

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

**DEPARTMENT OF THE AIR FORCE
INSTRUCTION 21-101**



**AIR FORCE RESERVE COMMAND
Supplement**

**434 AIR REFUELING WING
Supplement
14 AUGUST 2026**

Maintenance

**AIRCRAFT AND EQUIPMENT
MAINTENANCE MANAGEMENT**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Department of the Air Force Policy Directive (DAFPD) 21-1, *Maintenance of Military Materiel*; AFMAN 11-2KC-135V3, *KC-135 Operations Procedures*, and is consistent with AFD 13-5, *Air Force Nuclear Mission*. It extends guidance of the Department of the Air Force Instruction (DAFI) 21-101, *Aircraft and Equipment Maintenance Management*, and DAFI 21-101_AFRCSUP *Aircraft and Equipment Maintenance Management Air Force Reserve Command (AFRC) Supplement*. It provides guidance and procedures on all weapon systems and support equipment maintenance management guidance as well as prescribing procedures governing aerospace equipment maintenance management. This

supplement applies to all Air Force personnel assigned to the 434 Air Refueling Wing (ARW) that maintain and support aircraft, aircraft systems, equipment, support equipment and components. Ensure that all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with (IAW) the Air Force Records Disposition Schedule (AFRDS), 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 DAF Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command. This publication may be supplemented at any level, but all supplements must be routed to the OPR of this publication for coordination prior to certification and approval. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See DAFI 90-160, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the requestor’s commander for non-tiered compliance items. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

SUMMARY OF CHANGES

This publication consolidates and supersedes multiple legacy directives to create a single, comprehensive maintenance and operations guidance document for the 434th Air Refueling Wing. It supersedes 434ARWI21-137 (13 November 2013), 434ARWI21-138 (24 September 2013), AFI21-101_AFRCSUP_434ARWSUP (29 October 2019), 434MXGOI21-104 (24 January 2022), 434MXGOI21-108 (18 March 2022), 434MXGOI21-115 (15 November 2022), 434MXGOI21-118 (19 May 2022), 434MXGOI21-134 (19 May 2022), and 434MXGOI21-204 (10 July 2012). Content from these publications has been merged, and reorganized to eliminate redundancy, align with current Air Force and AFRC policy, and provide a streamlined, audit-ready framework for unit maintenance operations.

Chapter 1

MANAGEMENT OVERVIEW, SUPPORTING CONCEPTS AND REQUIREMENTS

1.13. General Safety Guidance. Maintenance personnel are exposed to a large variety of hazardous situations, machinery, equipment, and chemicals. Most hazardous situations can be avoided by following approved procedures, asking for assistance when needed, and using all required personal protective equipment (PPE).

1.13.1. Safety “Knock It Off” and Risk Management. Due to the inherent danger to life, limb, and property associated with maintenance operations, personnel are empowered to terminate an operation or situation which they perceive is unsafe or too dangerous. When supervisors or crew leaders become task-focused, junior personnel are often better able to assess the danger; however, deferring to the experience and judgment of the supervisor or crew leader, they may choose to remain silent, missing an opportunity to break the mishap sequence chain. Maintenance commanders and supervisors are responsible for fostering a culture in their units so that a simple, but recognizable “audible” from anyone can prevent a potential mishap. Note: See AFI 90-802, Risk Management, and DAFPAM 90-803, Risk Management (RM) Guidelines and Tools for additional information.

1.13.1. **(434 ARW)** All 434 Maintenance Group (MXG) personnel will maintain a constant awareness of the changing risk associated with the operation/task. All MXG personnel have the responsibility and authority to call “Knock-it-Off” when there are significant changes to the amount of risk involved in the operation/task. Supervision will be immediately notified to determine the proper course of action. As required, a Risk Management (RM) meeting will be conducted with the technicians involved, management, Quality Assurance (QA) and other necessary offices to determine the best course of action.

1.13.1.1. **(Added)** RM will not be substituted for changes in operations where written guidance is already provided, such as Air Force Instructions (AFIs), technical orders (TOs), checklist etc.

1.13.1.2. **(Added)** Anytime any member of our organization witnesses a potentially unsafe situation during maintenance activities they will call a “Knock-it-Off”. The common assertive statement “Knock-it-Off” will:

1.13.1.2.1. **(Added)** Provide a clear warning when an action causes concern or is perceived as a potential safety hazard.

1.13.1.2.2. **(Added)** Communicate to all maintenance team members that a member sees and/or feels uneasy about the actions being accomplished and/or the member is uncomfortable with a developing situation.

1.13.1.2.3. **(Added)** Provide an opportunity to break or stop an action, discuss potential errors and formulate alternative actions thereby breaking a potential error chain before a mishap could occur.

1.13.1.2.4. **(Added)** As soon as possible after a “Knock-it-Off” has been called, the maintenance team will take the following actions:

1.13.1.2.4.1. **(Added)** Safety permitting - stop all activities in question.

1.13.1.2.4.2. **(Added)** The initiating maintenance team member will voice his or her concerns to the team.

1.13.1.2.4.3. **(Added)** The senior maintenance person present will provide all other maintenance team members with the opportunity to voice inputs relative to the stated concerns.

1.13.1.2.4.4. **(Added)** After considering all inputs, the senior maintenance team member in coordination with their supervision will direct the team to continue the current course of action or direct a new course of action. **Note:** If you believe your concerns were not properly addressed, you may pursue the issue through your chain of command without any concern for reprisal or punishment. Commanders at all levels are to investigate any alleged reprisal and take appropriate corrective actions when necessary to fulfill the spirit of this program.

1.13.1.3. **(Added)** Supervision will be immediately notified to determine the proper course of action. As required, a RM meeting will be conducted with the technicians involved, management, Quality Assurance (QA) and other necessary offices to determine the best course of action. **(T-3)**

1.13.1.4. **(Added)** RM will not be substituted for changes in operations where written guidance is already provided, such as Air Force Instructions (AFIs), technical orders (TOs), checklist etc.

1.13.1.5. **(Added)** Apply Operational RM to both on and off duty operations (recreation).

Chapter 2

ROLES AND RESPONSIBILITIES

2.4. Maintenance Group Commander (MXG/CC) Responsibilities. This instruction extends the commander's responsibilities outlined in AFI 1-2, Commanders Responsibilities. For an AFRC unit where the MXG/CC position is not authorized, the senior Maintenance Air Reserve Technician (ART) is considered the MXG/CC equivalent and is responsible for all MXG/CC duties outlined in this instruction; example, for consolidated Airlift, Bomber, and Fighter Groups the senior maintenance ART is delegated the responsibility of MXG/CC duties. **(T-2)**

2.4.3. The MXG/CC will:

2.4.3.36. **(Added)** Ensure all commanders and functional managers promote applicable occupational safety and health (OSH) guidance is available to all personnel of the maintenance group.

2.9. Maintenance Supervision Responsibilities. Maintenance Supervision consists of the Director of Operations (DO) and Maintenance Superintendent (MX SUPT). Maintenance Supervision advises the SQ/CC on technical matters, leads a mission-focused maintenance effort, and manages resources necessary to accomplish the mission. They provide necessary administration to manage assigned responsibilities and control maintenance through Pro Supers, Flight CC/SUPT, and Section NCOICs/Chiefs. The MX SUPT is responsible to the DO. Maintenance Supervision will:

2.9.23. **(Added)** Maintenance supervisors will routinely evaluate employees on the proper and safe operation of equipment and personal protective equipment (PPE).

2.9.24. **(Added)** Provide training in job safety, fire prevention and health as required.

Chapter 3

AIRCRAFT MAINTENANCE SQUADRON (AMXS)/GENERATION SQUADRON.

3.7. Aircrew and Maintenance Debrief Section. Debrief is conducted at the termination of each sortie/mission or when a sortie/mission is aborted. Aircraft scheduled for turn-around sorties/missions need not be debriefed if returned in landing status Code 1 or 2. However, debriefing is required, regardless of landing status, after the last flight of the day for each aircrew. MAJCOMs operating RPAs will develop and publish debrief procedures for Remote Split Operations in their supplements or addendum for both aircraft and ground control stations to adequately capture all maintenance discrepancies. The Debrief Section will:

3.7.12. **(Added)** Debriefing will normally be accomplished in a centralized location in Building 439, Room 209 (Second floor of Dock 1, next door to the Maintenance Operations Center, (MOC). Debriefers may utilize room 208, for debrief, when there is no other controller available and/or depending on the aircraft landing status. Debriefing responsibility is assigned to the MOC.

3.7.12.1. **(Added)** Ground aborts do not require formal aircrew debriefing in Dock 1.

3.7.12.2. **(Added)** MOC Personnel will complete an Abort/Incident worksheet. Crew Chief will accomplish the worksheet when MOC Personnel are not available. The Expeditor will deliver aircraft forms binder to MOC as soon as possible but prior to the end of shift. **(T-3)**

3.7.13. **(Added)** Debriefing record files will be developed for each aircraft. Files will be arranged by aircraft identification number and will include a debriefing sortie recap for the last four sorties to aid in identifying repeat/recurring discrepancies. Record files will be maintained in the MOC.

3.7.14. **(Added)** The contracted Transient Alert is responsible for all transient aircraft and notifying MOC of all transient aircraft. Transient Alert will ensure all maintenance discrepancies are marked Mission Essential (ME) or Mission Capable (MC).

3.7.15. **(Added)** Thirty minutes prior to termination of flight or as soon as Ultra High Frequency (UHF) or Very High Frequency (VHF) contact can be established, the flight crew will call the 434 Air Refueling Wing Command Post (434 ARW/CP) and provide an aircraft maintenance status code identifying any system malfunctions.

3.7.15.1. **(Added)** The 434 ARW/CP will provide the MOC with the aircraft maintenance status for relay to the Production Superintendent (Pro Super). MOC will provide Command Post (CP) with aircraft parking location.

3.7.15.2. **(Added)** Since Maintenance Status Code 3 Non-Mission Capable (NMC) discrepancies affect break rate and health to fleet, special emphasis will be placed on these problems.

3.7.16. **(Added)** The Aircraft Commander or crew members with knowledge of discrepancies will hand-carry the aircraft 781 Forms Binder to the debrief session. **(T-3)**

3.7.17. **(Added)** The Aircraft Commander will ensure aircrews enter all discrepancies into the AFTO Form 781A, *Maintenance Discrepancy and Work Document*. MOC will assist the aircrew in entering the proper system capability codes when documenting discrepancies IAW this publication and AFI 11-2KC-135V3, *KC-135 Operations Procedures*. **(T-3)**

3.7.18. **(Added)** The Aircraft Commander will ensure aircrews fill out the AF Form 664, *Aircraft Fuels Documentation Log*, and the DD Form 791, *Aerial Tanker In-flight Issue Log* (if required) for all refuel, defuel, and aerial refueling operations. **(T-3)**

3.7.19. **(Added)** The Aircraft Commander will ensure all AF Forms 315's, *United States Air Force AVFuels Invoice* and AF Forms 15's, *United States Air Force Invoice* are completed legibly, validated and signed and placed with the AF Form 664. **(T-3)**

3.7.20. **(Added)** All fuel documents and forms will be retained by the Aircraft Commander and turned into their respective Squadron Aviation Resource Management (SARM) office. **(T-3)**

3.7.21. **(Added)** The Aircraft Commander and pertinent aircrew will ensure the US Air Card is accounted for. If missing, inform the Production Supervisor, Expediter and/or Crew Chief who will annotate the discrepancy in the forms and initiate lost item procedures. **(T-3)**

3.7.22. **(Added)** On the AFTO Form 781H, *Aerospace Vehicle Flight Status and Maintenance*, the Aircraft Commander will ensure the "condition after flight" is signed and the correct number code is annotated under section 6 Status Data. They will also document flying hours, full stops and total landings respectively. **(T-3)** The reverse side of 781H will be annotated in red for all fuel offloads and the corresponding block will be signed and dated.

3.7.23. **(Added)** The Aircraft Commander, boom operator and pertinent aircrew will ensure the AFTO Forms 781 are properly completed and legible according to DAFMAN 11-401, **Attachment 2**, *Aviation Management*. **(T-3)**

3.7.24. **(Added)** Aircrew will ensure the original forms are kept with the aircraft forms and given to MOC upon return to home station. **(T-3)**

3.7.25. **(Added)** The Debriefing will coordinate with Expediter and Pro Super to ensure all necessary specialists attend the debriefing. If requested specialists are not available, Debriefing will use, DAFI 21-101 AMCSUP, Aircraft and Equipment Maintenance Management, KC-135R/T Debriefing Checklist located on the AF Portal at <https://www.my.af.mil/gcss-af/USAF/AFP40/d/s6925EC1353610FB5E044080020E329A9/Files/a4m/a4mp/debrief/hello.html>. **(T-3)**

3.7.26. **(Added)** The Debriefing will remove all applicable forms from the form's binder, i.e., AFTO Form 781, fuel documents. Do not tear out forms. **(T-3)**

3.7.26.1. **(Added)** Arrange forms in sequence to ensure AFTO 781 Series forms are not missing; ensure forms are properly completed to include blocks 1 through 18, 39 and block 40 of the AFTO Form 781. **(T-3)**

3.7.26.2. **(Added)** MOC will ensure all fuel receipts are accurately completed, and annotated on the AF Form 664, located in the aircraft forms binder. **(T-3)**

3.7.26.3. **(Added)** As a last check, ensure any fuel receipts (AF Form 15 and AF Form 315) are removed from the aircraft forms. **(T-3)**

3.7.27. **(Added)** The Debriefing will collect a copy AFTO Form 781 and audit to ensure correct takeoff time (Zulu) date and aircraft tail number are correct. **Note:** At this point, the Debriefing may release the flight crew. **(T-3)**

3.7.28. **(Added)** The Debriefing will load the open aircraft discrepancies into the FMXC2 computer. File copy AFTO form 781's in a designated Plans Scheduling and Documentation (PS&D) retrieval area for processing. **(T-3)**

3.7.29. **(Added)** The Debriefing will contact the Expediter responsible for the aircraft to retrieve the aircraft forms binder. **(T-3)**

3.7.30. **(Added)** PS&D will retrieve copy AFTO form 781 from MOC NLT the next duty day.

3.7.31. **(Added)** PS&D will review AFTO form 781 for accuracy, contact 72 and 74Air Refueling Squadron Superintendent daily to verify information and input into appropriate Maintenance Information Systems (MIS) (FMXC2) NLT the next duty day.

