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DIRECTOR AIR FORCE PUBLIC
AFFAIRS AGENCY**

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**Communications and Information
MAINTENANCE MANAGEMENT**

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This instruction implements Air Force Policy Directive 33-1, *Cyberspace Support* and maintenance policy as directed in Technical Order (T.O.) 00-33A-1001, *Maintenance Management of Communications-Electronics*. This instruction applies to all units maintaining Air Force Public Affairs Agency (AFPAA) audio visual systems and equipment. This document establishes specific maintenance and engineering management policies and provides directive guidance for all AFPAA directorates as well as AFPAA units under its operational control. This instruction does not apply to the Air National Guard or Air Force Reserve. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*. Requests for waivers must be submitted to the OPR listed above for consideration and approval. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System Records Disposition Schedule.

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Chapter 1

AFPAA STAFF RESPONSIBILITIES

1.1. AFPAA 3DXXX Functional Manager.

1.1.1. Coordinates with AFPAA/DS and AFPAA/SC on all AFPAA related 3DXXX issues as required, and performs duties as follows:

1.1.1.1. Identifies subject areas within AFPAA requiring 3DXXX Air Force Job Qualification Standards (AFJQS) and Air Force Qualification Training Packages (AFQTP), and submits requests to 81 TRSS/Q-Flight, Keesler Air Force Base (AFB), through the Utilization and Training Workshops (UT&W) for consideration.

1.1.1.2. Assigns subject matter experts to support all AFPAA maintenance-training projects approved by Communications-Electronics (C-E) U&TW, and assigned to 81 TRSS/Q-Flight, Keesler AFB, for development and publication.

1.1.1.3. Attends all Air Force 3D1X2 U&TWs and other applicable U&TWs. Obtains input from all command 3D's for use at the U&TW.

1.1.1.4. Manages all AFPAA 3D1X2 special duty assignments.

1.1.1.5. Requests quotas through AFPAA/DP and selects personnel to attend formal Air Education and Training Command (AETC) and Department of Defense maintenance training courses including the Broadcast Radio and Television Systems Maintenance Course (BRTSM), Defense Information School (DINFOS).

1.2. AFPAA Information Technology Superintendent.

1.2.1. Coordinates Air Force C-E maintenance management policy.

1.2.2. Develops C-E maintenance management policy for AFPAA owned and operated units. Provides guidance as required to ensure those units establish effective maintenance management programs.

1.2.3. Performs specified duties related to determining maintenance manpower requirements, personnel assignments and use.

1.2.4. Serves, or designates a 3D1XX to serve, on the AFPAA Equipment Review Panel (ERP).

1.2.5. Serves as technical advisor to Headquarters (HQ) AFPAA.

1.2.6. Ensures effective training programs are established for all AFPAA maintenance personnel including personnel in Maintenance Support staff positions in accordance with T.O. 00-33A-1001 and in coordination with AFPAA/DS and AFPAA/SC.

1.2.7. Provides functional oversight of AFPAA maintenance support activities in accordance with (IAW) T.O. 00-33A-1001.

1.2.8. Ensures budget requests include costs for all AFPAA/SC temporary duty assignments (TDYs). Plans, manages and request funds for overall directorate maintenance training requirements.

- 1.2.9. Provides input to and monitors Program Action Directives affecting maintenance.
- 1.2.10. Performs staff visits to AFPAA subordinate units at least once per year, and courtesy visits to operating locations when directed or needed.
- 1.2.11. Advises AFPAA on quality and accuracy of all enlisted performance reports and military decorations submitted to AFPAA for 3DXXX personnel.
- 1.2.12. Advises AFPAA/LG concerning AFPAA assets.
- 1.2.13. Reviews all projects developed by AFPAA for accuracy, maintenance support, training requirements, and mission impact.
- 1.2.14. Establishes management policies and plans to support new commercial off-the-shelf (COTS) equipment and systems IAW T.O. 00-33A-1001.
- 1.2.15. Assists Self Inspections and Assessments Manager by validating maintenance inspection criteria and checklists.
- 1.2.16. Reviews, validates, and approves/disapproves AFPAA recommended improvements or requests to waive maintenance or training requirements outlined in this publication. Submits recommended improvements or requests for waiver to T.O. 00-33A-1001.
- 1.2.17. Manages AFPAA 3DXXX Maintenance Awards and ensures submissions are in compliance IAW AFI 36-2818, *The USAF Maintenance Awards Program*. Coordinates with AFPAA/DS and AFPAA/SC as required.

1.3. AFPAA Maintenance Manager and Support Staff.

- 1.3.1. Evaluates AFPAA equipment and systems when directed by the AFPAA Information Technology Superintendent.
- 1.3.2. Manages AFPAA Command and Local Maintenance Instructions.
- 1.3.3. Performs Staff Assistance Visits to provide a detailed look at management, training and equipment standards of AFPAA work center areas IAW this instruction. Provides a subject matter expert when requested by HQ AFPAA.
- 1.3.4. Helps resolve problems, provide training, facilitates exchange of information, and obtains an understanding of special requirements resulting. Assists subordinate units to correct deficiencies identified during inspections, evaluations or when requested by the subordinate unit commander.
- 1.3.5. Provides recommendations to the AFPAA ERP for additions and deletions to the Test, Measurement, and Diagnostic Equipment (TMDE) and Maintenance Support issues.
- 1.3.6. Develops AFPAA maintenance concepts and logistics support plans for COTS equipment and/or systems as outlined in T.O. 00-33A-1001.
- 1.3.7. Updates SC section on AFPAA SharePoint as required.

