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AIR FORCE MATERIEL COMMAND

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This instruction implements Air Force Policy Directive (AFPD) 21-1, *Maintenance of Military Materiel*, and provides directive guidance for maintenance management at the Air Force Materiel

Command (AFMC) Centers organic depots as it applies to aircraft and associated aerospace equipment. Air Force Materiel Command Instruction (AFMCI) 21-100, is comprised of three volumes: **Volume 1**, *Depot Maintenance Principles*; **Volume 2**, *Depot Maintenance Production*; **Volume 3**, *Depot Maintenance Production Support*. A Volume and Chapter breakout is provided in **Attachment 2**. For policies and procedures adhered to planning and administering depot level contract maintenance programs, refer to Air Force Instruction (AFI) 63-101/20-101, *Integrated Life Cycle Management,* and AFI 63-138, *Acquisition of Services*. This publication applies to all AFMC Regular Air Force. This publication does not apply to United States Space Force, Air Force Reserve, or Air National Guard units. This publication applies to all AFMC military and civilian members and those with contractual obligation to comply with Air Force publications. However, if an AFRC unit is assigned or associated with AFMC where AFMC is the lead this guidance would be applicable to the AFRC unit. Headquarters (HQ) AFMC and Centers will develop supplements to implement the requirements of this instruction at their level and provide them to the Office of Primary Responsibility (OPR) of this instruction for review and approval before publishing. Supplements and addendums to this instruction will be written in accordance with (IAW) Department of the Air Force Manual (DAFMAN) 90-161, *Publishing Processes and Procedures* and must be provided to the OPR of this publication for review and approval prior to publication. Supplements are submitted to Air Force Materiel Command, Directorate of Logistics, Civil Engineering, Force Protection, and Nuclear Integration, Maintenance Division (AFMC/A4/10/A4M) @ **AFMC.A4M.Workflow@us.af.mil**. Center-level Supplements must identify and document all Center required deviations (applicability, variance, exception, and differences in organizational placement of responsibilities/processes) in their supplement and addendums with the abbreviation (DEV). Place the (DEV) entry after the paragraph number and directly preceding the affected text, such as (AFSC) (DEV) Use the..., or (ADDED-AFSC) (DEV) Use the...). Only current and verified technical data, as authorized by Technical Order (TO) 00-5-1, *Air Force Technical Order System*, will be used for depot maintenance. All contractor requirements in this instruction must be included in a contract/grant/agreement to be enforceable. Refer recommended changes and questions about this publication to the OPR using Department of the Air Force (DAF) Form 847, *Recommendation for Change of Publication* (or equivalent). Route DAF Forms 847 (or equivalent) from the field through the Center to the appropriate Major Command (MAJCOM) functional manager. Ensure that all records created because of processes prescribed in this publication adhere to AFI 33-322, *Records Management and Information Governance Program*, and are disposed IAW Air Force Records Disposition Schedule (RDS), which is in the Air Force Records Information Management System (AFRIMS). The waiver approval authority for requirements throughout this instruction is the publication Approving Official. Submit requests for waivers through the appropriate chain of command to the Publication OPR for consideration, using DAF Form 679, *Department of the Air Force Publication Compliance Item Waiver Request/Approval* (or equivalent).

(AFSC) Air Force Materiel Command Instruction (AFMCI) 21-100_Air Force Sustainment Center (AFSC) Supplement, is comprised of three volumes: **Volume 1**, *Depot Maintenance Principles*; **Volume 2**, *Depot Maintenance Production*; **Volume 3**, *Depot Maintenance Production Support*. This Supplement provides directive guidance for depot maintenance management. This Supplement applies to the Air Logistics Complexes (ALCs) and other units deemed appropriate. Missions within AFSC that are not organized under the standard Wing Organization concept for Aircraft Maintenance Management IAW AFI 38-101, *Manpower and*

Organization, are considered Non-Standard Organizations (NSOs). NSOs require deviations (applicability, variance, and/or differences in organizational placement of responsibilities/processes) from AFMCI 21-100 and this supplement. Deviations to provide/scope applicability for NSO logistics/maintenance in an addendum to the Center supplement is approved by AFMC/A4M, in accordance with (IAW) DAFMAN 90-161, *Publishing Processes and Procedures.* Therefore, NSOs will follow the addendum only, not the parent AFMCI nor this AFSC Supplement. The AFSC Software Directorate (AFSC/SW) is identified as an NSO and is not organized as a standard organization IAW AFI 38-101. This Supplement does not apply to the United States Space Force. Refer recommended changes and questions about this Supplement to the Supplement's OPR using the Air Force Sustainment Center (AFSC) Form 847, *Recommendation For Change Of Depot Maintenance Management (DMM)*. Route AFSC Form 847s from the field through the appropriate functional chain of command. Local instructions, supplements and addendums to this instruction may be written in accordance with (IAW) Department of the Air Force Manual (DAFMAN) 90-161, *Publishing Processes and Procedures* but must be provided to the OPR of this supplement for review and approval prior to publication. The waiver authority for this Supplement is AFSC/A3/4. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force. IAW Records Disposition Schedule (RDS) Table & Rule: T21-05 R 02.00, "*Depot Maintenance and Inspection Records*": records pertaining to the major overhaul of aircraft, missiles, propulsion, guidance, or other end-item system equipment at the ALCs will be retained for 7 years after completion of the maintenance and repair work or longer as determined by the ALC/CC. Once records exceed the retention duration, the records can either be moved to an unofficial status or be disposed.

(OC-ALC) Air Force Materiel Command Instruction (AFMCI) 21-100_Oklahoma City Air Logistics Complex (OC-ALC) Supplement, implements Air Force Policy Directive (AFPD) 21-1, *Maintenance of Military Materiel*, and is comprised of three volumes: **Volume 1**, *Depot Maintenance Principles*; **Volume 2**, *Depot Maintenance Production*; **Volume 3**, *Depot Maintenance Production Support*. This supplement implements and extends the guidance of the AFMCI 21-100 uniquely to the OC-ALC and provides directive guidance for depot maintenance management. This publication applies to AFMC military and civilian members who share any legal connection to or represent the OC-ALC or Tinker Air Force Base and those with contractual obligation to comply with Air Force publications. This publication does not apply to the United States Space Force. This publication may be supplemented at any level, but all supplements must be routed to the Office of Primary Responsibility (OPR) for coordination prior to certification and approval. Refer recommended changes and questions about this publication to the OPR using the Department of the Air Force (DAF) Form 847, *Recommendation for Change of Product*. Route DAF Form 847 through the appropriate functional chain of command. Local instructions, supplements and addendums to this instruction may be written in accordance with (IAW) Department of the Air Force Manual (DAFMAN) 90-161, *Publishing Processes and Procedures* but must be provided to the OPR of this supplement for review and approval prior to publication. The waiver authority for this supplement is the OC-ALC Quality Assurance Office (OC-ALC/QA). Only current and verified technical data, as authorized by TO 00-5-1, *Air Force Technical Order System,* shall be used for depot maintenance. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the OC-ALC or Tinker Air Force Base. Ensure that all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322,

Records Management and Information Governance Program and are disposed of IAW the Air Force Records Disposition Schedule (RDS), which is located in the Air Force Records Information Management System. IAW RDS Table & Rule: T21-05 R 02.00, "*Depot Maintenance and Inspection Records*": records pertaining to the major overhaul of aircraft, missiles, propulsion, guidance, or other end-item system equipment at the OC-ALC will be retained for seven years after completion of the maintenance and repair work or longer as determined by the OC-ALC Commander (OC-ALC/CC). Once records exceed the retention duration, the records can either be moved to an unofficial status or be disposed.

SUMMARY OF CHANGES

This instruction has been substantially revised and restructured into three volumes and must be reviewed in its entirety. Major changes include the incorporation of Guidance Memorandums, corrections, clarifications, and relevant information from other directives.

(AFSC) This supplement has been substantially revised and restructured into the three volumes of AFMCI 21-100 "Depot Maintenance Management" and must be reviewed in its entirety. The requirements and instructions for Requirement Review and Depot Determination (R2D2), Capital Investment Program (CIP), Air Force Materiel Command Depot Maintenance Capacity & Utilization Measurement, and ALC Engineering Roles and Responsibilities have been realigned and will soon publish in AFSCI 20-101 "Depot Processes and Programs Management".

(OC-ALC) This supplement has been substantially revised and restructured into the three volumes of AFMCI 21-100 and must be reviewed in its entirety. The OC-ALC has implemented updated depot maintenance management processes and procedures based on the Air Force Sustainment Center (AFSC) supplement.

Chapter 1

DEPOT MAINTENANCE MANAGEMENT

1.1. Depot Maintenance. This instruction provides command level policy, guidance, and staff coordination for the management of Air Force (AF), and applicable other service, aircraft, and aerospace equipment depot maintenance within the Air Force Sustainment Center (AFSC). AFSC provides oversight for the three Air Logistics Complexes (ALCs), the Geographically Separated Units (GSUs), and Non-Standard Organizations (NSOs) aligned under them. This instruction requires AFSC and Air Force Life Cycle Management Center (AFLCMC) to develop, implement, and maintain standardized depot maintenance processes and procedures for all activities required to perform depot maintenance for AF, and applicable other service, weapon systems and aerospace equipment at the ALCs, GSUs, and NSOs.

1.1.1. **(Added-OC-ALC)** OC-ALC will: provide Complex level policy, guidance, and staff coordination for all activities required to operate depot maintenance activities for AF weapon systems and is the OPR for this supplement.

1.1.1.1. **(Added-OC-ALC)** All waiver packages pertaining to this supplement will be fully coordinated through OC-ALC/QA. A completed DAF Form 679, *Department of the Air Force Publication Compliance Item Waiver Request/Approval*, will be required for all waiver requests.

1.2. Weapons Systems and Equipment Readiness. Weapons systems and equipment readiness is the maintenance mission. The maintenance function ensures assigned aircraft and equipment are safe, serviceable, and configured to meet mission needs. Maintenance actions include, but are not limited to, inspecting, repairing, overhauling, modifying, preserving, refurbishing, troubleshooting, testing, and analyzing condition and performance. Supervisors must emphasize safety, quality, and timeliness in the performance of maintenance. Each supervisor and technician must foster the concept of quality maintenance to ensure the integrity and skill of maintainers are not degraded. Maintenance is accomplished on a preplanned scheduled basis to the greatest extent possible. Planning provides the most effective and efficient use of people, facilities, and equipment, reduces unscheduled maintenance, and allows for progressive actions towards maintaining and returning aircraft and equipment to safe operating condition. Maintenance concepts are described in TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*, and TO 00-25-108, *Communications-Electronics Depot Support*.

1.3. Maintenance Concept. Per AFPD 21-1, organizational, intermediate, and depot maintenance capabilities for operational readiness will be maintained to ensure effective and timely response to peacetime operations, mobilizations, national defense contingencies and other emergencies.

1.3.1. Depot-level Maintenance provides the capability to maintain materiel coded for organizational, intermediate, and depot levels of maintenance.

1.3.2. Depot-level Maintenance is any action performed on materiel or software in the conduct of inspection, repair, overhaul, or the modification or rebuild of end-items, assemblies, subassemblies, and parts that requires extensive industrial facilities, specialized tools and equipment, or uniquely experienced and trained personnel that are not available in lower echelon-level maintenance activities, and is a function and, as such, is independent of any location or funding source. Depot-level maintenance and repair also includes the fabrication of parts, testing, and reclamation, as necessary; the repair, adaptive modifications or upgrades, changes events made to operational software, integration and testing; and in the case of either hardware or software modifications or upgrades, the labor associated with the application of the modification. **Note:** Guidance for the use of Additive Manufacturing to build replacement parts is prescribed in AFI 63-101/20-101.

1.4. Maintenance Discipline. It is the responsibility of all maintenance personnel to comply with all written guidance to ensure required repairs, inspections, and documentation are completed in a safe, timely, and effective manner. Supervisors are responsible for enforcing and establishing a climate that promotes maintenance discipline.

1.5. Technical Orders (TOs). AF TOs are published under the authority of the Secretary of the Air Force (SECAF). Compliance with TOs is mandatory, except as explained in TO 00-5-1.

1.6. Modification Management. A modification proposal is a recommendation to alter the form, fit, function, or interface of an item, subsystem, or system whose requirements are documented, reviewed, and approved using an AF Form 1067, *Modification Proposal*, or appropriate Joint Capabilities Integration and Development System (JCIDS) documentation as described in applicable AFI 10-series publications. Refer to AFI 63-101/20-101 for modification management procedures.

1.7. Maintenance Information System (MIS). MIS refers to automated maintenance information systems that support and enable maintenance business processes. MIS will be used to document maintenance actions and determine fleet health. All information entered will be accomplished IAW TO 00-20-2, *Maintenance Data Documentation*. MISs are clearly defined in TOs 00-20-1, 00-20-2, and 00-20-3, *Maintenance Processing of Reparable Property and the Repair Cycle Asset Control System.* Non-maintenance management information systems follow guidelines under separate AFIs.

1.8. Nuclear Weapons Related Materiel (NWRM). The accomplishment of depot maintenance on NWRM items, whether at organic or contract (commercial) sites, shall comply with AFI 20-110, *Nuclear Weapons-Related Materiel Management.*

1.9. Duty Shifts, Rest Periods and Temporary Personnel Actions. Depot maintenance personnel shall have their duty hours aligned to provide the best mission support. Civil service employee work hours are governed by the collective bargaining agreement and its local supplement and federal and state laws. Contractor employee work hours are governed by the contract, federal, and state laws. Consider union requirements and climatic conditions when determining work schedules; local work/rest schedules for extreme temperatures are recommended by the Medical Group commander.

1.10. Civilian Visitors. AFSC will not permit civilian visitors to operate any AF equipment or specialized vehicles. Civil service employees, contractor employees, and other civilian personnel who must operate AF equipment as part of their assigned duties are not considered civilian visitors.

1.11. Statutory Framework. Title 10 of the United States Code (USC) contains several sections addressing depot maintenance. When necessary, request an authoritative interpretation or explanation of the following Title 10 provisions from the appropriate functional legal office.

1.11.1. USC § 2460, *Definition of depot-level maintenance and repair*.

1.11.2. USC § 2464, *Core logistics capabilities*.

1.11.3. USC § 2466, *Limitations on the performance of depot-level maintenance of materiel.*

1.11.4. USC § 2469, *Contracts to perform workloads previously performed by depot-level activities of the Department of Defense: requirement of competition.*

1.11.5. USC § 2470, *Depot-level activities of the Department of Defense; authority to compete for maintenance and repair workloads of other Federal agencies*.

1.11.6. USC § 2472, *Prohibition on management of depot employees by end strength.*

1.11.7. USC § 2474, *Centers of Industrial and Technical Excellence: designation; public-private partnerships.*

1.11.8. USC § 2476, *Minimum capital investment for certain depots.*

1.12. Metrics and Reporting. HQ AFSC will develop and provide metrics and reports to higher headquarters as requested. The broad metrics areas include, but are not limited to, Functional Check Flight (FCF) performance, flying hour execution reporting, financial, production, quality, manpower, training, capacity, capability, and infrastructure. Each of these broad categories may contain significant numbers of sub-metrics that are useful for depot operations. Standard metrics will be directed as needed in specific data calls and guidance from higher headquarters.

1.12.1. Program Offices (POs) may provide a performance assessment report to AFSC for Depot Maintenance activities. HQ AFLCMC and HQ AFSC should collaborate on performance assessment reporting.

1.12.2. HQ AFSC will ensure the ALCs report on Mission Essential Tasks (METs) in the Defense Readiness Reporting System (DRRS) as outlined in AFI 10-201, *Force Readiness Reporting*.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. Headquarters Air Force Materiel Command, Directorate of Logistics, Civil Engineering, Force Protection, and Nuclear Integration (HQ AFMC/A4/10) will:

2.1.1. Ensure development, implementation, and sustainment of the capability necessary to satisfy depot maintenance requirements for DAF managed equipment.

2.1.2. Develop and implement a logistics requirements determination process for prioritizing requirements IAW Air Force Manual (AFMAN) 63-143, *Centralized Asset Management Procedures*.

2.1.3. Ensure development and implementation of depot maintenance (contract or organic) strategies, plans, procedures, and collect then report data to satisfy statutory requirements, including:

2.1.3.1. Core logistics capability IAW Title 10, USC § 2464.

2.1.3.2. 50/50 stipulations and data reporting IAW Title 10, USC § 2466.

2.1.3.3. Centers of Industrial and Technical Excellence (CITEs) and Public-Private Partnerships (PPPs) IAW Title 10, USC § 2474.

2.1.4. Ensure development and implementation of processes for assessing organic depot maintenance workload requirements and for making Depot Source of Repair (DSOR) recommendations for non-Core workloads and source of repair decisions IAW AFI 63-101/20-101, and AFMAN 63-122, *Depot Source of Repair Planning and Activation.*

2.1.5. Ensure development and implementation of productivity and work specification procedures to ensure performance to budget. Provide financial planning and prepare budgets for depot maintenance requirements through the Planning, Programming, Budgeting and Execution (PPBE) including the Program Objective Memorandum (POM) and the Annual Planning and Programming Guidance (APPG) processes.

2.1.6. Ensure processes are developed to determine and substantiate depot maintenance workload.

2.1.7. Ensure procedures to assess process improvement are implemented and ensure technical orders contain all required data.

2.1.8. Ensure a surge contingency plan is in place that provides:

2.1.8.1. Guidance and procedures for a responsive capability to accelerate, surge, or compress depot maintenance or modifications.

2.1.8.2. Procedures for approval or disapproval from the requesting Program Manager (PM) of AFMC projection of cost/impacts.

2.1.9. Develop and publish AF Depot Maintenance Master Plan (DMMP).

2.1.10. Ensure robust corrosion prevention program for fielded assets which will:

2.1.10.1. Collect and report corrosion related cost data as required by the AF Corrosion Control and Prevention Executive.

2.1.10.2. Develop funding forecasts to mitigate newly discovered corrosion problem areas.

2.1.10.3. Support PM/Product Support Manager (PSM)/Product Group Manager (PGM) and cognizant engineering authority in developing substitution strategies for hazardous and expanded standards chemicals (to include Cd, Cr 6+, strontium chromate, lead, etc.).

2.1.11. Ensure Serialized Item Management (SIM) techniques are implemented.

2.1.12. Ensure a process to control and document cannibalizations (CANN) is established to include written guidance on individual responsibilities and specific procedures for CANN actions.

2.1.13. Establish a Precision Measurement Equipment Laboratory (PMEL) Program, and ensure it complies with DAFMAN 21-113, *Air Force Metrology and Calibration (AFMETCAL) Management*, and TO 00-20-14, *Air Force Metrology and Calibration Program*.

2.1.14. Ensure depot activities document and report flying hours, equipment inventory, status, utilization, and equipment reliability and maintainability deficiencies/improvements.

2.1.15. Ensure a Quality Assurance (QA) Program is established. The QA Program will include a Maintenance Standardization and Evaluation Program (MSEP). The MSEP and QA Program will be established IAW Volume 3, Chapter 8 of this instruction.

2.1.16. Ensure the allocation of resources to meet all mission requirements. Ensure the maintenance organizations are not overly tasked with augmentation duties outside maintenance functional areas.

2.1.17. Ensure depot maintenance activation and business planning are accomplished. Support development of depot maintenance requirements and planning for new system acquisitions.

2.1.18. Ensure AF depot maintenance transition plans and manufacturing process procedures are implemented.

2.1.19. Ensure accurate data on Core, 50/50, and PPP is collected and maintained for data call reporting from Headquarters Air Force (HAF).

2.1.20. Ensure the DSOR decision for contract versus organic CITE support is validated for contract partnership workload that is CITE-related.

2.1.21. Ensure the development and implementation of a process through which depot maintenance activities can request and receive engineering disposition for nonconforming technical problems that are outside published authority and new/revised procedures to facilitate equipment troubleshooting and repair procedures IAW Air Force Materiel Command (AFMCMAN) 63-1202, *Engineering Technical Assistance Request (ETAR) Process.*

2.1.22. Ensure development and implementation of procedures and training for successful execution of Depot Purchased Equipment Maintenance (DPEM) IAW AFMAN 63-143.

2.1.23. Ensure development and implementation of an Aircraft and Equipment Decontamination Program IAW Volume 2, Chapter 12 of this instruction.

2.1.24. Ensure development and implementation of Foreign Object Damage (FOD) and Dropped Object Prevention (DOP) Programs IAW Volume 2, Chapter 4 of this instruction.

2.1.25. Ensure a radiation protection program IAW AFI 48-109, *Electromagnetic Field Radiation (EMFR) Occupational and Environmental Health Program*, is established when applicable.

2.1.26. Ensure a Command focal point is identified for environmental, safety, and occupational health requirements, compliance, and worker protection issues. Refer to AFPD 90-8, *Environment, Safety, and Occupational Health Management and Risk Management*, AFI 32-7001, *Environmental Management*, and AFMAN 32-7002, *Environmental Compliance and Pollution Prevention*, for additional guidance.

2.1.27. Ensure strict adherence to technical data and management procedures IAW 00-5 series TOs to include TO Library management.

2.1.28. Ensure development and implementation of a Depot Maintenance Training Program ensuring maintenance is only performed by personnel who are trained, qualified, and certified, unless under the direct supervision of a trainer or certifier, IAW Volume 1, Chapter 4 of this instruction.

2.1.29. Ensure standardization of maintenance discipline, procedures, organizational structures, compliance, and management philosophy, IAW **Volume 1, Chapter 1** of this instruction.

2.1.29.1. Ensure development and implementation of standard depot maintenance programs detailing the roles, responsibilities, and methodology for how aircraft, engines and commodities are planned, scheduled, inducted, handled, overhauled, repaired, tested, certified, and delivered back to the customer.

2.1.29.2. Ensure development and implementation of standardized processes, procedures and responsibilities for depot maintenance production, materiel management, and associated support activities.

2.1.30. Ensure a nuclear surety program is implemented (if applicable) IAW Department of Air Force Instruction (DAFI) 91-101, *Air Force Nuclear Weapons Surety Program*.

2.1.30.1. Depot activities using Nuclear Certified Equipment (NCE) in/for normal operations will be included in the NCE management program IAW AFI 63-125, *Nuclear Certification Program*.

2.1.30.2. For units possessing NCE, ensure personnel are trained in the proper use of nuclear flagwords and mishap and deficiency reporting instructions IAW AFMAN 91-221, *Weapons Safety Investigations and Reports*, and DAFI 91-204, *Safety Investigations and Reports.*

2.1.31. Ensure an impoundment program is developed IAW **Volume 1, Chapter 5** of this instruction.

2.1.32. Ensure procedures are developed to control tools, equipment, and electronic devices IAW Volume 2, Chapter 3 of this instruction.

2.1.33. Incorporate all Lead Command requirements.

2.1.34. Ensure a Cyber Assurance Program that prevents, detects, and remediates cyber incidences IAW Air Force 17 Series publications and **Volume 1, Chapter 6** of this instruction.

2.1.35. Work with HAF Functional Area Managers (FAMs) to ensure the appropriate METs are loaded into DRRS for each ALC.

2.2. Headquarters Air Force Life Cycle Management Center (HQ AFLCMC) will:

2.2.1. Create a horizontal integration team consisting of PMs, PSMs, AFSC Supply Chain Managers, Defense Logistics Agency (DLA), AFSC Maintenance Groups, field units, and contractors for all AF managed sources of repair, to design critical paths for specific repair actions.

2.2.2. Establish and communicate a process to AFSC, regarding aircraft and commodity component condition prior to induction for maintenance, as the first aspect of a critical path. This process will include:

2.2.2.1. Depot Pre-Induction Inspection (PII) activities with field units synchronized with the Home Station Check (HSC), Phase Inspections, or Isochronal Inspections.

2.2.2.2. PIIs for Commercial Derivative Aircraft (CDA) synchronized with the A and C checks as identified in the Maintenance Planning Document.

2.2.3. Create a process to ensure parts and non-parts supportability prior to maintenance work package execution, as the second aspect of a critical path. For further guidance; reference AFMAN 63-143.

2.2.4. Retain aircraft and commodity component baseline information (i.e., configuration management and structural knowledge) throughout all scheduled and unscheduled maintenance activities.

2.2.5. Ensure technical data accuracy, IAW TO 00-5-1 and AFMAN 63-143.

2.2.6. Establish and communicate a process to AFSC pertaining to information required to report Consolidated Sustainment Activity Group-Maintenance (CSAG-M) Fund 6 Depot Maintenance 6 Percent Capital Investment Plan budget exhibit data, as outlined in DoD 7000.14-R, *Financial Management Regulation,* Volume 2B, Chapter 9, *Defense Working Capital Fund Budget Justification Analysis*.

2.2.7. Establish an Aircraft Structural Integrity Program (ASIP), IAW DAFI 63-140, *Aircraft Structural Integrity Program and Air and Space Equipment Structural Management*.

2.2.8. Provide AFMC with using MAJCOM data that is needed for reporting upon request.

2.2.9. Ensure Depot Field Team (DFT) requirements are developed and implemented IAW Volume 2, Chapter 10 of this instruction.

2.2.10. Provide support to AFSC to ensure Ground Instructional Trainer Aircraft (GITA) are maintained IAW Volume 2, Chapter 11 of this instruction.

2.2.11. Designate the organizations that will document, reconcile, and report, on the schedules indicated by HQ Air Force Materiel Command, Air, Space and Cyberspace Operations, Test and Evaluations Division (AFMC/A3/6/A3F), all flying hours executed by AFLCMC, and by agencies (commercial or other) contracted by the AFLCMC. Ensure there are no conflicts with hours reported by AFSC.

2.3. Headquarters Air Force Sustainment Center (HQ AFSC) will:

2.3.1. Ensure sustainment and modernization of depot facilities, processes, and equipment using new technologies, production enhancements, and development of consolidated support facilities.

2.3.1.1. Review existing depot capabilities for capital equipment investments and associated facility requirements to modernize, replace, or update to ensure depots are adequately equipped to support existing depot maintenance workloads.

2.3.1.2. In collaboration with PMs/PSMs/PGMs, ensure capital investment actions are accomplished to provide for depot maintenance activities.

2.3.1.3. Provide facilities and support (e.g., standard tools/equipment and access to Command approved MISs) for organizations performing depot maintenance or providing technical assistance at operating locations.

2.3.2. Ensure an orientation program is developed and conducted for all personnel newly assigned to all unit maintenance activities.

2.3.3. Establish procedures and controls for local manufacture.

2.3.4. Establish procedures and responsibilities for obtaining, documenting, and monitoring the Oil Analysis Program (OAP) IAW Volume 2, Chapter 9 of this instruction.

2.3.5. Appoint a Stock Record Account Number (SRAN) engine manager (if a host unit), or a Unit Engine Manager (UEM) (if a tenant unit), to accomplish duties outlined in TO 00-25-254-1, *Comprehensive Engine Management System Engine Configuration, Status, and TCTO Reporting Procedures.*

2.3.6. Develop, implement, and maintain a standardized Quality Assurance Program IAW Volume 3, Chapter 8 of this instruction.

2.3.7. Ensure depot maintenance requirements are considered by airfield management.

2.3.8. Establish a weight and balance (W&B) program IAW Volume 2, Chapter 12 of this instruction.

2.3.9. Establish a Functional Check Flight (FCF) Program IAW Volume 3, Chapter 7 of this instruction.

2.3.10. Establish a waste management program IAW AFMAN 32-7002.

2.3.11. Establish and enforce a flight Precious Metals Recovery Program, as applicable, IAW DAFI 23-101, *Materiel Management Policy*, and TO 00-25-113, *Conservation and Segregation of Critical Alloy and Precious Metal Bearing Parts and Scrap.*

2.3.12. Ensure personnel are provided the appropriate Personal Protective Equipment (PPE) IAW DAFMAN 91-203, *Air Force Occupational Safety, Fire and Health Standards.*

2.3.13. Ensure configuration control is maintained IAW TO 00-20-2.

2.3.14. Develop an Aircrew Egress Systems Maintenance Program IAW Volume 2, Chapter 7 of this instruction.

2.3.15. Develop a Housekeeping Program IAW **Volume 1, Chapter 3** of this instruction.

2.3.16. Develop procedures for depot maintenance support to grounded aircraft, engines, or major end items IAW Volume 2, Chapter 12 of this instruction.