3.7.32. **(Added)** PS&D will hand carry processed original AFTO form 781s to 434 Operations Support Squadron (OSS/DOTF) NLT 0900 each duty day.

3.7.33. **(Added)** During MIS down times, or when deployed and MIS is not available, AMC form 278, *Debriefing and Recovery Plan* and AMCSUP, *KC-135R/T Debriefing Checklist* will be used to ensure accurate debriefing information is obtained. When Maintenance Data System Analysis personnel are deployed, the deployed Commander will designate an individual or activity to perform the analysis function. MOC personnel/Debriefers will use blank printouts as manual documentation method and forward documents to home station for data transcribing by the most expeditious means available. All documents will be turned into the MOC upon return to home station. Automated debrief tools should be used as the primary debriefing instrument, if availability permits.

3.7.34. **(Added)** The MOC will maintain a minimum 60-day supply of hard copy debrief forms for the purpose of deployments and for flight line historical reference during FMXC2 system failure. These debrief forms will be maintained in the MOC. Furthermore, AMXS Support Section will maintain a two-week supply in the cross-country kits. Hard copy forms will be used to update the FMXC2 system upon redeployment or system repair.

3.7.35. **(Added)** For aircraft returning to home station during non-duty days/hours, the recovering Crew Chief will conduct the aircraft maintenance debrief at the aircraft using AMC form 278 and AMC Checklist, *KC-135R/T Debriefing Checklist* available in the cross-country kit. Aircraft forms and all applicable documentation will be left in the Maintenance Debrief room (Building 439, Room 209) for reconciliation and entering of information into FMXC2 during the next normal duty day.

Chapter 4

MAINTENANCE SQUADRON (MXS)/GENERATION SQUADRON

4.10. Munitions Flight. Controls, accounts for, stores, ships, receives, inspects, maintains, assembles, and delivers conventional, precision guided and nuclear munitions. Manages and maintains all assigned tools, test and munitions handling equipment. Refer to AFI 21-2XX series instructions for specific guidance. **Note:** Munitions may be part of the MXS or established in a Munitions Squadron IAW DAFMAN 21-200.

4.10.1. (Added) 434th Air Refueling Wing Procedure on Explosive Safety: AFTO.

4.10.1.1. **(Added)** Comply with Department of Defense (DOD) and Air Force explosives safety and environmental standards.

4.10.1.2. **(Added)** Obey the cardinal principle for explosives safety.

4.10.1.3. **(Added)** Expose the minimum number of people to the minimum amount of explosives for the minimum amount of time.

4.10.1.4. **(Added)** Always observe explosives safety practices during all operations (includes war time, preparation for war, heightened tensions, etc.) that include the use of live explosives.

4.10.1.5. **(Added)** Provide the maximum possible protection to all personnel and property from the damaging effects of potential accidents involving ammunition and explosives.

4.10.2. (Added) Responsibilities.

4.10.2.1. **(Added)** The complete duties and responsibilities of the Munitions Section (Wing Commander thru Munitions Crew Chief) are outlined in depth in DAFMAN 21-200, *Munitions and Missile Maintenance Management*, and DAFI 21-201. That complete list of responsibilities will not be reiterated here but instead only those responsibilities that concern the safe handling and safeguarding of munitions will be addressed in this publication.

4.10.2.2. **(Added)** Everyone from the Munitions Accountable Systems Officer (MASO) on down to the crewmembers will document munitions movements on an Air Force (AF) Form 4331, Munitions Transaction Sheet, unless doing direct input. All crewmembers will have access to the AM104 Movement Screen in Combat Ammunition System (CAS) to process movements. AF Form 4331's will be updated in CAS at the earliest convenience and prior to closing the shop out for the day. The forms will then be forwarded to the MASO for weekly validation of movements.

4.10.2.3. (Added) MASO Duties.

4.10.2.3.1. **(Added)** The MASO will validate movements and transactions as required by DAFI 21-201.

4.10.2.3.1.1. **(Added)** The MASO is responsible for quality control of all documents before filing. MASO will not delegate this duty.

4.10.2.3.1.2. **(Added)** The MASO will process any munitions inventory adjustments and will not delegate this duty.

4.10.2.3.2. **(Added)** Document Control procedures, transactions and document filing will follow AFI21-201. Since the small and unique size of the munitions element at Grissom Air Reserve Base (GARB) does not lead to any unique situations that do not already have procedures established by AFI 21-201, no additional Operating Instruction (OI) is needed. Those procedures needing further clarification are included in this instruction.

4.10.3. **(Added)** Explosive/Operational Limits.

4.10.3.1. **(Added)** Explosive limits are posted at each operating location and storage facility.

4.10.3.2. **(Added)** Operational Limits will be determined at the time of the required task to be performed and entered into the munitions crew book pre-task safety briefing.

4.10.3.3. **(Added)** When figuring total NEW requirements for an operation you must use Quantity Unit Packed (QUP) calculations. Only minimum amount of explosives needed (rounded up to QUP) to perform required current operation will be present.

4.10.4. **(Added)** Personnel Limits:

4.10.4.1. **(Added)** As posted. Only supervisors, workers and casuals may be present. To meet the Two Person Rule, if only two workers are present the senior worker is the acting crew chief unless otherwise designated in the pre-task briefing. Munitions Personnel Descriptions for personnel limits in accordance with (IAW) Defense Explosives Safety Regulation (DESR)6055.09 Air Force Manual (AFMAN) 91-201, *Explosive Safety Standard*:

4.10.4.1.1. **(Added)** Worker – An individual that is fully qualified in the task to be performed. A worker is one who is directly involved in the explosive operation.

4.10.4.1.2. **(Added)** Supervisor – An individual that is overseeing the entire explosive operation. A supervisor is not required for every explosive operation.

4.10.4.1.3. **(Added)** Casuals – Personnel not normally part of an explosive operation but have duties that require their presence, such as quality assurance, safety, or inspection personnel.

4.10.4.1.4. **(Added)** Visitors – Non-essential personnel with limited access. All explosive operations will stop when visitors are present.

4.10.4.2. **(Added)** Building 696 is the only structure that Munitions work shall be performed in. Personnel Limits are set as follows: Workers: (4), Casuals: (2), Supervisor: (1).

4.10.4.3. **(Added)** Two-Person Rule (or buddy system): Explosive operations involving unpackaged explosives require a minimum of two qualified personnel.

4.10.4.3.1. **(Added)** The two qualified personnel may consist of two workers, or one worker and one supervisor as long as the supervisor is directly involved in the operation. Casuals will not be considered as part of the two-man rule.

- 4.10.4.3.2. **(Added)** Only the following are exempt from the two-man rule:
- 4.10.4.3.2.1. **(Added)** Small arms ammunition (5.56(millimeter) mm, 9mm, 7.62mm and 12gauge shotgun), and Cartridge Actuated Device/Propellant Actuated Device (CAD/PAD) items in quantity-distance class division 1.4S.
 - 4.10.4.3.2.2. **(Added)** Handling of munitions items in their storage/shipping configuration only does not require the use of the two-man rule. Once seal is broken on munitions items storage/shipping container, other than those listed in paragraph 4.10.4.3.2.1. the two-man concepts will apply.
- 4.10.5. **(Added)** Equipment Requirements.
- 4.10.5.1. **(Added)** A minimum of two serviceable fire extinguishers, suitable for the hazards involved, for immediate use at any location where explosives are being handled.
 - 4.10.5.2. **(Added)** Personal protective equipment (PPE) required for a specific munitions item are listed in Work Package 3 of the item Technical Manual. PPE will be present before the start of the explosive operation. As a standard all munitions personnel are issued and required to use safety glasses, safety toed boots and leather gloves when handling munitions storage containers.
 - 4.10.5.3. **(Added)** Pallet jack/dollies (as required) will be inspected and Air Force Technical Order (AFTO) FORM 244 signed off for serviceability prior to use.
 - 4.10.5.4. **(Added)** Non powered support equipment such as pallet jacks and hand dollies may be stored in building 696.
 - 4.10.5.5. **(Added)** Markers, paint, tape, stencils, common hand tools and nails as required by Technical Order (T.O.) 11A-1-10, *Air Force Munitions Surveillance Program and Serviceability Procedures*, and work package 3 and 6 of applicable technical orders in the T.O. 11A series. These items will not be stored in the storage structures with munitions.
- 4.10.6. **(Added)** Location and Procedures of Explosive Operations:
- 4.10.6.1. **(Added)** Maintenance and Inspection Facility, Building 696.
 - 4.10.6.2. **(Added)** **Prior** to an explosive operation in building 696 the following must be followed:
 - 4.10.6.3. **(Added)** Technical data for all munitions involved in the operation must be present. If no technical data is available, the munitions item will not be handled until appropriate technical data is obtained.
 - 4.10.6.3.1. **(Added)** All watches, rings, jewelry of any kind will be removed. Crew chief will ensure all individuals have removed such item.
 - 4.10.6.3.2. **(Added)** Crew chief assigned to the operation will fill out the munitions crew book and give a pre-task safety briefing (see **Attachment 4**) to all workers, supervisors and casuals in the area.
 - 4.10.6.3.3. **(Added)** Crew chief will notify the Maintenance Operation Center (MOC) at 688-3986 of the start of and completion of an explosive operation.

- 4.10.6.4. **(Added)** Maintenance Operation Center will be notified of an explosive operation prior to the movement of munitions into building 696.
- 4.10.6.4.1. **(Added)** The Maintenance Operation Center does not need notified of an operation that only consists of handling munitions items in their proper shipping container, such as re-warehousing, palletizing munitions for shipment, etc.
 - 4.10.6.4.2. **(Added)** Crew chief will notify the Fire Alarm Communication Center at 688-3353 of any fire symbol changes.
 - 4.10.6.4.3. **(Added)** Crew chief will post the “Explosive Operation in Progress, Do Not Enter” sign at the front gate of the munitions storage area (MSA).
 - 4.10.6.4.4. **(Added)** Crew chief will ensure personnel gate of the MSA is not padlocked or blocked to prevent evacuation of personnel.
 - 4.10.6.4.5. **(Added)** Crew chief will ensure that all applicable AF Form 4331, Munitions Transaction Sheets are filled out and given to the MASO at the completion of the operation.
 - 4.10.6.4.6. **(Added)** Crew chief will ensure CAS AM104A movement screen is updated when munitions are moved into building 696. Computer access should be available in building 696.
 - 4.10.6.4.7. **(Added)** When updating movement of munitions into building 696 in CAS, the normal storage location system, as standardized in T.O. 11A-1-61-1, *Storage and Outloading Instructions Conventional Ammunition (Igloo, Magazine, Military Van, Truckloading, and Carloading)* does not need to be followed.
- 4.10.7. **(Added)** During an explosive operation:
- 4.10.7.1. **(Added)** Crew chief will supervise the explosive operation and initiate action to correct deficiencies, terminates unsafe operations, and reports discrepancies.
 - 4.10.7.2. **(Added)** All members of the crew will remain vigilant for abnormal conditions or unsafe act.
 - 4.10.7.3. **(Added)** All members on the crew will remain vigilant for unauthorized personnel entering the area.
 - 4.10.7.4. **(Added)** All operations will be stopped if unauthorized personnel enter the area. The personnel, if to remain in the area, will be given the pre-task safety briefing by the crew chief before the operation is allowed to continue.
- 4.10.8. **(Added)** Munitions Storage Facilities, Buildings 694/695.
- 4.10.8.1. **(Added)** For operations conducted in building 694/695 the munitions crew chief will follow the same procedures as outlined in paragraphs 4.10.6.3-4.10.6.4.5.
 - 4.10.8.2. **(Added)** Building 694/695 are cited as a munitions storage structure only and any explosive operations in this facility are limited to:
 - 4.10.8.2.1. **(Added)** The opening of hazard class/division 1.4S small arms ammunition containers for inventory purposes.

- 4.10.8.2.2. **(Added)** Palletizing and banding of munitions, in their storage containers, for storage or shipment.
- 4.10.8.2.3. **(Added)** Correcting exterior packaging markings such as re-stenciling outer markings.
- 4.10.8.2.4. **(Added)** No munitions other than those listed in paragraph 4.10.4.3.2.1 will be removed from their packaging while inside of building 694/695. Munitions will be moved to building 696 for opening, inspection, and issue.
- 4.10.9. **(Added)** All storage facilities are secured with high security locks and alarmed with intrusion detection systems (IDS).
 - 4.10.9.1. **(Added)** The high security locks will be secured whenever exiting the facility.
 - 4.10.9.1.1. **(Added)** If the IDS system is not working, munitions personnel will notify security forces immediately. Security forces will then either post an armed guard or two-hour checks on the facility.
 - 4.10.9.1.2. **(Added)** See maintenance group operating instruction (434MXGOI 31-101, *Internal Security Operating Instructions*) for complete munitions storage area security procedures.
 - 4.10.9.1.3. **(Added)** No excess dunnage, packaging material, empty ammo cans, or empty countermeasure dispensers are authorized to be stored inside building 694/695.
 - 4.10.9.2. **(Added)** Storage locations will follow T.O. 11A-1-61-1 and will include the last two numerical digits of the facility and the bay designation as the first three digits of the location identifier. Example: 95A001A001B, 95C002C015AA.
- 4.10.10. **(Added)** General/Handling and Safety Precautions.
 - 4.10.10.1. **(Added)** No flame, heat, or spark producing items are permitted in the storage area where explosives are stored.
 - 4.10.10.2. **(Added)** All munitions' containers, including those issued to custody accounts will be sealed to prevent pilferage.
 - 4.10.10.2.1. **(Added)** Loose rounds, links, and brass will be properly stored and sealed to prevent pilferage.
 - 4.10.10.2.2. **(Added)** Care will be taken to prevent nails from puncturing the inside of ammo storage containers when nailing lids shut.
 - 4.10.10.3. **(Added)** Two forms of communication (phone land line, handheld radio) between munitions and dispatch will be in place during munitions operations.
 - 4.10.10.4. **(Added)** Cell phones will be turned off prior to handling any unpackaged Electro-Explosive Devices (EED).
 - 4.10.10.5. **(Added)** Electro-Explosive Devices (EED) and require personnel to be continuously grounded while opening and handling unpackaged items.
 - 4.10.10.6. **(Added)** Any grenade or smoke grenade that is upside down in their container DO NOT REMOVE from container notify Explosive Ordinance Disposal (EOD) immediately.

