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OGDEN AIR LOGISTICS COMPLEX

AIR FORCE SUSTAINMENT CENTER
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Supplement

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Maintenance

DEPOT
MAINTENANCE MANAGEMENT

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This Air Sustainment Center Manual (AFSCMAN), Ogden Air Logistics Complex (OO-ALC) Supplement, implements aircraft and equipment maintenance local management procedures to augment Air Force Sustainment Center (AFSC) policy relating to aircraft and equipment maintenance procedures. This supplement supports Air Force Policy Directive (AFPD) 21-1, *Maintenance of Military Materiel*, Air Force Instruction (AFI) 21-101, Air Force Materiel Command (AFMC) Supplement, *Aircraft and Equipment Maintenance Management*, AFSCMAN 21-102, *Depot Maintenance Management*. Ensure all records generated as a result of processes prescribed in this publication adhere to AFI 33-322, *Records Management and Information Governance Program*, and are disposed of in accordance with (IAW) the Air Force Records Disposition Schedule (RDS) which is located in the Air Force Records Information Management System (AFRIMS). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Department of the Air Force (DAF) Form 847, *Recommendation for Change of Publication*. Route DAF Forms 847 from the field through the appropriate functional chain of command.

SUMMARY OF CHANGES

This interim change updates paragraph numbering to align with of AFSCMAN21-102 AFSCGM2022-1 and removes redundant paragraphs. **Paragraph 7.3.4.10.2.1** is moved to 5.5.4.1 to better align with DFT requirements. Chapters **4**, **10**, and **13** have minor verbiage changes. Added Annual Aircraft and Missile Requirements Cycle, pargraphs 6.7.3 – 6.7.3.9.3. Paragraphs were deleted. **Chapter 18** has significant changes and should be read in its entirety.

Chapter 1

DEPOT MAINTENANCE MANAGEMENT PRINCIPLES

1.2.1. **(Added)** Sustainment Operating Instructions (SOI) are F-35 joint program instructions provided by the Joint Program Office. They are developed with service/partner participation and provide source documentation for Air Force policies/instructions specific to the F-35 where legacy instructions may not be adequate for the given topic. SOIs are considered applicable and source guidance for use when there is no other Air Force guidance available. If there is a conflict, Air Force guidance will take precedence. SOI source documentation/information that is relevant to Air Force Materiel Command Instruction (AFMCI) 21-100, *Depot Maintenance Management*, is included in this publication and referenced to the specific SOI in applicable paragraphs of this publication.

1.2.2. **(Added)** The F-35 is a unique joint services platform that utilizes terminology that differs from legacy. For a frame of reference, the following are common terms (not all inclusive) and their legacy equivalent: Autonomic Logistics Information System **(**ALIS)=Integrated Maintenance Data System (IMDS), Joint Service Technical Data (JTD)=Maintenance Data System (MDS) Technical Order (TO), Time Change Technical Directive (TCTD)=Time Compliance Technical Order (TCTO), Action Request (AR)= problem reporting for Air Vehicle (AV) issues, problems identified through the Anomaly and Failure Resolution System (AFRS), quality defects that cannot be solved at the lowest level, problems identified within the JTD browser and corrections to JTD publications, and their issues identified by the Joint Strike Fighter (JSF) organization, including data requests and ALIS requests, Minimum Essential Function List = Minimum Essential Subsystems List and Logistics Control Number (LCN)=Work Unit Code. AFMC Form 202, *Nonconforming Technical Assistance Request and Reply*, similar to Supplier Initiated Quality Assurance Report (SQAR) and/or Maintenance – Repair – Overhaul Deviation Request (MDR).

1.3. Technical Orders.

1.3.1. **(Added)** F-35. Use of JTDs. Verified JTD will be used for all maintenance actions/procedures (T-2). Where there is JTD that is not authored or verified, refer to established procedures outlined in SOIs 1511.01 and 1514.02.

1.3.2. **(Added)** F-35. Recommend improvements, corrections or additions to JTD by submitting a Joint Technical Data Action Request (JTDAR) to Autonomic Logistics Global Sustainment (ALGS) Operations Center through ALIS for JTD improvements, corrections or additions (T-2). The request should be clear, concise and provide enough detail to identify the recommendation. Additionally, the request should provide a recommended solution if known. The initiator shall recommend a JTDAR processing priority of routine or expedited action as applicable.

1.3.3. **(Added)** F-35. Expedited JTDAR are accomplished when personnel/property hazards, safety-of-flight conditions exist or a change that pertains to a procedure that will result in a work stoppage or damage to equipment if left uncorrected.

1.3.4. **(Added)** F-35. Routine JTDAR are accomplished for all other changes that do not meet the expedited action criteria.

1.3.5. **(Added)** F-35. Waivers, deviations, improvements, corrections, or additional technical data procedures are submitted using an AR to the ALGS Operations Center through ALIS (T-2). SOI 1514.02.

1.3.6. **(Added)** F-35. Support Equipment Maintenance Matrix (SEMM). SOI 1508.09.

1.3.6.1. **(Added)** F-35. The primary source for technical data used by authorized personnel to conduct maintenance for support equipment (SE) is verified JTD. In the absence of verified JTD, legacy general technical data may be used.

1.3.6.2. **(Added)** F-35. The SEMMs identify the approved technical data that is to be used for a given SE maintenance task. The SEMMs do not contain SE operational tasks, procedures, or documentation. The SEMMs only contain SE maintenance and repair tasks and related documentation.

1.3.6.3. **(Added)** F-35. The SEMMs are standalone, Air System Contractor (ASC) configuration-managed, protected Microsoft Excel files intended to be used as cross reference tools for SE authorized persons to assist in determining whether or not a particular SE maintenance task is authorized (when no released/verified JTD is available).

1.3.6.4. **(Added)** F-35. The referenced SE maintenance technical data in the SEMM is comprised of original equipment manufacturer and/or vendor operation & maintenance manuals, Department of Defense (DoD) Service SE technical publications and ASC-authored work cards.

1.3.6.5. **(Added)** F-35. If SE JTD data modules exist, the authorized person identifies whether it is verified or unverified.

1.3.6.6. **(Added)** F-35. If SE JTD modules are available, but identified as "unverified," the authorized person shall follow procedures outlined in SOI 1511.01.

1.3.6.7. **(Added)** F-35. If SE JTD modules are available and identified as "verified," the authorized person shall perform maintenance in accordance with the instructions, and then close the work order. (T-2)

1.3.6.8. **(Added)** F-35. If no SE JTD is authored the authorized person selects the applicable unscheduled or preventative maintenance SEMM. (T-2).

1.3.6.9. **(Added)** F-35. If the authorized person identifies a discrepancy (e.g., does not find a task and applicable reference) in the unscheduled and/or preventative SEMM, he/she shall submit an AR and follow instructions as detailed in the AR Report. (T-2).

1.4. Modification Management.

1.4.1. **(Added)** F-35. Modification Management. Submit an AR to the ALGS Operations Center through ALIS for program-specific equipment and aircraft modifications. SOI 1514.02, *Problem Reporting and Resolution*.

1.5.2. Personal electronic devices, such as cell phones, can be a hazard to personnel or government equipment due to distraction, explosive concerns, cyber security concerns, safety in industrial environments, activities requiring special focus or attention, etc. Maintenance group directors/commanders will identify areas and/or activities where use of personal electronic devices is prohibited.

Chapter 4

CAPITAL INVESTMENT PROGRAM (CIP)

4.1. Capital Investment Activities.

4.1.2.3.1. **(Added)** The OO-ALC CIP Managers, who reside in the complex financial office (OO-ALC/FMA), have financial management responsibility of the complex CIP funds. They act as the financial OPRs for projects over $250K designated as CIP in these categories: Equipment, Automated Data Processing Equipment (ADPE), Software and Minor Construction (MC). Each group will designate a primary and alternate CIP manager that will be responsible for the program within that group. It is recommended that the CIP manager should be a formal program manager (not an engineer) and where possible, when the group has an Engineering (EN) organization the designated CIP manager should be assigned to that EN office.

4.1.2.21.1. **(Added)** The core members of the Capital Investment Program Working Group (CIPWG) will be the complex and group CIP managers, Maintenance Acquisition Support Office (MASO), contracting officers (AFMC OL-H/PZ) and cost analysts (AFMC AFSC/FZC). They will participate in the monthly CIPWG to provide required input and attempt to resolve issues. Representatives of other organizations may also be called upon to attend the CIPWG meetings dependent on the agenda.

4.1.2.21.2. **(Added)** The OO-ALC Equipment Working Group (EWG), led by 309th Maintenance Support Group (309 MXSG) will work the strategic planning and prioritization processes. The EWG will consist of participants most closely associated with the equipment, mission, or purpose as selected by their management. Upon agreement of a prioritized CIP list, the EWG will present recommendations to the Infrastructure Governance Board and Council for approval.

4.1.5.1.1. **(Added)** The complex and group CIP managers will ensure all CIP investments are focused on resolving capability gaps or achieving the returns on investment identified in the Economic Analysis.

4.1.5.3.1. **(Added)** A 5-year CIP industrial resource plan will be developed and maintained by each maintenance group EN office. The plan will identify equipment, ADPE, and MC requirements for the current year, budget year, one-out year, and a projected project list for 2 additional years. All projects will be identified by priority of need for their respective year.

4.1.6.5.1. **(Added)** The following solutions for each project must be considered: upgrade/refurbish, buy new, buy refurbished, contract the workload, move the workload, and or change/improve the process.

4.1.6.5.2. **(Added)** Estimates will be created at a high-level Rough Order of Magnitude (ROM) to include: material costs and sources, equipment purchase cost and sources, non-recurring engineering costs and sources, notional schedule, facilities modifications, and MC costs.

4.1.6.5.3. **(Added)** The 309th Maintenance Support Squadron (309 MXSS) Analytical Section, as well as the item manager, and program office are required to be involved in the requirements development process to ensure maintainability and spare parts supplies. Technicians in the shop should be involved in the equipment installation, testing and operation training.

4.1.6.5.4. **(Added)** For all specialized equipment that requires calibration, the calibration procedures and technical data must be purchased as part of the equipment buy. Air Force Metrology and Calibration (AFMETCAL) and the Precision Measurement Equipment Laboratory or the Metrology and Calibration Flight (PMEL/MCF) must be involved in this process to ensure equipment maintainability. If calibration procedures, technical data, or intellectual property cannot be purchased, the OO-ALC will pursue a Public Private Partnership with AFMETCAL involvement and approval.

4.1.7.3.1. **(Added)** All projects will be scored using the approved AFSC scoring sheet. The groups will initially score the project using the current AFSC scoring matrix. An independent board consisting of the FM CIP manager, the AFSC/FZC lead cost analyst, the MXSG CIP manager and an EN representative, will review the initial group score and all documentation to determine a final score for each project. Supporting documentation must be attached to Comprehensive Cost and Requirement (CCaR) to receive any score above a zero. Documents may include workload review files, maintenance records, safety write-ups, overtime reports, etc.

4.1.7.3.2. **(Added)** All budget year submissions must also have the following documentation: Rate impact spreadsheet and a prioritized group budget submission letter to include the electronic staff summary sheet (e-SSS) with the group EN coordination.

4.1.7.3.3. **(Added)** First out-year projects must have a 9-band AFSC/FZC data sheet attached to CCaR. Second out-year will only require a CCaR record.

4.1.7.3.4. **(Added)** All documentation must be completed and submitted to the complex CIP managers No Later Than (NLT) the Enterprise Task Management Software Solutions due date.

4.1.7.3.5. **(Added)** As soon as the approved 1-N list is received from AFSC/LZDA, groups will begin working their requirements refinement and project procurement packages. Group CIP managers will meet with the equipment managers, group engineers, MASO representatives and the contracting officer to discuss acquisition strategies and timelines.

4.1.7.3.6. **(Added)** Upon receipt of the Authority to Advertise, the complex CIP manager must send out a data call to all groups requesting inch stones be established for all budget-year projects. Group CIP managers must work with their engineers and the contracting office to set their inch stone dates, ensuring they will meet the OO-ALC obligation goal of NLT 30 June. If a project has special circumstances, or for out-of-cycle project adds, permission must be given by the complex CIP manager for a later obligation date.

4.1.9.3.1. **(Added)** Obligation of contractual funds is accomplished using one of the following mechanisms:

4.1.9.3.1.1. **(Added)** Signed contract. Contractual awards will be accomplished by AFMC OL-H/PZ or by a Category II Military Interdepartmental Purchase Request (MIPR). Once the contract is fully signed, a copy of the contract must be given to the group or complex CIP manager to upload to CCaR. The complex CIP manager will ensure obligation occurs in the AGFS-BQ Accounting System and Defense Industrial Financial Management System (DIFMS) and must provide a copy to AFSC/LZDA.

4.1.9.3.1.2. **(Added)** DD Form 448-2, *Acceptance of MIPR*. Once the acceptance is received from the supplier, it must be forwarded to the Hill Outgoing MIPR mailbox to be processed through MIPR control. The complex CIP manager will ensure obligation occurs in BQ and DIFMS.

4.1.9.3.1.3. **(Added)** Certified Miscellaneous Obligation and Reimbursement (MORD). Upon certification, 75th Comptroller Squadron Financial Management will obligate in BQ and DIFMS and must provide a copy to AFSC/LZDA.

4.1.9.3.2. **(Added)** In-House obligations will be accomplished by the complex CIP manager upon receipt of a signed ROM, Performance Work Statement, and Memorandum of Agreement (MOA) from the organizations involved and must provide a copy to AFSC/LZDA.

4.1.9.3.2.1. **(Added)** Cost estimates for in-house (organic) work will use the labor and material costs appropriate to the Resource Cost Center (RCC) that is accomplishing the work.

4.1.9.3.2.2. **(Added)** Financial Job Order Number (FJON) in DIFMS for in-house labor will begin with FOG. Example of FJON: FOG6TLA01000, underlined are special characters used to identify the workload as organic in support of a CIP project. 309th Software Engineering Group (309 SWEG) project managers will ensure that only those costs associated to the project are charged to the relative in-house Job Order Number (JON).

4.1.9.3.2.3. **(Added)** Contractual requirements for in-house projects will use the FJON beginning with FE. All Purchase Requests (PR) for these projects must be approved by the complex CIP manager before they are submitted and there must be an approval step in the Funds Request and Certification (FRC) route for the complex CIP manager to approve. A resource advisor or project manager from the group performing the work will request a line of accounting from the complex CIP manager for the PRs.

4.2. Funding Activities and Equipment Management.

4.2.7.1.1.4. **(Added)** The CIP project folder containing the required documents will be housed digitally in the CCaR system, as required by AFSCMAN21-102, paragraphs 4.1.2.18 and 4.4.6.

4.4. Comprehensive Cost and Requirements (CCaR).

4.4.4.4.1.1. **(Added)** The MASO will complete purchase documents in CCaR with the following exceptions: ADPE documents will be created by the 75th Air Base Wing (75 ABW) Information Technology Office (75 ABW/SC), MC documents will be created by 75th Civil Engineering Group (75 CEG), and MORDs will be created by the respective group finance office. Per approval from AFSC/LZDA.

4.4.4.4.1.2. **(Added)** Purchase documents created outside CCaR will be backfilled upon certification and again upon obligation by the complex CIP manager.

4.4.4.4.1.3. **(Added)** A complex CIP manager must approve all funding documents in FRC before certification of funds.

4.4.4.4.1.4. **(Added)** A CIP procurement status meeting will be held with contracting a minimum of monthly to discuss status of each procurement package they are working. Attendees will include complex and group CIP managers, AMSO representative, contracting officers and others as needed.

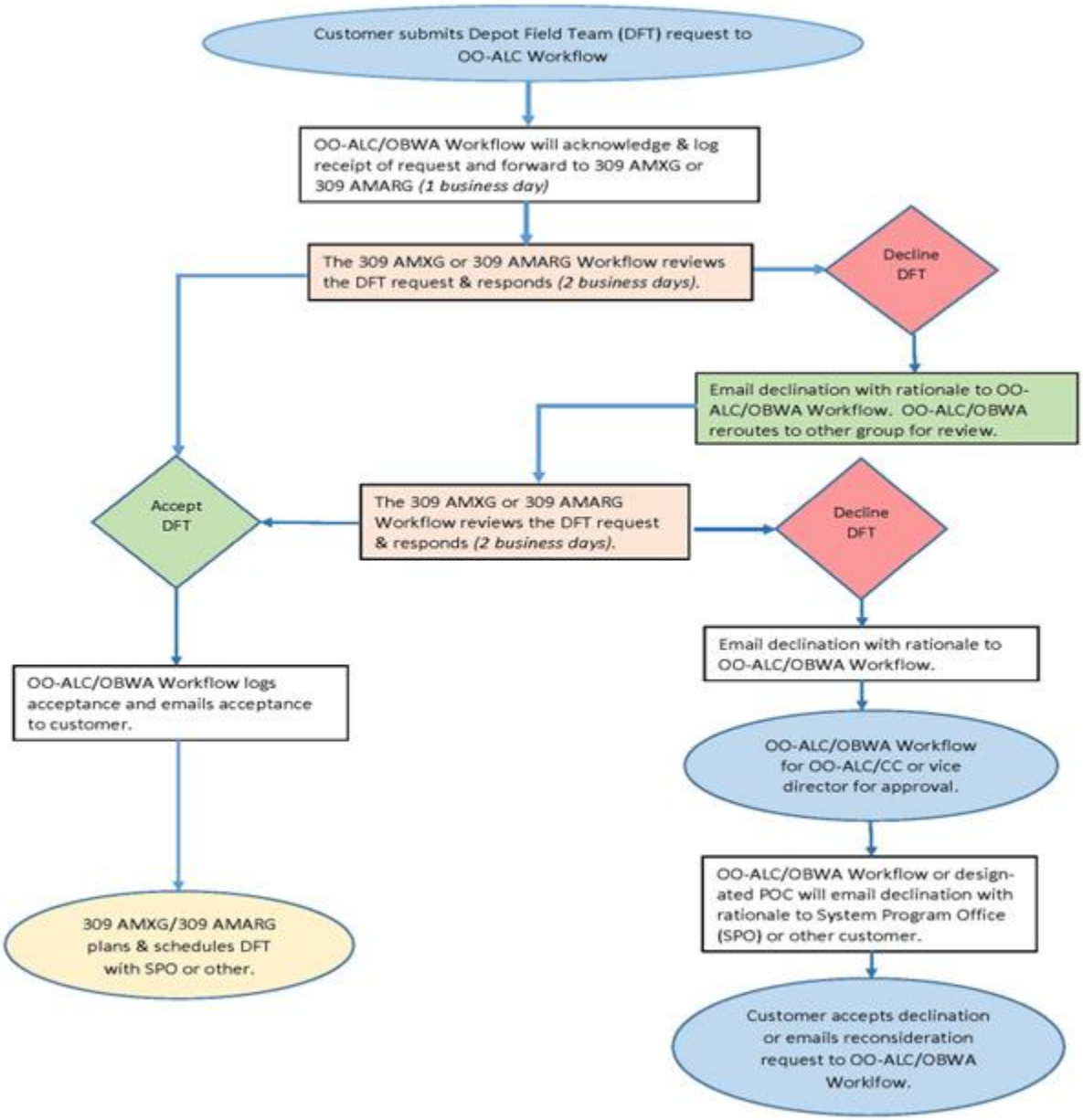
Chapter 5

ORGANIC DEPOT FIELD TEAM (DFT)

5.2. Scheduled facility maintenance workloads. I.e., radomes, launch facility, launch control center) are not processed as DFTs. These are processed as Mobile Depot Maintenance.

5.3.1. OO-ALC/OBWA will serve as the OPR for aircraft DFT requests. See **Figure 5.1.**, *OO-ALC DFT Process Flow*.

Figure 5.1. (Added) Depot Field Team (DFT) Process Flow.



5.3.1.1. **(Added)** Define Designated Point of Contact (POC) for each group: Production Group Workloading section or Squadron Production Support section:

5.3.1.1.1. **(Added)** 309 AMARG Workflow, **AMARCWorkflow@us.af.mil**, 228-8146.

5.3.1.1.2. **(Added)** 309 AMXG Workflow, **309AMXG.Workflow@us.af.mil**, 777-2362.

5.3.1.1.3. **(Added)** 309 CMXG Workflow, **309.CMXG.Workflow@us.af.mil**, 777-3241.

5.3.1.1.4. **(Added)** 309 EMXG Workflow, **309.EMXG.Workflow@us.af.mil**, 775-3073.

5.3.1.1.5. **(Added)** 309 MMXG Workflow, **309.MMXG.Workflow@us.af.mil**, 586-9248.

5.3.1.1.6. **(Added)** 309 MXSG Workflow, **309MXSG.Workflow@us.af.mil**, 777-8064.

5.3.1.1.7. **(Added)** 309 SWEG Workflow, **309.SMXG.Workflow@us.af.mil**, 586-4941.

5.3.2. Emergency telephone requests and immediate requests will be processed IAW TO 00-25-107, *Maintenance Assistance*, paragraph 2.4. ALC 107, with the System Program Manager/Product Group Manager notifying OO-ALC/OBWA Workflow or designated POC with the request for support. Designated POC may be 309 AMXG/MXDS or 309 AMARG/MXDS.

5.4. Designate a POC for each group. 309 AMXG/MXDS Production Group Workloading and 309 AMARG/MXDS, Production Group Workloading.

5.5.4.1. **(Added)** 583 MMXS DFTs. Until such time the OO-ALC and 309 MMXG can support process engineering requirements listed in sub paragraphs **7.3.4.10.4** and **7.3.4.10.5**, any engineering authority, to include 583 MMXS engineering technicians with Intercontinental Ballistic Missile (ICBM) knowledge, will fulfill the process engineer requirement to ensure production and training can be completed whenever a new process, procedure, or tasks are introduced.

5.5.4.1.1. **(Added)** 583 MMXS DFT certifying WCD when no technicians are PAC certified. Since there are limited resources to train on ICBM sites (launch facilities and launch control centers) training is generally accomplished while performing the actual tasks on site. QA or EN shall oversee these tasks until technicians are certified on the tasks in PAC.

Chapter 6

DEPOT MAINTENANCE PRODUCTION SUPPORT

6.2. Purpose.

6.2.1. **(Added)** Exception: The 575th Aircraft Maintenance Squadron (575 AMXS) located at Randolph Air Force Base (AFB) and the 309th Missile Maintenance Group (309 MMXG) Geographically Separated Units (GSU) will follow the supply rules and guidance in Air Force Handbook (AFH) 23-123, Volume 1, *Materiel Management Reference Information*, and AFH 23-123, Volume 3, *Air Force Equipment Management*, AFMAN 23-122, *Materiel Management Procedures*, and AFI 23-101, *Air Force Materiel Management*, for material ordering and turn in processes. Procedures in this manual pertaining to data systems are not applicable to these Depot Maintenance (DM) locations. "EXCEPTION", the 309 MMXG GSUs will use applicable data systems to perform DM production support within USAF guidance.

6.5. General Information.

6.5.3.1. **(Added)** Electronic system equivalents to AFSC Form 501 are acceptable to utilize for a RFQ/ROM (i.e., Impresa ROME screen).

6.5.3.1.1. **(Added)** The following business rules are established to clarify the general guidelines provided in the OO-ALC Concept of Operations for business development and ensure a synchronized strategy prior to the acceptance of new workload. For the purpose of this supplement, new workload is defined as: New work, as related to requiring a Depot Source of Repair (DSOR) assignment, is a change in workload (hardware or software) to a previously postured system, sub-system, end-item or component that results in a change greater than 20 percent to the DM workload hours or cost and for which the OO-ALC has no recent experience and/or workload involving previously unforeseen risk of financial loss.

6.5.3.2. **(Added)** Communication.

6.5.3.2.1. **(Added)** The OO-ALC Business Development Office (OO-ALC/OBP) is the entry point for all requests for new workloads as defined in **paragraph 6.5.3.1**. Solicitation through any other means must be brought to the attention of OO-ALC/OBP immediately.

6.5.3.2.2. **(Added)** Once the production group evaluation is complete, the response will be returned to OO-ALC/OBW. Response must include previous history of a similar workload with lessons learned, production area(s) impacted, risk assessment (production and financial) and mitigation plan. If no history is available, as a minimum, a risk assessment and mitigation plan must be included. This additional data will be submitted on a template available upon request by emailing the OO-ALC/OBW Local Manufacturing (LM) Workflow.

6.5.3.3. **(Added)** Strategy.

6.5.3.1. **(Added)** Electronic system equivalents to AFSC Form 501 are acceptable to utilize for a Request for Quote (RFQ)/Rough Order of Magnitude (ROM) (I.E. Impresa ROME screen).

6.5.3.1.1. **(Added)** The following business rules are established to clarify the general guidelines provided in the OO-ALC concept of operations (CONOPS) for business development and ensure a synchronized strategy prior to the acceptance of new workload. For the purpose of this supplement, new workload is defined as workload for which the OO-ALC has no recent experience and/or workload involving previously unforeseen risk of financial loss.

6.5.3.3.1. **(Added)** The OO-ALC workload shall be priced to external customers IAW current AF regulations. Per AFMCI 65-101, *Depot Maintenance Accounting and Production System-Financial Policy and Procedures for Depot Maintenance*, provides guidance relative to use of approved RCC rates. Once labor standards are determined, the applicable RCC rate will be applied to the standard to determine the estimated cost of new workload.

6.5.3.3.2. **(Added)** With few exceptions, it is impractical to build new RCC rates for each new workload under consideration. Existing RCC rates will be applied to the portion of the standard hours the RCC contributes to a new workload.

6.5.3.3.3. **(Added)** The OO-ALCC/OBP office is the entry point for all requests for new workloads. Solicitation through any other means should be brought to the attention of OO-ALC/OBP immediately.

6.5.3.3.4. **(Added)** Once the production group evaluation is complete, the response will be returned to OO-ALC/OBW. The response must include previous history of a similar workload with lessons learned, production area(s) impacted, a risk assessment (production and financial) and a mitigation plan. If no history is available, as a minimum, a risk assessment and mitigation plan must be included. This additional data will be submitted on a template available upon request by emailing the OO-ALC/OBW LM Workflow.

6.5.3.3.5. **(Added)** It is critical that the amount of direct labor hours planned for a new workload include appropriate consideration for "unknowns" (e.g., aging airframe issues), typically encountered during maintenance processes on new workload which can drive additional cost risk to maintenance.

6.5.3.3.6. **(Added)** Consideration shall be given to new or increased requirements of industrial support equipment and services then coordinated through 309 MXSS. The 309 MXSS shall determine the ability to maintain new or unique equipment, special knowledge, training, or certifications and possible risk assessment.

6.5.3.3.7. **(Added)** The OO-ALC maintenance groups and staff offices will retain relevant history for a minimum of 6 months after completion, IAW AFRIMS RDS T21-05, R01.00, *Depot Maintenance Projects*, on current and past workloads for incorporation in subsequent responses to new workload solicitations.

6.5.3.4. **(Added)** Review/Approval.

6.5.3.4.1. **(Added)** Workloads priced to internal OO-ALC customers or valued up to $500K to external (outside OO-ALC) customers will be approved in the performing production group.

6.5.3.4.2. **(Added)** OO-ALC/OBP chief, along with OO-ALC Financial Management (OO-ALC/FM), will lead the review of a production group risk assessment, history and pricing strategy used in response to new workload requests from external customers. OO-ALC Business Operations (OO-ALC/OB) will act as approval authority on pricing strategies for workloads valued over $500K but less than $1M.

6.5.3.4.3. **(Added)** Workload responses valued over $1M will be forwarded to OO-ALC/CC for approval after the above review. New workload packages must have the proper coordination of all affected OO-ALC production group(s), OO-ALC/FM and recommendation for approval or disapproval by OO-ALC/OB. Proper coordination will include an e-SSS routed through the appropriate workflow accounts.

6.5.3.5. **(Added)** Business Rules.

6.5.3.5.1. **(Added)** All workload will be negotiated with OO-ALC/OB. If the customer notifies a group that changes to workload requirements have/will occur, OO-ALC groups will advise the customer to work with OO-ALC/OB.

6.5.3.6. **(Added)** Process/Responsibilities.

6.5.3.6.1. **(Added)** The OO-ALC Business Operations Office (OO-ALC/OB) will develop the Planned Labor Application depicting workload in hours and personnel equivalents by commodity at the RCC level for each group within the complex.

6.5.3.6.2. **(Added)** The OO-ALC/OB will calculate the manpower required (targets) to produce funded workload based on the approved productivity factors provided by the groups.

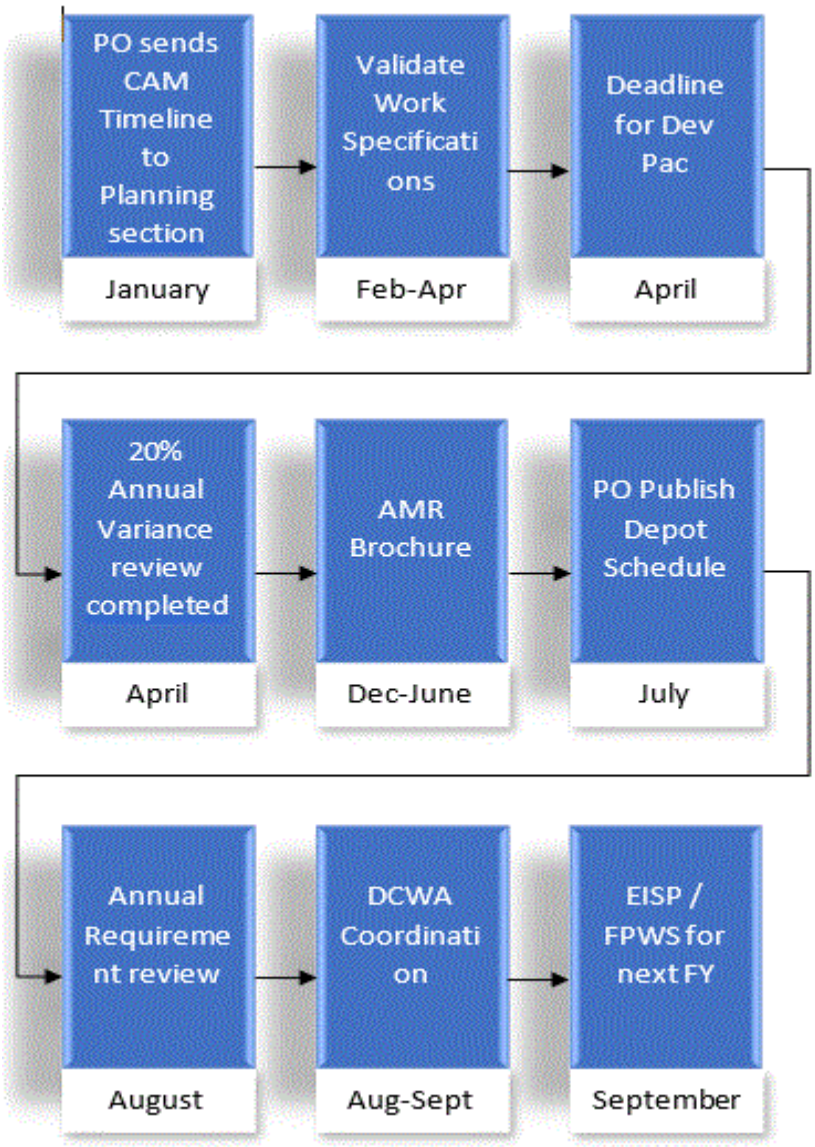
6.5.3.6.3. **(Added)** The OO-ALC/OB will assist the groups in developing a plan to hire/realign/attrite to achieve manpower targets.

6.5.6.6.4. **(Added)** The OO-ALC production groups will annually submit productivity factors Efficiency (EFF), Indirect Labor Factor (ILF), Overtime (OT) and Cost Class Four (CCIV) forecasts to OB. The CCIV requirement will include a workload description, the supported organization, RCCs performing the work, and the hours by RCC.

6.5.6.6.5. **(Added)** The OO-ALC production groups will notify OO-ALC/OB of problems that could impact production hours and/or manpower (major structural repairs, backlogs, schedule changes, skills imbalances, etc.) If the production impact will result in additional resource requirements, the groups will submit a plan that identifies the root cause, a plan of action, and a get-well date.

6.5.6.6.6. **(Added)** The OO-ALC has overall approval authority for workload, productivity factors, CCIV work, manpower, personnel, etc., submitted by OO-ALC production groups.

Figure 6.1. (Added) . Aircraft and Missile Requirements (AMR) Cycle.



6.7.3. Annual AMR Cycle: AMR and Logistics Requirements Determination Process (LRDP) plan for the current fiscal year plus three years. Individual maintenance task creation / updates can take place at any time however the process of adding / updating them to the maintenance plan follows a calendar-based timeline that officially begins every year on Nov 15th. Full AMR process laid out in AFMAN 63-143, *Centralized Asset Management Procedures*, Chapter 3.

6.7.3.1. **(Added)** Validate AMR Work Spec (1 Feb - Early Apr): Maintenance tasks are broken down to Maintenance (MX) operations level, sequenced, and the list of materials is updated. Industrial Engineering Technician (IET) (maintenance planner) expand, refine and price out individual maintenance task requirements to include step-by-step work procedures and lists of required parts, HAZMATs, Test, Measurement, & Diagnostic Equipment (TMDE), special tools, common tools, PPE, SE, production skills, etc. Once the individual maintenance task has been constructed in the Engineering Requirements Review Process and priced out in the Bill of Work (BOW). Maintenance task scope and year of execution changes are addressed at this time for

potential inclusion in the FY+2 Draft Work Specification. The Collaborative review team determines implementation plan & year of execution for new / updated requirements NLT 1 Apr. The FY+1 Work Spec is already considered locked at this point and is only updated with minor (non-scope) requirement changes. The PM provides depot maintenance the disposition (e.g., AFMC Form 202, deferment, etc.) for non-AMR work specification related tasks that are unplanned, unpredictable, or O&A as well as non-supportable AMR work specification related tasks. The Work Spec documents general aircraft MX task requirements, TOs, and directives. It is reviewed / approved annually to ensure that new or changed tasks, as well as existing tasks, are valid and adequately defined. Published the first week of April each year for the upcoming execution year and used to develop the Depot Customer Workload Agreement (DCWA).

6.7.3.2. **(Added)** Deadline for Dev Pac updates (1 April): Required for all repeatable maintenance tasks to determine task requirements and the List of Materials (LOM). Dev Pacs enable supportability analysis based on the individual maintenance task requirements and not historical part consumption data. Dev Pacs are reviewed annually for validity and currency at a rate that aligns with the MDS PDM interval. PO leads review with collaborative function team input and updates the Dev Pac LOMs with accurate & up to date Part / Non-part supportability requirements. Concurrently, IET (maintenance planner) will validate the corresponding Work Control Documents (WCDs) of the Dev Pacs selected for annual review. The work spec/brochure are published for the upcoming FY and AFMC/A4F tasks the enterprise for future task requirement changes that will impact the current FY+2. For inclusion in the current AMR cycle, Dev Pacs will be complete with BOW initiated NLT 31 Jan.

6.7.3.3. **(Added)** 20% annual variance review (April): As a minimum, all current labor standard tasks, with less than a 100% occurrence factor, must be reviewed annually for any variance in hours greater than +/- 20% and/or 50 hours. Concurrently, all 100% occurrence factor tasks will be reviewed, in their entirety, based on PDM interval (Ex: 6-year PDM interval equals 16.7% of tasks per year).

6.7.3.4. **(Added)** AMR Brochure (1 Dec - 15 Jun): The AMR Brochure identifies trended and non-trended tasks, hours, and establishing occurrence factor (if required) needed to maintain aircraft in mission ready status. Reviewed and approved annually by all stakeholders to ensure that new or changed tasks, as well as existing tasks, are valid and adequately defined. New requirements, which are not fully supportable, will not be included as a funded brochure requirement until they are fully supportable unless an alternate supportability plan has been provided by PM. The AMR Brochure is used to develop the Fixed Price Worksheet (FPWS). The Brochure documents programmed organic aircraft and missile depot maintenance tasks, descriptions, hours, and occurrence factors. The PM coordinates and certifies the brochure with the SOS / SOR NLT 15 Jun. It is prepared for each FY, portrayed in a 3-year format, and finalized at least one FY prior to execution year. The published AMR brochure is used by both the Budgeting and Requirements Review and Depot Determination (R2D2) processes and serves as the baseline for the hours associated with the scheduled maintenance tasks to be completed. The R2D2 process follows AFMCI 21-100.

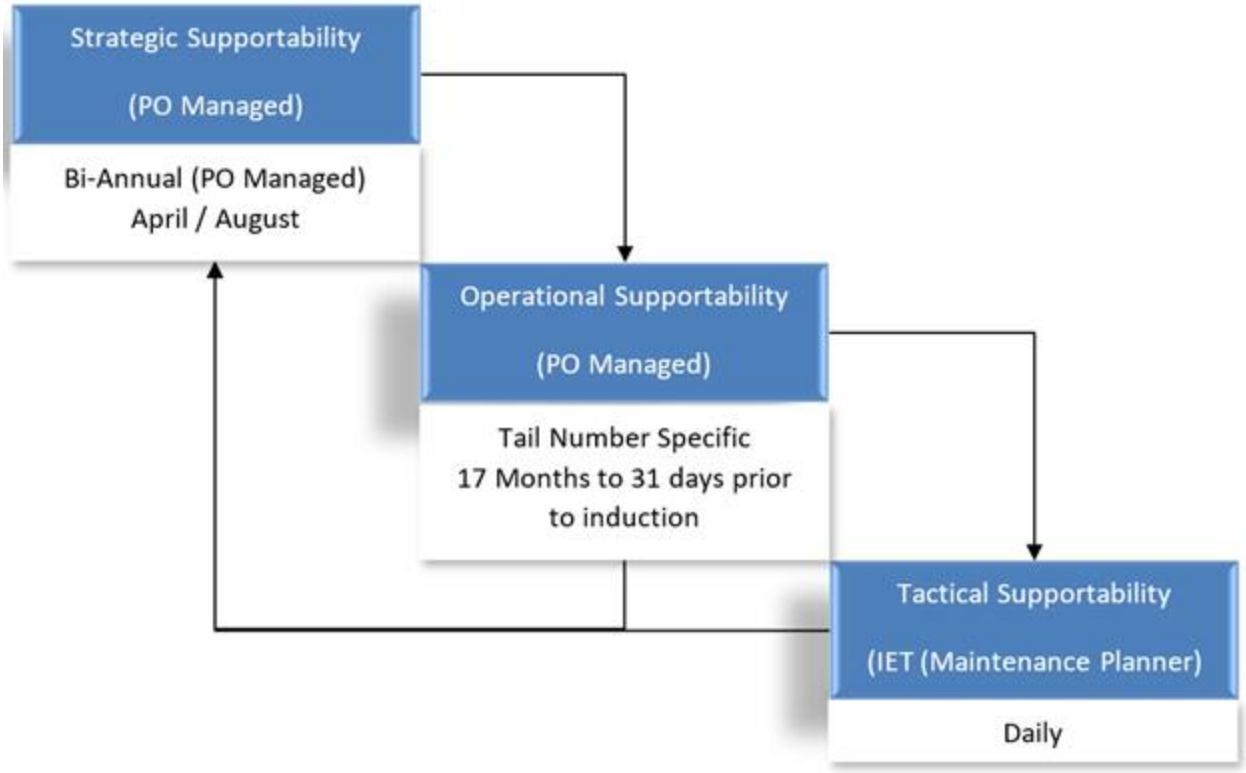
6.7.3.5. **(Added)** Publish Depot schedule (1 July): PM will develop and publish an official schedule in conjunction with MAJCOMs, ALC Business Office, DM, and appropriate stakeholders annually NLT 1 July for the next execution year plus draft two-years of the FYDP (at a minimum). The schedule is aligned with the approved Brochure and is an official baseline by tail number, engineering requirement, quantity, induction date, target completion date, flow days, etc.

6.7.3.6. **(Added)** Annual requirement reviews (as directed by the Chief Engineer): Collaboration review team / MRSP team reviews and identifies new, changed, or deleted requirements for future FY's. Once complete, the AMR Brochure considered baselined for next FY+2.

