

**BY ORDER OF THE COMMANDER
AIR EDUCATION AND TRAINING
COMMAND**

**AIR EDUCATION AND TRAINING
COMMAND INSTRUCTION 21-112**

24 DECEMBER 2015



Maintenance

**AETC CIVIL SERVICE AND
CONTRACTOR AIRCRAFT
MAINTENANCE TRAINING**

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This instruction implements AFD 21-1, *Air and Space Maintenance*. It provides the minimal essential guidance for safely and effectively maintaining objectives, standards, procedures, and responsibilities for management of the Air Education and Training Command (AETC) civil service aircraft maintenance (CSAM) and contractor aircraft maintenance (CAM) training programs. This instruction applies to all civil service and contractor personnel who plan, conduct, administer, evaluate, and manage these programs. This instruction does not apply to Air National Guard or Air Force Reserve Command units. Refer recommended changes about this publication to the Office of Primary Responsibility (OPR) using AETC Form 1236, *Request for Improving/Changing AETC Maintenance Publications*. Recommended changes must be approved by the group commander/director of maintenance (DOM)/Program Manager (PM), before forwarding to HQ AETC/A4M, for action by HQ AETC/A4MMP. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). This publication may be supplemented at the group/director level. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately to the Publication OPR for non-tiered compliance items. The use of the

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SUMMARY OF CHANGES

This publication has been revised and must be completely reviewed. More specifically, Maintenance Information System (MIS) review and validation requirements are clarified (paragraph 2.2.11 and 2.14.3.8), defines TBA requirements for T-1s, T-6s and T-38s (paragraph 4.1.2), clarifies training requirements for assigned personnel (paragraph 4.1.2), adds requirement to decertify and re-certify trainees as required (paragraph 4.2.3.7), adds Advance Distributed Learning Service (ADLS) for additional source for TBA training (paragraph 4.3). Also, references have been updated for currency.

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Chapter 1

GENERAL

1.1. Objective. The objective of this publication is to establish aircraft maintenance training policy and procedures for the maintenance activity. It provides guidance on conducting initial, recurring, and advanced training to the level required so maintenance personnel can effectively and safely perform their duties.

1.2. General. Maintenance training (MT) is the office of primary responsibility (OPR) for aircraft maintenance training programs. However, the PM/DOM has overall responsibility for all training programs within the organization or activity, and must ensure quality training programs are established, effective, administered and accomplished on time according to the performance work statement (PWS), as applicable; AFI 21-101, *Aircraft and Equipment Maintenance Management*; the policy, procedures and programs outlined in the government-accepted contractor training plan (if applicable); and this publication. CSAM training programs fall under the purview of AFI 36-2201, *Air Force Training Program* and AFI 36-2650, *Maintenance Training*: All pertinent requirements relevant to support the CSAM organization structure has been imported into this instruction. CAM training programs do not fall under the purview of AFI 36-2201 or AFI 36-2650.

1.3. Compliance Terminology. For the purposes of this instruction, the following definitions apply:

1.3.1. Shall, must, or will indicate mandatory requirements. (Will is also used to express a declaration of purpose for a future event.)

1.3.2. **Should** indicates a preferred method of accomplishment.

1.3.3. **May** indicates an acceptable or suggested means of accomplishment.

1.4. Training Resources. Wing leadership and the PM/DOM must ensure training resources are available and provided to support MT course requirements and to facilitate quality, realistic training. The MT must identify/schedule aircraft, major support equipment, and special test equipment needed for training.

1.5. Risk Management (RM). RM 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 RM principles, concepts, and techniques in the development, implementation, and application of new or existing training programs. Additional information can be found in AFI 90-802, *Risk Management*, and AFPAM 90-803, *Risk Management (RM) Guidelines and Tools*.

1.6. Block Training. The objective of block training is to group as many training requirements as possible into a single training event/session. Initially, the training session should provide general training that everyone requires, and then be reduced 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, security awareness, egress familiarization, and resource protection, etc.

1.7. Technical Training (TT) and AETC Training Detachment (TD) Courses. Utilize TT and TD courses (when available) as an alternate source of training only when the training capability is clearly beyond that of MT. MT will develop courses (similar to TD courses) to ensure standardization and train and qualify their work force.

1.8. Operating Instruction (OI). MT will develop and publish an OI that describes local policy and procedures for managing the maintenance training programs they are responsible for administering and controlling. **(T-2).** Provide HQ AETC/A4MMR with a copy of the government-accepted training plan/published OI and any future revisions. For CAM units, an OI is not required if all elements listed below are included in the government-accepted training plan. If not already described and published in other instructions, supplements, or the government-accepted training plan, ensure the following topics are included in the OI: **(T-2).**

1.8.1. Production frequency and distribution of Maintenance Information System (MIS) automated training products.

1.8.2. Procedures for updating the MIS training subsystem (Integrated Maintenance Data System [IMDS]/GO81.)

1.8.3. Personnel in- and out-processing procedures.

1.8.4. Procedures for requesting training (internally and externally).

1.8.5. Duties and responsibilities of MT personnel, as applicable.

1.8.6. Program management processes, procedures, responsibilities, training resources, products, temporary duty (TDY) processing, scheduling procedures, formal training policy and procedures, etc., for aircraft maintenance training programs prescribed in this instruction, as applicable.