2.3.17. Develop a program for management of land mobile radios and personal electronic and communication devices IAW **Volume 1, Chapter 6** of this instruction.

2.3.18. Ensure effective management of the Center's maintenance training program IAW DAFMAN 36-2689, *Training Program*, AFI 36-2650_AFMCSUP, *Maintenance Training*, and Volume 1, **Chapter 4** of this instruction. Provide aircraft, personnel, and equipment to support the maintenance training program.

2.3.19. Ensure continuous process improvement activities are conducted in all depot maintenance units; ensure improvement results are appropriately implemented and measured.

2.3.20. Ensure ALCs support the Air Base Wing (ABW) Crash Damaged or Disabled Aircraft Recovery (CDDAR) program when requested. For specific CDDAR requirements, reference TO 00-80C-1, *Crashed, Damaged, Disabled Aircraft Recovery Manual* and local operating instructions (OIs).

2.3.21. Ensure the accomplishment of depot maintenance on NWRM items complies with AFI 20-110 and AFI 20-110_AFMCSUP, *Nuclear Weapons-Related Materiel Management*.

2.3.22. Develop, implement, and maintain standardized processes and procedures to address Contract Field Teams (CFT) requirements.

2.3.23. Establish an execution process for the design teams' (reference **paragraph 2.2.1** of this chapter) prioritized sequence to ensure a mechanic-centric focus and sequenced daily standard work for all repair activities.

2.3.24. Establish a critical chain process for the scheduled tasks per day to set and accomplish high-touch labor to schedule goals.

2.3.25. Maintain maintenance records of current configuration in Reliability and Maintainability Information Systems (REMIS) IAW TO 00-20-2 and maintain up to date technical data throughout all scheduled and unscheduled maintenance activities.

2.3.26. Ensure depot activities document and report: flying hours; equipment inventory, status, and utilization; and equipment reliability and maintainability deficiencies and/or improvements. (Reference: DAFI 21-103, *Equipment Inventory, Status, and Utilization Reporting* and TO 00-20-2.)

2.3.27. Establish a process to integrate tool and equipment management with aircraft, missile, and commodity component supportability actions on non-parts supportability elements IAW TO 00-25-4, *Depot Maintenance of Aerospace Vehicles and Training Equipment*.

2.3.28. Develop, implement, and maintain Missile Maintenance policy and implementation procedures.

2.3.29. Provide to AFMC monthly, a single consolidated Defense Integrated Financial Management System (DIFMS) report.

2.3.30. Establish a process to determine, document, and communicate to HQ AFMC/A4/10 information required to report CSAG-M on Fund 6 Depot Maintenance 8 Percent Capital Investment Plan budget exhibit data as outlined in DoD 7000.14-R, Volume 2B, Chapter 9. On an annual basis, report the following:

2.3.30.1. Status, current year, and future year, of each investment program (i.e., funding category) to include Capital Investment Program (CIP), Restoration/Modernization, Productivity Enhancements, Military Construction (MILCON), and Equipment.

2.3.30.2. Contributions to composite sales rate reductions for each budget year, in terms of workload type and man-hours by workload type, as part of the annual depot maintenance sales rate build process.

2.3.30.3. Contributions, current year, and future year, to aircraft and engine planned and actual input/output production schedules (Requirements Review and Depot Determination [R2D2] and revised).

2.3.31. Develop, implement, and maintain standardized processes and procedures to execute the CIP within the Defense Working Capital Fund (DWCF) as outlined in DoD 7000.14-R, Volumes 1-15, hereafter known as the Working Capital Fund (WCF).

2.3.32. Develop, implement, and maintain standardized processes and procedures to ensure AFSC MILCON and Facility Sustainment, Restoration and Modernization (FSRM) projects are properly represented and vetted to/through the AFMC corporate process IAW DAFI 32-1020, *Planning and Programming Built Infrastructure Projects.*

2.3.33. Ensure a Center Point of Contact (POC) is identified for Environment, Safety, and Occupational Health (ESOH) requirements, compliance, and worker protection issues. For additional guidance, reference AFPD 90-8, DAFI 32-7001, AFMAN 32-7002, and DAFMAN 91-203. Additionally, ensure that information and risk impacts on system related ESOH hazards are conveyed to the appropriate AFLCMC PO.

2.3.34. Develop an annual process to implement DoD 4151.18-H, *Depot Maintenance Capacity and Utilization Measurement Handbook*. Report the following when requested:

2.3.34.1. Capacity and utilization of organic depot maintenance operations by workload type for all shops and areas performing direct labor, including DFTs, and for the previous Fiscal Year (FY), current FY, and next three projected FYs.

2.3.34.2. Unutilized or Underutilized Plant Capacity Fund 30 Budget Exhibit at the conclusion of the annual data call.

2.3.35. Establish a process to ensure personnel assigned to measure depot capacity and utilization, complete Defense Acquisition University course, LOG 0260.

2.3.36. Serve as lead organization for marking legacy depot items that meet requirements for Item Unique Identification (IUID) marking and registration in the IUID registry IAW AFMCI 20-104, *Item Unique Identification.*

2.3.37. Ensure corrosion control and prevention is implemented IAW AFMCI 21-105, *Corrosion Program and Marking of Aerospace Equipment*.

2.3.38. Provide AFMC with using MAJCOM data that is needed for reporting upon request.

2.3.39. Appoint in writing, a Center Support Equipment Manager to act as the Depot Maintenance Functional Manager (DMFM) to perform FAM duties, as they apply to depot support equipment only, IAW DAFI 10-401, *Operations Planning and Execution*, DAFI 23-101, DAFMAN 23-122, *Air Force Equipment Management Interim Guidance,* if applicable, TO 00-25-240, *Uniform Repair/Replacement Criteria for Selected USAF Support Equipment (SE),* TO 35-1-24, *Air Force Economic Repair/Replacement Criteria for Selected Warner Robins Air Logistics Complex (ALC) Managed Support Equipment (SE)*, TO 35-1-25, *Economic Repair Criteria Support Equipment*, and TO 35-1-26, *Air Force Economic Repair/Replacement Criteria for Selected WR-ALC Managed Support Equipment*, where applicable.

2.3.40. Ensure DFT requirements are developed and implemented IAW Volume 2, Chapter 10 of this instruction**.**

2.3.41. Ensure GITA are maintained IAW Volume 2, Chapter 11 of this instruction.

2.3.42. Ensure consumable parts are properly disposed of IAW DAFI 23-101, DAFI 23-101_AFMCSUP, *Materiel Management Policy*, and Volume 3, **Chapter 6** of this instruction.

2.3.43. Develop, implement, and maintain standardized Center level guidance for parts disposal ensuring ALC personnel properly identify demilitarization requirements and properly dispose of consumable parts. Parts disposal process oversight will be at AFSC center level utilizing Management Internal Control Toolset (MICT) Self-Assessment Checklist (SACs) IAW DAFI 90-302.

2.3.44. Develop, implement, and maintain a process to track facility and equipment conditions that lead to maintenance delays IAW **Volume 3, Chapter 5** of this instruction.

2.3.45. Ensure the allocation of resources to meet all mission requirements. Ensure the maintenance organizations are not overly tasked with augmentation duties outside maintenance functional areas.

2.3.46. Designate the organizations that will document, reconcile, and report, on the schedules indicated by HQ AFMC/A3F, all flying hours executed by AFSC, and by agencies (commercial or other) contracted by the AFSC. Ensure there are no conflicts with hours reported by AFLCMC.

2.3.47. Maintain program management responsibility for the Aircraft Battle Damage Repair (ABDR) program. For additional guidance, reference Air Force Sustainment Center (AFSCI) 10-202, *Aircraft Battle Damage Repair Forces*.

2.3.48. **(Added-AFSC)** AFSC will: Provide Center level policy, guidance, and staff coordination for all activities required to operate depot maintenance activities for Air Force (AF) weapon systems and is the OPR for this Volume 1, **Chapter 2** Supplement.

2.3.49. **(Added-AFSC)** Provide guidance and set policy for Depot Maintenance PAC and SSQ Programs.

2.3.50. **(Added-AFSC)** Direct and approve command-wide Depot Maintenance PAC initiatives.

2.3.51. **(Added-AFSC)** Direct policy to promote standardization of SSQs for common Mission Design Series (MDS) across the ALCs.

2.3.52. **(Added-AFSC)** Direct policy to promote standardization of PAC Programs across the ALCs.

2.3.53. **(Added-AFSC)** Provide oversight of resources for TSS-PAC.

2.3.54. **(Added-AFSC)** Ensure compliance with Depot Maintenance PAC directives and policies.

2.3.55. **(Added-AFSC)** Ensure all production personnel obtain Materiel Control for Production Personnel training, course number: CHPMAS0201800SU IAW AFMCI 21-100, AFSC Supplement, Volume 3, Chapter 6.

2.4. (Added-OC-ALC) OC-ALC Commander (OC-ALC/CC) shall:

2.4.1. **(Added-OC-ALC)** Ensure effective management of the Complex maintenance training program IAW DAFI 36-2670, *Total Force Development*, AFI 36-2650_AFMCSUP_OC-ALCSUP, *Maintenance Training*, and AFMCI 21-100V2, Chapter 6. Provide aircraft, personnel, and equipment to support the maintenance training program.

2.4.2. **(Added-OC-ALC)** Provide facilities and support (e.g., standard tools/equipment and Command-approved Management Information Systems) for organizations performing depot maintenance or providing technical assistance at operating locations.

2.4.3. **(Added-OC-ALC)** Ensure the Art of the Possible (AOP) and continuous process improvement activities are conducted in all depot maintenance organizations; ensure improvement results are appropriately implemented and measured.

2.4.3.1. **(Added-OC-ALC)** The foundation for investigating and solving problems within the Complex is the 8-Step Practical Problem-Solving Method (PPSM) found in the Air Force Sustainment Center Handbook AFSCH 60-101, *Art of the Possible Handbook.*

2.4.3.1.1. **(Added-OC-ALC)** Group CC/directors, staff office directors or deputies will consider using the AOP, 8-Step PPSM for the following events:

2.4.3.1.1.1. **(Added-OC-ALC)** All impoundments.

2.4.3.1.1.2. **(Added-OC-ALC)** Significant property damage (Class C or above).

2.4.3.1.1.3. **(Added-OC-ALC)** Quality escapes.

2.4.3.1.1.4. **(Added-OC-ALC)** Chargeable Foreign Object Damage (FOD)/Dropped Object Prevention (DOP) incidents (Class C or above).

2.4.3.2. **(Added-OC-ALC)** The team will include Subject Matter Experts (SME)s from production, QA, process engineering, and other SMEs as deemed necessary. The team will out-brief the applicable OC-ALC/CC, OC-ALC Deputy Director (OC-ALC/DD) and Group CC, Civilian Leader (CL) or Deputy Director (DD), Deputy Commander (CD) as required after step four and again after step eight.

2.4.4. **(Added-OC-ALC)** Ensure an effective Crash Damaged or Disabled Aircraft Recovery (CDDAR) capability is in place. Publish a complex/group instruction containing specific responsibilities for the Complex.

2.4.5. **(Added-OC-ALC)** Establish a self-assessment program IAW DAFI 90-302, *The Inspection System of the Department of the Air Force*, Attachment 14, The Unit Self-Assessment Program (USAP), and AFMCI 21-100V3, Chapter 8.

2.4.6. **(Added-OC-ALC)** Develop, implement, and maintain standardized processes and procedures to address Contract Field Team (CFT) requirements IAW AFMCI 21-141, *Contract Field Team (CFT) Program*.

2.4.7. **(Added-OC-ALC)** Establish configuration management and control of scheduled and unscheduled maintenance activities.

2.4.8. **(Added-OC-ALC)** Establish a process to integrate tool and equipment management with aircraft, missile, and commodity component supportability actions on non-parts supportability elements as outlined in the Logistics Requirements Determination Process (LRDP).

2.4.9. **(Added-OC-ALC)** Establish a process to determine, document, and communicate to Headquarters (HQ) Air Force Materiel Command (AFMC) information required to report Consolidated Sustainment Activity Group- Maintenance (CSAG-M) Fund 6 data as outlined in Department of Defense (DoD) 7000.14-R, Volume 2B, Chapter 9, *Defense Working Capital Fund Budget Justification Analysis*.

2.4.10. **(Added-OC-ALC)** Develop, implement, and maintain standardized processes and procedures to execute the Capital Investment Program (CIP) within the Defense Working Capital Fund (DWCF) as outlined in DoD 7000.14-R, Volumes 1-15.

2.4.11. **(Added-OC-ALC)** Develop, implement, and maintain standardized processes and procedures to ensure AFSC Military Construction (MILCON) projects are properly represented and vetted to/through the AFMC corporate process.

Chapter 3

SAFETY, HOUSEKEEPING, AND SECURITY

3.1. General Safety Guidance. Maintenance personnel are exposed to a large variety of hazardous situations, machinery, equipment, and chemicals. Supervisors must be knowledgeable of and implement the Voluntary Protection Program. They must also enforce Defense Explosive Safety Regulation (DESR) 6055.09_AFMAN 91-201, *Explosives Safety Standards*, DAFI 91-202, T*he US Air Force Mishap Prevention Program*, DAFMAN 91-203 requirements, TOs, AFIs, Command and Center-level instructions applicable to their operations and ensure personnel are educated on safety requirements applicable to the job. Examples of hazardous situations and programs covered in the applicable technical data, TOs and AFIs include, but are not limited to confined space, fall protection, chemical safety, interior spray painting, explosive safety, and respirator safety. Engineering controls will be used in lieu of Personal Protective Equipment PPE where risks and life cycle costs can be effectively reduced to more acceptable levels. If conflicting guidance exists, the weapon system specific technical data will take precedence.

3.1.1. Job Hazard Analysis (JHA). JHAs will be conducted on all work processes, where appropriate, to identify potential fire, safety, and health hazards, determine appropriate training and PPE, and include preventative measures in procedures to mitigate the hazards. Refer to DAFI 91-202 for additional guidance.

3.1.1.1. **(Added-AFSC)** Safety Overview. Safe operations and reliable operations are synonymous. The goal in system safety is to control operational risk wherever possible. The five progressive steps to risk reduction are (reference in DAFMAN 91-203):

3.1.1.1.1. **(Added-AFSC)** Eliminate the hazard.

3.1.1.1.2. **(Added-AFSC)** Reduce the risk in design.

3.1.1.1.3. **(Added-AFSC)** Provide safeguards.

3.1.1.1.4. **(Added-AFSC)** Implement administrative controls.

3.1.1.1.5. **(Added-AFSC)** Use PPE.

3.1.1.2. **(Added-AFSC)** Personal Protective Equipment (PPE). All maintenance personnel must receive indoctrination training in PPE. The basic PPE is a hard hat, hearing protection, gloves, eye protection, and hard toed safety shoes. Additional PPE may include radiation film badges, coveralls, knee pads, welding shields, breathing apparatus, and other equipment.

3.1.1.2.1. **(Added-AFSC)** Each ALC will establish procedures to store electric shock-protective rubber gloves and sleeves. Ensure that items are stored and cared for as required by ASTM F496, In-Service Care of Insulating Gloves and Sleeves, Section 8 and UFC 3-560-01.

3.1.1.2.2. **(Added-AFSC)** Personal Protective Equipment (PPE) Stored in Toolboxes. A drawer or an additional toolbox/container is authorized for protective equipment and inclement weather apparel and must be clearly labeled 'Personal Protective Equipment.' PPE containers are subject to toolbox inspections. PPE kept in ITKs will be marked with the ITK number. PPE not stored in an ITK will be marked with the employees' last name, first initial, and stored in a personal or PPE locker. Note: Shop PPE is PPE intended for shop use (i.e., face shield for shop use at a drill press) will be marked with the shop symbol. Do not etch or write on PPE used for arc flash, arc blast, or electric shock protection unless the manufacturer authorizes marking; use only those methods of marking specifically authorized by the manufacturer.

3.1.1.3. **(Added-AFSC)** Voluntary Protection Program (VPP). The most recent initiative in industry and DoD involves VPP. VPP involves team-based safety awareness. The VPP promotes effective worksite-based safety and health. In the VPP, management, labor, and Occupational Safety and Health Administration (OSHA) administration establish cooperative relationships at workplaces that have implemented a comprehensive safety and health management program. Approval into VPP is OSHA's official recognition of the outstanding efforts of employers and employees who have achieved exemplary occupational safety and health. Incidents are reported and hazards identified. Reference: **http://www.osha.gov/dcsp/vpp/index.html**.

3.1.1.4. **(Added-AFSC)** Confined Space. Many workplaces contain spaces that are considered 'confined' because their configuration hinders the activities of employees who must access them. A confined space has limited or restricted means for entry or exit and it is not designed for continuous employee occupancy. Confined spaces include but are not limited to underground vaults, tanks, storage bins, manholes, pits, silos, process vessels, and pipelines. OSHA uses the term 'permit-required confined space', i.e., permit space, to describe a confined space that has one or more of the following characteristics: contains or has the potential to contain a hazardous atmosphere, contains a material that has the potential to engulf an entrant, has walls that converge inward or floors that slope downward and taper into a smaller area which could trap or asphyxiate an entrant, or contains any other recognized safety or health hazard such as unguarded machinery, exposed live wires, or heat stress. (Reference: OSHA 29 Code of Federal Regulations (CFR) 1910.146/DAFMAN 91-203 for Confined Space).

3.1.1.5. **(Added-AFSC)** Processing Storage Restriction Items.

3.1.1.5.1. **(Added-AFSC)** General. Explosive and armament items, AF Form 2692 items, and other items subject to regulatory storage restrictions while end items, primarily aircraft, are undergoing repair will be turned in and withdrawn from hold storage areas using AFSC Form 95 and may be stored temporarily in production areas certified by the Base Safety Office. Reference DESR 6055.09 DAFMAN 91-201, *Explosives Safety Standards.* This applies to items temporarily removed by production and later reinstalled.

3.1.2. Safety mishap investigations have authority over impoundments until such time the Safety Single Investigating Official (SIO) or Safety Investigation Board (SIB) president submits in writing that they are releasing the impoundment back to the Impound Official. All request for access and to perform maintenance or teardown activities must be approved in writing by the SIO or SIB president. Refer to DAFI 91-204 for aircraft and equipment involved in accidents, mishaps, or incidents.

3.1.3. Dull Sword Investigation and Reporting. HQ AFSC will ensure local procedures are developed for the Dull Sword investigation, reporting, and distribution IAW DAFI 91-204 and AFMAN 91-221. The installation (or Complex if assigned) Weapons Safety Manager is the OPR for this program.

3.1.4. **(Added-AFSC)** Additional AFSC safety instructions are listed in AFSCI 91-202, *Air Force Sustainment Center Safety Program.*

3.2. Housekeeping. HQ AFSC will ensure the local development, implementation, and maintenance of general workplace housekeeping procedures IAW DAFMAN 91-203. Emphasis will be placed on ensuring workplace personnel follow proper work procedures, PPE use, and hygiene IAW work center specific Job Safety Training Outline (JSTO).

3.2. (AFSC) Housekeeping. Housekeeping is the process of ensuring that the workplace is kept clean and organized. Industrial housekeeping forms are part of the manager's general responsibility. It includes the provision of adequate workspace and adequate storage arrangements, both around the workstation and within the unit, in addition to the development of effective administration and procedures to ensure a culture of tidiness and cleanliness within the workforce. A lack of concern with housekeeping can result in an increase in accidents, machine failure, and a reduction in the overall efficiency of the unit. The checklist below is an example to be use during housekeeping inspections.

Figure 3.1. (Added-AFSC) Housekeeping Checklist.

	Yes	No	N/A
Housekeeping and Workplace Stewardship.			
Area Observed.			
Date of Inspection.			
Inspector.			
Housekeeping Element (score 1-10).			
Spaces free of clutter.			
Floors clean.			
Cabinets and lockers organized and properly secured.			
Materials stored properly.			
Cardboard boxes and delivery containers properly disposed of.			
Tools and equipment properly organized and stored properly.			
Exits, stairways, and aisle ways clear of obstructions, no tripping hazards.			
Yard areas clean.			
Smoking in designated areas only, no butts on ground.			
Workplace lighting sufficient for work requirement.			

Confined spaces properly marked.			
Energized electrical cabinets secured when not open for maintenance.			
Emergency lighting operational when tested.			
Eyewash and emergency showers unobstructed, clean, and inspection current.			
Fire extinguishers in place, accessible, and charged.			
Flammable storage cabinets properly labeled, contents match labels, clean.			
Hazardous material cabinets labeled and MSDS/SDS provided at location			
Fluid leaks and spills labeled and contained.			
Guard rails and rope barriers in compliance with standards.			
K-bottles secured, upright, and caps in place if not in use.			
Scaffolding properly erected and inspected when in use.			
Hoisting equipment in compliance with standards.			
Power tool guards and protective equipment in place and in good working order.			
Note: This checklist is general in nature and not specific to regulated or expanded standard cleaning areas and must comply with requirements of DAFMAN 91-203.			

3.2.1. **(Added-AFSC)** 5-6S**.** 5-6S is a recommended best practice for housekeeping involving the application of a five or six step process. The 5S program has been expanded to a sixth S to include safety. The steps in the process are 1) sort, 2) set in order, 3) shine, 4) standardize, 5) sustain, and 6) safety. By following these steps, gains can be achieved. Gains in productivity often positively affect mean time to repair (MTTR) by ensuring tools, parts, and other materials are readily available to perform repairs when needed. A clean workplace is also a safe workplace.

3.3. Security. HQ AFSC will ensure adequate Protection Levels are maintained IAW the A/C Protection Level Designation as outlined in DAFI 31-101, *Integrated Defense (ID)*, along with all associative manpower and Integrated Base Defense Security System (IBDSS) requirements.

3.3. (AFSC) Security Forces at each ABW will: Ensure adequate Protection Levels are maintained IAW the A/C Protection Level Designation as outlined in DAFI 31-101 along with all associative manpower and Integrated Base Defense Security System (IBDSS) requirements.

Chapter 4

MAINTENANCE TRAINING

4.1. Maintenance Training. Air Force Materiel Command, Directorate of Logistics, Civil Engineering, Force Protection, and Nuclear Integration, Resource Integration Division, Workforce Development Branch (HQ AFMC/A4PT) will develop a Depot Maintenance training program to include and identify initial, recurring, and qualification training required by personnel to perform assigned duties. All training will be documented in a MIS as validation of completion of training. Training is essential to establish, improve, and sustain unit capabilities and is one of the most important responsibilities of commanders and supervisors. Commanders and supervisors must give priority support to training. When balancing resources, (e.g., aircraft, support equipment, facilities, tools, funding, personnel, etc.), maintenance training carries an equal priority with the production workload.

4.1. (AFSC) Maintenance Training. Maintenance training provides initial, recurring, and advanced proficiency, and qualification/certification skills needed by a technician to perform duties in their primary AF Specialty Code/Civilian Job Series. All formal training will be documented in a Maintenance Information System (MIS) as validation of completion of training. Training is essential to establish, improve, and sustain unit capabilities and is one of the most important responsibilities of commanders and supervisors. Commanders and supervisors must give priority support to training. When balancing resources, (e.g., aircraft, support equipment, facilities, tools, funding, personnel, etc.), maintenance training carries an equal priority with the production workload. For depot maintenance training policy and guidance, refer to AFI 36-2650 AFMCSUP, *Maintenance Training*.

4.1.1. The AFMC depot maintenance training program will be accomplished IAW AFI 36-2650_AFMCSUP.

4.1.1. **(AFSC)** IAW AFI 36-2650 AFMCSUP, the Air Logistics Complexes (ALCs') authorized automated MIS will be Training Scheduling System (TSS) and will be used to manage training requirements in support of this instruction and other applicable directives.

4.1.2. HQ AFMC/A4PT will establish and chair a Maintenance Training Manager (MTM) and Production Acceptance Certification (PAC) Working Group that:

4.1.2.1. Includes representation from HQ AFMC/A4/10, ALC Maintenance Training Managers, Complex PAC Program Managers, Complex Civilian Training Plan (CTP) Managers, and other representatives as required.

4.1.2.2. Advises HQ AFMC/A4/10 on depot maintenance training and PAC issues.

4.1.2.3. Resolves depot maintenance training, PAC, and Special Skills Qualification (SSQ) related problems.

4.1.2.4. Proposes standardization of depot maintenance training PAC and SSQ activities.

4.1.2.5. Establishes procedural guidance for implementation of this instruction and HQ AFMC/A4/10 depot maintenance training PAC and SSQ initiatives.

4.1.2.6. Processes revisions to this instruction and input on all other directives that impact depot maintenance training, PAC, and SSQ Programs.

4.1.2.7. Recommends Lead Maintenance Complex assignments for AFMC command SSQs.

4.1.3. The HQ AFSC will ensure the use of standardized Command developed training courses.

4.1.3.1. All maintenance production personnel required to access Logistics Evaluation Assurance Program (LEAP) to provide corrective/preventive action plans for Quality Assurance (QA) findings/deficiencies must successfully complete the LEAP Responsible Person course, CRXMAO0007101SU – *Logistics Evaluation Assurance Program (LEAP) (Module 2 – Responsible Person).*

4.1.4. **(Added-AFSC)** The ALCs are the OPRs for the Depot Maintenance Training Program. A Maintenance Training Section (MTS) will be established at the ALC level. The ALC Commander (CC)/Vice Director (DV)/Deputy Commander (CD) will appoint in writing an ALC Maintenance Training Manager, ALC CTP Program Manager, ALC PAC Program Manager, ALC Courseware Program Manager (CPM), ALC Training Systems Program Manager (TSPM), and other officials deemed necessary to effectively develop, implement, and manage the Depot Maintenance Training and PAC programs at the ALCs. These positions will be assigned to the ALC MTS.

4.1.5. **(Added-AFSC)** Work Center Training. ALCs will develop work center training requirements. Assigned personnel will be evaluated and a determination of their individual training needs will be accomplished. Training requirements will be tracked, and personnel will attend required training on time. ALCs will ensure training documentation is accurate. When applicable, AETC developed training materials are used to supplement qualification training.

4.1.6. **(Added-AFSC)** Information Systems Training. ALCs will ensure that depot maintenance personnel are trained on maintenance and/or supply information systems, or other management information systems required to support the depot maintenance function and as required for job performance of the individual.

4.2. Maintenance Certification Program. HQ AFMC will develop a program to document the certification of employees, both civilians and military, to perform depot maintenance and accept/stamp completion of assigned work. This program will apply to all depot maintenance personnel certifying Work Control Documents (WCDs). In this program, tasks will be identified with required training and any other applicable qualification requirements that must be completed prior to task certification. Specific career field/series training will be identified using AF approved Career Field Education and Training Plans (CFETPs) or equivalent command civilian training plans. Criteria must be established to decertify and recertify employees as required.

4.2.1. The definition of a task for the purpose of this program is any necessary activity in the completion of an industrial process or procedure involving a product or product-related service. The tasks must be identifiable, trainable, and auditable.

4.2.2. All tasks and required training will be documented in an electronic database as validation of completion of certification requirements and proof of an employee's certification. All personnel assigned to AFSC aircraft/missile maintenance units, military and civilian, will use the Training Scheduling System (TSS) MIS to document recurring training requirements and certifications.

4.2.3. Employee training records will be reviewed per AFI 36-2650_AFMCSUP.

4.2.4. WCDs may only be stamped by personnel meeting the certification requirements of the program as specified in AF CFETP or equivalent command civilian training plan. If the series of work does not have an established command civilian training plan, the CTP Manager will develop one. A certified employee will be issued an identifying stamp and use the stamp on the WCD upon completion of the work validating that work performed meets all applicable requirements.