6.7.3.7. **(Added)** DCWA Coordination / Signature (Aug - 1 Sep): The PO will route the DCWA to OB for signatures NLT 1 Aug. The PM and PM equivalents from DM, ALC Business Office, and MAJCOMs will jointly agree on and sign DCWA for the upcoming FY NLT 1 Sep. Deviation memorandums are required NLT 1 Sep if any of the designated representatives non-concur on DCWA.

6.7.3.8. **(Added)** EISP / FPWS for next FY (September): See AFSCMAN21-102 Chapter 14, Section 14.8 for details of End Item Sales Pricing. See AFMAN 63-143 Chapter 3, Section 3.6 for details of Fixed Price Worksheet.

Figure 6.2. (Added) . LRDP Maintenance Requirements Supportability Process (MRSP).



6.7.3.9. **(Added)** Maintenance Requirements Supportability Process (MRSP): Part/non-part supportability review.

6.7.3.9.1. **(Added)** Strategic Supportability: Bi-annual review (2 x per year) of all known maintenance requirements for Part / Non-part supportability (All parts, all tasks, all years). The PO manages the master list of supportability elements for the SOS / SOR to review and provides list of changes from previous years. Supportability elements originate from AMR work-spec, AMR brochure, Dev Pacs, etc.

6.7.3.9.2. **(Added)** Operational Supportability: Tail number specific review which takes place quarterly, 17 months to 31 days prior to induction. The PO manages/provides the list of Part / Non-part supportability requirements for the SOS / SOR to review, and the list is expanded over time as additional requirements are identified. DM will identify unsupportable maintenance tasks and determine the level of PDM flow risk to accept. The final operational supportability review is the "Operational to Tactical handoff" which takes place 30 days prior to induction and is where DM accepts full responsibility for the aircraft. PO will mitigate, defer, or waive unsupportable non-safety of flight requirements as required.

6.7.3.9.3. **(Added)** Tactical Supportability: Daily support and maintenance task feedback to the PO for future DevPac updates as required.

6.9. Special Positions within Maintenance.

6.9.1.3.1. **(Added)** The Depot Forecasting Specialist (DFS) will submit Demand Data Exchange (DDE) for Defense Logistics Agency (DLA)-managed items that DLA cannot accurately forecast using their demand history. The DDE will only be submitted when there is a significant change in future requirements driven by a known demand-triggered event. See AFMCI 23-105, *Planning for DLA-Managed Consumables (PDMC)*, page 11, paragraph 3.2.5 for maintenance wing demand triggers.

6.9.1.3.2. **(Added)** Demand Input Templates (DIT) will be submitted through the Planning for DLA-Managed Consumables (PDMC) Automated Tool.

6.9.1.3.3. **(Added)** DFS will perform analysis to determine if an item should be placed in collaboration, based on the complex demand triggers at a minimum annually, routine Material Forecasting Analysis on all active Production Numbers/Control (PDN/CTRL), and established methodology. Material supportability forecasting with a copy of any DIT submitted for DDE consideration will be file maintained by PDN/CTRL number for 2 years, subject to periodic inspections.

6.9.1.3.4. **(Added)** The Process Initiator (PI)/DFS and DLA Demand Planner will perform a review of all items in collaboration to determine if a decrease/increase is required or if the DIT should be flagged for removal. The DFS will use the PDMC Collaboration Lists on the PDMC SharePoint for their analysis. An initial review should be performed 6 months after the DIT has been submitted to determine if changes are required. All DITs should be reviewed at least every 6 months.

6.9.1.3.5. **(Added)** The PI/DFS will research to ensure the planned DIT quantity is being ordered in the months it was planned for. If not, the PI/DFS will adjust the DIT or shift the forecast to the right.

6.9.1.3.6. **(Added)** When planning for temporary work orders (AFSC Form 206, *Temporary Work Request*), the PI/DFS will review the required material to ensure that material planned for permanent workloads is not consumed on the temporary work order. Industrial Engineering Technicians (Planners), in coordination with the PI/DFS, must collaborate on these T-Jobs prior to accepting the workload to ensure stocks are available when needed. DITs will be submitted as required.

6.9.1.3.7. **(Added)** If PI/DFS' analysis points to inaccurate Bill of Material (BOM) data (i.e., replacement factor), the PI/DFS will notify the assigned planner to make the required BOM adjustments.

6.11. Functions.

6.11.2.4.1. **(Added)** Material Processing System (MPS) is used as an interface between the maintenance systems and the material ordering systems.

6.11.2.13.6.1. **(Added)** The Production Support Section/Production Support Technician (PSS/PST) will check for backorders in Naval Air Systems Command Industrial Material Management System (NIMMS) & DO35K prior to the turn in of an end item from the repair activity. If there are backorders, they will be rolled or cancellation requested prior to the turn in.

6.14. Requirements.

6.14.1.1. **(Added-Exchangeables only)** Shop flow days are included in the algorithm driving D200A system to redistribute requisition objective levels and can affect depot working levels. Production groups need to maintain awareness of this event and ensure the production machine uses available resources to control long flow days.

6.14.1.1.1. **(Added)** Available resources include but are not limited to approved overtime, engineering assistance, supportability reviews, equipment procurement, or additional manpower request.

6.17. Manual Intervention of the EXPRESS Table.

6.17.1.1. **(Added)** Production groups shall ensure EXPRESS users are provided training.

6.17.3.6. **(Added)** Available resources include but are not limited to approved overtime, engineering assistance, supportability reviews, equipment procurement, or additional manpower request.

6.18. Supportability Max Item Switch and Quantity ("M" switch).

6.18.4.1. **(Added-OO-ALC)** All organizations will use the Repair Pipe setting in EXPRESS and set each assigned National Stock Number (NSN) to a Production Section Scheduling Designator (PSSD) with a realistic number to maintain a constant level of repairs for a specific NSN in a shop. This logic helps to maximize shop efficiency by maintaining a standard On Work Order (OWO) balance throughout the shop.

6.19. Exchangeable Meeting.

6.19.2.1.1. **(Added)** Unresolved EXPRESS constraints shall be elevated to complex leadership during tri-weekly reviews or other forums identified by the complex commander. Purpose of elevating is to provide senior leadership situational awareness and opportunity to assist in resolution of constraints/issues, as required.

6.45.1.1. SQAR/Technical Advisory Groups (TAG) are equivalent to AFSC Form 202. SQAR is specific to F-35 and F-22/TAG are specific to Boeing and transferred to F-22.

6.55. Aircraft/Missile Status Documentation.

6.55.4. **(Added-OO-ALC)** All F-22 maintenance actions will be documented in Integrated Maintenance Information System (IMIS). All F-35 maintenance actions will be documented in ALIS. Refer to SOI 1505.17, *Documenting Maintenance*.

Chapter 7

WORK CONTROL DOCUMENT (WCD) AND TECHNICAL DATA

7.1.1.6. OO-ALC WCD Focal Point Duties and Responsibilities. The WCD focal point will:

7.1.1.6.1. **(Added)** Be appointed by the OO-ALC/CC, director, or equivalent.

7.1.1.6.2. **(Added)** Coordinate with headquarters to provide interpretation and guidance on all WCD issues and processes when not defined in other directives.

7.1.1.6.3. **(Added)** As required, supplement higher headquarters requirements on the WCD program. The WCD focal point is OPR for OO-ALC 309th Maintenance Groups (MXG) including GSUs for WCD policy and procedures. All 309 MXGs and GSUs supplementing WCD policy and procedures shall coordinate their WCD operating instructions through the complex designated focal point.

7.1.1.6.4. **(Added)** Participate in the development of all command and local WCD training courses.

7.1.1.7.2. **(Added)** Contractor engineering red-line changes to contractor-owned electronic work instructions, contractor work instructions, technical manual work instructions, process specifications, commercial maintenance manuals, etc., shall have a letter from the contractor engineer authorizing the red line changes. A copy of this letter shall be maintained in the planning folder for the workload. Additionally, a copy of the redline authorization letter shall be attached to all copies of the applicable contractor technical data. The cognizant engineer and program office is responsible for ensuring the contractor supplies the required information and how the contractor provides the information.

7.1.1.7.2.1. **(Added)** 583d Missile Maintenance Squadron (583 MMXS) DFT's contractor technical data and Master Change List (MCL). When contractor technical data or MCLs, published by Air Force Global Strike Command MES, are inaccurate creating a work stoppage, an engineering change request is submitted to the appropriate office. An engineer response is then routed back with the appropriate corrective actions. The engineer response shall be attached to all effected WCDs prior to giving it to the technician and filed with the completed WCD until the technical data is corrected.

7.1.1.7.3. **(Added)** First Article Test Technical Data Used in Production Environments. Any technical data provided to production and used in direct support for the first article test requirements will contain markings on the top of the document stating First Article Test Document. This document will contain on the first page a date when printed and the full printed name and phone number of a POC within the First Article Test Office. Because the document will be used in production, the First Article Test technical data document will only be good for as long as it takes to complete the required maintenance procedures required by the First Article Test office. All First Article Test technical data documents will be returned to the First Article Test office.

7.1.1.8. **(Added)** AFSC Form 206 special instructions containing actual technical data procedures will require the performing work center to initiate and submit an AFMC Form 202/ Engineering Technical Assistance Request (ETAR), back to the responsible engineer containing the exact AFSC Form 206 special instructions technical data procedures. The AFSC Form 206 control number shall be entered in block 8 and block 23B of the AFMC Form 202/ETAR. The

AFMC Form 202/ETAR will then be the source technical data identified on the WCD. If the AFSC Form 206 identifies technical data by number, then that technical data will be the source technical data used to perform the requirements of the AFSC Form 206 and identified on the WCD. The AFMC Form 202/ETAR shall be attached to the WCD per requirements of Air Force Materiel Command Manual (AFMCMAN) 63-1202, *Air Force Materiel Command Engineering Technical Assistance Request (ETAR) Process,* and paragraph 7.1.2.9.2 of this supplement.

7.1.1.8.1. **(Added)** AFSC Form 206 special instruction stating use applicable technical data or similar statement (customer doesn't know what technical data to use) shall require the Pre-Production Planning Team (PPPT) and/or Production Planning Team (PPT) to thoroughly research identified AFSC Form 206 part number to identify technical data. Once the PPPT and/or PPT identifies technical data, an AFMC Form 202/ETAR will be initiated and submitted back to the responsible engineer identifying requested technical data to use. The AFSC Form 206 control number shall be entered in block 8 and block 23B of the AFMC Form 202/ETAR. The AFMC Form 202/ETAR will then be the source technical data identified on the WCD. If the AFSC Form 206 identifies technical data by number, then that technical data will be the source technical data used to perform the requirements of the AFSC Form 206 and also identified on the WCD. The AFMC Form 202/ETAR shall be attached to the WCD per requirements of AFMCMAN 63-1202 and **paragraph 7.1.2.9.2.1** of this supplement.

7.1.1.9. **(Added)** The use of test plans and associated test procedures as mandated by DODI5000.89_DAFI 99-103, *Capabilities-Based Test and Evaluation,* are authorized technical data guidance. Prior to formal implementation, the test plan shall be fully coordinated through the respective maintenance chief or equivalent of the depot maintenance organization utilizing and performing the requirements of the test plan. Once the test plan is signed, the planner will have a formal PPT meeting utilizing the AFSC Form 500, *Pre-Production and Pending Proposal at WCD Checklist*. The test plan number shall be identified on the WCD as the source technical data. Test plan number, including as required specific test plan paragraphs, shall be identified on the temporary job AFSC Form 206 within the special instructions. TO procedures called out from the test plan shall be considered part of the test procedures unless specifically stated in the test plan.

7.1.1.9.1. **(Added)** A safety briefing shall be given prior to test execution. The safety briefing shall address any specific test hazards in addition to standard test/shop safety procedures. The planner shall ensure an administrative operation is planned as part of the WCD coded with an X certification/verification code for the safety briefing.

7.1.1.9.2. **(Added)** If a deviation and/or change is needed to procedures contained in the test plan, the guidance contained in AFI 99-103 shall be followed. Test plan deviations or changes may require manual planner updates to WCDs on the shop floor. **NOTE:** Test plans and test directives are considered interchangeable and developed IAW DODI5000.89_DAFI99-103.

7.1.2.1. If Mil Standards, Mil Specifications, American Society for Testing Materials, DoD Performance Specifications or similar type of technical information is required, the applicable process engineer, planner and responsible production supervisor shall ensure this information is current and correct for the workload. Locally reproduced copies of these documents will be controlled as technical data extracts.

7.1.2.9.1. A AFTO Form 22, *Technical Order Recommended Change Request*, will be evaluated by the supervisor and forwarded to the group quality AFTO Form 22 POC, or designated AFTO Form 22 POC. The POC will follow the procedures contained in TO 00-5-1, *Air Force Technical Order System*, for tracking and following up on submitted AFTO Forms 22 and the AFMC Supplement to TO 00-5-1 for routing of AFTO Forms 22. AFTO Form 22 will be submitted in ETIMS.

7.1.2.9.2. One-time use serial/tail number specific, AFSC Form 206 number (one-time use AFMC Form 202/ETAR).

7.1.2.9.2.1. **(Added)** Only an AFMC Form 202/ETAR coordinated and signed IAW AFMCMAN 63-1202 for a one-time use shall be documented and attached to the WCD. The entire AFMC Form 202/ETAR control number shall be manually or electronically entered in "red" on the WCD header page and annotated to the specific WCD sub-operation task description block requiring the use of the AFMC Form 202/ETAR. This process will be accomplished prior to scheduling/issuing the WCD for work on the affected aircraft. The aircraft dock scheduler Aircraft Logistics Specialist (ALS) as the focal point and responsible agent for the issuance of WCDs will attach the completed AFMC Form 202/ETAR or program approved engineering disposition approved by engineering to all required WCDs and properly document the AFMC Form 202/ETAR control number onto the WCD. **NOTE:** (F-35 only) SQARs and or MDRs approved by engineering (all pages) shall be attached to the corresponding WCD. If the WCD does not reference the SQAR and or MDR, the SQAR and or MDR number shall be annotated in red on the WCD header page and on any sub-operations requiring the SQAR and or MDR as technical data.

7.1.2.9.2.2. **(Added)** The following OO-ALC stamps are authorized to manually or electronically document one-time use AFMC Form 202/ETAR control numbers onto a WCD: Planner stamp IET, Production Supervisor stamp (P), Evaluation & Inspection stamp (E&I), Productions Control Scheduler stamp (C). The authorizing stamp will be placed and dated as close as possible to the applicable AFMC Form 202/ETAR control number.

7.1.2.9.2.3. **(Added)** A WCD developed specifically for a one-time use AFMC Form 202/ETAR will have the AFMC Form 202/ETAR control number identified as the technical data in the technical data block of the WCD. These types of AFMC Forms 202 are not required to have the AFMC Form 202/ETAR manually or electronically entered onto the WCD as identified in the previous paragraphs.

7.1.2.9.2.4. **(Added)** OO-ALC maintenance groups in contractor logistics support partnering agreements where the prime contractor uses the AFMC Form 202/ETAR to provide "proprietary" engineering disposition procedures back to production shall ensure the prime contractor engineering enters in block 23B the complete contract number and contract expiration date.

7.1.2.9.3.1. **(Added)** Upon receipt of a completed SH252 with an AFMC Form 202/ETAR attached, the changes will be incorporated into the WCD within 15 working days and released to the maintenance activity.

7.1.2.9.4.1. **(Added-Add for F-35)** Improvements and changes to JTD will be accomplished IAW SOI 1514.02.

7.2. Work Control Document.

7.2.4.1.1. **(Added)** 309 AMXG configuration management control of items in work. When informed by maintenance personnel of a header error that affects form/fit/function/critical task the planner will immediately correct and update any WCD header configuration information containing errors. Any other WCD header changes will be made within 15 days. Planners shall manually change WCDs on the shop floor. The planner shall IET-stamp and date next to the header changes. The planner will correct the information within the applicable electronic WCD generating system. Examples of header errors would be incorrect noun (nomenclature), federal stock number, part number, operation number, job order number, serial number, etc.

7.2.4.1.2. **(Added)** Critical tasks/operations identified by the PPT will be IAW technical data for tasks with specific step-by-step instructions from the technical data. It is acceptable to have the technical data, given the environmental conditions (e.g., confined space, windy conditions, etc.) and for safety reasons, within a reasonable distance. Critical tasks/operations identified by the PPT for general maintenance tasks/operations not covered by step-by-step technical data, will be reference technical data.

7.2.4.2. **(Added)** Critical maintenance processes and critical maintenance tasks identified as IAW require the technician to have technical data open and in use. It is acceptable to have the technical data, given the environmental conditions (e.g., confined space, windy conditions, etc.) and for safety reasons, within a reasonable distance. This means the technician has reviewed procedures, warnings, cautions, and notes for the maintenance process or maintenance task before starting the job. The technician has the approved technical data open to the applicable process or task in work. The technician performing the process or task will be able to point to the exact step being accomplished in the technical data but need not be on the exact page when approached. A critical maintenance process may include several separate tasks within the WCD associated with that process. These WCD tasks associated with the critical maintenance process require PPT approval if they need to be modified per **paragraph 7.2.19.2** of this document. It is not necessary to label each task within a critical maintenance process either IAW or critical in the WCD. The PPT who has authority for the critical maintenance process shall determine if any of the tasks need to be labeled as either critical or IAW. The PPT may elect to avoid labeling a task as either critical or IAW to allow for inclusion of technical information on the WCD task. Justification for inclusion of this information on the WCD shall be based on reduced risk of operational errors or increase in quality, auditability, and standardization of the operational sequence.

7.2.4.3. **(Added)** The following provides minimum requirements the PPT will use to identify WCD IAW processes and tasks including identification of critical process and tasks requiring secondary certification on WCDs:

7.2.4.3.1. **(Added)** For use of technical data identified as “Preliminary”, all associated tasks will be identified as IAW.

7.2.4.3.2. **(Added)** The WCD operation requires a “critical” measurement be taken to determine serviceability, ensure proper assembly, or are required in order to proceed to the next step in the repair or test process, will be identified as IAW.

7.2.4.3.3. **(Added)** The WCD operation requires critical “specific” torque requirements in order to assemble or test an item. Example: Torque of a panel fastener or clamp bolt is a general torque while the torque on a bearing retaining nut is a “specific” torque that will be identified as IAW.

7.2.4.3.4. **(Added)** The WCD operations are identified as "Tasks Must Be Accomplished and Certified in Step-By-Step Order" will be identified as IAW.

7.2.4.3.5. **(Added)** Other criteria that can be used to identify WCD tasks as IAW are the WCD operation with chronic rework issues, deficiency reports, failed quality assessment rating (QAR3), and failed quality verification inspections (QVI).

7.2.7. The WCD header may contain the following statement or equivalent: "All operations identified on this WCD shall be accomplished IAW unless identified otherwise." Including this statement in the header eliminates the requirement to identify each task description block technical data as IAW.

7.2.7.1. **(Added)** On WCDs with a technical data block in the header, WCDs requiring the use of independent technical data not identified within primary technical data, shall have independent technical data identified within the WCD technical data block. Independent technical data shall also be identified to the specific WCD operation(s) task description block requiring use of independent technical data. AFI, AFMCI, local operating instruction, etc., very rarely contain actual maintenance repair requirements and should rarely be included in the technical data block and shall not be considered in lieu of approved technical data.

7.2.9. When requested by the PPT safety, bioenvironmental, training manager, Production Acceptance Certification (PAC) manager, etc., will be required to attend the PPT. Individuals attending PPT shall coordinate and sign off on the AFSC Form 500 per the requirements of AFSCMAN 21-102, Table 7.4, *Instructions for Completing AFSC Form 500*.

7.2.10. Approved OO-ALC WCDs are: AFSC Form 173, *MDS/Project Operation Assignment*, AFSC Form 959, *Work Control Document*, Impresa, Inventory Tracking System (ITS), MAXIMO, Programmed Depot Maintenance Scheduling System (PDMSS) computer-generated AFSC Form 173, Over and Above (O&A) unplanned/unpredictable WCDs generated from a Maintenance Work Request (MWR), and definitized lists when attached to an AFSC Form 173.

7.2.10.2. All I-coded tasks shall be performed in the sequence they appear on the WCD. I-coded tasks shall not be skipped over to perform dependent sub-operation tasks. The following is a scenario for clarification: An AFSC Form 173 card states rig flight controls and the attached definitized list identifies two independent tasks, with critical but independent sub-operations, that are I-coded (1) rigging left flight controls and (2) rigging right flight controls. In scenarios such as this, the I-codes can be stamped out of sequence because they are totally independent "major" tasks with independent sub-operations.

7.2.10.3.1. PDMSS-generated O&A unpredictable/unplanned. The PDMSS-generated O&A WCD is initiated by a technician who identifies (stumbles-on) a defect and hand scribes the defect onto a PDMSS maintained work request worksheet when the defect is not covered by any E&I write up. All stumble-on defects must be properly annotated in the appropriate maintenance database prior to the end of the shift, or no later than first thing the next business day in the event that a production controller is not available to initiate the MWR at the time. See **Table 7.5**., *Instructions for Completing PDMSS-Generated Work Request Worksheet*, for instructions.

Table 7.5. (Added) Instructions for Completing PDMSS-Generated Work Request Worksheet.

BLOCK TITLE	DESCRIPTION
Date	(Responsibility of initiator) The date of initiation of work request worksheet.
Reference Number	(Responsibility of initiator) Optional, master MWR number.
Defect Class	(Responsibility of initiator, can be changed by supervisor) To be used to describe the severity of the defect described on the MWR. Includes blank (for INFO notes), X, /, -, Supervisor of Flying, Non Safety of Flight, Non Safety of Flight Economy, Local Minor not Accessible.
Zone/Area	(Responsibility of initiator) Zone or area in which the defect described can be found. Zones and areas are found in the statements of work associated with the repair.
Inspector	(Responsibility of initiator) The inspector code will be the Core Automated Maintenance System (CAMS) number or stamp number of the actual inspector (E & I, engine, etc.) doing inspections on the aircraft.
Requestor	(Responsibility of initiator) The requestor block will be used by any requestor other than inspectors. CAMS number will be used.
Work Unit Code	(Responsibility of initiator) Code found in -06 technical orders to identify the part being described in the MWR description block. (5th Gen use appropriate code i.e., LCN)
Work Spec Code	(Responsibility of Project Administration Officer [PAO] or planner) Work specification code from the Maintenance Requirements Review Board brochure or other source. Describes the task the work in the description block falls under.
Inspection Code	(Responsibility of initiator, can be changed by supervisor, planning or PAO) Code found in AFI 21-101_AFMCSUP or other document that describes the level of inspection. Usually in conjunction with the defect class.
How Mal Code	(Responsibility of initiator) Code found in weapon-specific -06 TO identifying the defect described in the MWR description block.
Incoming Condition	(Responsibility of initiator) The requestor will circle either Y for yes or N for no.
IAW	(Responsibility of initiator) The requestor will circle either Y for yes or N for no. This shows if the TO needs to be open/used while doing the task.

Technical Data Required	(Responsibility of initiator) Either a TO (including job guide) or engineering reference to be used in the repair of the defect described in the description block. The -4 reference may be used here if the purpose of the MWR is to manufacture a part. Otherwise, the block will indicate the technical data to be used in the work involved.
Para/Figure	(Responsibility of initiator) Extension of the technical reference, if needed.
Step/Index	(Responsibility of initiator) Extension of the technical reference, if needed.
Work Package	(Responsibility of initiator) Further extension of the technical reference, if needed.
Serial Number/Part Number	(Responsibility of initiator) Serial number of serialized part involved on the MWR (for instance, engine serial number), part number of part on MWR, or part to be local manufactured on the MWR.
Part Quantity	(Responsibility of initiator) Number of parts in the serial number/part number block.
Skill	(Responsibility of initiator) Skill code to perform the work described in the description block.
Workers	(Responsibility of initiator) Number of workers expected to be working on the defect in the description block.
Actual Hours	(Responsibility of initiator) May be .1 for E&I initiated MWRs, or actual requested hours, estimated by the requestor. Final approval of hours will be paid by the PAO and planner to the RCC for the work described. If there is a planned operation covering the discrepancy/description the request may be attached to an operation as a MWR definitized guide.
Organic	(Responsibility of initiator) Type of work, the requestor will circle either Y for yes or N for no.
Material	(Responsibility of initiator, can be changed during processing) Materiel. Codes are N, K, and M. N = None required, K = Kit, M = Material may be required for this MWR. "M" includes local manufacture. Indicator only.
Action Taken Code	(Responsibility of initiator) Action Taken Code, found in 06 technical orders to indicate what type of actions will be or have been taken on the part described on the MWR.
Rework	(Responsibility of initiator, but may be changed by the planner or PAO) "Y" or "N" entry. Indicates if the work on the MWR is rework, not to be paid for, but approved to be accomplished.
CANN/Rob	(Responsibility of initiator) Field to indicate the "other" related tail number involved if the MWR describes work connected to cannibalization (CANN) or robbing of a part.

AFSC Form 959 Needed	(Responsibility of initiator but may be changed by the planner or PAO) "Y" or "N" entry. May be requested by the planner or PAO to justify the hours requested.
Discrepancy Description	(Responsibility of initiator) A complete description of the defect. May include part numbers, serial numbers, stations on the aircraft, other technical references used in the work, etc.
If Required Follow-On Maintenance	Also required is information on any follow-on maintenance or functional or operational checks required. If none, a check mark will be placed here.
Corrective Action	(Responsibility of initiator) The process followed by the mechanic in repairing the defect described on the description block, may be blank on input. Should not be left blank on the WCD after completion of work.
Foreman Stamp	(Responsibility of Foreman) "P" stamp placed here after review of worksheet for accuracy paying particular attention to the inspection code before giving to the ALS for input in PDMSS.
Tail Number	(Responsibility of initiator) Tail number of aircraft requiring MWR.
Work Request Number	(Responsibility of ALS) ALS will write down request number given by the system, PDMSS for aircraft it was input for.
Input	(Responsibility of ALS) ALS will put date and time of input of the work request.

7.2.10.3.2. Work Emergency WCDs. AFSC Form 959 shall be used when circumstances prevent the use of WCD generating systems. Such occurrences may include but not limited to: extended power outage; data base failure or connectivity interruption; force deployment where connectivity, planning, or scheduling support is unavailable.

7.2.10.3.2.1. **(Added)** 309 AMXG procedures for work emergency WCDs. Production ALS or ranking production supervisor (if no ALS is on duty) will determine necessity of work emergency WCD. Flight test ALS or ranking production supervisor (if no ALS is on duty) will determine necessity of work emergency WCD.

7.2.10.3.2.1.1. **(Added)** 309 AMXG: When the AFMC Form 959 is being used as an emergency hand-scribed definitized list attachment to an unplanned WCD, or when being used to build a master AFSC Form 959 WCDs definitized list attachments to an AFSC Form 173. Use block 7 for operation/MWR number. Block 10, MDS. Block 12 optional used for master O & A definitized list. Block 13, tail number. Block 17, task accomplished. Block 18, inspection code required (M, E, or I) certification stamp and date, blocks 19 and 20, certification stamp and date if applicable.

7.2.10.3.2.1.1.1. **(Added)** An emergency MWR will be attached to a handscribed AFSC Form 959. A handscribed AFSC Form 959 will be used to document the emergency maintenance work and identified to the aircraft by tail number, operation number/MWR number. On the next regular workday morning or after immediate need situations have been addressed, the applicable ALS will copy over the original emergency MWR in PDMSS to a new MWR and provide the original completed copy along with the completed hand scribed AFSC Form 959 to the appropriate planning section. Planning will review the copied over MWR and coordinate with PAO (if applicable) for disposition of the work requirements and associated hours for approval.

7.2.10.3.3. Definitized lists may be used as a continuation of the technical data block. Block 31 of an AFSC Form 173 may contain the statement "see definitized list to continue multiple technical data listing if required".

7.2.10.5. The PPT will review all contractor supplied WCDs using the AFSC Form 500. The PPT will determine if the contractor supplied WCD needs to be supplemented. If the contractor supplied WCD requires additional information, the planner will elevate it to the applicable contracting authority. The planner will maintain a "master" hard copy of contractor supplied WCDs if these documents are not electronically maintained.

7.2.10.6. **(Added)** Electronic Facility Equipment Management System (EFEMS) shall be utilized by Plant Management 309th Maintenance Support Squadron (MXSS) to create a computer-generated Work Authorization Document for called in problems and scheduled maintenance. The work performed by the qualified technician will be annotated in EFEMS for permanent record. PMEL Automated Management System (PAMS) shall be utilized by the PMEL (809th Maintenance Support Squadron [MXSS]) to generate calibration and/or repair work orders for the scheduling of TMDE. Completed work orders will be "K" stamped by the technician who is certified to perform the work. The completed work order shall be routed to PMEL/MCF Production Control for entry into the PAMS database. Historical tracking of all certifying employees shall be maintained in PAMS.

7.2.10.6.1. **(Added)** Prior to beginning a task, ensure an approved WCD is provided to the mechanic/technician for performance and certification of the maintenance task identified. If using hard copy WCDs, ensure they are in the possession of technician accomplishing the operation. It is acceptable to have the WCD, given the environmental conditions (e.g., confined space, windy conditions, etc.) and for safety reasons, within a reasonable distance. If using electronic Work Control Documents (eWCD), the technician must be able to locate it when asked.

7.2.11. When a system generated WCD is not developed to support level of effort and other non-Management Items Subject to Repair (MISTR)/non-Programmed Depot Maintenance (PDM) workloads, an AFSC Form 959 will be used.

7.2.12.1.1. X-coded tasks do not require the individual to be PAC certified. X-coded tasks will be stamped and dated. The X-code is used for tasks that are administrative in nature to include but not limited to tasks that are informational in nature, used for scheduling (trigger operations), non-maintenance-related time tracking, routing, perform overhead support operations, etc.

7.2.12.1.2. General maintenance tasks not covered by technical data and requiring PAC certified technician(s) to perform the tasks will minimally have an inspection/certification code of “M” assigned. Examples of general maintenance tasks could be: process in, process out, uncrate, verify material, preparation of tooling, etc. Task/operation description should include the phrase "Technical Data Not Required" or equivalent statement.

7.2.12.2.3. The planning organization shall ensure the planner or appointed Dimension, Tolerance or Specification (DT&S) monitor maintains a log of all WCDs containing DT&S. This log may be in an electronic format or in a manually maintained logbook. Electronic records are the media of choice IAW AFI33-322

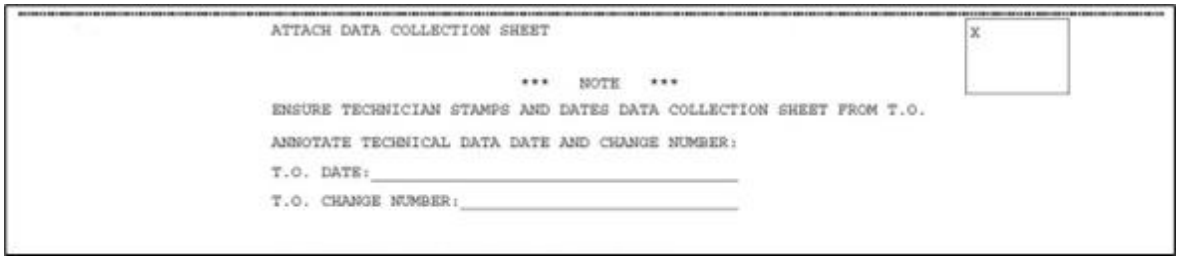
7.2.12.2.3.1. **(Added)** Any WCD containing planned DT&S shall have within the header of the WCD the following or equivalent statement: “DT&S are contained within this WCD”.

7.2.12.2.3.2. **(Added)** If a technical data change updates any planned reference identified DT&S contained on a WCD, after coordinating the change with process engineering, the planner shall update the WCD within the WCD electronic system. The planner shall ensure all WCDs on the shop floor are updated within 10 working days. The planner shall make any required DT&S change annually to the DT&S contained within the WCD task description block. The planner will IET-stamp and date the change. Production will assist in locating the affected WCDs when requested. Process engineering may make any required DT&S change in ink to the DT&S contained within the WCD task description block. The process engineer will sign and date the change and the planner will IET stamp and date the change. If this is a permanent change to the WCD an AFSC Form 957, *Work Control Document (WCD) Change Request*, shall be initiated.

7.2.12.2.3.3. **(Added)** If new DT&S are added to a WCD where there previously was no DT&S, it is not necessary to manually update all WCDs that were already on the shop floor.

7.2.12.3.1. **(Added)** When technical data specifically requires the use of a data collection sheet contained within the technical data, planning shall ensure the WCD contains an operation to attach the data collection sheet. This operation will include fields to document the TO date and the TO change number.

Figure 7.2. (Added) Example WCD Operation Attach Data Collection Sheet.

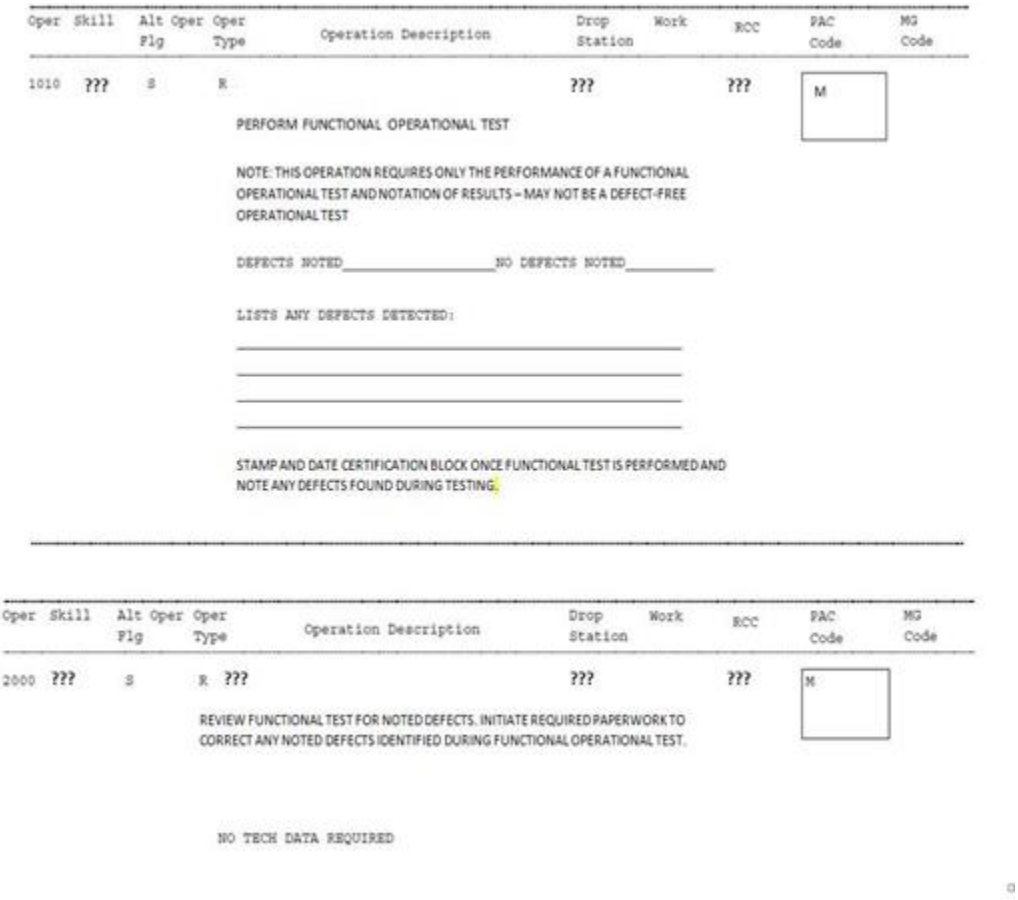


7.2.12.3.1.1. **(Added)** For data sheets contained in technical data, the individual making a copy of the data collection sheet contained within the technical data, shall stamp and date the data collection sheet and attach the data sheet to the WCD. The individual will then enter, within the operation, the technical data date and change number. This information is found on the title page of the technical data. The individual will then stamp and date the "Attach Data Collection Sheet" operation.

7.2.12.3.2. **(Added)** As required, a technician can manually or electronically record measurements taken during maintenance processes onto the WCD within the task description block.

7.2.12.3.3. **(Added)** When functional testing is required the test data sheet, if available, shall be attached to the WCD and forever remain attached to the WCD. Functional tests where no test data sheet is available, planning shall have planned operations developed to document functional test outcome and follow on requirements according to **Figure 7.3.**, *Example WCD Operation Functional Test*, or equivalent.

Figure 7.3. (Added) Example WCD Operation Functional Test.



7.2.12.3.4. **(Added)** Non-Destructive Inspection (NDI) is a crucial process within OO-ALC production operations and all WCD sub-operations will be formatted as detailed in Figures **7.4 through 7.13**. If questions arise contact the 709th Production Support Flight.

7.2.12.3.4.1. **(Added)** An NDI technician supporting 309 AMXG NDI requirements finding deficiencies will submit an MWR for defects discovered during NDI processing.

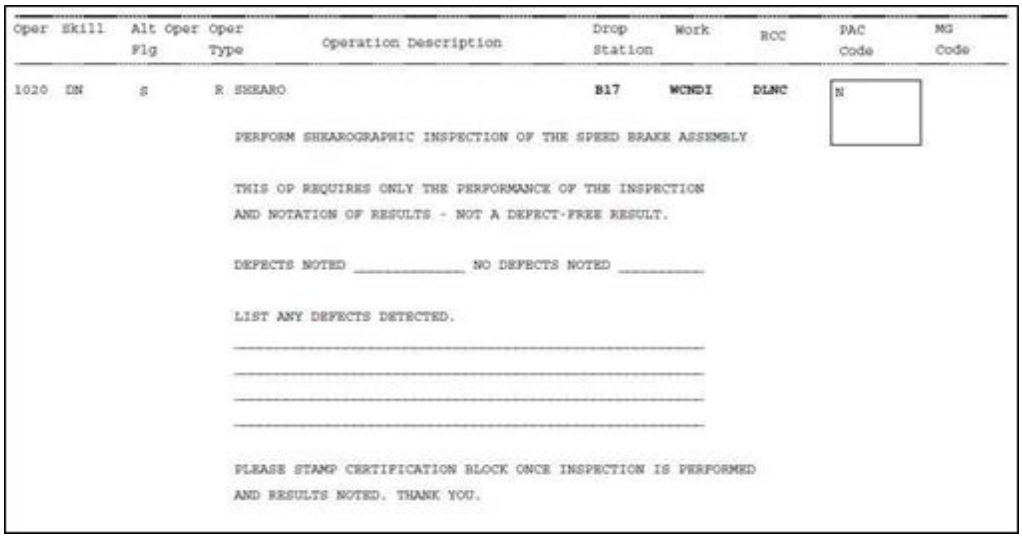
7.2.12.3.4.2. **(Added)** A technician supporting aircraft functional testing finding deficiencies will submit an MWR for defects discovered during functional test process.

7.2.12.3.4.3. **(Added)** If no defects are noted the NDI technician shall hand scribe the following or equivalent statement in LIST ANY DEFECTS DETECTED area "No Defects Noted". The NDI technician shall stamp and date the inspection certification code block.

7.2.12.3.5. **(Added)** Initial incoming WCD NDI Requirements: Any OO-ALC authorized MISTR, programmed, planned, temporary, unpredictable, or contractor WCD requiring performance of approved NDI techniques shall be fully evaluated and approved through the OO-ALC-Level III NDI technician and NDI element chief and document on the PPT AFSC Form 500.

7.2.12.3.5.1. **(Added)** If no NDI process technique exists, the NDI supervisor or element chief will be notified, and the procedures contained in **Table 7.5 and Figure 7.8**. 309CMXG (New) Stamp Issue Prerequisite Training, shall be followed. NDI requirements shall be developed and implemented IAW the most current NDI technique.

Figure 7.4. (Added) Example of WCD NDI Requirements 1.



Oper	Skill	Alt Oper Flg	Oper Type	Operation Description	Drop Station	Work	RCC	PAC Code	MG Code
1020	DN	S	R	SHEARO	B17	WCNDI	DLNC	N	

PERFORM SHEAROGRAPHIC INSPECTION OF THE SPEED BRAKE ASSEMBLY

THIS OP REQUIRES ONLY THE PERFORMANCE OF THE INSPECTION
AND NOTATION OF RESULTS - NOT A DEFECT-FREE RESULT.