1.4. Maintenance Training Manager.

- 1.4.1. Manages AFPAA centralized Training Business Area (TBA) Training Management Subsystem training data and coordinates operational issues concerning all AFPAA TBA accounts with the Lackland AFB TBA database manager. Determines and fulfills common maintenance training requirements through such methods as: Command Job Qualification

Standards (CJQS), AFJQs, AFQTPs, commercial training, DINFOS, exportable training courses, and arranges for subject matter experts to provide training. Coordinates with AFPAA Chief of Maintenance, AFPAA/DS and AFPAA/SC as required on TBA training issues and requirements.

1.4.2. Assists the AFPAA Information Technology Superintendent during 3D1X2 U&TWs, and DINFOS external in-progress reviews and Training Task Selection Boards.

1.4.3. Works with AFPAA and subordinate units to develop standardized training programs IAW Maintenance Work Center Training Programs.

1.4.4. Monitors training needs and validates annual training requirements and special training requests for AFPAA 3DXXXs.

1.4.5. Serves on the AFPAA ERP and reviews procurement project's list of materials to ensure the inclusion of maintenance training from the manufacturer when new equipment is procured.

1.4.6. Provides AFPAA with cost estimates on TDYs, training, and workshops for the AFPAA Financial Plan.

1.4.7. Develops and maintains CJQS for 3DXXXs assigned to AFPAA.

1.4.8. Assists subordinate units and operating locations in correcting training deficiencies identified during evaluations or when requested.

1.4.9. Provides information concerning special training requirements resulting from a subordinate units mission or location.

1.4.10. Monitors and assists unit training managers in evaluating 3D1X2 upgrade and proficiency qualification training at all subordinate units.

1.4.11. Maintains training publications IAW Work Center Mandatory Technical References and Training Materials. This material can be downloaded from the 81st TRSS Qualification and Training Flight website. (Available at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=20946>).

Chapter 2

MAINTENANCE WORK CENTER RESPONSIBILITIES

2.1. Maintenance Non-Commissioned Officer in Charge (NCOIC) Overall Responsibilities. The maintenance NCOIC is responsible to the subordinate units commander for all maintenance and engineering issues at the unit. The maintenance NCOIC will be the ranking 3D1X2 and will:

- 2.1.1. Ensure compliance with all maintenance and engineering programs identified in this instruction, T.O. 00-33A-1001, and other directives as applicable.
- 2.1.2. Know maintenance capabilities of the work center and inform the subordinate units commander and HQ AFPAA of problems beyond their capability to resolve.
- 2.1.3. Enforce safety practices IAW T.O. 00-33A-1001 and safety directives as applicable. Follow host base administrative procedures for management of safety program to include establishment of a safety continuity folder. Ensure personnel are trained on proper handling of power tools and use of personal protective equipment.
- 2.1.4. Schedule and monitor training status within the work center and ensure all training is documented in TBA.
- 2.1.5. Ensure all maintenance actions are documented.
- 2.1.6. Ensure effective and timely equipment corrosion prevention and control actions are taken IAW T.O. 1-1-689, *Avionics Cleaning and Corrosion Prevention and Control*, available through the Enhanced Technical Information Management System (ETIMS).
- 2.1.7. Ensure all work center personnel with maintenance additional duties are aware of their responsibilities and are properly trained. Establish continuity folders for all maintenance additional duties and key positions.
- 2.1.8. Establish use of electrostatic discharge (ESD) when needed IAW T.O. 00-25-234, *General Shop Practices for the Repair, Maintenance and Test of Electrical Equipment* available through ETIMS. Reference Chapter 6.
 - 2.1.8.1. If needed include applicable grounding tests in ESD program. Reference Chapter 5.
- 2.1.9. Develop instructions addressing the following:
 - 2.1.9.1. Equipment malfunction reporting procedures.
 - 2.1.9.2. Local maintenance documentation instructions (e.g., sample AFTO Form 349, *Maintenance Data Collection Record* and AFTO Form 350, *Repairable Item Tag* or equivalent).
- 2.1.10. Send monthly report to AFPAA/SC. Monthly report will include notable maintenance and engineering accomplishments, problems, personnel issues, and other items as requested by HQ AFPAA Information Technology Superintendent.
- 2.1.11. Annually review local maintenance instructions (LMIs).

2.1.12. Ensure historical records are included with equipment when transferred to a gaining unit.

2.1.13. Support Air Force and AFPAA 3DXXX maintenance awards programs IAW HQ Award Program.

2.2. Control of Maintenance.

2.2.1. Job Control Database.

2.2.1.1. Document all scheduled and unscheduled maintenance for equipment assigned to the unit.

2.2.1.2. Print out maintenance history and provide historical information with any equipment end-item permanently transferred to another unit.

2.2.2. Job Control Numbers (JCN). All maintenance jobs will be assigned a JCN. The JCN number provides a means to tie together all on and off equipment actions taken, the hours expended and the parts replaced in satisfying a maintenance requirement whether it be the correction of a discrepancy, completion of an inspection.

2.2.2.1. Work centers will maintain status of all open jobs for both scheduled and unscheduled maintenance.

2.2.2.2. The JCN serves as a unique identifier for each job. Once a JCN is assigned to a job, the same JCN is carried until the job is completed.

2.3. Scheduled Maintenance.

2.3.1. LMIs, TMDE, local and contract calibration, pre-planned and time change items.

2.3.1.1. Preventive maintenance inspections (PMIs) include LMIs. If discrepancies are found during PMIs, open a local work order and re-accomplish PMI prior to restoring equipment to service.

2.3.1.1.1. Work center supervisor will create a master PMI schedule and review it at least annually.

2.3.2. TMDE and Video Test Equipment Calibration Verification programs.

2.3.2.1. TMDE Program. Establish and maintain a TMDE program IAW guidance provided by host base Precision Measurement Equipment Lab (PMEL), Test Measurement Diagnostic Equipment program.