4.2.5. When work is identified as "*critical*" then a secondary certification or "*second set of eyes*" is required to verify the work completed has met the requirements. To determine if a task is critical, the following criteria will be used:

4.2.5.1. A catastrophic failure of an end item.

4.2.5.2. An end item failure that may affect safety of flight.

4.2.5.3. An end item failure that may present an imminent safety or health hazard or affect a life support system.

4.2.6. Production Acceptance Certification (PAC) Program. The PAC Program documents employee certification to perform and accept completion of assigned work. The PAC program applies to all depot maintenance personnel certifying WCDs. Employees certify (i.e., stamp) that the work they performed meets all technical data, safety, and other applicable directives.

4.2.6.1. HQ AFMC/A4PT will develop, implement, and maintain standardized policy for the depot maintenance PAC Program and maintain the TSS MIS.

4.2.6.1.1. Documentation to track employees' PAC qualifications and certifications will be maintained in TSS.

4.2.6.1.2. External training certifications will be transcribed into TSS using the transcription date and certified by supervisor and employee.

4.2.6.1.3. **(Added-AFSC)** PAC Program Applicability. The PAC program applies to all depot maintenance personnel certifying WCDs. All depot production WCDs will be stamped and dated by a PAC certified employee. Other documents directly supporting depot production are designated and certified as locally determined. **Note:** Training and PAC documentation requirements apply to the internal PMEL supporting the on-site test equipment and other on-site production equipment covered by TO 00-20-14.

4.2.6.1.4. **(Added-AFSC)** PAC Training. All personnel assigned to AFSC aircraft/missile maintenance units, military and civilian, will use the TSS MIS to document recurring training requirements and certifications.

4.2.6.2. HQ AFSC will:

4.2.6.2.1. Develop, implement, and maintain standardized procedures to accomplish transcription tasks. Ensure compliance with depot maintenance PAC directives and policies.

4.2.6.2.2. Ensure PACs meet all technical data, safety, and other applicable directives.

4.2.6.2.3. Develop, implement, and maintain standardized procedures to ensure PAC tasks are reviewed in coordination with the WCD reviews. PAC Tasks will include a noun descriptor and performance statement. All PAC tasks will be identifiable, trainable, and auditable.

4.2.6.2.4. Ensure PAC trained mechanics are assigned to the work control documents they are certified to perform and accept during non-parts supportability planning.

4.2.6.3. **(Added-AFSC)** PAC Responsibilities.

4.2.6.3.1. **(Added-AFSC)** PAC OPR. HQ AFMC/A4PT is the OPR for the Depot Maintenance PAC and SSQ Programs. AFSC will:

4.2.6.3.1.1. **(Added-AFSC)** Provide guidance and set policy for Depot Maintenance PAC and SSQ Programs.

4.2.6.3.1.2. **(Added-AFSC)** Direct and approve command-wide Depot Maintenance PAC initiatives.

4.2.6.3.1.3. **(Added-AFSC)** Direct policy to promote standardization of SSQs for common MDS across the ALCs.

4.2.6.3.1.4. **(Added-AFSC)** Direct policy to promote standardization of PAC Programs across the ALCs.

4.2.6.3.1.5. **(Added-AFSC)** Provide oversight of resources for TSS.

4.2.6.3.1.6. **(Added-AFSC)** Ensure compliance with Depot Maintenance PAC directives and policies.

4.2.6.4. **(Added-AFSC)** AFMC Depot Maintenance Training and PAC Working Group. The AFMC Maintenance Training and PAC Working Group is chaired by HQ AFMC/A4P Depot Maintenance Training Manager with representation from ALC Training Managers, ALC PAC Program Managers, ALC CTP Program Managers, ALC Courseware Program Managers, ALC TSS Program Managers, and other representatives as required. As a minimum, the Working Group will:

4.2.6.4.1. **(Added-AFSC)** Advise HQ AFMC/A4P on depot maintenance training, PAC, Standardized On-the-Job Training (SOJT), and SSQ issues.

4.2.6.4.2. **(Added-AFSC)** Resolve depot maintenance training, PAC, SOJT, and SSQ related problems.

4.2.6.4.3. **(Added-AFSC)** Propose standardization of depot maintenance training, PAC, SOJT, and SSQ activities.

4.2.6.4.4. **(Added-AFSC)** Establish procedural guidance for implementation of depot maintenance training, PAC, SOJT, and SSQ initiatives.

4.2.6.4.5. **(Added-AFSC)** Process revisions to this instruction and input on all other directives that impact depot maintenance training, PAC, SOJT, and SSQ programs.

4.2.6.4.6. **(Added-AFSC)** Recommend Lead ALC assignments for AFMC command courseware, CTPs, training, SOJTs, and SSQs.

4.2.6.5. **(Added-AFSC)** ALC Maintenance Training and PAC Council. The ALC Maintenance Training and PAC Council is chaired by the ALC/CC/DV/CD or designee with representation from the Maintenance Groups. The ALC Training Office and other senior leaders are represented when deemed appropriate. The ALC Maintenance Training and PAC Council will:

4.2.6.5.1. **(Added-AFSC)** Meet at the call of the chair.

4.2.6.5.2. **(Added-AFSC)** Ensure ALC compliance with depot maintenance training, PAC, and SSQ directives and policies.

4.2.6.5.3. **(Added-AFSC)** Resolve ALC depot maintenance training, PAC, and SSQ related problems.

4.2.6.6. **(Added-AFSC)** ALC Maintenance Training and PAC Working Group. This Working Group is co-chaired by the ALC Maintenance Training Manager and ALC PAC Program Manager and includes the ALC CTP Program Manager, Group Training Managers, Group PAC Program Managers, and other representatives as applicable. At a minimum, the ALC Maintenance Training and PAC Working Group will:

4.2.6.6.1. **(Added-AFSC)** Advise organizations on depot maintenance training, PAC, and SSQ issues.

4.2.6.6.2. **(Added-AFSC)** Standardize ALC depot maintenance training, PAC, and SSQ activities as appropriate.

4.2.6.7. **(Added-AFSC)** ALC PAC Program Manager. Each ALC/CC/DV/CD designates in writing an ALC PAC Program Manager. The PAC Program Manager will:

4.2.6.7.1. **(Added-AFSC)** Serve as OPR for PAC and SSQ issues during the development and revision of directives.

4.2.6.7.2. **(Added-AFSC)** Co-chair the ALC Maintenance Training and PAC Working Group with the ALC Maintenance Training Manager.

4.2.6.7.3. **(Added-AFSC)** Serve as liaison between the ALCs and HQ AFMC/A4PT on PAC and SSQ related issues.

4.2.6.7.4. **(Added-AFSC)** Ensure ALC compliance with PAC and SSQ directives and policies by providing guidance and setting policy for the ALC PAC Program.

4.2.6.7.5. **(Added-AFSC)** Assist Maintenance Groups with PAC Program implementation and elevate PAC problems to higher authority at the ALC and AFSC as needed.

4.2.6.7.6. **(Added-AFSC)** Administer all command and local SSQs to include approving the development, revision, and revalidation of SSQ guides and worksheets.

4.2.6.7.7. **(Added-AFSC)** Establish local SSQs as required.

4.2.6.7.8. **(Added-AFSC)** Forward locally designated SSQs to HQ AFMC/A4PT with copies to all ALC PAC Program Managers.

4.2.6.7.9. **(Added-AFSC)** Process waiver and deviation requests to this and other AFSC or higher directives on behalf of the ALC when such requests are related to the PAC and SSQ Programs, advise organizations involved of higher headquarter decisions, and maintain copies on file for reference and audit purposes.

4.2.6.8. **(Added-AFSC)** Maintenance Group Commanders (MXG/CCs)/DVs/CDs will:

4.2.6.8.1. **(Added-AFSC)** Appoint in writing a Group Training Manager, Group PAC Program Manager, and other officials deemed necessary to effectively implement the Depot Maintenance Training PAC and SSQ Programs within the Group.

4.2.6.8.2. **(Added-AFSC)** A copy of the Groups' PAC and Training Manager Appointment Letters will be provided to the ALC MTS.

4.2.6.8.3. **(Added-AFSC)** Designate SSQ officials in writing IAW this instruction and local publications.

4.2.6.8.4. **(Added-AFSC)** Provide SMEs in support of SSQ, courseware, and CTP development, review, and revision.

4.2.6.8.5. **(Added-AFSC)** Ensure Group compliance with depot maintenance training, PAC, and SSQ directives and policies.

4.2.6.8.6. **(Added-AFSC)** Review and analyze monthly training status reports for Recurring Training Requirement (RTR) overdues, no-shows, and training backlog to determine corrective actions.

4.2.6.8.7. **(Added-AFSC)** Review and analyze monthly PAC program status reports for SSQ overdues and program compliance to determine corrective actions.

4.2.6.8.8. **(Added-AFSC)** Participate on the ALC Maintenance Training and PAC Council.

4.2.6.9. **(Added-AFSC)** Group PAC Program Manager. The Group PAC Program Manager will:

4.2.6.9.1. **(Added-AFSC)** Serve as a member of the ALC Maintenance Training and PAC Working Group.

4.2.6.9.2. **(Added-AFSC)** Serve as a liaison between the production Group and the ALC PAC Program Manager on issues related to the PAC and SSQ Programs including TSS.

4.2.6.9.3. **(Added-AFSC)** Assist supervisors with PAC and SSQ Program implementation to include qualification, certification, and documentation, and elevate PAC issues to the ALC PAC Program Manager as needed.

4.2.6.9.4. **(Added-AFSC)** Manage TSS for the Group.

4.2.6.9.5. **(Added-AFSC)** Assist supervisors in identifying PAC and SSQ tasks.

4.2.6.9.6. **(Added-AFSC)** Administer all Group SSQs to include approving the development, revision, and revalidation of SSQ guides and worksheets.

4.2.6.9.7. **(Added-AFSC)** Provide monthly PAC Program status reports for SSQ overdues and program compliance to the Production Group Chief and the ALC PAC Program Manager.

4.2.6.9.8. **(Added-AFSC)** Maintain copies of all applicable SSQ qualification official appointment letters.

4.2.6.9.8.1. **(Added-OC-ALC)** Make available to the OC-ALC PAC program manager, a list of all appointed Qualification Officials (QOs) and SMEs authorized to perform reviews on SSQs.

4.2.6.9.8.2. **(Added-OC-ALC)** Make available to the OC-ALC PAC program manager, a list of all subject matter experts authorized to perform reviews on Structured On-the-Job Training (SOJT).

4.2.6.9.9. **(Added-AFSC)** Maintain completed SSQ proficiency worksheets for a minimum of one year.

4.2.6.9.10. **(Added-AFSC)** Participate in all PPPT meetings.

4.2.6.9.11. **(Added-AFSC)** Participate in PPT meetings as required.

4.2.6.9.12. **(Added-AFSC)** Ensure WCDs have a supporting PAC task as required.

4.2.6.9.13. **(Added-AFSC)** Ensure PAC tasks are written in compliance with this instruction.

4.2.6.10. **(Added-AFSC)** Maintenance Supervisor. The maintenance supervisor is ultimately responsible for training, qualification, and certification of assigned maintenance personnel. The maintenance supervisor will:

4.2.6.10.1. **(Added-AFSC)** Utilize TSS, Education and Training Management System (ETMS) Web, and/or other authorized automated systems to identify training and qualification requirements/completions.

4.2.6.10.2. **(Added-AFSC)** Identify the PAC tasks associated with work performed in areas of responsibility, verify that tasks are documented in TSS, and work with the Group PAC Manager to correct deficiencies.

4.2.6.10.3. **(Added-AFSC)** Ensure that all the factors of production and the industrial environment are correct (e.g., training, safety, material, equipment, technical data, work documents, facilities, data systems, etc.) to enable the worker to produce quality products and services.

4.2.6.10.4. **(Added-AFSC)** Certify, decertify, and recertify employees using the certification, decertification, and recertification criteria to ensure consistency among employees.

4.2.6.10.5. **(Added-AFSC)** Perform an annual PAC record review with each assigned employee. Reference **paragraph 4.2.13**.

4.2.6.10.5.1. **(Added-AFSC)** Annual reviews will be accomplished within 30 days of assignment and annually thereafter.

4.2.6.10.6. **(Added-AFSC)** Make PAC records available to the gaining supervisor for loaned, transferred, and TDY employees.

4.2.6.10.7. **(Added-AFSC)** Notify the Group PAC/Training Manager when an employee is transferred, retired, or terminated.

4.2.6.10.7.1. **(Added-OC-ALC)** Supervisor will notify the group PAC/Training Manager within five business days of the employee's transfer, retirement or termination.

4.2.6.10.8. **(Added-AFSC)** Ensure training/qualification requirements are identified and applied in TSS/Electronic Training Record (ETR). **Note:** The TSS/ETR Section II 'Apply' box indicates active work center/mission training requirements that need to be met by employees.

4.2.6.10.9. **(Added-AFSC)** Notify the appropriate PAC Program Manager of any WCD changes that would affect PAC tasks. This would include any changes to the WCDs, TOs, work descriptions, sub-operations, and definitive lists.

4.2.6.11. **(Added-AFSC)** Maintenance Employee. The maintenance employee will:

4.2.6.11.1. **(Added-AFSC)** Advise management of problems with technical data or other issues that impact technical or regulatory compliance.

4.2.6.11.2. **(Added-AFSC)** Provide the supervisor and Group Maintenance Training Manager feedback on the training received.

4.2.6.11.3. **(Added-OC-ALC)** Employee Bill of Rights. OC-ALC personnel will be empowered to take responsible actions that contribute to safety, quality, and productivity. To make this happen, the following employee rights are guaranteed without threat or fear of reprisal:

4.2.6.11.3.1. **(Added-OC-ALC)** The RIGHT to challenge business as usual.

4.2.6.11.3.2. **(Added-OC-ALC)** The RIGHT to be heard.

4.2.6.11.3.3. **(Added-OC-ALC)** The RIGHT to expect commitment to quality.

4.2.6.11.3.4. **(Added-OC-ALC)** The RIGHT to place quality before production.

4.2.6.11.3.5. **(Added-OC-ALC)** The RIGHT to feel genuine pride in OC-ALC products and services.

4.2.6.11.3.6. **(Added-OC-ALC)** The RIGHT to notify chain of command of any conditions that compromise the ability to produce a safe and quality-built product during the performance of assigned duties.

4.2.7. **(Added-AFSC)** PAC Task Identification. The PAC task title will be related to the WCD as much as possible regardless of the use of overall headers. Task headers provide a degree of organization for tasks. Headers also help in the sorting/grouping of tasks. The use of headers is highly recommended (though optional) and should be utilized to the maximum extent possible at each ALC. PAC task standardization will be accomplished to the extent possible for similar work and will relate to the work described on the WCD.

4.2.7.1. **(Added-AFSC)** Identifiable. The task must identify the singular component or function being certified.

4.2.7.1.1. **(Added-AFSC)** Task Titles as a minimum will have a noun descriptor (i.e., component) and performance statement (e.g., repair, install, set-up, test, operate, etc.). Additionally, tasks that are specific to a weapon system or Type Model Series (TMS) will contain the weapon system or TMS in the task title or task code. Example: For TMS, F-100 or for MDS, B-1B.

4.2.7.1.2. **(Added-AFSC)** When the work performed does not lend itself to this kind of task definition, PAC tasks will be structured to the nature of the service performed. This can be by skill, equipment, type of service, or other logical breakdown.

4.2.7.1.3. **(Added-AFSC)** SSQ tasks will be designated with the SSQ indicator.

4.2.7.1.4. **(Added-AFSC)** PAC tasks may be established to document OJT and qualifications for work that does not relate to a WCD or require stamping a WCD such as operating a forklift or operating an aerial lift. However, all tasks must meet the task title criteria.

4.2.7.2. **(Added-AFSC)** Auditable. The PAC task will provide a direct correlation to that WCD entry.

4.2.7.2.1. **(Added-AFSC)** The task must reflect conformance to standards by providing a link from certified PAC task to applicable WCD. The WCD will reflect the applicable technical data related to the task.

4.2.7.2.2. **(Added-AFSC)** One of the primary goals of an audit is to determine if a person, organization, system, enterprise activity, project, process, product, etc., in question, is meeting standards and requirements. Example: If the WCD states "Remove F-15 Left Aileron", the task must be identified in the employee's Section III of their PAC record. The ability to 'audit' the WCD task-to-training/certification relationship is what is being evaluated.

4.2.7.3. **(Added-AFSC)** Trainable. Ability to instruct an employee on a single task that provides the knowledge, skills, and competencies to successfully perform a function IAW the applicable technical data and other regulatory requirements.

4.2.7.3.1. **(Added-AFSC)** Tasks must be structured to verify that the employee is properly trained on the task. Example: Task Title states 'Manufacture, Repair, Assemble, Install, or Overhaul Aircraft Components In-Shop', therefore this task is not trainable because there is no way for the employee to be trained on all aircraft components. An Example of a trainable task is 'Remove Over Wing Escape Hatch on a E-3 Aircraft', therefore this is a trainable task because it identifies training specific to the weapon system and component. **Note:** There is no time frame required to PIN a certified task. Employees cannot stamp off a WCD until the PAC task is certified and PINed by the employee and the employee's supervisor. Additionally, due to varying complexity of tasks, there is no time frame required for OJT.

4.2.7.4. **(Added-AFSC)** PAC Task Bundling. Bundling or placing multiple functions in a single PAC task is authorized as long as the employee, supervisor, and QA/auditor can determine what requirements the tasks were trained on (e.g., WCD, technical data, etc.). Bundled PAC tasks will meet the PAC task requirements identified in this instruction to include the identifiable, auditable, and trainable requirements defined above. New PAC tasks that are bundled will be reviewed and approved by the Group PAC Manager. The supervisor and employee must understand that if the employee becomes decertified on any portion of the task, then they will become decertified on all portions of the task.

4.2.7.4.1. **(Added-AFSC)** AMARG PAC Tasks. PAC tasks related only to reclamation and disposal actions (i.e., AMARG) can be written as logical process groups. AMARG will develop, implement, and maintain standardized procedures to identify these unique tasks. All other tasks will follow standard processes previously defined.

4.2.8. **(Added-AFSC)** Creation/Update of PAC Tasks.

4.2.8.1. **(Added-AFSC)** The Group PAC Program Manager will document a PAC task request process for use in their group. This request process will be used by Supervisors/Work Leaders to request creation/update of PAC tasks and headers. Reference **Figure 4.1** for an example of a request form. Group PAC Program Managers will create/update PAC tasks IAW this instruction.

4.2.8.2. **(Added-AFSC)** The Group PAC Program Manager when notified of changes to WCD work descriptions, sub-operations, and definitized lists, will review all associated tasks and update any PAC tasks to ensure tasks correlate to the updated WCD.

4.2.9. **(Added-AFSC)** PAC Training. Personnel who perform depot maintenance will complete applicable training requirements prior to PAC certification. All personnel assigned to AFSC aircraft/missile maintenance units, military and civilian, will use the TSS MIS to document training requirements and certifications.

4.2.9.1. **(Added-AFSC)** Training Prerequisites for PAC Tasks. PAC prerequisites are training requirements that must be completed and maintained current for specific task certification. These include any AF, Safety, TO, or local instruction that directs requirements for specific tasks. Assignment of mandatory training prerequisites will be documented in TSS Section II. All SSQ identified tasks will be linked to the related SSQ. All task related to RTRs listed in this instruction and any task related RTRs that are locally identified and listed in the local publications will also be linked to the tasks they support. Automatic decertification will occur if task related recurring training or SSQ requalification is not accomplished in the required time frame. Prerequisite linking is not required for general recurring training requirements.

4.2.9.2. **(Added-AFSC)** Training and SSQ Prerequisites. Applicable training and SSQ prerequisites will be assigned and documented in Section II of TSS. SSQ prerequisites are not required to be linked to tasks.

4.2.9.3. **(Added-AFSC)** Certification Official for Employee. The first level supervisor is the only level authorized to certify employees. Supervisors not qualified in a specific skill or task will utilize qualified and certified maintenance personnel as task trainers/qualifiers that will assist in training and verifying proficiency of individual employees.

4.2.10. **(Added-AFSC)** Employee Certification Criteria. All training and SSQ requirements for task certification will be completed before an employee is certified. Proficiency at performing the task will be demonstrated to a task trainer/qualifier or task certifying official. Equivalency cannot be granted for SSQ proficiency demonstration or safety training requirements. A proficiency demonstration is always required prior to certification. The supervisor's minimum certification criteria for employees are as follows:

4.2.10.1. **(Added-AFSC)** Completion of all required training.

4.2.10.2. **(Added-AFSC)** Completion of applicable SSQ qualification.

4.2.10.3. **(Added-AFSC)** Performance of all parts of the task.

4.2.10.4. **(Added-AFSC)** Knowledge of why and when the task is needed or accomplished.

4.2.10.5. **(Added-AFSC)** Compliance with technical data and safety precautions.

4.2.10.6. **(Added-AFSC)** Demonstration of proficiency.

4.2.11. **(Added-AFSC)** Decertification Criteria. Any level of management can direct a decertification, but the certifying supervisor actually decertifies an individual. Decertification can be either administrative or workmanship related. Specific decertification criteria will be established and documented at the local level as needed to ensure consistency among employees. All decertifications are effective immediately upon entering into PAC Section IIIC. The supervisor will not assign tasks related to the decertification to the employee and the employee is not to perform the duties associated with the task until the conditions that render the technician ineligible for certification have been corrected and the technician is subsequently recertified on the task. Decertified employees may be assigned to perform retraining on the task under the supervision of a trainer/qualifier as part of the recertification process. Supervisors and employees will acknowledge decertifications through the PIN process within 3 business days of notification. Employees that are on excused absence, beyond the 3 business days, will acknowledge decertification through pin process upon return-to-work center.

4.2.11.1. **(Added-AFSC)** Administrative Decertification. Decertification for administrative reasons is based on such things as non-performance of the task for a prolonged period as determined by the supervisor and the employee, personnel reassignments, medical conditions, workload changes, or overdue recurring training requirements.

4.2.11.2. **(Added-AFSC)** Workmanship Decertification. Decertification for workmanship reasons is based on such things as failure to comply with technical data and other applicable directives, valid customer complaints or feedback both external and internal, PAC related mishaps, invalid certification of WCD, lack of proficiency, failure to pass SSQ requalification, as required by Personnel Evaluations (PEs)/Quality Verification Inspections (QVIs) IAW AFMCI 21-100, Volume 3, Chapter 8 and TO 00-35D-54 Category I Deficiency Reports (DRs) caused by workmanship. Decertify the secondary PAC unless it has been determined that the individual could not have uncovered the discrepancy without disturbing the work performed by the primary PAC.

4.2.12. **(Added-AFSC)** Recertification Criteria. Recertification is accomplished once the conditions of decertification have been resolved or removed. The certifying supervisor determines the criteria to be used for recertification. As a minimum, a demonstration of proficiency of the task or portion of the task that resulted in the decertification will be accomplished. The supervisor will review all decertification to determine if the employee is required to re-accomplish formal training in order to meet the recertification criteria.

4.2.13. **(Added-AFSC)** PAC/ETR Review. The supervisor will perform an annual PAC/ETR review with each assigned employee to review and validate assigned training and certification requirements as applicable. The supervisors will conduct this review when an employee is moved from one supervisor to another, within 30 days of assignment, and annually thereafter. Both the supervisor and the employee will indicate they are satisfied that the data contained in the employee's PAC/ETR record is correct and valid by using an electronic signature PIN. **Note:** If an employee does not have access to TSS, a hard copy will be kept on file by the supervisor with the employee and supervisor signature stating the review was accomplished.

4.2.13.1. **(Added-AFSC)** When a supervisor and an employee PIN the annual PAC/ETR review of the employee's record, their PIN action signifies that Section II (Training Requirements) has been reviewed/verified; Section III (Task Requirements, if applicable) has been reviewed/verified; and Section VII (Assigned CTP, if applicable) has been reviewed by the employee.

4.2.13.2. **(Added-AFSC)** Personnel NH-04/GS-14 and above, their military equivalent, and contractors are exempted from the requirement to perform an annual review of their own records if they are not covered by the PAC program or do not stamp off WCDs.

4.2.14. **(Added-AFSC)** Certifying WCDs. All WCDs will be stamped and dated IAW this instruction and HQ AFMC requirements. Certification of tasks will be performed by someone PAC certified in that specific task. Personnel not certified on the task being performed can accomplish the work if they are qualified to the extent necessary and are under the guidance of a PAC certified mechanic or technician. **Note:** Supervisors accepting work by certifying WCDs for maintenance tasks will meet the same training, qualification, and certification requirements as the PAC certified employee and will require a PAC record.

4.2.14.1. **(Added-AFSC)** Secondary Certification. Secondary certification (i.e., second set of eyes) will be applied and is required for all critical tasks. Exceptions: Some nondestructive testing and where SSQ tasks due to their very nature do not allow for secondary certification (i.e., welding, and soldering tasks) or where it is impossible to inspect or witness the accomplishment of the task (e.g., engine run on single seat fighter aircraft, etc.), a single certification by a fully SSQ qualified and certified mechanic or technician is acceptable. Secondary certification will be accomplished on the applicable WCD using one of the established inspection codes. Secondary certification requires two PAC certified employees to inspect the work performed, stamp, and date the WCD.

4.2.14.2. **(Added-AFSC)** Non-Routine Work Certification Criteria. Non-routine work is workload that has not been in production for a long period of time such that PAC certified employees are no longer available. When non-routine work is reintroduced and a PAC certified employee is no longer available, the supervisor will certify a journeyman technician to perform the task(s).

4.2.14.2.1. **(Added-OC-ALC)** Also, non-routine work can consist of workloads considered prototype, first-article, one-time occurrence or based on a limited production run in which there is no PAC certified employee.

4.2.14.2.2. **(Added-OC-ALC)** Non-routine work for workloads already established but not accomplished for such a long period of time that there is not a PAC certified technician available, the supervisor will choose the best qualified journeyman technician to perform the task(s), enter an OJT start date, place a note in sec IV stating the technician is assigned to accomplish work for which he/she is not currently certified. The supervisor will conduct a search via the TSS Supervisor Dashboard function to identify personnel who were previously certified on the task that may be available to conduct OJT with the identified technician.

4.2.14.2.2.1. **(Added-OC-ALC)** If there are no previously certified personnel available to conduct training with the journeyman technician, then the task will be conducted by the technician, with oversight by the Group Process Engineering Authority, until the Engineering Authority and the technician feel confident the technician can perform the task at the required proficiency level.

4.2.14.2.3. **(Added-OC-ALC)** Non-routine work for prototype and first-article workloads in which there are no PAC certified employees, the supervisor will select the best qualified journeyman technician. The technician will then accomplish the task under the oversight of the appropriate OC-ALC Group Production Engineering authority and not need to be PAC certified; however, the technician will need to meet all required training to perform the operation, as determined by the appropriate OC-ALC Group Production Engineering authority. Training will be documented in TSS using the TSS PAC Form 75 Section III-C and linked to any formal task related training identified in the technician's Form 75 Section II. Once the work is accomplished, the technician will stamp/date the WCD and the appropriate OC-ALC Group Production Engineering authority will sign their name next to the technician's stamp that all work performed meets all technical data, safety and other applicable directives.

4.2.14.2.4. **(Added-OC-ALC)** Due to the unique nature of the non-routine, prototype, and first article workload managed by the 76th Propulsion Maintenance Group (PMXG) Process, Repair, Operations and Critical Tooling (PROACT) Section, PROACT will establish an SCR letter for MXDE personnel to accomplish this workload. SCR appointments and document retention will follow the requirements listed in **paragraph 4.6** of this instruction. The SCR technician will then accomplish the task under oversight of the OC-ALC Group Production Engineering Authority (Process Engineer) and will be exempt from the PAC task certification requirements defined in this chapter, as long as they meet the training/qualification requirements to perform the task. Training/Qualification requirements will be determined by the appropriate Process Engineering Authority and Group Training Manager. Any formal training/qualification needed will be documented in the technician's Form 75 Section II. Once the work is accomplished, the technician will stamp/date or sign/date the Work Control Document (WCD) that the work is complete and appropriate Process

Engineer will sign/date next to the technician's stamp/signature, that all work performed meets all technical data, safety, and other applicable directives. If/when this workload becomes a production workload, it will be given to an existing production organization who will establish PAC tasks and certify technician IAW PAC policies and procedures.