DEFECTS NOTED _____ NO DEFECTS NOTED _____

LIST ANY DEFECTS DETECTED.

_____
_____
_____
_____

PLEASE STAMP CERTIFICATION BLOCK ONCE INSPECTION IS PERFORMED
AND RESULTS NOTED. THANK YOU.

Figure 7.5. NDI Operation Example 2.

Operation Description	Work Center	Machine No	RCC	PAC Code	MG Code
PERFORM MAGNETIC PARTICLE INSPECTION	N503	MAGTEST	DHND	N	

THIS OP REQUIRES ONLY THE PERFORMANCE OF THE INSPECTION
AND NOTATION OF RESULTS - NOT A DEFECT-FREE RESULT.

DEFECTS NOTED_____ NO DEFECTS NOTED_____

LIST ANY DEFECTS DETECTED:

_____

_____

_____

_____

PLEASE STAMP CERTIFICATION BLOCK ONCE INSPECTION IS
PERFORMED AND RESULTS NOTED. THANK YOU

Figure 7.6. NDI Operation Example 3.

PERFORM FLUORESCENT PENETRANT INSPECTION	N503	PENTEST	DHND	N

THIS OP REQUIRES ONLY THE PERFORMANCE OF THE INSPECTION
AND NOTATION OF RESULTS - NOT A DEFECT-FREE RESULT.

DEFECTS NOTED_____ NO DEFECTS NOTED_____

LIST ANY DEFECTS DETECTED:

_____

_____

_____

_____

PLEASE STAMP CERTIFICATION BLOCK ONCE INSPECTION IS
PERFORMED AND RESULTS NOTED. THANK YOU.

Figure 7.7. (Added) NDI Operation Example 4.

PERFORM ULTRASONIC INSPECTION	N503	ULTRA	DHNC	N

THIS OP REQUIRES ONLY THE PERFORMANCE OF THE INSPECTION
AND NOTATION OF RESULTS - NOT A DEFECT-FREE RESULT.

DEFECTS NOTED_____ NO DEFECTS NOTED_____

LIST ANY DEFECTS DETECTED:

_____

_____

_____

_____

PLEASE STAMP CERTIFICATION BLOCK ONCE INSPECTION IS
PERFORMED AND RESULTS NOTED. THANK YOU.

Figure 7.8. (Added) NDI Operation Example 5.

Operation Description	Work Center	Machine No	RCC	PAC Code	IMC Code
PERFORM EDDY CURRENT INSPECTION	N265	EDDY	DHNC	N	

THIS OP REQUIRES ONLY THE PERFORMANCE OF THE INSPECTION
AND NOTATION OF RESULTS - NOT A DEFECT-FREE RESULT.

DEFECTS NOTED_____ NO DEFECTS NOTED_____

LIST ANY DEFECTS DETECTED:

_____
_____
_____
_____

PLEASE STAMP CERTIFICATION BLOCK ONCE INSPECTION IS
PERFORMED AND RESULTS NOTED. THANK YOU.

Figure 7.9. (Added) NDI Operation Example 6.

PERFORM X-RAY INSPECTION	N238W	XRAY	DHNC	N

THIS OP REQUIRES ONLY THE PERFORMANCE OF THE INSPECTION
AND NOTATION OF RESULTS - NOT A DEFECT-FREE RESULT.

DEFECTS NOTED_____ NO DEFECTS NOTED_____

LIST ANY DEFECTS DETECTED:

_____
_____
_____
_____

PLEASE STAMP CERTIFICATION BLOCK ONCE INSPECTION IS
PERFORMED AND RESULTS NOTED. THANK YOU.

Figure 7.10. (Added) NDI Operation Example 7.

PERFORM SHEAROGRAPHY INSPECTION	N238W	SHGPHY	DHNC	N

THIS OP REQUIRES ONLY THE PERFORMANCE OF THE INSPECTION
AND NOTATION OF RESULTS - NOT A DEFECT-FREE RESULT.

DEFECTS NOTED_____ NO DEFECTS NOTED_____

LIST ANY DEFECTS DETECTED:

_____
_____
_____
_____

PLEASE STAMP CERTIFICATION BLOCK ONCE INSPECTION IS
PERFORMED AND RESULTS NOTED. THANK YOU

Figure 7.11. (Added) NDI Operation Example 8.

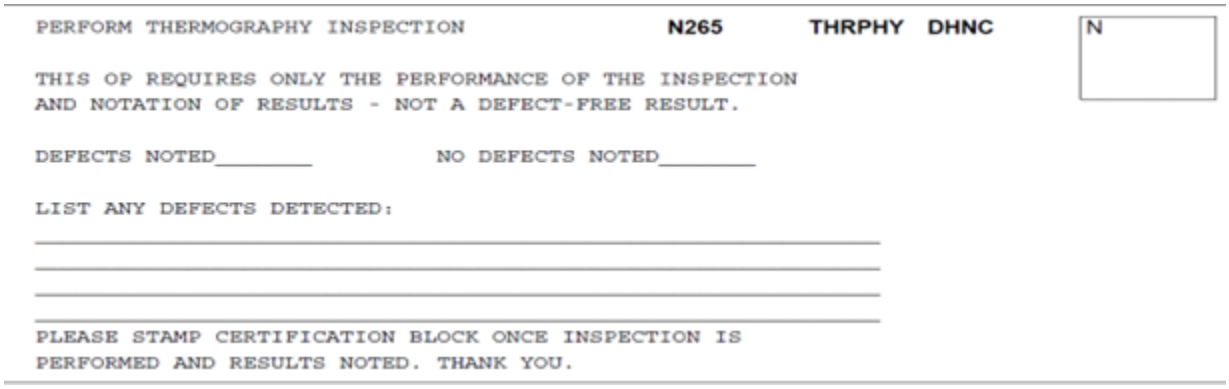


Figure 7.12. (Added) NDI Operation Example 9.

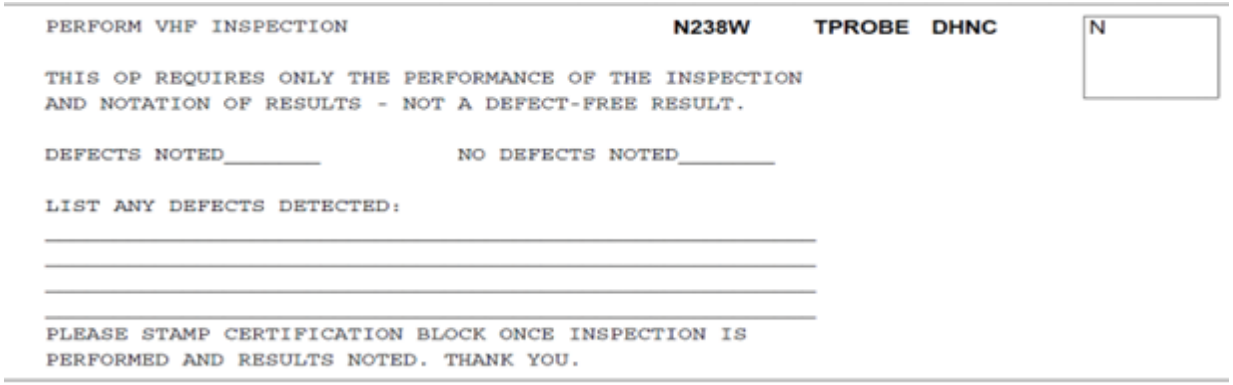


Figure 7.13. (Added) NDI Operation Example 10.

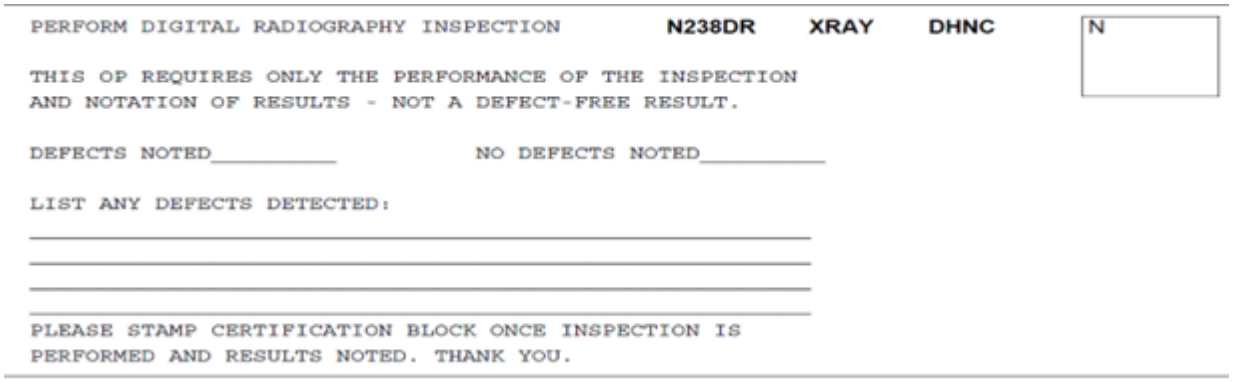


Figure 7.14. (Added) Process Flow Map for NDI Techniques/Procedures. 1 of 2.

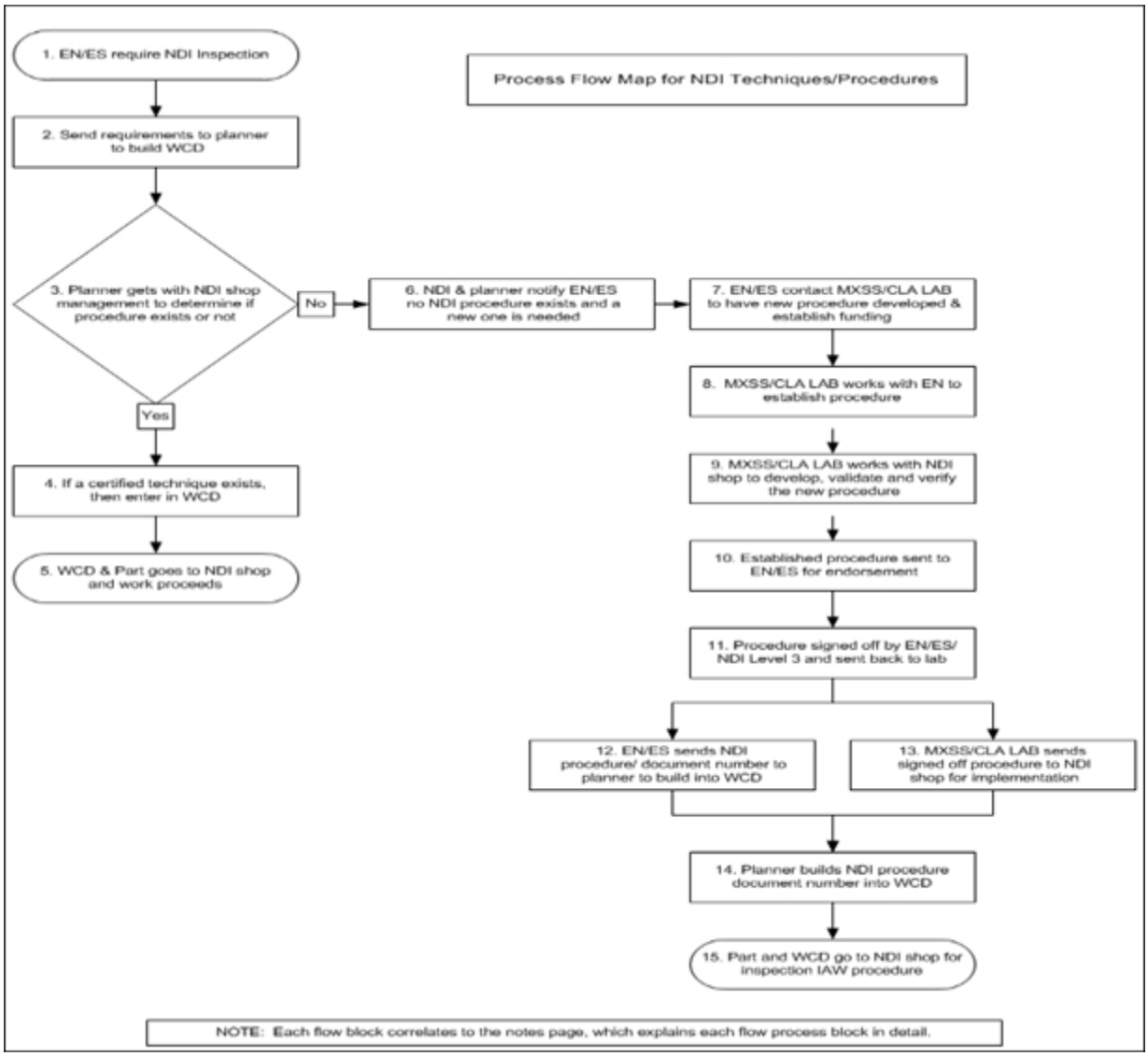


Figure 7.14. (Added) Process Flow Map for NDI Techniques/Procedures. 2 of 2.

e.	100 percent inspect or just a section of part.
f.	Accept/reject criteria.
g.	One-time inspection.
1.	Engineering/equipment specialists have a new requirement to have an NDI inspection performed upon a part:
a.	Fluorescent Penetrant Inspection (FPI)
b.	Fluorescent Magnetic Particle Inspection (FMPI)
c.	Eddy Current (ET)
d.	Radiography (RT)
e.	Ultra Sonic (UT)
f.	Shearography (ST)
2.	Planner receives requirement from EN and ES to have NDI perform inspection and begins to build WCDs to meet this requirement.
3.	Planner coordinates with NDI shop supervisor/work leader to determine if NDI procedures already exist that can be entered on the WCD to perform work.
a.	If the answer to step 3 is **YES** continue with steps 4 and 5.
b.	If the answer to step 3 is **NO** skip steps 4 and 5, go directly to step 6.
4.	NDI supervisor or work leader concurs that the document/technical data that the planner will reference to in the NDI operation block of the WCD is correct and has a valid NDI procedure for the inspection called out for.
5.	WCD and part are forwarded to the NDI shop where inspection proceeds.
6.	NDI supervisor or work leader and planner meet with EN/ES to notify them that there is no established NDI procedure documented to inspect this part.
7.	EN/ES contacts OO-ALC NDI manager in the lab to have the 809 MXSS/CLA Physical Sciences develop a NDI procedure that meets EN/ES requirements for that part.
a.	Also at this time, funding for the 809 MXSS/CLA to support this effort is established (i.e., 206).
b.	Funding is started from the requesting planning office.
8.	809 MXSS/CLA OO-ALC NDI manager works with EN/ES on the development of the NDI procedure to ensure EN/ES are getting the results needed and 809 MXSS/CLA knows all requirements, i.e.:
a.	Type of defect/s looking for.
b.	Size
c.	Location

d.	Geometry
h.	Requires new equipment.
i.	Inspection just accomplished at Hill AFB or other bases.
j.	Written procedure put in TO, technical data, Process Order (PO) or locally developed approved technical data.
9.	809 MXSS/CLA works with NDI shop to validate and verify new procedure and ensure NDI shop can perform inspection. Identify if any training of NDI personnel needs to be accomplished for new procedure.
10.	Finished procedure is sent to EN/ES for endorsement/signature.
11.	EN/ES sends procedure back to MXDTA.
12.	EN/ES notifies planner of valid established procedure and gives planner document number of that procedure.
13.	809 MXSS/CLA forwards new procedures to NDI shop for implementation.
14.	Planner builds NDI procedure document number into WCD.
15.	Part and WCD get forwarded to NDI shop for inspection.

7.2.12.4. The following management codes (MGT/CD) are authorized for use on OO-ALC WCDS. “C” is used to indicate the WCD task requires a scheduler’s review of completed WCD for accuracy, completeness of stamping and other WCD documentation requirements. “P” is used to indicate the WCD task requires a supervisor's review of completed WCD for accuracy, completeness of stamping and other WCD documentation requirements. The MGT/CD “SP” (secondary PAC) is used to indicate the WCD task is critical and requires dual certification with either an “E” or “I” in the PAC/CD block. Rationale: eliminates specifying only used on ITS and Impresa WCDs allows use on all WCDs.

7.2.12.4.1. Any WCD task having an assigned inspection/certification code to include management code shall be stamped and dated when completed. Any production supervisor certifying an actual WCD identified maintenance process or task will meet the same training, qualification, and certification requirements as the PAC certified employee and will require a PAC record.

7.2.12.7. All WCD Foreign Object (FO)/Rag inspections will be coded with “I” inspection certification code.

7.2.12.9. When the WCD operation identifies a critical maintenance process or task (secondary in-process certification) performed by a team, the team chief will brief all team members on safety requirements prior to process or task initiation. In cases of incomplete work at shift change, sufficient documentation will be provided by the off-going shift supervisor or wage leader to ensure the work, when continued, will not require unnecessary re-accomplishment of previous processes or tasks. Processes or tasks on the WCD not completed due to shift change will be annotated as follows:

7.2.12.9.1. **(Added)** The off-going supervisor or wage leader will describe the completed work in an established logbook identifying the WCD operation or PDN, JON and specific WCD operation or sub-operation. The technician who subsequently completes the process or task will certify completion by properly stamping and dating the WCD task in the appropriate certification block. A copy of the log will be included in the dead file (ERM Inactive) for audit purposes.

7.2.12.9.2. **(Added)** If the follow-on technician is unable to appraise the work already completed the shift supervisor or wage leader will determine how to proceed.

7.2.12.9.3. **(Added)** When definitized lists are used to document tasks accomplished by more than one individual, the individual certifying the source AFSC Form 173 is stating that the operations he/she performed on the definitized list were done correctly and all other operations on the definitized list are stamped/dated. The source AFSC Form 173 should be M-coded.

7.2.12.9.4. **(Added)** For team task certifications, the person designated as team leader will ensure the task has been completed, stamped and dated legibly on the WCD.

7.2.12.10.2. Add an informational note as to the reason for adding the QAS stamp. Upon completion of the evaluation the QAS shall stamp and date the manually entered Q code. Only a QAS is authorized to stamp or enter Not Inspected (NI) stamping and dating the NI on a Q coded WCD operation or sub-operation. A QAS may add a Q code in block 38 of the AFSC Form 173 or in the Other/Insp of the defintized list. For downgrade of 'Q' coded WCDs or defintized lists, reference local guidance if applicable.

7.2.12.10.3.1. Downgrades to Inspection/Certification Codes. Downgrades to maintenance processes for example, heating, baking, welding, non-destructive process methods, cold working processes such as shot peening, high velocity oxygen flame spray, chemical cleaning, chrome plating, anodizing, alodining, etc. shall require coordination and approval through quality and process engineering organizations. Any downgrade to an inspection certification code shall require mandatory documentation and coordination of the AFSC Form 500 through quality, process engineering and/or the cognizant engineer.

7.2.12.12. **(Added)** After the 309 AMXG Maintenance Review Team (MRT) transfers an aircraft to flight test, all discrepancies documented on the AFTO Form 781A, *Maintenance Discrepancy and Work Document*, will have a mirroring WCD to accompany each discrepancy. All discrepancies, planned and over and above listed on AFTO Form 781A's will reference the assigned MWR number or WCD operation. This number will be annotated within the discrepancy block. All WCDs associated with aircraft depot maintenance will be physically/individually accounted for and placed in aircraft dead file (ERM Inactive) within 30 days of aircraft delivery.

7.2.12.13.1. **(Added)** 309 AMXG will document non-production crash damage repair aircraft maintenance actions using AFTO Form 781 series and/or AFSC Form 959.

7.2.14. 309 AMXG rework is defined as all labor hours expended and/or material utilized to correct nonconforming conditions (damage) caused as a result of maintenance actions, or lack of action, while an asset (end item, weapon system, subsystem, or any part thereof, etc.,) is under 309 AMXG control. The labor hours expended to correct "organically caused" deficiencies fall under the category of rework. Production count will not be taken for operations undergoing rework.

7.2.14.1. The following categories are not considered rework:

7.2.14.1.1. **(Added)** Unavoidable periodic calibrations and adjustments.

7.2.14.1.2. **(Added)** Work normally required to hand-fit or select-fit parts in an assembly.

7.2.14.1.3. **(Added)** Work done as a result of incoming or preliminary diagnostic tests and inspections performed to determine necessary repairs and replacements. When an item fails a particular step in a diagnostic test composed of a number of sequential steps, is then repaired but subsequently fails a later step in that test, rework will not be charged unless the subsequent failure is attributable to a discrepancy in the earlier repair.

7.2.14.1.4. **(Added)** NDI re-inspections are not considered rework. Example: But not limited to, NDI is called to inspect a hole and the hole cannot be "cleared", then the hole needs to be reamed oversized and NDI will inspect the oversized hole to "clear" it. These are two independent inspections, and this is part of the NDI process to ensure the part does not have any indications.

7.2.14.2. 309 AMXG Rework (Exclude Flight Test) will include eWCD.

7.2.14.2.1. **(Added)** The mechanic initiates MWR worksheet identifying operation number to be re-worked. The supervisor will review MWR worksheet for approval; once approved they will turn in the MWR worksheet to ALS.

7.2.14.2.2. **(Added)** ALS inputs MWR into the system based from the MWR worksheet, and planning approves it with work spec-RW.

7.2.14.2.3. **(Added)** ALS pulls the original WCD (if required), required tail team members will red diagonal line through stamps of items to be re-worked. Then the ALS prints a duplicate WCD, writes "re-work" in red at top of duplicate WCD, then attaches it to the original WCD. ALS prints the approved MWR (does not have to be attach to WCDs) and provides all paperwork to the supervisor or mechanic.

7.2.14.2.4. **(Added)** The mechanic logs onto MWR to track time for re-work, stamps all steps being re-worked on a duplicate WCD. When completed, the mechanic will return all documents (WCDs and MWR) to the supervisor for disposition of paperwork. When completed, the supervisor will return all documents (WCDs and MWR) to ALS for disposition of paperwork.

7.2.14.3. 309 AMXG. The production supervisor will assess damage caused as a result of maintenance actions and any errors in workmanship. The production personnel mechanics or supervisors will complete an MWR worksheet for the aircraft maintenance squadron. All rework reported will need to be identified back to the originating cell or RCC that performed the maintenance. Comments on the worksheet or MWR must be completed following guidelines beginning in **paragraph 7.2.14.8** of this rework section. The scheduler/ALS or planner will initiate appropriate WCD(s) for all re-work. The scheduler/ALS will electronically file the worksheet or MWR into the appropriate systems.

7.2.14.3.1. **(Added)** Production, scheduling and planning will attempt to identify all rework back to the original operation. The mechanic will enter the time into PDMSS or via the Time and Attendance system and log onto the WCD the scheduler has assigned for rework.

7.2.14.3.2. **(Added)** Additional work performed as part of the most economical method of doing a job. The exclusion does not apply when the additional work is required to correct work previously done on an item.

7.2.14.4. **(Added)** 309 AMXG Management of Rework Costs While on Temporary Duty (TDY). The purpose of the TDY is to correct a discrepancy due to 309 AMXG maintenance actions. The team chief will ensure all costs are charged to overhead as stated in this section.

7.2.14.5. **(Added)** 309 AMXG Quality Deficiency Reports (DR). When analysis of the Quality DR exhibit determines the technology repair center was at fault, all material and labor associated with the rework of the end item will be done IAW the instructions in this section.

7.2.14.6. **(Added)** 309 AMXG Labor Costs: Production count will not be taken for operations undergoing rework.

7.2.14.7. **(Added)** 309 AMXG. Ordering Material.

7.2.14.7.1. **(Added)** Production shop employees will use an AFSC Form 95, *Issue Request*, for any material ordered in support of rework. The production shop supervisor will ensure the form indicates the material is in support of rework by annotating or stamping the word "rework" on the top margin of the form.

7.2.14.7.2. **(Added)** All 309 AMXG material associated with the rework process is ordered as overhead material using U6800 as the control number.

7.2.14.7.2.1. **(Added)** Expendable items normally ordered under cost code "A" or "L" will be ordered with control number U6800.

7.2.14.7.2.2. **(Added)** TCTO/Mod Kits ordered under cost code "D" and all investment material ordered under cost code "M" will be ordered with control number U6800 with the cost code identified by the planner.

7.2.14.7.2.3. **(Added)** With investment or exchange material, use the same cost codes for those items normally procured as cost codes "B".

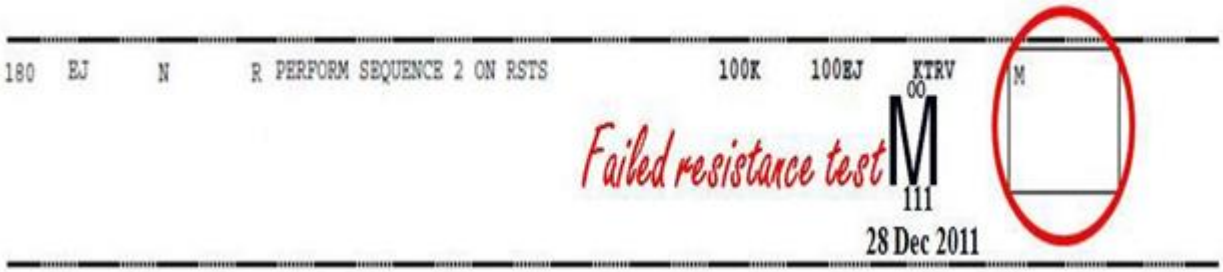
7.2.14.8. **(Added)** 309 AMXG Rework Analysis.

7.2.14.8.1. **(Added)** Analysts from the price and availability section of aircraft or a management analyst from the back shop area will analyze the data and build the monthly first-time pass yield rate charts. The analyst will then submit charts and data to the squadron director or equivalent to be briefed at the monthly squadron team reviews.

7.2.14.8.3. **(Added)** Data is compiled into the PDMSS web, **https://apfemweb/mabr/Wdev/lms-athome.asp** via the depot data storage system. This is for both back shops, ITS, and aircraft, PDMSS. Information on MWR, ITS worksheet and the original documents can all be found on this website for research.

7.2.14.9. **(Added)** Other Than Re-Work WCD Documentation Requirements. WCD operations requiring further investigation for an unknown condition will have a red circle placed around the inspection/certification block. The technician discovering an unknown condition shall place an informational note within the task description block stamping and dating informational note. See **Figure 7.15**., *Other Than Re-Work Documentation*.

Figure 7.15. (Added) Other Than Re-Work Documentation.



7.2.14.9.1. **(Added)** Any individual stamping and dating a red circle for a specific maintenance task shall be PAC certified for the task. The individual stamping and dating in the inspection/certification block with the red circle is indicating the required maintenance or inspection (repair, replace, within limits, etc.) requiring further investigation was performed and found the condition satisfactory. A stamped and dated informational note shall be used within the operation task description block to identify what maintenance or inspection was performed to correct the red circle (repair, replace, within limits, etc.) See **Figure 7.16**., *Clearing Red Circle Operation*.

Figure 7.16. (Added) *Clearing Red Circle Operation*.

7.2.14.9.2. **(Added)** When a new operation is created and the original operation with the red circle inspection/certification block isn't cleared, per **paragraph 7.2.14.11.1**, the technician performing the required maintenance or inspection (repair, replace, within limits, etc.,) correcting the unknown condition shall insert a stamped and dated informational note within the original operation task description block identifying see operation XXX including what maintenance or inspection was performed to correct the red circle (repair, replace, within limits, etc.) When the new operation inspection/certification block is stamped and dated, the new operation shall have a stamped and dated informational note placed in the new operation task description block stating see original operation XXX for repair/corrective action. See **Figure 7.17**., *Clearing Red circle Operation with New Operation*.

Figure 7.17. (Added) Clearing Red Circle Operation with New Operation.

7.2.15. The owning organization, as defined by induction or ownership, will supply the tasked organization with a WCD and all applicable documents for the routed process. The tasked organization will assist the owning organization with WCD development.7.2.15.1. A WCD will be attached to the applicable routing document when a route is required. See **Table 7.6.**, *Instructions for Completing AFSC Form 137, Routed Order (Project Directed)*.

Table 7.6. (Added-OO-ALC) Instructions for Completing AFSC Form 137.

BLOCK	DESCRIPTION
1	Aircraft serial number (see note 1).
2	Aircraft model, description and series (see note 2).
3	Production number (see note 3).
4	Quantity. Enter the number of items being processed with AFSC Form 137.
8	Name of the document originator.
9	Date document originated.
16	Item serial number (if obtainable).
22	M-stamp number (or E-number if process performed is outside of PAC program). This will signify that portion of the route was completed. Numbers may be hand scribed or stamped but **not** pre-printed.
25	Flow days (if local directives require).
29	Completion date of routed process.
28	Skill of support shop (if local directives require).
34	Date due (back to the user).
Unplanned Item: When the AFSC Form 137 document is not available for an item removed from a serial number, the following additional items must be taken.	
NOTE 1	309 AMXG. Only the responsible ALS and squadron synch representative will be notified.
NOTE 2	309 AMXG. Only the routed item listing should be researched to determine if the item is listed for the project under which the serial number is being processed.
NOTE 3	309 AMXG. Only if the item is not a part of the negotiated package as determined by the MRT, but the item must be bench checked or have minor repair, a complete AFSC Form 137 will be handscribed.
NOTE 4	This form is available on the Air Force e-publishing website. When the document has been completed, it will be attached to the item for which it was written. This will be accomplished by placing the AFSC Form 137 into a protective envelope/pouch. An AFSC Form 137 will not be used as a WCD.

7.2.15.4. Routed Item Production Count. Routed items using AFSC Form 137 must be accompanied with a production and operation number for production count purposes.

7.2.15.5. **(Added)** WCDs for Indirect "S" JON cost class 4 (CC4) work. Organizations performing "S" JON CC4 work will use an approved WCD to document accomplishment of CC4 work. The WCD will be attached to the applicable routing document when a route is required. When requested, a copy of the WCD will be attached to the routing document and provided to the organization receiving the item showing accomplishment of operations. For additional information on CC4 work, refer to AFSCMAN 21-102.

7.2.15.3. **(Added)** WCDs for support agreements. An approved WCD will be used for support agreement work. The WCD ensures proper control of all support work to include ensuring required maintenance actions are performed and to ensure return of the items to a final destination. The AFSC Form 137 will be attached to the WCD. When requested, a copy of the WCD will be attached to the routing document and provided to the organization receiving the item showing accomplishment of operations.

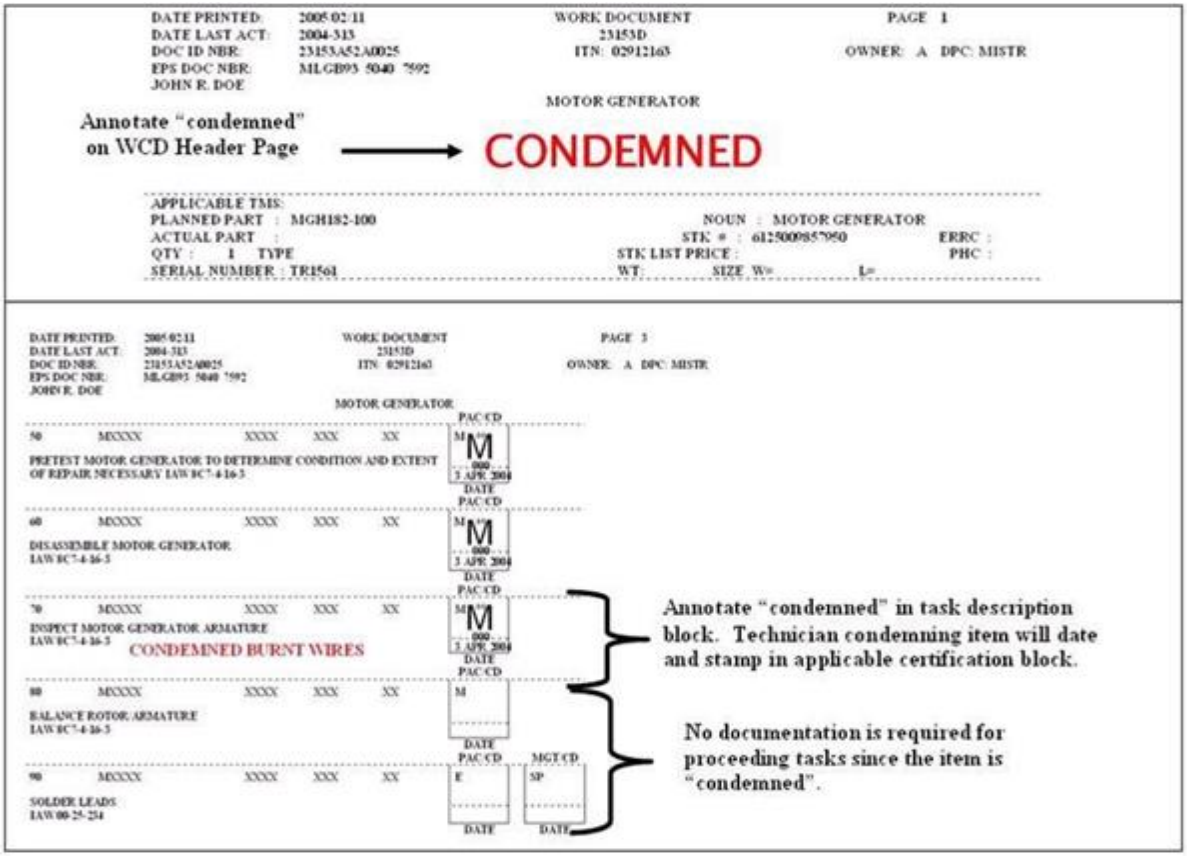
7.2.16. When requested, a copy of the WCD generated as the result of an authorized AFSC Form 206 will be attached to the routing document and provided to the organization receiving the item showing accomplishment of operations.

7.2.16.1. **(Added)** AFSC Form 206 special instructions containing actual technical data procedures will require the performing workcenter to initiate and submit an AFMC Form 202/ETAR back to the responsible engineer containing the exact AFSC Form 206 special instructions technical data procedures. AFSC Form 206 control number shall be entered in block 8 and block 23B of the AFMC Form 202/ETAR. The AFMC Form 202/ETAR will then be the source technical data identified on the WCD. If the AFSC Form 206 identifies technical data by number, then that technical data will be the source technical data used to perform the requirements of the AFSC Form 206 and identified on the WCD. The AFMC Form 202/ETAR shall be attached to the WCD.

7.2.18. For condemned WCD documentation requirements see **Figure 7.18.**, *Condemnation Documentation*.

7.2.18.1. **(Added)** The production supervisor and scheduler are required to stamp and date the condemned WCD.

Figure 7.18. (Added) Condemnation Documentation.



7.2.19.1. The 957.net information system is the required system throughout OO-ALC to recommend changes to WCDs. All change requests will require submission to the IET/Planner in order to maintain configuration control of the WCD process. NOTE: IET/Planners identifying the need for changes based on analysis will follow the normal AFSC Form 500 process unless the request will cross workloads/organization, then the 957.net system is required.

7.2.19.2. All submitted WCD change requests affecting nuclear weapons-related materiel, an operation coded with an E or I, change request impacting form, fit, or function, and change requests effecting critical technical data-specific maintenance tasks of disassembly, cleaning, inspection, assembly, functional testing, including change requests impacting critical maintenance processes such as NDI, heat, bake, welding, chrome plating, anodizing, and chemical treatment of components, shall require formal coordination and approval through the PPT including Quality Assurance (QA) and the applicable process engineering organization. These WCD change requests will require the use of the AFSC Form 500 and block 4 Planning Reason shall be marked PPT with comments inserted in block 4 or in comments block 8 stating the following or equivalent: If a process is identified in this paragraph as a critical maintenance process, that doesn't mean that every step within the process must be considered critical or IAW, only that change to the section of the WCD affecting the critical process must be approved through official means and documented. The determination of whether a task within a critical maintenance process is either critical or IAW is the responsibility of the PPT and process engineer. This does not alleviate the requirement for the request for change to be initiated with the 957.net system.

7.2.20. **(Added)** Not Repairable This Station (NRTS) Documentation Requirements. NRTS WCDs shall be retained IAW AFSCMAN21-102, paragraph 1.12.1. WCDs associated with parts NRTS prior to work documentation (no operations started) may be destroyed and are exempt from retention.

7.2.20.1. **(Added)** The production supervisor and scheduler are required to stamp and date the NRTS WCD.

7.2.20.2. **(Added)** NRTS WCDs shall be retained for a minimum period of 2 years. WCDs associated with parts NRTS prior to work documentation (no operations started) may be destroyed and are exempt from retention.

7.2.21. **(Added)** Awaiting Parts (AWP) WCD Documentation. When a part is placed into AWP status the technician will stamp and date "outside" the WCD inspection/certification block, entering within the operation task description block the word "AWP" and enter "AWP" on the WCD header first page. No technician documentation is required for operations not completed due AWP.

7.2.21.1. **(Added)** No production supervisor and scheduler stamp and date is required on the identified AWP WCD when a part is placed into AWP status.

7.2.21.2. **(Added)** The AWP WCD shall remain with the part or in an identifiable location where the WCD is easily traceable to the location where the AWP part is stored.

7.2.21.3. **(Added)** When an original AWP WCD contains some "completed" operations that were stamped and dated by production, this WCD will be attached to the back of the "new" WCD. The new WCD operations originally completed on AWP WCD shall have inserted within the operation task description block a stamped and dated informational note stating "previously complied with (PCW) see AWP WCD operation XX".

7.2.22. **(Added)** WCD documentation requirements for a new WCD replacing partially completed production stamped and dated WCD.

7.2.22.1. **(Added)** When an original WCD contains some "completed" operations that were stamped and dated by production, the original WCD will be attached to the back of the "new" WCD. The original WCD will be annotated as follows: 1) Annotate on the header "See new attached WCD" or equivalent statement the scheduler shall stamp and date next to this informational note; 2) The operations not completed due to the AWP status indicate that they will be accomplished on the new WCD with the tailor route. Therefore, they don't require a Z. A copy of the original WCD shall be placed in the dead file for the original JON for accountability.

7.2.22.2. **(Added)** If the original WCD contains no completed stamped and dated operations there is no need to keep the undocumented WCD unless directed otherwise by the organizations immediate management.

7.2.22.3. **(Added)** When an original AWP WCD contains some "completed" operations that were stamped and dated by production, this WCD will be attached to the back of the "new" WCD. The "new" WCD will be tailored with the operations not accomplished on the original WCD.

7.2.23. **(Added)** Lost WCD. Anyone within OO-ALC finding a WCD, inadvertently misplaced or detached from the part and the part cannot be located, will deliver the WCD to the appropriate scheduler for research. The scheduler will retain the WCD for a maximum of 90 calendar days in order to try to locate the appropriate part.

7.2.23.1. **(Added)** If the part does not have a WCD, the supervisor or designee where the part is located will contact the scheduler. Production and scheduling will make every effort to locate the missing WCD.

7.2.24. **(Added)** Processing a soiled, torn, mutilated or otherwise damaged WCD that is unreadable. A new WCD will be initiated as a "replacement or duplicate WCD" with a recording of all legible stamp numbers and entries on the new WCD. These WCDs will be returned to the applicable production shop foreman. The production shop foreman will determine the appropriate action.

7.2.24.1. **(Added)** When the original WCD is missing and could not be located, the scheduler will re-print the WCD and will mark it as a "replacement WCD" or "duplicate WCD". These WCDs will be returned to the applicable production shop foreman. The production shop foreman will determine the appropriate action.

7.2.25. **(Added)** WCD Impoundment Documentation. OO-ALC/QA is the OPR for the impoundment program. Review impoundment procedures contained within **chapter 9** of this supplement.

7.2.25.1. **(Added)** The front page of the WCD shall have "A RED BORDER" drawn on all four sides.

7.2.25.2. **(Added)** The following shall be entered in RED on the front page of the WCD, "IMPOUNDED FOR INVESTIGATION OF:" (state problem), "SEE PAGE Operation __". The WCD shall be placed into a protective document holder and attached to the item.

7.2.26. **(Added)** WCD Documentation for Clecos. If Clecos must remain on an aircraft or component for multiple shifts, an informational note will be made on the aircraft AFTO Form 781A record and/or in the WCD task description block of the specific WCD operation number where the Clecos were installed. This installation informational note will identify the quantity of Clecos installed and will be stamped and dated by the technician who installed the Clecos on the aircraft or component. When the Clecos are removed, another informational note will identify the quantity of Clecos removed and be stamped and dated.