4.10.10.7. **(Added)** Excess dun age, paper, cardboard, and trash will be removed at the end of each work shift or more frequently as required.

4.10.10.8. **(Added)** Explosive operations will cease when lightning is within 10 nautical miles. If possible, secure unpackaged munitions and facilities. Then evacuate MSA to the munitions flight office building 595, room 119.

4.10.10.9. **(Added)** Face shield and leather gloves will be worn when cutting or performing banding operations. Civilians will not wear shorts when handling steel banding.

4.10.10.10. **(Added)** All issued and returned munitions will be inspected for serviceability in accordance with the applicable technical order, and T.O. 11A-1-10. Required inspections will be updated in CAS through direct input or annotated on an AFTO Form 102, "*Munitions Inspection Document*." AFTO 102's will be given to the munitions accountability personnel for updating into CAS.

4.10.10.11. **(Added)** Munitions returned from custody accounts will be returned as issued. This means munitions items will be packaged in original configuration prior to placing in storage. Munitions personnel will not except munitions that are loose or unpackaged. Munitions custody accounts are responsible for all munitions and packaging material issued to their account.

4.10.10.12. **(Added)** Any lost or suspected theft of munitions, notify Security Forces immediately.

4.10.10.13. **(Added)** Unserviceable items will be segregated from serviceable stock, clearly marked, and placed in the segregated area inside building 695.

4.10.11. **(Added)** Munitions Accident/Mishap and Emergency Action.

4.10.11.1. **(Added)** A munitions mishap is any accident or an unexpected event involving ammunition or explosives.

4.10.11.2. **(Added)** Munitions dropped, that exceed their drop distance identified in the item TO, are considered a mishap. Dropped munitions will not be installed/used until cleared to do so by the Senior Munitions Inspector.

4.10.12. **(Added)** In the event of a munitions mishap:

4.10.12.1. **(Added)** In the event of munitions accident/mishap or if the support of EOD is required refer to **Attachments 6 and 7**.

4.10.12.2. **(Added)** Cease all operations and evaluate the situation. If necessary, evacuate personnel to the minimum withdrawal distance for the type of explosives involved.

4.10.12.3. **(Added)** In the event of a munitions mishap regardless of damage, will be reported immediately to the Munitions Commander, Chief/Superintendent, MASO, Wing Safety, and MAJCOM.

4.10.12.4. **(Added)** Munitions operations will be shut down until proper guidance is obtained. No one will handle any munitions until cleared to do so by Supervision or EOD.

4.10.12.5. **(Added)** Senior ranking person will act as On-Scene Commander (OSC) until relieved by Wing Safety, Fire Department, Security Forces, or EOD.

4.10.12.5.1. **(Added)** On-Scene Commander will ensure first aid is rendered if needed.

4.10.12.5.2. **(Added)** On-Scene Commander will ensure area is secure and unauthorized personnel do not enter.

4.10.13. **(Added)** Mishaps, Accidents, or Fire within the munitions storage area:

4.10.13.1. **(Added)** Any contractor working within the MSA will coordinate with the MASO to ensure procedures are followed within this instruction.

4.10.13.2. **(Added)** In the event of fire, sound the alarm and evacuate all personnel to the minimum withdrawal distance. Personnel will attempt to fight fires until the munitions themselves become engulfed. Once the munitions become engulfed evacuate to the required withdrawal distance and wait for the fire department.

4.10.13.3. **(Added)** All personnel will be evacuated to the stop sign located at the end of Munitions Drive and Readiness Circle regardless of Munitions Technical Manuals identifying a lesser withdrawal distance.

4.10.13.3.1. **(Added)** The Stop Sign meets the 4000-foot withdrawal distance for 1.1 munitions.

4.10.13.3.2. **(Added)** If the fire department has not reached the Stop Sign when you get there, stand by, perform a head count, and relay that information on to fire department.

4.10.13.3.3. **(Added)** Ensure the individual calling or radioing in identifies type of emergency, if any/or how many people are involved and if any munitions are involved. If no munitions are involved, relay that information to the Fire Department.

4.10.13.3.4. **(Added)** Use the Fire Pull Stations to report a fire and to alert personnel to evacuate. After activating the fire alarms by the pull station, use the emergency direct dial phone located on the exterior of the munitions storage area to immediately pass critical information on to responding emergency crews.

4.10.13.3.4.1. **(Added)** If you use the pull station to call in an emergency without immediately following up with the emergency direct dial phone call to the Fire Department, the Fire Department will be delayed while they conduct a risk assessment of the situation.

4.10.13.3.4.2. **(Added)** Emergency information may also be relayed to the Fire Department by radio to Maintenance Operations Center (MOC); in turn MOC will relay the information to the Fire Department. However, the most effective way is by use of the direct dial phone.

4.10.13.3.5. **(Added)** The Wing Fire Department has specific procedures in place to protect them in the event of an alarm sounding in the munitions storage area. The Fire Department follows specific guidelines for fires and munitions. The Fire Department will respond to the intersection of Munitions Drive and Readiness Circle to meet

munitions personnel. If no munitions personnel meet them at this area, there could be a possible delay in getting help to the munitions area.

4.10.13.3.6. **(Added)** The munitions crew chief will ensure that someone is on their way to intercept and brief the Fire Department. This individual is appointed in the munitions crew book prior to the start of the explosive operation.

4.10.13.3.7. **(Added)** The individual appointed in the crew book as the one to intercept and brief the fire department, needs to exit and make contact with the fire department in the most expeditious means possible, unless they are performing lifesaving operations.

4.10.13.3.8. **(Added)** Brief/relay to the OSC or Fire Department of type and quantity of munitions involved and if all personnel are accounted for.

4.10.14. **(Added)** Movement Control.

4.10.14.1. **(Added)** Transportation.

4.10.14.1.1. **(Added)** Personnel and vehicles transporting munitions must comply with DESR6055.09_AFMAN 91-201, *Explosive Safety Standard*. Explosive routes have been established with 434th Safety Office and will be strictly adhered to while transporting munitions.

4.10.14.1.2. **(Added)** All off-base movements of munitions will be coordinated through the Transportation Management Office (TMO) office at least 48 hours prior to movement. Munitions transported off of GARB must be moved IAW the Wing Installation Security Plan (ISP) and DAFI 31-101, *Integrated Defense (ID)*.

4.10.14.2. **(Added)** Flightline Deliveries. There are no munitions delivered to the flightline.

4.10.14.3. **(Added)** Licensed Location Deliveries.

4.10.14.3.1. **(Added)** Movement of explosives between licensed locations and the MSA is the responsibility of the munitions custodians. If munitions custody accounts do not have a means of transportation of their munitions, they may request assistance from the Munitions Section on a case-by-case basis.

4.10.14.3.2. **(Added)** It's the responsibility of the using munitions custody account/organization transporting the munitions to have established training and explosive transportation procedures coordinated and approved by the Wing Weapons Safety Office.

4.10.14.3.3. **(Added)** Before release of munitions to custodians for transportation from the MSA the Munitions Crew Chief will ensure:

4.10.14.3.3.1. **(Added)** Individual picking up munitions is authorized and listed on a current DAF Form 68, *Munitions Authorization Record*.

4.10.14.3.3.2. **(Added)** Munitions will not be transported in Privately Owned Vehicles (POV). If munitions custodian arrives to pick up any munitions in a POV the custodians will be turned away.

4.10.14.3.3.3. **(Added)** Vehicle is properly placarded to reflect the most hazardous items being transported. On base movement of 1.4 munitions does not require placards.

4.10.14.3.3.4. **(Added)** Two serviceable 2A:10BC fire extinguishers suitable for the hazards involved are available on vehicle transporting explosives.

4.10.14.3.3.5. **(Added)** Vehicle has a means of tie-down/securing munitions, in the cargo compartment, to prevent movement, rolling, tumbling...etc., during transportation. Passengers will not ride in the cargo compartment with munitions. Munitions will not be transported in the passenger compartment except for those instances identified in DESR6055.09_AFMAN 91-201.

4.10.14.4. **(Added)** Forklifts.

4.10.14.4.1. **(Added)** Spotters will be used when handling explosives with forklifts.

4.10.14.4.2. **(Added)** Forklifts may be used for transportation of munitions other than inside the MSA.

4.10.14.4.3. **(Added)** If loading or off-loading a truck with a forklift away from the MSA, the munitions will be loaded and transported on either a flatbed truck for transportation to and from the MSA.

4.10.14.4.4. **(Added)** When handling munitions with a forklift, the munitions must be secured to the forklift with tie down straps.

4.10.14.5. **(Added)** Movement Documentation.

4.10.14.5.1. **(Added)** Ensure movements are either direct input into CAS AM104A screen or documented on an AF Form 4331, *Munitions Transaction Sheet*, or an AM Form 567A, *Munitions Storage Location Report*, for all stockpile and custody account movements within the MSA.

4.10.14.5.1.1. **(Added)** Movements documented on an AF Form 4331 or on the AM567A report, will be processed in CAS at the earliest convenience, normally within the hour but no later than the end of the duty day. After the movement is processed in CAS, write the CAS transaction number off of the AM903A, *Transaction History* report onto the AF Form 4331 or the AM567A report.

4.10.14.5.1.2. **(Added)** AF Form 4331's and AM567's used to process movements will be turned into the MASO once CAS is updated. The MASO will use these sheets to validate the AM903, *Transaction History*, report daily. Once the daily movement validation is complied with, the AF Form 4331 and/or AM567A report can be discarded. The validated AM903A report will be electronically signed by the MASO and filed in the Munitions Document Control file until superseded.

4.10.14.5.2. **(Added)** The MASO will use the weekly AM903 report along with the AF Form 4331's or AM567 report to validate 10% of movements within the MSA weekly.

4.10.14.5.3. **(Added)** The MASO may delegate these validation processes to other munitions personnel as long as the results of this validation is briefed to the MASO.

4.10.14.5.4. **(Added)** After the validation of movements have been completed, the AF Form 4331, AM567 can be discarded. The AM903 weekly validated report will be electronically signed by the MASO and filed in the Munitions Document Control file until superseded.

4.10.14.5.5. **(Added)** Discrepancies in the movement validation process will be thoroughly researched and corrected. If a negative trend is identified, the MASO will implement new movement procedures to this MOI to correct deficiencies.

Chapter 5

MAINTENANCE OPERATIONS (MXO)

5.2. Maintenance Operations.

5.2.4. Maintenance Operations, Director of Operations /Superintendent (DO/SUPT). In addition to the applicable Maintenance Supervision responsibilities in Chapter 2, the MXO OIC/SUPT will:

5.2.4.12. Establish/sustain local radio call signs for maintenance LMR networks IAW AFI 17-210, Radio Management. **(T-3)**

5.2.4.12. **(434 ARW)** Maintenance Group personnel will use the call signs listed in 434 MXG Memorandum “434 MXG Maintenance Net Call Signs”
<https://usaf.dps.mil/sites/434ARW/MXG/QA/SitePages/Home.aspx>.

5.2.5. Maintenance Operations Center (MOC). The MOC monitors and coordinates sortie generation, maintenance production, and execution of the operations and maintenance schedules while maintaining visibility of fleet health indicators. Through coordination with maintenance units, the MOC communicates priorities for competing limited resources (such as, fuel or calibration docks, wash racks, and dispatched specialists from the maintenance squadron(s) (for example, egress) based on daily operations schedule and maintenance priorities. The exchange of information between squadrons and the MOC must be in sufficient detail to allow the MOC to comply with reporting requirements and to identify potential problems.

5.2.5.1. The MOC will:

5.2.5.1.16. Develop, coordinate, implement, and maintain functional and emergency action checklists. **(T-3)** Checklists contain those actions required to be taken by functional area(s).

5.2.5.1.16.5. The MOC will maintain checklists that implement all approved MAJCOM and local requirements. **(T-3)**

5.2.5.1.16.5. **(434 ARW)** MOC will be the POC for Checklist and QRL's and QA approved copies will be kept on the 434 MXG QA Sharepoint at:
<https://usaf.dps.mil/sites/434ARW/MXG/QA/SitePages/Home.aspx>.

Chapter 6

QUALITY ASSURANCE (QA)

6.10. Technical Order Distribution Office (TODO). The TODO ensures TOs and CPINS are managed IAW AFI 63-101/20-101, TO 00-5-1, TO 00-5-15 and TO 00-5-16. TO 00-5-1 provides criteria for establishing levels of TO distribution activities. Additionally, TODOs will control electronic technical data configuration IAW **Chapter 8**. Establish the PMEL TODO under the control of the TMDE Flight. **(T-2)** The TODO will:

6.10.5. Prepare a list of all changes and revisions to indexes, TOs, inspection work cards and checklists. **(T-2)**

6.10.5.4. **(Added)** Locally developed Work Cards, Job Guide and Checklists will be formatted and distributed by the TODO only. Each local Work Card, Job Guide and Checklist will be assigned a local number and will be distributed through the Enhanced Technical Information Management System (ETIMS) program. A QA representative and maintenance POC will be assigned to all locally developed tech data. **(T-3)**

6.10.5.5. **(Added)** The TODO will establish an index for all local Work Cards, Job Guides and Checklists. They will be reviewed every two years for currency and when there is a change to any source data. The annual and source data change review will be documented in the QA Local Technical Data Review Handbook that is maintained by TODO. The review will be signed by the QA OPR for that tech data. The TODO will notify the QA OPR when a review is required.

6.10.5.6. **(Added)** The Technical Order Distribution Account (TODA) will notify the TODO notification of all TOs that are mobilized out of country from Grissom with the exception of aircraft libraries (G File). This notification will be done by e-mail and will only state the time the tech data will be gone from Grissom, the identification of the Mobility Kit and any additional TOs that are affected. **Do not specify where the Mobility Kit is going.**

6.10.5.7. **(Added)** When Mobility TOs have been returned to home station, an inventory of the returned TOs will be accomplished by TODA and notify the TODO of inventory results within 15 days of return.

6.10.5.8. **(Added)** The TODO will process TCTO in the ETIMS Program. All TODA accounts with action or information on the TCTO will receive a “*Working Copy*” only and will destroy the “*Working Copy*” when all work on that TCTO has been accomplished. The QA POC for the TCTO will track those accounts that receive “*Working Copies*” in the TCTO information loaded into Quality Assurance Tracking and Trend Analysis System (QANTTAS) Program. Additional copies are to be distributed by **QA ONLY**. The exceptions to this are offices required by DAFI 21-101, to maintain a TCTO folder until the rescission of TCTO.