2.3.2.2. Contract Calibration. Before purchase of new equipment, ensure base PMEL can support calibration, or (reserve/allocate) funding for contact calibration.

2.3.2.3. Local Calibration Verification of Test Equipment. A program must be established for test equipment not calibrated by PMEL or contract. Test equipment parameters should be verified using commercially calibrated and/or PMEL calibrated items as standard references.

2.3.3. Pre-Planned and Time Change Items. Review all equipment maintenance and operations manuals to determine if pre-planned and time change items are recommended. Annotate hours usage during preventive maintenance inspections. Inspect parts at intervals

recommended for replacement, and replace parts if needed. Do not automatically replace items based only on hours usage.

2.4. Unscheduled Maintenance. Equipment malfunctions, Awaiting Parts (AWP), Equipment Inoperable for Parts (EIP) and awaiting maintenance (AWM) status, mission essential equipment and off-air conditions, contract repair and warranty repair, cannibalization/transfer of parts, equipment and system modifications, non-equipment repairable items.

2.4.1. Open a job on any report or observation of malfunctioning equipment or systems as soon as possible, even if the solution to the problem can be determined and performed immediately.

2.4.2. Use AFTO Form 350, or equivalent, to identify equipment with open jobs AWP, EIP or AWM. Remove inoperable individual equipment items from system.

2.4.3. Equipment in AWP/EIP Status. Store equipment in an area within the maintenance work center clearly identified for these items. Upon receipt of parts, install as soon as possible and return equipment to appropriate system. Equipment with minor malfunctions, such as broken knobs or burned out bulbs, may remain in the system with an AFTO Form 350, or equivalent, clearly identifying the job opened against it.

2.4.4. Equipment in AWM status. Equipment AWM will be stored in an area clearly marked for AWM. All AWM equipment will have a job opened against it and an AFTO Form 350, or equivalent attached. Assign technicians to work on equipment in AWM status as soon as possible. Request assistance from other units or HQ AFPAA when troubleshooting time becomes excessive.

2.4.5. Mission Essential Outages. Subordinate units notify the Maintenance Superintendent, via e-mail or telephone, when needing assistance with mission essential outages affecting capability to provide service. Request assistance from HQ AFPAA, if needed, to procure parts to return equipment to operational status.

2.5. Contract Repair.

2.5.1. Contract Repair. Contract repair should be kept to the absolute minimum and used only when equipment repairs are beyond the work center's capabilities. Verify equipment warranty prior to completing any maintenance action.

2.6. Cannibalization and Transfer/Turn in of Parts/Equipment.

2.6.1. Cannibalization. T.O. 00-20-2-WA-1, *Maintenance Data Documentation*, outlines the cannibalization process and documentation requirements. Most maintenance situations at the subordinate unit do not meet the requirements to be considered cannibalization. According to T.O. 00-20-2, assemblies, sub-assemblies, or parts obtained from spare C-E equipment to repair off-equipment (off-system) items are considered transfers and are not treated as cannibalization actions.

2.6.2. Transfer of Parts/Equipment. Before resorting to a transfer action, ensure the part is not currently available in spare parts kits, work order residue or shop stock. Place a demand on the supply system or use the government purchase card to purchase the item. If a spare equipment item is available, replace the failed equipment with the complete spare equipment item and order parts to repair the faulty equipment.

2.6.3. Turn-in of Parts/Equipment. Subordinate units will coordinate with AFPAA/AOX and AFPAA/LG before turning in equipment to the Defense Reutilization Marketing Office. This ensures that excess equipment can be reutilized at other subordinate units before turn-in.

2.7. Technician Availability. Maintenance NCOICs will determine if there is a need for a standby technician to respond to any priority mission outage after duty hours.

2.8. Maintenance Training.

2.8.1. Training Plan. Establish a work center training plan IAW Chapter 8 of this instruction. Use AFI 36-2201, *Air Force Training Program*, and AFJQS 3DXXX-201L *Communications-Electronics Work Center Manager's Handbook* for further guidance on developing effective training plans.

2.8.2. Document technician training using the Air Force TBA training management subsystem. Work centers will update TBA training records monthly.

2.8.3. Ensure each additional duty has a primary and alternate assigned and trained.

2.8.4. Initial Training Evaluations. Conduct training evaluations of newly assigned maintenance technicians.

2.8.5. AFJQSS and AFQTPs. There are several mandatory AFJQSS for all 3DXXX technicians for upgrade and qualification training. Equipment specific AFQTPs are required only if equipment covered is a responsibility of the work center. This material can be downloaded from the 81st TRSS Qualification and Training Flight website. (available at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=20946>).

2.8.6. Training Records are maintained electronically in TBA.

2.8.7. Special Experience Identifier (SEI) 336, Tele-Facility Experience. All SEI requirements are covered in AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*. Currently, the award of SEI 336 requires completion of Broadcast Radio and Television Systems Maintenance Course, DINFOS-BRTSM, 12 months experience, and supervisor's recommendation. It is not always possible to fill the positions with technicians having this SEI.

2.8.8. Broadcast Radio and Television Systems Maintenance Course, DINFOS-BRTSM. All AFPAA maintenance technicians who do not have a 336 SEI will request class attendance through AFPAA/SC for scheduling purposes. TDY costs are paid by AETC based on quotas allotted to AFPAA each fiscal year.

2.9. Technical Publications.

2.9.1. Commercial Manuals. Maintain an organized library with an index of all current commercial manuals. A maintenance manual should be on hand for each model of broadcast, support, and test equipment in the facility.