7.2.27. **(Added)** DFT Procedures. A DFT is an individual or group designated to perform maintenance and or inspection of systems or equipment at a place other than the organic depot.

7.2.27.1. **(Added)** When a DFT request is received; the respective weapon system management team should convene a DFT PPT meeting and determine the appointment of a DFT chief/lead as applicable. The DFT PPT shall include the appointed DFT chief/lead who will work together to establish a plan for the specific DFT requirements. The DFT PPT will develop all aspects of the plan including but not limited to the following:

7.2.27.1.1. **(Added)** WCD package.

7.2.27.1.2. **(Added)** Repair plan.

7.2.27.1.3. **(Added)** Listings of manning, tooling, material, equipment, and technical data requirements.

7.2.27.1.4. **(Added)** Personnel notification.

7.2.27.1.5. **(Added)** TDY requirement coordination with the travel office regarding the number of people going, TDY accommodations, rental cars, and travel requirements.

7.2.27.1.6. **(Added)** TDY requirements such as TDY shift, address, host organization points of contact, pay, overtime, transportation, tool control, shipping, interim reporting, return procedures, safety concerns and any other related issues.

7.2.27.1.7. **(Added)** Provision of required information to the host unit to support the DFT.

7.2.27.1.8. **(Added)** Review of tasks and site for specific environmental issues.

7.2.27.1.9. **(Added)** When the DFT Team returns home the DFT chief/lead will debrief the DFT PPT and provide the package of completed WCDs. The DFT PPT will review the completed WCDs and file them in the depot WCD dead file.

7.3. Roles and Responsibilities.

7.3.1.6. **(Added)** The PPT shall follow procedures contained in AFSCMAN 21-102 for Critical Safety Item (CSI) requirements when a critical maintenance process or critical maintenance task is under review. Additionally, the PPT shall ensure a review of the applicable weapon-specific -6 Scheduled Inspection and Maintenance Requirement TO and weapon system -06 Work Unit Code Manual TO for forms documentation requirements of CSIs and items requiring configuration control and serial number tracking.

7.3.1.7. **(Added)** OO-ALC PPTs shall use the AFSC Form 500 for all PPT reviews. WCDs developed solely for time with no inspection certification code (M, E, I, N) assigned are not required to have a formal PPT or AFSC Form 500. The AFSC Form 500 will be maintained by the planner for WCDs electronically maintained in the Impresa, ITS, PDMSS and MAXIMO systems. Additionally, the AFSC Form 500 will be used for all electronically maintained AFMC Forms 959. WCDs developed solely for time tracking and no inspection certification code (M, E, I, N) assigned are not required to have a formal PPT or AFSC Form 500. The following provides minimum requirements on when the formal PPT will use AFSC Form 500:

7.3.1.7.1. **(Added)** Use for developing new workload WCDs and reviews of contractor supplied WCDs.

7.3.1.7.2. **(Added)** Use for submitted WCD change requests affecting the form, fit, or function of an established process.

7.3.1.7.3. **(Added)** Use when a submitted WCD change request affects a critical task.

7.3.1.7.4. **(Added)** Use when initially determining WCD critical and IAW tasks.

7.3.1.7.5. **(Added)** Use to document WCD review/PPT.

7.3.1.8. **(Added)** PPT requirements for new and revised workload first article inspection.

7.3.1.8.1. **(Added)** All WCDs or other records for first article, prototype and revised workload inspections will have a unique identifier to distinguish it from established WCDs and records of ongoing workloads. Printing on a designated color of paper may be an option.

7.3.1.8.2. **(Added)** First article and prototype inspections of products and deliverable software will be scheduled and performed IAW the standard engineering guide and 309 SWEG.

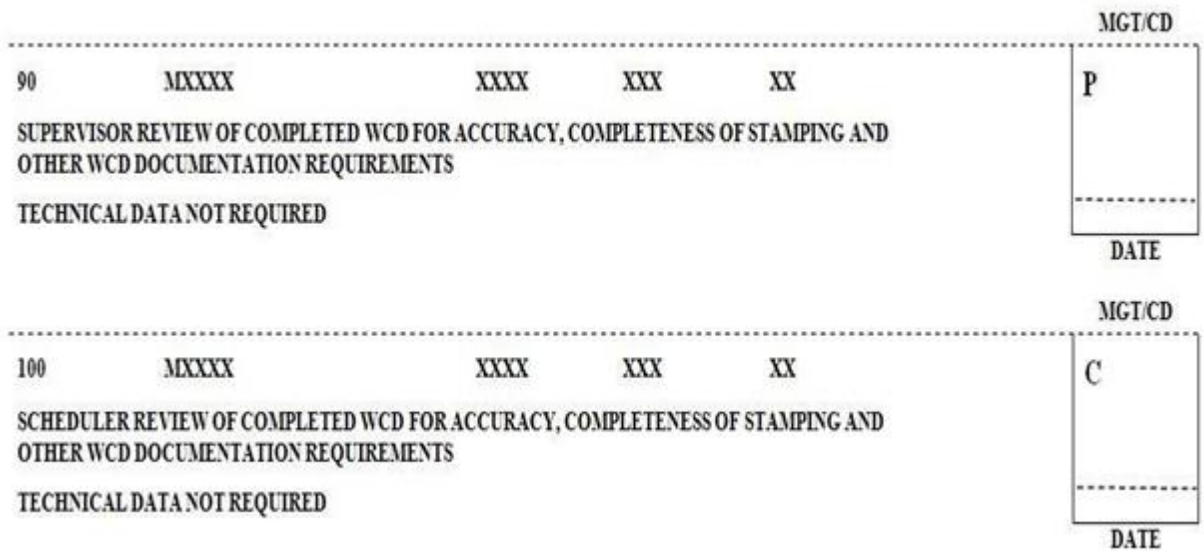
7.3.1.8.3. **(Added)** A full article inspection (FAI), or a partial FAI for affected characteristics of a revised workload, shall be performed and records of such an FAI shall be attached to the original FAI record, so that evidence is retained of the full qualification for all characteristics.

7.3.2.1. Planners using ITS, Impresa, MAXIMO will ensure the following:

7.3.2.1.1. **(Added-OO-ALC)** A production supervisor WCD operation is developed and inserted at the end of the WCD. The MGT/CD for this operation will be "P". The following or equivalent statement will be placed in the operation description block: "Supervisor review of completed WCD for accuracy, completeness of stamping and other WCD documentation requirements technical data not required".

7.3.2.1.2. **(Added)** Planners using ITS, Impresa, MAXIMO will ensure a scheduler WCD task is developed and inserted after the supervisor review task of the WCD. The MGT/CD for this task will be "C". The following or equivalent statement will be placed in the task description block: "Scheduler review of completed WCD for accuracy, completeness of stamping and other WCD documentation requirements, technical data not required". See **Figure 7.19**., *ITS/Impresa/ MAXIMO Supervisor and Scheduler WCD Entries*.

Figure 7.19. (Added) ITS/Impresa/MAXIMO Supervisor and Scheduler WCD Entries.

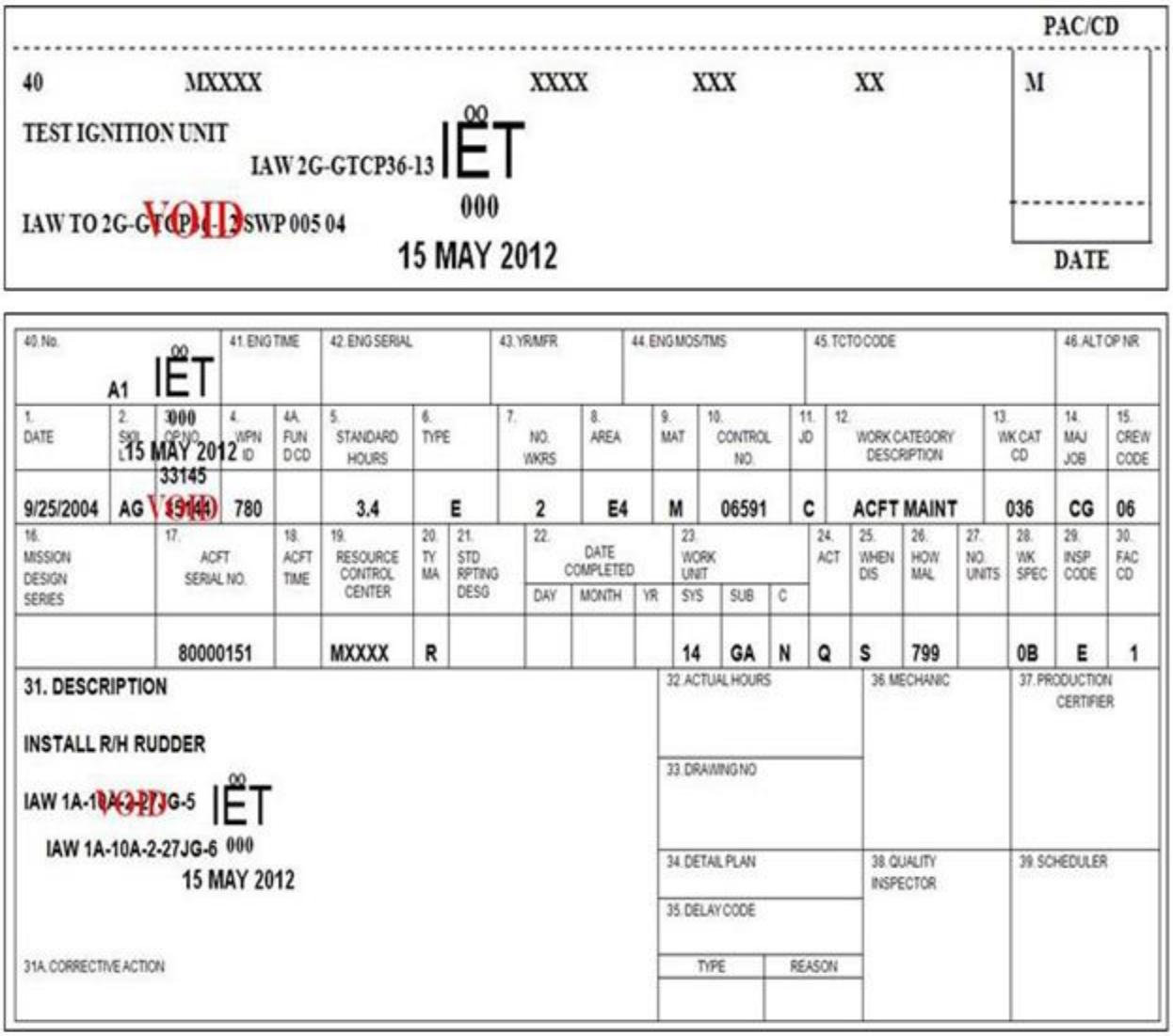


7.3.2.4. When a planner makes a correction or change to a hardcopy WCD, the planner shall VOID in red any errors and IET-stamp and date as close as possible to the changes or additions. See **Figure 7.20**., *Planner Changes to Hardcopy WCD.*

7.3.2.4.1. **(Added)** The planner as required shall ensure the appropriate electronic WCD system PDMSS/G097 MWR Journal, Impresa, ITS, MAXIMO is updated with all necessary changes or corrections.

7.3.2.4.2. **(Added)** 309 AMXG planners will ensure an operation that is verified as not applicable (N/A) or not required (NR) is deleted in PDMSS and/or G097 MWR Journal.

Figure 7.20. (Added) Planner Changes to Hardcopy WCD.



PAC/CD
40 MXXXX XXXX XXX XX M
TEST IGNITION UNIT
IAW 2G-GTCP36-13 OO IET 000
IAW TO 2G-GTCP36-2-2SWP 005 04 VOID
15 MAY 2012
DATE

40.No.		41.ENG TIME	42.ENG SERIAL	43.YR/MFR	44.ENG MOS/TMS	45.TCTO CODE	46.ALT OP NR
A1 OO IET 000 15 MAY 2012							

1. DATE	2. SKL LVL	3. OP NO. 33145 VOID	4. WPN ID	4A. FUN DCD	5. STANDARD HOURS	6. TYPE	7. NO. WKRS	8. AREA	9. MAT	10. CONTROL NO.	11. JD	12. WORK CATEGORY DESCRIPTION	13. WK CAT CD	14. MAJ JOB	15. CREW CODE
9/25/2004	AG		780		3.4	E	2	E4	M	06591	C	ACFT MAINT	036	CG	06

16. MISSION DESIGN SERIES	17. ACFT SERIAL NO.	18. ACFT TIME	19. RESOURCE CONTROL CENTER	20. TY MA	21. STD RPTING DESG	22. DATE COMPLETED DAY	MONTH	YR	23. WORK UNIT SYS	SUB	C	24. ACT	25. WHEN DIS	26. HOW MAL	27. NO. UNITS	28. WK SPEC	29. INSP CODE	30. FAC CD
	80000151		MXXXX	R					14	GA	N	Q	S	799		0B	E	1

31. DESCRIPTION	32. ACTUAL HOURS	36. MECHANIC	37. PRODUCTION CERTIFIER
INSTALL R/H RUDDER	33. DRAWING NO		
IAW 1A-10A-2-27JG-5 VOID OO IET 000	34. DETAIL PLAN	38. QUALITY INSPECTOR	39. SCHEDULER
IAW 1A-10A-2-27JG-6 000 15 MAY 2012	35. DELAY CODE		
31A. CORRECTIVE ACTION	TYPE / REASON		

7.3.2.6. IET/planners will be responsible to contact Technical Order Distribution Office (TODO) adding their name to the change notification distribution listing. This is the preferred method to check technical orders within their library for changes. IET/planners will review any changes identified by TODO in the distribution listing for effects to their workload WCDs and BOMs in order to maintain currency and configuration with the most current technical order changes.

7.3.3.10. The production supervisor as required will coordinate with the group PAC manager and ensure PAC tasks relate to the work described within the WCD operation task description block.

7.3.3.13. The supervisor shall P-stamp and date completed WCDs as confirmation of supervisor review of completed WCD for accuracy, completeness of stamping and other WCD documentation requirements prior to turn in to the production controller/scheduler. For PDMSS/G097-generated AFSC Form 173 WCDs, the supervisor shall stamp and date in the upper right-hand corner. ITS, Impresa, MAXIMO and electronic generated AFSC Form 957 WCDs shall contain a planned operation ensuring production supervisor review.

7.3.4.1.2. **Exchangeables/Local Manufacture Only.** On all tasks/operations on a WCD not accomplished as NR, N/A, PCW or satisfactory as is, the technician will include an informational note in the task/operation description block explaining why the task/operation was not accomplished and will stamp and date in the applicable task/operation block, not the PAC certification block.

7.3.4.1.3. **(Added)** 309 AMXG: E&I technicians determine what unpredictable write-ups are required, consistent with work specification requirements and, as required, the E&I technician will complete an MWR worksheet identifying unpredictable defects for input into PDMSS. 309th Commodities Maintenance Group (309 CMXG): E&I technicians will determine what tasks and or processes are required for back shop repair.

7.3.4.9. **(Added)** When non-AFMC personnel perform maintenance as specified on AFMC WCDs, a review of the individual's qualification/certification will be performed by the AFMC production supervisor. This can be through training certificates, Training Business Area (TBA), AF Form 623, *Individual Training Record Folder*, or equivalent. Non-AFMC personnel will document AFTO Form 781A and attach it to the WCD. The production supervisor will make a note on the AFMC WCD stating "see attached AFTO Form 781A". The production supervisor will P stamp and date the note only. The supervisor will also note that a record review has been accomplished and the non-AFMC personnel are qualified/certified to perform work. The task certification blocks on the WCD will be left blank as the attached AFTO Form 781A is the audit trail.

7.3.4.10. **(Added)** Technician training is accomplished while performing the actual tasks or processes. Supervisor or supervisors' designee (and as determined by the production supervisor, QA, process engineering, and other agencies) will oversee training until technicians are competent/certified in section III of the technician's PAC record. This will allow options depending on the criticality of the task.

7.3.4.10.1. **(Added)** Trainee stamping of WCDs. Personnel not certified on the task or process being performed can accomplish the work if they are qualified to the extent necessary and are under the direct guidance of a PAC-certified technician. A technician not yet certified on a task or process can stamp and date the WCD outside the certification block. At no time will a trainee stamp inside certification blocks unless PAC certified on that specific WCD task or process. A certified technician will stamp and date inside the applicable certification blocks.

7.3.4.10.2. **(Added)** The uncertified technician will stamp the WCD operation outside the certification block, to signify completion of tasks or processes. Once certified on the task, the certified technician will stamp and date inside the applicable certification blocks and ensure a copy of the completed certification Memo for Record (MFR) (required by **paragraph 7.3.4.10.3**) is attached.

7.3.4.10.3. **(Added)** The following informational note will be placed in the task description block by the supervisor: "See attached certification (MFR)". The supervisor will P stamp and date this informational note.

7.3.4.10.4. **(Added)** This MFR shall contain the printed names of QA, process engineer, and supervisor or supervisor designee (as applicable), and technicians. The MFR shall be signed by overseeing POCs, Quality, process engineer and supervisor or supervisor designee (as applicable) and technicians. Refer to **paragraph 7.3.4.9**.

7.3.4.10.5. **(Added)** The supervisor shall enter in Section IV of the technician's PAC record, a dated statement identifying technicians were observed performing tasks or processes by QA and process engineering and the supervisor or supervisor designee (as applicable) and certified. The supervisor working with the PAC manager shall ensure an auditable PAC task is developed for Section III of the PAC record and certify the technician.

7.3.5.9. **(Added)** The lead or process scheduler for each product line will notify workloader when all WCDs are completed for a project. When the workloader confirms no further work orders will be required a project closure checklist will be initiated.

7.3.5.10. **(Added)** Project closure checklist will be initiated within 30 days after the project is complete. The responsible supervisor or designee for each area listed on the checklist is responsible to ensure their checklist responsibilities are completed accordingly.

7.3.5.11. 309 AMXG ALS AFMC Form 202/ETAR responsibilities.

7.3.5.11.1. **(Added)** If an AFMC Form 202/ETAR addresses more than one skill, the responsible ALS will ensure a copy of the AFMC Form 202/ETAR is attached to the WCD for each skill prior to being scheduled and issued for work.

7.3.7.3. OO-ALC Process Orders.

7.3.7.3.1. Process orders shall be written to prescribe detailed standard work instructions for production methods and shop practices. Process orders may supplement maintenance-engineering standards, but will not change standards, parameters, tolerances, etc., within applicable maintenance-engineering standards. Maintenance engineering standards include TOs, Air Force drawings, and industry or military specifications. This includes POs developed to supplement Commercial Off-The-Shelf (COTS) manuals and Contractor Maintenance Manuals (CMM).

7.3.7.3.2. Process order preparation.

7.3.7.3.2.1. **(Added)** All POs shall be developed according to AFSCMAN 21-102, Table 7.7, *Guidelines for Preparing a Process Order*, and the requirements of this supplement.

7.3.7.3.2.2. **(Added)** POs shall be prepared, controlled, monitored, distributed and deleted by maintenance process engineers, facility engineers and System Program Office (SPO) engineers.

7.3.7.3.2.3. **(Added)** If an organization desires to use another organization's developed PO the engineering organization over the requesting organization shall ensure the new production area can perform requirements of the PO by completing a validation/verification (VAL/VER) and ensure all coordination requirements are complied with.

7.3.7.3.3. Process Order Development and Display System (PODDS).

7.3.7.3.3.1. **(Added)** All new POs shall be prepared, controlled, monitored, distributed and deleted utilizing PODDS. All OO-ALC geographically separated units are waived from this requirement until PODDS is made available.

7.3.7.3.3.2. **(Added)** POs in PODDS may contain electronic pictures, diagrams, tables or other forms of media that help explain correct processing methods. Any media used in PODDS shall be controlled as technical data.

7.3.7.3.3.3. **(Added)** Any previously developed PO currently in sustainment having major changes to primary procedures or addition or deletion of procedures, the PO shall have a VAL/VER and will be placed into PODDS.

7.3.7.3.3.4. **(Added)** In the event of a malfunction of the PODDS system, a backup process order control system may be used to manage and distribute process orders. The backup process order control system must meet the process order distribution and control requirements of AFSCMAN 21-102 and this supplement.

7.3.7.3.5. Any technical data changes including changes to COTS manuals, CMMs resulting in an engineering update to a developed PO shall require the PO to receive a VAL/VER and the PO shall be placed into PODDS.

7.3.7.3.6. Engineering red-line changes to POs. The responsible engineer may make changes or clarifications to an electronic PO and republish it after the initial full review has been completed as long as the small changes are minor and not deemed critical. Minor changes are defined as spelling or grammar corrections, formatting or spacing adjustments or adding notes. This is essentially an electronic "redline" change to a PO. All changes, other than those listed as minor above, are deemed critical and require a full review. The process engineer may only publish minor changes without full signature review. After the minor changes, the new PO will immediately be made available to the production shop floor via the PODDS reader. PODDS will assign a new revision number to the PO with each update, no matter how minor.

7.3.7.3.6.1. **(Added)** Only the process engineer or his/her delegate has access to modify the PO in PODDS.

7.3.7.3.6.2. **(Added)** If a minor redline change is made to a hard copy process order; the process engineer will make the change and legibly print their name, sign and date near the change using red ink. The same process engineer shall ensure the PO contained in PODDS is immediately updated within 2 working days with a new revision number.

7.3.7.3.13. Mandatory attendance at all VAL/VERs shall be production technicians, QA, and the process engineer developing the PO. Other parties such as safety or planning will participate if requested by production or process engineering.

7.3.7.3.13.1. **(Added)** The VAL/VER will consist of 100 percent hands-on performance by production personnel required to use the PO in performance of the process or task.

7.3.7.3.13.2. **(Added)** Any deficiencies or other issues shall be noted in red on the draft document.

7.3.7.3.13.3. **(Added)** Changes deemed minor by both production, quality and engineering may be made to the draft without the need for an additional VAL/VER. Major changes to procedures to the draft process order will require a re-VAL/VER.

7.3.7.3.13.4. **(Added)** At the completion of the VAL/VER, production, and process engineer (and any other parties that assisted in the VAL/VER) will legibly print, sign and date the draft process order and process engineering will then submit the process order (with any changes made) for official review, coordination, and publication.

7.3.7.3.13.5. **(Added)** Process engineering will maintain a file of the draft process orders with VAL/VER signatures for a minimum of 2 years.

7.3.7.3.13.6. **(Added)** VAL/VER's are not required for renewal or minor modification of existing process orders.

7.3.7.3.14. **(Added)** Process order deviation. An OO-ALC Form 210, *OO-ALC Process Order Deviation Request,* is used at the shop level to grant authority to temporarily deviate from a process order. An OO-ALC Form 210 shall not be used to request deviation from officially prescribed technical data, all technical data deviation requests shall be submitted using the AFMC Form 202/ETAR or equivalent and approved by the appropriate process engineer.

7.3.7.3.14.1. **(Added)** An OO-ALC Form 210 shall be submitted to request deviation from any process order to the responsible process engineer for that specific PO.

7.3.7.3.14.2. **(Added)** An OO-ALC Form 210 is not valid until signed and dated by the responsible process engineer and process engineering. (309 CMXG Process Engineering/Flight Chief).

7.3.7.3.14.3. **(Added)** The responsible process engineer or process engineering manager (309 CMXG Process Engineering Flight Chief) may rescind a Process Order Deviation Request (PODR) at any time, prior to the expiration of the PODR.

7.3.7.3.14.4. **(Added)** Requests for permanent process order change may also be made by checking the appropriate box at the bottom of the OO-ALC Form 210.

7.3.7.3.14.5. **(Added)** After signature and approval, a copy of the OO-ALC Form 210 shall be provided to the affected production area planner for the component to place in the planning jacket file for that workload, and a copy shall be kept in the process engineering office.

7.3.7.3.14.6. **(Added)** An OO-ALC Form 210 copy shall be made accessible to shop floor personnel until expiration or rescission, whichever is first.

7.3.7.3.14.7. **(Added)** The process engineering office shall maintain a file of all OO-ALC Forms 210, the file shall consist of an active section and a historical section. Once PODRs become inactive, they will be placed in the historical section. The historical section shall be maintained indefinitely. The file of OO-ALC Form 210 may be hard copy or electronic.

7.3.7.3.15. **(Added)** Inactive or rescinded process orders. When work/repair is required on a component having an inactive or rescinded process order identified on the WCD, the production shop shall contact process engineering for guidance and also notify the responsible planner.

7.3.7.3.15.1. **(Added)** The responsible process engineer for that PO may print an inactive or rescinded copy of a process order for temporary use on the shop floor.

7.3.7.3.15.2. **(Added)** The responsible process engineer will legibly print, sign, date, and provide phone number on the front page of the inactive or rescinded copy. This inactive or rescinded PO copy shall only be used for 30 calendar days from the date of responsible engineering signature on the front of the PO. If after 30 calendar days the PO still isn't activated, the responsible engineer shall be contacted and all work will be stopped until the process order is republished.

7.4. Stamps.

7.4.2. The OO-ALC MXGs (309 AMXG, 309 AMARG, 309 CMXG, 309th Electronic Maintenance Group (309 EMXG), 309 MXSG, 309 MMXG) are responsible for the issue, control and inventory of all maintenance stamps within their respective organizations. A primary and alternate stamp manager shall be assigned in writing by each organization. Oversight is provided by the OO-ALC QA/Process Improvement Office.

7.4.2.1. **(Added)** The 809 MXSS PMEL/MCF utilizes K-stamps to calibrate and certify test, measurement, and diagnostic equipment, IAW TO 00-20-14, Air Force Metrology and Calibration Program, and the PMEL/MCF Quality Manual or the contract Statement of Work. K-Stamps are not used on WCDs and are not considered maintenance stamps as defined in this instruction. The 309 MXSG is responsible for issue, control, and inventory of these stamps.

7.4.2.2. **(Added)** Support Center Pacific, Kadena AB, Japan (525th Electronics Maintenance Squadron [525 EMXS]) will maintain a supply of maintenance stamps, issued from 309 EMXG. The designated representative will issue and control all stamps in 525 EMXS.

7.4.2.3. **(Added)** 525 EMXS is responsible for issue and control of any maintenance (N) stamp issued to the 18th Equipment Maintenance Squadron, Kadena AB, Okinawa, Japan. This will facilitate the performance and documentation of NDI inspections in the absence of the assigned 525 EMXS NDI technician.

7.4.3. Requests for maintenance stamps shall be initiated by the employee's supervisor via e-mail or in writing to the organizational stamp manager.

7.4.3.1. An "M", "P", or "Q" stamp will not be issued until the employee has completed all mandatory training. See **table 7.7** through **table 7.10**.

Table 7.7. (Added) 309 AMXG (New) Stamp Issue Prerequisite Training.

Initial Requirement Training Courses
Work Control Documents
Tool Control and Accountability Program
Technical Data Use and Compliance (F-22 and F-35 exempt)
Foreign Object Damage (FOD)/Dropped Object Prevention (DOP) Awareness Training

Table 7.8. (Added) 309 CMXG (New) Stamp Issue Prerequisite Training.

Initial Requirement Training Courses
Work Control Documents
Tool Control and Accountability Program
Technical Data Use and Compliance
FOD/DOP Awareness Training

Table 7.9. (Added) 309 EMXG Stamp Issue Prerequisite Training.

Initial Requirement Training Courses
Work Control Documents
Tool Control and Accountability Program
Technical Data Use and Compliance
FOD/DOP Awareness Training
Electro-Static Discharge Awareness

Table 7.10. (Added-OO-ALC) 309 MMXG Stamp Issue Prerequisite Training.

Initial Requirement Training Courses
Work Control Documents
Tool Control and Accountability Program
Technical Data Use and Compliance
FOD/DOP Awareness Training

7.4.3.2. Organizations shall use the Hill AFB Training Scheduling System (TSS), Stamp module to issue, record, track, control and identify maintenance stamps. This database shall include unissued stamps.

7.4.3.3. Revocation of a maintenance stamp shall only occur at squadron or flight level within the respective organization. Outside agencies can only recommend a stamp be revoked. The maintenance stamp shall be returned to the organizational stamp manager.

7.4.3.4. Recall actions of maintenance stamps initiated by the organizational or OO-ALC stamp manager shall be coordinated through the appropriate squadron/flight.

7.4.3.5. **(Added)** Requests for maintenance stamps must include: Employee name, office symbol, type of stamp, supervisor's name and phone number and date of request.

7.4.3.6. **(Added)** Issued stamps shall be accounted for on an AF Form 1297, *Temporary Issue Receipt*. Stamps shall be issued as two line items to include stamp and cap. Obsolete or previously used forms do not need to be re-accomplished. Documentation of unissued stamps shall be maintained on the annual inventory summary and organizational database. Turned in maintenance stamps shall not be reissued to another individual for a minimum of 90 days from the date of turn in.

7.4.3.7. **(Added)** Maintenance stamp caps shall be marked with the stamp number of the issued stamp by the most suitable method (i.e., etching, lasered, or permanent marking pen) when issued. Caps shall be inspected by the employee and re-marked as needed.

7.4.3.8. **(Added)** Individuals retiring, separating or being reassigned to a position in a different organization, or to a position no longer requiring a stamp, shall turn in their assigned stamp to the organizational stamp manager.

7.4.3.9. **(Added)** Lost maintenance stamps or caps shall be reported and documented IAW lost item procedures in **chapter 10** of this instruction. Lost stamp or cap information, including the AFMC Form 310, *Lost/Found Item Report*, control number, shall be maintained in the organizational stamp databases for a minimum of 3 years. Once a stamp is reported lost, the stamp number shall not be reissued for 1 year from the date lost. A stamp reissue request from the assigned supervisor shall be required prior to another stamp being issued. When caps only are lost, a replacement cap will be issued without re-issue of a new maintenance stamp after compliance IAW all FOD procedures.

7.4.3.10. **(Added)** Annual maintenance stamp inventory documentation shall be kept on file by organizational stamp managers until replaced by the following year's inventory.

7.4.3.11. **(Added)** Organizations shall conduct an annual maintenance stamp inventory including unissued stamps. A summary of the results shall be forwarded to OO-ALC Maintenance Training Flight (OO-ALC/OBHA) upon completion.

7.4.3.11.1. **(Added)** An annual inventory summary shall include as a minimum, total number of stamps assigned by type with a status of active/in use, lost, destroyed, or unissued. Stamps not reconciled with the inventory shall include a status, i.e., deployed active duty, TDY, illness. Non-reconciled stamp(s) shall be cleared from TSS Stamp Manager Open Audits module when the new completed audit has shown stamp(s) is/are in the same status from the previous annual audit.

7.4.3.11.2. **(Added)** Deficiencies discovered during the annual inventory shall be reconciled and updated with the TSS/PAC stamp database.

7.4.3.11.3. Added) Once a new group annual audit is launched, all prior open annual work center audits with non-reconciled stamps will be closed. Explanation should be added to the comments section of the non-reconciled stamp to note carry over to next audit.

7.4.3.11.4. **(Added)** The following procedures shall be followed to accomplish annual maintenance stamp inventories:

7.4.3.11.4.1. **(Added)** Organizational stamp managers shall provide stamp inventory listings to all appropriate flights. These listings shall contain employees' names and maintenance stamp number(s).

7.4.3.11.4.2. **(Added)** The supervisors shall have the employees place their stamp impressions next to the stamp number on the stamp inventory listing. The supervisor shall inspect the stamp impression to ensure it is the correct number and is legible, and that the maintenance stamp cap is marked with the issued stamp number. Any discrepancies shall be noted, the supervisor shall sign and date the completed stamp inventory listing and forward it to the organizational stamp manager.

7.4.3.11.4.3. **(Added)** Group/squadron commanders shall ensure all stamp inventory listings are returned. Organizational stamp managers shall ensure all entries are stamped, and each stamp inventory listing is signed by the responsible supervisor.

7.4.3.12. **(Added)** 309 MMXG GSUs will maintain a supply of maintenance stamps, issued from 309 MMXG. The designated representatives will issue, control, and inventory all stamps.

7.4.4.1. **(Added)** The OO-ALC stamp program authorizes fourteen different stamps for use by personnel in accomplishing their assigned functions. **NOTE:** There are stamps in the OO-ALC stamp program that are not "maintenance stamps" for the purpose of this instruction and will not be used to certify WCD tasks. Stamps are for the exclusive use of personnel to whom they are issued and shall not be used by any other individual for any reason. Stamps M, N, P, IET, C, MRT, and Q have mandatory issue and use requirements. Additional stamps issued are D, EI, INERT, K, T, and U. It is not expected or required that organizations shall use or issue all fourteen different types of stamps. An organization has the right under this supplement to issue only stamps in their assigned blocks. Process engineering will use a wet-ink signature instead of a stamp.

7.4.4.2. **(Added)** 309 MMXG. Temporary issuance and use of P-Stamps is authorized for non-production supervisors and their designated representatives when conducting a 100 percent review of each task on each work control document opened and in use. To certify the completion of the oversight, the non-production supervisor or their designated representative, will "P" stamp the top right-hand corner of the AFSC Form 500. Stamps will be turned in to the group stamp manager when the 100 percent task review is completed.

7.4.4.2.1. **(Added)** P-Stamps may be issued to supervisors and/or designated alternate at the discretion of the group.

7.4.4.2.2. **(Added)** C-Stamps issued to production schedulers who verify that WCDs have been completed and all time has been taken. The scheduler reviews, stamps and dates the completed WCDs to ensure all required certification blocks have been stamped and dated.

7.4.4.2.3. **(Added)** MRT and PAO may be accomplished electronically and may not physically exist in all squadrons.

7.4.4.2.3.1. **(Added)** MRT stamps are issued to 309 AMXG forms and records personnel to denote accomplishment of X-coded tasks on WCDs. MRT and PAO are accomplished electronically and do not physically exist in all squadrons.

7.4.4.2.4. **(Added)** E&I stamps are issued to evaluators and inspection personnel to authorize work for back shops.

7.4.4.2.5. **(Added)** D - Aircraft Examination & Inventory Stamp: Issued to inspectors who perform an incoming inspection on the various weapon systems after the aircraft has been prepped for depot maintenance.

7.4.4.2.6. **(Added)** U- Delta Stamp. Issued to qualified maintenance personnel to:

7.4.4.2.6.1. **(Added)** Identify Air Force property on condition tags or labels if another type of maintenance stamp has not been issued. All other OO-ALC maintenance stamps may be used to stamp condition tags or labels.

7.4.4.2.6.2. **(Added)** Identify work to be accomplished on components by certified mechanics other than E&I personnel.

7.4.4.2.7. **(Added)** The process engineering signature may be used to halt an operation or task:

7.4.4.2.7.1. **(Added)** If production needs to be halted at a specific operation or task, the process engineer will use the words "Halt Production" in red followed by more detail. The process engineer will print, sign and date the operation block where work must be stopped.

7.4.4.2.7.2. **(Added)** Production shall not proceed on or beyond the operation having the signature and "Halt Production" notation until an additional signature is applied to "Resume" production.

7.4.4.2.8. **(Added)** Authorized maintenance stamp users shall correct their stamping and dating errors by writing “VOID” in red across the error. The correct information will be entered and stamped/dated as close as possible to the correction.

7.4.4.3. **(Added)** OO-ALC Stamp Program Manager is:

7.4.4.3.1. **(Added)** Appointed in writing by the OO-ALC/CC and acts as the OO-ALC OPR to oversee the maintenance stamp program.

7.4.4.3.2. **(Added)** Conducts a yearly review of organizational stamp programs.

7.4.4.3.3. **(Added)** Maintains copies of organizational stamp manager assignment letters.

7.4.4.3.4. **(Added)** Assigns blocks of maintenance stamp numbers to each organization. Organizations are required to notify the OO-ALC Stamp Program Manager of any changes, deletions, or additions to their blocks of assigned numbers.

7.4.4.4. **(Added)** Group or squadron commanders will:

7.4.4.4.1. **(Added)** Provide executive oversight and resources for their respective organizational stamp programs.

7.4.4.4.2. **(Added)** Appoint an organizational stamp manager, in writing, and provide a copy of the memorandum to the OO-ALC Stamp Program Manager for maintenance stamp management.

7.4.4.4.3. **(Added)** Ensure all stamp inventory listings are returned by supervisors to organizational stamp managers.

7.4.4.5. **(Added)** Organizational stamp managers will:

7.4.4.5.1. **(Added)** Receive and process original issue and replacement stamp requests for all organizational personnel requiring stamps.

7.4.4.5.2. **(Added)** Procure and secure stamps to fill requests.

7.4.4.5.3. **(Added)** Maintain organizational information in the TSS stamp database.

7.4.4.5.4. **(Added)** Conduct an annual inventory of all stamps.

7.4.4.5.6. **(Added)** Assign stamps to qualified employees and record the required information in the PACS/TSS stamp database. The expeditionary maintenance personnel flight shall document the information in PACS/TSS and CAMS.

7.4.4.5.7. **(Added)** Ensure maintenance stamps caps are marked with the stamp number of the issued stamp at the time of issue.

7.4.4.5.8. **(Added)** Issue new stamps to employees whose stamps have become illegible and update the PAC/TSS stamp database.

7.4.4.5.9. **(Added)** Document stamps that are lost, destroyed or illegible in database, alert other group stamp managers within the complex of the loss.

7.4.4.5.10. **(Added)** Ensure all returned stamp annual audit inventory listing entries are either stamped, or a disposition of the stamp is given and the listing is signed by the supervisor.

7.4.4.5.11. **(Added)** Maintain stamp annual audit inventory listings and the inventory summary on file until replaced with the following year's inventory.

7.4.4.5.12. **(Added)** Sign and date a retiring, separating or transferring employee division/squadron out processing checklist as required, upon receipt of their assigned stamps.

7.4.4.6. **(Added)** First-line supervisors will:

7.4.4.6.1. **(Added)** Request appropriate stamps from the organizational stamp manager via e-mail or in writing when required training is completed.

7.4.4.6.2. **(Added)** Notify the organizational stamp manager, via e-mail or in writing, of any stamp revocations, including the employee's name, office symbol and stamp number, and return the revoked stamp to the organizational stamp manager.

7.4.4.6.3. **(Added)** Conduct a thorough search for any maintenance stamp or cap reported lost, and if not found, complete AFMC Form 310, and notify the organizational stamp manager.

7.4.4.6.4. **(Added)** Notify and return a found stamp and/or cap to the respective organizational stamp manager when a stamp is found to close the AFMC Form 310 filed for the lost stamp and notify group/squadron tool manager.

7.4.4.6.5. **(Added)** Assist organizational stamp manager in conducting an annual inventory of all stamps.

7.4.4.6.6. **(Added)** Ensure maintenance stamp caps are marked with the stamp number of the stamp issued during the formal stamp audit.

7.4.4.6.7. **(Added)** Direct employees to return illegible stamps to the organizational stamp manager immediately for replacement and request replacement stamps via e-mail or in writing.

7.4.4.7. **(Added)** Employees will:

7.4.4.7.1. **(Added)** Pick up assigned stamps from the organizational stamp manager.

7.4.4.7.2. **(Added)** Stamp must be in direct line of sight or safeguarded against unauthorized use or loss.

7.4.4.7.3. **(Added)** Report illegible stamps to their first-line supervisor.

7.4.4.7.4. **(Added)** Return stamp to the organizational stamp manager when transferring from a position requiring a stamp, separating, retiring or transferring from their current organization.

7.4.4.7.5. **(Added)** Annually provide a stamp impression and examine it with the supervisor for inventory and legibility purposes.

7.4.4.7.6. **(Added)** Conduct a thorough search and notify the first-level supervisor if stamp or cap becomes lost.

7.4.4.7.7. **(Added)** Maintain legible stamp number on maintenance stamp caps with the number of the stamp issued.

7.4.4.7.8. **(Added)** Not modify maintenance stamp from its original issued construction.

7.4.4.10. The Production Support Section will notify DLA to capture demand history DHA when a workaround is used to prevent a work stoppage for a DLA-managed item.

7.5.3. **(Added)** Coordinates with headquarters providing interpretation and guidance on technical data issues and processes when not defined in other directives.

7.5.3.1. **(Added)** As required, develops policies and procedures on technical data program requirements when not defined in other directives.

7.5.4. **(Added)** As required attends monthly complex technical order management meetings. Elevates issues and concerns to this committee impacting the technical data program.

7.5.5. **(Added)** . Participates as a subject matter expert in the development of command and local technical data training courses.