1.8.7. Ensure CSAM/DOM signs and approves the OI.

Chapter 2

RESPONSIBILITIES

2.1. PM or DOM. The PM or DOM will ensure:

- 2.1.1. Maintenance training programs are implemented, efficiently managed, and fully supported. MT is the single point of contact (POC) for maintenance training programs.
- 2.1.2. Facilities and equipment (offices, classrooms, dedicated hangar space, etc.) are provided to MT in support maintenance training programs.
- 2.1.3. Highly qualified maintenance technicians and instructors assigned or attached to MT are appointed in writing and assign instructors based on the training demands of the unit. Personnel selected must possess superior job knowledge, experience, communication skills, and a desire to instruct.
- 2.1.4. Maintenance personnel receive required qualification training when not 100 percent task qualified when initially hired, promoted, or transferred to a new position.
- 2.1.5. Funds are provided to support maintenance training programs.
- 2.1.6. Sufficient aircraft and support equipment are provided to MT to support training.
- 2.1.7. MT submits aircraft maintenance formal school training requirements according to the Education and Training Course Announcement (ETCA) and this instruction.

2.2. Supervisors. Supervisors will ensure:

- 2.2.1. Work center task training requirements, to include all tasks performed in the work center (100 percent task coverage) are identified and provided them to MT.
- 2.2.2. The development of a training plan that depicts how assigned personnel will be trained.
- 2.2.3. Personnel initial evaluations are accomplished within 60 duty days of assignment to the work center. **(T-2)**. At a minimum, match work center training and MIS requirements against individual past/present qualifications, and identify which, if any, tasks an individual is qualified to perform or requires training/certification on to be qualified for the duty position. The focus of the evaluation is to ensure employees have current systems knowledge and task qualifications to perform their jobs in a safe and productive manner. Document qualifications when the individual has been trained, evaluated, and certified (if and when appropriate). Do not dispatch employees to perform maintenance unsupervised until they have been evaluated for system knowledge, provided formal training, if necessary, and are task-qualified/certified to perform them. Document the completion of the initial evaluation and ensure subordinate personnel are aware of their individual training requirements/responsibilities.
- 2.2.4. Personnel are adequately trained and qualified to perform assigned duties.
- 2.2.5. Training records are maintained to show current qualifications of assigned personnel.
- 2.2.6. Aircraft, support equipment, and personnel are provided as needed to support training.
- 2.2.7. The special certification program complies with AFI 21-101.

- 2.2.8. Training programs are administered, controlled, managed, and supported.
- 2.2.9. Notify MT which tasks constitute MIS work center training requirements.
- 2.2.10. Duty related training that applies only to select personnel within a work center is individually loaded against them in the MIS.
- 2.2.11. Work center training requirements identified in the MIS are reviewed and validated at least semi- annually.
- 2.2.12. Personnel requiring training are properly identified, scheduled, and released for training, and training is completed/documentated on time.
- 2.2.13. All training matters, requests, requirements and deficiencies are coordinated with MT.
- 2.2.14. MT is notified when training program changes require MIS update.
- 2.2.15. Personnel process in and out through MT.
- 2.2.16. MIS products are managed as directed by MT.

2.3. MT. MT will:

- 2.3.1. Manage and provide locally developed policy and guidance as needed to ensure an effective training program that meets the needs of assigned maintainers and the maintenance organization (**T-2**).
- 2.3.2. Provide assistance to personnel on training matters.
- 2.3.3. Act as the internal and external single POC for training matters/requirements affecting maintenance.
- 2.3.4. Provide the PM/DOM and HQ AETC/A4MMR a quarterly report that identifies the qualification/certification status of their employees. (**T-2**). Upload the report to HQ AETC/A4MMR SharePoint@ <https://eis.aetc.af.mil/hq/A47/A4M/MaintenanceTraining/default.aspx>. As a minimum, the report will include:
 - 2.3.4.1. Task qualification status.
 - 2.3.4.2. Number of employees fully position qualified.
 - 2.3.4.3. New employees:
 - 2.3.4.3.1. Employees hired/transferred to a new position and are not fully qualified in the new position (may be as a result of a promotion, temporary medical condition, manning shortage, etc.).
 - 2.3.4.3.2. Show where new/transferred employees (in training) are assigned by specialty, position, and work center.
 - 2.3.4.4. Number of employees overdue training.
- 2.3.5. Serve as the OPR to provide, coordinate, and acquire training (internally and externally).

2.3.6. Ensure MT supply custodians (as applicable) manage supply and equipment accounts according to AFI 23-101, *Air Force Material Management*.

2.3.7. Maintain composite toolkits (as required) in accordance with AFI 21-101.

2.3.8. Establish and maintain a technical order (TO) file (when required) according to TO 00-5-1, *Air Force Technical Order System*.

2.3.9. Review/certify all locally developed training programs and courses/material annually for accuracy, currency, and applicability.

2.3.10. Establish procedures with quality assurance (QA)/quality control (QC) to review QA/QC summaries for training deficiencies or trends.

2.3.11. Assist supervisors/trainers with preparing and administering training plans.

2.3.12. Develop and maintain a current listing of CSAM/CAM training courses that describes course number, course duration, a brief course synopsis, course prerequisites and who the target audience is.

2.3.13. Ensure tests are controlled, secured, reviewed and inventoried at least annually. Restrict access to test materials to only personnel designated in writing.

2.3.14. Use the MIS training subsystem as the primary system to manage and document training for assigned personnel. The goal is to use the MIS to the fullest extent possible so training needs can be determined, validated, scheduled, and documented as required.