4.2.14.2.5. **(Added-OC-ALC)** The 76th Commodities Maintenance Group (76 CMXG) Reverse Engineering and Critical Tooling (REACT) Laboratory utilizes Additive Manufacturing (AM) and 3D Scanning/Metrology technologies to develop prototypes, form blocks, fixtures and one-off/limited run weapon system components. REACT also utilizes these technologies to create technical data and generate reports for customers. It is impractical for REACT to create task qualifications/certifications for every part or technical data package under development. REACT Prototype/Development WCDs will be marked as "DEVELOPMENT" to indicate that this process is not covered under the PAC program. If/when a limited run becomes a production workload, it will be given to an existing production organization who will establish PAC tasks and certify technicians IAW PAC policies and procedures.

4.2.14.3. **(Added-AFSC)** Multitask, Subtask, and Team Task Certification. This will be done by multiple annotations on the WCDs.

4.2.15. **(Added-AFSC)** PAC Documentation. TSS is the source data for PAC and will be used for all official purposes such as audits, investigations, and inspections. The TSS Program Management Office (PMO) will impound the TSS records in case of mishaps, formal investigations, or when directed by higher authority. Certification/decertification/recertification changes made in Section III of an employee's PAC record are not an official part of the record until the employee and supervisor verify them by PIN or signature. Administrative decertifications due to non-performance or overdue training when the employee is not available for pinning may be accomplished but the reason for not being available must be explained within TSS Section IV. If depot work is performed where TSS is not available, use of printed copies is permitted. When PAC personnel go TDY to perform depot maintenance, they are required to carry a copy of their PAC record with them. **Note:** DFT requirements are outlined in AFMCI 21-100, Volume 2 Chapter 10. Automated TSS contains the following seven sections.

4.2.15.1. **(Added-AFSC)** TSS Section I, Supervisor Identification. TSS documents the employee-to-supervisor assignment when an employee is assigned or reassigned.

4.2.15.2. **(Added-AFSC)** TSS Section II, Job Knowledge Training. This section contains the employee training and qualification requirements.

4.2.15.3. **(Added-AFSC)** TSS Section III, Tasks. This section identifies specific tasks on which the employee can be trained, qualified, or certified.

4.2.15.3.1. **(Added-AFSC)** Task Title. The task title will be related to the WCDs as much as possible, and as a minimum, will have a noun descriptor (i.e., component or system name) and performance statement (e.g., repair, install, set-up, test, operate, etc.).

4.2.15.3.2. **(Added-AFSC)** OJT Start Date. The date that is entered will be the actual date the supervisor assigns employees to begin training on the task.

4.2.15.3.2.1. **(Added-OC-ALC)** Any mechanic/technician in a training status for a PAC task will have a PAC task assigned and an OJT start date entered.

4.2.15.3.3. **(Added-AFSC)** OJT Completion Date. The date that is entered will be the actual date the employee completes the OJT and is proficient in the task. For qualification tasks, the OJT completion date will verify performance demonstration.

4.2.15.3.4. **(Added-AFSC)** Certification Date. The date that is entered will be the actual date the employee successfully demonstrates task proficiency to the supervisor or the date the supervisor grants certification based on the verification of demonstrated proficiency by the task trainer/qualifier.

4.2.15.3.5. **(Added-AFSC)** Recertification Date. The date that is entered will be the actual date that the employee successfully demonstrates task proficiency to the supervisor or the date the supervisor grants certification based on the verification of proficiency by the task trainer/qualifier.

4.2.15.3.6. **(Added-AFSC)** Decertification Date. The date that is entered will be the actual date that the supervisor decertifies the employee or the date when TSS decertifies the employee for overdue training or qualifications.

4.2.15.4. **(Added-AFSC)** TSS Section IV, Notes. This section lists explanations and additional clarifying information on training, task certification/qualifications, and PIN actions.

4.2.15.4.1. **(Added-AFSC)** IAW AFI 36-2650 AFMCSUP, the Group Training Managers are required to document employee training equivalencies in Section IV. Training equivalencies cannot be granted for SSQs, experience, or safety related courses.

4.2.15.4.2. **(Added-OC-ALC)** Decertification information is not to be entered in Section IV.

4.2.15.4.3. **(Added-OC-ALC)** Health Insurance Portability and Accountability Act (HIPAA) information will not be entered in Section IV.

4.2.15.4.4. **(Added-OC-ALC)** When an employee is placed in a Temp Inactive status, a note will be entered in Section IV and the User Admin profile to explain the reason.

4.2.15.4.4.1. **(Added-OC-ALC)** Only employees who are on any type of military leave, Family and Medical Leave Act (FMLA), Individual Mobilization Augmentee (IMA), on extended medical leave or extended Leave Without Pay (LWOP) and do not report to work will be placed in a Temp Inactive status. Employees in a Temp Inactive status are not considered certified and will not stamp off any WCD for as long as they are assigned to this work center.

4.2.15.4.4.2. **(Added-OC-ALC)** The group training manager will be responsible for updating the notes every 90 days.

4.2.15.5. **(Added-AFSC)** TSS Section V, Decertification Data. This section lists the task, reason, and dates when an employee is decertified. It can also list what training is needed to recertify the employee. Entries in this section will be removed after the recertification action and retained in history. After a period of one year from the date of decertification, the information in this section and its history will be deleted even if the person has not been recertified. History on these actions will only be accessible and viewable by system administrators. The history records will only be used to provide an audit trail for mishaps.

4.2.15.6. **(Added-AFSC)** TSS Section VI, Annual Certification Review. This section documents the annual review of the employee's TSS record by the employee and supervisor.

4.2.15.7. **(Added-AFSC)** TSS Section VII, CTP. This section contains the CTP that is assigned to the employee if applicable.

4.2.15.8. **(Added-AFSC)** Military Personnel. Military personnel performing depot maintenance are required to comply with all applicable depot maintenance directives. PAC task, SSQ, and depot maintenance training requirements will apply to these personnel. Military personnel assigned to the ALCs not performing depot maintenance may track certification and non-depot maintenance training requirements in the myTraining system. Applicable certifications will be transcribed into TSS.

4.2.15.8.1. **(Added-AFSC)** External training certifications will be transcribed into TSS using the transcription date and certified by supervisor and employee.

4.2.15.8.1.1. **(Added-AFSC)** When non-ALC personnel perform maintenance as specified on WCDs, a review of the individual's qualification/certification will be performed by the ALC production supervisor and Group PAC Program Manager. This can be through training certificates, myTraining, DAF Form 623, *Individual Training Record Folder*, or equivalent. Non-ALC personnel will document AFTO Form 781A and attach it to the WCD. The production supervisor will make a note on the WCD stating that a record review has been accomplished by the production supervisor and the group PAC Program Manager that personnel are qualified/certified to perform work.

4.2.15.8.2. **(Added-AFSC)** Military personnel will use stamps authorized in this instruction to certify WCDs.

4.2.15.9. **(Added-AFSC)** Applicable RTR requirements listed in this chapter and in AFI 36-2650 AFMCSUP will apply to these personnel. Command standard courses will be used if developed.

4.2.16. **(Added-AFSC)** PAC and Training Compliance Inspections.

4.2.16.1. **(Added-AFSC)** Biennial PAC /Training Compliance Inspections will be conducted by the Complex PAC/Training Office. These inspections will be accomplished at the execution level of the Group PAC/Training Managers.

4.2.16.1.1. **(Added-AFSC)** PAC and Training Compliance Inspections performed by the MTS will be entered into an approved MIS. This will ensure all findings are documented and corrective actions performed.

4.2.16.2. **(Added-AFSC)** Group Training and PAC Program Managers are required to conduct annual face-to-face PAC and Training Compliance inspections. These inspections will be conducted at the point of execution level of first-line supervisors. The number of inspections (sample size) will be based on the number of first level supervisors, within the Group, who are assigned maintenance technicians who stamp off WCDs. The inspection sample size will be 10% of the total number of first level supervisors and then 20% of the employees assigned to that supervisor. These inspections will serve five functions; (1) Ensure oversight at the Group Level that the supervisor can correlate the PAC task with the WCD, (2) Ensure PAC tasks conform to the PAC task structure IAW this Instruction, (3) Ensure PAC tasks requiring formal training are appropriately linked to prevent employees from becoming certified on tasks without first completing all required prerequisites which can cause automatic decertification if requirements are not completed on time, (4) Provide assistance to supervisors to help them understand their responsibilities within the PAC Program, and (5) Ensure maintenance technicians and supervisors are aware of any overdue mandatory training requirements. QA personnel may assist the MTS in accomplishing this task at Geographically Separated Units (GSUs). PAC and Training Compliance Inspections performed will be entered in an approved MIS. This will ensure all findings are documented and corrective actions performed.

4.2.16.2.1. **(Added-AFSC)** Findings and corrective actions will be reported in the PAC Program status reports as required by this instruction to the Group Commander and ALC PAC Program Manager.

4.2.16.2.1.1. **(Added-OC-ALC)** Group Training and PAC Program Managers will conduct quarterly face-to-face PAC and Training Compliance inspections. These inspections will be conducted at the point of execution level of first-line supervisors. The number of inspections (sample size) will be based on the number of first level supervisors, within the Group, who are assigned maintenance technicians who stamp off WCDs. The quarterly inspection sample size will be 10 percent of the total number of first level supervisors and then 20 percent of the employees assigned to that supervisor.

4.2.16.2.1.1.1. **(Added-OC-ALC)** Prior to the Group Training and PAC Managers conducting their quarterly inspections, notification will be sent, at least 2 days prior to inspections, to the Complex PAC Program Manager identifying date, time, location, and list of supervisors to be inspected.

4.2.16.2.2. **(Added-OC-ALC)** Group PAC Program Managers are to provide the OC-ALC PAC Program Manager an updated list of first-line supervisors quarterly.

4.2.16.3. **(Added-AFSC)** The ALC Training Manager and PAC Program Manager will track the findings and report them in their scheduled status of training briefing to ALC leadership.

4.3. Special Skills Qualifications (SSQs). SSQs are skills so specialized that they require extensive technical knowledge and proficiency demonstration. Most of these skills are governed by military specifications or higher-level regulatory guidance, are safety related, or have a significant impact on cost. Qualification and requalification requirements for SSQs established by this manual and by local ALCs are mandatory for PAC certification. HQ AFMC will develop qualification/disqualification/requalification requirements for all SSQs.

4.3. (AFSC) For SSQ Guide and Worksheet, reference **Figure 4.2** and **Figure 4.3**. Reference AFI 36-2650 AFMCSUP for additional maintenance training information.

4.3.1. **(Added-AFSC)** SSQ Applicability. Mandatory SSQ requirements apply to all ALC organizations performing depot maintenance. Special skills require a periodic requalification. Individuals who fail the requalification or cannot be requalified within the designated time frame will be disqualified for that SSQ skill and decertified for all PAC tasks related to the SSQ.

4.3.2. **(Added-AFSC)** SSQ Requirements. Completion of specialized formal training, completion of a written test (if applicable), demonstration of proficiency, and periodic requalification are required for SSQ skills. Traditional OJT can be used in addition with formal training as needed. Applicable AFIs, AFMCIs, safety, and other regulatory requirements will be included in SSQ requirements. **Note:** For new workloads, it may not be possible to satisfy all requirements to start work (i.e., experience requirements on the MDS). In these cases, the responsible supervisor will select the best qualified journeyman technician and will be appointed as the SSQ Official IAW this instruction.

4.3.2.1. **(Added-OC-ALC)** When a written test is required, it will be conducted prior to the demonstration of proficiency. If the employee is being qualified/requalified on the SSQ and fails (the written test or any part of the demonstration of proficiency), the employee will be immediately decertified by the employee's supervisor on all tasks related to the SSQ. It is the responsibility of the SSQ QO to notify the supervisor, in writing, when an employee fails any part of the qualification/requalification process. If TSS is utilized to schedule an SSQ, and the employee fails the SSQ, the TSS failure notification will suffice as written notification.

4.3.3. **(Added-AFSC)** Request for SSQ Waivers. Request for waivers to the initial qualification requirement will be initiated in writing by the Group PAC Program Manager and submitted to the ALC PAC Program Manager for routing to the ALC for action. If approved by the ALC/CC/DV/CD, it will be submitted through HQ AFMC/A4PT for action. The ALC PAC Program Manager will inform the Group PAC Program Manager of any waivers granted. The ALC PAC Program Manager will maintain a copy on file.

4.3.4. **(Added-AFSC)** Request for Temporary SSQ extensions. Request for extensions to requalification requirements can be approved by the ALC/CC/DV/CD. Extensions will be initiated in writing by the Group PAC Program Manager and submitted to the ALC PAC Program Manager for action. ALC PAC Program Managers will inform the Group PAC Program Manager of any extensions granted. The ALC PAC Program Managers will maintain a copy on file. Extensions exceeding 90 days will be coordinated and approved through HQ AFMC/A4PT.

4.3.5. **(Added-AFSC)** Local SSQ. Local SSQ requirements will be established if unique ALC requirements exist.

4.3.5.1. **(Added-AFSC)** All local SSQs will be administered by the ALC PAC Program Manager and approved by the ALC CC/DV.

4.3.5.2. **(Added-AFSC)** Locally designated SSQs will meet all requirements of this instruction.

4.3.5.2.1. **(Added-OC-ALC)** The group PAC program manager must oversee the development of local SSQ procedures including regulatory documents, application, qualification, re-qualification, and disqualification criteria IAW with this supplement. Locally Added-OC-ALC SSQ procedures will be established in group level publications. Locally Added-OC-ALC SSQs are as follows:

4.3.5.2.1.1. **(Added-OC-ALC)** KC-135 air refueling boom rigging.

4.3.6. **(Added-AFSC)** SSQ Requalification. Requalification will be accomplished IAW each independent SSQ requirement established in this instruction and in local publications.

4.3.7. **(Added-AFSC)** SSQ Disqualification. Disqualification will be accomplished IAW each independent SSQ disqualification requirement established in this instruction and in local publications. SSQ disqualification will result in immediate decertification on SSQ-related PAC tasks.

4.3.8. **(Added-AFSC)** Mandatory SSQs. The special skills listed in **paragraph 4.3.9** are mandatory requirements as they apply to each ALC. The references listed for the mandatory skills are not intended to be all-inclusive and will be used with other directives and technical publications that apply to the special skill to develop qualification requirements. It is essential that all AFI and other applicable safety requirements are included in the formal training. New or revised command-level SSQ requirements will be approved by AFSC Maintenance Training and PAC Working Groups before implementation unless directed by higher authority.

4.3.8.1. **(Added-AFSC)** AMARG will comply with the following SSQ requirements where possible. When unique aircraft requirements make it impractical for full compliance, AMARG will document a qualification program that provides the best qualification possible. These procedures will be approved by OO-ALC/CC/DV/CD.

4.3.9. **(Added-AFSC)** SSQ Responsibilities.

4.3.9.1. **(Added-AFSC)** Lead ALC for SSQs. Lead ALC for command SSQs are appointed by HQ AFMC/A4PT. The SSQ Lead ALC will:

4.3.9.1.1. **(Added-AFSC)** Arrange for SMEs to provide technical guidance to the ALC and other organizations on issues related to the subject area of assigned SSQ.

4.3.9.1.2. **(Added-AFSC)** Serve as the liaison between HQ AFMC/A4PT, ALCs, Groups, and other organizations on issues related to assigned SSQ.

4.3.9.1.3. **(Added-AFSC)** Ensure that ALCs are involved in decisions related to the assigned SSQ.

4.3.9.1.4. **(Added-AFSC)** Assigned SSQs will be updated as needed and reviewed at least triennially to ensure the requirements identified in this instruction are adequate and current to support it, and report changes that require immediate action through HQ AFMC/A4PT.

4.3.9.2. **(Added-AFSC)** SSQ Qualification Official. The SSQ Qualification Officials will be SMEs in the skills they support, and will possess the knowledge, skills, and abilities to perform this function. SSQ Officials will be appointed locally. These officials should avoid qualifying employees they supervise. If a local expert is not available to act as the SSQ official, an outside source may be designated. The order of selection is: Another ALC or AFSC unit, another HQ AFMC unit, another Air Force unit, another DoD source, academia, or other commercial/private source. If none of these sources are available, the responsible system engineers or other technical experts will be used to develop qualification requirements, train, and qualify the first SSQ Officials. The SSQ Qualification Official will:

4.3.9.2.1. **(Added-AFSC)** Be SSQ qualified in the skill supported or possess the necessary credentials required by the SSQ (i.e., degree, professional/industrial certification).

4.3.9.2.2. **(Added-AFSC)** Be appointed in writing by the ALC/CC/DV/CD or production Group CC/DV/CD supported.

4.3.9.2.3. **(Added-AFSC)** Complete the HQ AFMC SSQ Qualifier Course. **Note:** If the designated SSQ Qualification Official is from an outside source, the individual's education and/or certification will be documented and current as specified by the governing authority (e.g., recognized professional organization, ANSI, etc.)

4.3.9.2.4. **(Added-AFSC)** Notify the Group PAC Program Manager when changes to SSQ requirements are necessary.

4.3.9.2.5. **(Added-AFSC)** Prepare and use the appropriate SSQ proficiency worksheet for each SSQ supported.

4.3.9.2.5.1. **(Added-AFSC)** Complete all steps of the SSQ proficiency worksheet to include completion dates for all prerequisite training.

4.3.9.2.5.2. **(Added-OC-ALC)** Blank or N/A entries are not permitted on the SSQ proficiency worksheets for any steps or prerequisite dates. Every blank/block on the worksheet requires a proper entry.

4.3.9.2.5.3. **(Added-OC-ALC)** The completion date for the SSQ will not be the same completion date as the SOJT.

4.3.9.2.5.4. **(Added-OC-ALC)** The demonstration of proficiency (practical) will not be completed until after successful completion of written examination(s).

4.3.9.2.6. **(Added-AFSC)** Participate as an SSQ SME in the development and review of SSQ Guides, SSQ worksheets, and formal training supporting the SSQ.

4.3.9.2.6.1. **(Added-OC-ALC)** Review all written test material for validity at the same time the SSQ material is reviewed during the triennial review or at such time as changes are made to the SSQ requirements. The OC-ALC PAC Manager will be notified at the completion of the review.

4.3.9.2.6.2. **(Added-OC-ALC)** In addition, the SSQ written tests being administered by the E-Testing System are to be reviewed every 15 months with notification to the OC-ALC PAC Manager upon completion.

4.3.9.2.7. **(Added-AFSC)** Witness and evaluate the performance of the skill using the appropriate SSQ proficiency worksheet. The worksheet will be completed in its entirety with no blanks or N/As.

4.3.9.2.8. **(Added-AFSC)** Inform the supervisor in writing (i.e., SSQ worksheet documentation or other means deemed appropriate) that the employee is qualified, or the employee failed their SSQ or written test.

4.3.9.2.8.1. **(Added-AFSC)** TSS may be used to notify supervisors in writing if the employee passed or failed.

4.3.9.2.8.2. **(Added-OC-ALC)** When the QO witnesses a deficiency during the demonstration of proficiency, the QO will notify the supervisor, and the technician will be decertified.

4.3.9.2.8.3. **(Added-OC-ALC)** Upon failure of an SSQ requalification, the supervisor will ensure that the failure has been input into TSS for the appropriate SSQ.

4.3.9.2.9. **(Added-AFSC)** Provide completed copies of the SSQ worksheets to the applicable Group PAC Program Manager.

4.4. Mandatory SSQs.

4.4.1. HQ AFSC will:

4.4.1.1. Develop, implement, and maintain standardized SSQs for common Mission Design Series (MDS) across the ALCs.

4.4.1.2. Ensure all SSQ waivers are submitted in writing through HQ AFSC to HQ AFMC for action.

4.4.1.2.1. **(Added-AFSC)** Request for waivers to the initial qualification requirement will be initiated in writing by the Group PAC Program Manager and submitted to the ALC PAC Program Manager for routing to the ALC for action. If approved by the ALC/CC/DV, it will be submitted to AFMC for action. The ALC PAC Program Manager will inform the Group PAC Program Manager of any waivers granted. The ALC PAC Program Manager will maintain a copy on file.

4.4.1.3. Develop, implement, and maintain procedures for the following mandatory Command SSQs:

4.4.1.3.1. Aircraft Engine Run-up.

4.4.1.3.1.1. **(Added-AFSC)** Regulatory Documents. Compliance with AFMAN 11-218, *Aircraft Operations and Movement on the Ground,* as supplemented, applicable AFI and safety standards, weapons system TOs, job guides, and other directives.

4.4.1.3.1.2. **(Added-AFSC)** Lead ALC. OO-ALC, Hill AFB, Utah.

4.4.1.3.1.2.1. **(Added-AFSC)** Application. Applies to all personnel who start, run-up, operate, or test engines installed on aircraft at any power level including co-pilot position.

4.4.1.3.1.3. **(Added-AFSC)** Qualification. The following are minimum initial qualification requirements that will be augmented locally as necessary:

4.4.1.3.1.3.1. **(Added-AFSC)** Completion of formal training as it relates to specific MDS engine run-up procedures which will include the following.

4.4.1.3.1.3.2. **(Added-AFSC)** Aircraft systems familiarization as it applies to engine run.

4.4.1.3.1.3.3. **(Added-AFSC)** Cockpit/flight deck familiarization to include instrument, switches, circuit breaker functions, and locations for all aircraft equipped with operational egress systems.

4.4.1.3.1.3.4. **(Added-AFSC)** MDS specific emergency ground escape procedures (unless covered in other training).

4.4.1.3.1.3.5. **(Added-AFSC)** Engine run procedures.

4.4.1.3.1.3.6. **(Added-AFSC)** Emergency procedures including system brake operation.

4.4.1.3.1.3.7. **(Added-AFSC)** Abnormal operations.

4.4.1.3.1.3.8. **(Added-AFSC)** Aircraft marshaling (unless covered in other training).

4.4.1.3.1.3.9. **(Added-AFSC)** Auxiliary power or starting unit procedures as applicable to each MDS (unless covered in other training).

4.4.1.3.1.3.10. **(Added-AFSC)** Completion of initial simulator (or flight deck procedures trainer) session.

4.4.1.3.1.3.11. **(Added-AFSC)** Completion of a written test consisting of two parts:

4.4.1.3.1.3.12. **(Added-AFSC)** BOLDFACE/Emergency procedures test, 100 percent correct passing score (committed to memory).

4.4.1.3.1.3.13. **(Added-AFSC)** A general knowledge written test, 85 percent correct minimum passing score, corrected to 100 percent.

4.4.1.3.1.3.14. **(Added-AFSC)** Proficiency demonstration to an SSQ Qualification Official.

4.4.1.3.1.4. **(Added-AFSC)** Requalification. Requalification is required every 12 months and will consist of as a minimum:

4.4.1.3.1.4.1. **(Added-AFSC)** Completion of one simulator or flight deck procedures trainer/live aircraft session. When the individual is qualified for several similar aircraft, rotate simulators each year, if possible, to vary experiences. **Note:** If simulator time is difficult/costly to schedule for annual requalification, it may be performed at ALC discretion in a flight deck procedures trainer/live aircraft in lieu of a simulator session. If an MDS is not available on the installation, simulator training must be scheduled for requalification.

4.4.1.3.1.4.2. **(Added-AFSC)** Completion of a written test (same criteria as initial qualification).

4.4.1.3.1.4.3. **(Added-AFSC)** Demonstration of proficiency to an SSQ Qualification Official for each similar aircraft/engine configuration.

4.4.1.3.1.5. **(Added-AFSC)** Currency. Currency is maintained if an engine run has been performed within 90 days for each MDS. If 90 to 180 days have passed without performing an engine run, a proficiency demonstration to an SSQ Qualification Official is required. If 180 days has passed without performing an engine run, an annual requalification is required. **Note:** If low workload volume makes it impossible to meet this requirement (90/180-day currency), the responsible supervisor will select a MDS SSQ qualified and certified technician to perform the engine run.

4.4.1.3.1.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, or failure to perform required procedures IAW the applicable technical directives can be grounds for immediate disqualification. Failure to maintain qualification, failure to comply with BOLDFACE items (emergency procedures), and/or failure to maintain the required level of proficiency will be grounds for disqualification. Requalification is granted when the deficiency is corrected, and all initial qualifications have been met as described above.

4.4.1.3.1.7. **(Added-AFSC)** Special Requirements. When possible, flight test personnel or other rated personnel will qualify (i.e., initial, and annual requalification) all SSQ Qualification Officials.

4.4.1.3.2. Engine Test Cell Operation.

4.4.1.3.2.1. **(Added-AFSC)** Regulatory Documents. Applicable engine technical data/job guides, test cell operation instructional manuals, applicable safety standards, and other directives.

4.4.1.3.2.2. **(Added-AFSC)** Lead ALC. OC-ALC, Tinker AFB, Oklahoma.

4.4.1.3.2.3. **(Added-AFSC)** Application. Applies to all personnel who operate aircraft engines and small gas turbines in test facilities.

4.4.1.3.2.4. **(Added-AFSC)** Qualification. The following are minimum initial qualification requirements that will be locally augmented as necessary:

4.4.1.3.2.4.1. **(Added-AFSC)** Completion of formal training as it relates to aircraft engines and small gas turbines test procedures.

4.4.1.3.2.4.2. **(Added-AFSC)** Completion of a written test consisting of two parts:

4.4.1.3.2.4.3. **(Added-AFSC)** BOLDFACE/Emergency procedures test, 100 percent correct passing score (committed to memory).

4.4.1.3.2.4.4. **(Added-AFSC)** A written test on the specific type-model engine, 85 percent correct minimum passing score, corrected to 100 percent.

4.4.1.3.2.4.5. **(Added-AFSC)** Demonstration of proficiency to an SSQ Qualification Official. At a minimum, this will include demonstrated knowledge of the test cell fire extinguishing system and the ability to perform normal engine acceptance test.

4.4.1.3.2.5. **(Added-AFSC)** Requalification. Requalification is required every 12 months and will include completion of a written test (same criteria as initial qualification) and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.2.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.3. Aircraft Towing.

4.4.1.3.3.1. **(Added-AFSC)** Regulatory Documents. AFMAN 11-218 as supplemented and applicable safety standards, weapons system technical orders, job guides, and other directives.

4.4.1.3.3.2. **(Added-AFSC)** Lead ALC. OC-ALC, Tinker AFB, Oklahoma.

4.4.1.3.3.3. **(Added-AFSC)** Application. Applies to all personnel occupying a flight deck position for aircraft towing and operating a vehicle actively towing an aircraft or acting as a tow team chief. Wing walkers, tail walkers, and all other support personnel performing assigned duties during towing operations do not need SSQ. These individuals will be trained and qualified to the extent necessary to perform the function as determined locally.

4.4.1.3.3.4. **(Added-AFSC)** Qualification. Qualification is granted upon successful completion of required MDS specific training, completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and a demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.3.5. **(Added-AFSC)** AMARG will document alternative requirements for stored aircraft.

4.4.1.3.3.6. **(Added-AFSC)** Requalification. Requalification is required every 12 months and will include demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.3.7. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.3.8. **(Added-AFSC)** Special Comments. All personnel occupying a flight deck position during the towing operation will have completed the applicable emergency ground escape course. If an operational egress system is installed, the applicable egress familiarization course will be completed and current.

4.4.1.3.4. Airframe Jacking and Leveling.

4.4.1.3.4.1. **(Added-AFSC)** Regulatory Documents. Applicable weapons system TOs, job guides, safety standards, and directives.