2.9.2. Technical Orders/Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Standards. T.O.s must be maintained in accordance with Air Force procedures. The minimum T.O.s and AFOSH Standards required are listed in Attachment 5. Other T.O.s and AFOSH standards used infrequently or required only in AFJQSS and AFQTPs for task training may be borrowed from other units on base. Some T.O.s are available in electronic format via the Internet. (See Attachment 5)

2.10. LMIs. LMIs provide a means to issue inspection and servicing requirements and operational performance checks related to standard broadcast systems/equipment.

2.10.1. LMIs. Develop and perform LMIs for all non-standard systems IAW Attachment 3.

2.11. Quality Assurance (QA).

2.11.1. Establish a unit QA program IAW T.O. 00-33A-1001.

2.11.1.1. Assign a primary and alternate work center Quality Assurance Representative (QAR).

2.11.1.2. Ensure QARs comply with related duties in T.O. 00-33A-1001 to include personnel and equipment evaluations, Technical Order Distribution Office , Corrosion Control Lead, ESD Monitor, Statement of Work reviewer, Local Work Card Validator.

2.11.1.2.1. Individual Personnel Evaluation. This evaluation is completed on all 3DXXX enlisted personnel (excluding 3D0X1s) within one year of initial assignment to an organization and upon return to the production work center after an absence of one year or longer. This does not apply to Master Sergeant – Chief Master Sergeant unless they maintain training records due to certification requirements, are regularly performing maintenance, or maintain records for upgrade training due to cross-training. The QAR evaluator will evaluate a minimum of 15 tasks of which at least two-thirds are performance based and the remaining third are common knowledge core tasks as identified in the CFETP or TBA on the Individual Training Plan.

2.11.1.3. QARs must complete AFJQS 3DXXX-201G, Quality Assurance, within 90 days of appointment.

Chapter 3

CORROSION PREVENTION AND CONTROL PROGRAM (CPCP)

3.1. Corrosion Control Program. This section gives procedures to implement a viable corrosion prevention and control program IAW T.O.'s 1-1-700, *Corrosion Prevention and Control*, and 31Z-10-37, *Corrosion Prevention and Protection*. This program will be accomplished at the work center level. Corrosion Prevention and Control training is a one-time requirement. AFJQS 3D1XX-201C must be loaded to individuals training records for documentation of completed training.

3.2. Work Center's Responsibilities:

- 3.2.1. Appoint in writing a work center CPCP monitor.
- 3.2.2. Make sure corrosion control PMIs are scheduled and performed for all assigned equipment IAW T.O.'s 1-1-700, 31Z-10-37, and 00-33A-1001, Chapter 6.
- 3.2.3. Develop local work cards for corrosion control procedures if none exist.
- 3.2.4. Ensure training plans reference the Qualification Training Package completion.
- 3.2.5. Document major corrosion problems in job control log and historical records.

Chapter 4

GROUNDING

4.1. Grounding. This section provides guidance and defines responsibility to ensure our systems are properly grounded IAW AFI 32-1065, *Grounding Systems* and T.O. 31-10-24, *Communication Systems Grounding, Bonding, and Shielding*. All communications equipment must be properly grounded in order to prevent noise and operate safely.

4.2. Work Centers Responsibilities:

4.2.1. Ensure all system grounds are tested every 5 years IAW AFI 32-1065, Table 1.4. This can be tracked by loading it to the work center PMI schedule.

4.2.2. Annotate Base Civil Engineer ground test results on equipment historical records IAW T.O. 00-33A-1001, paragraph 7.4.6.

4.2.3. Ensure grounding is evaluated during Equipment Evaluations IAW T.O. 00-33A-1001, Paragraph 2.5.4.

4.2.4. If applicable, physically inspect all ground connections and cables annually on in-house electronic equipment grounds IAW AFI 32-1065, Table 1.10.

4.2.4.1. Ensure all grounds meet the requirements given in applicable T.O.s.

4.2.4.2. Track ground checks on in-house equipment on the work center PMI schedule.

Chapter 5

ELECTROSTATIC DISCHARGE PROGRAM

5.1. ESD Program. This section provides guidelines to maintaining an effective ESD program when component level or ESD sensitive maintenance is performed. T.O. 00-25-234, Section 7 provides specific information on the handling, transport, and storage of ESD sensitive items. Any questions concerning any area of this program should be directed towards the AFPAA Maintenance Support section.

5.2. Maintenance Support Responsibilities:

5.2.1. Assist work centers with any ESD problems beyond their ability to resolve.

5.3. Work Center Supervisor Responsibilities:

5.3.1. Appoint an ESD monitor.

5.3.2. Ensure completion of ESD survey and certifications when deemed necessary.

5.3.2.1. If any modifications to the ESD control items are made, the work center supervisor will request another survey and a re-certification will be completed.

5.4. ESD Monitor Responsibilities:

5.4.1. Administer and document initial/annual ESD Awareness and Prevention Training IAW T.O. 00-25-234, Section 7-6-g.

5.4.2. Perform an ESD Survey IAW T.O. 00-25-234, Section 7-7.

5.4.3. Perform initial/annual ESD Certifications.

5.4.3.1. Ensure work center has complied with everything outlined in the ESD Survey prior to performing ESD certification on the work center.

5.4.4. Perform initial PMI on all ESD testing devices.

5.4.5. Ensure all PMIs on ESD control items (e.g. work stations) are being performed and documented.

5.4.6. Ensure work center has all necessary approved items to perform ESD maintenance IAW T.O. 00-25-234, Section 7.

5.4.7. Quarterly, check the ESD continuity folder to ensure no pertinent information has changed and all PMIs are being documented.