6.10.5.9. **(Added)** TCTO’s will be loaded on IPads as working copies.

6.10.5.10. **(Added)** The Plans and Scheduling (P&S) Office will assign all TCTO’s to applicable aircraft in FMXC2 (9126) to include aircraft requiring weight and balance

(W&B) updates. QA will be scheduled as an assisting work center for W&B up-date when required by the TCTO. The QA Work Event Separator (WES) for the TCTO will be upgraded to a RED X when the aircraft is placed in work and the statement "802 assist, update chart C" will be placed in the REMARKS BLOCK of QA's WES. QA will update the Chart "C" at the completion of the TCTO when informed by the primary work center. After FMXC2 is completed by QA they will inform the primary work center that the 801 action can be finalized.

6.10.7. If designated as Lead TODO (primary as designated in block 5 of the AFTO Form 43, *USAF Technical Order Distribution Office (TODO) Assignment or Change Request* per TO 00-5-1), will conduct a management inspection on other maintenance TODOs/TODAs in the maintenance complex at least annually along with performing spot checks of TO files.

(T-2)

6.10.7.1. As part of this inspection, the TODO will confirm TODO/TODA personnel and Library Custodian have completed the mandatory minimum requirements of TO System training. **(T-2)**

6.10.7.1.1. **(Added)** Each work center submits a letter of appointment for account custodians (TODA) or changes affecting the account to the TODO. The letter will contain the following information and will be updated as needed for currency and within 30 days of any changes to TO Library custodians or location:

6.10.7.1.1.1. **(Added)** Account Number.

6.10.7.1.1.2. **(Added)** Office Symbol.

6.10.7.1.1.3. **(Added)** Building Number.

6.10.7.1.1.4. **(Added)** Phone number of TODA.

6.10.7.1.1.5. **(Added)** Name of Primary custodian, AF Portal ID, date assigned to the account and date training completed.

6.10.7.1.1.6. **(Added)** Name of Alternate custodian, AF Portal ID, date assigned to the account and date training completed. **Note:** Primary and alternate TODA and library custodians will complete, at a minimum, Air Force Technical Order System General Course. This course is Computer Based Training (CBT) acquired through the following link: <https://usaf.dps.mil/teams/12982/default.aspx>.

6.10.7.1.2. **(Added)** The TODA will file a copy of the certificate with the appointment letter in Section 1 of their Technical Order Inventory Binder.

6.10.9. Maintain records of ETIMS IAW TO 00-5-1.

6.10.9.3. **(Added)** When a requirement exists for a TO or Computer Program Identification Numbering System (CPINS) to be requisitioned or deleted from an account, the primary/alternate custodian makes the request by E-mail to the TODO office for processing.

6.10.9.4. **(Added)** The TODO will process the requested TOs or CPINS in ETIMS and in CPINS. The TODO will return an E-mail to the TODA informing them when the action is completed. The TODA will maintain a copy of this E-mail in the Technical Order Library Binder until the requisition is received or deleted from the Master Report.

The TODA will notify the TODO of any additional copies of CPINS to be maintained within 15 duty days. Obsolete copies of CPINS will be returned to the TODO within 5 duty days. All distribution of CPINS will be tracked by the TODO and reviewed annually.

6.10.9.5. **(Added)** TODA's will provide the TODO with a copy of the training certificate after completing the AF TODA General and Advanced Course.

6.12. Functional Check Flights (FCFs) to include Operational Check Flights (OCFs).

6.12.2. The QA FCF Program Manager will:

6.12.2.1. Establish local FCF procedures IAW TO 1-1-300 and checklists for any specific local aircraft requirements to include configuration, administration, control, and documentation of the FCF Program. **(T-2)**

6.12.2.1.2. **(Added)** Notification of a Functional Check Flight (FCF), Operational Check Flight (OCF) and High Speed Taxi Check will begin with the performing maintenance organization supervisor contacting the AMXS Production Supervisor (Pro Super). The Pro-Super is responsible for ensuring maintenance supervision is notified.

6.12.2.1.2.1. **(Added)** Pro Super will notify PS&D and the QA Office.

6.12.2.1.2.2. **(Added)** Maintenance supervision and QA will brief the MXG/CC prior to contacting Stan Eval (OGV).

6.12.2.1.2.3. **(Added)** QA will contact Stan Eval, requesting an FCF, OCF or High Speed Taxi Check. QA will provide the following information: aircraft tail number, reason for the FCF, and anticipated time of aircraft availability. OGV will coordinate the FCF, OCF or High Speed Taxi with scheduling.

6.12.2.1.2.4. **(Added)** Stan Eval will coordinate and receive approval for flight from OG/CC.

6.12.2.1.2.5. **(Added)** AMXS Specific Responsibilities:

6.12.2.1.2.5.1. **(Added)** Pro Super will ensure the aircraft preflight is complete and no open discrepancies exist that affect the airworthiness of the aircraft or the systems requiring the FCF.

6.12.2.1.2.5.2. **(Added)** Pro super will review the aircraft forms and ensure the exceptional release is completed by an individual identified on the special certification roster.

6.12.2.1.2.6. **(Added)** Quality Assurance Specific Responsibilities:

6.12.2.1.2.6.1. **(Added)** Verify the preflight inspection and that no open discrepancies exist, which affect the airworthiness of the aircraft or the systems involved in the FCF.

6.12.2.1.2.6.2. **(Added)** Ensure a discrepancy exists in the aircraft forms and MIS for the FCF and the reason for accomplishment.

6.12.2.1.2.6.3. **(Added)** Initiate a FCF checklist, TO 1C-135-6CL-1, *Pilot Acceptance and/or Functional Check Flight Checklist, Series-135 Aircraft*.

Note: Line non-applicable checklist blocks out or put—N/A in red in those blocks.

6.12.2.1.2.6.4. **(Added)** Brief the flight crew on the previous maintenance problems and discrepancies recorded on the aircraft and/or system/equipment relating to the FCF.

6.12.2.1.2.6.5. **(Added)** Conduct the post flight debrief with the flight crew at the Maintenance Operations Center (MOC) when the mission is completed.

6.12.2.1.2.6.6. **(Added)** Ensure all FMXC2 and aircraft form entries are completed.

6.12.2.1.2.6.7. **(Added)** Complete the Functional check flight log to indicate if aircraft was released for flight or any reason for non-release, action taken and date completed.

6.12.2.1.2.6.8. **(Added)** Forward the checklist to PS&D for inclusion in the aircraft jacket file after a complete review.

6.12.2.1.2.7. **(Added)** Aircraft Commander Responsibilities:

6.12.2.1.2.7.1. **(Added)** Ensure flight crew specialties responsible for in-flight operation of systems to be evaluated are manned by qualified individuals.

6.12.2.1.2.7.2. **(Added)** Review the requirements of TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*, the inspection and procedural requirements of TO 1-1-300; *Maintenance Operational Checks and Check Flights* applicable TO 1C-135-6 *Aircraft Scheduled Inspections and Maintenance Requirements*, TO 1C-135-6CF-1, *Operational Supplement Acceptance and/or Functional Check Flight Checklist* and TO 1C-135-6CL-3 *Boom Operator Acceptance and/or Functional Check Flight Checklist*. **Note:** These technical orders are available for review during the briefing if needed.

6.12.2.1.2.7.3. **(Added)** Accomplish the FCF as briefed and in accordance with directives.

6.12.2.1.2.7.4. **(Added)** Entering all discrepancies in the aircraft forms in a clear and concise manner.

6.12.2.1.2.7.5. **(Added)** Complete FCF checklist, TO 1C-135-6CL-1 or TO 1C-135-6CF-3.

Chapter 7

IMPOUNDMENT PROCEDURES

7.2. Specific Guidance. MXGs will develop and implement a standardized Impound Official training course. The course will include review of applicable AFIs, TOs, impoundment clearing procedures, and leverage FSR and AFETS expertise to ensure Impound Official is prepared to assume all duties and responsibilities of an impoundment official.

7.2.1. Local program procedures, requirements and responsibilities will be captured in a local supplement to this instruction. **(T-3)**

7.2.1.1. **(434 ARW)** The 434 ARW Impoundment Checklist is located at U:\434_MXG\QA\Programs\Impoundment_OCF.

7.6. Impoundment Procedures.

7.6.3. Aircraft or equipment records will be controlled at the discretion of the Impoundment Official. **(T-2)** When required, the Impoundment Official will:

7.6.3.6. **(Added)** Maintenance Group personnel involved or witnessing an incident involving damage or injury will remain at the scene until released by the on-scene commander or Impoundment Official.

7.6.5. The Impoundment Official will select a team of qualified technicians dedicated to determining the cause of the problem that led to the impoundment. **(T-2)**

7.6.5.2. **(Added)** Impound official will read and become familiar with the impoundment procedures outlined in this instruction. Paragraph 7.6.5.2.1.-7.6.5.2.6. are the additional 434 ARW Specific Procedures.

7.6.5.2.1. **(Added)** Obtain the impoundment logbook from QA to support the process.

7.6.5.2.2. **(Added)** Take required training and be updated on SCR if needed.

7.6.5.2.3. **(Added)** Ensure an access control log is established.

7.6.5.2.4. **(Added)** Execute the appropriate impoundment procedures checklist.

7.6.5.2.5. **(Added)** Coordinate all information required for the impoundment during the daily maintenance meeting.

7.6.5.2.6. **(Added)** Upon release of the impoundment, return the impoundment logbook to QA.

7.6.10. MAJCOMs will publish guidance outlining impoundment and release procedures for transient aircraft.

7.6.10. **(AFRC)** The transient location MXG/CC will coordinate with the home station/owning MXG/CC on impounded aircraft. **(T-2)** The transient location MXG/CC will be responsible for all impoundment procedures except impoundment release authority. **(T-2)** Coordinate with the home station/owning for impoundment release. **(T-2)**

7.6.10.2. **(Added)** During a dual absence of the MXG/CC and MXG/CD the Order of Succession for 434 MXG memo will designate the Impoundment Release Authority.

Chapter 8

TOOL AND EQUIPMENT MANAGEMENT

8.2. Guidelines for Program Management. Wings will document procedures for the control and management of all tools/equipment used for aircraft/aerospace equipment maintenance or which enter the flightline or aerospace equipment maintenance industrial areas, to include all wing organization's (Hospital, CE, vehicle Mx, Security Forces), to provide mission support in a wing level publication IAW DAFMAN 90-161. As a minimum, guidance will address the following:

8.2.1. Standardized procedures for security, control, and accountability of tools and equipment. **(T-3)**

8.2.1. **(AFRC)** Units will develop local procedures to ensure positive control of dispatchable aircraft, vehicle, and trailer mounted Composite Tool Kits (CTKs). (T-2) Include procedures for the control of weapons load crew crimpers, die, lead seals, and engine blade blending blue dye. **(T-2)**

8.2.1.2. **(Added-AFRC)** Develop local procedures to cover out/in procedures for tool control in instances where only one person is assigned to a shift/work center. (T-2)

8.2.1.2.1. **(Added)** The use of a "shop" or "ghost" account to sign-in/out items is strictly prohibited. On the occasions when a single person must sign in and sign out a tool kit, the item will be signed out in TC-Max and signed in on an AFRC Form 177, *Consolidation Tool Kit Inventory and Control Log* maintained solely for that purpose.

8.2.1.2.2. **(Added)** A "second look" inspection will be completed and documented as soon as possible but not later than the start of the next duty shift. The "second look" inspection will be documented on the same AFRC Form 177 and the individual completing the "second look" will sign the item into TC-Max. For CTK's where keys are tracked in TC-Max (i.e. Truck CTK's) this process will be used if a single person signs the first and last entry of the AF Form 177 of each TC-Max transaction.

8.2.1.3. **(Added)** CTKs installed in trucks are permitted.

8.2.1.3.1. **(Added)** The keys for truck CTKs will be controlled through the owning work center TC-Max; AFRC Form 175, *Broken/Missing/Removed Tools and Equipment* and AFRC Form 177, *Consolidation Tool Kit Inventory and Control Log* will be maintained with the CTK.

8.2.1.3.2. **(Added)** Users of truck CTKs are responsible for performing and documenting inventory checks at the beginning and end of each job on an AFRC Form 177.

8.2.1.4. **(Added)** Equipment or CTKs that are not expected to be returned prior to the end of the current work shift are documented as long-term issues (LTI) or TDY.

8.2.1.5. **(Added)** The operator inspection for all equipment except AGE will be completed and considered documented when the item is signed out in TC-Max.

8.2.3. Procedures for warranted tool management. **(T-3)**

8.2.3.2. **(Added)** Warranted and replacement tools shall be purchased by the individual work center supervisor or his designated representative and managed utilizing TC-Max.

8.2.4. Procedures for control and management of replacement, expendable and consumable hand tools, HAZMATs, and other items contained in CTKs. **(T-3)**

8.2.4. **(434 ARW)** Maintenance Superintendents will designate authorized spare tool locations and appoint spare tools monitors to control expendable, consumable hand tools and HAZMAT items.

8.2.6. Procedures for lost or missing tools. **(T-3)**

8.2.6.2. **(Added)** If a missing item is suspected to be on an aircraft that has departed, the discovering individual immediately contacts MOC by the fastest means available and requests the Aircraft Commander to return to the Mass Parking Area (MPA) for a thorough inspection of the aircraft for the missing item.

8.2.7. Assignment of Equipment Identification Designators (EID) for CTKs, non-CA/CRL equipment, and assignment of CTK numbers for tools. **(T-3)**

8.2.7. **(434 ARW)** Refer to **Table 8.1, 434 ARW Equipment Identification Designators (EIDs)** for 434 ARW specific Equipment Identification Designators EID's

Table 8.1. (Added) 434 ARW Equipment Identification Designators (EIDs).

