICATION	6 DEC 02	13 DEC02	20 DEC02	10JAN03	13JAN03		28

	EVALUATION OF SPECIFIC ITEMS OF TEST																												EVALUATION OF ENTIRE TEST							
ITEM NO	ANSWERS SELECTED IN ERROR																												WRONG ITEMS						TOTAL	
	A						B						C						D						E				1	2	3	4	5	6	WG	RT
1	X			X				X				X																X	2	2			1		5	23
2																					X											1			1	27
3									X						X			X							X					1	1	1	1		4	24
4		X												X				X							X				1		1	1	1		4	24
5					X																	X							1				1		2	26
6							X																							1					1	27
7		X		X									X							X							X		2		1	1	1		5	23
8			X						X																				1	1					2	26
9																				X				X			X					1	2		3	25
10	X				X	X	X			X				X		X													3	2	2				7	21
11			X																										1						1	27
12	X								X			X	X							X									1	1	2	1			5	23
13																					X			X								1	1		2	26
14															X																1				1	27
15						X		X																					1	1					2	26
16																X		X							X	X					1	1	2		4	24
17					X								X		X														1		2				3	25
18																				X		X										1	1		2	26
19								X						X					X								X			1	1	1	1		4	24
20		X									X					X		X				X							1	1	1	2	1		6	22
21																																				
22																																				
23																																				
24																																				
25																																				
26																																				

AETC FORM 18, 20021101 *(IMT-V2)*

A21.2. AETC Form 18 Completion Instructions. The following guidelines apply:

A21.2.1. COURSE NUMBER. Self-explanatory.

A21.2.2. NUMBER OF STUDENTS. Enter the number of students in the class tested.

A21.2.3. NUMBER OF INSTRUCTORS. Enter the name of the instructor that taught the class.

A21.2.4. RECERTIFICATION. Enter date test data was completed.

A21.2.5. Draw a heavy line through or block out the correct answer for each question.

A21.2.6. As each group tests, document the answers selected in error in the appropriate block.

A21.2.7. NO OF CASES. Enter the total number of cases recorded in sections 1 through 6.

A21.2.8. Using the completed answer sheet, record the total answers selected in error in the appropriate A, B, C, D, or E column for each question.

A21.2.9. TOTAL WRONG. When the test is administered 6 times or 30 samplings, enter the total questions missed.

A21.2.10. TOTAL RT. Enter the difference between the NO OF CASES and the TOTAL WRONG.

A21.2.11. After instruction #10 is completed, look at or analyze those questions that have a 50 percent or more miss rate to determine whether or not the test is valid, or whether the test questions need to be rewritten.

A21.3. Documentation. Document all test analysis information on the reverse of AETC Form 18.

Attachment 22

SAMPLE FOR THE TEST COMPROMISE STATEMENT

A22.1. Warning. The material covered in this test is governed under the guidelines set forth in AETCI 21-103. Compromise of this test material to include unauthorized possession of test materials or discussion of test content is a violation of Air Force and Air Education and Training Command instructions, and is punishable under the Uniformed Code of Military Justice.

A22.2. Test compromise situations. The following are potential compromise situations that can occur as a result of actions taken on the part of individuals who develop, handle, administer or participate in the testing program:

A22.2.1. Reviewing, accessing or allowing review of, or access to controlled test material by any individual not specifically authorized.

A22.2.2. Having an oral or written discussion concerning contents of test material with an unauthorized person.

A22.2.3. Bringing any unauthorized material into the testing room.

A22.2.4. Unauthorized reproduction, copying, or faxing of test material.

A22.2.5. Removing test material from the examination room without authorization.

A22.2.6. Being unable to account for the location of testing materials.

A22.2.7. Storing test materials improperly.

A22.2.8. Taking or possessing materials without authorization.

A22.3. Actions to be taken in the event of a test compromise:

A22.3.1. Suspend all testing of the affected test, and gain positive control of all affected test materials.

A22.3.2. Development section will perform a preliminary assessment and report recommendations to the DADL superintendent.

A22.3.3. MTF commander/chief will evaluate the preliminary assessment results, and report findings to the MOS/CC.

Attachment 23

SAMPLE MAINTENANCE TRAINING FLIGHT COURSE CRITIQUE

Course: _____ Date: _____

Instructor: _____

Name (optional): _____ Office Symbol: _____

****

The purpose of this critique is to ascertain feedback concerning courses taught through the maintenance training flight. Please take a moment to furnish us with comments and suggestions, be specific with your comments especially if a low rating is indicated. This will better enable us to provide quality training. (Please provide your name and duty phone number if you would like a reply to your comments.)