4.4.1.3.4.2. **(Added-AFSC)** Lead ALC. OO-ALC, Hill AFB, Utah.

4.4.1.3.4.3. **(Added-AFSC)** Application. Applies to all personnel performing the following functions: Jacking chief, hydraulic manifold operator, and the leveling member. All other support personnel involved in jacking operations do not need SSQ. These individuals only need to be trained to the extent necessary to accomplish their task.

4.4.1.3.4.4. **(Added-AFSC)** Qualification. Qualification is granted upon successful completion of required training, completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.4.5. **(Added-AFSC)** Requalification. Requalification is required every 24 months and will include demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.4.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.5. Explosive Devices.

4.4.1.3.5.1. **(Added-AFSC)** Regulatory Documents. Defense Explosives Safety Regulation (DESR) 6055.09_91-201, *Explosives Safety Standards,* Department of the Air Force Instruction (DAFI) 91-202, *The US Air Force Mishap Prevention Program*, applicable safety standards, weapons system TOs, job guides, and other directives.

4.4.1.3.5.2. **(Added-AFSC)** Lead ALC. WR-ALC, Robins AFB, Georgia.

4.4.1.3.5.3. **(Added-AFSC)** Application. Applies to all personnel who remove and install explosive devices.

4.4.1.3.5.4. **(Added-AFSC)** Qualification. Qualification is granted upon successful completion of required training, completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.5.5. **(Added-AFSC)** Requalification. Requalification is required every 12 months and will include demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.5.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.6. Refuel/Defuel Operations.

4.4.1.3.6.1. **(Added-AFSC)** Regulatory Documents. TO 00-25-172, applicable safety standards, weapons system TOs, job guides, and other directives.

4.4.1.3.6.2. **(Added-AFSC)** Lead ALC. WR-ALC, Robins AFB, Georgia.

4.4.1.3.6.3. **(Added-AFSC)** Application. Applies to all personnel performing refueling or defueling of any aerospace vehicle.

4.4.1.3.6.4. **(Added-AFSC)** Qualification. Qualification is granted upon successful completion of required training, completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.6.5. **(Added-AFSC)** Requalification. Requalification is required every 12 months. Consists of completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.6.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.6.7. **(Added-AFSC)** Special Comments. Due to the criticality of transferring fuel, only those directly involved with the process will be allowed within the area of the transfer. Periodic monitoring of the actual process in progress is required to ensure adherence to all applicable directives and to verify that the high state of proficiency required in this process is maintained. Training will include ESD information specific to fueling operations. **Note:** All personnel occupying a flight deck position during the transfer of fuel will have completed the applicable emergency ground escape course. If an operational egress system is installed, the applicable egress familiarization course will be complete and current.

4.4.1.3.7. Aircraft Cabin/Cockpit/Fuselage Pressurization.

4.4.1.3.7.1. **(Added-AFSC)** Regulatory Documents. The applicable weapons system TOs, job guides, applicable safety standards, and directives.

4.4.1.3.7.2. **(Added-AFSC)** Lead ALC. OO-ALC, Hill AFB, Utah.

4.4.1.3.7.3. **(Added-AFSC)** Application. Applies to all personnel who perform aircraft cabin/flight deck/fuselage pressurization checks or functional tests requiring aircraft pressurization using either aircraft or external sources of pressurization. Applies to all tasks directly related to the pressurization check/test included in applicable TO, job guide, or WCD.

4.4.1.3.7.4. **(Added-AFSC)** Qualification. Qualification is granted after successful completion of required training, completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and demonstration of the ability to perform the check/test IAW all the requirements of the technical data to an SSQ Qualification Official.

4.4.1.3.7.5. **(Added-AFSC)** Requalification. Requalification is required every 12 months. Employees will demonstrate the ability to perform the check/test IAW all the requirements of the technical data to an SSQ Qualification Official.

4.4.1.3.7.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, or failure to perform the pressurization check/test procedure IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.7.7. **(Added-AFSC)** Special Comments. Because of the wide variations in MDS, qualification criteria will meet specific weapon systems' needs. **Note:** All personnel occupying a flight deck/cabin position during any portion of the aircraft flight deck/fuselage pressurization process will have completed the applicable emergency ground escape course. If an operational egress system is installed, the applicable egress familiarization course will be completed and current.

4.4.1.3.8. Aircraft Canopy Rigging.

4.4.1.3.8.1. **(Added-AFSC)** Regulatory Documents. The applicable weapons system TOs, job guides, applicable safety standards, and directives.

4.4.1.3.8.2. **(Added-AFSC)** Lead ALC. OO-ALC, Hill AFB, Utah.

4.4.1.3.8.3. **(Added-AFSC)** Application. Applies to all personnel who perform rigging operations on aircraft canopies. In some cases, the canopy rigging task may be part of the egress qualification for that MDS. If this is the case, the egress SSQ is all that is required.

4.4.1.3.8.4. **(Added-AFSC)** Qualification. Qualification is granted upon completion of required training and a demonstration of proficiency in the canopy rigging operation to an SSQ Qualification Official.

4.4.1.3.8.5. **(Added-AFSC)** Requalification. Requalification is required every 24 months and will include a demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.8.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.9. Flight Control Rigging.

4.4.1.3.9.1. **(Added-AFSC)** Regulatory Documents. Applicable weapons system TOs, job guides, applicable safety standards, and directives.

4.4.1.3.9.2. **(Added-AFSC)** Lead ALC. WR-ALC, Robins AFB, Georgia.

4.4.1.3.9.3. **(Added-AFSC)** Application. Applies to all personnel who perform aircraft flight control rigging (i.e., flight control rigging includes all tasks associated with the adjustment of mechanical, hydraulic, and/or electrical systems which control aircraft flight direction and attitude). Personnel trained in flight control rigging may be specialized in either the mechanical, hydraulic, or electrical skill of rigging. Personnel assisting in the rigging process in a support role may not require SSQ. These individuals only need to be trained to the extent necessary to accomplish their task.

4.4.1.3.9.4. **(Added-AFSC)** Qualification. Qualification is granted upon successful completion of required training, completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.9.5. **(Added-AFSC)** Requalification. Requalification is required every 12 months and will include completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.9.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.9.7. **(Added-AFSC)** Special Comments. All personnel occupying the flight deck during any portion of the flight control rigging process will have completed the applicable emergency ground escape course. If an operational egress system is installed, the applicable egress familiarization course will be completed and current.

4.4.1.3.10. Aircraft Egress Systems.

4.4.1.3.10.1. **(Added-AFSC)** Regulatory Documents. AFMCI 21-100, Volume 2, Chapter 7, DESR 6055.09_AFMAN 91-201, DAFI 91-202, applicable safety standards, weapons system TOs, job guides, and other directives.

4.4.1.3.10.2. **(Added-AFSC)** Lead ALC. OO-ALC, Hill AFB, Utah.

4.4.1.3.10.3. **(Added-AFSC)** Application. Applies to all personnel who remove, repair, install, and inspect egress systems. An egress technician is a civilian series WG-6652 (Aircraft Ordnance Systems Mechanic) or the military equivalent (AF Specialty Code 2A6X3) who meets the requirements of this instruction. Other personnel who perform or assist in egress tasks including series WG-6652 when it is not their primary duties are egress augmentees. The augmentees will meet the requirements of this instruction for the tasks performed.

4.4.1.3.10.4. **(Added-AFSC)** Qualification. As a minimum, the following are initial qualification requirements for egress technicians and augmentees:

4.4.1.3.10.4.1. **(Added-AFSC)** Completion of an aircrew egress systems apprentice course or a waiver based upon equivalent training or experience as specified in Egress Explosive Safety Training, AFMCI 21-100, Volume 2, Chapter 7.

4.4.1.3.10.4.2. **(Added-AFSC)** Completion of an initial weapons safety course as specified in DAFI 91-202.

4.4.1.3.10.4.3. **(Added-AFSC)** Completion of an AETC journeyman/five level egress course (preferred) or a comparable AETC approved egress course for the specific MDS aircraft.

4.4.1.3.10.4.4. **(Added-AFSC)** Completion of a written test with a score of 100 percent. Failure to attain 100 percent correct will require further training and retesting.

4.4.1.3.10.4.5. **(Added-AFSC)** Demonstration of acquired knowledge and skill proficiency to an SSQ Qualification Official.

4.4.1.3.10.5. **(Added-AFSC)** Requalification. All egress technicians and augmentees will be requalified every 18 months. Requalification will consist of:

4.4.1.3.10.5.1. **(Added-AFSC)** Completion of a written test (same criteria as initial qualification).

4.4.1.3.10.5.2. **(Added-AFSC)** Demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.10.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification. Requalification is granted when the deficiency is corrected, and all qualifications have been met as described above.

4.4.1.3.10.7. **(Added-AFSC)** Special Requirements.

4.4.1.3.10.7.1. **(Added-AFSC)** Demand Response Team. All personnel will use the Demand Response Team when performing an egress task that requires the removal or installation of explosive components, and during egress final inspections as directed by TOs. AFMCI 21-100, Volume 2, Chapter 7 provides guidance that will be followed. All personnel performing egress tasks will be SSQ qualified and certified. Only egress certified technicians will certify egress tasks to include secondary certification and sign-off of aircraft status forms. Nonqualified or certified personnel may assist if they are in a training status or when performing ancillary duties in support of and under the direct supervision of fully qualified and certified egress personnel.

4.4.1.3.10.7.2. **(Added-AFSC)** Life Support Task. When parachutes and survival kits are integral parts of the ejection seat, either 2A6X3 Aircrew Egress Systems personnel or 1P0X1 Aircrew Flight Equipment (or series WG-4818, Aircraft Survival Flight Equipment Repairing) may install and remove them provided they meet the requirements specified in this instruction.

4.4.1.3.10.7.3. **(Added-AMARG Only)** . Training for Process-In aircraft egress systems tasks of SAFE/DISARM and CAD/PAD Removals (CADRE) will be managed as critical tasks and training will include the use of locally developed standard SOJT training guides and worksheets. SAFE/DISARM guides and worksheet will incorporate the use of MDS specific Explosive Operating Instructions approved by AMARG/SE, AMARG/CC-QA, and 355th Wing Weapons Safety (reference AFMCI 21-100, Volume 2, Chapter 7 for specific egress requirements).

4.4.1.3.10.8. **(Added-AFSC)** Aircraft Egress Familiarization and Aircraft Emergency Ground Escape. Personnel who are not SSQ qualified in egress but who access cockpits (e.g., flight deck, cabin, etc.) with operational egress systems installed will complete the applicable aircraft emergency ground escape and complete/be current in the applicable flight deck egress familiarization course.

4.4.1.3.11. Fuel Cell Repair.

4.4.1.3.11.1. **(Added-AFSC)** Regulatory Documents. TO 1-1-3, AFI and safety standards, applicable weapon systems TOs, job guides, and directives.

4.4.1.3.11.2. **(Added-AFSC)** Lead ALC. WR-ALC, Robins AFB, Georgia.

4.4.1.3.11.3. **(Added-AFSC)** Application. Applies to all personnel who perform final inspection and closeout, leak detection and repair, and pressure check/test of integral tanks or fuel cells to include bladders. Personnel who perform ancillary duties in support of fuel cell/tank work may not need SSQ but will be trained to the extent necessary to safely perform the tasks.

4.4.1.3.11.4. **(Added-AFSC)** Qualification. Qualification is granted upon successful completion of required training, completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and a demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.11.5. **(Added-AFSC)** Requalification. Requalification is required every 12 months and will include completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.11.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.11.7. **(Added-AFSC)** Special Comments. If the integral, auxiliary, or external tank is removed from the aircraft, the SSQ requirement still applies. Training will include ESD information specific to fuel cell repair operations.

4.4.1.3.12. Fiberglass Radome Repair.

4.4.1.3.12.1. **(Added-AFSC)** Regulatory Documents. TO 1-1-24, *Maintenance Repair and Electrical Requirements for Fiberglass Airborne Radomes*, applicable safety standards, weapons system TOs, job guides, and other directives.

4.4.1.3.12.2. **(Added-AFSC)** Lead ALC. WR-ALC, Robins AFB, Georgia.

4.4.1.3.12.3. **(Added-AFSC)** Application. Applies to all personnel who perform repairs to any airborne radome constructed of reinforced fiber and resin impregnated materials.

4.4.1.3.12.4. **(Added-AFSC)** Qualification. Qualification is granted upon successful completion of required training, completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and a demonstration of proficiency consisting of two parts:

4.4.1.3.12.4.1. **(Added-AFSC)** Repairing simulated damage to fiberglass panels of the type of construction normally repaired with the structural integrity verified by destructive testing.

4.4.1.3.12.4.2. **(Added-AFSC)** Demonstration of proficiency to an SSQ Qualification Official on work normally performed.

4.4.1.3.12.5. **(Added-AFSC)** Requalification. Requalification is required every 12 months and will include a demonstration of proficiency to an SSQ Qualification Official using the same criteria as the initial qualification.

4.4.1.3.12.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.13. Parachute Repair and Packing.

4.4.1.3.13.1. **(Added-AFSC)** Regulatory Documents. Regulatory documents consist of TO series 14D1, 14D2, 14D3, 14S1, and other applicable directives.

4.4.1.3.13.2. **(Added-AFSC)** Lead ALC. WR-ALC, Robins AFB, Georgia.

4.4.1.3.13.3. **(Added-AFSC)** Application. Applies to all personnel who inspect, repair, or pack parachutes.

4.4.1.3.13.4. **(Added-AFSC)** Qualification. Qualification is granted upon successful completion of required training, completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and a demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.13.5. **(Added-AFSC)** Requalification. Requalification is required every 12 months and will include completion of a written test, (85 percent correct minimum passing score, corrected to 100) percent, and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.13.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.14. Soldering.

4.4.1.3.14.1. **(Added-AFSC)** Regulatory Documents. TO 00-25-234, TO 00-25-259, *Standard Maintenance Practices Miniature/Microminiature (2M) Electronic Assembly Repair*, applicable AFI and safety standards, weapons system TOs, job guides, and other directives.

4.4.1.3.14.2. **(Added-AFSC)** Lead ALC. OO-ALC, Hill AFB, Utah.

4.4.1.3.14.3. **(Added-AFSC)** Application. Applies to personnel who perform hand-held soldering (i.e., not hot air) on aerospace electrical and electronic equipment. This includes all depot maintenance personnel engaged in repair, maintenance, or test of aerospace electrical/electronic equipment. Personnel who perform hand-held soldering on test equipment and other aerospace equipment that directly support depot production are also included.

4.4.1.3.14.4. **(Added-AFSC)** Qualification. The following are minimum initial requirements for soldering technicians, instructors, and SSQ qualification officials:

4.4.1.3.14.4.1. **(Added-AFSC)** Technicians. Successful completion of HQ AFMC soldering technician course applicable to specific soldering tasks supported. Successful completion of written tests, (with a passing score of 85 percent, corrected to 100 percent), applicable to the soldering tasks supported. Demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.14.4.2. **(Added-AFSC)** Instructors and Qualification Officials. Successful completion of the 'AFMC Soldering Instructor Qualification Course' applicable to specific soldering discipline they intend to instruct and/or serve as SSQ qualifiers. Successful completion of a written test (with a passing score of 85 percent, corrected to 100 percent) applicable to specific soldering discipline they intend to instruct and/or serve as SSQ qualifiers. Demonstration of proficiency to the course instructor.

4.4.1.3.14.5. **(Added-AFSC)** Requalification. The following are minimum requalification requirements for soldering technicians, instructors, and qualification officials:

4.4.1.3.14.5.1. **(Added-AFSC)** Technicians. Requalification intervals will not exceed 24 months. Requires successful completion of a demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.14.5.2. **(Added-AFSC)** Instructors and Qualification Officials. Requalification will not exceed 36 months and will include completion of the 'AFMC Soldering Instructor Requalification Course' applicable to the specific soldering disciplines which they instruct and/or serve as SSQ qualifiers; successful completion of written tests with the same criteria as initial qualification (applicable to specific soldering disciplines which they instruct and/or serve as SSQ qualifiers); and demonstrations of proficiency to the course instructor.

4.4.1.3.14.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Additionally, qualification will be revoked if inspection records, or other evidence indicates poor workmanship. Requalification is granted when the deficiency is corrected, and all qualification requirements as described above have been met.

4.4.1.3.15. Liquid and Gaseous Oxygen Handling and Equipment Maintenance.

4.4.1.3.15.1. **(Added-AFSC)** Regulatory Documents. TO 42B6-1-1, *Quality Control of Aviators Breathing Oxygen/Aviators Gaseous Breathing Oxygen*, 15X and 35 series TOs, applicable AFI and safety standards, weapons system technical orders, job guides, and other directives.

4.4.1.3.15.2. **(Added-AFSC)** Lead ALC. OO-ALC, Hill AFB, Utah.

4.4.1.3.15.3. **(Added-AFSC)** Application. Applies to all personnel who repair, service, store, transfer, purge, bleed, vacuum, pressure check or otherwise handle or use liquid or gaseous oxygen in maintenance tasks. It also applies to personnel who perform maintenance on liquid and gaseous oxygen equipment. Duties, such as removal and installation of lines, pressure relief valves, regulators and converters removed from the aircraft during the depot maintenance process, prior to pressure check and purging are considered to be ancillary duties and do not require SSQ.

4.4.1.3.15.4. **(Added-AFSC)** Qualification. Qualification is granted after successful completion of the required training and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.15.5. **(Added-AFSC)** Requalification. Requalification is required every 24 months and will include a demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.15.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification. Retraining and successful demonstration of proficiency to an SSQ Qualification Official will be required prior to regaining qualification.

4.4.1.3.16. Selective Brush Plating.

4.4.1.3.16.1. **(Added-AFSC)** Regulatory Documents. Applicable weapons systems TOs, general TOs, MIL-Standard (STD)-865D, *Selective, Brush Plating, Electro-Deposition,* and other applicable technical and safety directives.

4.4.1.3.16.2. **(Added-AFSC)** Lead ALC. OO-ALC, Hill AFB, Utah.

4.4.1.3.16.3. **(Added-AFSC)** Application. Applies to all personnel who perform the process of selective brush electrode deposition of various metals and alloys on other metals and alloys.

4.4.1.3.16.4. **(Added-AFSC)** Qualification. Qualification is granted upon successful completion of required training, completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and a demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.16.5. **(Added-AFSC)** Requalification. Requalification is required every 12 months and will include demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.16.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.17. Temper Etching.

4.4.1.3.17.1. **(Added-AFSC)** Regulatory Documents. Regulatory documents consist of MIL-STD-867C, *Temper Etch Inspection*, applicable AFI and safety standards, TOs, and other directives.

4.4.1.3.17.2. **(Added-AFSC)** Lead ALC. OO-ALC, Hill AFB, Utah.

4.4.1.3.17.3. **(Added-AFSC)** Application. Applies to all personnel who perform temper etching and subsequent temper etching inspection on applicable aircraft and missile structural and propulsion system components.

4.4.1.3.17.4. **(Added-AFSC)** Qualification. Qualification is granted upon successful completion of required training, completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and a demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.17.5. **(Added-AFSC)** Requalification. Requalification is required every 12 months and will include completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.17.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.18. Brazing.

4.4.1.3.18.1. **(Added-AFSC)** Regulatory Documents. American Welding Society (AWS) B2.2, *Specification for Brazing Procedures and Performance Qualification*, TO 00-25-252, *Intermediate Maintenance and Depot Level Instructions for Aeronautical Equipment Welding*, MILSTD-B-12673, *Brazing Oxyacetylene of Build-up Metal Structures*, applicable safety standards, weapons system TOs, job guides, and other directives.

4.4.1.3.18.2. **(Added-AFSC)** Lead ALC. OC-ALC, Tinker AFB, Oklahoma.

4.4.1.3.18.3. **(Added-AFSC)** Application. Applies to personnel who perform oxyacetylene, induction and resistance brazing on aircraft, aircraft engines, propulsion systems components, and aerospace components.

4.4.1.3.18.4. **(Added-AFSC)** Qualification. Qualification is granted upon successful completion of required training and demonstration of proficiency of the employee's ability to braze a joint on a representative production part to an SSQ Qualification Official.

4.4.1.3.18.5. **(Added-AFSC)** Requalification. Requalification is required every 36 months and will include demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.18.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.19. Welding.

4.4.1.3.19.1. **(Added-AFSC)** Regulatory Documents. TO 00-25-252, AWS D17.1, *Specification for Fusion Welding for Aerospace Applications*, AWS D17.2, *Specification for Resistance Welding for Aerospace Applications*, TO 00-25-224, *Welding High Pressure and Cryogenic Systems*, applicable AFIs, TOs, and other directives.

4.4.1.3.19.2. **(Added-AFSC)** Lead ALC. OC-ALC, Tinker AFB, Oklahoma.

4.4.1.3.19.3. **(Added-AFSC)** Application. Applies to welding (i.e., not temporary spot/tack) performed on aircraft, aircraft engines, and aerospace components to include propulsion system components and missiles.

4.4.1.3.19.4. **(Added-AFSC)** Qualification. All welders will be qualified IAW ANSI/AWS D17.1, TO 00-25-252, and applicable TOs and directives. Welders who perform electron beam welding, resistance, dabber tungsten inert gas, and plasma arc will be gas tungsten arc welding (GTAW) qualified if they also perform manual welding within any of these processes. Resistance Welding Machine Operators who perform spot/tack welding IAW AWS D17.2, do not require SSQ if the weld produced serves as a temporary function of the welding production process. Welders performing welding on high pressure or cryogenic systems will qualify IAW TO 00-25-224. Qualification is granted upon successful completion of the required training and demonstration of proficiency to an SSQ Qualification Official. Operators will pass an eye exam as specified by AWS D17.1. Local waivers may be granted on a case-by-case basis where these vision requirements are not necessary for the work being performed.

4.4.1.3.19.5. **(Added-AFSC)** Requalification. A welder or welding operator will be requalified every 12 months for resistance and electron beam welding, every 24 months for automated welding processes, and every 60 months for manual welding processes. Requalification is also required when there is a specific reason to question the ability of a welder or welding operator to meet the requirements for qualification in a given welding process.

4.4.1.3.19.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, failure to weld within the qualified process using the appropriate material IAW TO 00-25-252 interval, failure to pass eye exam or obtain waiver, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.19.7. **(Added-OC-ALC)** Welders will not perform a penetrant test on their own welds. This will be performed by another mechanic/technician who is NDI SSQ qualified.

4.4.1.3.20. Thermal Spraying.

4.4.1.3.20.1. **(Added-AFSC)** Regulatory Documents. ANSI/AWS C2.16, *Guide for Thermal Spray Operator Qualification Programs,* applicable AFI and safety standards, TOs, job guides, and other directives that apply to the process.

4.4.1.3.20.2. **(Added-AFSC)** Lead ALC. OC-ALC, Tinker AFB, Oklahoma.

4.4.1.3.20.3. **(Added-AFSC)** Application. Applies to all personnel who perform thermal spray on aircraft, aircraft components, propulsion system components, missiles components, and jet engine components.

4.4.1.3.20.4. **(Added-AFSC)** Qualification. Qualification is granted upon the completion of required training, completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.20.5. **(Added-AFSC)** Requalification. Requalification is required every 24 months and will include completion of a written test, (85 percent correct minimum passing score, corrected to 100 percent), and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.20.6. **(Added-AFSC)** Disqualification. Observed deficiencies or deviation from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Initial SSQ qualification requirements will be met to be requalified.

4.4.1.3.21. Engine Blade Blending.

4.4.1.3.21.1. **(Added-AFSC)** Regulatory Documents. Applicable weapons system TOs, job guides, and other applicable directives.

4.4.1.3.21.2. **(Added-AFSC)** Lead ALC. OC-ALC, Tinker AFB, Oklahoma.

4.4.1.3.21.3. **(Added-AFSC)** Application. All personnel who perform engine blade blend inspections and repairs. Personnel who blend blades in a dedicated blade blending repair facility do not require SSQ. These individuals will be trained and qualified to the extent necessary to perform the function as determined locally.

4.4.1.3.21.4. **(Added-AFSC)** Qualification. Qualification is granted upon successful completion of required training, and a demonstration of proficiency to a SSQ Qualification Official.

4.4.1.3.21.4.1. **(Added-AFSC)** Formal training will as a minimum include care and handling of equipment, applicable technical data, fault isolation/damage, assessment/defect, size determination, and techniques required to correctly inspect and repair blades in the performance of an engine blade blend.

4.4.1.3.21.5. **(Added-AFSC)** Currency Requirements. As a minimum, B-1, B-2, F-15, F-16, F-22, F-35, and U-2 personnel must demonstrate blade blending proficiency every 180 days. Work center supervisors ensure personnel who do not meet this requirement are decertified.

4.4.1.3.21.6. **(Added-AFSC)** Requalification. Requalification is required every 12 months and demonstration of proficiency to a SSQ Qualification Official.

4.4.1.3.21.7. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives will be grounds for immediate disqualification. Failure to maintain currency requirements, if applicable, will also be grounds for disqualification. Initial SSQ qualification requirements will be met for requalification.

4.4.1.3.21.8. **(Added-AFSC)** Special Requirements. Blade blending procedures for installed/uninstalled engines/modules.

4.4.1.3.21.8.1. **(Added-AFSC)** Notify the Group/ALC FOD Monitor prior to blade blending anytime FOD is identified other than for minor sand nicks or scratches (i.e., blending with emery cloth).

4.4.1.3.21.8.2. **(Added-AFSC)** Fill out Blade Blending/FOD Damage worksheet or applicable form with the following information: Engine serial number, stage number, number of blades blended, depth of damage before and after blend, area of damage, and employee number/stamp number of maintenance personnel.

4.4.1.3.21.8.3. **(Added-AFSC)** Notify Engine Management (EM) section and forward Blade Blending/FOD Damage worksheet or applicable form to EM section for filing. The EM section will transcribe information provided in the Blade Blending/FOD Damage worksheet into the applicable engine/module records (i.e., AFTO Form 95 if applicable) and CEMS IAW TO 00-20-1.

4.4.1.3.22. Aircrew Flight Equipment.

4.4.1.3.22.1. **(Added-AFSC)** Regulatory Documents. AFMAN 11-301V1, applicable weapons system TOs, checklists and job guides, applicable Air Force Occupational Safety and Health standards and directives.

4.4.1.3.22.2. **(Added-AFSC)** Application. Applies to all personnel assigned to maintain and repair Aircrew Life Support equipment.

4.4.1.3.22.3. **(Added-AFSC)** Qualification. Granted after completion of formal training and a demonstration of proficiency.

4.4.1.3.22.3.1. **(Added-OC-ALC)** Qualification is granted upon successful completion of required training, completion of a written test, (85 percent correct minimum passing score corrected to 100 percent), and a demonstration proficiency to a SSQ Qualification Official.

4.4.1.3.22.4. **(Added-AFSC)** Requalification. An annual demonstration of proficiency to an SSQ official.

4.4.1.3.22.4.1. **(Added-OC-ALC)** Requalification is required every 12 months and shall include completion of a written test, 85 percent correct minimum passing score, corrected to 100 percent, and demonstration of proficiency to an SSQ Qualification Official.

4.4.1.3.22.5. **(Added-AFSC)** Disqualification. Observed deficiencies, DRs, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives, is grounds for immediate disqualification. Initial SSQ qualification requirements will be met to be requalified.

4.4.1.3.23. Auxiliary Power Unit (APU), Air Turbine Motor (ATM), Integrated Power Package (IPP), and Gas Turbine Compressor (GTC) Operation.

4.4.1.3.23.1. **(Added-AFSC)** Regulatory Documents. Compliance with AFMAN 11-218, *Aircraft Operations and Movement on the Ground*, as supplemented, applicable AFI and safety standards, weapons system TOs, job guides, and other directives.

4.4.1.3.23.2. **(Added-AFSC)** Lead ALC. OO-ALC, Hill AFB, Utah.