SHOP	EID
MXS	
PERIODIC INSPECTION SECTION	MI
PROPULSION SECTION	MP
AEROSPACE GROUND EQUIPMENT SECTION	MG
FUEL SYSTEM SECTION	MF
HYDRAULIC/IFR SECTION	MH
ELECTRIC/ENVIRONMENTAL SECTION	ME
STRUCTURAL REPAIR	MS
METALS TECHNOLOGY	MT
NON-DESTRUCTIVE INSPECTION	MN
AERO REPAIR	MA
CRASH RECOVERY	MC
AIRCRAFT REFURBISHMENT	MR
AMXS	
FLIGHT LINE	A1

SUPPORT FLT	A2
MXG	
MXG/QUALITY ASSURANCE	QA
Aircrew Flight Equipment (AFE)	LS

8.2.8. Procedures for issue, marking, and control of PPE, tools, or equipment (such as, hearing protectors, reflective belts, headsets) assigned/issued to individuals. **(T-3)**

8.2.8.2. **(Added)** Personal Protective Equipment (PPE) issued equipment may be maintained in personal lockers and will be marked with TC-Max and the issue date will be tracked in TC-Max.

8.2.9. Procedures to ensure positive accountability and control of rags. **(T-3)**

8.2.9.4. **(Added)** For areas that track rags in more than one location, a representative of each work center shall sign a hand receipt to the rag monitor for an initial issue of rags. These rags will be entered in TC-Max as expendable (special) stock items for issue control.

8.2.9.5. **(Added)** Once per week work center representatives will return dirty rags to the rag monitor and pick up clean ones. The time and day for rag return will be determined by the rag monitor based on the pickup day for the rag supplier.

8.2.9.6. **(Added)** Rags and absorbent pads will be issued and controlled through TC-Max. Rag monitors or work center representatives will inventory/account for all of their rags at the end of each shift. Any lost or unaccounted rags will be treated as a lost tool and follow the same procedures in this instruction.

8.2.9.7. **(Added)** Emergency spill kits that contain absorbent pads will be sealed with plastic or lead seals to prevent use of pads in non-emergency situation.

8.2.11. Procedures for control of locally manufactured or developed tools and equipment. **(T-3)**

8.2.11. **(434 ARW)** Control of locally manufactured tools and equipment will align with this instruction.

8.2.12. Procedures for FSRs/DFTs/CFTs when working on equipment within the unit. **(T-3)**

8.2.12. **(434 ARW)** Contract Field Teams and Depot Teams who are dispatched to aircraft will utilize tool control procedures and follow this instruction to the maximum extent possible.

8.2.13. Standardized procedures and responsibilities for decentralizing CTKs, tools, and equipment outside tool room/support section to meet mission requirements. **(T-3)**

8.2.13.2. **(Added)** Decentralized work centers include the Periodic Inspection (PE) Dock, Refurbishment and Wash Rack tool boxes. The security check performed by the remote work center representative will include all CTKs that are physically located there. The responsibility for maintaining, inspecting, and inventorying these CTKs will remain with the owning work center.

8.2.14. Procedures for control of response equipment permanently stored/located in trailers or vehicles. **(T-3)**

8.2.14. **(434 ARW)** All Crash Damaged, or Disabled Aircraft Recovery (CDDAR) tools and equipment procedures will align with this instruction.

8.2.16. Procedures for controlled access to tool rooms. **(T-3)**

8.2.16. **(434 ARW)** Tool rooms will be located in an area where the access can be limited when 24 hour coverage is not available. When this is not possible CTK's and equipment need to be stored in a manner to prevent unauthorized use or access.

8.2.17. **(Added-AFRC)** FOD container/pouch requirements for dispatchable CTKs. **(T-2)**

8.2.17. **(434 ARW)** Dispatchable CTK's are not required to have a Foreign Object Damage (FOD) container/pouch attached.

8.3. General Program Guidelines.

8.3.6. A Master Inventory List (MIL) will be required for each CTK or series of identical CTKs. **(T-3)**

8.3.6.7. Missing, removed and/or broken tools/items will be documented in the TCMax® if they cannot be replaced immediately. **(T-3)**

8.3.6.7.5. **(Added)** When missing tools are replaced, update the copy of the MIL in the CTK and update TC-Max.

8.4. TMDE Management Guidelines. Support Sections will designate a TMDE Monitor who will act as the focal point with the designated servicing PMEL (whether on-base or off-base) for managing the TMDE calibrations requirements for the owning work center. **(T-3)** The TMDE Monitor will:

8.4.10. **(Added)** Test Measurement and Diagnostic Equipment (TMDE) Calibration Procedures. **Note:** The following special terms are used throughout this section. 88 LRS/LGRMCD, Precision Measurement Equipment Laboratory (PMEL) Monday, PMEL Tuesday, PMEL Wednesday, PMEL driver and PMEL rider. These terms indicate responsibilities only during weeks when PMEL runs are scheduled.

8.4.10.1. **(Added)** The 434 ARW Commander will:

8.4.10.1.1. **(Added)** Appoint two individuals, a primary and an alternate, to serve as wing PMEL Monitors. The PMEL monitors coordinate on-site calibration of TMDE at Grissom Air Reserve Base (ARB). The appointments will be disseminated to all organizations within the 434 ARW via official e-mail.

8.4.10.1.2. **(Added)** Ensure adequate facilities are provided to support the Wing PMEL program.

8.4.10.2. **(Added)** The wing PMEL Monitors shall perform the following functions:

8.4.10.2.1. **(Added)** Act as a focal point for PMEL related questions within the 434 ARW.

8.4.10.2.2. **(Added)** Maintain a list of equipment requiring "on-site" calibration.

8.4.10.2.3. **(Added)** Coordinate on-site calibration requests between owning work centers and Wright Patterson Air Force Base (WPAFB) PMEL laboratory.

8.4.10.2.4. **(Added)** Ensure required PMEL training is accomplished. Training will be provided through Wright-Patterson. Upon completion trainees need to print certificate and turn it into Grissom PMEL Monitor.

8.4.10.3. **(Added)** 434 LRS/LGRR serves as the focal point for coordination of support agreements between 434 ARW agencies and WPAFB.

8.4.10.4. **(Added)** 434 ARW/FM is responsible for advising the affected units as to the proper funding and forms to utilize when procuring PMEL support from WPAFB. Each unit is responsible for funding their own PMEL requirements and documenting expenditures.

8.4.10.5. **(Added)** Squadron Commanders/Superintendents assigned to the 434 ARW at Grissom ARB solicit volunteers from TMDE customers within their squadron to perform PMEL rider duties on a rotating monthly basis. PMEL riders can be either management or bargaining unit employees. PMEL riders must possess a secret security clearance and a valid state and military driver's license.

8.4.10.6. **(Added)** PMEL drivers will:

8.4.10.6.1. **(Added)** Sign out the PMEL vehicle at vehicle operations each PMEL Monday.

8.4.10.6.2. **(Added)** Assist the PMEL rider with the loading and unloading of TMDE.

8.4.10.6.3. **(Added)** Drive the PMEL delivery vehicle to and from WPAFB.

8.4.10.7. **(Added)** PMEL riders will: Receive TMDE and WPAFB PMEL receipts from the 434 ARW PMEL Equipment room and load TMDE equipment into the PMEL vehicle between 1300 and 1500 hours on PMEL Monday. 434 ARW PMEL Equipment room is located in building 591, room 8.

8.4.10.8. **(Added)** 434 PMEL monitor notifies the PMEL rider of any classified equipment requiring pickup. Classified equipment is picked up at the owning work center prior to departure to WPAFB PMEL Tuesday morning. PMEL riders ensure that they receive a security briefing from the owning work center prior to departure to WPAFB. The classified equipment hand receipts are placed in the PMEL receipt folder provided by the PMEL Equipment room.

8.4.10.9. **(Added)** After the PMEL vehicle is loaded for the trip to WPAFB, it will proceed directly to Building 420 (Vehicle Maintenance) on Grissom where it will be stored inside overnight for security of the equipment.

8.4.10.9.1. **(Added)** Deliver TMDE and equipment manifest directly to WPAFB on PMEL Tuesdays.

8.4.10.9.2. **(Added)** Receive TMDE and any correspondence from WPAFB PMEL at the time designated by the WPAFB PMEL scheduler on PMEL Tuesdays. Riders ensure that PMEL receipts are used for pick-up and delivery of TMDE at WPAFB

PMEL. The PMEL generated hand receipts are maintained in the PMEL receipt folder by 434 ARW PMEL Equipment room.

8.4.10.9.3. **(Added)** PMEL riders comply with all the instructions contained in the PMEL vehicle continuity folder.

8.4.10.9.4. **(Added)** Upon return to Grissom ARB, the PMEL riders deliver TMDE and PMEL receipt folder to the 434 ARW PMEL Equipment room in building 591, room 8. Classified equipment is delivered directly to the owning work center. The PMEL vehicle is returned to vehicle operations, building 420 on PMEL Tuesdays, if possible or by 1000 hours on PMEL Wednesday.

8.4.10.10. **(Added)** Work Center supervisors will:

8.4.10.10.1. **(Added)** Notify the wing PMEL monitors, in writing, of all TMDE requiring on-site calibration. Information provided to the PMEL monitors includes the following:

8.4.10.10.1.1. **(Added)** Equipment ID number.

8.4.10.10.1.2. **(Added)** Equipment nomenclature.

8.4.10.10.1.3. **(Added)** Equipment National Stock Number (NSN) and part number.

8.4.10.10.1.4. **(Added)** Equipment location.

8.4.10.10.1.5. **(Added)** Calibration interval.

8.4.10.10.1.6. **(Added)** Calibration due date.

8.4.10.10.1.7. **(Added)** Work center ID number.

8.4.10.10.2. **(Added)** Appoint a primary and alternate TMDE Coordinator and notify PMEL, through the 434 ARW PMEL Monitor, 434 MXS/MXMP, by letter. Inform the 434 ARW PMEL Monitor of any changes to the provided information. Provide the following information:

8.4.10.10.2.1. **(Added)** Full name and rank of primary and alternate TMDE coordinators.

8.4.10.10.2.2. **(Added)** Duty phone number, work center number, name of work center, and organizational address.

8.4.10.10.3. **(Added)** Retain one copy of the TMDE appointment letter in the Owning Work Center (OWC) PMEL folder.

8.4.10.11. **(Added)** TMDE Coordinators will:

8.4.10.11.1. **(Added)** Establish a TMDE folder that includes the following:

8.4.10.11.1.1. **(Added)** Appointment letter for primary and alternate TMDE coordinators.

8.4.10.11.1.2. **(Added)** Owning work center Master ID listing.

8.4.10.11.1.3. **(Added)** Owning work center 90 day forecast.

8.4.10.11.1.4. **(Added)** Owning work center hand receipts (generated by 434 MXS/MXMP) for items in PMEL.

8.4.10.11.1.5. **(Added)** Any customer handout(s) provided by PMEL.

8.4.10.11.1.6. **(Added)** Proof of TMDE Monitor training.

8.4.10.11.2. **(Added)** Review the 90 day forecast and master ID listing for accuracy. Notifying WPAFB PMEL, through 434 ARW PMEL Monitor, of any error or corrections and requesting corrected listings. Upon review the Coordinator will return a signed copy of the Master Listing to the 434 PMEL Equipment section. This is required as soon as possible and, at the latest, by the following PMEL Tuesday Run.

8.4.10.11.3. **(Added)** Monitor and ensuring all TMDE due calibration is delivered to the 434 ARW PMEL Equipment room, building 591, room 8 or other specified location, between 0800 - 1000 hours each PMEL Monday. Coordinators will ensure TMDE meets the following standards when turned in:

8.4.10.11.3.1. **(Added)** The TMDE is clean, has connectors properly attached, all exposed parts protected, and the correct fuses installed.

8.4.10.11.3.2. **(Added)** The TMDE filters are clean.

8.4.10.11.3.3. **(Added)** The TMDE contains all ancillary equipment (e.g. preamplifiers, power supplies, adapters, cables, or probes) needed for calibration.

8.4.10.11.3.4. **(Added)** For initial calibration or equipment in need of repair ensure and AFTO Form 350, *Repairable Item Processing Tag* is properly completed and attached to the item.

8.4.10.11.3.5. **(Added)** Do not send common power cords with TMDE.

8.4.10.11.3.6. **(Added)** Plug-in modules and other TMDE that are a part of a piece of test equipment but calibrated separately have an AFTO Form 350 tag attached to it indicating the type of equipment that the module is used with.

8.4.10.11.3.7. **(Added)** Ensure each piece of TMDE has its own case if needed, do not group items into one case.

8.4.10.11.4. **(Added)** Initiate priority/emergency calibration requests as necessary. 434 ARW PMEL Monitor is notified if the TMDE requires priority/emergency handling. A letter is required to justify and expedite calibration.

8.4.10.11.5. **(Added)** Ensure a hand receipt is received for each item delivered to the 434 ARW PMEL Equipment room, building 591, and room 8.

8.4.10.11.6. **(Added)** After notification by 434 ARW PMEL Monitor, TMDE coordinators pick up equipment between the hours of 1200 and 1500 on Wednesday. If Wednesday is a holiday, pick up the TMDE on the first duty day following the holiday. Individuals picking up equipment must bring their copies of the hand receipts or a signed manifest. In the event the hand receipts have been lost, the customer must sign for the equipment before it can be released no exceptions.