7.5.6. **(Added)** Government organizations participating in contract TODO services.

7.5.6.1. **(Added)** Ensures main and sub-account TO libraries have a primary and alternate Government Technical Data Library POCs appointed using the OO-ALC Form 536, *Government Technical Order (TO) Library POC Appointment/Change*. Route OO-ALC Form 536 to 309 MXSG mission support organization (OBM).

7.5.6.2. **(Added)** Ensures appointed main and sub-account primary and alternate Government Technical Data Library POCs receive Government Technical Data Library POC training, AFMC course # MHPADM9800400DL, within 90 days of appointment. Completed training will be documented in the TSS and if applicable, annotated in Section II of the employee's PAC record.

7.5.6.3. **(Added)** Ensures the technical data charge out system procedures identified in **paragraph 7.5.7.6** and are enforced. Charge out system also applies to COTS manuals.

7.5.6.4. **(Added)** Ensures technical data extract procedures are enforced.

7.5.6.5. **(Added)** Ensures all appointed main and sub-account primary and alternate Government Technical Data Library POCs perform and document an annual Technical Data Library Requirements Review.

7.5.6.6. **(Added)** The organization will ensure any new and/or additional TO requirements to the Government Technical Data Library POC routes a completed OO-ALC Form 535, *Government Library Technical Order Distribution Requirements*, to the TODO. If additional requirements result in increased costs, the OO-ALC/OBC contract functional manager will be contacted and forward the request to the OO-ALC/PKX contract officer who will request a cost proposal from the contractor.

7.5.6.7. **(Added)** Ensures a COTS POC is appointed for the purpose of providing oversight ensuring proper management, tracking, and controlling of COTS manuals required by any RCC within the organization. The level of management for this POC is at OO-ALC group discretion. Additionally, each RCC maintaining COTS manuals will assign a RCC POC, see **paragraph 7.5.3.8** for the RCC COTS POC duties and responsibilities.

7.5.7. **(Added)** Government Technical Data Library POC:

7.5.7.1. **(Added)** Performs an annual Technical Data Library Technical Order Review and documents review by printing name and date review completed on first page of ETIMS library requirement listing. Ensures assigned sub-account POCs perform and document annual technical order reviews on provided requirement listing. Maintains documented technical order review in the main POC binder. Annual technical reviews shall be performed by the end of the month the review is due. **NOTE:** Sub-account POCs are not required to maintain hard copy documentation of annual "Technical Order Reviews" completions. The main technical data library POC will maintain all technical data library sub-accounts documentation of technical order review completion.

7.5.7.2. **(Added)** Notifies the designated TODO POC to be added to the daily TO distribution listing.

7.5.7.3. **(Added)** Main Technical Data Library POC binders will contain the following minimum documentation:

7.5.7.3.1. **(Added)** Completed and legible OO-ALC Form 536.

7.5.7.3.2. **(Added)** As applicable submitted OO-ALC Form 535. This form can be removed when all requested updates have been accomplished by contract TODO personnel and verified by the main and/or sub-account primary or alternate government POC.

7.5.7.3.3. **(Added)** Documented annual technical data library requirements reviews for all sub-accounts for that main TO file.

7.5.7.3.4. **(Added)** If applicable, completed AFMC Form 310.

7.5.7.3.5. **(Added)** Copy of training certificate completion for the government technical data library POC training, AFMC course # MHPADM9800400DL.

7.5.7.4. **(Added)** Sub-account technical data library binders will contain the following minimum documentation and filed at the end of that specific technical data library.

7.5.7.4.1. **(Added)** Completed and legible OO-ALC Form 536.

7.5.7.4.2. **(Added)** Submitted OO-ALC Form 535.

7.5.7.4.3. **(Added)** Copy of training certificate completion for government technical data library POC training AFMC course # MHPADM9800400DL.

7.5.7.5. **(Added)** Group quality organizations shall perform and document required organizational TO inspections IAW established guidance contained in TO 00-5-1 and this supplement.

7.5.7.5.1. **(Added)** Government quality organization identified deficiencies against the contract TODO will be entered in the Logistics Evaluation Assurance Program (LEAP) and routed to the OO-ALC Contracting Officer's Representative (COR) for corrective and preventative actions.

7.5.7.5.2. **(Added)** Government QAS identified TO deficiencies against the government will be entered in LEAP and routed against the applicable organization RCC supervisor and/or government technical data library POC for corrective and preventive actions.

7.5.7.6. **(Added)** Technical Data Charge Out System. Removed technical data will be returned within a maximum of 5 working days to the library. The following procedures shall be used:

7.5.7.6.1. **(Added)** OO-ALC organizations will use AF Form 614, *Charge Out Record,* to account for any technical data binder removed from the vicinity of a technical data library. Minimum documentation requirements for the AF Form 614 are as follows: 1) Technical data binder number; 2) legible name and phone number; 3) date binder removed from library. The completed AF Form 614 will be placed in the same location of the removed technical data binder. Once the technical data binder is returned, remove the AF Form 614 and line through the information.

7.5.7.6.2. **(Added)** If technical data is required in excess of 5 working days an AF Form 1297, will be used and attached to the AF Form 614 and placed in the same location of the removed technical data and/or technical data binder. Technical data signed out on an AF Form 1297 will not be signed out for more than 30 consecutive calendar days. Technical data signed out to support TDY operations are excluded from the 30 consecutive calendar day requirement. Technical Data signed out on AF Form 1297 in direct support of TDY operations will be returned to the technical data library within 2 working days upon return to home station. Once the technical data and/or binder is returned, remove the AF Form 614 and line through the information. Provide the AF Form 1297 to the individual (or destroy). **NOTE:** Any deviation from the above TO charge out procedures will be fully coordinated through the OO-ALC Technical Data Program Manager.

7.5.7.7. **(Added)** Lost technical data the government technical data library POC will be notified when any technical data and/or technical data binder is missing. If the technical data cannot be found within 2 hours, an AFMC Form 310 will be initiated by the designated government technical data library POC. Follow procedures as required by your organization, the same as reporting a lost item. A copy of the completed AFMC Form 310 will be filed in the POC binder.

7.5.7.8. **(Added)** RCC COTS POC.

7.5.7.8.1. **(Added)** Appointed in writing by RCC supervisor.

7.5.7.8.2. **(Added)** Determines if a TO number is assigned to all centrally acquired equipment manuals maintained by the RCC. If the manual has a TO number assigned, turn the manual over to the government technical data library POC so this POC can notify the appropriate contract TODO personnel to add the TO to the library and update TO records.

7.5.7.8.3. **(Added)** Establishes and maintains a COTS library for manuals not requiring a TO number. Location of the library will be locally determined; however, every effort should be made to locate the library in close proximity to existing TO libraries so there is no question as to the availability of the manuals. The COTS library must be accessible to all who use the equipment. Ensures COTS manuals are numbered to maintain positive control and filed in numerical and/or alphabetical sequence. Numbering will be locally determined and will be consistent throughout the group.

7.5.7.8.4. **(Added)** Develops and maintains a COTS library binder. The binder shall be placed with the COTS library. At a minimum, the binder shall contain:

7.5.7.8.4.1. **(Added)** 309 MXSS digital COTs will be maintained in EFEMS and an inventory report will be available for inventory purposes.

7.5.7.8.4.2. **(Added)** The master COTS manual listing for manuals contained in COTS library. At a minimum, the master listing will contain the following elements: manufacturer, nomenclature, and equipment supported.

7.5.7.8.4.3. **(Added)** RCC COTS POC appointment letter.

7.5.7.8.5. **(Added)** COTS library shall have an annual technical review ensuring:

7.5.7.8.5.1. **(Added)** The need for each manual still exists and the correct manual is on file for equipment possessed. Each manual in the COTS library shall have a list of effected page (LEP) check. Annotate completion of LEP on COTS title page or LEP with the date, reviewer initials. Page checks are required for brief manuals or COTS manuals without LEPs and need to be documented with the date and reviewer initials.

7.5.7.8.5.2. **(Added)** Add any new COTS manuals to master COTS listings ensuring new COTS manuals are numbered.

7.5.7.8.5.3. **(Added)** The annual technical review shall be documented on the first page of the master COTS Listing. Subsequent reviews will require lining out the old annual review date and entering the new annual review date.

7.5.7.8.5.4. **(Added)** Annual technical reviews shall be performed by the end of the month the review is due.

7.5.7.8.6. **(Added)** Ensures the charge out system identified within **paragraph 7.5.7.6** of this instruction is enforced and used to account for all COTS manuals removed from the COTS library. COTS manuals will be returned within 5 working days or at the request of the COTS POC.

7.5.7.8.7. **(Added)** A process order will be developed to establish procedures for equipment operations where COTS manuals are not available or are inadequate IAW AFSCMAN 21-102, Chapter 7, *Work Control Document (WCD) and Technical Data*.

Chapter 9

IMPOUNDMENT PROCEDURES PROGRAM

9.4. Local Procedures.

9.4.1. **(Added)** Impoundment of aircraft, major end item, or equipment.

9.4.1.1. **(Added)** OO-ALC system assets involved in any incident will be placed into a "maintenance freeze" status until its determined if it meets impoundment criteria. All maintenance activity will cease except to safe the asset, or to isolate the area and notify appropriate group control center who will in turn notify the group QA section. QA will contact the Impound Authority (IA) with recommendation to impound or not. No other actions will be taken until the IA determines if impoundment is necessary of all or a specific item involved in the incident. The IA or Impound Release Authority are the only individuals authorized to release asset(s) from "Maintenance Freeze" conditions.

9.4.1.2. **(Added)** Reasons for Impoundment.

9.4.1.2.1. **(Added)** An uncommand activation of onboard systems, emergency power unit, fire suppression, egress, stores cartridges etc.

9.4.1.2.2. **(Added)** Total loss of hydraulic system pressure in flight.

9.4.1.2.3. **(Added)** Lightning strike in flight.

9.4.1.2.4. **(Added)** Contaminated fluids (i.e., in aircraft, engine, equipment, test systems, plating tanks). Fluids are considered contaminated when they possess foreign particles, material, or are contaminated from an outside source (i.e., metal, dirt, water). **NOTE:** Hydraulic fluid is not considered contaminated when it is crossed from another system on an aircraft.

9.4.1.7. **(Added)** Nose landing gear/main landing gear tire blowout during taxi or take-off.

9.4.1.8. **(Added)** All OO-ALC and 514th Flight Test Squadron employees are empowered and obligated to recommend to the impoundment authority the impoundment of an aircraft, components, or support equipment when they are aware of an impounding condition.

9.4.1.9. **(Added)** If the reason for impoundment is determined to be reportable IAW Department of the Air Force Instruction (DAFI) 91-204, *Safety Investigations and Reports*, (this includes support equipment damage exceeding $2,000), the appropriate safety office will appoint the investigation official.

9.4.2. **(Added)** AFTO Form 95, *Significant Historical Data*, WCD.

9.4.2.1. **(Added)** For aircraft, engines, and MEIs in production phase and equipment without an AFTO Form 244, *Industrial/Support Equipment Record*, document reason for impoundment on the WCD following procedures in **paragraph 7.2.25** of this instruction.

9.4.2.2. **(Added)** For aircraft in the flight test phase with forms open:

9.4.2.3. **(Added)** Initiate AFTO Form 781A and complete as follows:

9.4.2.4. **(Added)** Item 1: "AIRCRAFT IMPOUNDED FOR INVESTIGATION OF:" (state problem), "SEE PAGE___ ITEM___ FOR ORIGINAL DISCREPANCY." Enter "IMPOUNDMENT OFFICIAL: _____," and a RED X in the symbol block. Use of preprinted AFTO Form 781A is authorized. **NOTE:** Preprinted AFTO Forms 781A are not authorized for F-22/F-35 aircraft.

9.4.2.5. **(Added)** For the F-22, add an aircraft impoundment warning in the IMIS forms section in the Portable Maintenance Aid (PMA) on all three work center event entries under the primary job control number or WCD IAW **paragraph 9.4.2.3**. F-35 annotation will be made in the forms section of ALIS.

9.4.2.6. **(Added)** Enter in AFTO Form 781A Item 2: "ALL MAINTENANCE DEFERRED UNTIL AIRCRAFT RELEASED FOR MAINTENANCE BY IMPOUNDMENT OFFICIAL." Enter a RED X in the symbol block. **NOTE:** For F-22, annotation will be made in the IMIS forms section of the PMA; F-35 annotation will be made in the forms section of ALIS.

9.4.2.7. **(Added)** Enter in AFTO Form 781A Item 3: "FORMS AND CORRECTIVE ACTION TO BE REVIEWED BY IMPOUNDMENT OFFICIAL PRIOR TO RELEASE FROM IMPOUNDMENT." Enter a RED DASH in the symbol block. **NOTE:** For F-22, annotation will be made in the IMIS forms section of the PMA; F-35 annotation will be made in the forms section of ALIS.

9.4.2.8. **(Added)** Draw a RED BORDER on all four sides of the impoundment AFTO 781A. **NOTE:** Non-Applicable to the F-22/F-35. No Red Border is available in ALIS/IMIS forms section.

9.4.2.9. **(Added)** For lost items, follow the procedures in the lost tool search package (on aircraft or off aircraft) for aircraft in production. If the aircraft is in flight test, ensure a Red X is placed on the AFTO Form 781A, a lost tool package is initiated, and the procedures of this supplement are followed. **NOTE:** F-22 annotation will be made in the IMIS forms section of the PMA; F-35 annotation will be made in the forms section of ALIS.

9.4.3. **(Added)** For Missiles:

9.4.3.1. **(Added)** 309 MMXG Consolidated Munitions Control Center (CMCC) personnel, in coordination with QA, the engineering authority, and/or the applicable production supervisor will complete an (impoundment) AFTO Form 95. The AFTO Form 95 will be inserted into a protective document that allows visibility on both front and back sides and attached to the equipment in question. The AFTO Form 95 will be completed as follows:

9.4.3.1.1. **(Added)** The AFTO Form 95: May be completely red or have a red border around entire form (use a bold/wide red marker to make the border).

9.4.3.1.2. **(Added)** Block 1: Mission design series, type model and series and asset classification. (Minuteman: LGM30G).

9.4.3.1.3. **(Added)** Block 3: Enter the equipment serial number.

9.4.3.1.4. **(Added)** Block 4: Enter date.

9.4.3.1.5. **(Added)** Block A: Insert a RED X.

9.4.3.2. **(Added)** Block B: Enter "IMPOUNDED" using BOLD/WIDE letters. Then add a clear and concise statement indicating the reason for impoundment, the name of the impoundment authority with phone number, and name of the assigned impoundment official and phone number.

9.4.3.2.1. **(Added)** Document any special procedures, limitations, and/or restrictions associated with handling, transportation, or storage.

9.4.3.2.2. **(Added)** Part number for any part removed.

9.4.3.2.3. **(Added)** Serial number for any part removed.

9.4.3.3. **(Added)** Block C: Work center where asset is located. **NOTE:** (Added) (OO-ALC) If a missile motor or booster is impounded, the description on the reverse side of the AFTO Form 95 will be the exact verbiage as entered into the IMDS (Tab: Minuteman Motors) under the "Remarks" section. This exact verbiage will also be used in **paragraph 9.4.3.4** email traffic.

9.4.3.4. **(Added)** Impoundment official will provide an email to the 581st Missile Maintenance Squadron MXDPB POC for entry into IMDS, as applicable. Descriptive comments shall be placed in the "Remarks" section pertaining to the missile motor or booster in question.

9.4.4. **(Added)** For Engines/Equipment:

9.4.4.1. **(Added)** If F-16/A-10/F-22/F-35/C-130 or T-38 engine shop is called to perform inspections on installed engines on impounded aircraft, the technicians will perform tasks IAW the applicable aircraft TO, and sign off all applicable AFTO Forms 781A discrepancies under the aircraft impoundment. If the engine is removed, engine shop procedures outlined in Section 9.4.2.1 of this chapter will be followed. **NOTE:** F22 annotation will be made in the IMIS forms section of the PMA; F-35 annotation will be made in the forms section of ALIS.

9.4.4.2. **(Added)** When impounding equipment, enter on AFTO Form 244, the reason for impoundment, outlined in red, and enter a Red X in the symbol block.

9.4.4.3. **(Added)** Releasing authority will review forms and corrective action and clear the Red X on AFTO Form 244.

9.4.5. **(Added)** The OO-ALC Operations Center, (801) 777-3238 will be notified when a maintenance freeze or impoundment decision has been made within the OO-ALC.

9.4.5.1. **(Added)** Contact the 309 MMXG CMCC, (801) 777-6618 or (801) 586-3781 for impoundment within the 309 MMXG. CMCC will notify OO-ALC Operations Center, (801) 777-3238, and OO-ALC/QASM.

9.4.5.2. **(Added)** Contact the 309 AMXG Maintenance Operations Center (MOC) for impoundment within the 309 AMXG. 309 AMXG/MOC will notify the OO-ALC Operations Center. **NOTE:** If the 309 AMXG/MOC is closed, notify the OO-ALC Operations Center.

9.4.6. **(Added)** Impoundment official will:

9.4.6.1. **(Added)** Review and complete all sections of applicable and developed checklist.

9.4.6.2. **(Added)** Attend the aircrew debriefing (if possible), or be debriefed by aircrew (if required).

9.4.6.3. **(Added)** Review the aircraft binder (AFTO Forms 781A) and record jacket to determine if the aircraft has a history of the discrepancy and if maintenance was performed on that system, or in that area. **NOTE:** F-22 annotation will be made in the IMIS forms section of the PMA; F-35 annotation will be made in the forms section of ALIS.

9.4.6.4.1. **(Added)** Undocumented engine FOD to 5th Generation aircraft (F-22 or F-35) requires immediate aircraft impoundment. Follow all impoundment procedures in accordance with AFMCI 21-100.

9.4.6.4.1.1. **(Added)** Once the aircraft is impounded, the impoundment official will coordinate with the Ogden Air Logistics Complex Safety (OO-ALC/SE) occupational safety manage (OSM) to release the aircraft for engine shop evaluation.

9.4.6.4.1.2. **(Added)** The aircraft will not be released for any maintenance without coordination with OO-ALC/SE.

9.4.7. **(Added)** Make an entry in the AFTO Form 781A to ensure all recoverable stored data is collected prior to application of electrical power, if applicable. **NOTE:** F-22 annotation will be made in the IMIS forms section of the PMA; F-35 annotation will be made in the forms section of ALIS.

9.4.8. **(Added)** All parts removed pertaining to the impoundment will be assessed for the necessity of product quality DR or engineering inspections procedures outlined in TO 00-35D-54-WA-1, *USAF Material Deficiency Reporting, Investigation, System for Category Descriptions*. This will be coordinated through OO-ALC/QA group deficiency monitor.

9.4.9. **(Added)** Prior to impound official releasing an aircraft or equipment for maintenance, the impound official will conduct a preliminary assessment to ensure no non-impound related maintenance will be performed that will hinder the investigation or correction of an impounded aircraft or equipment.

9.4.9.1. **(Added)** (Added) The impound official may release the aircraft or equipment for maintenance once an action plan has been formed to determine the cause and correction of impound, and once a preliminary assessment has been accomplished to assess feasibility of non-impound maintenance. Enter "AIRCRAFT RELEASED FOR MAINTENANCE IAW AFSCMAN 21-102 *Depot Maintenance Management* Chapter 9" in the corrective action block of the AFTO Form 781A entry made in paragraph **9.4.2.4 or 9.4.2.5** of this instruction. Signature of the impoundment official is required in the "Inspected By" block only. **NOTE:** F-22 annotation will be made in the IMIS forms section of the PMA; F-35 annotation will be made in the forms section of ALIS

9.4.9.2. **(Added)** Ensure all work done on aircraft is properly documented in the active AFTO Forms 781A, and the appropriate depot work control document. **NOTE:** F-22 annotation will be made in the IMIS forms section of the PMA; F-35 annotation will be made in the forms section of ALIS.

9.4.9.3. **(Added)** Review the applicable maintenance forms with impoundment team members and technicians to ensure impoundment problem has been solved.

9.4.9.4. **(Added)** After reviewing the AFTO Forms 781A, sign off the corrective action "FORMS AND CORRECTIVE ACTION Complied with (C/W)". Signature of the impoundment official is required in the "Inspected By" block only. **NOTE:** For F-22, this will be accomplished in the IMIS forms section of the PMA. F-35 annotation will be made in the forms section of ALIS. Clear impoundments IAW AFMCI 21-100 paragraph 9.5.2 – 9.5.4

9.5.1. **(Added)** Refer to SOIs 1505.01, *Actions Following Aircraft Mishap/Accident,* and 1505.14, *Asset Lockdown Procedures.*

Chapter 10

TOOL AND EQUIPMENT MANAGEMENT

10.3. Tool Control Manager (TCM) Responsibilities.

10.3.1. **(Added)** Group TCM.

10.3.1.1. **(Added)** Provide policy recommendations, management of the lost tool program, help resolve issues with loaned tools, monitoring of QA findings for trends, developing corrective action plans for systemic tool issues within group, brief group leadership on trends and concerns and report the same to the complex TCM. Coordinate tool template changes. Order tool kits through (309 MXSG/AC) using Electronic Facility Equipment Management System (EFEMS).

10.3.2. **(Added)** The main warehouse assigned to 309 MXSG is the only organization authorized to buy or procure hand tools. Hand tools are defined by the 51XX stock class and other items identified by the main warehouse. At no time will units purchase any hand tools without coordinating with the complex tool manager.

10.4. Tool Accountability.

10.4.2.1. **(Added)** Supervisors are ultimately responsible for the Tool Kits (TK) in their area.

10.4.2.1.1. **(Added)** Upper-level managers will ensure that in the least, an acting supervisor will take responsibility for tool kits immediately following supervisor personnel change.

10.4.3.1. **(Added)** Group or squadron supervisors will ensure that the tool cribs are notified when employees change work areas, through use of organizational in/out processing forms.

10.4.4.1.1. **(Added)** F-35 Program supplied tools and equipment will use CMMS for accountability and control.

10.5. Tool Kits.

10.5.8.1. **(Added)** Minor pen and ink changes may be made to the Tool Kit Custody Receipt Listing (TKCRL) such as drawer location and piece counts. Changes will be initialed by both the 309 MXSG tool representative and the employee. All copies of the TKCRL will match. An OO-ALC Form 515, *Tool Request* or FEM-generated request will be initiated for these changes when deemed necessary by the group TCM and approval of complex TCM. A copy of the TKCRL will be provided to the employee and maintained with the TK at all times.

10.5.9.1. **(Added)** Template changes will include new TKCRL, tools, and foam (as needed). Warehouse personnel will notify group TCM of completion.

10.5.12.1. **(Added)** Any shadow/silhouette that is no longer being used to show the location of a tool or supplemental item will be filled in or marked empty.

10.5.12.1.1. **(Added)** Occasionally, separate line items on a TKCRL may be shadowed together for tool usage purposes. Examples of this are the plastic hammer and two inserts, as well as a sealant gun and the hose. Cases and tubes with lid may contain other items on TKCRL/supplemental and will be shadowed together.

10.5.12.1.2. **(Added)** Some items have multiple pieces that come together from the manufacturer but do not have a container or are impractical to shadow together. These items may be shadowed separately by 309 MXSG tool warehouse as long as the description describes the items or notes as piece count (e.g., drill with key; paint gun_ pcs). Items that are too small to be marked are still required to be stored in a container.

10.5.15.1. **(Added)** When the shop provides the TK storage device (i.e., Vidmar or cabinet), the supervisor is responsible for the locking mechanism.

10.5.16.1. **(Added)** Secured tool rooms or work centers that do not require tool kits to be locked during shift must be approved by the complex TCM.

10.5.20.1. **(Added)** When a single employee is temporarily assigned a Consolidated Tool Kit (CTK), the employee will sign/check out the key on an AF Form 3126, *General Purpose (8-1/2"x11")*/AF Form 3136, *General Purpose (11"x8-1/2")*. Employee will perform a visual inspection of the TK. At the beginning and end of the shift, the user will perform a tool inventory of the TK and document on page 1 of the AFSC Form 309, *AFSC Tool Control Inventory Record*. When the employee no longer requires the CTK, he/she will then sign/check in the key to the secure lockable storage device.

10.6. Temporary Loaned Tools.

10.6.2.1. **(Added)** Tools and equipment must be returned to the Production Support Center (PSC) for re-issue upon expiration of the 30-day loan unless installed on aircraft. Tools/equipment installed on aircraft must be verified by the supervisor/representative that they are still installed on the aircraft before renewal.

10.6.2.1.1. **(Added)** Expendable items, such as drill guides, being turned into the PSC/Tool Crib, that have been adjusted in length for use and are still serviceable, will be placed back in the serviceable bin/drawer for storage.

10.6.2.2. **(Added)** Tools checked out of a tool crib/PSC to support a TDY will be requested on an OO-ALC Form 515 and tracked in EFEMS. A copy of the OO-ALC Form 515 will be used as a TKCRL for the duration of the TDY. TKs left in place at TDY locations will be inventoried and transferred between team chiefs on an OO-ALC Form 515. A copy of the OO-ALC Form 515 will be forwarded to the issuing tool crib by the returning team chief upon his/her return. While TDY, team chiefs will coordinate with the issuing tool crib on broken/replacement tools.

10.7. Other Items in TKs.

10.7.2.1. An item is considered a consumable if after limited usage, it does not maintain its original configuration and is considered used up (i.e., tape, safety wire, string).

10.7.2.2. **(Added)** Consumables in a tool kit will be shadowed/silhouetted by TK owner and added to the supplemental list.

10.7.3.1. **(Added)** Expendable items are items that must be frequently replaced due to high use, excessive wear, breakage, or otherwise become unfit for use. Expendable tools include cutting tools, drill guides, reamers, screw extractors, hacksaw blades, apex bits, etc.

10.7.3.2. **(Added)** Expendable items such as drill guides, that need adjustment, i.e., length, in order to be properly aligned, may be adjusted to fit by removing enough material to ensure the applicable length dimension. Material removed will be discarded appropriately, i.e., trash, recycle, etc. to ensure the maintenance area remains FOD free. These items, when adjusted, are not required to be turned in unless unserviceable and may be continually used. These expendables will be marked with the tool kit ID and cut into the foam if possible or placed in a container if too small to mark, IAW **paragraph 10.8**.

10.7.7.1. **(Added)** Non-disposable personal protective equipment kept in an individual tool kit (ITK) will be shadowed/silhouetted by TK owner and added to the supplemental list.

10.8. Markings & Traceability.

10.8.2.1. **(Added)** All equipment not stored in a tool kit will be marked with the shop office symbol.

10.8.6.1. **(Added)** The complex TCM is the final decision maker on piece counts.

10.8.9.1. **(Added)** Supervisors will ensure all tool kits in their area of responsibility are externally marked with the tool kit number and shop designator/office symbol.

Table 10.2. (Added) ALC Identification (ID) Number Marking Codes.

GSU marking methodology.	
Code	**OO-ALC GSU**
HLRA	309 AMXG-Randolph
HLSCP	309 EMXG-Kadena
HLV	309 MMXG-Vandenberg
FWHR	309 MMXG-FE Warren
MBMRM	309 MMXG-Malmstrom
MPSR	309 MMXG-Minot
AM	309 AMARG

10.8.12.1. **(Added)** Tools/equipment that are on the "Non-Mark List" but have correct markings, are not required to have the marking removed.

10.8.12.2. **(Added)** All TKCRLs printed prior to the date of this publication will continue to follow Non-Marked Tool letter guidance dated 19 March 2013. Upon printing of a new TKCRL, the guidance in this publication will be followed. The Non-Marked Tool list will be maintained in EFEMS or other approved OO-ALC Management Information System (MIS) beginning the date of this policy.

10.8.12.3. **(Added)** Tools identified in the "MARKED" column as "Y" are required to be marked with a tool kit number.

10.8.12.4. **(Added)** Tools or sets identified in the "MARKED" column as "N" are not required to be marked with a tool kit number. If a tool is marked "N" on a TKCRL, and it is currently etched with the correct tool kit number, the tool will be replaced through attrition.

10.8.12.5. **(Added)** Tool sets that contain marked and non-marked tools will be identified with a "Y" in "MARKED" column and an asterisk (*) in the "DESCRIPTION" on the TKCRL.

10.8.12.6. **(Added)** The 309 MXSG Warehouse Supervisor, 309 MXSG inspector/trainers, or the OO-ALC Tool Program Manager, will determine which items will not be marked.

10.8.14.4. **(Added-OO-ALC)** Cleco and Wedgelocks contained in a tool kit will be marked with the tool kit ID.

10.9. Inventory and Inspection Requirements.

10.9.1.1.1. **(Added)** Loaned tools refer to tools or equipment checked out from a tool crib or PSC.

10.9.1.1.2. **(Added)** Annotation of AFSC Form 309 for inventory is not required if the tool kit was not used.

10.9.1.1.3. **(Added)** Other contractors performing functions in industrial areas within OO-ALC will be required to have a method for controlling and accounting for tools used, and will be written into their contracts. This program must be outlined in the contractor's quality plan and must be coordinated with the respective contracting officer and contract functional manager or his/her designated representative. All contractors working within OO-ALC will be required to inventory their tools at the beginning of the shift, at the end of each task, and at the end of each shift to check for any lost or missing tools. Any lost tools not found must be reported immediately to the contracting officer, production area supervisor, and MXG tool manager. Control and issue of government provided contractor TKs, kit template, ID numbers, and to establish or revise tool lists or appendages will be accomplished using OO-ALC Form 515.

10.9.1.3.1.2. **(Added)** Supervisor may assign a "designated representative" to perform the beginning and end-of-shift inventory and document each on the AFSC Form 309.

10.9.1.3.1.3. **(Added)** Each shift will have separate AFSC Form 309 cards for each TK used by that shift, to document separate beginning and end-of-shift inspections.

10.9.4.1. **(Added) Paragraph 10.9.4** applies to tool centers/PSCs only.

10.10. Supervisory inspections.

10.10.1.8. **(Added)** OO-ALC supervisors are responsible for ensuring all tool kits assigned to them and their subordinates are inspected at least once every 180 days.

10.11. Procedures for Lost/Found Tool Items.

10.11.1.1. **(Added)** Each AFMC Form 310 will contain a control number that is assigned by the group/complex "TCM".

10.11.1.2. **(Added)** Lost Tools. Tools identified as missing from a TK, tool cribs or a PSC will be reported immediately to the supervisor by the employee who lost a tool (or item) on an AFMC Form 310. The supervisor will also contact the group TCM immediately for official reporting. Tool (or item) owner will document the loss on page 2 of AFSC Form 309. **Not required if tool (or item) was not part of the tool kit.** The supervisor will ensure AFMC Form 310, Block 17a, is signed by the second-level supervisor (if applicable), 17b signed by the third-level supervisor (if applicable), and 17c is signed by the group TCM. Block 18 will be signed by the squadron director, deputy, or higher. The lost tool/item package AFMC Form 310 has a 7-workday suspense back to the group TCM once it is issued. The group TCM will ensure the AFMC Form 310 is complete and has been properly coordinated.

10.11.1.3. **(Added)** In every case, an AFMC Form 310 will be provided to the issuing tool room for tool/item replacement and be maintained in the master TK file. The group TCM will maintain a copy of the AFMC Form 310, and copies will be forwarded to the employee, the TK owner's supervisor, and the complex TCM. For lost stamps, the employee will provide a copy of the AFMC Form 310 to the stamp manager to obtain a new stamp.

10.11.1.3.1. **(Added)** Completed lost report will be sent to issuing personnel (e.g., tool crib or stamp manager). Upon issue, the individual issuing the new item will print their name and date in blocks 11E and 11F on the AFMC Form 310.

10.11.3.1.1. **(Added)** Incoming aircraft will follow the procedures in 10.11.3.1.

10.11.3.2. **(Added)** The supervisor of the mechanic that lost the tool will ensure the MWR/WCD is initiated, to include aircraft in flight test.

10.16. Electronic Tools (E-Tools).

10.16.3. **(Added)** For F-35, refer to SOI 1505.05 Management of PMA.

10.18. Overview of Responsibilities. 309 MXSG/Authorized Contractor (Tool Crib).

10.18.1.1.10.1. **(Added)** Issue no more than one permanently assigned ITK per technician, unless authorized by the group TCM.

10.19. Locally Manufactured/Modified Tools and Equipment (LM/MT&E).

10.19.1.1. **(Added)** Procedures. Expendable items/tools that are designed to be adjusted in length to meet a specific need (i.e., drill bushings) are not considered Modified. Hand tools that change in size or length due to Dressing (i.e., sharpening a chisel or punch, or removing the worn end of a hex driver) IAW T.O. 32-1-101, are not considered modified.

10.19.3.1. All new LM/MT&E requests shall be submitted to the group engineering chief or their designated representative using OO-ALC Form 213, *Locally Manufactured, Developed or Modified, Tools and Equipment (LM/MT&E) Worksheet.*

10.19.3.2. **(Added)** All existing LM/MT&E that do not have a drawing number assigned will be submitted on OO-ALC Form 213 to the group engineering chief or their designated representative for evaluation and approval.

10.19.3.3. **(Added)** The group engineering chief or their designated engineering representative will evaluate all LM/MT&E to determine if a process order is required for use in a production environment; use instructions, restrictions, controls, cautions, warnings, etc.

10.19.3.4. **(Added)** LM/MT&E request approvals will be accomplished on OO-ALC Form 213. The required signatures are the group engineering chief or their designated engineering representative and complex safety office (OO-ALC/SE).

10.19.3.5. **(Added)** The group engineering chief or their designated engineering representative shall be responsible for coordinating the OO-ALC Form 213, LM/MT&E approvals.

10.19.3.6. **(Added)** When procuring tools to be modified, an OO-ALC Form 515 must be completed by the requestor, describing the tool to be modified, reason for the modification and intended use. The OO-ALC Form 515 must then be signed by the supervisor, prior to being taken to the tool crib/PSC. The procured tool will be taken to engineering for modification to the design/drawing.

10.19.5.1. LM/MT&E being turned in to the DLA Disposition Services will have all markings removed.

Chapter 13

FOREIGN OBJECT DAMAGE (FOD)/DROPPED OBJECT (DO) AWARENESS AND PREVENTION PROGRAM AND MISCELLANEOUS PROGRAMS (ADDED)

13.1.1. Applicable OO-ALC GSU's will follow OO-ALC guidance written into this supplement: Kadena AB, Randolph AFB, as well as 309 MMXG GSUs.

13.1.2. Applicability. OO-ALC as well as all contracted services that work in, on, around, or travel through OO-ALC areas mentioned will follow guidance written into this supplement.

13.4. FOD/DO Prevention Program.

13.4.2.1. **(Added)** AFMC 75th Operational Support Squadron (75 OSS) Airfield Management Operations (AMOPS) is the OPR for any established local host-tenant MOA or Memorandum of Understanding (MOU) regarding an outline of organizational responsibilities between 75 ABW, OO-ALC and tenant units for shared areas of AFMC flight lines, runways, taxiways, parking ramps, and outside maintenance areas that are shared. FOD prevention measures will be practiced in all areas indicated as OO-ALC organizational areas of responsibility. Refer to the Hill AFB Orientation map contained in the local Hill Air Force Base DAFI13-213_HILLAFBSUP, *Airfield Driving*, for a map of these designated or aforementioned areas of responsibility.

13.4.2.1.1. **(Added)** 75 ABW areas shared with OO-ALC are: ALC Ramp, East Ramp, Flight Test Ramp, Hangar 270 (to include compass rose area)/680 Ramps, Incoming Ramp (after recovery of incoming aircraft for ALC input on any ramp, responsibility of that specific area then transfers from the Transient Alert contractor to ALC) and South Ramp.

13.4.2.2. **(Added)** OO-ALC GSUs will follow all host base local directives with regard to organizational responsibilities of shared airfield areas, to include missile launch facilities.

13.4.3.1.1. **(Added)** Unless otherwise stated in specific technical order or local guidance, covers and plugs (e.g., engine, pitot tubes to include ejection seat) required by the applicable technical order will remain installed up to one hour prior to aircrew arrival, unless there are personal safety issues or cover installation impedes maintenance task performed.

13.4.3.1.2. **(Added)** Aircraft, missiles, munitions, Aerospace Ground Equipment (AGE), engines, or components in temporary storage, or removed from an end item to facilitate other maintenance, will be monitored by the responsible supervisor in the applicable organization to ensure security of covers and other associated caps/plugs. Caps and plugs must not be of the type that can be inadvertently left in place when connecting mating components.

13.4.3.1.3. **(Added)** Intake and exhaust plugs/covers will be kept in good condition and only used for their designed function. When an aircraft enters flight test or the flight line ramp area of Hill AFB, or Joint Base San Antonio (Randolph) and ready for flight, remove before-flight streamers will be attached per applicable TO (or local guidance) and wording will remain legible.

13.4.3.1.4. **(Added)** Organizations which use various methods other than the TO prescribed inlet/intake cover/plug while performing maintenance in or around engine inlet/intake, will establish a documented control measure for installation and removal (i.e., installation/removal steps listed separately on a work control document approved by organizational leadership, for items such as cardboard inlet dams, barrier paper for blast/paint).

13.4.3.1.5. **(Added)** It is recommended shop-stock supply of caps routinely receive a cursory inspection to ensure caps do not pose an FO concern with multiple pieces which may become separated.

13.4.3.1.6. **(Added)** Locally manufactured covers may be used in back shop/test facility environments to cover portions of test equipment when caps/covers/plugs are not available via normal supply channels.

13.4.3.2. In back shop Electrostatic Discharge (ESD) environments, it is recommended that shop-stock supply of caps/plugs routinely receive a cursory inspection to ensure only ESD caps/plugs are present.

13.4.3.3. If a FOD investigation identifies one of the aforementioned processes introduced a FO to an asset that later caused a FOD incident, the squadron FOD Focal Point (FP) and asset supervisor will work with the appropriate workload planners/process engineers to add a local process/requirement to install appropriate caps/plugs as part of actions to prevent recurrence.

13.4.4.1. Housekeeping/tidiness is the practice of keeping work areas organized and clean with items properly accounted for and/or stored when not in use. This includes: tail number/facilitate other maintenance (FOM), and other bins, boxes (locally manufactured for a specific task/process), cabinets, elevated work platform decks, fixtures, floors, pallets, push carts, shipping containers, storage shelves, tooling, tote trays, vehicles, and work areas (tops of tables, tool kits, Vidmars, and work benches). It is everyone's responsibility to keep work areas clean and tidy.

13.4.4.2. Absorbent pads will not be used in or on aircraft or missiles unless there is a control measure (including documentation in AFTO Forms 781 for aircraft in work within a ready for flight area or included on an established WCD) to ensure removal. Unless used to actively control or clean-up a hazardous waste spill (which has been reported to the applicable operations center) absorbent pads will not be left unattended lying on the ground or in a drip pan on the airfield or outside in the industrial area without an adequate means of securely keeping it from blowing away.

13.4.5.1.1. **(Added)** Any delay reporting a DO could result in death or damage to aircraft and/or equipment as the object could be on the airfield in the path of an aircraft taxing/landing/taking off. To ensure maintenance integrity of timely reporting, anyone who observes a condition that appears to have resulted in a DO, will contact the appointed supervisor of the affected aircraft. The supervisor will immediately contact the local Base Operations (Base Ops) desk (AMOPS at Hill AFB, 777-1861).

13.4.5.1.2. **(Added)** Upon receiving notification of a DO, OO-ALC FOD monitor will notify 75 ABW Flight Safety (75 ABW/SEF). OO-ALC GSU's will follow guidance to include the safety office or flight test representative accomplishing a cursory inspection of their specific taxiway/flight line areas.

13.4.5.1.3. **(Added)** OO-ALC GSU's will report any suspected DO to their control, host base MOC or operations center immediately in addition to OO-ALC FOD/DO monitor.

13.4.5.2.1. **(Added)** All OO-ALC squadron FOD/DO FPs will brief their applicable squadron and group senior leadership as well as the group Quality Chief monthly on the progress of all open FOD/DO investigations until closed.