2.3.14.1. Manage MIS training subsystem operation and utilization to include the management and production of products, policy, and procedures. Do not duplicate data loaded into MIS in other automated systems or manual forms, except to document initial certifications in the individual's training record for recurring tasks tracked in the MIS.

2.3.14.2. Use the MIS/IMDS master course table (MCT) (NA for G081 using units) to schedule, track, and administer maintenance training. **Note:** The MCT is used to document recurring training, special certifications, and inspector authorizations, AETC-directed high-interest tasks, and frequently scheduled training. Course codes not utilized within 6 months of establishment will be deleted from the MCT. Initial training will not be loaded as an MCT course code if there is a recurring training requirement unless specifically directed by instructions or standards. Each MIS unit identification (ID) is allowed 20 local course codes. These local codes are used for unit- and base-specific requirements or to track locally directed high-interest tasks and will be approved by MT. Additionally, specific lists and usage instructions can be found in the applicable MIS and MIS user manuals. MT submits all requested MCT additions, changes, or deletions to HQ AETC/A4MMR. If approved, HQ AETC/A4MMR submits to the MCT manager at Maxwell-Gunter AFB AL.

2.3.14.3. Produce the following training management products to manage training programs: **(T-2)**.

2.3.14.3.1. Training forecast (quarterly). Used to forecast and schedule training requirements.

2.3.14.3.2. Training course code listing (semiannually). Identifies all MIS course codes, narratives, frequency, duration, etc.

- 2.3.14.3.3. Special certification roster (SCR) (semiannually). Use to control and monitor certification and inspection programs. Run and distribute this product to affected work centers for validation, additions, deletions etc., at least semiannually.
 - 2.3.14.3.4. Course status report (CSR) (as required). Identifies specific course information.
 - 2.3.14.3.5. Maintenance personnel listing (as required). Used to identify employee numbers, work centers, supervisors, squadrons, organization IDs, etc.
 - 2.3.14.3.6. Consolidated training report (as required). Identifies class rosters, class schedules, etc.
 - 2.3.14.3.7. Uncompleted event list (as required). Lists all training events that are not completed during the period of report.
 - 2.3.14.3.8. Ensure work center training requirements identified in the MIS are reviewed and validated at least semi-annually.
- 2.3.15. Ensure work center training requirements are identified and entered in the MIS (as applicable).
- 2.3.16. Establish, load, change, or delete local MIS course codes, and review/validate them annually, .
- 2.3.17. Establish procedures to ensure training completion, task qualifications and certifications are properly documented before they are entered into the MIS. As a minimum, MT personnel will ensure only authorized personnel sign source documents manually or electronically prior to updating the MIS.
- 2.3.17.1. AF Form 2426, *Training Request and Completion*, may be used to request or record training actions and must be signed (manually or via E-mail) by the supervisor or designated representative to be valid.
 - 2.3.17.2. AETC Form 666, *Change to Inspector/Special Certification Listing*, will be used to initially add personnel to the SCR and to delete personnel from the SCR when no longer required. AF Form 2426 may be used for recurring updates, to include appropriate coordination.
- 2.3.18. Authorize work center supervisors to update MIS for work center-conducted training. Do not authorize work center supervisors to update any training administered, controlled, or scheduled by MT.
- 2.3.19. Establish, change, update, close, or delete all MT scheduled classes in MIS.
- 2.3.20. Establish manual backup procedures in case of extensive MIS down time.
- 2.3.21. Assist supervisors identifying and evaluating maintenance personnel for instructor duty and recommend approval/disapproval to the PM/DOM to ensure only highly qualified individuals are identified/assigned (full-time) or attached (part-time) maintenance instructors (MI). When trained personnel requirements do not warrant full-time instructors, use attached instructors to teach specialized/unique courses. Part-time instructors are assigned to their respective sections and conduct training using approved lesson plans.
- 2.3.22. Ensure instructors receive a class roster before class start date.

2.3.23. Ensure instructor and equipment availability prior to scheduled training.

2.3.24. Ensure necessary supplies, tools, equipment, classrooms, and personnel are available for scheduled MT classes.

2.3.25. Maintain these documents according to the RDS:

2.3.25.1. Class rosters.

2.3.25.2. Course code creation or deletion documentation.

2.3.25.3. Training documentation that includes forecasts, training schedules, etc.

2.3.25.4. Maintenance instructor appointment memorandums.

2.3.25.5. Messages or memorandums, requests for TDY instructor assistance, special or contractor external formal training requests, etc.

2.4. MI. (Note: Includes attached instructors, if applicable). MIs will:

2.4.1. Develop, conduct, validate, maintain, and administer local courses for aircraft maintenance, using the instructional system development process. They will serve as subject matter experts for course and test development, including revisions.

2.4.2. Maintain high levels of skill, knowledge, and experience on the specific systems they are tasked to instruct/support.

Chapter 3

CSAM TRAINING

3.1. Training Program

3.1.1. The DOM shall implement a training program containing written procedures to ensure employees are fully trained, task proficient, and task certified prior to being declared position qualified for each aircraft and/or equipment servicing, towing, and maintenance duty position category. **(T-2)**. Supervisors shall ensure establishment of qualification standards for each duty position in each work center. **(T-2)**.

3.1.2. Individuals selected for duty positions for which they are not fully qualified, shall have their prior experience and qualification records reviewed by the supervisor and the results annotated in the individual's training records **(T-2)**. As a minimum, each individual shall receive a structured mission-design series (MDS) specific on-the-job training (OJT) program that includes a follow-on position task evaluation or certification process. **(T-2)**. OJT shall be tailored to the duty position being filled, i.e., aircraft mechanic, fuels specialist, etc.