8.4.10.12. **(Added)** 434 ARW PMEL Monitors will:

- 8.4.10.12.1. **(Added)** Serve as a collection point for TMDE going to and coming from WPAFB PMEL.
- 8.4.10.12.2. **(Added)** Accept TMDE from TMDE coordinators between 0900-1100 hours on each PMEL Monday. No TMDE is accepted after 1100 on PMEL Monday.
- 8.4.10.12.3. **(Added)** Issue hand receipts or a signed manifest to TMDE coordinators for TMDE going to PMEL.
- 8.4.10.12.4. **(Added)** Develop and publish PMEL rider schedule. This schedule will be provided to all applicable work centers.
- 8.4.10.12.5. **(Added)** Notify the PMEL rider of any classified equipment requiring pick-up at any owning work center.
- 8.4.10.12.6. **(Added)** Issue TMDE, any correspondence from work centers, and the PMEL receipt folder to the PMEL riders.
- 8.4.10.12.7. **(Added)** After receiving equipment on PMEL, Monday's print out and e-mail the equipment listing (TMDE Equipment being delivered that trip) to the WPAFB PMEL section.
- 8.4.10.12.8. **(Added)** Receive TMDE, correspondence, and PMEL receipt folder from PMEL riders upon their return from WPAFB PMEL
- 8.4.10.12.9. **(Added)** Issues TMDE to work center representatives from 1200-1500 hours each PMEL Wednesday unless the Wednesday is a holiday. In this case, TMDE is issued on the first duty day following the holiday
- 8.4.10.12.10. **(Added)** Forward WPAFB PMEL correspondence to appropriate work centers.
- 8.4.10.13. **(Added)** 434 LRS/LGRVO / BOS Contractor, Vehicle Operations will:
 - 8.4.10.13.1. **(Added)** Provide the PMEL delivery vehicle and a qualified driver.
 - 8.4.10.13.2. **(Added)** Establish the PMEL driver continuity folder that is issued with the PMEL delivery vehicle each week. The continuity folder contains as a minimum: maps of Indiana and Ohio, a map of WPAFB, OH, safety checklist, procedures for vehicle breakdowns, accidents, hijacking and theft, and procedures for safeguarding of classified equipment.
 - 8.4.10.13.3. **(Added)** Ensure approval is received from the Accountable Officer (AO) and the Administrative Contracting Officer (ACO) for the annual scheduled PMEL runs prior to departure of the first PMEL run of the fiscal year, and any changes to that schedule thereafter.
- 8.4.10.14. **(Added)** As many items as possible will be calibrated on-site, they will include items of TMDE identified as being too large or too fragile to move. Coordinate on-site calibration through the wing PMEL monitor. WPAFB will determine all items that can be on-site calibrated or are non-mobile and require Local Calibration.
 - 8.4.10.14.1. **(Added)** WPAFB local calibration technicians will use the designated facility located in Bldg. 591 room 8 to perform local calibration on scheduled cycles. A WPAFB technician and the Wing's PMEL coordinator will perform an inspection

together of the work area prior to start of any calibration to ensure area is clean and orderly. After the work has been completed, the area will be inspected again by both parties to ensure work area is left in the same original condition.

8.4.10.14.2. **(Added)** 434 ARW PMEL's coordinator will be responsible for locking up the area. Appropriate power supplies and equipment will be provided by the 434 ARW PMEL section and all additional requests will be made in a timely manner and coordinated through the Wing PMEL coordinator and the facility manager for Bldg. 591.

8.4.10.15. **(Added)** All correspondence between WPAFB PMEL and organizations within the 434 ARW at Grissom ARB is processed through the 434 ARW PMEL section. The PMEL section ensures that all correspondence is routed to the appropriate agencies.

8.4.10.16. **(Added)** TMDE coordinators must receive training before assuming their duties and on an annual basis. Training sessions are conducted by the 434 ARW PMEL monitors or squadron representatives. Contact the wing PMEL monitor or squadron representative for an appointment.

8.4.10.16.1. **(Added)** Document training on an AF Form 2426, *Training Request and Completion* notification. This form serves as the certificate of attendance and is placed in the work center TMDE folder.

8.4.10.16.2. **(Added)** Work center supervisors ensure PMEL training is input into FMXC2, if applicable.

8.5. Tool Accountability and Serviceability. Flight CC/SUPT and Section NCOICs/Chiefs, through CTK Custodians, are responsible for tool and equipment accountability and control (knowing where tools are and who has responsibility for them). When a person signs for a tool or piece of equipment, they are considered the user and accountable for the item until it is returned to the tool room and accountability transfers back to the CTK Custodian (through a representative or tool room employee).

8.5.1. All units must use TCMax® for accountability and control of tools and equipment. **(T-3)** Contractors and MEOs are not required to use TCMax® unless specified in the Performance Work Statement/Statement of Work. **Note:** Refer to [Paragraph 8.1](#) for exceptions.

8.5.1.3. If TCMax® is not available (such as at a deployed location), units will use the DAF Form 1297, *Temporary Issue Receipt*, a MAJCOM, or locally approved form for accountability and control of CTKs, equipment, and tools. **(T-3)**

8.5.1.3. **(AFRC)** TCMax® generated form or AFRC Form 177, *Consolidated Tool Kit Inventory and Control Log*, will be used for accountability and control when TCMax® is inoperative. **(T-2)**

8.5.1.3. **(434 ARW)** In the event of TC-Max downtime, use the AF 3131, *General Purpose* or AFRC Form 177 along with AFRC Form 175 to document and control dispatch of CTKs and/or equipment.

8.6. Tool and Equipment Marking and Identification.

8.6.1. To ensure tool rooms have unique identifiers, wings (or equivalent) must ensure other units within the same wing or Personnel Assignment Symbol (PAS) code do not duplicate the WWID. **(T-2)** MAJCOMs/ANG will develop, sustain, and review annually a complete listing of all the WWID utilized within their MAJCOM/ANG. MAJCOMs will update AF/A4LM with WWID changes as they occur. Reference the AF/A4LM SharePoint® site: https://usaf.dps.mil/sites/haf-a4/A4L/AF_A4LM/Policy/SitePages/Home.aspx

8.6.1.2. The EID will consist of nine characters (numbers/letters) of which the first four characters will be a unique WWID code. **(T-3)**

8.6.1.2. **(434 ARW)** The numbering system listed in **Table 8.1** was devised for 434th Maintenance Group personnel to prevent duplication of CTK numbers presently in use at Grissom (Air Reserve Base) ARB, Indiana. All sections/shops will use U2 as the first two characters of the 9-digit Equipment Identification. Each section/shop will use the codes listed for their shop for the third and fourth characters. The remaining 5 characters are left to the discretion of the work center supervisor.

8.7. Locally Manufactured, Developed, or Modified Tools and Equipment. All locally manufactured, developed, or modified tools and equipment used on aerospace equipment must be approved by the MXG/CC, their equivalent, or a designated representative and meet the requirements described in **Chapter 9**.

8.7. (AFRC) Locally Manufactured, Developed, or Modified Tools and Equipment. The using work center will ensure inspection and periodic maintenance criteria are established for all locally manufactured or modified tools and equipment IAW (as required) MDS TOs, TO 34-1-3, Machinery and Shop Equipment, or 32-series TOs. **(T-2)** Ensure all local manufactured items are tracked in TCMax® or the MIS. **(T-2)** Develop local technical data for equipment operating procedures (if applicable). **(T-2)**

8.7.1. This procedure does not apply to tools and equipment authorized for local manufacture in MDS specific technical data or equivalent engineering approved document. QA will coordinate on all requests for approval and use of locally manufactured, developed, or modified tools or equipment. **(T-3)**

8.7.1. **(434 ARW)** Follow procedures in local guidance to locally manufacture, develop or modify tools and equipment.

8.10. (Added) Special Tool Cabinet/CTK Due to the unique nature of their specialties the Powered Support (MG), Structural Repair (MS), and Metals Technology (MT) sections are authorized to utilize a Special Tool Cabinet /CTK.

8.10.1. **(Added)** Each item contained in the Special Tool Cabinet/CTK will be marked with a unique TC-Max ID and loaded in TC-Max as an equipment item and the cabinet will be loaded in TC-Max as a CTK with all items being listed on the MIL. The cabinet may be utilized as a non-dispatchable CTK for normal day to day operations. The cabinet must contain all documentation and follow all procedures for CTK's contained within this instruction and all others that apply.

8.10.2. **(Added)** On the occasion that a special tool is needed outside of the shop area, the tool will be issued from TC-Max as a piece of equipment. The Issue/Return is also documented on a separate AFRC Form 177.

8.10.3. **(Added)** Broken or removed tools will be documented as required for CTK's and will also be documented in TC-Max under the unique TC-Max ID number.

8.10.4. **(Added)** The cabinet may be closed as a CTK provided all removed tools are documented. If the cabinet is closed as a CTK when the removed item is returned the cabinet must be reopened as a CTK and an inventory must be accomplished IAW **paragraph 2.1.** of the parent instruction. Items not expected to be returned by the end of the current work shift will be documented as long term issue in TC-Max under the unique TC-Max ID and on the AFRC 177, under the CTK they will be documented as removed in TC-Max and on all copies of the MIL.

8.10.5. **(Added)** All tools contained within these cabinets must be reasonably considered to be "special". Any tool that is common or is used for multiple tasks must be controlled by standard tool control procedures.

Chapter 11

ADDITIONAL MAINTENANCE REQUIREMENTS AND PROGRAMS

11.2. Personal Wireless Communications Systems Management.

11.2.4. **(Added)** MXG/CC will appoint Personal Wireless Communications Systems (PWCS) Managers from assigned Maintenance Operations Center (MOC) personnel.

11.2.4.1. **(Added)** The MOC has the overall responsibility to ensure adequate communications are available and manage the non-tactical radio program.

11.2.4.1.1. **(Added)** PWCS Managers will supply land mobile radios (LMR)'s to individuals within the MXG by issuing them on an DAF Form 1297 also known as a Hand Receipt.

11.2.4.1.1.1. **(Added)** Work centers having TC-Max capability will control and charge out LMR's through TC-Max. This is the preferred method for issuing LMR's.

11.2.4.1.1.2. **(Added)** All LMR's will be signed out from the PWCS Manager using DAF Form 1297. These forms will be reviewed and updated annually.

11.2.4.1.2. **(Added)** PWCS Managers will perform an annual inventory of assigned LMR's, base stations and desk consoles and report results of inventory and any discrepancies to the 434th Communication Squadron (CS).

11.2.4.1.2.1. **(Added)** Any LMR's that are misplaced/lost will be reported as a Lost Tool/Object in accordance with this instruction. In all cases, LMR's misplaced/lost will be reported to the 434 MXG PWCS Manager and 434 CS.

11.2.4.1.2.2. **(Added)** The PWCS Manager will request a Report of Survey be conducted for any radio not recovered.

11.2.4.2. **(Added)** The MOC will broadcast all emergencies and severe weather notifications over the in-use maintenance frequency these announcements will be preceded with an alert tone. All radios in use on the flight line will acknowledge emergency messages.

11.2.4.3. **(Added)** All PWCS users will follow requirements outlined in AFI 10-701, *Operations Security (OPSEC)* ensuring all Personal Electronic Devices (PEDs) or LMR's have a DD Form 2056, *Telephone Monitoring Notification Decal* attached to it.

11.2.4.4. **(Added)** Users will exercise radio discipline at all times and only activate emergency button for real-world emergencies.

11.2.4.5. **(Added)** Any LMR or desk consoles that becomes inoperable will be turned in to PWCS Manager for coordination with 434 CS
for repair/replacement.

11.2.4.6. **(Added)** MOC personnel will only engage in conversation with aircraft using the Ultra High Frequency (UHF) radio when requested by either the aircrew via the

Command Post or by Command Post personnel. Monitoring of UHF radio by MOC personnel is authorized at all times.

11.2.4.7. **(Added)** Upon activation of the distress/duress alarm, MOC will determine if the radio belongs to MXG. If it does, MOC will attempt to make contact with the user.

11.2.4.7.1. **(Added)** MOC will attempt to contact a total of three times at 20 second intervals. If no response from the user is received after the third transmission, MOC will contact the user's work center/supervisor for possible location. **This will be done via land line or runner, not over the radio net.**

11.2.4.7.2. **(Added)** If the supervisor/work center does not know the individual's location, MOC will notify security forces.

11.2.4.7.3. **(Added)** Once the individual is located and determined to be safe and secure, the emergency will be terminated.

11.6. Red Ball Maintenance. The term "Red Ball" is a traditional descriptor, recognized throughout aircraft maintenance, and defines a situation requiring a sense of urgency and priority actions. Red Ball maintenance normally occurs two hours prior to launch and until aircrew have released the aircraft back to maintenance. The Red Ball maintenance concept is intended to prevent late takeoffs and aborts by having qualified maintenance personnel available (such as, in a truck or standby in the shop) during launch and recovery operations to troubleshoot, isolate, and repair system malfunctions. Red Ball maintenance does not authorize technicians to take shortcuts or deviate from TOs, disregard personnel safety requirements or fail to properly document the aircraft forms and the MIS for all completed repair actions.

11.6.6. **(Added)** AMXS Specialist Flight Chiefs will ensure qualified personnel are available from each specialist shop for Red Ball Maintenance dispatch.

11.6.7. **(Added)** A Crew Chief will maintain interphone communications, remain in full view of a flight crew member and be positioned to maintain overall surveillance of the aircraft and personnel entering or exiting the aircraft.

11.6.8. **(Added)** If aircraft status changes, an exceptional release will be re-accomplished prior to flight. This includes opening and closing of access panels and doors.

11.6.9. **(Added)** Maintenance Operations Center (MOC) will enter Red Ball discrepancies into the Maintenance Information System (MIS) when they are called in by the Expeditor/Pro-Super once the discrepancy is corrected, the Pro Super/Expediter will verify that aircraft Air Force Technical Form (AFTO) Form 781, *Arms Aircrew/Mission Flight Data Document* are properly documented and cleared prior to takeoff. Every effort will be made to clear MIS documentation as soon as possible by technicians that completed the Red Ball discrepancy. However, if technician cannot before aircraft taxi, MOC will assist to clear the MIS.

11.8. Foreign Object Damage (FOD) Prevention Program. All personnel (military, civilian, and contractors) working in, on, around, or traveling through areas near aircraft, flightline munitions, AGE, engines, or components thereof will comply with FOD prevention. **(T-2)** FOD prevention training requirements are outlined in AFI 36-2650. This section establishes minimum requirements for a FOD Prevention Program.

11.8.3. FOD Prevention.

11.8.3.6. Each base will develop a local flightline clothing policy that addresses wearing of hats, badges, and passes aimed at FOD prevention while considering climate and safety. (T-2) As a minimum, it will include the following requirements:

11.8.3.6.6. **(Added)** Flight line clothing program:

11.8.3.6.6.1. **(Added)** Any loose clothing or hats will be removed or secured prior to entering the danger area of an operating jet engine as defined by the applicable aircraft T.O. (The KC-135R is within 25 feet of the aircraft engine inlet, and 180 feet of aircraft exhaust at engine idle and 50 feet of the engine inlet and 900 feet from engine exhaust at Takeoff Rate Thrust (TRT) ground operations.)

11.8.3.6.6.2. **(Added)** See Grissom Air Reserve Base Instruction (GARBI) 13-201, *Grissom ARB Airfield Operations*, for additional information.

11.8.3.6.6.3. **(Added)** The Maintenance Duty Uniform (MDU) is authorized to be worn by maintenance personnel during duty hours.