13.4.5.2.2. **(Added)** OO-ALC FOD/DO monitor will submit updates quarterly to the Hill AFB FOD/DO monitor by the 20th day of the first month after the start of a new quarter. This update will summarize the data sent by the OO-ALC squadron FOD/DO FPs of each open FOD/DO incident until closed. Update will include: incident number, cost estimates (only when determined a mishap), if owning unit requested the engine be sent to a repair facility or back to home station for repair, if private/property damage was reported by DO, DR number (when determined material failure), if the investigation is on-going, if compiling a DRAFT final report, or if the final report is in coordination.

13.4.5.2.3. **(Added)** Hill AFB FOD/DO monitor will include current AFMC FOD Manager when updates are sent to AFSC/LG Workflow.

13.4.5.3. Any delay reporting a cut tire could result in death or damage to aircraft and/or equipment from objects on the airfield in the path of an aircraft taxing/landing/taking off. To ensure maintenance integrity of timely reporting, anyone who observes a condition which appears to have resulted in a cut tire will immediately contact the supervisor of the affected aircraft.

13.4.5.3.1. **(Added)** The supervisor will immediately contact the squadron alert center or control (as applicable), who in-turn will immediately contact the Base Operations (Base Ops) desk (AMOPS [777-1861] at Hill AFB) and 75 ABW Flight Safety (SEF).

13.4.5.3.2. **(Added)** OO-ALC GSU's will ensure the flight operations representative accomplish a cursory inspection of their specific taxiway/flight line areas. OO-ALC GSU's will report any suspected cut tire to their squadron alert center or control (as applicable), host base MOC or alert center immediately in addition to OO-ALC FOD/DO monitor.

13.4.5. Applicable squadron leadership will ensure accurate engine ground operation start/shutdown (termination) times are called into the appropriate MOC/alert center/or GSU control, as this is a crucial part of the formula to determine an accurate FOD rate reportable to AFSC and HQ AFMC. Applicable group FPs will provide updated flight hours to the OO-ALC FOD Monitor monthly.

13.4.5.7. **(Added)** Personnel will report all potential conditions that may cause FOD to an immediate supervisor, for further action when such conditions cannot be corrected on the spot.

13.4.6.1. When FOD is discovered within an OO-ALC organization regarding a turbine or jet engine, a forensic sample will be collected. The sample from the damaged area will be preserved in the event it is required to be processed by a metallurgy laboratory to aid in the investigation. Forensic samples from fifth generation aircraft will be sent to: Air Force Research Laboratory (AFRL)/CTIO, 2700 D Street, Bldg 1661, Rm C123, WPAFB, OH 45433; unless specifically instructed to do otherwise by AFRL personnel, samples will be taken by group or engine shop personnel trained in collecting FOD forensic samples. The sample will be taken when the damage is readily accessible and does not require disassembly beyond the scope of the organization's capability to gain access to the damaged area. When an asset is sent to a repair and overhaul facility not associated with the OO-ALC, a request to obtain a forensic sample will accompany the asset. Forensic samples will be placed in the damaged asset's serialized historical records file/folder. The forensic sample will be placed in a sealed envelope marked "Foreign Object Damage Forensic Evidence - Do Not Open Unless to Process." An aircraft engine sample will be maintained as part of the engine data file/folder.

13.4.6.3. HILL AFB FOD/DO Monitor assigns the control number prior to sending initial reports to AFSC and HQ AFMC.

13.4.6.4. The applicable squadron leadership will ensure the designated squadron FOD FP (at a minimum) works with the group FOD/DO FP to comprise an investigation team and is allotted adequate time to conduct a thorough FOD/DO incident investigation not reportable under DAFI 91-204, (follow local impoundment FOD checklist or FOD investigation worksheet as applicable). Group leadership will ensure this team remains available to work with and support 75 ABW/SEF during a FOD mishap investigation once determined reportable under DAFI 91-204.

13.4.6.14. OO-ALC and associated GSU's will follow local impoundment FOD checklist or FOD investigation worksheet as applicable. Recommend group or squadron FOD FP collaborate with designated impound authorities to ensure established locally developed impoundment FOD checklist remains applicable/comprehensive to ensure it aids in incident investigations.

13.4.7.1.1. **(Added)** Applicable squadron FOD FP will coordinate with their group FOD FP to ensure the owning unit's FOD monitor, POC in the QA Office or Safety Office is notified of the initial findings within 24 hours of all FOD discoveries occurring when an aircraft is in the process of the Programmed Depot Maintenance/Functional Test process. This POC name and organizational symbol will be provided to the Hill AFB FOD monitor when the initial report is sent.

13.4.7.1.2. **(Added)** In addition to requirements to notify the FOD monitor prior to any blade blending, provide the Hill AFB FOD monitor a scanned electronic copy of the applicable documents sent to the Engine Management section regarding the evaluated and accomplished blend.

13.4.7.3. While accomplishing the requirements of **paragraph 13.4.6.4** in this instruction, the applicable squadron leadership will also include coordination with the OO-ALC FOD Monitor or alternate, impoundment official and the applicable group and OO-ALC Safety official when the investigation team is established.

13.4.8.2. A FOD-critical area should be considered as an area where assembly, modification, flight and ground operations occur and require the highest level of FO preventative measures. The elimination of FO contamination, entrapment, migration or damage is critical to safeguard the asset. It is imperative group (and/or squadron) FOD FPs coordinate with leadership and re-evaluate an area in the event of changes or new workload locations, and forward updated listings to the OO-ALC FOD monitor to maintain currency.

13.4.8.3. Refer to OO-ALC QA management information system (i.e., SharePoint), FOD/DOP program or contact the designated FOD program representative for the current FOD critical areas list.

13.4.9.1. Areas such as asphalt joints, grounding points, "pop-outs" on concrete pads, seams along concrete pads, ground and tie-down points will be a focus of the pre-engine start FOD inspection/FOD walk.

13.4.9.2. HILLAFBI 13-204, *Airfield Operations*, has established local guidelines for wearing hats and head covers on Hill AFB airfield (flight line) regarding FOD prevention and safety. OO-ALC GSUs will refer to the host base local guidance regarding the wear of hats and head covers on the airfield (flightline) regarding FOD prevention and safety, if one does not exist, coordinate with host base Airfield Management, Safety office and FOD monitor to generate local policy or comply with the aforementioned HILLAFBI 13-204.

13.4.9.3. All engine intake inspection (bunny suits) used for aircraft intake and exhaust inspections will have elastic/Velcro® arm and leg cuffs.

13.4.9.4. Restricted/controlled area badges and other officially issued temporary visitor badges/passes must remain properly displayed and secured when not conducting operations in an AFI/TO-identified critical intake area during engine operation. All badges/passes will be removed and secured (stowed) when within fifty feet of the AFI/TO identified critical intake area during engine operation.

13.4.9.5. Metal hair fasteners and metal accoutrements (such as but not limited to civilian years of service pins, aircraft silhouette pins, commemorative insignia pins, etc.) are not authorized for wear in designated FO critical areas. Aircraft engine run (excluding personnel who remain within the control/monitoring cab at the test cell/hush house facility) or launch team personnel will remove and secure all jewelry, badges, lanyards and loose pocket contents prior to performing any engine run tasks.

13.4.9.7. **(Added)** Include Hill AFB FOD monitor in all notifications sent to the Airfield Management, Civil Engineering (CE) or the facility manager concerning damaged pavement, flight line construction, or other hazards in or near aircraft parking ramps or taxiways. OO-ALC GSU FOD FP will notify host base FOD monitor when notifications are sent to the Airfield Management, CE or the facility manager regarding the aforementioned conditions.

13.4.9.8. **(Added)** Effective prevention of dropped objects starts when an aircraft door, panel, or cowling is opened for maintenance and during munitions build-up, loading, and arming. Maintenance personnel will ensure the serviceability of fasteners and the proper fit of doors, panels, connectors, etc. Place special attention on the correct length of fasteners and condition of nut plates and other securing devices. Supervisors place special emphasis on these areas during the inspection of completed maintenance actions.

13.4.9.9. **(Added)** A lack of adequate control of consumables, broken non-recovered pieces of expendables as well as loose/excessive hardware and/or material is a leading contributor to FOD incidents and FO findings reported by the asset-owning units. Along with adhering to proper control of material, all maintenance personnel will take action prior to closure or component mating after work is performed inside a panel, door, access cover, cowling or component and adhere to the maintenance discipline known as “clean-as-you-go”; the on-going/in-progress practice of removing debris during manufacturing, fabrication, modification, operations, or maintenance on/in the aircraft, part, component assembly, sub-assembly, or engine to ensure the product is free of FO. Along with clean-as-you-go, the maintenance discipline known as “end-of-shift/end-of-day-clean-up” will also be accomplished to make the designated work area free of FO for housekeeping/tidiness purposes.

13.4.9.10. **(Added)** A pre-run worksheet will be established by each squadron or group which operate aircraft engines in either an aircraft engine run hush house, trim pad, or test cell. These worksheets will be published on the 309 AMXG Form SharePoint site with a form number. For installed engine runs on the trim pad, include only applicable items. Engine run personnel will complete, and the engine run supervisor will ensure, all worksheet FOD prevention/FO inspection items are complied with and documented prior to engine start. For hush house runs, this worksheet will be maintained by the applicable A-10/F-16 Flight Test Section supervisor. For test cell runs, this worksheet will be maintained by the Propulsion (Engine Shop) supervisor. Contact unit records managers for requirements of AFRIMS. Completed forms will be retained in accordance with RDS. The worksheet will include, at a minimum; the following headings: engine type, model and series, engine serial number, remarks, run supervisors name, signature and date. Annotate the area inspection with performing technician's stamp number and date accomplished. Area inspection will include: inlet FOD/FO; exhaust FOD/FO; aircraft/engine exterior inspection for FO; test stand/ thrust bed/ test equipment for FO; TK inventory C/W, (ensure all CTK and test equipment is accounted for and secured by a means to prevent it from becoming a FOD hazard before each engine start), check all door tracks for obstructions, debris and dirt; check air inlet baffles and screens for rivet security, obstructions and debris and dirt; check test bay for cleanliness and check augmenter (exhaust) tube for dirt and/or damage; visually inspect aircraft and engine components for loose hardware, debris and/or tools; ensure the run bay is washed down (weather/Environmental Protection Agency permitting) and free of all FO before engine start. Strongly recommend a follow-up inspection behind calibration and/or facility maintenance actions which take place to or above the engine mount fixture prior to the next engine operation. Units may add additional inspection areas/steps as appropriate.

13.4.9.11. **(Added)** Aircraft engine and turbine Aerospace Ground Equipment component test facilities will have a pre-engine run inspection of any test stand fixture and surrounding area for cleanliness and to eliminate any possible item, which may be ingested during engine operation.

13.4.9.12. **(Added)** The area within the painted lines which designate “stressed” or “usable full strength” pavement of runway 14/32, active taxiways (not designated a construction-free zone – closed for construction), and active aircraft parking ramps/hot pads (when aircraft are present or within 1 hour of scheduled transient/TDY arrival and not designated a construction-free zone– closed for construction) are critical aircraft operation areas and a combination of scheduled FOD walks, vacuum sweeper operations, and cursory inspections, by all who travel it, will be accomplished in the attempt to maintain this area FO free. Reference DAFI13-213_HILLAFBSUP for a map of these designated areas.

13.4.9.13. **(Added)** Designated entry points to the airfield are identified with a combination stop sign, vehicle FOD checkpoint sign (for HILL AFB reference DAFI13-213_HILLAFBSUP for example). If at any time a FOD checkpoint sign is noted as damaged or missing, at HILL AFB, contact should be made to 75 OSS/OSAMB either via base land mobile radio tower net or phone (801) 777-1861 to provide the location. GSUs will contact the host base airfield manager and FOD.

13.4.9.14. **(Added)** Aircraft boarding ladders will receive a pre-use inspection for items such-as but not limited to: loose/missing/short fasteners, cracks, bent/dented items which affect safe/serviceable use. Remove any unsafe/unserviceable ladder from the flight line portion of the ready for flight area until the ladder can be repaired as applicable.

13.4.9.15. **(Added)** When aircraft enter the Flight Operations Phase (post-production line) items will not be placed in or on engine intakes. **NOTE:** Does not apply to technicians performing inlet maintenance, inspections and blade blending requiring lights, files, or other tools inside aircraft inlets.

13.4.11.1.1. **(Added)** Refer to the MOA/MOU established by 75 ABW which outlines organizational responsibilities for AFMC flight lines, runways, taxiways, parking ramps, and outside maintenance areas shared with the 75 ABW, OO-ALC and tenant units. OO-ALC GSUs will follow all host-base established MOAs/MOUs or local guidance with regard to organizational responsibilities of the aforementioned shared airfield areas, to include missile launch facilities.

13.4.11.1.2. **(Added)** All applicable organizations will identify their areas of responsibility (AOR): airfield/flight line, buildings occupied (to include the area to 75 feet around the building), and portions of the designated industrial area (ramp and areas used as temporary storage/ parking). OO-ALC 309 MMXG occupied buildings located within the munitions areas of Hill AFB, Utah Test and Training Range and sites at FE Warren, Malmstrom, and Minot AFBs, as well as Peterson, Vandenberg and Offutt AFBs are not required to identify any area outside of the buildings as a FOD program AOR. Tidiness around these buildings will be maintained and the inside maintenance areas will remain a FOD program AOR requirement. Leadership in organizations with FO-critical areas will ensure these areas are designated as AORs for FOD walk purposes.

13.4.11.1.3. **(Added)** All designated airfield/flight line AORs, under the stewardship of specific organizations, will have a FOD walk performed once a day (weather permitting, and only on designated duty days), prior to the first sortie/maintenance engine run of each day.

13.4.11.1.4. **(Added)** Airfield/flight line AORs will have a post high-wind event (high wind events are determined, notification sent out, and terminated by the 75th Weather Squadron, through the OO-ALC Alert Center for Hill AFB. GSU contact will be made through the local control or MOC). After a high-wind event, supervisors will inspect their AORs for security of aircraft; aircraft plugs/covers/streamers and other dash 21 equipment (down gear); gather debris which may have been blown into the area; determine if a FOD walk or sweeper truck is required to clean the area.

13.4.11.1.5. **(Added)** A FOD walk of the end-of-runway inspection area will be conducted by the unit using it prior to the first scheduled flight for that unit each day.

13.4.11.1.6. **(Added)** For all other designated FO critical areas, not designated as airfield/flight line AORs, FOD walks will be conducted weekly (at a minimum).

13.4.11.1.7. **(Added)** Leadership will ensure assigned personnel participate in all scheduled FOD walks for their areas of responsibility to reduce/eliminate the potential for FO-related incidents. An adequate amount of supervisory personnel will oversee each scheduled FOD walk to ensure overall participation and effectiveness. The frequency of any FOD walks may be increased when directed by leadership to ensure cleanliness for housekeeping and tidiness. The weekly FOD walk does not negate the requirement for daily end-of-task and end-of-shift clean-ups in the immediate work areas.

13.4.11.1.8. **(Added)** When an aircraft is required to land at an alternate/emergency landing location, aircraft maintenance crews will conduct a thorough daily FOD walk of the immediate area around the aircraft prior to performing maintenance. Maintenance supervision will coordinate with the local airport authority and request an airfield sweeper (when available) to conduct operations on the runway and taxi lanes. Aircraft maintenance crews will ensure a rapid response airfield sweeper unit (e.g., a FOD boss) is taken when responding to this type of alternate/emergency landing event in case an airfield sweeper is not available. This is only a requirement if the aircraft will be returned to serviceable/flying condition and will depart under its own power.

13.4.12.1. The FOD inspection on all towed equipment, etc., applies to Low-Speed Vehicles (LSV) as well. FO inspections shall be accomplished as part of the vehicle daily inspection and prior to use. Prior to an aircraft tow operation, movement of AGE, etc., to include an aircraft or AGE which may already be on the airfield, immediately inspect for items such as loose hardware, TOs or tools; to prevent the inadvertent deposit of these items on the runway, taxiway or flight line. Aircraft tow operations which enter the designated airfield area will comply with a rollover tire inspection at the point of entry. Prior to completion of the aircraft tow operation, a tire roll-over inspection will be performed as follows: 1) IAW applicable TO; 2) IAW local supplemental guidance; or 3) stop five feet short of the intended final location to inspect tires from all angles, accomplish final positioning, then inspect the previously unobserved portion of tires. Any item removed from a vehicle tire will be properly collected and disposed.

13.4.12.2. The operator of any vehicle driven on the airfield/flight line during periods of darkness or that passes through vehicle tire FOD checkpoints without adequate lighting will ensure a flashlight is available to accomplish the tire FOD inspection. If a flashlight is kept in the vehicle as part of the vehicle equipment, it will be marked with the vehicle ID and added to the vehicle's AF Form 1800, *Operator's Inspection Guide and Trouble Report,* for inventory purposes. Direct questions or concerns about the location or condition of Hill AFB airfield (flight line) vehicle FOD checkpoints to 75 OSS/AMOPS (777-3592).

13.4.12.4. **(Added)** Vehicle operators on any portion of the designated airfield which deposit dirt/mud/rocks onto the paved surface upon re-entry, and are unable to eliminate the FOD hazard on the spot, will provide location of debris and request a vacuum sweeper through 75 OSS/OSAMB, Control Tower (75 OSS/OSAT), or Maintenance Operations Control Center, either via base land mobile radio tower net or phone (801) 777-1861. OO-ALC GSUs will contact their local control or MOC with this information. Violations of this policy may result in revocation of airfield driving privileges by airfield management.

13.4.12.5. **(Added)** Leadership within OO-ALC squadrons with flight operations will ensure at least one vehicle per squadron operating on the flight line the majority of the time, will have a bumper magnet installed year-round. If the safety office deems inclement weather has rendered the magnet a hazard or snow exceeds the ground clearance, it may be removed. The magnet will be cleaned of all FO and inspected for excessive wear and cracks at least once per day when the vehicle (to include LSV) is operated. If excessive wear and/or cracks are identified, the magnet will be identified for replacement and removed. (Recommend items gathered by the magnets be collected for analysis by the squadron or group FOD FP for possible trend analysis).

13.4.12.5.1. **(Added)** Due to the segregation of the OO-ALC ramp and 574th Aircraft Maintenance Squadron (574 AMXS) industrial area from all other airfield ramp and maintenance areas, this requires a large amount of general area base vehicle travel for meetings and other official business; so there is no requirement for a 574 AMXS vehicle to have a bumper magnet installed year-round. Speed humps, dips and other physical characteristics of the roadway pose impact concerns to the magnet. Repeated impacts would cause cracks and wear to the aluminum/rubber guard to become a possible FOD hazard. As an added measure to aid in the elimination of FO in the absence of a magnet, 574 AMXS will operate a vacuum or rotary brush type piece of equipment on the anticipated spot (with specific attention to slab relief seems) within 2 hours of the following: aircraft arrival, maintenance engine operational check, proficiency and/or functional check flight departure. If 574 AMXS (or 309 AMXG) owned, this equipment will be cleaned of the collected debris/FO after use. (Recommend items gathered by the magnets is collected for analysis by the squadron or group FOD FP for possible trend analysis).

13.4.12.6. **(Added)** Vehicles operated on HILL AFB airfield will abide by DAFI 13-213, *Airfield Driving*, regarding to the restriction from driving diagonally across the various aircraft parking ramps to assist with the reduction of potential FO migration. Unless specifically directed to do so by local host base guidance, vehicles (and LSV) from OO-ALC GSU squadrons with flight operations will not be driven diagonally across aircraft parking ramps when other travel paths are unobstructed to reduce the potential FO migration. All flight line violations of this may result in revocation of flight line driving privileges by Airfield Management.

13.4.12.7. **(Added)** Recommend all personnel conduct a post use inspection of snow removal equipment used on the airfield (LSVs with push blades, small utility tractors with a snow blower or broom attachment, etc.) with a focus on items prone to vibrate loose or shear during use. If an item is discovered missing, immediately notify Airfield Management of the possibility that a FO may exist in the area of the airfield which snow removal operations were conducted. Recommend 309 AMXG Transportation Flight personnel conduct a post-use inspection on large snow removal equipment driven in the industrial area with a focus on items prone to vibrate loose or shear during use. This inspection should be accomplished immediately upon arrival back to the equipment yard. Immediately notify Airfield Management and CE Snow Barn if the possibility exists that FO may migrate to the airfield via other snow removal efforts. Recommend a checklist be established for specific items on specific pieces of equipment.

13.4.12.8. **(Added)** OO-ALC units which operate airfield vacuum sweepers/hitch pulled rotating brush equipment/snow removal rotating brush equipment will ensure it is not equipped with metal bristles. OO-ALC GSU's with flight operations, coordinate with host base CE or facility maintenance contractor (or whomever performs maintenance on unit operated vacuum sweeper) to ensure that vacuum sweepers/snow removal equipment used on the airfield and flight line is not equipped with metal bristles. If metal bristles are used at GSU locations, a request should be made to remove the metal bristles and only operate with non-metal bristles. If the host base will not eliminate the metal bristle brushes, increased FOD walks or operations with a magnet will occur prior to aircraft engine operations or flight in an effort to mitigate potential FOD incidents.

13.4.13.1. The cable lug nut on the bayonet end of aircraft grounding cables will be routinely inspected for tightness and security to prevent separation and possible FO. This will occur during each basic post-flight, thru-flight and pre-flight inspection while an aircraft remains in a ready for flight area.

13.4.16. Contact information on the locally developed visual aid will include OO-ALC FOD monitor, group (and squadron if applicable) FOD FPs.

13.5. Supervisor Briefing.

13.5.1. An Initial FOD awareness briefing will be given to all newly assigned personnel, at each work center, shop or area. Initial area-specific FOD/DO (as applicable) briefing will be made part of the Job Safety Training outline and incorporated during the initial orientation work center briefing. This briefing is required for all personnel who accomplish on-equipment or off-equipment maintenance tasks in the performance of their assigned duties. Supervisors will brief work area specific FOD/DO prevention techniques procedures and requirements and is also required for individuals who are TDY, transferred, or loaned from other units prior to beginning work in the area. This initial FOD/DO briefing will be documented in TSS III-Q as part of the Job Safety Training (MHPSAF9801500BR).

13.5.2.1. **(Added)** An AF Form 3126 or AFMC Form 316, *Supervisor Saftey Meeting Minutes,* will be used as the locally developed roster for organizations to document attendance at the quarterly FOD briefings. Quarterly FOD/DO briefing must be mentioned as its own line item on the form. The form will have the date, supervisor name, office symbol or RCC and typed/written names of all employees assigned so the spelling of the names is distinguishable. Employees will sign/initial next to their name to verify attendance.

13.5.2.2. **(Added)** Supervisors will maintain the most recent years' worth (four quarters) of FOD/DO quarterly briefing material and attendance rosters. A printed copy of briefing material is not necessary if the supervisor can demonstrate how to access it electronically. The attendance roster may be scanned and filed electronically. All supervisors should closely track employees absent at the time of the quarterly briefing and provide the material to them upon returning to duty. Supervisors may send the briefing material electronically to absent employees and use a reply from them indicating they have read the provided briefing material as an electronic signature. The reply will then be attached to that quarter's original attendance roster AF Form 3126 or AF Form 316.

13.5.2.3. **(Added)** Recommend all personal items (pencils, erasers, etc.) or professional equipment (maps, life support items, etc.) reported lost by aircrew members during aircraft operation (cockpit/ flight deck FO) and lost tools/items by maintenance personnel be briefed during applicable FOD/DO prevention briefings.

13.5.2.4. **(Added)** Approved final FOD/DO incident reports will be briefed to squadron maintenance employees.

13.6. FOD/DO Awareness and Prevention Training.

13.6.4. Each squadron FOD FP in an aircraft or missile squadron will compile additional areas of FOD concern for each MDS assigned to their respective squadron and/or GSU to aid maintenance training courseware developers with inclusion into one complex training program. Contractors consult your statement of work or contract management office for previously established FOD/DO training requirements, as applicable.

13.8. OO-ALC FOD/DO Program Monitor.

13.8.2. Complex/wing-level appointment letters will be forwarded to the Hill AFB FOD program monitor within 30 days of appointment and will include the individual's name, office symbol and phone number.

13.8.3.11. The continuity book format will contain (**NOTE:** Organizations may exercise the option to maintain a DD Form 2861, *Cross Reference,* with the current ERM link to any of the below mentioned items including an "e-continuity book".):

13.8.3.11.1. **(Added-Tab 1)** Applicable FOD/ DO program appointment letter, duties of a FOD/DO FP, AFSCMAN 21-102 and applicable memorandums.

13.8.3.11.2. **(Added-Tab 2)** Applicable FOD/DO program checklist.

13.8.3.11.3. **(Added-Tab 3)** FOD walk areas of responsibility map, AF Form 2420, *Quality Control Inspection Summary*.

13.8.3.11.4. **(Added-Tab 4)** Hill AFB FOD/DO committee meeting minutes, (Quarterly FOD committee briefing slides - optional) and a sample copy of the AF Form 3126, used as the documented attendance roster of the supervisors quarterly FOD briefing.

13.8.3.11.5. **(Added-Tab 5)** FOD/DO incident log containing the last 2 years' worth of incidents.

13.8.3.11.6. **(Added-Tab 6)** FOD program publicity/awards nomination forms.

13.8.3.11.7. **(Added-Tab 7)** Miscellaneous, notes, cross-tell, items of interest.

13.8.3.12. As needed, review and update FOD continuity book (or electronic version).

13.9. FOD/DO Focal Point.

13.9.1. All applicable group-level appointment letters will be forwarded to the OO-ALC FOD monitor within 30 days of appointment and will include the individual's name, office symbol and phone number. Applicable group FOD FP will maintain current appointment letters for each squadron requiring a FOD FP.

13.9.1.2. Each group and squadron FOD FP will accomplish two periodic FOD spot checks within their areas of responsibility per month. Use adopted AF Form 2420, (may be in an electronic format) to document the periodic spot checks.

13.9.1.5. Follow **paragraph 13.8.3.11** of this instruction regarding to the local continuity book format. As needed, review and update.

13.9.1.6. OO-ALC group FPs (primary or alternate) will attend the Hill AFB Quarterly FOD/DO Program Committee meeting and will brief all FOD/DO occurrences for the previous quarter pertaining to their organization if requested. If unable to attend, ensure a representative has access to quarterly data and incident reports so they can field possible questions from committee members.

13.9.1.7. Group and squadron FOD FPs: Ensure group or squadron-specific FOD (DOP where applicable) program-related QA data is available to supervisors to assist with awareness and prevention briefings.

13.9.1.8. **(Added)** Group and squadron FOD/DOP program FPs will ensure awareness material (i.e., posters, banners, decals, bulletins, current FOD program points of contact visual aid) is at least posted in highly visible areas throughout their areas of responsibility to promote FOD/DOP program awareness.

13.9.1.9. **(Added)** FOD (DOP where applicable) program FPs will assist in the distribution of all FOD program-related information to the next subordinate level.

13.10. (Added) Electrostatic Discharge.

13.10.1. **(Added)** ESD Control Program. The primary purpose of this program is to establish, describe, and assign specific responsibilities and procedures for an ESD Control Program within the ALC. This program identifies operating procedures that apply to all employees assigned to ALC who handle ESD Sensitive items and will minimize ESD damage to electrical/electronic parts, assemblies, and equipment repaired, tested, operated, stored, and transported within OO-ALC. It is intended to supplement existing ESD control guidance through reference and by providing basic procedures where none currently exists. It also provides supplemental information to support TO 00-25-234, *General Shop Practice Requirements for the Repair, Maintenance, and Test of Electrical Equipment,* Section VII, Electrostatic Discharge Control, takes precedence over all referenced standards and handbooks. This instruction supports the ALC quality systems.

13.10.2. **(Added)** Group commanders/directors will:

13.10.2.1. **(Added)** Appoint a primary and alternate group ESD Control Program Manager in writing. Appointment letters will be maintained by group ESD Control Program Managers for review.

13.10.3. **(Added)** Squadron directors will:

13.10.3.1. **(Added)** Designate primary and alternate squadron ESD POC in writing, to their group ESD Control Program Manager. Appointment letters will be maintained by the group ESD Control Program Manager.

13.10.4. **(Added)** Group ESD Control Program Manager will:

13.10.4.1. **(Added)** Maintain copies of current group ESD Control Program Manager and squadron ESD POC appointment letters.

13.10.4.2. **(Added)** Ensure ESD surveys are conducted by squadron ESD POC and area supervisors, identify and clarify group ESD control strategies for work areas and compile the annual area surveys into written reports.

13.10.5. **(Added)** Squadron ESD POC will:

13.10.5.1. **(Added)** Develop an effective ESD Control Program Survey tailored to their organization and work areas.

13.10.5.2. **(Added)** Conduct work area ESD control surveys in conjunction with each area supervisor. Each ESD work area survey will as a minimum be updated annually or when area requirements change and will be documented. Area surveys and area sensitivity will be annotated on the OO-ALC Form 237, *Electrostatic Discharge (ESD) Control Report of Annual Survey*. Area certification will be documented separately on an OO-ALC Form 234, *ESD Work Area Certification,* as required. Any additions or changes to the work area between annual survey intervals can be hand-written but will be incorporated as a written report when the next annual is accomplished. Survey requirements for existing and new ESD work areas are outlined in TO 00-25-234.

13.10.5.3. **(Added)** Provide an annual report of the evaluation to the group ESD program manager to certify, by area supervisor signature, completion of the ESD area survey. Additionally, the report will be posted either in the work area or in a readily accessible ESD program file, once each work area survey is completed. This certification report will serve as documentation that each surveyed work area complies with program directives and provide a record of the controls required in those areas. Certificate will be made available in the work area IAW TO 00-25-234.

13.10.6. **(Added)** Work Area Supervisor will:

13.10.6.1. **(Added)** Ensure all personnel handling ESD items have initial ESD and annual refresher ESD training. Training will be documented in the PAC system, TSS or other approved training database system.

13.10.6.2. **(Added)** Ensure an ESD Control Report of Annual Survey and/or an ESD Work Area Survey/Certification certificate is accomplished for all areas performing maintenance on or handling ESD components. Supervisors assist the squadron ESD POC in conducting an annual ESD survey and ensure corrective actions are taken to correct any identified deficiencies. Results will be posted in the work area or in a readily accessible ESD program file once the survey is completed. Annual surveys will be accomplished on the anniversary date of the previous annual survey or when area requirements have changed.

13.10.6.3. **(Added)** Notify squadron ESD POC within 10 working days when changes are made to existing areas or additional work areas are required to ensure an ESD Control Report of Annual Survey is re-accomplished. A new ESD area survey is not required for minor changes; pen and ink changes are authorized. Results will be forwarded to the group ESD manager within 30 days any time changes or new requirements are introduced to the work area and then posted within the work area or in a readily accessible ESD program file. The next annual survey will contain the changes and new requirements within the annual written report.

13.10.6.4. **(Added)** Ensure ESD work surfaces (stations) are tested annually. Results will be documented in the miscellaneous block on OO-ALC Form 234.

13.10.6.5. **(Added)** Storage cabinets used to store ESD items will be tested annually and documented in the miscellaneous block on OO-ALC Form 234, or by a label affixed to the cabinet with the current inspection date.

13.10.6.6. **(Added)** ESD testing of all soldering stations will be accomplished every 90 days and documented on OO-ALC Form 236, *90-Day Soldering Station ESD Test*.

13.10.6.7. **(Added)** Ensure wrist straps are tested and documented on OO-ALC Form 235, *ESD Wrist Strap Daily Check*, prior to initial use on each shift, if the wrist strap is not used it should be left blank. Each subsequent user shall test the functionality of the wrist strap before use. Each user individually issued wrist straps will maintain a separate OO-ALC Form 235 to document testing. If the supervisor elects to use common shop (not individually issued) wrist strap they must develop an in-house document to show multiple tests performed daily or provide a continuous wrist strap monitoring device.

13.10.6.8. **(Added)** Ensure all ESD items, serviceable or repairable, are transported and stored in static-shielding and non-charge-generating packages or containers. **NOTE:** Anyone handling packages containing ESD items are required to install ESD caps, plugs and bags. **NOTE:** Ensure attached forms, OO-ALC Form 237, OO-ALC Form 234, OO-ALC Form 236, and OO-ALC Form 235, are used to document ESD control program requirements. Groups may use locally developed forms tailored to their unique requirements, however these forms must be developed and approved by the group ESD control program manager. They must be outlined within a group policy memorandum letter IAW DAFI 90-160, *Publication and Forms Management* and DAFMAN 90-161, *Publishing Processes and Procedures*, and provide direction (instructions on how to complete the forms) in an effort to standardize documentation within the group.

13.11. (Added) TMDE Out of Tolerance (OOT) Reporting Process and Responsibilities.

13.11.1. **(Added)** OO-ALC group leadership shall ensure local risk analysis/recall procedures are developed, coordinated, published, and maintained. **NOTE:** For Kadena AB, the 525 EMXS in conjunction with the 18th Fighter Wing shall ensure local risk analysis/recall procedures are developed, coordinated, published, and maintained.

13.11.2. **(Added)** 809 MXSS PMEL/MCF will assure Letter for Not Repairable This Station Disposition (NRTSD) of TMDE; Letter for Notification of TMDE Out-Of-Tolerance Condition; and Letter for Recall of TMDE, are e-mailed to owning TMDE coordinator and assigned group Engineering Office (EN) office or designee.

13.11.3. **(Added)** OO-ALC TMDE Coordinators shall:

13.11.3.1. **(Added)** Complete MCF/IIA TMDE Coordinator Training within 2 months of appointment as a TMDE Coordinator.

13.11.3.2. **(Added)** Forward the Letter for NRTSD of TMDE; Letter for Notification of TDME Out-Of-Tolerance Condition; Letter for Recall of TMDE to the appropriate TMDE-owning supervisor within 1 working day. Include applicable correspondence from PMEL/MCF. If TMDE is used on multiple weapon systems and/or components, the TMDE coordinator shall initiate an e-mail to all production TMDE owning supervisors.

13.11.3.2.1. **(Added)** Letter for Recall of TMDE shall contain the TMDE part number, PAMS/MCF number, serial number, manufacturer's name, nomenclature, location, description of the discrepancy identified by PMEL/MCF, and reference this instruction.

13.11.4. **(Added)** Group EN or designee shall:

13.11.4.1. **(Added)** Within 1 working day after receipt of the Letter of Notification of TMDE Out-of-Tolerance Condition e-mail, assign a responsible process engineer to complete an OO-ALC Form 209, *Non-Compliance and Out of Tolerance Risk Assessment*. The completion of OO-ALC Form 209 should have a suspense of not more than 7 working days from date of receipt. Exceptions for complex situations may merit additional time, however; this should be used at group EN discretion. The process engineer performing tasks related to the completion of OO-ALC Form 209 shall:

13.11.4.2. **(Added)** Use all avenues available, e.g., practical knowledge/experience, risk assessment, technical data requirements, engineering assistance, and information provided by the PMEL/MCF certifier, to determine the impact of out-of-tolerance condition to meet technical data requirements and what steps, if any, should be taken (e.g., customer notification, recall of production items, process changes). **NOTE:** If additional information/clarification is required, the process engineer completing OO-ALC Form 209 shall contact the 809 MXSS Quality Office for assistance.

13.11.4.2.1. **(Added)** The responsible process engineer shall return the completed OO-ALC Form 209 and supplemental analysis to the group EN office or designee. **NOTE:** The OO-ALC Form 209 documents the actions taken due to the OOT condition and supplemental risk assessment tools/guidance should be used in the decision making and risk acceptance process (e.g., DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*; AFI 90-802, *Risk Management*; DAFPAM 90-803, *Risk Management (RM) Guidelines and Tools*; MIL-STD-882, *Department of Defense Standard Practice System Safety*; Department of the Air Force Pamphlet (DAFPAM) 63-128, *Integrated Life Cycle Management)* to determine what action, if any, should be taken (e.g., customer notification, recall of production items, process changes).

13.11.4.2.2. **(Added)** Upon receipt, review the completed OO-ALC Form 209 and supplemental documentation. If the group EN office or designee, QA and TMDE owning supervisor agrees with what is documented on the OO-ALC Form 209, he/she shall sign and date the assessment. If any reviewing member does not agree with the OO-ALC Form 209 results, he/she shall discuss the reasoning for non-concurrence with the individual/s involved. When satisfied with the results, he/she shall document concurrence as previously stated. The group EN will have final say in the event an agreement is not reached.

13.11.4.2.3. **(Added)** The group EN office or designee will complete the tracking metric chart by the 5th working day of the month and forward it to the group QA office. The group QA office will include the metrics chart in the monthly Quality Management Review brief.

13.11.4.2.4. **(Added)** OO-ALC group-level EN or designee shall initiate recall procedures if OO-ALC Form 209 concludes that the out-of-tolerance TMDE caused a non-conformance with technical data. Recall procedures shall include, but not be limited to, re-inspection of products in work, AFMC Form 202/ETAR to the SPO for additional guidance, etc. Copies of all correspondence shall be attached to the OO-ALC Form 209 to document all action taken. **NOTE:** In the event the out-of-tolerance condition and/or recall action affects multiple weapon systems and/or components, the results shall be reviewed and/or coordinated by all TMDE owning supervisors involved. Coordination will be documented on/or attached to OO-ALC Form 209. The group-level EN or designee office shall keep copies of all correspondence with the OO-ALC Form 209 package.

13.11.4.2.5. **(Added-OO-ALC)** OO-ALC group-level EN or designee shall: Maintain a file of all completed OO-ALC Form 209 packages (e.g., letters, e-mail copies, AFMC Form 202/ETAR, supplemental risk assessments, and supporting documents). Ensure records created as a result of out of tolerance condition are maintained in accordance with IAW AFI 33-322. Filing method will be determined by the group EN or designee office. The files must be available upon request and maintained in an auditable manner.

Chapter 14

OPERATIONAL WORKLOADING, PLANNING, AND SCHEDULING CONTROLS

14.9.5. Workloading uses funding reports to determine if there is a variance with 4L and work to reconcile the difference.

14.51. Workload Control.

14.51.1. AFSC Form 105, *Workload Record*, will be used for exchangeable and the AFSC Form 130 will be used for engines only. When the AFSC Form 105 Colum D of CUM TOT equals Column H of SER, this form will be file maintained according to AFRIMS.

14.51.3. OO-ALC/QA personnel will provide the assigned scheduler an email or written documentation with the following information: the Deficiency Report Unique Identifier (DRUI) number, NSN, PDN (if known), item name, condition code of the exhibit in the warehouse, quantity, and serial number of the exhibit. Upon notification of a Product Quality Deficiency Report (PQDR) from QA to the assigned scheduler, the scheduler will validate the availability of the identified NSN condition code of the exhibit in the Wholesale and Retail Receivng/Shipping System - WARRS (D035K) RIAF Custody Balance Inquiry screen by entering the NSN identified from QA. If the identified NSN condition code exhibit has no balance in D035K then notify QA that there is no exhibit for the identified NSN condition code visible in D035K. If the identified NSN condition code of the exhibit has a balance in D035K then the scheduler will use the Exchangeables Production System (G402A) to manually requisition the exhibit from supply by doing the following: Access G402A Exchangeable Program System Switchboard. Click on the Navigate tab then click on Supply-Production Issue. Input the assigned PDN for the NSN with a G JD and the current quarterly JON then click Query. Verify the NSN for accuracy. Input in the serial number portion of the document number field a Q followed by the last three numbers of the exhibit serial number or DRUI. Input the condition code of the exhibit identified by QA (usually Q). Enter the last five positions of the DRUI. The Cost Cd field should auto populate with an F. Click Send. G402A sends the transaction to D035K and can be seen on the G402A RA suspense.

14.51.6. Awaiting Parts. This is a holding account for non-serialized/serialized items awaiting parts. This is not to be used for temporary workloads and Depot Maintenance Interservice Support Agreement (DMISA) workloads.

14.51.8. The AFSC Form 959/AFSC Form 173, DO12, or computer-generated WCD. These documents are the only ALC approved WCDs. This document will be printed or electronically transferred to the production supervisor by the scheduler for assignment to the production mechanic for each inducted item. Computer-generated WCDs can come from PDMSS or Impresa. Exchangeable schedulers will file maintain all completed WCDs IAW AFSCMAN 21-102, paragraph 1.12.1. These can be used in the PQDR process.

14.51.13. Awaiting Maintenance (AWM). It is a delay status for items that are pre-positioned in the maintenance complex AWM. Do not use AWM for any exchangeable at OO-ALC. This is for aircraft and engines.