4.4.1.3.23.3. **(Added-AFSC)** Application. Applies to all personnel who start, run-up, operate or test APU, ATM, IPP, and GTC installed on aircraft. Personnel current on Aircraft Engine Run-up for applicable MDS are excluded from this requirement.

4.4.1.3.23.4. **(Added-AFSC)** The following are minimum initial qualification requirements that will be augmented locally as necessary:

4.4.1.3.23.4.1. **(Added-AFSC)** Completion of applicable formal training.

4.4.1.3.23.4.2. **(Added-AFSC)** Completion of a written test consisting of two parts: NOTE: Personnel operating F-22 APU or F-35 IPP from ground via portable maintenance aids (PMAs) are not required written testing.

4.4.1.3.23.4.3. **(Added-AFSC)** BOLDFACE/Emergency procedures test, 100 percent correct passing score (committed to memory).

4.4.1.3.23.4.4. **(Added-AFSC)** A general knowledge written test, 90 percent correct minimum passing score, corrected to 100 percent.

4.4.1.3.23.4.5. **(Added-AFSC)** Proficiency demonstration to an SSQ Qualification Official.

4.4.1.3.23.5. **(Added-AFSC)** Currency. To maintain currency (i.e., proficiency), maintenance personnel authorized to operate APU/ATM/IPP/GTC will perform at least one APU/ATM/IPP/GTC run every 180 days. Individuals authorized to operate the trim box will perform at least one trim utilizing the trim box every 180 days.

4.4.1.3.23.6. **(Added-AFSC)** Requalification. Requalification is required every 12 months consisting of two-part test completion and demonstration of proficiency to SSQ Official.

4.4.1.3.23.6.1. **(Added-AFSC)** Supervisors will ensure technicians who fail to maintain proficiency are decertified.

4.4.1.3.23.7. **(Added-AFSC)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, or failure to perform required procedures IAW the applicable technical directives can be grounds for immediate disqualification. Failure to maintain qualification, failure to comply with BOLDFACE items (emergency procedures), and/or failure to maintain the required level of proficiency will be grounds for disqualification. Requalification is granted when the deficiency is corrected, and all qualifications have been met as described above.

4.4.1.4. **(Added-AFSC)** SSQ Guide and Worksheet. An SSQ guide and worksheet will be developed for all command and local SSQs using the formats in **Figure 4.2** and **Figure 4.3**. Format and content can be adjusted to meet specific qualification needs as long as the intent of all requirements is met as they apply to the SSQ. At a minimum, SSQ guides and worksheets will be reviewed every three years for accuracy and completeness of stated requirements and references.

4.4.1.5. **(Added-AFSC)** SSQ Qualification/Requalification Guide. The SSQ Qualification Official will use the SSQ guide to identify all SSQ requirements. This guide will be used every time SSQ qualification or requalification is accomplished.

4.4.1.5.1. **(Added-OC-ALC)** The skill and grade requirement on the SSQ guide is to list the primary grade and skill for which the SSQ is intended. Other skills and grades can utilize the SSQ guide and worksheets as determined by the work center supervisor.

4.4.1.6. **(Added-AFSC)** SSQ Qualification/Requalification Worksheet. The SSQ Qualification Official will use the SSQ worksheet as a standard for documenting the employee's demonstrated level of proficiency on each step in the required task. The employee will demonstrate proficiency to the level required on the worksheet. The SSQ worksheet will be used each time SSQ qualification or requalification is accomplished.

4.5. PAC Task Related Recurring Training Requirements (RTRs).

4.5.1. Task Related RTRs. These RTRs are required to perform specific tasks. Task related RTRs shall be linked to specific tasks as assigned and shall cause automatic decertification if not completed on time. Employees may have task related training without being assigned the specific tasks. PAC task certification will not be granted until the applicable task related training requirements are completed. This list is not all inclusive.

4.5.2. HQ AFSC will develop, implement, and maintain procedures for Recurring Training Requirements (RTRs) specific to the work requirements and the following mandatory RTRs:

4.5.2. **(AFSC)** ALCs will establish additional task related RTRs specific to the work requirements, as required, and document the requirements in local directives. Command standard training will be used when available and applicable to the requirement.

4.5.2.1. Aircraft Egress Cockpit Familiarization.

4.5.2.1.1. **(Added-AFSC)** Regulatory Documents. AFMCI 21-100, Volume 2, Chapter 7, DAFMAN 91-203, DESR 6055.09_AFMAN 91-201, and applicable weapon system TOs, job guides, and other directives.

4.5.2.1.2. **(Added-AFSC)** Lead ALC. OO-ALC, Hill AFB, Utah.

4.5.2.1.3. **(Added-AFSC)** Application. All personnel who are not SSQ qualified in egress maintenance but who access cockpits/cabins equipped with operational egress systems.

4.5.2.1.4. **(Added-AFSC)** Initial Training. Training will be in compliance with requirements outlined in AFMCI 21-100, Volume 2, Chapter 7 and the AFSC Supplement.

4.5.2.1.5. **(Added-AFSC)** Refresher Training. Formal refresher training is required every 24 months and will include the same information as initial training. Refresher training does not require use of an actual aircraft or mock-up/trainer.

4.5.2.2. Aircraft Jet Engine Borescoping.

4.5.2.2.1. **(Added-AFSC)** Regulatory Documents. Applicable general and weapon system specific technical data.

4.5.2.2.2. **(Added-AFSC)** Lead ALC. OC-ALC, Tinker AFB, Oklahoma.

4.5.2.2.3. **(Added-AFSC)** Application. Personnel who perform borescope inspections on aircraft jet engines.

4.5.2.2.3.1. **(Added-AFSC)** Personnel who utilize borescope equipment to inspect or perform maintenance on jet engine modules that are not installed on the final engine do not require recurring borescope training. Final borescope inspections of the completed engine must be performed by a certified technician who has completed this recurring requirement.

4.5.2.2.3.2. **(Added-AFSC)** Personnel who utilize borescope equipment to inspect or perform maintenance on jet engine modules not installed on aircraft are required to complete initial borescope training for assigned TMS.

4.5.2.2.3.3. **(Added-AFSC)** Initial Training. Local formal training will be used.

4.5.2.2.3.4. **(Added-AFSC)** Refresher Training. Refresher training is required every 24 months.

4.5.2.3. Aircraft Jet Engine Inlet Inspection.

4.5.2.3.1. **(Added-AFSC)** Regulatory Documents. DAFMAN 91-203 and applicable weapons system TOs, job guides, and other applicable directives.

4.5.2.3.2. **(Added-AFSC)** Lead ALC. OC-ALC, Tinker AFB, Oklahoma.

4.5.2.3.3. **(Added-AFSC)** All personnel who perform flightline jet engine inlet inspections on aircraft with installed engines.

4.5.2.3.4. **(Added-AFSC)** Initial Training. Local formal training will be used.

4.5.2.3.5. **(Added-AFSC)** Refresher Training. Formal refresher training is required every 24 months.

4.5.2.3.6. **(Added-OC-ALC)** Aircraft jet engine exhaust inspection will be included with all requirements as stated above.

4.5.2.4. Confined Space.

4.5.2.4.1. **(Added-AFSC)** Regulatory Documents. DAFMAN 91-203, TO 1-1-3, and other applicable directives.

4.5.2.4.2. **(Added-AFSC)** Lead ALC. WR-ALC, Robins AFB, Georgia.

4.5.2.4.3. **(Added-AFSC)** Application. Personnel who enter, attend, test, monitor, or supervise entry into documented confined spaces as outlined in DAFMAN 91-203 and TO 1-1-3.

4.5.2.4.4. **(Added-AFSC)** Initial Training. Formal training will be used. Entrant authorities, entrants, and attendants will also complete site-specific training.

4.5.2.4.5. **(Added-AFSC)** Refresher Training. Site-specific refresher training is required every 12 months.

4.5.2.5. Weapons/Explosive Safety Training.

4.5.2.5.1. **(Added-AFSC)** Regulatory Documents. DESR 6055.09_AFMAN 91-201. DAFI 91-202, DAFMAN 91-203, and other applicable safety and technical directives.

4.5.2.5.2. **(Added-AFSC)** Lead ALC. OO-ALC, Hill AFB, Utah.

4.5.2.5.3. **(Added-AFSC)** Application. All personnel who operate, handle, transport, maintain, load, or dispose of missiles, explosives, or nuclear weapons.

4.5.2.5.4. **(Added-AFSC)** Initial Training. Initial training will include all information required to safely perform the job. Initial training is required prior to performing these duties.

4.5.2.5.5. **(Added-AFSC)** Refresher Training. Follow established guidance in DAFI 91-202.

4.6. Special Certification Roster (SCR).

4.6.1. The SCR is a management tool providing supervisors a clear and concise listing of personnel who have been appointed to perform, evaluate, and/or inspect work of a critical nature. Only maintenance requirements that have a definite potential for personnel injury or damage to equipment will be included in the SCR.

4.6.1.1. **(Added-AFSC)** SCR Approval. SCR rosters will be approved at Group level and maintained, at a minimum, by the Squadrons. Training leaders within the Divisions/Squadrons can better track/manage required training for SCR.

4.6.1.2. **(Added-AFSC)** Personnel identified on SCRs will meet all training and certifications required for the task appointed.

Figure 4.1. (Added-AFSC) New PAC Task Request Worksheet.

All information, excluding signatures, will be typed
Requester:_____ Organization(s): _____
Date Submitted:_____
HEADER NUMBER:_____
NEW TASK TITLE & NUMBER:
_____
_____
Minimum Grade: _____ SSQ:_____
Workgroup Matrix(s) to add to:_____
COURSES LINKED TO NEW TASK:
_____
_____
_____
_____
_____
TASK DESCRIPTION:_____
_____
SME Concurrence: Flight Authorization:
_____ _____
Name Signature Name Signature
REQUIRED: Attach a copy of the WCD (first page) to this request.

Concur with new task request.	
_____	_____
John S. Smith	**Jane D. Doe**
XX AMXG Training Manager	**XX AMXG PAC Manager**

Figure 4.2. (Added-AFSC) SSQ Guide.

SSQ: (Title) (Guide Number)
SKILL/GRADE: Aircraft Mechanic, WG 8852-10 or higher.

APPLICABLE TO: Applies to all personnel who repair, service, store, transfer, purge, bleed, vacuum, pressure check or otherwise handle or use liquid or gaseous oxygen in maintenance tasks. Duties, such as removal and installation of lines, pressure relief valves, regulators and converters removed from the aircraft during the depot maintenance process, prior to pressure check and purging are considered to be ancillary duties and do not require SSQ. Personnel performing these ancillary duties must be trained to the extent necessary to safely perform the tasks (not to the SSQ required level). It also applies to personnel who perform maintenance on liquid and gaseous oxygen equipment (such as removal and installation of lines, pressure relief valves and regulators, purging, bleeding, vacuuming, and pressure checks). Other ancillary tasks can be included as locally determined.

QUALIFICATION OFFICIAL CRITERIA:
- Shall be Subject Matter Expert (SME) in the skills they support.
- Shall be appointed in writing by the Complex or the Group supported.
- Shall be SSQ qualified in the skill supported or possess the necessary credentials required by the SSQ (i.e. degree, professional/industrial certification).
- Shall complete the AFMC SSQ Qualifier Course.

APPLICABLE DIRECTIVES:
- T.O. 1E-3A-2-21-1, Organizational Maintenance, Environmental Control System, 15 July 2013

TRAINING REQUIRED: See worksheet for required prerequisite training.

QUALIFICATION INSTRUCTIONS: Granted after successful completion of the required training and demonstration of proficiency to an SSQ Qualification Official.

DOCUMENTATION REQUIRED: PAC/TSS

DISQUALIFICATION: Observed deficiencies or deviations from technical data, safety violations, valid customer complaints, failure to maintain the required level of proficiency, or failure to perform the required procedures in accordance with the applicable technical directives can be grounds for immediate disqualification. Initial SSQ qualification requirements shall be met for re-qualification. Retraining and successful demonstration of proficiency to an SSQ Qualification Official shall be required prior to regaining qualification.

RE-QUALIFICATION: Required every 24 months and shall include a demonstration of proficiency to an SSQ Qualification Official.

NOTE: This guide is not technical data and must be used in conjunction with the most current versions of the applicable directives. If changes have been made to the technical data, please notify your PAC Program Manager.

Figure 4.3. (Added-AFSC) SSQ Worksheet (Sample).

SSQ ☐ QUALIFICATION / ☐ RE-QUALIFICATION WORKSHEET
PASS ☐ FAIL ☐

E-3 GASEOUS OXYGEN (GOX) HANDLER **SSQ #002545**

Name: _____ **Work Center:** _____

Prerequisite Training: (Insert trainee's completion date.)

1. TSS #MTEMAS0002544OJ SOJT E-3 Gaseous Oxygen (GOX) Handler Date Completed: _____

SSQ performed on: E-3 Oxygen System

Qualification Objectives are listed below. Document completion of qualification objectives by inserting the qualification official's initials. Proficiency Levels are identified in parenthesis following each objective. The proficiency levels are defined at the bottom of the page.

Qualification Objective	Initials: SSQ Qual/Off
1. SAFETY PRECAUTIONS AND PROCEDURES	
1a. Complies with all **Safety Warnings, Cautions, and Notes** contained in, and throughout the specified procedures IAW T.O. 1E-3A-2-21-1, Para 8-1 **(3c)**	
1b. Ensures personal safety equipment and tools are clean and free of petroleum products IAW T.O. 1E-3A-2-21-1, Para 8-1, 8-19, and Table 8-2 **(3c)**	
2. OXYGEN SYSTEM MAINTENANCE	
2a. Bleeds the Oxygen system IAW T.O. 1E-3A-2-21-1, Para 8-34 **(3c)**	
2b. Purges Oxygen supply system IAW T.O. 1E-3A-2-21-1, Para 8-32 **(3c)**	
2c. Purges Oxygen distribution system IAW T.O. 1E-3A-2-21-1, Para 8-34 **(3c)**	
2d. Performs operational test for panel mounted regulators IAW T.O. 1E-3A-2-21-1, Para 8-22 **(3c)**	
2e. Performs portable Oxygen system checkout IAW T.O. 1E-3A-2-21-1, Para 8-23 **(3c)**	

Is the individual being Qualified, a Qualifying Official? YES_____NO_____

SSQ Employee Name (print): _____

SSQ Employee Signature: _____ **Date:** _____

SSQ Qualifier Name (print): _____

SSQ Qualifier Signature: _____ **Date:** _____

4.6.2. HQ AFSC will develop, implement, and maintain standardized procedures on the following SCR items:

4.6.2.1. Exceptional Release.

4.6.2.2. Weight & Balance Certification.

4.6.2.3. Impoundment Authority.

4.6.2.4. Calibration Limitation Approval (Reference TO 00-20-14).

4.6.2.5. Red-X sign-off.

4.6.2.5.1. This roster will identify those personnel authorized, as required, to certify Red-X items on aircraft/equipment forms.

4.6.2.5.2. Red-X sign-off does not apply to WCDs.

Chapter 5

IMPOUNDMENT PROGRAM

5.1. Aircraft, Major End Item, and Equipment Impoundment. Aircraft, major end item, or equipment is impounded when intensified management is warranted due to system or component malfunction or failure of a serious or chronic nature. Refer to DAFI 91-204 for aircraft and equipment involved in accidents, mishaps, or incidents.

5.2. Impoundment Terms.

5.2.1. Impoundment. Impoundment is the isolation or control of access to an aircraft, major end item, or equipment and applicable historical records so an investigation can be completed.

5.2.2. Impoundment Authority. The Impoundment Authority is the individual authorized to impound aircraft, major end item, or equipment. The Maintenance Group Commander (MXG/CC), or equivalent, will designate Impoundment Authorities. The Impoundment Authority will select the Impoundment Official.

5.2.2.1. Following ground, explosives or flight related mishaps as defined in DAFI 91-204 and all applicable 91 series AFMANs, safety mishap investigations have authority over impoundments until such time the safety SIO or SIB president submits in writing that they are releasing the impoundment back to the Impoundment Official.

5.2.2.2. All request for access and to perform maintenance or teardown activities must be approved in writing by the SIO or SIB president.

5.2.3. Impoundment Official. The Impoundment Official is the single point of contact for the affected aircraft, major end item, or equipment and is responsible for controlling, monitoring, and investigating the impounded aircraft, major end item, or equipment. The Impoundment Official ensures only authorized personnel have access to the impounded aircraft, major end item, or equipment. Aircraft, major end item, or equipment records will be controlled at the discretion of the Impoundment Official.

5.2.4. Authorized Personnel. Authorized Personnel are individuals directly involved in the management, making safe, troubleshooting, or repair of impounded aircraft, major end items, or equipment.

5.2.5. Impoundment Release Authority. The Impoundment Release Authority is an individual authorized to release aircraft, major end items, or equipment from impoundment. The MXG/CC, or equivalent, or their designated representatives have authority to release the impounded aircraft, major end item, or equipment.

5.2.6. Isolation Area. The Isolation Area is an area designated by the Impoundment Authority to locate aircraft, major end items, or equipment. Aircraft may be isolated on the flightline or in hangars. The isolation area will be marked off using cones, ropes, or placards indicating the impoundment condition and isolation area.

5.3. Reasons for Impoundment of Aircraft, Major End Items, and Equipment. The following conditions require mandatory impoundment of aircraft, major end items, or equipment.

5.3.1. When the Impoundment Authority determines, extraordinary measures are required to ensure the safe operating condition of a specific aircraft, major end item, or equipment, to address any degradation of aircraft airworthiness or serious anomaly, or after the 2nd repeat/recur of a safety-of-flight maintenance discrepancy.

5.3.2. Following an aircraft ground or flight related mishap as defined in DAFI 91-204 and DAFMAN 91-223, *Aviation Safety Investigations and Reports*.

5.3.3. Following an un-commanded flight control movement.

5.3.4. When there is an inadvertent ordnance release or an explosive mishap.

5.3.5. For engine anomalies to include but not limited to:

5.3.5.1. Unselected propeller reversal.

5.3.5.2. Flameout/stagnation (for single engine aircraft).

5.3.5.3. Unselected power reversal.

5.3.5.4. Engine case penetration, rupture, or burn-through from an internal engine component.

5.3.5.5. When an aircraft experiences a loss of thrust sufficient to prevent maintaining level flight at a safe altitude. This includes all cases of multiple engine power loss or roll back.

5.3.5.6. Internal engine damage due to a Foreign Object (FO) which can be isolated to the engine and requires removal for repair will result in the engine being impounded. Aircraft impoundment is not required.

5.3.5.7. Engine damage while in transport.

5.3.6. When an in-flight fire occurs.

5.3.7. When an aircraft experiences an in-flight loss of all pitot-static system instruments or all gyro stabilized attitude or direction indicators.

5.3.8. When there is evidence of intentional damage, tampering, or sabotage.

5.3.9. When there are physiological incidents attributable to aircraft systems or cargo (crew becomes ill during flight).

5.3.10. Impoundment Authorities have discretion to determine whether impoundment is warranted when:

5.3.10.1. An aircraft landing gear fails to extend or retract.

5.3.10.2. When an aircraft has been confirmed as being contaminated with chemical, biological, or radiological materials in the aftermath of a terrorist incident and the residual hazard cannot be satisfactorily removed.

5.4. Impoundment Responsibilities. HQ AFSC will develop, implement, and maintain standardized impoundment processes and procedures that enables investigative efforts to systematically proceed with minimal risk relative to intentional/unintentional actions and subsequent loss of evidence.

5.4.1. At a minimum, the program will:

5.4.1.1. Use established checklists to guide the sequence of actions.

5.4.1.2. Ensure security and appropriate access to impounded aircraft, major end item, or equipment records are maintained.

5.4.1.3. Define what maintenance can be performed in conjunction with the maintenance required to release the aircraft, major end item, or equipment from impoundment. Maintenance actions will be limited to those required to make the aircraft, major end item, or equipment safe.

5.4.1.4. Ensure the Impoundment Official is supported by a team of qualified individuals that is dedicated to determining the cause of the impoundment. Impoundment team members will be relieved of all other duties until released by the Impoundment Official.

5.4.1.4.1. **(Added-AFSC)** Quality Assurance (QA). QA or equivalent function acts as the OPR for group impoundment procedures. QA will evaluate the need for development of a local operating instruction to include local procedures for impoundment situations, decision process, off-station aircraft impoundment, home station notification, release officials, forms entries, appointment and responsibilities of impoundment investigating officials, special handling or tagging of parts from impounded items sent through the repair cycle and conducting impoundment investigations across organizations.

5.4.1.4.1.1. **(Added-OC-ALC)** General Information: OC-ALC/QA is the OPR for the OC-ALC Impoundment Program. The OC-ALC group CCs or DDs will designate in writing the duty positions that are to serve as impoundment authorities and by name, individuals that are to serve as impoundment officials. The impoundment authority will select an impoundment official from the impoundment official appointment letter as the single POC for the impoundment.

5.4.1.4.1.2. **(Added-OC-ALC)** Appropriate QA offices will serve as the OPR for the group impoundment program. Impoundment investigations and procedures by the OC-ALC Safety Office (OC-ALC/SE) or Single Investigating Officer (SIO)/Safety Investigation Board (SIB) assigned by the convening authority take precedence over impoundment investigations IAW DAFI 91-204. Impound officials will not proceed with movement or teardown of asset unless authorized by the assigned SIO or SIB president. Notify OC-ALC/SE of all impoundment actions to include impending release from impoundment. This will ensure that OC-ALC/SE has completed their investigation prior to release of the asset.

5.4.1.4.1.2.1. **(Added-OC-ALC)** 76th Aircraft Maintenance Group (76 AMXG). The applicable Air Force Technical Order (AFTO) Form 781A, *Maintenance Discrepancy and Work Document* or electronic equivalent will be documented prior to engine removal for repair when internal engine damage due to FOD is isolated to the engine and requires engine impoundment. Impoundment official will clear the red X entry in forms stating impounded engine removed from aircraft with reference to entry by page and block. Engine

will remain impounded until investigation is complete and Impoundment Release Authority releases engine impoundment. **Note:** If same engine is repaired, the engine will not be re-installed on aircraft until Impoundment Release Authority releases engine impoundment.

5.4.1.4.2. **(Added-AFSC)** Impoundment officials may be any appointed Aircraft Maintenance Officers, Senior Non-Commissioned Officers (SNCOs), Production Superintendents assigned to Flight Test, First line Supervisors, or Engineers. Participation will be on a rotational basis, and candidates will be selected IAW the procedures identified in the Master Labor Agreement (MLA) – Article 20, Details to Bargaining Unit Positions, and Article 21, Loans of Bargaining Unit Employees.

5.4.1.4.3. **(Added-OC-ALC)** The impoundment official will be responsible for controlling, monitoring, reporting, and investigating the impounded item. Group CCs or DDs are the Impoundment Release Authority and will, in coordination with the SIO, when applicable, decide when the aircraft (A/C), A/C systems, sub-system components, engines/components, and support equipment can be released from impoundment.

5.4.1.5. **(Added-OC-ALC)** Responsibilities:

5.4.1.5.1. **(Added-OC-ALC)** Employees will:

5.4.1.5.1.1. **(Added-OC-ALC)** Call 911 for emergency personnel as necessary.

5.4.1.5.1.2. **(Added-OC-ALC)** Immediately notify supervision of the incident/mishap.

5.4.1.5.2. **(Added-OC-ALC)** Supervisors or individual-in-charge where incident/mishap occurred will:

5.4.1.5.2.1. **(Added-OC-ALC)** Immediately take actions to prevent further injury to personnel or additional property damage.

5.4.1.5.2.2. **(Added-OC-ALC)** Immediately stop all work and restrict access around the incident/mishap area.

5.4.1.5.2.2.1. **(Added-OC-ALC)** 76 CMXG, 76 PMXG. Notify Squadron CC/CL of the incident/mishap. Provide location, situation, A/C, A/C system/sub-system component, engines/components and support equipment part number, serial number, point of contact, and telephone number.

5.4.1.5.2.2.2. **(Added-OC-ALC)** 76 AMXG. Notify 76 AMXG/ Maintenance Operations Center (MXDSO) Maintenance Operations Center (MOC), 736-2500, of the incident/mishap. Provide location, situation, A/C, A/C system/sub-system component, engines/components and support equipment part number, serial number, point of contact, and telephone number.

5.4.1.5.2.3. **(Added-OC-ALC)** Isolate the area and ensure the incident or mishap scene and damaged parts are not disturbed.

5.4.1.5.2.4. **(Added-OC-ALC)** Ensure all records, including AFTO 781A series forms, AFTO Form 244, *Industrial/Support Equipment Record*, WCDs, test cell data, engine records, witness statements, etc., are secured pending release to the impoundment official.

5.4.1.5.2.5. **(Added-OC-ALC)** Ensure employees involved in the incident or mishap do not leave the scene unless the employees are injured and require medical attention. All employees involved with the incident, as well as any witnesses, will be detained for statements. Additionally, employees directly involved in the incident may be subject to drug testing, IAW DAFI 91-204. Notify the appropriate level of supervision necessary to receive authorization to detain workers beyond the end of their scheduled shift.

5.4.1.5.2.6. **(Added-OC-ALC)** Prepare an incident/mishap report using the online mishap reporting system at **https://usaf.dps.mil/teams/TMCO21465/SitePages/MIRS-Overview.aspx** or on the OC-ALC main home page. **Note:** In the rare event the network is down, please notify your group safety office and try resubmitting the online report at a later time. Reference OC-ALCI 91-201, *Mishap/Incident Reporting Procedures*, paragraph 3.1.3..

5.4.1.6. **(Added-OC-ALC)** 76 AMXG. For 76 AMXG ONLY, MOC will:

5.4.1.6.1. **(Added-OC-ALC)** Notify applicable group impoundment authority and ascertain whether the A/C, A/C system/sub-system component, engines/components and support equipment is to be impounded. If impoundment is directed, obtain impoundment official information.

5.4.1.6.2. **(Added-OC-ALC)** Notify the applicable group impoundment official.

5.4.1.6.3. **(Added-OC-ALC)** Notify applicable squadron commander and assigned scheduler.

5.4.1.6.4. **(Added-OC-ALC)** Notify OC-ALC Aircraft Quality Office (OC-ALC/QASA) workflow, of the impoundment and report name and phone number of the impoundment official and request the QA representative information. Notification will be by phone and/or e-mail to OC-ALC/QASA Workflow.

5.4.1.6.5. **(Added-OC-ALC)** Notify the OC-ALC/SE.

5.4.1.6.6. **(Added-OC-ALC)** Notify 72d Air Base Wing (72 ABW), 72d Operations Support Squadron Operational Airfield Management (72 OSS/OSAM) (72 OSS/OSAM) (FOD/DOP only). Notify 552d Air Control Wing Command Post (552 ACW/CP), (dropped objects (DO)s only).

5.4.1.6.7. **(Added-OC-ALC)** Update the Aircraft Information and Tracking System (ACITS) to reflect the aircraft impoundment.

5.4.1.6.8. **(Added-OC-ALC)** Update ACITS upon release of the A/C, A/C system/ sub-system component, engines/components and support equipment as applicable.

5.4.1.7. **(Added-OC-ALC)** Impoundment authority will:

5.4.1.7.1. **(Added-OC-ALC)** Immediately notify the Group CC, CD and the MOC of the impoundment situation.

5.4.1.7.2. **(Added-OC-ALC)** Assign an impoundment official from the group impoundment official appointment letter.

5.4.1.7.2.1. **(Added-OC-ALC)** The 76 AMXG. Inform MOC who the assigned impoundment official will be.

5.4.1.7.2.2. **(Added-OC-ALC)** The 76 CMXG and 76 PMXG. Inform the appropriate QA office who the assigned impoundment official will be.

5.4.1.7.3. **(Added-OC-ALC)** Oversee the impoundment process to ensure procedures are followed accordingly.

5.4.1.7.4. **(Added-OC-ALC)** Provide impoundment updates to the Group CC and CD as required.