3.1.3. Units shall comply with and utilize existing task qualification and training standards contained in Air Force TOs, instructions, publications, etc., and commercial publications and manuals (as applicable). In the event a task standard does not exist, the organization shall develop one for each task that meets the intent/objective. **(T-2)**.

3.1.4. MT will develop a comprehensive local maintenance OI describing policy/procedures for the conduct of aircraft maintenance training/qualification/certification programs for assigned employees. **(T-2)**. The OI shall include, as a minimum: **(T-2)**.

3.1.4.1. Minimum requirements set forth elsewhere in this instruction.

3.1.4.2. Guidance for the development of work center training plans to include, as a minimum, specific target milestones, frequencies, and/or intervals, as to when any training, qualification, or certification will occur.

3.1.4.3. Specific methods and procedures as to how training, task qualification or certification will be accomplished and by whom.

3.1.4.4. Personnel training and qualification levels or standards commensurate with specific aircraft and associated equipment maintenance tasks.

3.1.5. Additionally, MT shall: **(T-2)**.

3.1.5.1. Develop a special certification program according to AFI 21-101 and this instruction.

3.1.5.2. Implement and manage an engine run academic, evaluation, and certification program for personnel according to technical data and AFI 21-101.

3.1.5.3. If applicable to assigned MDS, implement and manage a flexible bore scope inspection training and certification program and engine blade blending training and certification program according to AFI 21-101.

3.1.6. Supervisors shall: **(T-2)**.

3.1.6.1. Ensure environmental and safety training is provided and documented in individual training records and/or the MIS.

3.1.6.2. Ensure corrosion control training is provided according to AETCI 21-106, *Corrosion Control*, and documented in the training records and/or MIS.

3.1.6.3. Maintain individual training plans in the training business area (TBA). TBA records shall contain all tasks on which the individual is qualified to perform maintenance/inspections, initials of the individual who provided the training, initials of the employee, and the date training was conducted and/or completed. At a minimum, a primary and alternate will be trained in all tasks to prevent gaps in capability to support mission. Ancillary, recurring training, and special certifications shall be documented in IMDS/G081/ADLS, as applicable.

Chapter 4

AUTOMATED TRAINING RECORDS

4.1. TBA

4.1.1. Description. TBA is an Air Force portal web-based application that fully automates Air Force training documentation for all logistics and communications/information management communities. TBA provides users with global, real-time visibility into the technical qualifications, certifications, and training status of personnel. TBA replaces traditional paper-based training records as the standard tool to track and manage job position duty-based training. TBA is not used to manage or document ancillary or recurring training currently contained in IMDS and the ADLS.

4.1.2. AETC Applicability. TBA is used by aircraft and munitions maintenance personnel (specific Air Force specialties or civilian equivalents—duty Air Force specialty codes (AFSC) 2AXXX, 2PXXX, 2RXXX. and 2WXXX). The use of TBA by AETC CSAM units is mandatory for aircraft maintenance employees in duty positions equivalent to the identified AFSCs who perform aircraft, component, or equipment maintenance tasks or who operate industrial machinery. CSAM supervisors and support personnel who do not perform maintenance tasks do not require training records. **Note:** T-1, T-6 and T-38 Career Field Education and Training Plans (CFETP's) are not available therefore, command/work center job qualification standards must be used in lieu of traditional CFETPs. CAM units will use TBA if directed by their PWS and will follow the guidance in this instruction. CAM units not directed to use TBA by PWS may use TBA for employees (as applicable) if desired and approved by their PM/DOM, administrative contracting officer, and HQ AETC/A4MMR. If a CAM unit elects to use TBA in any fashion, the PM/DOM will mandate use for all applicable maintenance employees in the work force and follow the guidance in this instruction.

4.2. TBA Responsibilities:

4.2.1. HQ AETC/A4MMR will:

4.2.1.1. Oversee and monitor TBA use in the command's aircraft maintenance units.

4.2.1.2. Serve as command focal point to receive and respond to higher headquarters taskings.

4.2.2. MT will:

4.2.2.1. Serve as unit focal point to receive and respond to MAJCOM taskings.

4.2.2.2. Receive TBA roles (permissions) as determined necessary by AETC functional managers.

4.2.2.3. Facilitate implementation and use efforts at the work center level.

4.2.2.4. Assign TBA roles and permissions to system users.

4.2.2.5. Ensure unit personnel are entered and transferred from TBA in a timely manner.

4.2.2.6. Continually engage and monitor TBA utilization and maintenance processes to ensure system and training activities support the needs of the unit.