14.55. Data System Interfaces.

14.55.1. D035K. Stock Control and Distribution/Central Material Locator System. Wholesale and Retail Receiving and Shipping (WARRS) system. Issue receipts and turn-ins of production items will be accomplished by input of a receipt acknowledgement (RA) (D7M) or turn-in (D6M) transaction into ITS, Impresa or G402A which passes to D035K. Production transactions are passed electronically from D035K to G004L. Issue receipts and turn-ins of material from supply sources will be accomplished by input of an issue request (D7A or D7R) or turn-in (D6R or D6A) transaction into MPS/D230, Impresa or Automated Bill of Material (ABOM)/NIMMS which passes to D035K. Material transactions are passed electronically from D035K to ABOM/NIMMS and G402A and post to MPS/D230 or Impresa if the transactions were processed in either system.

14.60. JON Suffix Establishment.

14.60.2. Permanent Non-serialized. The JON suffix is established upon the RA transaction (D7M RA or D7 WP) for each JON period (monthly or quarterly) input from G337/ITS, Impresa or G402A by the scheduler.

14.60.3. Temporary Serialized. The JON suffix is established upon the input of the serial number in G004L, Serialized Record Establishment screen by either the workloader or planner.

14.60.5. If a monthly JON suffix has been established in a fiscal quarter, a quarterly JON suffix cannot be established in the same fiscal quarter. If the End Item Sales Price (EISP) is less than $25,000, a quarterly JON suffix will be used. Any transaction that fails these JON edits will be rejected and will appear on the G004L-L2A with asterisks (*) over the JON.

14.61. Job Order Cancellation/Reduction. Job order cancellation/reduction is coordinated between the customer, scheduler and workloader. The change of the Job Order Quantity (JOQ) to a new value is accomplish by the workloader in G004L after written agreement has been sent from the customer to the workloader.

14.62. Annual Customer Order Quantities (ACOQ).

14.62.4. To ensure customers funds can be used to order work for MISTR items before fiscal year end, G004L system provides data from G019C reflecting fourth quarter input as an ACOQ.

14.62.5. The scheduler must populate the ACOQ in G004L. The scheduler will populate and save the G004L-L2B report daily from 30 September to 31 December every year.

14.62.8.4. If a requirement exists, inductions to replace the non-serviceable turn-ins will be inducted using an annual JON “M” in lieu of monthly/quarterly JON. During the first FY quarter, the scheduler will review the G004L-L2B report prior to inducting an end item into the shop. This is to ensure only the identified quantities of end items tied to a PDN on the report are inducted that day using an annual M JON. No inductions against a PDN monthly or quarterly JON will be made until the total quantities identified on the report have been inducted with the M JON. If the PDN is not listed on the current daily G004L-L2B report, then the scheduler will use the PDN monthly or quarterly JON.

14.63. Schedulers Jacket Files (Exchangeables Only).

14.63.1. AFSC Form 206 screen print. The AFSC Form 206 can be the printed G004L Temporary PDN Review of the T-Job.

14.63.1.1. AFSC Form 237, *Temporary Labor and Material Plan*, screen print and AFSC Form 240, *Temporary Labor and Material Plan Addendum*, (when applicable) (2 copies). The AFSC Form 237 and AFSC Form 240 can be the G004L-L3A, Temporary Job Record report which lists all the labor and material that is planned against the assigned T-Job.

14.63.2.1. Temporary-when completion equals JOQ on the G004L-L2A report, the jacket file is maintained with AFRIMS. The schedulers temporary production number (T-Job) jacket file, once completed, will be given back to the planner. The AFSC Form 105 and applicable WCDs for the T-Job will be file maintained by the scheduler for 2 years or longer in a locked file cabinet.

14.64. Inductions.

14.64.1. T-Data Processing Code and all permanent production numbers have the induction value established from an RA transaction. The induction transaction of a D7M RA is input by using either ITS, Impresa or G402A by the scheduler. The use of a Data Processing Code (DPC) of T means the item will be transacted with a D6M to ship the item back to supply by the scheduler once completed.

14.64.2. Temporary Production Numbers.

14.64.2.1. Once a T-Job is fully established in G004L with a DPC of N then the Job Order Number Induction (JONI) and JON OWO quantity will be equal to the T-Job JOQ in G004L. The T-Job G004L OWO quantity will not be reflected on the D035K NSN account M balance. The use of a DPC of N means the item will not be transacted to ship back to supply by the scheduler once completed.

14.65. Induction Transaction Processing (Exchangeables Only).

14.65.1. RA transaction inductions. All exchangeables that are shipped into depot maintenance against an assigned PDN that will be inducted into depot maintenance and shipped back to supply will be transacted with a D7M transaction input in ITS, Impresa or G402A by a scheduler. ITS and Impresa electronically sends the RA transaction through G402A, which feeds into the D035K system. The D035K system sends a tape daily to the G004L system.

14.65.3. Daily Verification of Production Transaction Visibility. The G004L-L2A is now titled Daily End-Item Production Account Visibility and Cross Reference List.

14.65.7.2. To allow de-obligation of customer funds when assets are OWO and work is discontinued for a period of time for whatever reason except awaiting parts. This action will enable schedulers to use the de-obligated funds for induction of other assets that the Item Manager/Production Manager has a requirement for. This process will not be used for EXPRESS-driven items.

14.65.7.3.1.1. The scheduler will use G402A to transact any AWM transactions.

14.65.7.4.1. Supply to AWM (Prepositioning). The D7/RB transaction will plus the D035K M balance and decrease the in transit to maintenance Y balance of the NSN used on the D7/RB transaction.

14.66. Formal AWP. Taken Off of OWO (Exchangeables Only).

14.66.1. Purpose. The purpose of the AWP process is to decrease assets in OWO status that are at work stoppage due to parts. Assets in AWP status must be maintained in a secured area.

14.66.3. Procedures. The following procedures identify production/supply transactions required for AWP processing. The PST will process the OWO to AWP transaction in D035K on the RBOG AWP End Item File Maintenance screen. D035K will automatically send a D7 RF transaction with action suffix of PK. This transaction will pass to G004L to decrease the OWO quantity and increase the AWP quantity for the PDN. If this transaction does not show up the following day on the G004L-L2A the scheduler will check the NSN of the end item document number used on the D7 RF PK transaction on the D035K RINL End Item Inquiry screen with NSN on the G402A Display OWO Data screen for the end item document number. If the NSN does not match in both systems, then the scheduler will check the NSN assigned to the PDN in G004L. If the NSN needs to be fixed in G004L then the Planner will be notified, in G402A the scheduler will use the End Item OWO screen and in D035K the DLA/Customer Support Specialist (CSS) will be notified.

14.66.4. AWP to OWO. The scheduler will use D035K RINL screen to verify the Due in from Overhaul (DIOH) Status Code changed from FWP to In Work (INW) then the scheduler will use the G402A AWP Induction Notice screen to transact a D7 RE PK transaction to the D035K system and passes to G004L. G004L will decrease the PDN AWP quantity and increase the PDN OWO quantity, increase the JONI quantity and decrease the remaining annual customer order quantity. Verify the transaction the following day on the G004L-L2A looking for AWP to OWO. The scheduler will use Impresa to re-induct the end item from AWP to the PDN and JON that was used on the G402A AWP Induction Notice screen. Annotate this transaction on the AFSC Form 105.

14.77. Due in From Overhaul In Maintenance Control (Exchangeables Only).

14.77.2. The DIOH accountable balances are reflected in D035K, as condition codes "M" which means on work in maintenance; "Y" is an issue from supply to maintenance; "Z" is a return from maintenance to supply.

14.77.3. The Production Support Section (scheduler) will ensure all inductions and sells are documented on the AFSC Form 105. Additionally, the scheduler will review the G004l-L2A and G402A End Item-Item Transaction History screen daily for transactions that failed/rejected. The scheduler will perform the research and determine the cause of the reject, make the correction and reprocess the transaction within 2 duty days.

14.77.7. For misidentified production items, the scheduler will always clear the RA, check the G004L-L2A the following day, check the D035K RINL screen to verify the NSN for the end-item document number then transact a DF1 making sure to use the exact NSN as on the RINL screen at the time of the transaction. Check the G004L-L2A the following day and then follow **paragraph 14.70.4** for mis-identified production items.

14.77.8. D035K Error Reject Codes. The error code will appear on the G402A End-Item Transaction History screen.

14.77.8.2.4. Accompanied by the shop supervisor, physically count assets in the shop, enter the count in Section III, Findings of the AFMC Form 37, *Inventory Research Worksheet*; sign and date the form. The shop supervisor will sign as the MX authenticating official.

14.77.9.2. **(Added)** Schedulers will run the Center of Parts Activity (COPA) DIOH D7M INTRANSITS WITH NO RA, COPA DIOH D6M INTRANSITS WITH NO RT weekly and do the following:

14.77.9.2.1. **(Added)** Filter the report by the “AGE CATEGORY” column.

14.77.9.2.2. **(Added)** Filter the report by the "DOC_NR" column according to assigned PSSD.

14.77.9.2.3. **(Added)** Highlight every line in RED for the "AGE CATEGORY" gt_21_days.

14.77.9.2.4. **(Added)** Highlight every line in YELLOW for the "AGE CATEGORY" 15_21_days.

14.77.9.2.5. **(Added)** Highlight every line in GREEN for the "AGE CATEGORY" 8_14_days and 0_7_days.

14.77.9.2.5.1. **(Added)** Document the spreadsheet of actions being taken by adding a column to the spreadsheet to the right of the POS23_80_TRANS column titled "CORRECTIVE ACTION BEING TAKEN".

14.77.9.2.5.2. **(Added)** Retain these weekly spreadsheets for 2 years.

14.77.9.3.1. **(Added)** Line through and date all items as the RA suspense has been cleared.

14.77.9.3.2. **(Added)** Daily review the items on the RA suspense for items greater than 7 days that have not been RA cleared.

14.77.9.3.3. **(Added)** If the item has not been RA cleared within 7 days, annotate the G402A RA suspense with actions being taken as follows:

14.77.9.3.4. **(Added)** Perform a search of the item in the shop, receiving areas in the building, other shops in the building, etc.

14.77.9.3.5. **(Added)** Contact DLA-A about doing research for the missing item for which the RA was not received.

14.77.9.3.6. **(Added)** If the item is found in the building the scheduler will transact the RA clear in the applicable MIS.

14.77.9.3.7. **(Added)** If the item is not found the scheduler will fill out an AFMC Form 37 detailing all the details about what happened to the item and request the RA be reversed in D035K to drop the Y in-transit balance for the end item document number not received.

14.77.9.4. **(Added)** If the item has not shown a D6M RT in D035K RINA Retail Transaction History Inquiry screen after 7 days of the D6M_T transaction the scheduler will do the following:

14.77.9.4.1. **(Added)** Perform a search of the item in the shop, receiving areas in the building, other shops in the building, etc.

14.77.9.4.2. **(Added)** Contact DLA-A about doing research for the item missing the D6M RT.

14.77.9.4.3. **(Added)** If the item is found still in the shop the scheduler will get with DLA-A to have the item shipped out to supply.

14.77.9.4.4. **(Added)** If the item is not found the scheduler will fill out an AFMC Form 37 detailing all the details about what happened to the item and request the Z, 1, 2 or 3 in-transit balance in D035K for the end item document number not receipted be dropped.

14.77.10. **(Added)** The scheduler will conduct a monthly 100 percent inventory of all DIOH assets in depot maintenance. This includes assets in transit from the supply warehouse to maintenance and in transit from maintenance to the supply warehouse.

14.77.10.1. **(Added)** Complete book-to-floor and floor-to-book inventories. This means that all items undergoing repair in maintenance using the supply DIOH process (D035K) must be accounted for and on a supply accountable record.

14.77.10.1.1. **(Added)** Included in the inventory are:

14.77.10.1.2. **(Added)** DMISA Items (these affect another service's balance).

14.77.10.1.3. **(Added)** In-transit to/from depot maintenance supply condition code (SCC) "Y", "Z", "1", "2" and "3".

14.77.10.1.4. **(Added)** Items identified in G004L as being in the repair process (OWO and formal AWP).

14.77.10.1.5. **(Added)** Items in supply condition code "M" in D035K.

14.77.10.1.6. **(Added)** Items in the X-MIC that are in SCC "M" in D035K, but *should not* be accounted for that way.

14.77.10.1.7. **(Added)** Items in the X-MIC that are not in SCC "M" in D035K, but *should* be accounted for that way.

14.77.10.1.8. **(Added)** Items that should be in SCC "M" in D035K.

14.77.10.1.9. **(Added)** Items identified in Impresa as being in the repair process (OWO and in formal AWP) against MISTR and temporary PDNs in which items came in from supply and are tracked in D035K as part of the DIOH process.

Table 14.15. 244Transaction/971 Error Codes (G004L-L2A).

Code	Error Code	Description
L		If the EISP is over $25,000 it requires a monthly JON suffix.

Table 14.16. Material Condition Codes.

Code	Error Code	Description
Z3	D, Q, R	In-transit from maintenance

14.83.2.3.2. If the EISP is greater than or equal to $25,000, a monthly JON suffix must be used. If the EISP is less than $25,000, a quarterly JON suffix will be used.

14.92.4. Supply Inventory held for Repair by Organic Depot Maintenance.

14.92.4.9. All supporting documentation will be maintained for two years with the scheduling documentation in accordance with the depot maintenance records retention rule. Keep Supporting Documentation such as: AFSC Form 400, AFSC Inventory Count Sheet for each NSN; D035K NSMC screen shot for each NSN; MRO Apps Sales Order Status; MRO Apps AWP Data; G402A End Item Record Display by NSN; G402A Display On Work Order (OWO) Data (click Show All Status to show all OWO and items in AWP); G402A End Item Transaction History query by NSN (only if a correction was made to bring system back into balance); AFMC Form 37, Inventory Research Worksheet (only if an inventory adjustment is required in D035K).

14.92.4.10. Out-of-Balance (OOB) Reconciliation. The purpose of the reconciliation is to identify the cause of the out-of-balance, make the corrections, verify and document the corrective action within 30 days of the identified OOB condition. Reconciliation research ends when the accuracy of the count has been verified or when any necessary recounts have been taken. If the adjusted physical balance quantity matches the recorded balance, the inventory is complete for the NSN.

14.92.4.11. Pacer Parts. For some NSNs, the number of single component NSNs that comprise an end-item NSN can be numerous making it extremely difficult to conduct a physical count. A pacer part is a component piece part used to identify the end-item or highest assembly. They are usually larger components which makes them easier to inventory. In said cases, the owning organization shall select a single component NSN (referred to as a Pacer Part) as representative of the end-item NSN that will be used to verify the physical audit count.

Chapter 15

DEPOT MAINTENANCE PLANT MANAGEMENT

15.2. Local Instruction.

15.2.1.1. **(Added)** Requesting organizations will submit all requests through EFEMS via a service request for any new equipment and/or changes to existing equipment and/or facilities IAW 15.7.2.

15.2.1.2. **(Added)** 309 MXSS will process, control, and support equipment and/or facilities IAW 15.7.2.

15.2.2. 309 MXSG/EN will develop strategies and requirements to monitor and accomplish preventative and predictive maintenance IAW 15.7.1.

15.4. Relationship to Base Civil Engineering (BCE) (Work Accomplishment).

15.4.1.1. **(Added)** 309 MXSG and BCE responsibilities will be accomplished IAW the current 309 MXSG/CE MOA.

15.5. Equipment Maintenance and Inspection Program.

15.5.2.1.5. **(Added)** Shop Machinery Accessories/Attachments—Items such as dies, fixtures, tool holders, chucks, shop aids (locally manufactured items used in conjunction with shop equipment to assist in the production of an end item or product), special machine tooling, end item unique items, equipment that may look like tools, but have been purchased or provided by a manufacturer, should be excluded.

15.5.3. All records for equipment maintained by 309 MXSG will be recorded and referenced from EFEMS.

15.5.3.1.6.2.1. **(Added)** 309 MXSG will use EFEMS to annotate and indicate the condition of the asset to the owning organization in the Industrial Plant Equipment asset EFEMS dashboard.

15.5.3.1.7.1. **(Added)** Mechanics perform PM IAW 309 MXSS work authorization documents.

15.5.3.3.1. **(Added)** Customers will request service from 309 MXSS for Equipment and Facilities utilizing the 309 MXSS Customer Service Desk/electronic equivalent. 309 MXSS is responsible for inputting and initiating all unscheduled repairs and service requests in FEM.

15.7. Responsibilities.

15.7.1.1.1. **(Added)** 309 MXSG will use historic data, judgement and expertise based on similar equipment to establish PM requirements for support equipment that does not have specific technical data IAW 15.5.3.1.4 and 15.5.3.1.5.

15.7.1.2.1. **(Added)** All equipment submitted to 309 MXSG will be evaluated/approved/ categorized and documented in EFEMS. ID numbers for industrial services-maintained equipment are assigned IAW 309 MXSS PM process.

15.7.1.12.4.1. **(Added)** Routine maintenance that is scheduled or unscheduled. This would include non-work stoppage of a critical workload.

15.7.1.12.5.1. **(Added)** Routine maintenance that is scheduled or unscheduled. This would include non-work stoppage of a non-critical workload.

15.7.2.2.1. **(Added)** All records for equipment maintained by 309 MXSG will be recorded and referenced from EFEMS. All prior to use inspections shall be maintained on AFSC Form 355 or AFTO Form 244. Report the acquisition, installation, relocation, modification, and removal of all industrial production equipment to 309 MXSG utilizing the service request within EFEMS.

15.7.2.2.1.1. **(Added)** To include work accomplished by contract/contractor/engineering that results in the acquisition, installation, relocation, modification, and removal of all industrial production equipment.

15.7.2.9.1. **(Added)** Customer reported CMs that have not been released for work within 5 days after initial response from 309 MXSG personnel may be canceled at the discretion of 309 MXSG.

15.7.2.12.1. **(Added)** 309 MXSG provides online computer-based training courses via TSS that have annual requirements for completion.

15.8. Equipment Maintenance Documentation.

15.8.4.1.1.1. **(Added)** The status of equipment EFEMS will be used to indicate condition of equipment in lieu of AFTO Form 244.

15.8.5.1.2.1. **(Added)** Shop supervisor's review of the AFTO 244 will be documented in Part IV of the AFTO 244 with review intervals of 180 days, at which time the AFTO 244 or computer-generated equivalent will be reviewed for correctness and accuracy.

15.9. Engineering and Installation Projects.

15.9.1.1.1.1. **(Added)** Project requestors should use OO-ALC Form 546, *Engineering Project Request*, to initiate an engineering project.

15.9.1.1.4.1. **(Added)** Use the CE e332 System to input AFMC Forms 299, *Safety, Fire, and Health Review*.

15.9.2.1.5.1. **(Added)** 75 CEG will coordinate AF Forms 813, *Request for Environmental Impact Analysis*, as required.

15.9.2.2.1. **(Added)** 309 MSGS/EN will hold weekly coordination meetings with representatives from all maintenance groups and other organizations as needed. The 309 MXSG chair of this meeting will then meet with BCE to discuss any projects in further detail at their coordination meetings, as needed.

15.9.2.4.3.1. **(Added)** Coordinate and ensure that the project requester/engineer provides a service request within FEM and a copy of all technical manuals/documentation to 309 MXSS equipment specialists for all projects affecting equipment IAW 15.7.2.

15.9.5.2.3.4.1. **(Added)** All returned residual material will be accompanied by a work order and an appointment shall be scheduled with a material control representative before material is returned.

15.9.5.2.3.6. **(Added)** Coordinate and ensure that the project requestor provides a service request via EFEMS and a copy of technical manuals to 309 MXSS for equipment purchased and installed as a result of this project.

15.10. Maintenance Support Group Laboratory.

15.10.3.1.1. **(Added)** 309 MXSG Laboratory personnel are exempt from PAC stamping. In lieu of stamps, employee signatures certify that the work they performed meets all technical data, safety, local Standard Operating Procedures (SOP), and other applicable directives.

15.10.3.4.2. **(Added)** Local SOPs are another acceptable medium for documentation of technical guidance and instruction for methods and procedures for 309 MXSG Laboratory testing.

15.11. Material Control.

15.11.1.1.1. **(Added)** The 309 MXSG Material Management Section is the responsible organization for controlling material functions throughout the 309 MXSG.

15.11.1.2.1. **(Added)** Shops within the 309 MXSG may manage bench stock types of material and consumable serviceable component parts.

15.11.1.2.2. **(Added)** Bench Stock: May be stored in production areas. All material will be identified with proper noun, part number, bin level, and then replenished as required.

15.11.1.2.3. **(Added)** Raw Stock: May be stored in the production work areas and should be identified with proper noun, part number, bin level, and then replenished as required and will stock, store and issue material.

15.11.2.4.1. **(Added)** Reclaimed Assets. Higher assembly assets reclaimed from a work order repair may be stored in a designated area for future use of salvageable part.

15.11.4.1. Engineering Section will develop BOM using EFEMS.

15.11.4.1.11. **(Added)** Include source-of-supply for sole source items and/or uncommon items.

15.11.4.3.1. **(Added)** Project bins or pallets will be used to collect and hold all BOM per project number and will be located in the staging cage until fully supportable.

15.11.4.5.1. **(Added)** Material pre-positioned for a project work order will be issued the same time stock is pulled from the Material Inventory Center (MIC), to ensure on-hand balance records are maintained.

15.11.4.6.1. **(Added)** Production shops must mark raw stock residue with proper mill markings before returning to the MIC to be re-stocked.

15.11.4.8.1. **(Added)** Material support will notify and coordinate with project engineers on all BOM procurement constraints and will update project work order status accordingly.

15.11.4.8.2. **(Added)** Provide material support status on unavailable and additional materials to the project engineer.

15.11.4.8.3. **(Added)** Production technicians will determine disposition of residue materials through coordination with the project engineer and MIC personnel. **NOTE:** See **paragraph 5.7.1.2**.

15.11.5.1.1. **(Added)** Manage hazardous material IAW AFI 32-7086_Hill AFB Supplement (HILLAFBSUP), *Hazardous Material Management,* and all applicable supplemental guidance.

15.11.6.1.1. **(Added)** Only materials previously stocked in MIC will be returned unless tied to an asset for permanent stock in EFEMS. Excess project material shall be coordinated with material management section to determine disposition.

15.11.6.1.2. **(Added)** Production technicians will coordinate with the MIC personnel via scheduled appointment to return residue material for future use. "A" condition residue parts will be identified with manufacturer part number, "P" number/national stock number, quantity, unit of issue, cost, nomenclature, and equipment PM number. **NOTE:** PM numbers are not required for common bench stock material types.

15.11.6.3.1. **(Added)** Applicable residue returned to the MIC will be returned by project or work order number. The MIC personnel shall accomplish a return in EFEMS during the appointment, to ensure all work orders are closed in a timely manner.

15.11.6.4.1. **(Added)** "A" condition residue material, determined not to be stocked for future use, will be coordinated with their production material technician to either return to the vendor, or send material to Defense Logistics Agency Disposition Services. Excess project material shall be coordinated with the material management section to determine disposition.

15.11.6.4.2. **(Added)** Hazardous chemicals will be disposed of IAW Title 40, Code of Federal Regulations, Hazardous Waste Management System, (See Subtitle C Parts **260**-**280**). Contact the 309 MXSG Environmental Manager for disposal assistance.

15.11.6.4.3. **(Added)** Hazardous materials transported and used during maintenance activities will not be stored in vehicles when not in use. Instead, hazardous material must be stored within hazardous material cabinets AFI 32-7086_HILLAFBSUP and all applicable supplemental guidance, and DAFMAN 91-203.

Chapter 18

DEPOT MAINTENANCE MATERIEL CONTROL

18.2. Maintenance Complex.

18.2.5. **(Added)** OO-ALC/OBWC is responsible for providing subject matter expertise on AFSC, AFMC and OO-ALC policy; developing production support process guides; and performing trend analysis to determine if the process is being performed correctly, if not, why not? Provide recommendations and a course of action to the PSS/Weapon System Support Center when the trend analysis indicates that production support processes are adversely impacting depot maintenance.

18.3.6. Maintenance Work Requests System.

18.3.6.7. **(Added)** MWR System is used for developing WCD for 103 work requests by Planning. WCDs based on AF Form 202 non-conforming material engineering answer. Stumble on, Safety of Flight items, Non-Safety of Flight Economy, Non-Safety of Flight, Carry Forward Home Station.

18.11.7.7. **(Added)** Excess material that does not meet the criteria to be held in NIMMS inventory ("Y" store), it may be placed in the MPS store. NOTE: This applies to material purchased because of the minimum buy requirements on part number requests as well as material reclaimed and held in maintenance based on instructions on an AFSC Form 206. The OO-ALC Form 244, Reclaim Material Worksheet, (see Attachment 2, Sample OO-ALC Form 244) will be used to ensure the correct criteria is met prior to placing material in the MPS holding area. The OO-ALC Form 244, *Reclaim Material Worksheet*, (see Attachment 2, *Sample OO-ALC Form 244*) will be used to ensure the correct criteria is met prior to placing material in the holding areas.

18.11.7.7.1. **(Added)** Prior to placing the material in the MPS store, research will be performed to ensure the item has a valid NSN, or a locally assigned stock number (PG or a non-definitive), only ERRCs XB3/N or XF3/P may be stored in MPS. Exchangeable/repairable items identified with an ERRC code of XD2/T or XD1/C will not be stored in MPS stores.

18.11.7.7.2. **(Added)** The NSN must be the same in all maintenance information systems (G004L, MPS, Impresa, ABOM and NIMMS) to allow the orders and issues to process systemically. **NOTE:** All NSNs will either be 13 or 15 digits, for example: 1560 01 123 4567 or 1560 01 123 4567 WF.

18.11.7.7.3. **(Added)** Material in the MPS store must have a verified future need (within the next 6 months).

18.11.7.7.4. **(Added)** Prior to placing the reclaim/excess material in the MPS store check to see if there are backorders in the systems. If a backorder exists, use the excess/reclaim material to satisfy it. Cancel the backorder in NIMMS on the MN123P screen. Check the DHA (Y) box to signify that the backorder was canceled due to a workaround.

18.11.7.7.5. **(Added)** MPS stores will be inventoried and reconciled monthly to ensure that MPS and the physical locations match. When all of the material is completely consumed in a location, contact the MPS System individual, via email, to delete the location.

18.11.7.7.6. **(Added)** When the material is no longer required, it will be removed from the MPS store, according to the turn in rules based on the NSN.

18.17. Assignment of Document Numbers. ABOM automatically assigns a document number, which includes the assigned RCC**,** Julian date, and a serial number. ABOM facilitates Due in From Maintenance/Due Out to Maintenance (DIFM/DOTM) transactions through on-screen matching before generating a new ABOM assigned document number.

18.19. Material Transaction Processing and Cost Corrections.

18.19.1.1. The PST will pull the 507 report daily, from Depot Cost and Schedule Tool and fix any material errors.

18.19.1.2. **(Added)** The PST will use the Requisition Status Error Report in Automated Bill of Material (ABOM) to identify and correct any errors on the report each day.

18.19.2.2.1. **(Added)** The PST will ensure that the orders are input with the End Item Document Number (EIDN), Standard Reporting Designator, Required Delivery Date and a B3 priority to facilitate the AWP process if required.

18.19.3.2.1. **(Added)** The PST will keep a hard or electronic copy of Non-Bill of Material (NONBOM) approvals. NONBOM approvals accomplished via the MPS do not need to be printed.

18.19.5.3.2.1. **(Added)** MXG will ensure that consumable material regardless of type or condition is properly turned into the Retail Material Management Activity for proper handling, disposal and/or demilitarization (DEMIL).

18.19.5.5.1.1. **(Added)** PSS will ensure upon reciept of consumable material that is has been properly identified and tagged. NOTE: If the material is not properly tagged production should correct errors.

18.19.5.5.6.2.1. **(Added)** PST will ensure that material received from production is processed for turn-in based first on the condition code identified on the condition tag. If the material has been identified with a condition code of H, then the condition tag should have the correct DEMIL code in the remarks section of the tag." NOTE: If the DEMIL code is not on the tag the PST will have to research the proper code.

18.19.5.5.6.3.1. **(Added)** The DEMIL codes determine the degree of destruction and will not be thrown in the trash or to local recycling. The basic DEMIL Codes are B, C, D, F, G, P, and Q and requires turn-in for proper disposal and DEMIL. DO NOT research any further than the basic code for turn-in process. Note: DEMIL Code “A” is the only material that does not have a DEMIL requirement.

18.19.5.9.4. **(Added)** The PST will use the COPA report heading DIFM-DOTM-OO under DIFM-DOTM Records (choose the report to manage and minimize overage DIFMs (greater than 60 days) and credit DIFMs greater than 18 months. Credit DIFMS greater than 18 months will be deleted, unless there is a valid requirement, i.e., required to support AWP backorders.

18.19.5.9.5. **(Added)** The PST will request assistance from the responsible DLA person (CSS/MSS/MST) to match credit DIFMs with open DIFMs.

18.19.5.9.5.1. **(Added)** Serviceable (A) and (Q) condition turn-ins will only be processed in NIMMS on the original document. The PST will maintain turn-in documentation on file until the receipt transaction clears through the Distribution Standard System (DSS).

18.19.5.9.6. **(Added)** For DIFM turn ins, the PST will request a signature from the DLA Aviation person that is accepting the asset. If a signature is not provided, the PST will document the name of the person that received the material and date the hand-off on a copy of the stuffer. The stuffer will be maintained until the transaction has completed in D035K.

18.19.5.9.7. **(Added)** The PST will track the DIFM turn in until the receipt is completed in DSS and D035K reflects the completion (RT advice code) on the RINA Transaction History Screen.

18.19.5.9.8. **(Added)** All items ordered or turned in under the DIFM/DOTM process will never have a quantity greater than one on the transaction.

18.20. Backorder Management.

18.20.1. **(Added)** The PST will conduct at a minimum, monthly reviews of all backorders to ensure the material is still required in support of the repair actions. Utilizing the five NIMMS Backorder Reports in COGNOS. If the materials are no longer required, determine if cancellation or roll is needed. Additionally, the PST will ensure requirements are still valid in DO35K and NIMMS. They will review and annotate any actions on the COGNOS NIMMS Open Backorder Reports. The PST will keep these reports on file for 2 months.

18.20.2. **(Added)** The PST will work with the supporting CSS to correct adverse advice codes and status codes on their orders, i.e., "FL" and advice codes that start with a “C” (CJ, CG CH etc.). Any request for assistance will be via email.

18.20.2.1. **(Added)** The PST will engage the supporting CSS when there is a backorder, and no requisitioning action has taken place.

18.20.3. **(Added)** PST will check NIMMS and D035K for BOs and roll or cancel any BOs prior to JON closure.

18.20.4. **(Added)** The PST will hand off supply discrepant material to the Shop Service Center (SSC). The SSC will coordinate with DLA-Distribution for a reversal of the original issue (order). If the Supply Discrepancy Report meets the time rules, credit will be granted.

18.33. Management of CANN Actions. NOTE: See AFSCMAN 21-102_OO-ALCSUP_309 AMARG Addendum A for 309 AMARG CANN action process.

18.33.2.1. **(Added)** Each CANN action will be initiated by the benefiting scheduler and approved by the current Memorandum of Delegation of Authority, by the OO-ALC Commander for depot-possessed aircraft.

18.33.2.2. **(Added)** When using an eWCD and the electronic version of the 309 AMXG Form 2, *Cannibalization Transaction Summary Sheet*, there will be backup names for each person/section (benefiting scheduler, donor scheduler, PST and master scheduler) so there is no single point failure for information input and approval actions. **NOTE:** The PST for both the benefiting and donor aircraft must be involved in the process.

18.33.2.2.1. **(Added)** The benefiting scheduler will initiate the 309 AMXG Form 2 and send it to the benefiting PST for input of material and backorder information. The PST will forward the form either to the benefiting scheduler or aircraft supervisor for approval. After donor aircraft selection and approval, the form will be returned to the benefiting scheduler for disbursement as per the direction on the back of 309 AMXG Form 2. The benefiting PST will roll the backorder (ZFA/Mark for) from the benefiting aircraft to the donor aircraft.

18.33.2.3. **(Added)** The master scheduling office will make the determination of which aircraft will be the donor for the required material. If the part has already been removed during depot work and is in a tail number bin (TNB) it will save time and manhours if taken from the bin and not opening an aircraft to remove the part.

18.33.2.4. **(Added)** If a CANN action is directed by the SPO/Major Command (MAJCOM) they may also dictate which depot-possessed tail number the cannibalization may come from. Each CANN action will have the local 309 AMXG Form 2 filled out for the approving official to assign the donor aircraft tail number and sign the approval section of the form. SPO/MAJCOM funds the CANN actions and follow-on maintenance to replace the removed part.

18.33.4.1. **(Added)** The aircraft scheduler of the donor aircraft being cannibalized will check to see if the required part has already been removed from the aircraft and placed into storage (TNB) in high bay with adequate caps/covers/plugs to prevent foreign object intrusion, notify applicable supervisor if CANN item is not properly capped/covered/plugged). If the required part is in the storage bin a copy of the 309 AMXG Form 2 will be placed in the bin when the part is removed.

18.33.6.1. **(Added)** OO-ALC will use the Mission Impaired Capability Awaiting Parts (MICAP) worksheet (maintenance complex checklist, OO-ALC Form 211, *Depot MICAP Request Form*). The OO-ALC Form 211 will be used to notify the DLA CSS to have a backorder upgraded to MICAP status, when the backorder Estimated Delivery Date (EDD) is beyond the shops required delivery date.

18.33.7.1. **(Added)** Each cannibalized action will have its own set of WCDs. A removal WCD and an install WCD will be created for each action. The word cannibalization or CANN, will be the first word on each WCD. The P/N and or NSN will be listed in the description block of the WCD being cannibalized**.**

18.33.7.2. **(Added)** Each CANN action will have a 309 AMXG Form 2 COMPLETELY filled out and signed. The MWR operation numbers for the removal and reinstallation (or cyber operation numbers, if the part has been removed as part of a depot-negotiated workload) will be entered in the appropriate block. Unless using planned cyber, there must be an MWR for tracking the removal and or the installation of the material being cannibalized. This is for tracking the "T" Action Taken Code for CANN Action Removal and "U" for CANN Action Reinstallation as these codes are sent to Reliability and Maintainability Information System (REMIS) nightly from G097. If there are any follow-on operation checks required due to this cannibalization action, these operation numbers will also be listed in the remarks block. The material document number will be entered in the appropriate block.

18.33.7.3. **(Added)** Each CANN action will be entered into the local MIS. Aircraft will use PDMSS Web. This information will be entered into the scheduler's logbook under the word K-Ball in the "Type Remarks" pop down. An entry will be placed on each aircraft. The donor aircraft and the benefiting aircraft, part number and or NSN, will also be listed in the scheduler's logbook with the material order number.

18.33.7.4. **(Added)** All unit CANN actions will have the base and unit name on the WCDs and entered into the scheduler's log book. This allows for better traceability of parts being cannibalized from the depot by units.

18.33.7.5. **(Added)** All SPO/unit CANN actions will be worked through planning for the standard or estimated hours for the removal, reinstallation and any follow-on operations checks that might be required. An EDD on the replacement item will be obtained from the SPO/unit at the time of the request for CANN. Planning will work with the master schedulers for a donor aircraft unless the situation dictates the part(s) be removed from a designated, depot-possessed aircraft for the creating of the WCDs. The aircraft scheduler will be notified as soon as possible of an upcoming unit CANN so that the aircraft RCC supervisor can also be informed.

18.33.7.6. **(Added)** The Forms and Records section will need to be contacted by Master Scheduling to verify the donor part is a good candidate for the CANN action by verifying the AFTO Form 95 history for hours remaining, starts remaining, and due time change. A copy of all 309 AMXG Forms 2, CANN action will be given to the Forms and Records sections for updating of the AFTO Form 95 for serial-tracked items after final approval. Part numbers and serial numbers MUST be on the CANN sheet.

18.33.7.7. **(Added)** Copies of the CANN summary sheet, 309 AMXG Form 2, will be given to the donor aircraft scheduler, supervisor, PST, master scheduler, Forms and Records section, benefiting aircraft scheduler, supervisor and the PSTs of the benefiting aircraft.

18.33.7.8. **(Added)** The benefiting aircraft will have a current material backorder. When the CANN action is completed, the benefiting PST will ZFA (mark-for) that order to the donor aircraft.

18.33.4.1. **(Added)** Cannibalization actions for field units will not be performed on depot-possessed aircraft unless approved and funded by the SPO or owning MAJCOM. This includes funding for the install/removal and follow-on operations checks not covered under the existing program/PDM projects. All CANN/Rob-Back actions will be tracked in the local MIS.

18.35. Procedures for Control of Production Items AWP.

18.35.1.1. **(Added)** Moving the end item from OWO to AWP storage. **NOTE:** Detailed instructions are documented in the complex AWP Process Guide for formal AWP procedures and can be found on the Material SharePoint site.

18.35.1.2. **(Added)** When the decision is made that the end item will be moved from OWO to AWP, the PSS will:

18.35.1.2.1. **(Added)** Ensure all parts are ordered. Ensure the AFSC Form 503, *AWP Checklist/Worksheet*, is completed and the WCDs are gathered.

18.35.1.2.2. **(Added)** Query WARRS/D035K to ensure that the end item document number is valid and that all backorders are tied to the EIDN.

18.35.1.2.3. **(Added)** Coordinate with DLA for a location in the "X" store for the EI that will be placed in AWP.

18.35.1.2.4. **(Added)** Process the transaction in the RBOG screen in WARRS/D035K placing the EI in formal AWP.

18.35.1.2.4.1. **(Added)** The scheduler will process the appropriate transactions in MIS.

18.35.1.2.5. **(Added)** Ensure all parts issued, but not installed on the EI, are located with the EI and a copy of the RINM screen may be attached to the AFSC Form 503 for a record of parts issued to the end item.

18.35.1.2.6. **(Added)** Notify DLA that the end item is ready to be moved and/or move the end item into an agreed upon location for storage and request a signature on the AFSC Form 503.

18.35.1.2.7. **(Added)** Maintain the signed AFSC Form 503 and copy of RINM screenshot until the parts have been systematically issued and the end item and parts have been received from the AWP Store.

18.35.2.1. **(Added)** FWP fully supportable end item in formal AWP. **NOTE:** Detailed instructions are documented in the complex AWP Process Guide for formal AWP procedures and can be found on the Material SharePoint site.

18.35.2.1.1. **(Added)** Scheduler will notify PST when an end item in AWP is fully supportable. PST hands off the AFSC Form 503 to the scheduler to update the JON. Scheduler returns the AFSC Form 503 to the PST to issue component parts from AWP. **NOTE:** The status on the RINL screen in WARRS/D035K will change to FWP once all backorders are released.

18.35.2.1.2. **(Added)** PST will verify that all backorders have been released/receipted in ABOM/NIMMS and/or WARRS/D035K.

18.35.2.1.3. **(Added)** PST will verify the end item is showing as fully supportable in ABOM, AWP Supportability Report by looking under the Status Indicator column for *F*.

18.35.2.1.4. **(Added)** PST will verify the on-hand quantity is available in the NIMMS MN090P screen prior to issuing the material to prevent 507 material errors from generating in NIMMS. If there are out of balances, the PST will contact the DLA-A MSS to perform the required corrective actions.

18.35.2.1.5. **(Added)** PST will issue component parts out of ABOM, AWP Mgt, Issue screen and provide DLA with a copy of the “AWP Components Awaiting Issue” screen and completed “AWP Issue Response” transaction.

18.35.2.1.5.1. **(Added)** PST will verify in NIMMS MN090P that the quantity on hand has decreased by the issue quantity.

18.35.6.1. **(Added)** Kadena AFB unique: PST will input the transaction in the WARRS/D035K RBOG screen to change the DIOH status code to INW.

18.35.7.1.1. **(Added)** PST will coordinate transport/delivery of the end item and component parts with DLA and the maintenance shop for repair.

18.37. Organic Manufacture Procedures.

18.37.5. **(Added)** The scheduler will process the turn in (D6) in accordance with the special instructions on the AFSC Form 206

18.43. Indirect and Bench Stock Material Control and Support.

18.43.3.1. **(Added)** The GSUs located at Randolph, Malmstrom, Minot, F.E. Warren, Vandenberg AFBs, the Support Center Pacific (Kadena AB) and 309 AMARG are exempt from the mandatory use of the IPV contract.