5.4.1.8. **(Added-OC-ALC)** Impoundment official will:

5.4.1.8.1. **(Added-OC-ALC)** The 76 AMXG. Report to MOC, building 3001, post Y60 or impoundment kit trailer and/or squadron tool crib and pick up the impoundment book and impoundment signs. Caution/warning tape will be the responsibility of the user.

5.4.1.8.2. **(Added-OC-ALC)** The 76 PMXG, 76 CMXG. Inform the group QA office of the impoundment.

5.4.1.8.3. **(Added-OC-ALC)** The 76 PMXG, 76 CMXG. Pick up the impoundment kit from the applicable squadron or appropriate QA office, which includes: the impoundment book, caution/warning tape, and impoundment signs.

5.4.1.8.4. **(Added-OC-ALC)** Report to the scene of the incident within two hours of the incident occurrence when notified during normal business hours (0645-1530).

5.4.1.8.5. **(Added-OC-ALC)** The 76 AMXG, 76 CMXG. Report within 3 hours of incident occurrence when notified after normal business hours (1530-0645).

5.4.1.8.6. **(Added-OC-ALC)** The 76 PMXG. On weekends or non-duty hours, the impoundment official will report within the first three hours of the next duty day.

5.4.1.8.7. **(Added-OC-ALC)** Impound the A/C, A/C systems, sub-system components, engine/components and support equipment. Assess the situation and conduct investigation to determine the cause of the incident or mishap.

5.4.1.8.8. **(Added-OC-ALC)** Contact group impoundment team members and assign duties and responsibilities throughout the investigation after coordinating with OC-ALC/SE.

5.4.1.8.9. **(Added-OC-ALC)** Use of these forms in their entirety is mandatory (OC-ALC Form 130, *OC-ALC Impoundment Official Checklist*, (found on the AF e-publishing site), OC-ALC Form 131, *OC-ALC Impoundment Worksheet* (found on the AF e-publishing site), and an Incident/Mishap Report Cost Analysis. All three attachments will be turned into the appropriate QA office to become part of the final record of the impoundment. It may be stored electronically.

5.4.1.8.10. **(Added-OC-ALC)** Incident/Mishap Report Cost Analysis. This cost analysis will become part of the final impoundment record.

5.4.1.8.11. **(Added-OC-ALC)** The 76 AMXG. Post OC-ALC Form 131, on aircraft as close as possible to the crew entry door or at Entry Control Point (ECP).

5.4.1.8.12. **(Added-OC-ALC)** Ensure all FOD/DOP incidents/mishaps are investigated and reported IAW AFMCI 21-100v2 Chapter 4.

5.4.1.8.13. **(Added-OC-ALC)** Ensure all responsible personnel are kept informed of progress and problems discovered throughout the investigation. Coordinate with/and support the OC-ALC/SE in investigating and reporting under DAFI 91-204.

5.4.1.8.14. **(Added-OC-ALC)** Coordinate the Incident/Mishap Report Cost Analysis and obtain approval from the group CC, DD, or designated representative (as required) prior to releasing the preliminary and final FOD/DOP Incident/Mishap Report Cost Analysis to ensure reporting requirements are followed IAW DAFI 91-204.

5.4.1.8.15. **(Added-OC-ALC)** Report any damage or destruction to contracted property (loaned/leased/rental support equipment) to the Defense Contracting Management Agency (DCMA).

5.4.1.8.16. **(Added-OC-ALC)** Return impoundment kit to MOC and/or applicable office. (Impoundment book and signs must be checked out from and returned to the MOC and/or applicable squadron office).

5.4.1.8.17. **(Added-OC-ALC)** Ensure initial incident/mishap report is completed and delivered within two hours.

5.4.1.8.18. **(Added-OC-ALC)** The 76 AMXG. Document required forms of areas released for maintenance and inform MOC at 736-2500.

5.4.1.8.19. **(Added-OC-ALC)** Deliver impoundment documentation to appropriate QA office for document review prior to recommending release of the impoundment.

5.4.1.8.20. **(Added-OC-ALC)** Impoundment officials will annotate on OC-ALC Form 131 what maintenance can be performed on the aircraft/engine/equipment in conjunction with investigation or partial release information and inform the appropriate QA office. 76 AMXG impoundment officials will inform MOC.

5.4.1.8.21. **(Added-OC-ALC)** Impoundment team members will consist of various job series within the applicable group: planner, engineer, quality, FOD/DOP investigator/monitor, production front/back shop senior technician, and any other series necessary to complete the investigation. Coordinate with the OC-ALC/SE and OC-ALC FOD/DOP monitor if applicable during investigation. Team members will provide support and assist with investigation as required, including but not limited to:

5.4.1.9. **(Added-OC-ALC)** Impoundment Release Authority will:

5.4.1.9.1. **(Added-OC-ALC)** Approve the initial Incident/Mishap Report Cost Analysis provided by the Impoundment Official (as required) before releasing it to OC-ALC/SE.

5.4.1.9.2. **(Added-OC-ALC)** Support OC-ALC/SE to ensure a thorough investigation is accomplished IAW DAFI 91-204. Upon convening Impoundment Release Authority, review the final investigation report and ensure corrective actions are taken to prevent possible reoccurrence.

5.4.1.9.3. **(Added-OC-ALC)** Determine if further actions are required; if the cause that led to the impoundment cannot be determined; or positive corrective action was not identified.

5.4.1.9.4. **(Added-OC-ALC)** Authorize the release of the impoundment to the impoundment official by using OC-ALC Form 131. This will be signed by the Impoundment Release Authority.

5.4.1.10. **(Added-OC-ALC)** Groups will provide support for incident/mishap investigations as requested by the impoundment official/authority or SIO.

5.4.1.11. **(Added-OC-ALC)** Groups will provide engineering and technical support for incident/mishap investigations as requested by the impoundment official/authority or SIO.

5.4.1.12. **(Added-OC-ALC)** Group planning office will immediately appoint a cost POC upon notification from the supervisor/impoundment official for all incidents/mishaps that occur within the group. The POC will expeditiously provide an initial damage cost estimate in accordance with DAFI 91-204 reporting requirements to the impoundment official.

5.4.1.13. **(Added-OC-ALC)** The initial cost assessment for damaged parts will be evaluated and reported based on the repair cost as defined in the applicable repair TO versus replacement cost of the damaged parts. If the damaged parts are beyond repairable limits, then the exchange cost will be used. If the asset is destroyed (i.e., there are no parts to turn in), then use replacement cost.

5.4.1.14. **(Added-OC-ALC)** Group resource management office will validate the initial and final cost estimates for current prices prior to releasing the estimate to the impoundment official.

5.4.1.15. **(Added-OC-ALC)** Appropriate QA offices will:

5.4.1.15.1. **(Added-OC-ALC)** The 76 CMXG and 76 PMXG. Maintain all active impoundment documentation when not in the possession of impoundment official.

5.4.1.15.2. **(Added-OC-ALC)** Appoint a QAS as part of the investigation team upon notification from the impoundment official.

5.4.1.15.3. **(Added-OC-ALC)** Maintain the master impoundment authority appointment letter.

5.4.1.15.4. **(Added-OC-ALC)** Maintain the master impoundment official appointment letter.

5.4.1.15.5. **(Added-OC-ALC)** Ensure impoundment authority/official appointment letters are reviewed bi-annually.

5.4.1.15.6. **(Added-OC-ALC)** The 76 AMXG. Maintain impoundment books located within the MOC to include all required forms and appointment letters.

5.4.1.15.6.1. **(Added-OC-ALC)** The 76 CMXG and 76 PMXG. Maintain impoundment books within the appropriate QA office.

5.4.1.15.6.2. **(Added-OC-ALC)** The 76 CMXG and 76 PMXG. Inactive impoundment documentation will be maintained in appropriate QA office for two years after the impoundment release.

5.4.1.15.7. **(Added-OC-ALC)** Ensure corrective actions are effective and instituted completely throughout the identified areas after the release of the impoundment.

5.4.1.15.8. **(Added-OC-ALC)** Update the impoundment tracking log located at the OC-ALC/QA EIS site, within one working day of impoundment notification/release/changes.

5.4.1.16. **(Added-OC-ALC)** Group and Complex FOD/DOP monitor will assist the investigation team on all FOD/DOP incident/mishaps.

5.4.1.17. **(Added-OC-ALC)** OC-ALC impoundment program manager will:

5.4.1.17.1. **(Added-OC-ALC)** Monitor and track all Complex impoundment activities.

5.4.1.17.2. **(Added-OC-ALC)** Provide management with OC-ALC impoundment overviews as determined by management.

5.4.1.18. **(Added-OC-ALC)** Internal engine damage due to a FO which can be isolated to the engine and requires removal for repair will result in the engine being impounded by the 76 AMXG impoundment authority, aircraft impoundment is not required. When requested, 76 PMXG will borescope the engine to help determine if on or off wing repair is required and provide a repair cost analysis. The POC for requesting the borescope will be the OC-ALC/QASP office. The engine will remain impounded by 76 AMXG until the investigation and cost estimate is complete and disposition instructions are received from the owning Major Command.

5.4.1.19. **(Added-OC-ALC)** Incident/Mishap Report Cost Analysis information shall be provided by 76 PMXG of the initial incident whenever possible for engines repaired by 76 PMXG. For engines not repaired by 76 PMXG, the 76 AMXG FOD monitor will request a cost analysis from the Engine Repair Facility. A preliminary cost determination may be provided by the Engine Repair Facility, as necessary, prior to the engine being shipped through established communication channels to exchange mishap details.

5.4.1.20. **(Added-OC-ALC)** OC-ALC/QASP will provide a POC for 76 AMXG engine FOD incidents.

5.4.1.21. **(Added-OC-ALC)** Throughout the impoundment the engine will be marked off using cones, ropes, or placards.

5.5. Impoundment Process and Procedures. HQ AFSC will develop, implement, and maintain standardized impoundment processes and procedures.

5.5.1. When the Impoundment Authority directs impoundment, a Red X symbol will be placed in the applicable AFTO Form 781A, *Maintenance Discrepancy and Work Document* (or electronic equivalent) or AFTO Form 244, *Industrial/Support Equipment Record*, with a statement indicating the reason for impoundment and the name of the assigned Impoundment Official. Reference TO 00-20-1 for additional detail.

5.5.2. HQ AFSC will establish impoundment documentation procedures for Aircraft, Major End Items, and Equipment inducted into Programmed Depot Maintenance (PDM) when forms are closed or unavailable.

5.5.2.1. **(Added-AFSC)** Local Procedures. While this publication is production and process oriented, it is necessary for each maintenance organization to translate impound requirements into local procedures. Local procedures will be defined in local publications utilizing local MIS.

Chapter 6

WORKPLACE COMMUNICATIONS, COMMUNICATIONS SECURITY AND MAINTENANCE CYBER DISCIPLINE

6.1. Workplace Communications. Effective maintenance requires efficient communication. Radios must be available to expedite personnel, equipment, material, and maintenance data throughout the maintenance complex. Unit commanders will develop communication plans according to mission requirements.

6.1.1. Land Mobile Radio (LMR) Management. Maintenance communications that are reliable, redundant, and effective are essential for efficient maintenance operations. HQ AFSC will develop, implement, and maintain a standardized LMR management program IAW DAFI 17-210, *Radio Management*. At a minimum, the program will address training, allowances, control, and etiquette.

6.1.2. Personal Devices. HQ AFSC will develop, implement, and maintain standardized procedures for personal electronic devices, (e.g., cell phones, smart watches, pagers, portable music/video players, electronic games, etc.) to include:

6.1.2.1. The use and proper control of personal electronic and communication devices.

6.1.2.1.1. **(Added-AFSC)** Workplace Communication and Information Management.

6.1.2.1.2. **(Added-AFSC)** Devices and Distraction.

6.1.2.1.3. **(Added-AFSC)** Personal electronic/communication/recording devices are hereafter known as personal devices. Examples include cameras, electronic readers (e.g., Amazon Kindle™), cellular telephones, gaming devices, tablet/laptop computers (i.e., an Apple iPad®), music players (i.e., an iPod®), video players, and multi-use devices that incorporate these functions. Personal devices will only be used or carried IAW local policy. Employees will remove themselves from maintenance activities (i.e., hands-on maintenance, inspection/evaluation, monitoring machinery, handling material, transporting parts), aircraft, or high traffic areas to use personal devices as directed by local policy. In non-Foreign Object Damage (FOD) critical industrial maintenance facilities, personal devices will be used IAW local policy. Unless otherwise prohibited, personal devices may be stored on one's person, in personal lockers, in personal drawers in tool boxes, or in other areas as authorized by each ALC. Sizable music playing devices (such as table-top Amplitude Modulation/Frequency Modulation (AM/FM) radios or boom boxes) are authorized throughout maintenance areas except where machinery audio warnings/alarms are used or music interferes with work being performed. ALCs may publish directives to clarify or expand the general prohibition on personal devices in coordination with the local union; ALCs may also develop local policy to authorize use of personal devices for specific official purposes.

6.1.2.1.4. **(Added-OC-ALC)** Personal cell phones and personal hand-held radios (walkie-talkies, Ultra-High Frequency (UHF), Very High Frequency (VHF), amateur radio (HAM)) are prohibited from being carried or used in critical FOD areas. Critical FOD areas are defined in AFMCI 21-100V2, Chapter 4. In non-critical FOD areas, users will remove themselves from the maintenance activity prior to using a personal cell phone or personal hand-held radio. Removing oneself from the maintenance activity is defined as: exiting/crossing the established demarcation lines.

6.1.2.1.5. **(Added-OC-ALC)** Cell phones and other wireless devices (laptops, tablets, etc.) will not be used within 10 feet of any explosive operation IAW DESR6055.09_DAFMAN91-201, *Explosives Safety Standards*. Cell phone use is prohibited within 10 feet of internal fuel cell maintenance IAW technical order (TO) 1-1-3, *Inspection and Repair of Aircraft Integral Tanks and Fuel Cells*, TO 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*, and fuel servicing operations IAW DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards,* DAFI 91-208, *Hazards of Electromagnetic Radiation to Ordinance (HERO) Certification and Management.*

6.1.2.2. Storage of personal electronic devices.

6.1.2.3. Government Supplied electronic devices.

6.1.2.3. **(AFSC)** Government-supplied electronic/communication/recording devices are hereafter known as government devices. Government devices required for official communication, official documentation, or other official purposes are authorized to be used. ALCs and subordinate units may publish additional directives as needed to regulate government devices.

6.1.2.3.1. **(Added-OC-ALC)** Use of government or personal cell phones and electronic devices are IAW American Federation of Government Employees (AFGE) 214 and AFGE 916 Memorandum of Agreement.

6.1.2.4. Contractor supplied electronic devices.

6.1.2.4. **(AFSC)** Contractor-supplied devices will adhere to the same requirements as government- devices. ALCs and subordinate units may publish additional directives applicable to safety, security (classified), privacy, special access, or technical directives to regulate contractor-supplied devices.

6.1.2.5. Workplace Distractions.

6.1.2.5. **(AFSC)** Workplace distraction. Workplace music/audio volume must be kept to a level that allows clear, effective communication and ensures safe noise levels. Non-work-related activities that impair hearing, attention, awareness, or vision are authorized IAW local policy. Employees will remove themselves from maintenance activities (e.g., hands-on maintenance, inspection/evaluation, monitoring machinery, handling material, transporting parts), aircraft, or high traffic areas before engaging in non-work-related activities. ALCs and subordinate units may publish additional directives on workplace distraction.

6.1.3. Electronic devices are prohibited as mandated by applicable safety, security (classified), privacy, special access, or technical directives (e.g., technical orders, process orders, or other technical data recognized by TO 00-5-1).

6.1.3. **(AFSC)** 1 (Added) This instruction does not relieve obligations to comply with prohibitions specified elsewhere (e.g., "empty pockets" procedures in engine intakes and fuel tanks).

6.1.4. **(Added-AFSC)** Communications and Electronic Equipment. Work functions include disassembly, inspection, cleaning, repair, parts reconditioning and/or replacement, manufacture, calibration, reassembly, and test.

6.1.4.1. **(Added-AFSC)** Radar. Covered and uncovered areas associated with processing radar equipment for overhaul, repair, conversion, and modification that are required in support of fixed, mobile, and portable electronic and communication systems. Radar equipment categories include navigation, search, surveillance, height finding, and identification.

6.1.4.2. **(Added-AFSC)** Radio. Covered and uncovered areas associated with processing radio equipment for overhaul, repair, conversion, and modification that are required in support of fixed, mobile, and portable electronic and communications systems. Radio equipment categories include communication, control, navigation, auxiliary, relay, microwave, television, and radiological.

6.1.4.3. **(Added-AFSC)** Wire. Covered and uncovered areas associated with processing wire communications equipment for overhaul, repair, conversion, rehabilitation, and modification that are required in support of fixed, mobile, and portable electronic and communication systems. Wire and communications categories of equipment include teletype, facsimile, telephone and telegraph, intercom and public address systems, sound recording and reproduction, visible and invisible light communication, and crypto logical systems.

6.1.4.4. **(Added-AFSC)** Electronic Warfare. Covered and uncovered areas associated with processing electronic warfare equipment.

6.1.4.5. **(Added-AFSC)** Navigational Aids. Covered and uncovered areas associated with processing of navigational aids.

6.1.4.6. **(Added-AFSC)** Electro-Optics and/or Night Vision. Covered and uncovered areas associated with processing of electro-optics and night vision equipment.

6.1.4.7. **(Added-AFSC)** Crypto. Covered and uncovered areas associated with processing of crypto equipment.

6.1.4.8. **(Added-AFSC)** Computers. Covered and uncovered areas to perform depot maintenance on computer equipment.

6.1.4.9. **(Added-AFSC)** Other. Covered and uncovered areas to perform depot maintenance on other types of communications-electronics equipment not covered in 6.1.4.1. through 6.1.4.8. includes work performed away from production facilities by field teams.

6.2. Communications Security (COMSEC).

6.2.1. COMSEC Controlled Cryptographic Item (CCI) Accountability. The Air Force COMSEC/Central CCI Authority is the Cryptologic and Cyber Systems Division, Joint Base San Antonio-Lackland, Texas. HQ AFSC will develop, implement, and maintain standardized procedures for COMSEC/CCI Accountability.

6.2.2. Installed COMSEC/CCI accountability will be accomplished IAW AFMAN 17-1302-O, *Communications Security (COMSEC) Operations*, and DAFI 23-101, *Air Force Material Management*. **Note:** AFMAN 17-1302-O is accessible through the AF e-Pubs Warehouse Management System (WMS) at the following link: **https://wmsweb.afncr.af.mil/wms/**.

6.2.2.1. HQ AFSC will ensure all serially controlled and serially tracked COMSEC/CCI information is entered into the MIS IAW TO 00-20-2.

6.2.2.2. Maintain serial number inventory accountability and physical security for all COMSEC/CCI issued or removed to Facilitate Other Maintenance (FOM).

6.2.2.3. Questions concerning COMSEC/CCI accountability can be directed to the Air Force CCI Central Authority at **aflcmc.hncls.cciworkflow@us.af.mil**

6.2.3. COMSEC Training. All personnel authorized to access/handle CCI must complete annual training per AFMAN 17-1302-O through the use of, and documented on, DD Form 2625, *Controlled Cryptographic Item (CCI) Briefing*. Training will be recorded and maintained in TSS.

6.3. Maintenance Cyber Discipline (MCD). MCD is a focus on daily cyber hygiene activities which requires continuous attention to mitigate daily threats by creating a culture of cyber awareness, discipline, and strict compliance. HQ AFSC will develop a cyber-assurance program IAW Air Force 17 series publications and TO 31S5-4-ETOOL-1, *ETOOL and Commercial Mobile Device Setup and Management*.

6.3.1. Electronic Tools (eTools). eTools are portable electronic devices (PEDs) (such as a laptop computer or handheld device) that operate in a disconnected mode and/or, are certified to inter-operate on AF networks, are mission critical because they are the primary method for viewing electronic technical publications, and, in some cases, are used to exchange maintenance data with an approved MIS at the point of maintenance. The MCD guidance below establishes requirements for developing and implementing daily/periodic cyber mitigation processes.

6.3.1.1. HQ AFSC will ensure eTools are used for official and authorized purposes only and will develop local procedures as needed for the use, storage, content update, security, and cyber hygiene processes necessary to support the approved use of all assigned eTool devices IAW Air Force 17-series publications and Volume 2, Chapter 3 of this instruction.

6.3.1.2. HQ AFSC will develop, implement, and maintain guidance that ensures eTools standardization, management, and configuration control to include contingency eTool comm-out/cyber-out operating procedures.

6.3.1.2. **(AFSC)** E-Tools (e.g., desktop and laptop computers, handheld devices, portable maintenance aids, etc.) are common infrastructure, allow access to logistics information systems, update TOs, provide automated change requests similar to AFTO Form 22, and integrate with other MIS. E-Tools purchased and used for the purpose of viewing digital technical data and/or for maintenance documentation must be accounted for as ADPE IAW 33-series AFIs and tracked in FEM/MIS. E-tools designed specifically for a weapon system (e.g., F-35, F-22, etc.) will be accounted for on an equipment account (i.e., CA/CRL) and tracked in FEM/MIS if stored in a tool crib/center or equivalent.

6.3.1.2.1. **(Added-OC-ALC)** eTools are defined as Class 1/ Division 2, fully ruggedized electronic devices such (e.g., laptops or tablets) and associated peripheral items (e.g., batteries, cords, etc.) used to view electronic technical data, maintenance documentation, diagrams/mapping. Providing the device has been properly docked in the eTool assigned Point of Use cabinet, daily synchronization of technical data will occur.

6.3.1.2.2. **(Added-OC-ALC)** For inventory control purposes, the device will be treated as a tool in accordance with AFMCI21-100V2, Chapter 3 and DoDI5000.64_DAFI23-111, *Accountability and Management of DoD Equipment and Other Accountable Property*, for accountability in the event the eTool is lost, stolen, or damaged in a way that might allow pieces to be at risk of becoming lost in, on, or around an aircraft or component.

6.3.1.2.3. **(Added-OC-ALC)** Damage and abuse of eTools will be identified and resolved in accordance with AFMCI 21-100v2, Chapter 3 and DoDI5000.64_DAFI23-111. Historical records obtained through Common Access Card (CAC) cabinet control software may be used to identify who has checked out any specific eTool. Technicians that are not issued tool kits may not have signed an AFSC Form 311, *Certificate of Responsibility for Government Property*, however, they will be held to the same responsibility and accountability for eTools in accordance with DoDI5000.64_DAFI23-111.

6.3.1.2.4. **(Added-OC-ALC)** Lost tool /item procedures apply to eTools in accordance with this supplement. Historical records obtained through CAC cabinet control software will be used to identify last user. If the Lost tool / item is not recovered the shop supervisor will be responsible for filling out the AFMC Form 310, *Lost/Found Item Report*.

6.3.1.2.5. **(Added-OC-ALC)** TODO shall report to area supervisor if e-Tool has not been returned as required. Production supervisor can request the Technical Order Distribution Office (TODO) to access historical records obtained through CAC cabinet control software to identify the last users.

6.3.1.2.6. **(Added-OC-ALC)** Responsible production supervisors will ensure employees are familiar with all requirements and are fully trained in the use of the cabinet as well as check-out/check-in procedures.

6.3.1.2.7. **(Added-OC-ALC)** In the event the e-Tool cabinet will not open by using the user's CAC card, the TODO, e-Tool client support administrators (CSA)s and production supervisors may check out the e-Tool cabinet keys from the tool crib, like any other controlled tool. The supervisor will complete an DAF Form 1297, *Temporary Issue Receipt*, for each device. The supervisor will place hand receipt to acknowledge receipt of e-Tool in the cabinet drawer. Supervisor will take full responsibility for the checked out eTool(s) and related accessories when utilizing cabinet key. At the end of shift, the production supervisor will be required to manually return the device to the assigned cabinet drawer. The preferred method to check-out/in e-Tool device is using the user's CAC card.

6.3.1.2.8. **(Added-OC-ALC)** All eTool accessories (e.g., power cables and spare batteries) will be stored in the tool crib/PSC and checked out, as needed. If an employee is issued an accessory, it must be clearly marked in accordance with directives and placed on the OC-ALC Form 539, *Supplemental Listing* per this supplement. The e-Tool cabinet keys will only be checked out by TODOs, e-Tool CSAs and production supervisors. The responsible production supervisor will always be the preferred person to manually check-in or out e-Tools.

6.3.1.2.9. **(Added-OC-ALC)** In the event that CSA or TODO accesses the eTool POU cabinets using the cabinet key, he/she will complete DAF Form 1297 to acknowledge receipt of device to user or remove to repair device. TODO and CSA technician POC information is posted on each POU cabinet.

6.3.1.2.10. **(Added-OC-ALC)** Only a supervisor may check out more than one eTool device at a time for any reason. The supervisor can check-out eTool devices by completing a DAF Form 1297 for each device to be used. The completed forms will be placed in eTools cabinet drawers and removed when the devices are returned. Supervisor will take full responsibility for multiple devices and/or any hardware checked out.

6.3.1.2.11. **(Added-OC-ALC)** Contingency plan for TO access in the event of cabinet malfunction:

6.3.1.2.11.1. **(Added-OC-ALC)** The production groups will:

6.3.1.2.11.1.1. **(Added-OC-ALC)** Identify specific desktop computer(s) and off-network printer(s) to be used as TO contingency printing station(s). The identified desktop computer(s) will be set up like an eTool device to receive automated updates (e.g., technical data, process orders or other pertinent maintenance information).

6.3.1.2.11.1.2. **(Added-OC-ALC)** Identify device, quantity, locations (building and post location), primary user and alternate user (name, organization and telephone number).

6.3.1.2.11.1.3. **(Added-OC-ALC)** Once the contingency plan is enacted, the primary and alternate users will be responsible to log on to the contingency desktop computer and print TOs by priority for production. All printed TO extracts will be IAW AFMCI 21-100V2_AFSCSUP, Chapter 2, paragraph 2.2.7.

6.3.1.2.11.2. **(Added-OC-ALC)** The contingency station location, primary user list, and alternate user list will be maintained on the eTool Program site located at **https://usaf.dps.mil/sites/TMCO19264/OBW/OBWB/eToolProgram/SitePages/Home.aspx**.

6.3.1.2.11.2.1. **(Added-OC-ALC)** Primary and Alternate users will:

6.3.1.2.11.2.1.1. **(Added-OC-ALC)** Log into the contingency printing station(s) weekly to keep user credentials cached.

6.3.1.2.11.2.1.2. **(Added-OC-ALC)** Test the printer on a quarterly basis.

6.3.1.2.11.2.2. **(Added-OC-ALC)** The contingency printer(s) will be off-network, stand-alone, connected only by Universal Serial Bus (USB) or print cable and NEVER be connected to the network with a Local Area Network (LAN) cable.

6.3.1.2.11.3. **(Added-OC-ALC)** eTool devices will not be connected to any contingency printing stations.

6.3.1.2.11.4. **(Added-OC-ALC)** The designated desktop computer(s) will be installed and maintained by the eTools CSA. The CSA will test quarterly to ensure the tech data contingency configuration is correct and receiving the automatic TO updates. The CSA and production group primary/alternate user will create and maintain a mechanism for logging testing compliance results.

6.3.1.2.11.5. **(Added-OC-ALC)** When cabinets are inoperable due to power failures, server or system outages, etc.,

6.3.1.2.11.5.1. **(Added-OC-ALC)** Supervisors and TODO will use manual procedures to issue eTool devices.

6.3.1.2.11.5.2. **(Added-OC-ALC)** The user will access technical data utilizing TO remote or tech data downloaded to device to avoid work stoppage.

6.3.1.2.11.5.2.1. **(Added-OC-ALC)** Tech data stored on-device is valid for seven working days from the date it was downloaded.

6.3.1.2.11.5.3. **(Added-OC-ALC)** Supervisors will check out cabinet keys from the tool crib/PSC and issue eTools using a DAF Form 1297. A DAF Form 1297 is to be completed for each device checked out. If the TODO is unavailable, the supervisor can perform manual procedures.