Chapter 6

TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT PROGRAM

6.1. Test Measurement and Diagnostic Equipment Monitor. The TMDE monitor will:

6.2. Be familiar with and adhere to TMDE management directives (T. O.s 00-20-14-WA-1, *Air Force Metrology and Calibration Program*, 33-1-27-WA-1, *Logistic Support of Precision Measurement Equipment*, and 33K-1-100-1-WA-1, *Calibration Procedure for Maintenance Data Collection*).

6.3. Ensure all newly received test equipment has applicable manuals and extender cards.

6.4. Take all newly received TMDE equipment to PMEL for initial calibration or determination of user calibration requirements.

6.5. Turn in work center TMDE for calibration according to the calibration schedule and local TMDE procedures.

6.5.1. Establish suspense file of paperwork from local TMDE.

6.5.2. Maintain hand receipt for equipment turned in to PMEL.

6.6. Schedule at least one test signal generator and a VM-700A (or its equivalent) for contract calibration annually.

6.7. Perform and document scheduled user-calibration actions.

6.7.1. Ensure equipment user-cal intervals are added to the maintenance database.

6.7.2. Use PMEL or contract calibrated test equipment to perform scheduled user calibration.

6.7.3. Affix AFTO Form 108, *TMDE Certification (3 1/2 x 1 4/6)* or AFTO Form 394, *TMDE Certification (2 x 7/10)*, TMDE Certification, to user calibrated equipment. Fill out forms IAW T.O. 33K-1-100 and T.O. 00-20-14.

6.8. Provide or arrange for training of work center maintenance personnel on proper use and care of TMDE, including how to determine calibration condition and limitations.

6.9. Identify no calibration required items with AFTO Form 256, *No Calibration Required*.

6.10. Subordinate units notify AFPAA/SC when the lack of TMDE impacts completion of the work center's mission.

Chapter 7

MAINTENANCE WORK CENTER TRAINING PROGRAM

7.1. Introduction. Qualified technicians are vital to properly maintain and restore mission systems. Effective work center training programs produce qualified technicians. Effective training programs are measured by the results produced, such as system or equipment operational rates, inspection reports, work center task coverage, trainee upgrade rates, and the ability to implement policy changes and new technical procedures.

7.2. Effective Training Program. To establish and maintain effective work center training programs, work center supervisors will:

7.2.1. Perform supervisor responsibilities listed in AFI 36-2201. Read and become familiar with AFI 36-2201 and AFI 36-2101.

7.2.2. Ensure each training record is updated a minimum once a month for personnel in qualification training and once a week for personnel in upgrade training (use TBA for this function). Documentation must state improvements, de-certifications, re-certifications, and deviations from the training schedule.

7.2.3. Identify work center task training requirements. Determine all training required for 100 percent equipment coverage. Develop a work center training plan. Include the following items:

7.2.3.1. Master Task List (MTL) including all tasks required in the work center. (See paragraph 7.2.5.)

7.2.3.2. List of recurring training requirements.

7.2.3.3. Local task breakdowns and training aids.

7.2.3.4. Specific tasks for additional duties. (Use an AF Form 797, *Job Qualification Standard Continuation/Command JQS*, for each additional duty.)

7.2.3.5. Milestones for tasks and Career Development Course completion.

7.2.4. Identify supervisory tasks. This combines technical tasks needed to supervise and manage a crew, team, or work center.

7.2.5. Develop a work center MTL to include management actions and additional duties, for military personnel and ensure training guides developed by trainers meet the units training needs and ensure 100 percent task coverage. Use the current 3D1X2 Career Field Education and Training Plan (CFETP), any mandatory AFJQSs and AFQTPs, and any command or local AF Form 797s. The MTL, as a minimum, will identify all core tasks (tasks mandatory for performing assigned duties within the unit).

7.2.6. Perform initial evaluations of newly assigned individuals within 60 days of assignment. Accomplish this to determine task certification and identify qualification training requirements. Technicians certified by another work center on tasks applicable to their new duty station must demonstrate proficiency on a sampling of those tasks.

7.2.7. Develop and update a training schedule for each trainee. Determine the most convenient and effective method to document, disseminate, and monitor individual work

center training schedules. Make every effort to meet scheduled training goals when mission requirements and unforeseen situations affect schedule compliance. Integrate on-the-job training (OJT) with day-to-day work center operations.

7.2.8. Observe training sessions frequently to ensure the training is on schedule, meets the trainee's needs, and achieves work center training objectives.

7.2.9. Establish and use local task breakdowns, training aids, and specific tasks for additional duties.

7.3. Formal Training. Evaluate individuals when they complete formal training and complete the graduate assessment survey. Use the Customer Service Information Line to report formal training deficiencies. Refer to the cover page of the applicable training standard for the specific telephone number to use.

7.3.1. Ensure trainers and certifiers have attended a formal trainer/certifier course and trainers stay qualified on tasks for which they train others.

7.3.2. Ensure the validity of task qualification and certification directives by the following methods:

7.3.2.1. Ensure technicians do not perform maintenance tasks on which they are not certified unless directly supervised by a task certification technician. Inadequately trained technicians are more likely to commit errors resulting in injury or loss of mission equipment. Supervisors must ensure trainees are qualified before certification.

7.3.2.2. Ensure trainees fully understand and believe they can perform the task safely and correctly before agreeing to task certification.

7.3.2.3. Immediately decertify individuals who cannot perform a task. Work center supervisors determine if the individual requires re-certification on the task.

7.3.2.4. Ensure trainees are certified on only those tasks they are required to perform.

7.3.3. Identify formal training needs based on work center mission requirements, trainee qualifications, and lack of OJT capability.