- 4.2.2.7. Provide training and assistance to unit TBA users.
 - 4.2.2.8. Manage and control TBA work center database structure.
 - 4.2.2.9. Ensure unit personnel information is entered into TBA.
 - 4.2.2.10. Ensure training records for newly assigned personnel are initiated.
 - 4.2.2.11. Review training visibility ledger and associated analysis reports and initiate actions to overcome unfavorable trends or task coverage deficiencies.
 - 4.2.2.12. Ensure losing organizations update TBA to project individuals as losses.
 - 4.2.2.13. Ensure they are loaded into the organization's TBA admin work center.
- 4.2.3. Supervisors will: **(T-2)**.
- 4.2.3.1. Ensure training is provided and documented in TBA for all personnel in any training status.
 - 4.2.3.2. Coordinate training requirements and TBA issues with unit POCs.
 - 4.2.3.3. Ensure development and accuracy of work center master training plan and individual training plans for all applicable personnel.
 - 4.2.3.4. Submit system requirements and shortfalls to unit MT POC.
 - 4.2.3.5. Document completion of training on required personnel and ensure current and accurate training status.
 - 4.2.3.6. Electronically sign system generated suspenses and journal entries for assigned employees, to include documentation of initial evaluations.
 - 4.2.3.7. Decertify and re-certify trainees as required.
- 4.2.4. Employees and trainees will:
- 4.2.4.1. Sign off completed training in TBA.
 - 4.2.4.2. Electronically sign individual system generated suspenses and journal entries, to include documentation of initial evaluation.

4.3. Training. TBA software is of an intuitive nature, so extensive formal user training is not necessary. Available training resources at the TBA SharePoint@ <https://cs3.eis.af.mil/sites/OO-LG-ES-04/default.aspx> include a standardized lesson plan for use Air Force-wide, student instructional materials, system users guide, task-level instructional videos, and online help. Additionally, there is a user practice environment (UPE) that replicates the production software for hands-on training use that can be found in ADLS.

4.4. Role Assignments. Actions in TBA are accomplished through various user roles, to include trainee, trainer, supervisor, etc. Various .power roles are assigned to selected individuals in each organization to manage the system. Refer to the TBA users guide for additional information about roles and their capabilities. HQ AETC/A4MMR will periodically provide field units with a 754 ELSG-developed role report via the HQ AETC/A4MM SharePoint@ <https://eis.aetc.af.mil/hq/A47/A4M/MaintenanceTraining/default.aspx>. MT will use this report to monitor and manage role assignments. Power role assignments must remain limited to only those personnel who require these special roles and must be limited. **(T-2). Exceptions:** to

the following limitations will include rationale, must be approved in writing by MT, and maintained in the file. (T-2). [Table 4.1](#) provides additional guidance on roles.

Table 4.1. Roles, Purposes and Limitations.

ITEM	A	B	C
	Role	Purpose	Limitation
1	Analyst	Used to manage work centers	One primary and one alternate in the MT
2	Commander	Organization-level managerial oversight	Limited to senior supervision
3	Flight Chief	Branch-level managerial oversight	Limited to branch-level or equivalent supervision
4	Personnel Manager	Add, change, move personnel	MT assigned personnel, to include training managers outside the MT who work in the organization
5	Role Manager	Authorizes role assignments	MT assigned personnel, to include training managers outside the MT who work in the organization
6	Work Center Supervisor	Self-explanatory	One primary and one alternate in each work center
7	Training Manager	Training management and QA/QC personnel	MT assigned personnel, to include training managers outside the MT who work in the organization; also includes QA/QC personnel if locally desired
8	Trainee	Each employee	No limitation
9	Trainer	Personnel who conduct training	Limited to only those individuals who conduct and document training
10	Supervisor	Personnel who directly supervise employees	Limited to only those individuals who directly supervise employees

4.5. Task Type Definitions.

4.5.1. Active tasks in TBA are those tasks that are required by a supervisor of a subordinate employee as part of that employee's duty position. Active tasks have been trained, certified, and signed off in TBA with dates and supervisor, employee, and trainee initials and are expected to be performed by an individual.

4.5.2. Archived tasks in TBA are considered inactive, and individuals are not qualified or authorized to perform those listed tasks when in archive status. Archived tasks are those tasks an individual was formerly qualified to perform, but is no longer signed off and may not perform until a qualified supervisor or trainer either trains the individual or ascertains that the individual is qualified to perform the task, and then the task must be signed off and placed into active status. (T-2).

4.6. Problem Resolution. Users follow their TBA chain of command to resolve problems and receive assistance. Users contact their MT for assistance, and MT elevate problems as required. MT refer software-related problems to the field assistance service team, DSN 596-5771, option 1, then 4 and 7, or by E-mail at FAS.team4@us.af.mil. MT contacts the HQ AETC/A4MMR for assistance with policy and procedure matters.

4.7. Records Impoundment Procedures. In the event of an incident or accident, the DOM/PM will determine if TBA training records require impoundment. When directed the training manager will immediately print the training records of all personnel under investigation. This action will provide a "frozen in time" picture of the training records. If DOM/PM deems it necessary MT will enter a dash "-" in front of the portal IDs of the individuals who are associated with the accident/incident to prevent them from logging into TBA. MT will notify the DOM/PM when the procedures above are completed and will reinstate TBA access for affected individuals when directed.

Chapter 5

FORMAL TRAINING

5.1. AETC Course Quota and AETC TDY Instructor Assistance Procedures.

5.1.1. As a general rule, CAM units do not routinely receive AETC formal, TD, or TDY instructor assistance, unless specified in the PWS or they request it thru the administrative contracting officer (ACO). In the event these resources are required, units will follow Education and Training Announcements (ETCA) procedures and the following guidance:

5.1.1.1. Fully justify requests; describe why the CSAM/CAM MT does not have the capability to provide required training; describe the mission impact if training is not provided; include a signed statement by the PM/DOM that unit funds are available to defray student or instructor TDY costs and course tuition (if applicable).

5.1.1.2. Additionally, requests must include the course number, title, and primary and alternate dates of desired training (**T-2**).