6.3.1.2.11.5.4. **(Added-OC-ALC)** Production supervisor will notify TODO regarding cabinet outage. If the outage is greater than one hour, the production group's chain of command will notify the assigned TODO to contact technical POCs to document outage and resolve cabinet issues.

6.3.1.2.11.5.5. **(Added-OC-ALC)** TODO will contact 76th Maintenance Squadron (76 MXSG) to assist in resolving Auto Crib eTool cabinet issues.

6.3.1.2.11.5.6. **(Added-OC-ALC)** Exception: A supervisor may be given authority to maintain a key to the e-Tool cabinet under special circumstances, only with squadron level approval and DAF Form 1297. To maintain an AutoCrib cabinet key the DAF Form 1297 will be submitted and approved for distribution by 76 MXSG. Supervisors checking out a cabinet key, as needed, from the tool crib/PSC is the preferred method.

6.3.1.2.11.5.7. **(Added-OC-ALC)** After gaining squadron approval, the key must be issued on a DAF Form 1297. Supervisor receiving key is only authorized to utilize it in the event that the cabinet is inoperable due to power failure, system failure, etc.

6.3.1.2.12. **(Added-OC-ALC)** Technicians may share eTools by using multiple windows to display tech data. This will be considered “open and in use" and "in accordance with" but should be limited to a maximum of seven technicians. "Open and in use" requirement and definition is dictated by AFMCI 21-100V2, Chapter 2.

6.3.1.2.13. **(Added-OC-ALC)** Summary of responsibilities.

6.3.1.2.13.1. **(Added-OC-ALC)** Production supervisor:

6.3.1.2.13.1.1. **(Added-OC-ALC)** Will provide users DD Form 2875, *System Authorization Access Request*, to access digital tech data utilizing eTool devices on assigned cabinets. DD Form 2875 will be coordinated with the TODO to gain access to eTool cabinets.

6.3.1.2.13.1.2. **(Added-OC-ALC)** Are required to ensure accountability of the eTools at the end of each shift. If missing, abused, or damaged, will be required to be documented on an AFMC Form 310.

6.3.1.2.13.1.3. **(Added-OC-ALC)** If the mechanic is manually issued an eTool a DAF Form 1297 will be completed when cabinets are inoperable due to power failures, etc.

6.3.1.2.13.1.4. **(Added-OC-ALC)** Supervisors will coordinate with the responsible TODO and group’s eTool POC regarding eTool cabinet or power failure if one hour threshold has been reached.

6.3.1.2.13.2. **(Added-OC-ALC)** Mechanic/Technician/eTool User:

6.3.1.2.13.2.1. **(Added-OC-ALC)** By accessing eTool cabinet by user CAC card, assumes responsibility for eTools and associated items within the assigned cabinet drawer. The user is responsible for reporting damaged or removed items to production supervisor.

6.3.1.2.13.2.2. **(Added-OC-ALC)** eTool User/Technicians may check-out an eTool for an extended period of time (longer than one shift) however; user must have the production supervisor complete a DAF Form 1297, before the end of shift. TODO will place a copy of the completed DAF Form 1297 in the e-Tool assigned cabinet drawer location. The drawer will be disabled through the controller software for the duration annotated on the DAF Form 1297. The user is responsible for inspecting and reporting all damaged and missing items to supervisor upon check-out and check- in of the eTool device.

6.3.1.2.13.2.3. **(Added-OC-ALC)** The user assuming responsibility for an eTool for an extended period must validate currency of the tech data daily. If authorized internet access is available, the user shall manually sync the eTool. If this can't be accomplished, the user must validate revision dates against online viewers, or by contacting their supervisor or TODO to see if any revision has occurred to specific required tech data. It is the user's responsibility to obtain current tech data elsewhere if tech data becomes outdated.

6.3.1.2.13.2.4. **(Added-OC-ALC)** Is responsible for the safety, condition, and security of eTool IAW signed AFSC Form 311 and all applicable directives.

6.3.1.2.13.2.5. **(Added-OC-ALC)** Will report all eTool related problems to the supervisor and designated TODO. Problems may include, but are not limited to device damage, access (wireless or software), content issues with tech data and update issues.

6.3.1.2.13.3. **(Added-OC-ALC)** TODOs:

6.3.1.2.13.3.1. **(Added-OC-ALC)** Accept reports from supervisors and technicians on all eTool related problems.

6.3.1.2.13.3.2. **(Added-OC-ALC)** Responsible for the updates and currency of the data for all eTools properly stored in their designated locations.

6.3.1.2.13.3.3. **(Added-OC-ALC)** Responsible for ensuring cabinets clearly identify their contact information and that the information remains current.

6.3.1.2.13.3.4. **(Added-OC-ALC)** Coordinate with supervisors when cabinets are inoperable.

6.3.1.2.13.4. **(Added-OC-ALC)** When a technician checks out an eTool for an extended period of time, TODO will review the completed DAF Form 1297 in the eTool assigned cabinet drawer location. The drawer shall be disabled through controller software for duration annotated on the DAF Form 1297.

6.3.1.2.13.5. **(Added-OC-ALC)** Designated TODOs are responsible for currency of tech data on eTool, provided the elTool is in its appropriate designated location to accommodate scheduled updates.

6.3.1.3. HQ AFSC will coordinate with their Chief Information Officer/A6 or equivalent to publish eTool sustainment and support procedures to ensure AFSC units remain compliant with requirements directed in applicable Air Force 17-series publications and TO 31S5-4-ETOOL-1.

6.3.1.4. eTools are procured IAW AFI 63-138 and sustained IAW AFI 63-101/20-101.

6.3.1.5. eTools must be configured IAW TO 31S5-4-ETOOL-1.

6.3.1.6. Assigned eTool users will not install, download, or access any unauthorized files or software on any eTool (e.g., games, mp3s, tablet, phone applications).

6.3.1.7. Users will not use, access, or insert unauthorized external media devices into any eTools.

6.3.1.8. eTools do not include Portable Maintenance Aids (PMA).

6.3.2. Portable Maintenance Aids (PMA).

6.3.2.1. PMAs such as electronic devices and test equipment are issued, and configuration managed by a system PM.

6.3.2.2. PMA functionality across AF weapon systems must be approved by the applicable program manager IAW AFI 63-101/20-101. This ensures the program's product support strategy identifies and supports interrelationships and integration with programs and processes both inside and outside the program's current Program Executive Officer (PEO) portfolio; it also ensures the program's product support strategy aligns to AF enterprise priorities.

6.3.3. HQ AFSC will establish procedures that prohibit the introduction of government or personal cellular/personal communications system and/or radio frequency (RF), infrared (IR) wireless devices, and other devices such as cell phones, tablets, and devices that have photographic or audio recording capabilities into areas (e.g., rooms, offices) where classified information is stored processed or discussed IAW AFMAN 17-1301, *Computer Security (COMPUSEC)*.

6.3.3.1. Waiver requests will be coordinated with AFMC to ensure adherence to Telecommunication Electronics Material Protected for Emanating Spurious Transmissions (TEMPEST) requirements IAW Department of Defense Directive (DoDD) 8100.02, *Use of Commercial Wireless Devices, Services, And Technologies In The Department Of Defense (DoD) Global Information Grid (GIG)*, written approval by the AF Certified TEMPEST Test Authority and the Enterprise Authorizing Official IAW DAFI 31-101, and AFMAN 17-1301.

6.3.3.2. Maintenance Group Commanders or equivalents with approved waivers will coordinate with the Communication Squadron Cyber Security Liaison and/or Information System Security Managers to identify specific requirements and publish local guidance on restrictions of the use of PEDs in classified processing areas.

Chapter 7

ADDITIONAL PROGRAM REQUIREMENTS

7.1. Aircraft Structural Integrity Program (ASIP). HQ AFSC will assist in the development, implementation, and maintenance of standardized procedures governing the ASIP program.

7.2. Repair Network Management (RNM). For RNM policy, reference DAFI 20-117, *Repair Network Management*. HQ AFSC will develop, implement, and maintain Repair Network processes and procedures to include the following:

7.2.1. Establish oversight procedures for evaluating intermediate-level maintenance performance and adherence to standards, IAW DAFI 90-302 and/or other appropriate AFSC performance reviews. Ensure oversight procedures include assessments for software requirements to accommodate -6 test cell standards, if appropriate.

7.2.2. Establish and provide oversight for intermediate-level metrics in terms of schedule (Availability), quality (Performance), and cost (Affordability) as required by DAFI 20-117.

7.2.3. Develop metrics to evaluate intermediate-level maintenance performance.

7.3. Team Spirit Inspection Program (TSIP). TSIP is an in-person reviews by owning units of on-going and completed work on aircraft undergoing Programmed Depot Maintenance (PDM)/Modification on a non-interference basis. HQ AFSC will develop, implement, and maintain guidance for TSIP at the ALCs.

Chapter 7 (AFSC)

ADDITIONAL PROGRAM REQUIREMENTS

7.1. (AFSC) Each Air Logistics Complex (ALC) will : Develop, implement, and maintain standardized processes & procedures for the ASIP program IAW DAFI 63-140, *Aircraft Structural Integrity Program and Air and Space Equipment Structural Management*.

7.2.4. **(AFSC)** Each Air Logistics Complex (ALC) will develop, implement, and maintain standardized processes & procedures for RNM IAW DAFI 20-117, *Repair Network Management* and section 7.2.

7.3.1. **(Added-AFSC)** Aircraft Maintenance Group Commander (AMXG/CC) or Air Logistics Commander (ALC/CC) will, at the start of each fiscal year (FY), formally invite customer Maintenance Group Commanders (MXG/CCs) from all MAJCOMS and all Weapon Systems to participate in the TSIP program.

7.3.1.1. **(Added-AFSC)** TSIP is a voluntary program funded by the owning unit.

7.3.1.2. **(Added-AFSC)** Visits will be requested at the beginning of the PDM/Modification process to take place at a logical point in the PDM/Modification flow but prior to Functional Check Flight (FCF) and is limited to three working days.

7.3.1.3. **(Added-AFSC)** The TSIP process will follow the AFSC Process Guide on TSIP located on the AFSC/A3/4 SharePoint site. Local Operating Instructions (OIs) may be implemented to optimize this program.

7.3.2. **(Added-AFSC)** AMXG/CC (or ALC/CC) will establish processes designed to allow the owning unit's aircrew a depot facility visit during the aircrew's delivery and/or pickup of aircraft.

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

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(**Added-AFSC**) AFSC Form 130, *Production Asset Control Record*

(**Added-AFSC**) AFSC Form 100, Floating Stock/Spares Requirement and Justification

(**Added-AFSC**) AFSC Form 847, Recommendation For Change Of Depot Maintenance Management (DMM)

(**Added-OC-ALC**) OC-ALC Form 130, *OC-ALC Impoundment Official Checklist*

(**Added-OC-ALC**) OC-ALC Form 131, *OC-ALC Impoundment Official Worksheet*

(**Added-OC-ALC**) OC-ALC Form 539, *Supplemental Listing*

None

Adopted Forms

(**Added-OC-ALC**) **(OC-ALC-Added)** AFMC Form 310, *Lost/Found Item Report*

(**Added-OC-ALC**) **(OC-ALC-Added)** AFMC Form 311, *Certificate of Responsibility for Government Property*

(**Added-AFSC**) AF Form 2691, Aircraft/Missile Equipment Property Record

(**Added-AFSC**) AF Form 332, Base Civil Engineer Work Request

(**Added-AFSC**) AFMC Form 206, *Temporary Work Request*

(**Added-AFSC**) DD Form 1723, *Flow Process Chart*

DD Form 2625, Controlled Cryptographic Item (CCI) Briefing

DAF Form 679, *Department of the Air Force Publication Compliance Item Waiver Request/Approval*

DAF Form 847, *Recommendation for Change of Publication*

AF Form 1067, *Modification Proposal*

AFTO Form 244, *Industrial/Support Equipment Record*

AFTO Form 781A, *Maintenance Discrepancy and Work Document*

Acronyms and Abbreviations

(Added-AFSC) – MDS—Mission Design Series

(Added-OC-ALC) 72 ABW—72d Air Base Wing

(Added-OC-ALC) 76 AMXG—76th Aircraft Maintenance Group

(Added-OC-ALC) 76 CMXG—76th Commodities Maintenance Group

(Added-OC-ALC) 76 PMXG—76th Propulsion Maintenance Group

(Added-AFSC) 9a—Capital Investment Summary

(Added-AFSC) 9b—Capital Investments Justification

(Added-OC-ALC) A/C—Aircraft

(Added-AFSC) A4—Headquarters Logistics Organization

ABDR—Aircraft Battle Damage Repair

(Added-AFSC) ABOM—Automated Bill of Material

ABW—Air Base Wing

(Added-AFSC) AC—Authorized Contractor

(Added-AFSC) ACB—Allocated Configuration Baseline

(Added-AFSC) ACES II—Advanced Concept Ejection Seat

(Added-OC-ALC) ACITS—Aircraft Information and Tracking System

(Added-OC-ALC) Added-OC-ALC) 76 MXSG—76th Maintenance Support Group

AF—Air Force

(Added-OC-ALC) AFGE—American Federation of Government Employees

AFI—Air Force Instruction

AFLCMC—Air Force Life Cycle Management Center

AFMC—Air Force Materiel Command

AFMCI—Air Force Materiel Command Instruction

AFMCMAN—Air Force Materiel Command Manual

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

AFSCI—Air Force Sustainment Center Instruction

ALC—Air Logistics Complex

(Added-OC-ALC) AM—Additive Manufacturing

ANG—Air National Guard

(Added-OC-ALC) AOP—Art of the Possible

APPG—Annual Planning and Programming Guidance

APU—Auxiliary Power Unit

ASIP—Aircraft Structural Integrity Program

ATM—Air Turbine Motor

(Added-OC-ALC) CAC—Common Access Card

CANN—Cannibalization

CCI—Controlled Cryptographic Item

(Added-OC-ALC) CD—Deputy Commander

CDA—Commercial Derivative Aircraft

CDDAR—Crashed Damaged Disabled Aircraft Recovery

CFETP—Career Field Education and Training Plan

CFT—Contract Field Team

CIP—Capital Investment Program

CITE—Center of Industrial and Technical Excellence

(Added-OC-ALC) CL—Civilian Leader

COMSEC—Communications Security

(Added-OC-ALC) CSA—Client Support Administrator

CSAG-M—Consolidated Sustainment Activity Group-Maintenance

CTP—Civilian Training Plan

DAFMAN—Department of the Air Force Manual

DAF—Department of the Air Force

DAFI—Department of the Air Force Instruction

(Added-OC-ALC) DCMA—Defense Contracting Management Agency

(Added-OC-ALC) DD—Deputy Director

DESR—Defense Explosive Safety Regulation

DEV—Deviation

DFT—Depot Field Team

DIFMS—Defense Industrial Financial Management System

DLA—Defense Logistics Agency

DMFM—Depot Maintenance Functional Manager

DMMP—Depot Maintenance Master Plan

DoDD—Department of Defense Directive

DOP—Dropped Object Prevention

DPEM—Depot Purchased Equipment Maintenance

DRRS—Defense Readiness Reporting System

DSOR—Depot Source of Repair

DWCF—Defense Working Capital Fund

(Added-OC-ALC) ECP—Entry Control Point

ESOH—Environmental Safety and Occupational Health

eTOOLS—Electronic Tools

FAM—Functional Area Manager

FCF—Functional Check Flight

(Added-AFSC) FMEA—Failure Modes and Effects Analysis

(Added-OC-ALC) FMLA—Family Medical Leave Act

FO—Foreign Object

FOD—Foreign Object Damage

FOM—Facilitate Other Maintenance

FSRM—Facility Sustainment, Restoration and Modernization

FY—Fiscal Year

GTC—Gas Turbine Compressor

GITA—Ground Instructional Trainer Aircraft

GSU—Geographically Separated Unit

HAF—Headquarters Air Force

(Added-OC-ALC) HIPAA—Health Insurance Portability and Accountability Act

HQ—Headquarters

HSC—Home Station Check

IAW—In Accordance With

IBDSS—Integrated Base Defense Security System

(Added-OC-ALC) IMA—Individual Mobilization Augmentee

IPP—Integrated Power Package

IR—Infrared

IUID—Item Unique Identification

JCIDS—Joint Capabilities Integration and Development System

JHA—Job Hazard Analysis

JSTO—Job Safety Training Outline

(Added-OC-ALC) LAN—Local Area Network

LEAP—Logistics Evaluation Assurance Program

LMR—Land Mobile Radio

(Added-OC-ALC) LRDP—Logistics Requirements Determination Process

(Added-OC-ALC) LWOP—Leave Without Pay

MAJCOM—Major Command

MCD—Maintenance Cyber Discipline

MDS—Mission Design Series

MET—Mission Essential Task

MICT—Management Internal Control Toolset

MILCON—Military Construction

MIS—Maintenance Information Systems

(Added-OC-ALC) MOC—Maintenance Operations Center

MSEP—Maintenance Standardization and Evaluation Program

MTM—Maintenance Training Manager

(Added-AFSC) MTTR—Mean Time to Repair

(Added-OC-ALC) MXDE—Maintenance Group Engineering Section

MXG/CC—Maintenance Group Commander

NCE—Nuclear Certified Equipment

NSO—Non-Standard Organization

NWRM—Nuclear Weapons Related Materiel

OAP—Oil Analysis Program

(Added-OC-ALC) OC-ALC—Oklahoma City Air Logistics Complex

OI—Operating Instruction

OPR—Office of Primary Responsibility

(Added-AFSC) OSHA—Occupational Safety and Health Administration

PAC—Production Acceptance Certification

PDM—Programmed Depot Maintenance

(Added-AFSC) PE—Personnel Evaluation

PED—Portable Electronic Device

PEO—Program Executive Officer

PGM—Product Group Manager

PII—Pre-Induction Inspection

PM—Program Manager

PMA—Portable Maintenance Aid

PMEL—Precision Measurement Equipment Laboratory

(Added-OC-ALC) PMXG—Propulsion Maintenance Group

PO—Program Office

POC—Point of Contact

POM—Program Objective Memorandum

PPBE—Planning, Programming, Budgeting and Execution

PPE—Personal Protective Equipment

PPP—Public-Private Partnership

(Added-OC-ALC) PPSM—Practical Problem-Solving Method

(Added-OC-ALC) PROACT—Process, Repair, Operations and Critical Tooling

(Added-AFSC) PSF—Production Support Flight

(Added-AFSC) PSFC—Production Support Flight Chief

PSM—Product Support Manager

QA—Quality Assurance

(Added-OC-ALC) QO—Qualification Official

(Added-AFSC) QVI—Quality Verification Inspection

R2D2—Requirements Review and Depot Determination

RDS—Records Disposition Schedule

(Added-OC-ALC) REACT—Reverse Engineering and Critical Tooling

REMIS—Reliability and Maintainability Information System

RF—Radio Frequency

RNM—Repair Network Management

RTR—Recurring Training Requirements

SAC—Self-Assessment Communicator

SCR—Special Certification Roster

SECAF—Secretary of the Air Force

SIB—Safety Investigation Board

SIM—Serialized Item Management

SIO—Single Investigating Official

(Added-OC-ALC) SME—Subject Matter Expert

SRAN—Stock Record Account Number

SSQ—Special Skills Qualification

TEMPEST—Telecommunication Electronics Material Protected for Emanating Spurious Transmissions

(Added-AFSC) TMS—Type Model Series

TO—Technical Order

(Added-OC-ALC) TODO—Technical Order Distribution Office

TSIP—Team Spirit Inspection Program

TSS—Training Scheduling System

UEM—Unit Engine Manager

(Added-OC-ALC) UHF—Ultra High Frequency

(Added-OC-ALC) USAP—Unit Seld Assessment Program

(Added-OC-ALC) USB—Universal Area Network

USC—United States Code

(Added-OC-ALC) VHF—Very High Frequency

W&B—Weight and Balance

WCD—Work Control Document

WCF—Working Capital Fund

WMS—Warehouse Management System

Office Symbols

(Added-OC-ALC) 552 ACW/CP—552d Air Control Wing Command Post

(Added-OC-ALC) 72 OSS/OSAM—72d Operations Support Squadron Operation Airfield Management

AFMC/A3/6/A3F—Air Force Materiel Command Air, Space and Cyberspace Operations, Test and Evaluations Division

AFMC/A4/10—Air Force Materiel Command, Directorate of Logistics, Civil Engineering, Force Protection, and Nuclear Integration

AFMC/A4/10/A4M—Air Force Materiel Command, Directorate of Logistics, Civil Engineering, Force Protection, and Nuclear Integration, Maintenance Division

AFMC/A4/10/A4MY—Air Force Materiel Command, Directorate of Logistics, Civil Engineering, Force Protection, and Nuclear Integration, Maintenance Division, Aviation Support Equipment, Depot Maintenance Policy, and Maintenance Training Branch

AFMC/A4PT—Air Force Materiel Command, Directorate of Logistics, Civil Engineering, Force Protection, and Nuclear Integration, Resource Integration Division, Workforce Development Branch

(Added-OC-ALC) OC-ALC/CC—Oklahoma City Air Logistics Complex Commander

(Added-OC-ALC) OC-ALC/DD—Oklahoma City Air Logistics Complex Deputy Director

(Added-OC-ALC) OC-ALC/QA—Oklahoma City Air Logistics Complex Quality Assurance Office

(Added-OC-ALC) OC-ALC/QASA—Oklahoma City Aircraft Quality Office

(Added-OC-ALC) OC-ALC/SE—Oklahoma City Air Logistics Safety Office

Terms

(Added-AFSC) Accountability—The degree of responsibility for material that has been recorded. This material is then subject to inventory or audit.

(Added-AFSC) Air Logistics Complex (ALC)—An AFSC depot operational activity charged with organically accomplishing repair and modification tasks; contracting with industry for manufacture or repair, as directed by the System Program Manager (SPM) and/or Materiel Manager (MM) for assigned weapon systems, equipment or items of supply; and providing worldwide technical and logistics support for Air Force operational units, Other Services/Agencies, and foreign military customers.

(Added-AFSC) Assessment—The evaluation of a system, component, process, procedure or person.

(Added-AFSC) Awaiting Parts (AWP)—A balance which may be used to de-obligate customer funds for assets that were OWO and work has been stopped due to lack of parts.

(Added-AFSC) Backorder—Material that is not available for issue (same as a due-out). It is a D035K computer recorded obligation to issue the material at a subsequent date when it becomes available.

Capability—The ability to execute a specified course of action.

Cognizant Engineering Authority—An organization or individual delegated engineering authority by the USAF Technical Airworthiness Authority.

COMSEC Material—Item designed to secure or authenticate telecommunications. COMSEC material includes, but is not limited to key, equipment, devices, documents, firmware, or software that embodies or describes cryptographic logic and other items that perform COMSEC functions.

Depot Maintenance—Any action performed on materiel or software in the conduct of inspection, repair, overhaul, or the modification or rebuild of end-items, assemblies, subassemblies, and parts that requires extensive industrial facilities, specialized tools and equipment, or uniquely experienced and trained personnel that are not available in lower echelon-level maintenance activities, and is a function and, as such, is independent of any location or funding source and may be performed in the public or private sectors (including the performance of interim contract support or contract logistic support arrangements. Depot-level maintenance and repair also includes the fabrication of parts, testing, and reclamation, as necessary; the repair, adaptive modifications or upgrades, changes events made to operational software, integration, and testing; and in the case of either hardware or software modifications or upgrades, the labor associated with the application of the modification.

(Added-AFSC) Due-In From Maintenance (DIFM)—A D035K computer detail record of an exchange item issued to a maintenance customer on a replacement basis from the SSC/EPSC to the production line, for which the requesting organization has not turned in a like item, or issued from DLA as a direct line issue (not from the SSC/EPSCs). The customer must turn in a like item using the same document number as the issue request to clear the DIFM detail.

Engineering Technical assistance Request (ETAR)—The document and process for organizations to request and receive disposition instructions, from the cognizant engineering organization, when published technical data is inadequate for the task at hand.

Electronic Tools (eTools)—eTools are portable electronic devices (PEDs) (such as a laptop computer or handheld device) that operate in a disconnected mode and/or, are certified to inter-operate on AF networks, are mission critical because they are the primary method for viewing electronic technical publications, and, in some cases, are used to exchange maintenance data with an approved MIS at the point of maintenance. The guidance below establishes requirements for developing and implementing daily/periodic cyber mitigation processes.

(Added-AFSC) Locally Manufactured/Modified Tools and Equipment (LM/MT&E)—Only those items developed, manufactured, controlled by the ALCs. This includes locally manufactured/modified tools and equipment (e.g. X numbered tools). LM/MT&E does not include tools.

Organic—Assigned to and forming an essential part of a military organization.

Organic depot maintenance—Maintenance performed by a military service under military control using government owned or controlled facilities, tools, test equipment, spares, repair parts, and military or government civilian personnel.

Public-private partnership—An agreement between an organic depot maintenance activity and one or more private industry or other entities to perform work or utilize facilities and equipment. Program offices, inventory control points and logistics commands may be parties to such agreements.

Source of repair—An industrial complex (organic or commercial) with required technical capabilities to accomplish repair, overhaul, modification, or restoration of specific types of military hardware or software.

(Added-AFSC) Stock Fund—A stock fund is a revolving fund established to finance inventories of supplies and other stores. It is authorized by specific provision of law to finance a continuing cycle of operations. Receipts derived from maintenance operations are then available for further use.

Surge—The act of expanding an existing repair depot maintenance repair capability to meet increased requirements by adjusting shifts or by adding equipment, spares, repair parts, and skilled personnel to increase the flow of repaired or manufactured materiel to the using activity or for serviceable storage.

(Added-AFSC) Yield—The productive time of an individual compared to the total available hours in a work- year (2080-2096). There are various yield calculations, both Direct Production Standard Hours (DPSH) and Direct Production Actual Hour (DPAH), including direct labor yield with and without overtime, and total yield with and without overtime. Direct labor yields include only the direct labor hours and work-years; while the total yield includes both direct and overhead hours and work-years.

Attachment 2

VOLUME/CHAPTER BREAKDOWN

Table A2.1. Volume/Chapter Breakdown.

VOLUME 1 DEPOT MAINTENANCE PRINCIPLES	VOLUME 2 DEPOT MAINTENANCE PRODUCTION	VOLUME 3 DEPOT MAINTENANCE PRODUCTION SUPPORT
Chapter 1	**Chapter 1**	**Chapter 1**
Depot Maintenance Management Principles	Depot Maintenance Production Labor Entry	Depot Maintenance Work Measurement
Chapter 2	**Chapter 2**	**Chapter 2**
Roles and Responsibilities	Work Control Documents and Technical Data	Depot Maintenance Production Support
Chapter 3	**Chapter 3**	**Chapter 3**
Safety, Security, and Housekeeping	Tools and Equipment Management	Operational Workloading, Planning, and Scheduling Control
Chapter 4	**Chapter 4**	**Chapter 4**
Maintenance Training	Foreign Object Damage/Dropped Object Prevention Programs	Sunshade Management
Chapter 5	**Chapter 5**	**Chapter 5**
Impoundment	Maintenance Operation Center and Aerospace Vehicle Distribution Officer	Depot Maintenance Plant Management
Chapter 6	**Chapter 6**	**Chapter 6**
Workplace Communications and Maintenance Cyber Discipline	Depot Engine Management	Material Management
Chapter 7	**Chapter 7**	**Chapter 7**
Additional Program Requirements	Aircrew Egress Systems Maintenance Program	Functional Check Flight Program
	Chapter 8	**Chapter 8**
	Maintaining Commercial Derivative Aircraft	Quality Assurance
	Chapter 9	

	Oil Analysis Program	
	Chapter 10	
	Depot Field Teams	
	Chapter 11	
	Ground Instructional Trainer Aircraft	
	Chapter 12	
	Additional Program Requirements	