7.3.3.1. Request unit education and training manager help to identify, coordinate, and schedule formal training.

7.3.3.2. Identify recurring training requirements (e.g., backup generator, fire extinguisher, cardio pulmonary resuscitation, Self-Aid Buddy Care, etc.).

7.3.3.3. Assess the impact of significant training difficulties on the work center's maintenance capabilities.

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Director, Air Force Public Affairs Agency

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

- AFPD 33-1, *Cyberspace Support*, 9 August 2012
- AFI 23-111, *Management of Government Property in Possession of the Air Force*, 7 January 2011
- AFI 32-1065, *Grounding Systems*, 1 October 1998
- AFI 33-322, *Records Management Program*, 4 June 2012
- AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, 14 June 2010
- AFI 36-2201, *Air Force Training Program*, 15 September 2010
- AFI 36-2818, *The USAF Maintenance Awards Program*, 27 November 2007
- AFMAN 23-110, Vol 2, *USAF Supply Manual*, 1 April 2009
- AFMAN 23-220, *Report of Survey for Air Force Property*, 1 July 1996
- AFQTP 3DXXX-232A, *Communications and Information Work Center Supervisor's Handbook*, 2 February 2010
- MIL-STD-188-124A, *Grounding, Bonding, and Shielding*, 18 December 2000
- TO 00-5-1-WA-1, *Air Force Technical Order System*, 1 May 2011
- T.O. 00-20-2-WA-1, *Maintenance Data Documentation*, 1 September 2010
- T.O. 00-20-14-WA-1, *Air Force Metrology and Calibration Program*, 30 September 2011
- T.O. 00-25-234-WA-1, *General Shop Practices for the Repair, Maintenance and Test of Electrical*, 21 July 2011
- T.O. 00-33A-1001-WA-1, *Maintenance Management of Communications-Electronics Equipment*, 9 January 2012
- T.O. 1-1-689-1-WA-1, *Avionics Cleaning and Corrosion Prevention and Control*, 1 March 2005
- T.O. 1-1-700-WA-1, *Corrosion Prevention and Control*, 14 March 2011
- T.O. 31Z-10-37-WA-1, *Corrosion Prevention and Protection*, 31 October 1983
- T.O. 31-10-24-WA-1, *Communication Systems Grounding, Bonding, and Shielding*, 15 November 2011
- TO 32-1-101-WA-1, *Use And Care of Hand Tools and Measuring Tools*, 31 July 2012
- T.O. 33-1-27-WA-1, *Logistic Support of Precision Measurement Equipment*, 30 November 1998
- T.O. 33K-1-100-1-WA-1, *Calibration Procedure for Maintenance Data Collection*, 30 November 2012

Adopted Forms

- AFTO Form 108, *TMDE Certification (3 1/2 x 1 4/6)*

AFTO Form 256, *No Calibration Required*

AFTO Form 349, *Maintenance Data Collection Record*

AFTO Form 350, *Repairable Item Tag*

AFTO Form 394, *TMDE Certification (2 x 7/10)*

AF Form 797, *Job Qualification Standard Continuation/Command JQS*

AF Form 847, *Recommendation for Change of Publication*

AF Form 3900, *Quality Control Checksheet*

Acronyms and Abbreviations

AETC—Air Education and Training Command

AFB—Air Force Base

AFCQCC—Air Force Communications Quality Control Checklist

AFJQS—Air Force Job Qualification Standards

AFOSH—Air Force Occupational and Environmental Safety, Fire Protection, and Health

AFPAA—Air Force Public Affairs Agency

AFQTP—Air Force Qualification Training Packages

AWM—Awaiting Maintenance

AWP—Awaiting Parts

BRTSM—Broadcast Radio and Television Systems Maintenance Course

C-E—Communications-Electronics

CFETP—Career Field Education and Training Plan

CJQS—Command Job Qualification Standards

COTS—Commercial Off-the-Shelf

CMI—Command Maintenance Instruction

CPCP—Corrosion Prevention and Control Program

COS—Corrected on the Spot

DINFOS—Defense Information School

EIP—Equipment Inoperable for Parts

ERP—Equipment Review Panel

ESD—Electrostatic Discharge

ETIMS—Enhanced Technical Information Management System

HQ—Headquarters

IAW—In Accordance With

JCN—Job Control Number
LMI—Local Maintenance Instruction
MS—Maintenance Support
MTL—Master Task List
NCOIC—Non-Commissioned Officer in Charge
OJT—On The Job Training
PMEL—Precision Measurement Equipment Lab
PMI—Preventive Maintenance Inspection
QA—Quality Assurance
QAR—Quality Assurance Representative
SEI—Special Experience Identifier
TBA—Training Business Area
TDY—Temporary Duty Assignment
TMDE—Test Measurement Diagnostic Equipment
TO—Technical Order
U&TW—Utilization and Training Workshop

Attachment 2

AFPAA MAINTENANCE QUALITY CONTROL CHECKSHEETS

A2.1. Introduction. AFPAA CQCCs are separate from Air Force Communications Quality Control Checksheets (AFCQCCs) and are referred to in this attachment as CQCCs. They are similar to AFCQCC and are guides used to help determine equipment condition and serviceability. Work center and staff functions can use CQCCs when performing self-inspections. AFPAA CQCCs are standardized and published on AF Form 3900, *Quality Control Checksheet* when possible. CQCCs are not directive. Units may create local CQCCs for subject areas not covered by an AFPAA CQCC. Submit proposed local CQCCs to AFPAA/SC for publication. Refer to T.O. 00-33A-100, for more information.