18.46. PSS and NIMMS Store.

18.46.3.2.1. **(Added)** The PSS will provide justification for any items in their Y-Stores that are older then 6 months. At a minimum, the justification will include what the material is being used on and an expected use date. Rationale: Only material with a future requirement will be retained in maintenance and cost is not a primary consideration.

18.48. Ordering Part Number.

18.48.1. **(Added)** If no valid NSN is found the PST will complete the part number research worksheet prior to utilizing the Part Number Supply Support Request (PNSSR), for submitting the DD Form 1348-6, *DoD Single Line-Item Release/Receipt Document*. NOTE: The part number research worksheet and detailed instructions on using PNSSR are documented in the Non-Stock Listed P/N Requests Process Guide located on the OO-ALC/OBWC SharePoint site.

18.48.2. **(Added)** The PSS/PST will send the request via the PNSSR process to the Retail Supply Activity (DLA) their CSS, to have a local stock number assigned. Once the PST receives the local stock number, they must process the maintenance order within 48 hours.

18.48.3. **(Added)** . When part number ordering, if the order quantity is over the unit per assembly of end items in work, whether it is a change request or initial request, an OO-ALC Form 248, *PNSSR Validation*, must be completed. The form must be uploaded to the PNSSR information system order as substantiating documentation as proof of validation of the mismatch of unit per assembly.

18.50. Software Maintenance Group (SMXG) Procedures.

18.50.13.1.1. **(Added)** The distribution section will pick up the containers whenever they make deliveries, or the shop can call AE-COM customer service for pick up.

Chapter 19

AIRCRAFT GROUNDING (MATERIEL DEFECT) PROGRAM

19.1. Aircraft Grounding.

19.3.2. **(Added)** MXG CCs will coordinate with OO-ALC/CC and/or affected SPO/cognizant engineering authority when defects are discovered during overhaul of depot assets that have the potential for personal injury and/or further equipment damage.

Chapter 20

MAINTENANCE TRAINING

20.1.3.1. **(Added)** 583 MMXS DFT field dispatch training requirements will be documented in host wing's Integrated Maintenance Data System only. The training requirements in AFMAN 21-202, *Missile Maintenance Management,* that apply to 583 MMXS DFTs are Nuclear Surety/Personnel Reliability Program, Missile Safety, Explosive Safety, Shot Gun, Escort Official and Sole Vouching Authority. All other required training is defined by AFMC.

20.2. Special Certification Roster.

20.2.3.1.1. **(Added)** Refer to SOI 1505.18, *Releasing an Aircraft for Flight*, for F-35 exceptional release.

20.3. Production Acceptance Certification Program.

20.3.13.2.1. **(Added)** A certification MFR will be developed when there are no available PAC certified technicians within the RCC, stating which tasks or processes the technician was qualified and certified to perform and were directly overseen by a POC from QA, engineering, and the RCC supervisor or supervisor designee. The memorandum will include a certification date, technician's name, all pertinent WCD data, i.e., control number, operation number, tasks, or processes performed to include as applicable, serial number, part number, and NSN. This MFR shall contain the printed names of QA, process engineer, and supervisor or supervisor designee, and technicians. The MFR shall be signed by overseeing POCs, Quality, process engineer and supervisor or supervisor designee and technicians. A copy of the completed MFR will be attached to the WCD, and a copy provided to all who sign the MFR.

20.3.13.4.1. **(Added)** Uncertified technician will stamp the WCD/task outside the certification block to signify completion of the task.

20.3.13.4.2. **(Added)** Create a MFR stating the following task(s) were overseen and reviewed by the QA or EN person that oversaw the tasks being performed. The memorandum will include all pertinent WCD data, i.e., control number, operation number, task(s) performed to include sub-operations, and serial number. The memorandum will then be attached to the back of the WCD.

20.4. Special Skills Qualification (SSQ).

20.4.11.5.3.1. **(Added)** Does not apply to personnel storing and/or handling exempt explosive items identified in DAFI 91-202, *The US Air Force Mishap Prevention Program,* Chapter 9, paragraphs 9.11.3.1 through 9.11.3.5.

20.4.11.9.3.1. **(Added)** Flight control rigging applies to all aircraft and cruise missiles.

20.4.11.10.4.2.1. **(Added)** Completion of Egress Explosive Safety Training produced by the 367th Training Support Squadron satisfies this requirement.

20.4.11.10.4.3.1. **(Added)** If training courses are not available through Air Education and Training Command, units must use interagency training before considering non-government training sources. If courses in both sources are not available, units must establish a documented training program that meets the intent of AFMCI 21-100 and this manual. The program must provide for training by the most qualified personnel and must be approved by the major command functional manager prior to implementation.

20.4.11.10.7.2.1. **(Added)** Aircrew Flight Equipment personnel (Air Force Specialty Code 1P0X1 or series WG-4818, Aircraft Survival Flight Equipment Repairer) will remove/install parachutes/survival kits from all non-ejection seat equipped aircraft. Egress personnel will perform these tasks on ACES II and Martin Baker (MK-16 series) equipped aircraft. All personnel will complete appropriate training, certification, and familiarization requirements. (Refer to AFSCMAN21-102 paragraph 12.1.3).

20.4.11.19.4.1. **(Added)** All personnel performing welding operations at any 583 MMXS DFT location will be required to attend and complete a welder's college designated by the location manager.

20.4.11.19.4.2. **(Added)** All personnel performing welding operations at any 583 MMXS DFT location will also be required to maintain a current certification to American Welding Society Standard. The American Welding Society Standard requires each welder to recertify every 5 years on each welding type they perform.

20.4.11.23. **(Added)** H-70 (Hydrazine) Fuel Spill Management

20.4.11.23.1. **(Added)** Regulatory Documents. TO 1F-16( )-2-49GS, *Emergency Power System*; TO's 1F-16( )-2-49JG-001, *Emergency Power System; Block 50/52*; TO 1F-16( )-2-49JG-002, *Emergency Power System*; TO 1F-16( )-2-49JG-003, *Emergency Power System*; TO 42B1-1-18, *Handling of H-70 Fuel, Hydrazine-Water Fuel*, and other applicable directives.

20.4.11.23.2. **(Added)** Application. Hydrazine Response Team.

20.4.11.23.3. **(Added)** Qualification. After completion of training, the individual shall be able to demonstrate proficiency through written or oral and practical examinations (simulated) and be able to complete a 25-question written examination test with a minimum score of 85 percent (corrected to 100 percent).

20.4.11.23.4. **(Added)** Requalification. Annual demonstration of proficiency or whenever an individual fails to demonstrate adequate proficiency.

20.4.11.23.5. **(Added)** 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 requirements shall be met to be requalified.

20.4.11.24. **(Added)** Portable Milling.

20.4.11.24.1. **(Added)** Regulatory Documents. TCTO 1947, *341 Bulkhead, 1910 462/479 Visual Bulkhead Inspection*, 2034, *Mill 462 and Replace 479 Bulkhead*, 2317, *Modified Wing Assembly, 2316 Station 2 Reinforcement*.

20.4.11.24.2. **(Added)** Application. Individual operates the portable milling unit in modification of some areas of the F-16 aircraft.

20.4.11.24.3. **(Added)** Qualification. After completion of training, the individual shall be able to demonstrate proficiency through oral and practical examinations.

20.4.11.24.4. **(Added)** Requalification. Annual demonstration of proficiency or whenever an individual fails to demonstrate adequate proficiency.

20.4.11.24.5. **(Added)** 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 shall be met to be requalified.

20.4.11.25. **(Added)** Liquid Nitrogen.

20.4.11.25.1. **(Added)** Regulatory Documents. TO 1F-16( )-3-1, *Structural Repair*; TO 00-25-172,*Ground Servicing of Aircraft and Static Grounding/Bonding,* and AFMAN 91-203.

20.4.11.25.2. **(Added)** Application. Personnel who use liquid nitrogen for panel or structural removal on aircraft.

20.4.11.25.3. **(Added)** Qualification. Granted after successful completion of the required training and a satisfactory proficiency demonstration to a qualification official.

20.4.11.25.4. **(Added)** Requalification. An annual written proficiency examination and a practical demonstration of proficiency to the qualification official. Shall be able to pass a written test with a minimum score of 80 percent (corrected to 100 percent).

20.4.11.25.5. **(Added)** OO-ALC 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 shall be met to be requalified.

20.4.11.26. **(Added)** Aircrew Life Support.

20.4.11.26.1. **(Added)** Regulatory Documents. Applicable weapons system TOs, checklists, and job guides, applicable Air Force Occupational Safety and Health standards and directives.

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

20.4.11.26.3. **(Added)** Qualification. Granted after completion of formal training, and a demonstration of proficiency. Successfully complete a written test, 20-question minimum, with a passing score of 80 percent (corrected to 100 percent).

20.4.11.26.4. **(Added)** Requalification. An annual requirement consisting of demonstration of continued proficiency to a SSQ official and the successful completion of a written examination, 20-question minimum, with a passing score of 80 percent (corrected to 100 percent).

20.4.11.26.5. **(Added)** 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 shall be met to be requalified.

20.4.11.27. **(Added)** Hypergolic Fuel Monomethyl Hydrazine/Nitrogen Tetroxide (MMH/N204), Leaks and Spills Response.

20.4.11.27.1. **(Added)** Regulatory Documents. Applicable weapons systems, general TOs and other applicable technical and safety directives.

20.4.11.27.2. **(Added)** Application. Liquid Fuel Engine Mechanics, Wage Grade (WG)/Wage Lead (WL)-8675-08 or higher.

20.4.11.27.3. **(Added)** Qualification. After completion of training, the individual shall be able to demonstrate proficiency through written or oral and practical examinations (simulated) and be able to complete a written examination with a minimum passing score of 85 percent (corrected to 100 percent).

20.4.11.27.4. **(Added)** Requalification. Annual demonstration of proficiency or whenever an individual fails to demonstrate adequate proficiency.

20.4.11.27.5. **(Added)** Disqualification. Observed deficiencies or deviations from technical data, safety violations, DRs, failure to maintain the required level of proficiency, or failure to perform the required procedures IAW the applicable technical directives can be grounds for immediate disqualification. Initial SSQ qualification requirements must be met to be requalified.

20.4.11.28. **(Added)** F-35 Landing Gear Functional Test Supervisor.

20.4.11.28.1. **(Added)** Regulatory Documents. F-35 Joint-Service Technical Data, applicable Air Force Occupational Safety and Health standards and directives.

20.4.11.28.2. **(Added)** Application. Personnel tasked to perform as F-35 Landing Gear Functional Test Supervisor.

20.4.11.28.3. **(Added)** Qualification. Completion of formal training, demonstration of proficiency, and completion of a written test with an 80 percent minimum passing score (corrected to 100 percent).

20.4.11.28.4. **(Added)** Requalification. An annual demonstration of proficiency to an SSQ official.

20.4.11.28.5. **(Added)** 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 requirements shall be met to be requalified.

20.4.11.29. **(Added)** A-10 White Area Maintenance Mechanic.

20.4.11.29.1. **(Added)** Regulatory Documents. Applicable technical data, applicable Air Force Occupational Safety and Health standards and directives.

20.4.11.29.2. **(Added)** Application. Personnel tasked to perform maintenance in the A-10 White Area.

20.4.11.29.3. **(Added)** Qualification. Completion of formal training, demonstration of proficiency, and completion of a written test with an 80 percent minimum passing score (corrected to 100 percent).

20.4.11.29.4. **(Added)** Requalification. An annual demonstration of proficiency to an SSQ official.

20.4.11.29.5. **(Added)** 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 shall be met to be requalified.

20.4.11.30. **(Added)** Resistance Brazing.

20.4.11.30.1. **(Added)** Regulatory Documents. TO 00-25-252, *Aeronautical Equipment Welding*, American Welding Society Brazing Handbook, DAFMAN 91-203, and other applicable directives.

20.4.11.30.2. **(Added)** Application. Personnel tasked to perform resistance brazing of airborne and ground generator windings.

20.4.11.30.3. **(Added)** Qualification. Completion of formal training, demonstration of proficiency, and completion of a written test with an 80 percent minimum passing score (corrected to 100 percent).

20.4.11.30.4. **(Added)** Requalification. An annual demonstration of proficiency to a SSQ official and completion of a written test with an 80 percent minimum passing score (corrected to 100 percent).

20.4.11.30.5. **(Added)** 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 requirements shall be met to be requalified.

20.4.11.31. **(Added)** Orbital Sander Operation on F-35 Aircraft.

20.4.11.31.1. **(Added)** Regulatory Documents: TO 1-1-690, *General Advanced Composite Repair Processes Manual*, Lockheed Martin Process Specification 2ZZA00300, *F-35 Material Review Standard Repair Manual for Outer Mold Line (OML) Application Issues*, Lockheed Martin Process Specification 2ZZP00001, *Finish Specification for F-35 Weapon System*, Lockheed Martin Process Specification 2ZZP00065, *F-35 Signature Coatings Removal and Restoration*, Orbital Sander Operator Manuals, AFSCMAN 21-102, DAFMAN 91-203.

20.4.11.31.2. **(Added)** Application. Personnel tasked use an orbital sander to remove F-35 Low Observable coatings and residue.

20.4.11.31.3. **(Added)** Qualification. Completion of formal training and demonstration of proficiency.

20.4.11.31.4. **(Added)** Requalification. An annual demonstration of proficiency to a SSQ official.

20.4.11.31.5. **(Added)** 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 requirements shall be met to be requalified.

20.4.11.32. **(Added)** F-16 Milling Fixture Blend (PN: F-16-15-001).

20.4.11.32.1. **(Added)** Regulatory Documents: TO 1F-16 ( )-3-1,TCTO 1F-16-2675, *Outboard Wing Attach Web Radii*, AFSCMAN 21-102, DAFMAN 91-203, Process Order F16-0063 Att. 1 & Att. 2: *Use of Milling Fixture in Response of TCTO 2675*, Process Order F16-0064: *Process for TCTO 2675 and Hand Blending Operations*.

20.4.11.32.2. **(Added)** Application. WG-3806-08, Structural Technician tasked to perform F-16 Milling Fixture Blend.

20.4.11.32.3. **(Added)** Qualification. Completion of formal training and demonstration of proficiency.

20.4.11.32.4. **(Added)** Requalification. An annual demonstration of proficiency to a SSQ official.

20.4.11.32.5. **(Added)** 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 requirements shall be met to be requalified.

20.4.11.33. **(Added)** Aircrew Flight Equipment (AFE) Survival Kit Maintenance and Repair.

20.4.11.33.1. **(Added)** Regulatory Documents: Applicable technical manuals, DAFMAN 91-203.

20.4.11.33.2. **(Added)** Application. Personnel assigned to maintain and repair AFE equipment.

20.4.11.33.3. **(Added)** Qualification. Completion of formal training and demonstration of proficiency to a SSQ official and complete written examination with a minimum passing score of 80 percent (corrected to 100 percent).

20.4.11.33.4. **(Added)** Requalification. An annual demonstration of proficiency to a SSQ official and complete written examination with a minimum passing score of 80 percent (corrected to 100 percent).

20.4.11.33.5. **(Added)** 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 requirements shall be met to be requalified.

Chapter 21

DEPOT ENGINE MANAGEMENT

21.1.1.1. **(Added)** F-35/F135 engine data is maintained in ALIS.

Chapter 22

CONTRACT SURVEILLANCE

22.6. Program Management Office.

22.6.1.1. **(Added)** The COR supervisor will select a COR to self-nominate in the Joint Application Module (JAM) for each contract.

22.6.11.1. **(Added)** COR training will be tracked in the JAM within the Procurement Integrated Enterprise Environment.

22.7. Corrective Action Request (CAR).

22.7.1.1. **(Added)** CORs will use OO-ALC Form 218, *Corrective Action Report*, for all CARs.

22.7.2.1. **(Added)** For minor discrepancies and superior performance ratings, CORs will use OO-ALC Form 219, *Performance Assessment Report* (PAR).

22.7.3. **(Added)** The chief COR or QAPC will load all CARs/PARs in the CAR database for tracking.

Chapter 23

OO-ALC ENGINEERING ROLES AND RESPONSIBILITIES (ADDED)

23.1.3. **(Added)** 309 SWEG meets the intent of **chapter 24** as defined in the 309 SWEG policy for Engineering Development and Support Project Management and through implementation of Capability Maturity Model Integration.

23.2. OO-ALC Engineering Management Roles and Responsibilities.

23.2.1. **(Added)** OO-ALC Technical Director (OO-ALC/EN) Responsibilities.

23.2.1.1. **(Added)** Designated by the OO-ALC Engineering Director or designee.

23.2.2.5.1. **(Added)** Group engineering chief shall ensure group engineers review all AFMC Forms 202/AFTO Forms 22 prior to submission to the applicable program office.

23.2.2.8. **(Added)** Ensure new workload activations, DSOR Process, PPPTs and PPTs are supported by appropriate complex engineers (process, facility, etc.)

23.3. OO-ALC Engineering Roles and Responsibilities.

23.3.1. Production engineer supports the DSOR Process, PPPTs and PPTs. The appropriate complex engineer shall review all AFMC Forms 202/AFTO Forms 22 prior to submission to the applicable program office.

23.3.1.2. Responsible for real property project design, development, and management to include facility repairs, alterations, and new construction (minor and military). Identifies facility deficiencies and coordinates facility needs with the 309 MXSG. Supports the tracking and reporting of maintenance and repair budgets. Responsible for correcting facility deficiencies related to risk assessment codes, fire safety deficiencies, and uniform building code requirements. Supports the PDM functions as assigned and ensures EFEMS is updated and properly documented. Develops and maintains group long-range facility plans. Prioritizes and executes facility project requirements in coordination with supported production group needs and budgetary constraints.

23.3.1.3. Ensures coordination of equipment replacement or modifications with production stakeholders. Creates reviews and approves technical requirements for equipment modifications, upgrades and/or replacement. Oversees equipment contracting technical documents (e.g., SOW, performance-based work statement, production, justification and approval, sole source letter, formal quote). Ensures a correlation of TO requirements to contract requirements are established for the equipment being procured to maintain customer’s contract maintenance. Performs the technical evaluations of proposals and coordinates with contracting officers. Provides inputs, oversight and expertise for equipment procurement and associated logistics for the Capital Investment Program for their respective group. Assists production squadrons, as required, with safety as related to repair processes and equipment and participates in mishap and safety-related issues. Responsible for coordinating equipment deficiency corrections with maintenance support group or responsible repair service entity.

23.3.1.5. Provides inputs for equipment procurement and associated logistics for the Capital Investment Program for their respective group. Responsible for Industrial Process Control (IPC) for assigned processes. Responsible for coordinating industrial process development and modifications with stakeholders. Leads a Risk Management Assessment (reference AFI 90-802 and DAFPAM 90-803) that evaluates the System Safety Hazard Analysis and Occupational Safety aspects for all projects prior to execution/implementation. All AFMC Form 202/ETAR requests will be reviewed by the responsible production engineer prior to submission (reference 7.1.2.9.2.5.).

23.3.6. **(Added)** Depot Process Quality Engineer. Develop and track quality measures (metrics) necessary to ensure the organization is consistently producing compliant products at best value. This function is a requirement on all critical processes and encouraged on all non-critical processes. Participates in IPC efforts. IPC efforts include; control planning, process reviews, statistical control, predictive analytics, root cause analysis, risk management and process improvements.

RICHARD W. GIBBS, Brig Gen, USAF
Commander, Ogden Air Logistics Complex

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

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AFMAN 21-202, *Missile Maintenance Management*, 29 August 2019

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HILLAFBI 13-204, *Airfield Operations,* 18 September 2015

DAVISMONTHANAFBI 11-250-0, *Airfield Operations,* 4 November 2021

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TO 00-5-1, *Air Force Technical Order System,* 15 February 2019

TO 00-20-14, *Air Force Metrology and Calibration Program*, 28 February 2021

TO 00-25-107, *Maintenance Assistance*, 1 October 2015

TO 00-25-234, *General Shop Practice Requirements for the Repair, Maintenance, and Test of Electrical Equipment,* 1 August 1988

TO 00-25-252, *Aeronautical Equipment Welding,* 1 October 2016

TO 00-35D-54-WA-1, *USAF Material Deficiency Reporting, Investigation, System for Category Descriptions,* 1 September 2015

TO 1-1-690, *General Advanced Composite Repair Processes Manual*

TO 1F-16()-3-1, *Structural Repair*

TO 42B1-1-18, *Handling of H-70 Fuel, Hydrazine-Water Fuel,* 18 November 2014

TO 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding,* 9 August 2013

Prescribed Forms

OO-ALC Form 209, *Non-Compliance and Out of Tolerance Risk Assessment*

OO-ALC Form 210, *OO-ALC* Process Order Deviation Request

OO-ALC Form 211, *Depot MICAP Request Form*

OO-ALC Form 213, *Locally Manufactured, Developed or Modified, Tools and Equipment (LM/MT&E) Worksheet*

OO-ALC Form 218, *Corrective Action Report*

OO-ALC Form 219, *Performance Assessment Report (PAR)*

OO-ALC Form 234, *ESD Work Area Certification*

OO-ALC Form 235, *ESD Wrist Strap Daily Check*

OO-ALC Form 236, *90-Day Soldering Station ESD Test*

OO-ALC Form 237, *Electrostatic Discharge* (ESD) Control Report of Annual Survey

OO-ALC Form 244, *Reclaim Material Worksheet*

OO-ALC Form 248, *Part Number Supply Support Request (PNSSR) Validation*

OO-ALC Form 515, *Tool Request*

OO-ALC Form 535, *Government Library Technical Order Distribution Requirements*

OO-ALC Form 536, *Government Technical Order (TO) Library POC Appointment/Change*

OO-ALC Form 546, *Engineering Project Request*

Adopted Forms

DAF Form 847, *Recommendation for Change of Publication*

AF Form 614, *Charge Out Record*

AF Form 623, *Individual Training Record Folder*

AF Form 813, *Request for Environmental Impact Analysis*

AF Form 1297, *Temporary Issue Receipt*

AF Form 1800, *Operator's Inspection Guide and Trouble Report*

AF Form 2420, *Quality Control Inspection Summary*

AF Form 3126, *General Purpose (8-1/2"x11")*

AF Form 3136, *General Purpose (11"x8-1/2")*

AFTO Form 22, *Technical Manual (TM) Change Recommendation and Reply*

AFTO Form 95, *Significant Historical Data*

AFTO Form 244, *Industrial/Support Equipment Record*

AFTO Form 781, *Arms Aircrew/Mission Flight Data Document*

AFTO Form 781A, *Maintenance Discrepancy and Work Document*

AFMC Form 37, *Inventory Research Worksheet*

AFMC Form 202, *Nonconforming Technical Assistance Request and Reply*

AFMC Form 206, *Temporary Work Request*

AFMC Form 299, *Safety, Fire, and Health Review*

AFMC Form 310, *Lost/Found Item Report*

AFMC Form 316, *Supervisor Safety Meeting Minutes*

AFSC Form 95, *Issue Request*

AFSC Form 105, *Workload Record*

AFSC Form 137, *Routed Order (Project Directed)*

AFSC Form 173, *MDS/Project Operation Assignment*

AFSC Form 206, *Temporary Work Request*

AFSC Form 237, *Temporary Labor and Material Plan*

AFSC Form 240, *Temporary Labor and Material Plan Addendum*

AFSC Form 309, *AFSC Tool Control Inventory Record*

AFSC Form 355, *Operator Maintenance Certification*

AFSC Form 500, *Pre-Production and Pending Proposal at WCD Checklist*

AFSC Form 503, *AWP Checklist/Worksheet*

AFSC Form 600, *Form 600, Production Order*

AFSC Form 957, *Work Control Document (WCD) Change Request*

AFSC Form 959, *Work Control Document*

309 AMARG Form 1, *Radiation Inspection Record and Checklist*

309 AMARG Form 2, *Radioactive Material Transfer Record*

309 AMARG Form 22, *Components/Items Missing and/or Removed from Aircraft*

309 AMXG Form 2, *Cannibalization Transaction Summary Sheet*

DD Form 448-2, *Acceptance of MIPR*

DD Form 1149, *Requisition and Invoice/Shipping Document*

DD Form 1348-6, *DoD Single Line Item Requisition System Document, DoD (Manual-Long Form)*

DD Form 1577, *Unserviceable (Condemned) Tag Materiel*

DD Form 2861, *Cross-Reference*

Abbreviations and Acronyms

AB—Air Base

ABOM—Automated Bill of Material

ACOQ—Annual Customer Order Quantities

ADPE—Automated Data Processing Equipment

AFB—Air Force Base

AFE—Aircrew Flight Equipment

AFH—Air Force Handbook

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFMETCAL—Air Force Metrology & Calibration

AFPAM—Air Force Pamphlet

AFPD—Air Force Policy Directive

AFRL—Air Force Research Laboratory

AGE—Aerospace Ground Equipment

AFMC—Air Force Materiel Command

AFMCI—Air Force Materiel Command Instruction

AFMCMAN—Air Force Materiel Command Manual

AMOPS—Airfield Management Operations

AFRIMS—Air Force Records Information Management System

AFSC—Air Force Sustainment Center

AFSC/FZC—Cost Analysts

AFSCMAN—Air Force Sustainment Center Manual

ASC—Air System Contractor

ALGS—Autonomic Logistics Global Sustainment

ALS—Aircraft Logistics Specialist

ALIS—Autonomic Logistics Information System

ALC—Air Logistics Complex

AMSO—Acquisition Management Support Office

AOR—Area of Responsibility

AR—Action Request

AWM—Awaiting Maintenance

AWP—Awaiting Parts

BCE—Base Civil Engineering

BOM—Bill of Material

BOW—Bill of Work

CAMS—Core Automated Maintenance System

CANN—Cannibalization

CAR—Corrective Action Report

CCaR—Comprehensive Cost and Requirement

CCIV—Cost Class Four

CE—Civil Engineering

CIP—Capital Investment Program

CIPWG—Capital Investment Program Working Group

CMCC—Consolidated Munitions Control Center

CMM—Contractor Maintenance Manual

COPA—Center of Parts Activity

COR—Contracting Officer’s Representative

COTS—Commercial Off-The-Shelf

CSI—Critical Safety Items

CSS—Customer Support Specialist

CTK—Consolidated Took Kit

C/W—Complied With

D035K—Stock Control and Distribution System

DAF—Department of the Air Force

DAFI—Department of the Air Force Instruction

DAFPAM—Department of the Air Force Pamphlet

DCWA—Depot Customer Workload Agreement

DDE—Demand Data Exchange

DEMIL—Demilitarization

DFS—Depot Forecasting Specialist

DFT—Depot Field Team

DIFM—Due in From Maintenance

DIFMS—Defense Industrial Financial Management System

DIOH—Due in From Overhaul

DIT—Demand Input Template

DLA—Defense Logistics Agency

DM—Depot Maintenance

DMISA—Depot Maintenance Interservice Support Agreement

DO—Dropped Object

DoD—Department of Defense

DoDM—Department of Defense Manual

DOP—Dropped Object Program

DOTM—Due Out to Maintenance

DPC—Data Processing Code

DR—Deficiency Report

DRUI—Deficiency Report Unique Identifier

DSOR—Depot Source of Repair

DSS—Distribution Standard System

DT&S—Dimension, Tolerance, or Specification

ECP—Entry Control Point

E&I—Evaluation and Inspection

EN—Engineering

EDD—Estimated Delivery Date

EFEMS—Electronic Facility Equipment Management System

EIDN—End Item Document Number

EISP—End Item Sales Price

ESD—Electrostatic Discharge

e-SSS—Electronic Staff Summary Sheet

ETAR—Engineering Technical Assistance Request

ETR—Electronic Training Record

eWCD—Electronic Work Control Document

EWG—Equipment Working Group

FAI—Full Article Inspection

FJON—Financial Job Order Number

FO—Foreign Object

FOD—Foreign Object Damage

FOM—Facilitate Other Maintenance

FP—Focal Point

FRC—Funds Request and Certification

G402A—Exchangeables Production System

GSU—Geographically Separated Unit

HILLAFBI—Hill Air Force Base Instruction

HILLAFBSUP—Hill Air Force Base Supplement

IA—Impound Authority

IAW—In Accordance With

ICBM—Intercontinental Ballistic Missile

ID—Identification

IET—Industrial Engineering Technician

IMDS—Integrated Maintenance Data System

IMIS—Integrated Maintenance Information System

INW—In Work

IPV—Industrial Product Support Vendor

ITK—Individual Tool Kit

ITS—Inventory Tracking System

IPC—Industrial Process Control

IPP—Integrated Power Package

JAM—Joint Application Module

JON—Job Order Number

JONI—Job Order Number Induction

JOQ—Job Order Quantity

JTD—Joint Technical Directive

JTDAR—Joint Technical Data Action Request

LCN—Logistics Control Number

LEAP—Logistics Evaluation Assurance Program

LEP—List of Effected Page

LM—Local Manufacturing

LM/MT&E—Locally Manufactured/Modified Tools and Equipment

LSV—Low Speed Vehicle

NDI—Non-Destructive Inspection

NIMMS—Naval Air Systems Command Industrial Material Management

NRTS—Not Repairable This Station

MAJCOM—Major Command

MASO—Maintenance Acquisition Support Office

MC—Minor Construction

MCF—Metrology Calibration Flight

MCL—Master Change List

MDR—Maintenance Repair Overhaul Deviation Request

MDS—Maintenance Data System

MFR—Memorandum for Record

MGT/CD—Management Code

MIC—Material Inventory Center

MICAP—Mission Impaired Capability Awaiting Parts

MIPR—Military Interdepartmental Purchase Request

MIS—Maintenance Information System

MISTR—Management Items Subject to Repair

MOA—Memorandum of Agreement

MOC—Maintenance Operations Center

MORD—Miscellaneous Obligation and Reimbursement

MOU—Memorandum of Understanding

MPS—Material Processing System

MRT—Maintenance Review Team

MWR—Maintenance Work Request

MX—Maintenance

MXG—Maintenance Group

MXSS—Maintenance Support Squadron

N/A—Not Applicable

NI—Not Inspected

NLT—Not Later Than

NONBOM—Non-Bill of Material

NR—Not Required

NRTSD—Not Repairable This Station Disposition

NSN—National Stock Number

O&A—Over and Above

OBP—Business Development Office

OO-ALC—Ogden Air Logistics Complex

OO-ALC/FM—Financial Management

OO-ALC/OB—Business Operations

OO-ALC/OBHA—Maintenance Training Flight

OO-ALC/OBW—Workloading and Business Operations

OOT—Out of Tolerance

OPR—Office of Primary Responsibility

OSM—Occupational Safety Manager

OWO—On Work Order

PAMS—PMEL Automated Management System

PAC—Production Acceptance Certification

PAO—Project Administration Officer

PAR—Performance Assessment Report

PCW—Previously Complied With

PDM—Programmed Depot Maintenance

PDMC—Planning for DLA-Managed Consumables

PDMSS—Programmed Depot Maintenance Scheduling System

PDN/CTRL—Production Number/Control

PI—Process Initiator

PM—Preventive Maintenance

PMA—Portable Maintenance Aid

PMEL—Precision Measurement Equipment Laboratory

P/N—Part Number

PNSSR—Part Number Supply Support Request

POC—Point of Contact

PODDS—Process Order Development and Display System

PODR—Process Order Deviation Request

PPT—Production Planning Team

PPPT—Pre-Production Planning Team

PQDR—Product Quality Deficiency Report

PR—Purchase Request

PSC—Production Support Center

PSS—Production Support Section

PSSD—Production Section Scheduling Designator

PST—Production Support Technician

QA—Quality Assurance

QAR—Quality Assessment Rating

RA—Receipt Acknowledgement

RCC—Resource Cost Center

RDS—Records Disposition System

ROM—Rough Order of Magnitude

SE—Support Equipment

SEMM—Support Equipment Maintenance Matrix

SOI—Sustainment Operating Instruction

SOP—Standard Operating Procedures

SOW—Statement of Work

SPO—System Program Office

SQAR—Supplier Initiated Quality Assurance Report

SSC—Shop Service Center

SSQ—Special Skills Qualification

TAC—Transportation Account Code

TAG—Technical Advisory Group

TBA—Training Business Area

TCM—Tool Control Manager

TCTO—Time Compliance Technical Order

TDY—Temporary Duty

TK—Tool Kit

TKCRL—Tool Kit Custody Receipt Listing

TMDE—Test Measurement and Diagnostic Equipment

TNB—Tail Number Bin

TSS—Training Scheduling System

TO—Technical Order

TODO—Technical Order Distribution Office

VAL/VER—Validation/Verification

WARRS—Wholesale and Retail Receiving and Shipping

WCD—Work Control Document

WG—Wage Grade

WL—Wage Lead

309AMXG—309th Aircraft Maintenance Group

309AMARG—309th Aircraft Maintenance and Regeneration Group

309CMXG—309th Commodities Maintenance Group

309EMXG—309th Electronics Maintenance Group

309MMXG—309th Missile Maintenance Group

309MXG—309th Maintenance Groups

309MXSG—309th Maintenance Support Group

309MXSS—309th Maintenance Support Squadron

309SWEG—309th Software Engineering Group

525EMXS—525th Electronics Maintenance Squadron

574AMXS—574th Aircraft Maintenance Squadron

575AMXS—575th Aircraft Maintenance Squadron

576AMRS—576th Aerospace Maintenance and Regeneration Squadron

577CMRS—577th Commodities and Reclamation Squadron

583MMXS—583d Missile Maintenance Squadron

75ABW—75th Air Base Wing

75ABW/SC—75th Air Base Wing Information Technology Office

75CEG—75th Civil Engineering Group

75OSS—75th Operational Support Squadron

809MXSS—809th Maintenance Support Squadron

Terms

Airfield—Refers to all areas inside the Foreign Object Debris check points; to include the runway, taxiways, infield, flight line, buildings, hangars, facilities, parking aprons, and flight line ECPs. The Airfield Industrial Safety Area is not included in the term "airfield."

Airfield Industrial Safety Area—At Hill AFB, this is the area between the airfield security chain link fence (PACER PROTECT) and the airfield movement area markings (painted movement area marking = double yellow lines) between FOD check signs. The painted double yellow line is solid toward the Airfield Industrial Safety Area and dashed toward the airfield.

Flight line (OO-ALC)—Any area where aircraft may be parked, stored, serviced or maintained and operated under their own power to include aprons, hardstands, hot pads, and aircraft parking ramps (as specified by airfield management).

FOD Inspection—A thorough inspection accomplished with the purpose to identify any foreign objects, so they may be collected and removed.

FOD Walk—A thorough inspection accomplished with the purpose to identify any foreign objects, so they may be collected and removed.

Formal Training (OO-ALC)—An organized and documented program of activities designed to impart the knowledge and skills necessary to be qualified to this standard. Formal training may be a mix of classroom, practical and programmed self-instruction as approved by the responsible Level 3 or NANDTB.

FWP—A code defined as an item previously in AWP status that is ready for scheduling and repair.

Hardware—Items that become part of the end product, such as nuts, bolts, washers, fasteners, screws, etc.

Independent Technical Data—Tech data not identified in primary tech data. This could be a Process Orders, a separate Drawing, some COTS manuals, etc.

Maintenance Area (OO—ALC)—Any area where on-equipment aircraft or off-equipment maintenance operations are conducted, whether within the Airfield Industrial Safety Area or outside on the flight line (assets include but are not limited to: jet engine, aircraft assemblies, subassemblies, munitions, missiles, rockets, and support equipment).

Off-Equipment Maintenance—Maintenance tasks that are not or cannot be effectively accomplished on or at the weapon system or end item of equipment, but require the removal of the component to a shop or facility for repair.

On Equipment Maintenance—Maintenance tasks that are or can be effectively performed on or at the weapon system or end item of equipment.

National Aerospace NDT Board—(NANDTB)—An independent national aerospace organization representing a nation's aerospace industry that is chartered by the participating prime contractors and recognized by the nation's regulatory agencies, to provide or support NDT qualification and examination services IAW this standard. Such services may include participation in certification.

Responsible Level 3—A Level 3 designated by the employer with the responsibility and authority to ensure that the requirements of this standard are met and to certify qualified individuals.

Tidiness—A state of being clean, neat and orderly by adhering to the maintenance discipline known as clean-as-you-go and/or end-of-shift/end-of-day-clean up. Synonymous with housekeeping, but when mentioned in the context of FOD prevention, it is without the expanded standard association.

Transient Aircraft—Aircraft not affiliated with, deployed to, or stationed at Hill AFB.

Work Authorization Document—A document that authorizes the expenditure of labor, material, and other related costs to do the work requested by a specific customer on AFMC Form 206, Temporary Work Request, AFSC Form 600D, *Form 600 Production Order*, within G004L, or FEM electronic equivalent.

Attachment 2 (Added)

SAMPLE OO-ALC FORM 244

Figure A2.1. ***Reclaim Material Worksheet.***

Reclaim Material Worksheet

1. National Stock Number (NSN):	2. ERRC:	3. PDN:	4. PDN/206:	5. Material RCC:	6. Qty:

Type of material for example: IPV excess, material reclaimed at the direction of the supply chain, via an AFSC Form 206 - this material may be kept if it meets the research below.

7. General Research Required Prior to Placing Material in the Material Processing Store (MPS):

a. Is this a valid NSN? (Note: Valid NSNs have an AAC of D, J, or Z. Check D043A) ☐YES ☐NO

b. Is the ERRC XD2, if yes this material must be turned in to supply? (Note: Only XB3/N ERRC allowed in the MPS) ☐YES ☐NO

Ensure the NSN is the same in: Impresa/G005M, ABOM, NIMMS, and or G004L

c. Is the item on the BOM? Note: If the answer is no, do not place the item in the store, this is an indicator that no future needs exist. ☐YES ☐NO

d. Is the material reclaimed based on an AFSC Form 206? ☐YES ☐NO

e. Are there backorders on the D035K RINF screen - Cancel the order and use the material. Submit DHA (MN123P) ☐YES ☐NO

If no, verify if there is a future requirement, generally, if the item is not on the BOM (Impresa/G005M), there is no future requirement.

Exchangeable/Repairable items (ERRC T or C) will not be held in the MPS stores.

Date research was completed:

Name of the person performing the research:

Office Symbol/DSN:

Name of the person approving the research:

Office Symbol/DSN/Date/Job Title:

Note: The production support flight chief or the material/scheduling chief will approve the research.

OO-ALC 244, YYYYMMDD

Attachment 3 (Added)

MANUAL/OFF-LINE SHIPMENTS (DD FORM 1149) INSTRUCTIONS.

Figure A3.1. Individual shipping material completes mandatory entries on the DD Form 1149.

Block 1. From: Shipper's name unit/office symbol, address and phone number.

Block 2. To: Unit/office symbol, address, phone number, and POC.

Block 3. Name/POC address & phone number (DSN/Com) of person receiving shipment.

Block 4. Appropriations Data: The TAC/fund cite used for the movement charges. The shipper must provide a valid TAC or funding (MORD/SDN). Use of cited funding must be approved at production support flight chief level prior to handing off DD Form 1149 to distribution activity.

Block 4(a). Item number: (1, 2, etc.)

Block 4(b). Stock number or part number, description, and coding of the material, and/or services: Identify all classified shipments with appropriate security classification and describe in detail all unclassified material that is considered sensitive or requires added protective services.

Block 4(c). Unit of issue: (e.g. each, feet, pounds, etc.)

Block 4(d). Quantity: (How much/how many)

Block 5. Requisition Date: (The date the shipment is taken to transportation.)

Block 6. Requisition number: Provided by the shipment activity

Block 7. Date material required at the receiving location.

Block 8. Priority: The priority is based on the required delivery date. The shipping activity will determine the mode/method of shipment based on that date. **NOTE: MICAP will not be used as a justification to expedite off-line shipment or increase shipping priority. **

Block 9. Authority or Purpose: (The reason for the off-line shipment). If expedited shipment is required, the shipper will provide written authority to the shipping activity for expedited movement. Justification must be signed by the production support flight chief or equivalent.

Block 10. Signature: The production support flight chief or equivalent will sign in this block authorizing the off-line shipment and the expenditure of the transportation funds.

Figure A3.2. Sample DD Forn 1149, The highlighted fields on page two must be filled out).