****

1 = Unsatisfactory 2 = Needs Improvement 3 = Satisfactory 4 = Excellent 5 = Outstanding

Circle One Response Only

1. THE COURSE: (1) (2) (3) (4) (5)

Did the course meet the objectives? Yes/No

Will the training provided assist you in your job? Yes/No

Did your knowledge of the subject increase as a result of the instruction? Yes/No

Should the subject matter covered be changed? Yes/No

Comments: _____

_____

_____

2. THE INSTRUCTOR/ GUEST SPEAKER (circle one): (1) (2) (3) (4) (5)

Was the instructor/guest speaker knowledgeable of the material covered? Yes/No

Did the instructor/guest speaker present a professional military image? Yes/No

Did the instructor answer student questions? Yes/No

Comments: _____

_____

_____

3. THE FACILITY: (1) (2) (3) (4) (5)

Did the facility provide an atmosphere favorable for learning? Yes/No

Comments: _____
_____
_____

4. OTHER (if applicable): (1) (2) (3) (4) (5)

Were audiovisual aids effective? Yes/No

Were written/performance tests used to evaluate student performance effective? Yes/No

Comments: _____
_____
_____

Attachment 24

SAMPLE FORMAT FOR VISUAL INFORMATION (VI) CERTIFICATION SHEET

The VI certification sheet is used to certify each VI training program (videos).

1. Program Title: _____

2. Program Number: _____

3. Program Running: _____

4. Subject matter expert has reviewed this VI program:
(Please print clearly)
NAME: _____
AFSC: _____
GRADE: _____
OFFICE SYMBOL: _____
DUTY PHONE: _____

5. I certify that this VI program is technically correct and is in accordance with applicable Air Force, AETC, and technical publications.

DATE CERTIFIED: _____
SIGNATURE: _____

6. I certify that an 18-month review of this VI program was conducted, and its content is still current and applicable to course objectives in accordance with Air Force, AETC, and technical publications, unless stated otherwise in the remarks section:

Review Date	Next Review Date	Certifier Signature	Remarks
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

NOTE: This worksheet may be in the form of an automated product.

Attachment 25

SAMPLE LESSON PLAN FORMAT - INTRODUCTION

This page identifies the lesson plan format (introduction) when personalizing the instructor POI.

LESSSON PLAN INTRODUCTION

COURSE NUMBER

LESSON INTRODUCTION

ATTENTION: This step is used to alert the student that the instructor is ready to begin the lesson, and to gain the students' attention.

OVERVIEW: Provides an explanation of what to expect during the lesson. It normally includes an explanation of the objectives and the major teaching steps. The overview provides a roadmap to help the student follow the lesson.

MOTIVATION: This step is used to gain the students' interest in the training. This step may be combined with the attention step. The instructor should explain why it is important for the student to learn the information that is presented during the training session.

TRANSITION: This step allows the instructor to move from the introduction to the body of the instruction. It is also used to focus the students' attention on the first major teaching step.

Sample Lesson Plan - Introduction (personalization)

ATTACHMENT 26

SAMPLE LESSON PLAN FORMAT - BODY

This page identifies the lesson plan format (body) when personalizing the instructor POI.

LESSON PLAN BODY

PRESENTATION/EXPLANATION:

Example:

Body. The body identifies the objective, teaching steps, and substeps. For longer blocks/units of instruction use interim summaries as needed.

Symbols. Refer to slide 1. Explain that each symbol indicates varying degrees of severity of writeups. Stress importance of using the correct symbol.

Transition. Used to tie-up one thought and proceed into another.

Example: Now that we know what symbols are used in documentation, let's continue with some actual documentation. Any questions?

Documentation. Use slide 2 and fill it in on the board while explaining procedures to students. Ask questions while completing the form.

Question. What symbol would be used to indicate a writeup that would ground the aircraft?

NOTE: Instructional guidance is not required but may be used if the instructor requires additional appropriate information.

Sample lesson plan: body (personalization)

Application/performance: none or as applicable

Evaluation: none or as applicable

Attachment 27

SAMPLE FOR THE LESSON PLAN FORMAT - CONCLUSION

This page identifies the lesson plan format when personalizing the instructor POI.

LESSON PLAN CONCLUSION

PRESENTATION/EXPLANATION:

Example:

Body. The body identifies the objective, teaching steps and sub-steps. For longer blocks/units of instruction use interim summaries as needed.

Symbols. Refer to slide 1. Explain that each symbol indicates varying degrees of severity of write-ups. Stress importance of using the correct symbol.

Transition. Used to tie up one thought and proceed into another.

Example: Now that we know what symbols are used in documentation, let's continue with some actual documentation. Any questions?

Documentation. Use slide 2, and fill it in on the board while explaining procedures to students. Ask questions while completing the form.

Question. What symbol would be used to indicate a write up that would ground the aircraft?

NOTE: Instructional guidance is not required but may be used if the instructor requires additional appropriate information

Sample Lesson Plan - Body (personalization)

Application/Performance. None or as applicable.

Evaluation. None or as applicable.