A2.2. General Equipment CQCCs. Minor and common pieces of equipment may not need a separate CQCC, but may be covered by general-type CQCCs as follows:

A2.2.1. Similar items of equipment (such as fuse panels, station batteries, panels, power supplies, etc...) may be included in a general CQCC. They contain those checks common to all or most of the similar equipment items. If required, subordinate units may add additional checks for an individual equipment type.

A2.2.2. Use general checksheets in conjunction with equipment specific checksheets.

A2.3. Local CQCCs. AFPAA Chief of Maintenance authorizes the use of local CQCCs with more than five critical performance checks. Subordinate units forward local CQCCs meeting this criteria to AFPAA for processing. All others may be created and retained locally. Local CQCCs are conspicuously marked or labeled as local CQCCs. Do not retain or use local CQCCs after an AFPAA CQCC is published on the same item of equipment, grouping of equipment (General Equipment CQCC), or management function.

A2.4. Functional Grouping. CQCCs are organized by series designator number for major functional and equipment categories. AFPAA CQCC category numbers differ from AFCQCC guidance somewhat to simplify management of AFPAA unique systems. AFPAA CQCC numbering is as follows:

Table A2.1. Functional Grouping

Maintenance Management	100 Series
Specialized Inspections	200 Series
Audio Equipment	300 Series
Video Equipment	400 Series
Miscellaneous Equipment	500 Series
Transmission Standards	600 Series

A2.5. AFPAA/SC Responsibilities. AFPAA/SC manages the AFPAA CQCC program for standard equipment/systems at subordinate units. AFPAA/SC will:

A2.5.1. Maintain a record copy of all published AFPAA CQCCs.

A2.5.2. Assign CQCC control numbers as appropriate, and forward new CQCCs to all subordinate units.

A2.5.3. Publish CQCCs and changes to standard CQCCs as required.

A2.5.4. Format CQCCs according to this attachment. (Updated CQCCs are treated as new publications and distributed to each subordinate unit.)

A2.5.5. Annually review appropriate CQCCs for continued need, accuracy and currency.

A2.5.6. Coordinate changes with subordinate units to evaluate and validate CQCCs before final approval.

A2.5.7. Determine AFPAA wide applicability of local CQCCs submitted by subordinate units.

A2.5.8. Return to subordinate units, proposed CQCCs not meeting the criteria above or formatted IAW paragraph A2.4. for correction, update, or local use as appropriate.

A2.5.9. Coordinate with LG on the implementation of this program.

A2.6. Proposed CQCCs from subordinate units.

A2.6.1. Subordinate units will:

A2.6.1.1. Create proposed CQCCs using an electronic word processing format IAW TO 00-33A-1001, paragraph 10.6.8.g.

A2.6.1.2. Use AFCQCC and Headquarters Air Force checklists as a template for Local CQCC creation.

A2.6.1.3. Ensure evaluation and field-testing for proposed CQCCs have been completed prior to forwarding to AFPAA/SC.

A2.6.1.4. Forward proposed CQCCs to AFPAA/SC for processing.

A2.7. Changes to CQCCs. Changes (except for minor punctuation and spelling errors) are accomplished as CQCC revisions. The complete CQCC is re-accomplished and processed in the same manner as new CQCCs. Subordinate units send recommended changes to AFPAA/SC.

Attachment 3

AFPAA COMMAND AND LOCAL MAINTENANCE INSTRUCTIONS

A3.1. Command Maintenance Instructions. Command maintenance instructions (CMIs) will be written on all major systems and fielded to all subordinate units. CMI frequency is determined by manufacturer's recommendation as well as input from the project engineer and AFPAA owned and operated units.

A3.2. AFPAA Responsibilities. When a system is installed at a subordinate unit AFPAA/SC will:

A3.2.1. Review current LMIs for applicability and development into a CMI.

A3.2.2. Task a subordinate unit to test the proposed CMI.

A3.2.3. Review and combine the recommended changes with the proposed CMI and publish the official CMIs quarterly.

A3.2.4. Post approved CMIs to AFPAA HQ Maintenance sharepoint site.

A3.2.5. Post CJQS to Task Training Table and notify all subordinate units of new task numbers.

A3.2.6. Process and publish CMI changes and maintain record copies. If an LMI is approved for a system and the system later becomes standard, AFPAA/SC will publish a CMI to replace the LMI and dispose of any LMI superseded by a CMI.

A3.3. Combat Camera Responsibilities.

A3.3.1. Subordinate units will develop a draft CJQS using AF Forms 797, *Job Qualification Standard Continuation/Command JQS*, IAW AFI 36-2247 and submit it to AFPAA/SC no later than 90 days after installation.

A3.3.2. Subordinate units will begin using the CMIs upon release.

A3.3.3. Subordinate units will send in proposed changes to AFPAA/SC as needed.

A3.4. Local Maintenance Instructions. LMIs will be written for all non-standard systems installed at subordinate units. LMIs may be used to develop CMIs when systems become standard at two or more subordinate units. Inspection requirements dictated by local conditions, such as special use or geographic location, may also be written as an LMI.

A3.4.1. LMI Development Requirements.

A3.4.1.1. Forward copy of LMI to AFPAA/SC for approval prior to use.

A3.4.1.2. Subordinate units will develop a draft local JQS utilizing AF Forms 797, IAW AFI 36-2247 for each LMI submitted for approval.

A3.5. Numbering and Indexing. AFPAA CMIs/LMIs are numbered in three series. Use the 100-series for instructions of a general nature, 200-series for special maintenance instructions and temporary modifications, and 300 through 600-series for inspection, servicing, and lubrication requirements and operational performance checks. This numbering system differs only slightly from the AFCEMI numbering system for better control and management of unique

AFPAA equipment and systems. Local LMIs will be identified by starting the last 3 numbers of the LMI with the numbers 100-199.