5.1.2. CSAMs will:

5.1.2.1. Submit requests for resident course quotas to the local civilian personnel flight or office for processing, and provide an information copy to HQ AETC/A4MMR.

5.1.2.2. Submit requests for AETC TDY instructor assistance to HQ AETC/A4MMR, and provide the local civilian personnel flight or office an information copy.

5.1.3. CAM will submit requests for resident course quotas and AETC TDY instructor assistance to the ACO for approval and certification. Once approved, the ACO will forward the request according to the ETCA, and provide an information copy to HQ AETC/A4MMR.

5.1.4. HQ AETC/A4MMR coordinates requests with appropriate agency, managers and providers, validates the training requirement, and facilitates procurement of requested training.

Chapter 6

TRAINING AND CERTIFICATION PROGRAMS

6.1. Test Facility Operator Training Program. Maintenance personnel selected for test facility operation must receive qualification training, and be evaluated/certified according to AFI 21-101. Use locally developed plans of instruction, procedures, and written tests to conduct test facility operator training.

6.2. Aerospace Ground Equipment (AGE) Operator Training Program. Operation of powered AGE, by model and type, requires initial qualification training, and a practical evaluation. Upon assignment to the unit, personnel who operate AGE (except AGE personnel) must receive initial qualification training. **(T-2).** Previous qualifications require a supervisory evaluation/certification during the initial evaluation process and if no longer qualified, scheduled for training.

6.3. 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 21-101. Use locally developed plans of instruction, procedures, and written tests to conduct run training.

6.4. Engine Bore Scope Training/Certification Program. Maintenance personnel selected to accomplish engine bore scopes must receive qualification training, and be evaluated and certified according to AFI 21-101. Use locally developed plans of instruction and procedures to conduct training.

6.5. Engine Blade Blending Training/Certification Program. Maintenance personnel selected to accomplish engine blade blending must receive qualification training, and be evaluated and certified according to AFI 21-101. Use locally developed plans of instruction and procedures to conduct training.

6.6. Munitions Inspector Training/Certification Program. Maintenance personnel selected to accomplish munitions inspections must receive qualification training, and be evaluated and certified according to AFI 21-201, *Conventional Munitions Maintenance Management*.

6.7. C-17 Integral Jacking Training Program (97 AW only):

6.7.1. General. Implementation and use of a comprehensive C-17 integral jacking training and certification program is mandatory. The maintenance qualification training program (MQTP) must include formal classroom instruction administered by MT as well as initial and annual special certification requirements. The target audience includes jacking members, jacking supervisors, and certifiers. To ensure minimum standards are met and proficiency is maintained, all units will use the Air Mobility Command (AMC)-approved C-17 integral jacking training materials produced by the 437 MXG/MXOT at Charleston AFB SC. The number of individuals certified to perform integral jacking should be sufficient to meet mission and production requirements. **(T-3).**

6.7.2. Certifiers. Supervisors shall select highly qualified personnel as certifiers. Certifiers must initially view the training video and pass the written test, and then be appointed as certifiers in writing by the DOM. **(T-2).**

6.7.3. Requirements. Personnel must have a minimum of 6 months weapon system experience, complete the entire initial training program, and be certified prior to performing duties as an integral jacking team member. **(T-2)**. Initial training will consist of completing the requirements of the AMC-approved maintenance qualification training program (MQTP) course, which includes the care and handling of equipment, applicable technical data, and hands-on performance of actual jacking procedures. Successful completion of all training and certification requirements is mandatory prior to placement on the SCR. Annual recertification will be accomplished by the technician viewing the integral jacking video, successfully completing the written test, and certification by a certifying official. **(T-2)**.

6.7.4. Grandfather Clause. Completion of the new integral jacking MQTP course is not required for personnel qualified prior to October 2005. However, those personnel must view the integral jacking video, successfully complete the written test (minimum passing score of 80 percent, corrected to 100 percent) and be task certified by a certifier. Once all requirements are completed, they will be added to the SCR by maintenance supervision following established SCR procedures.

6.7.5. Tracking. Use the following G081 course codes to track integral jacking training and certification:

6.7.5.1. Formal training, integral jacking MQTP course.

6.7.5.2. Initial or annual integral jacking member certification or recertification.

6.7.5.3. Initial or annual integral jacking supervisor certification or recertification.

6.7.5.4. Integral jacking certifying official.

6.7.5.5. Obtaining Materials. MT will obtain training materials and tests from the 437 MXG/MXOT.

6.8. Air Force Engineering and Technical Services (AFETS), Contractor Engineering and Technical Services (CETS) Program. The AFETS/CETS (also known as field service representatives) program, if applicable, is managed by the PM/DOM according to AFI 21-110, *Engineering and Technical Services Management and Control*. Utilize AFETS/CETS personnel to the fullest extent to provide training, and fully integrate them into the instructional effort for specialized systems and equipment training. MT will coordinate, schedule, and evaluate training provided by AFETS/CETS personnel to ensure training needs are met, and quality training is provided and documented. **(T-2)**.

6.9. AFTO Form 781 Series Documentation Training Program. MT will develop and administer an AFTO Form 781 series documentation training program for all on-equipment maintenance personnel that at a minimum, includes maintenance documentation procedures, types of discrepancies constituting grounding of aircraft, procedures for clearing discrepancies, and in-process inspection requirements and procedures. Training will emphasize the importance of individual maintenance actions and include automated forms and their use. Document completed training in the MIS for this one-time training requirement.