11.8.3.11. When FOD is discovered on a transient aircraft, depot input/output or CRF engine, the host FOD monitor, or aircrew must notify the owning organization within 24 hours. **(T-2)**

11.8.3.11.2. For depot input/output or CRF engine. If the FOD is found during the receiving inspection at one of the aforementioned locations, it will be tracked/charged (if necessary) to the owning MAJCOM unit. **(T-2)** If discovered any other time at one of the aforementioned locations, it will be tracked/charged to the ALC or CRF. **(T-2)**

11.8.3.11.2.1. **(Added)** Each unit is responsible for specific FOD prevention walk areas. These include areas immediately surrounding their buildings, grass areas, taxiways, and Entry Control Points (ECP) that are adjacent to their areas of responsibility. Aircraft Maintenance Squadron and Maintenance Squadron shall be responsible for the Mass Parking Area, 592 and 600 ramps and the Nose dock hangar areas (all paved areas to include policing grassy areas for trash). AGE and MXS Propulsion Shop shall be responsible for Building 591, 593 and the AGE parking areas (front and rear).

11.8.3.11.2.1.1. **(Added)** Squadron Commanders will ensure a FOD prevention walk is completed in their areas of responsibility before 1300 Sunday of each Primary unit training assembly (UTA). **(T-3)**

11.8.3.11.2.1.2. **(Added)** If for some reason FOD walks are not completed as required, the Quality Assurance (QA) office will be notified.

11.8.3.11.2.1.3. **(Added)** Maintenance Group (MXG) Flight Chiefs, Section Chiefs, Production Supervisors and Expeditors will take the lead and direct the FOD prevention walk.

11.8.3.11.2.1.4. **(Added)** All available personnel will participate in the FOD prevention walk.

11.8.3.11.2.1.5. **(Added)** Base Operation's personnel inspect the taxiways and runways daily for foreign objects.

11.8.3.11.2.2. **(Added)** Real Property Maintenance (RPM) is responsible for sweeping aircraft parking and movement areas a minimum of once a week. If additional sweeping is needed a request should be made through Base Operations.

11.8.3.13. Use extreme care during engine ground runs. Jet blast and helicopter hover power check areas need to be free of debris that could cause FOD.

11.8.3.13.1. **(Added)** Ensure elimination of foreign objects in aircraft cockpits and flight decks prior to flight. See LCL-434ARW-10-1, *Interior Equipment Accountability Checklist for 434th KC-135(R) Aircraft*.

11.8.3.13.2. **(Added)** While completing the required aircraft panel and FOD inspections prior to flight, additional attention will be given to the aircraft flight deck area for cleanliness to remove any loose debris.

11.8.3.16. Grounding wires/points:

11.8.3.16.3. **(Added)** Vehicle operators will stop and perform FOD checks at all flight line entry points, including Building 600.

11.8.3.19. Remove metal identification bands from all tubing (except aircraft installed egress system components) and cables on the aircraft.

11.8.3.19.4. **(Added)** FOD removal tool, if used, will be marked/etched with the vehicle identification number and attached to the vehicle key ring.

11.8.5. FOD Monitor. The Wing FOD Monitor's office will be located within QA or at the discretion of the WG/CD. (T-3) The Wing FOD Monitor, at a minimum, will:

11.8.5.2. Weekly FOD spot checks will be accomplished as part of the QA inspection process and will be documented IAW Chapter 6 of this instruction.

11.8.9. **(Added)** Incentive Program:

11.8.9.1. **(Added)** Wing FOD prevention incentives and awards program is used to promote a vigorous FOD prevention program through recognition of exceptional individual achievement. Encourage competitive programs in FOD prevention between squadrons, flights, sections and shops.

11.8.9.1.1. **(Added)** Nominations for Grissom FOD Fighter Award are submitted by the section supervisor to the FOD Prevention Monitor and should be based on individuals going above and beyond picking up FOD, in FOD Prevention (i.e. finding out what caused the FOD or thinking of innovative ways to prevent and control FOD).

11.8.9.1.2. **(Added)** Recognize an individual or his/her duty section as a "FOD Fighter" when he/she demonstrates innovative and effective application of the FOD prevention program. These individuals will be recognized by the MXG/CC.

11.8.9.2. **(Added)** Wing Golden Bolt Award. A distinctive 1½" plastic bolt (painted gold) is placed on the flight line or in a maintenance area. The person finding the bolt returns it to the wing FOD prevention monitor and will receive the designated award.

11.8.9.3. **(Added)** See LCL-434ARW-10-1, *Interior Equipment Accountability Checklist for 434th KC-135(R) Aircraft* for additional Dropped Object Prevention (DOP) Inspection requirements.

11.10. Aircraft Structural Integrity Program (ASIP). The ASIP includes requirements for collection and evaluation of aircraft usage data to update or confirm the original design or baseline spectrum and to adjust maintenance intervals on an individual aircraft basis. The Loads/Environment Spectra Survey data is collected via flight data recorders of instrumented aircraft to evaluate the loads spectrum. The Individual Aircraft Tracking data is collected via flight data recorders or manual forms such as “bubble sheets” and the data is used to make maintenance/inspection/force structure decisions. Both the Loads/Environment Spectra Survey and Individual Aircraft Tracking usage data programs are established by applicable MDS-specific TOs and DAFI 63-140 and require coordinated action by a number of base-level maintenance activities to achieve the required data capture rates. An effective ASIP aircraft usage data collection program is essential to establish, assess and support inspections, maintenance activities, repairs and required modification/replacement actions. MAJCOMs will:

11.10.5. **(Added)** The MXG/CC will appoint a primary and alternate ASIP/IATP Program Manager from within the Maintenance Group (MXG). The ASIP/IATP Program Manager will also serve as the ASIP/IATP monitors.

11.10.6. **(Added)** The Flight Data Recorder and Cockpit Voice Recorder (FDR/CVR) records and stores individual aircraft usage data.

11.10.6.1. **(Added)** Data is downloaded and transferred using Personal Computer Memory Card International Association (PCMCIA). PCMCIA cards will be controlled using TC-Max. Technicians will ensure maintenance cyber discipline is followed at all times.

11.10.6.2. **(Added)** Units will comply with the same procedures in this instruction while deployed.

11.10.6.3. **(Added)** Individual users of Aircraft Data Acquisition and Distribution System (ADADS) will receive cascade training from individuals qualified to make inputs into the system. Training will consist of On the Job Training (OJT) and will be documented on an AF form 797, *Job Qualification Standard Continuation* or other appropriate means.

11.10.6.4. **(Added)** AMXS personnel shall be responsible to maintain, repair and will download FDR/CVR data after each flight and as otherwise required in TO 1C-135-6WC-1, *Preflight /Postflight/Hourly Post-Flight Inspection Workcards*. They will also transfer the data into the ADADS.

11.10.6.5. **(Added)** The Engine manager shall be responsible to ensure each flight has been loaded and that the data is valid for transfer to the Comprehensive Engine Trending and Diagnostic System.

11.13. Cannibalization Program.

11.13.9. **(Added)** MOC will maintain and document all cannibalizations (CANN) on a locally developed form.

11.13.10. **(Added)** MOC will enter the original CANN action in FMXC2 using the maintainer's employee number for the discovered by. Controller will "X" the 349 block of Program 9050 to ensure LRS/LGRMM receives notification of CANN. Maintainer's employee number will also be entered in the aircraft AFTO Form 781A by the performing work center. Work center performing the CANN will promptly document aircraft AFTO 781A, FMXC2 and orally advise MOC when any cannibalization action is complete.

11.13.11. **(Added)** When Maintenance Group (MXG) Staff and supply support is unavailable (during nightshift and Non-UTA weekends) the work center will run an inquiry if Standard Base Supply System (SBSS) is operational. If the part shows it's available on base and time allows, supply support will be recalled by the Cannibalization Authority (CA) notifying the Command Post to contact the Supply Authorizing Official (AO). **Exception:** When time does not allow (launching a sortie/mission), the part is not available or SBSS is down the CA will evaluate the situation using all means available and make the determination for the CANN action. The CA will leave detailed information of the CANN action for the completion of supply actions and documentation by work centers, MOC and LRS/LGRMM. A supply record will be established in FMXC2 by the performing work center using "G" in Program 9006. This creates a "9000" series document number that will be used to help expedite the CANN process. LRS/LGRMM will review Program 8044 and resubmit all "9000" series document numbers at the beginning of their next duty day. Completion of the CANN process will be accomplished the next duty day that allows access to the aircraft and supply records.

11.13.12. **(Added)** The following actions must be completed no later than next duty day:

11.13.12.1. **(Added)** MOC opens original job necessitating the CANN action and documents the CANN log.

11.13.12.2. **(Added)** Work center requisitions part against the original aircraft and notifies MOC of document number

11.13.12.3. **(Added)** MOC establishes CANN action moving document number to CANN aircraft (in coordination with LRS/LGRMM). If the part was a straight issue LRS/LGRMM will need to manually move the document number to ensure the proper tracking of CANN'd parts.

11.13.12.4. **(Added)** Work center closes original discrepancy, and documents the removal action on the aircraft the part was canned from.

11.13.12.5. **(Added)** Work center completes the installation action when part issues (or after documentation for the straight issue is completed). Work center notifies Production Supervisor when all ops checks are completed.

11.13.13. **(Added)** Decentralized Materiel Support will notify Pro-super and MOC when cannibalized parts issue to ensure accurate aircraft status reporting.

11.13.14. **(Added)** MOC will provide Analysis (MXOA) with a copy of completed CANN Log as needed to facilitate validation of CANN documentation.

11.13.15. **(Added)** Cannibalization of engine components will be directed by the CA and will be coordinated between the Maintenance Squadron (MXS) Pro-Super and Unit Engine Manager. Maintenance Operations Center (MOC) will issue a Job Control Number (JCN)

and input into FMXC2, LRS/LGRMM will transfer the original Supply Document Number to the Cannibalization JCN. MXS Pro-Super/Expeditor will ensure all documentation is complete IAW T.O. IAW 00-20-1 *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*.

11.13.16. **(Added)** For deployed operations, an engine functional expert will be designated prior to deployment to compile data to determine where engine assets will be derived from during the employment phase. This data will include in theater engine points of contact, phone numbers and any associated information that would expedite the coordination and acquisition of an engine or engine parts while deployed.

11.13.17. **(Added)** Aircraft Ground Equipment (AGE) Cannibalization Procedures: The AGE Flight Chief and MXS Superintendent will designate CA on Special Certification Roster (SCR) for all AGE cannibalization actions. AGE personnel will ensure documentation for all AGE CANN actions, IAW 00-20 series Technical Order.

11.28. Crashed, Damaged or Disabled Aircraft Recovery (CDDAR) Program.

11.28.3. **(Added)** The CDDAR program is designed to recover crashed, damaged or disabled aircraft in minimum time. Requirements will consist of opening runways for operational use, prevention of secondary damage to the aircraft, and preservation of evidence for mishap or accident investigation.

11.28.3.1. **(Added)** There are three types of recoveries:

11.28.3.1.1. **(Added)** Aircraft that have maintenance malfunctions that require minimum recovery (i.e. flat tires/hung brakes etc.). These situations will not be considered an emergency or high risk and will normally be supported by a maintenance team from the AMXS.

11.28.3.1.2. **(Added)** On base aircraft incident or accident with damage to aircraft and or a personal injury.

11.28.3.1.3. **(Added)** Off base aircraft incident or accident involving either assigned aircraft or transient aircraft that have entered the area of responsibility, outlined in Comprehensive Emergency Management Plan (CEMP) 10-2. **Note:** Crash scenarios in **paragraph's 11.28.3.1.2 and 11.28.3.1.3** will require the assistance of the CDDAR Team Chief or alternate to evaluate the crash site and aircraft configuration.

11.28.3.2. **(Added)** The CDDAR Team will be dispatched to aircraft location when notified and authorized by the On Scene Commander (OSC) or equal. Base agencies (i.e. Fire Department, Bioenvironmental) will assist the OSC to analyze risk factors prior to dispatching recovery personnel.

11.28.3.3. **(Added)** Base support squadrons (base operations services contractor) will assist the CDDAR team with additional equipment, personnel and supplies as required.

11.28.3.4. **(Added)** Responsibilities and Procedures. Maintenance Group personnel appointed as CDDAR Team members are responsible for adhering to the following aircraft recovery procedures.

11.28.3.4.1. **(Added)** The Maintenance Group Commander (MXG/CC) will:

- 11.28.3.4.1.1. **(Added)** Appoint by letter, CDDAR Team Chief and Team members.
- 11.28.3.4.1.2. **(Added)** Notify the Maintenance Operation Center (MOC) to coordinate with all aircraft maintenance activities in the removal or recovery as required.
- 11.28.3.4.1.3. **(Added)** Ensure the recall of Aircraft Recovery Team Members is accomplished.
- 11.28.3.4.2. **(Added)** AMXS and MXS Superintendents and Flight Chiefs will: Ensure that squadron CDDAR personnel are familiar with the procedures contained in this instruction.
- 11.28.3.4.3. **(Added)** MXS Maintenance Section Flight Chief will:
 - 11.28.3.4.3.1. **(Added)** Validate and procure required crash recovery equipment
 - 11.28.3.4.3.2. **(Added)** Ensure required inspections are completed.
 - 11.28.3.4.3.3. **(Added)** Develop procedures for the unit crash recovery program.
 - 11.28.3.4.3.4. **(Added)** Ensures required personnel are available to operate specialized equipment.
- 11.28.3.4.4. **(Added)** MXS Aero Repair (A/R) Shop will:
 - 11.28.3.4.4.1. **(Added)** Maintains aircraft recovery equipment and dispatches equipment and personnel upon notification from higher authority. (Inventory of Aircraft Recovery Equipment and CDDAR POC Listing will be maintained by A/R shop.)
 - 11.28.3.4.4.2. **(Added)** Inspect for serviceability and inventory all recovery equipment to include airbags, manifolds, jacks, slings, and shoring etc., before and after each exercise. Periodic equipment inspections must be accomplished IAW intervals established in T.O.'s or annually if no T.O. intervals have been identified. Perform operational checks IAW applicable directives during exercise and/or inventory reviews. Document inspections and Maintenance in MIS, on AFTO form 244, *Industrial/Support Equipment Record* or on MAJCOM approved form.
 - 11.28.3.4.4.3. **(Added)** Provide training required to keep all Aircraft Recovery Team personnel current in all necessary procedures. Training exercises will be conducted annually and must consist of requirements listed in DAFI 21-101 and will be coordinated with the Emergency Management Office. Aero Repair Shop personnel will certify training. Annual requirements will be recorded in FMXC2. It is the responsibility of the Aircraft Recovery Team Chief to maintain the currency of Emergency Recall Personnel Roster.
 - 11.28.3.4.4.4. **(Added)** Provide the MXG Commander with a report after annual inspection, exercise, or real world event on the condition of the CDDAR equipment and training status of CDDAR team members.