Table A3.1. Numbering and Indexing

Audio Systems	300 Series
Video Systems	400 Series
Miscellaneous Systems	500 Series
Transmission Systems	600 Series

Figure A3.1. Local Maintenance Instruction Example

<p>DEPARTMENT OF THE AIR FORCE CMI-300-001/LMI-300-100 AIR FORCE PUBLIC AFFAIRS AGENCY LACKLAND AIR FORCE BASE, TEXAS</p> <p>TITLE AND INTERVAL OF CMI OR LMI</p>
<p>List of Sections</p> <p><u>Section Subject</u></p> <ol style="list-style-type: none"> 1. General Information 2. Test Equipment Required 3. Materials/Tools Required 4. Cleaning/Inspection 5. Preparation/Procedures <p>1. GENERAL INFORMATION:</p> <ol style="list-style-type: none"> a. This CMI/LMI provides procedures to perform a 7/84 day operational check and inspection of the (type equipment). b. This CMI/LMI is to be used with the manufacturer's service manuals for each separate piece of equipment. c. If a malfunction is noted, inform the maintenance supervisor and open a JCN for repair. d. Comply with standard safety practices and refer to the manufacturer's service manual if any adjustment is necessary. e. Additional Information may be added to clarify procedures/parameters. (Example: 0 VU is equal to +4 dBu, etc...) <p>2. TEST EQUIPMENT REQUIRED: Complete list of all test equipment required to perform a thorough check of the system.</p> <p>3. MATERIALS/TOOLS REQUIRED: Complete list of materials/tools required to ensure a complete system cleaning/inspection is accomplished.</p> <p>4. CLEANING/INSPECTION: Procedures required to ensure the system receives a complete preventive maintenance inspection.</p> <p>5. PREPARATION/PROCEDURES: Steps required to enable a complete system check.</p> <p>Note: Return system to operational status at end of inspection.</p>

Attachment 4

CONTINUITY FOLDERS

A4.1. Introduction. A continuity folder is essentially a step-by-step guide for performing work center duties. It will be set up to allow other work center personnel to accomplish the duties in the absence of those in primary or alternate positions. As a minimum, the continuity folders identified in Table A4.1. will be established:

Table A4.1. Continuity Folders

Work Center Job Control
Work Center Safety
TMDE Monitor
Materiel Control
Technical Publications Monitor
Training Monitor
<i>Note:</i> Others may be added as needed, i.e. project manager or other maintenance additional duties.

A4.1.1. Ensure all regulations are included or referenced in the procedures. The steps should flow logically or exactly as you perform the actual duty.

A4.1.2. Include copies of the actual forms and reports in the folder with directions for entering information.

A4.1.3. Use of the Sample Table of Contents in Figure A4.1. is recommended.

Figure A4.1. Sample Table of Contents.

TABLE OF CONTENTS

Section A:

Copy of Appointment letters (Primary and Alternate).

Copy of Training Certificates.

List of Applicable regulations and where they are located.

Points of Contacts.

Section B:

Step by step procedures of duty performed, listing all requirements of the position.

Section C:

Sample Copy of Forms.

Sample Copy of Reports. (Include procedures for completing the form/report, distribution requirements, timelines, etc...)

Section D:

Additional information.

A4.2. Conclusion. Remember, these are training folders. Do not keep official documents (i.e., reports, appointment letters, etc.) in the folders, that belong in work center official files.

However, copies of reports and letters may be included in the folders and appropriately referenced in the file plan.

Attachment 5

MANDATORY TECHNICAL REFERENCES AND TRAINING MATERIALS

A5.1. Introduction. The following list outlines the publications that will be maintained or be immediately accessible to the maintenance work center either electronically or in hard copy. Most Air Force publications are available on the Air Force Electronic Publication website at <http://www.e-publishing.af.mil/>. Training products can be downloaded at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=20946>.

A5.2. Required Air Force Job Qualification Standards. The Air Force Job Qualification Standards (AFJQS) identified in Table A5.1. are available at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=20946>. All mandatory, core training requirements are preceded by a “#” sign on AF Forms 797 within each AFJQS document.

Table A5.1. Required Air Force Job Qualification Standards

AFJQS3D1XX-201C	Corrosion Prevention and Control
AFQTP3DXXX-202A	Electrostatic Discharge Handbook
AFQTP3DXXX-232A	Work Center Supervisors Handbook
AFJQS3D1XX-201P	Work Center Test Equipment Management
AFJQS3DXXX-200TBA	Training Business Area
Note: For current dates on all available AFJQSs, see AFIND 8, Numerical Index of Specialized Education/Training Publications.	

Table A5.2. Required Air Force Manuals, Instructions and AFOSH Standards

AFMAN 23-110, Volume 2	USAF Supply Manual
AFOSHSTD 91-50	Communication cables, antenna and Communication-Electronics (C-E) Systems

Table A5.3. Required Technical Orders (TO)

TO 00-5-1-WA-1	Air Force Technical Order System (available in electronic version)
TO 00-20-14-WA-1	Air Force Metrology and Calibration Program
TO 1-1-689-1-WA-1	Avionics Cleaning and Corrosion Prevention and Control
TO 31-10-24-WA-1	Installation Practices for Communications Systems Grounding, Bonding, and Shielding
TO 32-1-101-WA-1	Care and Handling of Hand Tools
TO 33-1-27-WA-1	Logistic Support of Precision Measurement Equip
TO 33A-1001-WA-1	General Communications Activities Management Procedures and Practice Requirements
TO 33K-1-100-1-WA-1	Test, Measurement, and Diagnostics Equipment