6.10. Audiovisual Training Program. Training program videotapes, computer-based training, and interactive courseware can be effective in satisfying training requirements. The Defense Visual Information Directorate distributes Department of Defense, Air Force, and major command audiovisual training program materials through online ordering at <http://www.defenseimagery.mil/>.

Chapter 7

PLAN OF INSTRUCTION

7.1. Plan of Instruction (POI) and Lesson Plan (LP) Guidance. POIs/LPs are an approved plan of instruction that provides specific definition and direction to instructors on learning objectives, equipment, instructional media material requirements, and how training will be conducted. The POI/LP converts task and knowledge statements into criterion objectives that consist of a condition, behavior, and standard statement. POIs/LPs are required for formalized training courses administered by assigned and attached MT instructors. The following POI/LP elements meet the minimum acceptable requirements (see [Attachment 2](#) for an example AETC Form 133, *Plan of Instruction/Lesson Plan Part I*): **(T-2)**. (**Note:** Use of AETC Form 133 is not required; however, substitute forms or documents used must include all areas outlined on the AETC Form 133.)

7.1.1. Title of the course or lesson.

7.1.2. Course or lesson length.

7.1.3. Methods of instruction.

7.1.4. Course or lesson objectives.

7.1.5. Methods of measurement.

7.1.6. Student to instructor ratio.

7.1.7. Instructional equipment and materials.

7.1.8. Instructional reference.

7.1.9. Instructional guidance.

7.1.10. PM/DOM, or MT supervisor approves POI/LPs by signing and dating the course documents.

7.2. Lesson Plan (LP) Personalization. LPs include an introduction, body, and conclusion for each topic, task knowledge, and subject knowledge statement ([Attachment 3, 4, 5](#)).

7.2.1. Instructors maintain approved and current POIs/LPs for each course they are qualified and required to teach.

7.2.2. LP approval is required prior to initial use and when revised. The PM/DOM/MT supervisor approves LPs and annotates the instructor's copy of the LP.

GILBERT J. MONTROYA, SES
Director of Logistics, Engineering
and Force Protection

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AETCI 21-106, *Corrosion Control*, 4 June 2014
AFPD 21-1, *Air and Space Maintenance*, 25 February 2003
AFI 21-101, *Aircraft and Equipment Maintenance Management*, 26 July 2010
AFI 21-110, *Engineering and Technical Services Management and Control*, 12 Apr 2012
AFI 21-201, *Conventional Munitions Maintenance Management*, 7 March 2012
AFI 23-101, *Air Force Material Management*, 08 August 2013
AFI 36-2201, *Air Force Training Program*, 15 September 2010
AFI 36-2650, *Maintenance Training*, 20 May 2014
AFI 90-802, *Risk Management*, 11 February 2013
AFMAN 33-363, *Management of Records*, 1 March 2008
AFPAM 90-803, *Risk Management (RM) Guidelines and Tools*, 11 February 2013
TO 00-5-1, *Air Force Technical Order System*, 01 October 2014

Adopted Forms

AF Form 2426, *Training Request and Completion*
AETC Form 666, *Change to Inspector/Special Certification Listing*
AETC Form 1236, *Request for Improving/Changing AETC Maintenance Publications*
AETC Form 133, *Plan of Instruction/Lesson Plan Part I*

Abbreviations and Acronyms

ACO—Administrative contracting officer
ADLS—Advance Distributed Learning Service
AETC—Air Education and Training Command
AFETS—Air Force engineering and technical services
AFSC—Air Force specialty code
AGE—Aerospace ground equipment
AMC—Air Mobility Command
AWACT—Awaiting action
CAM—Contractor aircraft maintenance
CETS—Contract engineering technical service
CFETP—Career field education and training plan

CJQS—Command job qualification standard
CSAM—Civil service aircraft maintenance
CSR—Course status report
CRT—Consolidated training report
DOM—Director of maintenance
ETCA—Education and training course announcements
ID—Identification
IMDS—Integrated maintenance data system
LP—Lesson plan
MCT—Master course table
MDS—Mission-design series
MI—Maintenance instructor
MIS—Maintenance Information System
MOI—Maintenance operating instruction
MQTP—Maintenance qualification training program
MT—Maintenance training
OI—Operating instruction
OJT—On-the-job training
OPR—Office of primary responsibility
PM—Program manager
POC—point of contact
POI—plan of instruction
PWS—performance work statement
QA—Quality assurance
QC—Quality control
RDS—Records disposition schedule
RM—Risk management
SCR—Special certification roster
SOT—Status of training
TBA—Training business area
TD—Training detachment
TDY—Temporary duty

TO—Technical order

UPE—User practice environment

WJQS—Workcenter job qualification standard

Terms

Maintenance Instructor (MI)—An individual who is not assigned to MT, but instructs training on the MT/PM/DOM's behalf in support of the organization.

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 training due date and AWACT without a due date.

AWACT Without a Training Due Date—This AWACT means that 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 overdue if not completed by the last day of the month.

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

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

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

Maintenance Information System (MIS)—The approved, automated information system used to manage and track the training requirements for the organization. For documentation of government-required training, this includes only TBA, IMDS and G081. CAM units may use corporate or other databases as desired to document non-government required documentation (for example, corporate training requirements). CAM units may duplicate government-required training items in a corporate training database if desired at their own expense.

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

Proficient—The condition or state where a person can perform a task correctly and completely without supervision.

Qualification Training—Training designed to qualify a person in a specific duty position.

Recurring Training—Refresher training required periodically to ensure personnel are qualified.

Special Certification Roster (SCR)—Roster that identifies personnel authorized to perform critical tasks and production inspector duties.

Attachment 2

SAMPLE AETC FORM 133

A2.1. Completing the AETC Form 133. Figure A2.1 provides a sample of the information included on the AETC Form 133.

Figure A2.1. Sample AETC Form 133.

PLAN OF INSTRUCTION/LESSON PLAN PART I				
NAME OF INSTRUCTOR		COURSE TITLE		
ANDREW DANIEL		T-1 ENGINE RUN TRAINING		
BLOCK TITLE				
T-1 ENGINE RUN TRAINING				
COURSE CONTENT				TIME
INSTRUCTION:		MEASUREMENT		
Demonstration, Performance, & Practical Lessons		Oral, Practical, and Written		
1. INTRODUCTION				15 Min
2. TASK KNOWLEDGE REQUIREMENTS Given technical information and procedures, the student must take a two-part closed book examination scoring 100% on Boldface Emergency Procedures, and score a minimum of 90% on the T-1 Engine Run examination.				12 Hrs
3. TASK PERFORMANCE REQUIREMENTS				9.5 Hrs
a. Using appropriate T-1A Aircrew Training Device (ATD), the student must demonstrate proficiency by operating the ATD engines with no instructor assist, and satisfactorily perform emergency procedures without reference to technical information.				
b. Demonstrate on a T-1A aircraft all aspects of engine operation and emergency shutdown procedures, without error and no assistance, to a qualified engine run certifier, instructor pilot contractor, or AFETS/CETS representative.				
4. CONCLUSION				15 Min
TIME				TOTAL COURSE/LESSON
				22 Hrs
STUDENT/INSTRUCTOR RATIO: 1:1				
INSTRUCTIONAL EQUIPMENT/MATERIELS: T-1A aircraft, ATD training device (simulator), T-1A engine run test, communication headset, ground cord, flashlight, inspection mirror, and white cotton gloves.				
INSTRUCTIONAL TECHNICAL REFERENCE: 1T-1A-2-70JG-00-1, AFI 11-218, AFI 21-101				
INSTRUCTIONAL GUIDANCE: Throughout this POI/Lesson Plan the instructor will have instructional guidance for all objectives to be accomplished.				
SUPERVISOR APPROVAL OF LESSON PLAN				
SIGNATURE AND DATE		SIGNATURE AND DATE		
POI NUMBER	BLOCK	UNIT	DATE	PAGE NO

Attachment 3

SAMPLE FORMAT FOR LESSON PLAN—PART II, INTRODUCTION

A3.1. Lesson Plan Format—Introduction. Figure A3.1 identifies the lesson plan format (Introduction) when personalizing the instructor POI.

Figure A3.1. Lesson Plan Introduction.

LESSON PLAN INTRODUCTION	
	COURSE NUMBER
LESSON INTRODUCTION	
<p>ATTENTION: Use the attention step to alert the students that the trainer is ready to begin the lesson. Use it to gain the attention of the students.</p>	
<p>OVERVIEW: An 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.</p>	
<p>MOTIVATION: Use the motivation step to gain the students' interest in the training. This step may be combined with the attention step. The trainer should explain why it is important for the students to learn the information that is presented during the training session.</p>	
<p>TRANSITION: The transition step allows the trainer to move from the introduction to the body of the instruction. Use it to focus the students' attention on the first major teaching step.</p>	
<p>Sample Lesson Plan - Introduction (Personalization)</p>	

Attachment 4

SAMPLE FORMAT FOR LESSON PLAN BODY

A4.1. Lesson Plan Format—Body. Figure A4.1 identifies the lesson plan format (body) when personalizing the instructor POI.

Figure A4.1. Lesson Plan Body.

LESSON PLAN BODY
PRESENTATION/EXPLANATION:
Example:
Body. The body identifies the objective, teaching steps and substeps. For longer blocks or units of instruction, use interim summaries as needed.
2a. Symbols:
1. Refer to slide 1.
2. Explain that each symbol indicates varying degrees of severity of write-ups.
3. Stress importance of using the correct symbol.
Transition: Use 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?
2b. Documentation:
1. Use slide 2 and fill it in on the board while explaining procedures to students.
2. Ask questions while completing the form.
Question: What symbol is used to indicate a write-up that would ground an 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 5

SAMPLE FORMAT FOR LESSON PLAN—CONCLUSION

A5.1. Lesson Plan Format—Conclusion. Figure A5.1 identifies the lesson plan format (conclusion) when personalizing the instructor POI.

Figure A5.1. Lesson Plan Conclusion.

<p style="text-align: center;">LESSON PLAN CONCLUSION</p> <p>CONCLUSION: After the last teaching step of each objective, a summary of the information presented is performed. The conclusion contains a summary, remotivation, and closure.</p> <p>SUMMARY: The summary is used to remind the students of the objective and the major teaching steps of the lesson. This step allows the students 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. Any other items deemed appropriate by the instructor may be included. Do not introduce new material.</p> <p>REMOTIVATION: The re-motivation step allows the trainer to remind the students why it is important to remember what was taught and how the information applies to them.</p> <p>CLOSURE: The closure statement lets the student know the lesson is over.</p> <p>Note: Do not use the conclusion to introduce new information.</p> <p>Sample Lesson Plan - Conclusion (Personalization)</p>