- 11.28.3.4.5. **(Added)** AMXS Pro-Super will: Provide a tow team to stand by for all In-Flight Emergency (IFE) aircraft. For transient aircraft the AMXS tow team will be replaced by Transient Alert personnel (see **para 2.8**). The tow team will remain in place until the IFE is terminated or the aircraft is parked back on the apron.
- 11.28.3.4.6. **(Added)** MXS Pro-Super will: Provide Augmentees when requested. Special teams may be required when hazards exist which require personal protective equipment (PPE) i.e. Full Face Respirators that exceeds normal recovery procedures. Qualified personnel will be assembled from Fabrication and Systems Flight.
- 11.28.3.4.7. **(Added)** Maintenance Operations Center (MOC) will:
- 11.28.3.4.7.1. **(Added)** Focal point for notification, control, and documentation of actions taken during CDDAR operations. All actions will be documented in the AFRC Form 124, *Events Log*, for historical data purposes.
 - 11.28.3.4.7.2. **(Added)** MOC will notify the CDDAR Team per the MXG Appointment Letter in the event of an on/off base incident. The assembly point will be Aero Repair Shop, Dock 3 room 102.
- 11.28.3.4.8. **(Added)** Transient Maintenance (Contractor) will be responsible to follow the Emergency Services Response criteria outlined in the AF-Level Standardized Performance Work Statement (PWS) for Transient Alert (TA) Services here at Grissom Air Reserve Base (GARB).
- 11.28.3.5. **(Added)** Notification:
- 11.28.3.5.1. **(Added)** During normal duty hours individuals will receive notification from MOC or the team chief. After duty hours the Command Post will notify the CDDAR Team Chief.
 - 11.28.3.5.2. **(Added)** Personnel receiving the first call of an emergency (i.e. Command Post, or MOC) must make every attempt to gather the following information:
 - 11.28.3.5.2.1. **(Added)** Type and serial number of aircraft and/or identification of equipment.
 - 11.28.3.5.2.2. **(Added)** Location of occurrence.
 - 11.28.3.5.2.3. **(Added)** Date and time of occurrence.
 - 11.28.3.5.2.4. **(Added)** Description of occurrence (i.e., damage, extent of injuries, etc.).
 - 11.28.3.5.2.5. **(Added)** Personnel involved.
 - 11.28.3.5.2.6. **(Added)** Name and grade of person relaying message and/or source of information.
- 11.28.3.6. **(Added)** Recovery Team Specific Duties and Instructions:
- 11.28.3.6.1. **(Added)** The Recovery Team will assemble at the Aero Repair Shop in Dock 3, room 102. Instructions will be given by the Team Chief or designated briefer.

11.28.3.6.2. **(Added)** On-base recovery: the CDDAR Team Chief or equivalent will proceed to the incident with the on scene commander or the Fire Chief for additional CDDAR evaluation after release authority occurs. (see **Note** for release authority conditions) The Team Chief, with the assistance of Quality Assurance (QA) personnel, will further evaluate and assess the site. Team members will be dispatched as needed, tools and equipment will be assembled for the recovery plan.

11.28.3.6.2.1. **(Added)** Off-base incidents will require additional coordination, base support functions will have assembled to apply risk analysis, identify personnel/equipment needed and acquire recovery authority.

11.28.3.6.2.2. **(Added)** Specific systems that require specialist expertise will need to be dispatched from aircraft assigned unit.

11.28.3.6.2.3. **(Added)** Civil aircraft recovery (i.e. Montgomery Aviation) will be in accordance with Grissom Joint Use Agreement between Miami County Economic Development Authority and the United States Air Force dated 6 September 2005. **Note:** Release authority will occur when the following has been complied with.

11.28.3.6.2.3.1. **(Added)** The incident/accident requires only basic assistance from ground maintenance crews.

11.28.3.6.2.3.2. **(Added)** When the site requires evaluations for hazards the Fire Dept. will be the first release.

11.28.3.6.2.3.3. **(Added)** Bio Environmental Engineer will approve PPE requirements for recoveries when personal hazards have been identified.

11.28.3.6.2.3.4. **(Added)** When properly investigated and released by incident/accident investigation authority. (Base Safety, Base Security and Air Field Operations Manager)

11.28.3.6.2.3.5. **(Added)** When off base first response agencies have released site to Air Force authority. (Local and State Police, Fire/ Rescue and Environmental)

11.28.3.6.3. **(Added)** Only those personnel authorized by the OSC or Team Chief will have access to the recovery site once release authority has been given.

11.28.3.6.4. **(Added)** The team chief or QA representative will locate and impound the aircraft AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*, file for further investigation for aircraft owned by host base.

11.28.3.6.4.1. **(Added)** Ensure aircraft munitions (if loaded) are safe or removed.

11.28.3.6.4.2. **(Added)** Retrieve Classified/Communications Security (COMSEC) material and components (as required).

11.28.3.6.5. **(Added)** The QA representative will assist the team chief with weight and balance configuration when abnormal recovery methods occur.

11.28.3.6.6. **(Added)** Notify Quality Assurance, Plans and Scheduling/Documentation sections.

11.28.3.6.7. **(Added)** Determine what recovery actions are required.

11.28.3.7. **(Added)** Release of Information: All information regarding accidents and incidents involving disabled aircraft recovery operations are to be treated as sensitive information. All requests from the public will be directed to Public Affairs Office.

11.28.3.8. **(Added)** Each listed base agency will provide the minimum following equipment when required:

11.28.3.8.1. **(Added)** Aircraft Maintenance Squadron (AMXS):

11.28.3.8.1.1. **(Added)** One (1) flight line vehicle with driver.

11.28.3.8.1.2. **(Added)** Specified number of tractors (MB-2 UKE) with driver/s and tow bar/s as directed.

11.28.3.8.1.3. **(Added)** Qualified tow team/s to stand by for immediate dispatch as directed.

11.28.3.8.2. **(Added)** Transportation (434 LRS/LGRT):

11.28.3.8.2.1. **(Added)** One (1) All Terrain Forklift, Truck-ATFL with driver.

11.28.3.8.2.2. **(Added)** One (1) 40 foot flatbed trailer with tractor and driver.

11.28.3.8.3. **(Added)** Civil Engineer (434 MSG/CE)

11.28.3.8.3.1. **(Added)** One (1) Bulldozer, D6H and driver.

11.28.3.8.3.2. **(Added)** One (1) Mobile Crane, LRT-180A and driver.

11.28.3.8.4. **(Added)** Notify the Maintenance Operational Center (MOC) anytime the equipment listed above is out of commission for lengthy repairs exceeding 5 days.

11.28.3.8.5. **(Added)** All required materials and equipment are identified in this Supplement; any additional changes will be coordinated through the CDDAR OPR.

11.32. Aircraft and Equipment Decontamination.

11.32.4. **(Added)** All aircraft returning to Grissom ARB with biologically contaminated or suspected biologically contaminated crews or passengers will adhere to the following instructions: The aircrew will contact the command post with an aircraft brevity code of 4 no later than 30 minutes prior to landing and will provide command post and Maintenance Operations Control (MOC) with number of personnel on board as well as all known pilot reported discrepancies.

11.32.4.1. **(Added)** MXG/CC will appoint a Maintenance Decontamination Team for each shift consisting of the number of personnel deemed appropriate.

11.32.4.2. **(Added)** Command Post will notify either the Public Health Emergency Officer (PHEO) or Bio Engineering & Public Health Services (BE&PHS) in the event of biological contamination aboard the aircraft resulting from sick or injured personnel.

11.32.4.3. **(Added)** MOC will run the appropriate Quick Reference Checklist and ensure the Production Superintendent is notified to meet the aircraft at a remote parking location.

11.32.4.4. **(Added)** The Production Superintendent will ensure a decontamination team is assembled with all necessary tools and equipment to meet the aircraft.

11.32.4.5. **(Added)** The decontamination team will meet the aircraft and connect interphone communications. **WARNING: At no time will the crew entry chute door or cargo door open while the decontamination team is recovering the aircraft.** The team will ensure that all necessary chocks, locks, and safety pins are installed from the decontamination kit. The team will then place biohazard signs around the aircraft and will inform the crew the aircraft is safe for them to exit. The team will disconnect from interphone communications and exit the area prior to the crew leaving the aircraft.

11.32.4.6. **(Added)** Once maintenance has exited the area, the PHEO or Aerospace Medical Squadron (AMDS) representative(s) with BE&PHS, as needed based on review of the situation, will meet the crew and all passengers and have them transported to Aerospace Medicine (building 669) or a secure facility if required.

11.32.4.7. **(Added)** The PHEO or BE&PHS will make a determination with the MXG/CC as to the appropriate measures to take to decontaminate the aircraft. If it is determined that physical decontamination is required, the Maintenance Decontamination Team will strictly follow procedures outlined in the decontamination checklist. **WARNING: No personnel shall enter the area within the biohazard signs until directed to do so by the MXG/CC, or designated POC, and donning applicable PPE.**

11.32.4.8. **(Added)** Pro-Super and MOC will complete all necessary actions of debrief remotely and will ensure all pilot reported discrepancies are entered into the MIS. MOC will provide OSS a copy of the 781 as soon as the physical aircraft forms are deemed safe.

11.32.4.9. **(Added)** In the event that notification of contamination occurs after the aircraft has landed the PHEO or BE&PHS will make recommendations to the Group Commanders and Wing Commander on procedures to minimize the spread of disease and contain further contamination.

11.38. Oil Analysis Program (OAP).

11.38.1. Program. Oil Analysis is the process of analyzing oil and other fluids used to lubricate or operate mechanical equipment, evaluating the condition of the fluid or the equipment from which the fluid originated, and recommending maintenance actions to the equipment operating activity. An OAP ensures timely and accurate oil analysis support through the strategic location of oil analysis laboratories and the standardization of procedures, data elements, analytical instrumentation, and diagnostic techniques. The Joint Oil Analysis Program (JOAP) is a combined effort of the Army, Navy and AF to set-up and maintain a standard program. Oil analysis requires a centrally managed program and the integration of AF OAP and JOAP plans.

11.38.1. **(434 ARW)** In addition to the guidance in this instruction, all personnel will comply with guidance listed in AFI 21-131, *Oil Analysis Program*.

11.38.7. **(Added-AFRC)** Wing OAP Monitor Responsibilities.

11.38.7. **(434 ARW)** 122 FW/MXS/MXMFN (ANG) Ft Wayne, Indiana is designated as the Contingency Support Oil Analysis Program (OAP) Lab, DSN: 786-1248.

11.38.8. **(Added-AFRC)** AMXS Superintendent. AMXS Superintendent will:

11.38.8.1. **(Added-AFRC)** Ensure expedient delivery of samples to OAP laboratory. (T-2) Samples should be delivered to the OAP lab within 75 minutes after engine shutdown.

11.38.8.1. **(434 ARW)** The section taking the oil sample(s) is responsible for delivery of the sample(s) to the JOAP Laboratory and will not exceed 1 hour.

11.38.9. **(Added-AFRC)** Propulsion Flight Chief Responsibilities.

11.38.9.3. **(Added)** 434 MXS Propulsion Flight:

11.38.9.3.1. **(Added)** Notify the JOAP Laboratory promptly of all inspection results, maintenance and repair actions resulting from laboratory recommendations.

11.38.9.3.2. **(Added)** Report all information on engine changes to the JOAP Laboratory as soon as possible.

11.38.9.3.3. **(Added)** Ensure oil samples are taken in a most timely manner within (15 to 30 minutes) after engine shutdown and prior to adding any new oil to the tank; DD Form 2026, Oil Analysis Request, is initiated ensuring accuracy of entries and promptly submitted to JOAP Laboratory for processing and analysis.

11.38.9.4. **(Added)** Document all engine removals that are a result of an oil analysis recommendation "SOAP HIT" to reflect "U" when discovered code and HOW MAL Code 916.

11.38.10. **(Added-AFRC)** MOC Responsibilities.

11.38.10.1. **(Added-AFRC)** Maintain OAP status on unit assigned aircraft/engines. (T-2)

11.38.10.1.2. **(Added)** Immediately upon notification by Joint Oil Analysis Program (JOAP) Lab of aircraft grounding or special sample requirements, annotate aircraft status board and ensure prompt notification of the Quality Assurance (QA) and Production Supervisor (Pro Super).

11.38.10.2. **(Added-AFRC)** Inform the Expediter of the oil sample status when the results are known. (T-3)

11.38.10.2.1. **(Added)** Ensure aircraft identified as requiring special sampling "RED CAP" are not released for flight until results of the latest sample have been received.

11.38.10.2.2. **(Added)** Sampling frequency will remain the same regardless of the availability of oil analysis equipment or personnel.

11.38.11. **(Added-AFRC)** NDI/OAP Section NCOIC Responsibilities. NDI/OAP Section NCOIC will:

11.38.11.11. **(Added)** Ensure personnel designated as Spectrometric Oil Analysis Program (SOAP) laboratory specialists and technicians are fully qualified and certified annually to perform oil analysis operation and evaluations.

11.38.11.12. **(Added)** Establish and maintain oil analysis data records as required.

11.38.11.13. **(Added)** Process all samples in a timely manner giving priority to "RED CAP" and special samples.

11.38.11.14. **(Added)** Notify MOC and Propulsion Flight of results of all “RED CAP” and special samples.

11.38.11.15. **(Added)** Participate in the monthly Technical Support Center (TSC) Correlation Program as prescribed in TO 33-1-37-1/-2, *Joint Oil Analysis Program Laboratory Manual Volume I&II*.

11.38.11.16. **(Added)** Prior to analyzing samples, all daily standardization checks on the spectrometer will be completed in accordance with applicable tech data.

11.38.11.17. **(Added)** Laboratory control numbers will be assigned to each sample delivered. Place this number on the DD Form 2026 and sample bottle.

11.38.11.18. **(Added)** Notify MOC, Transient Alert and Propulsion Section when Spectrometer is not operational.

11.38.12. **(Added)** Aircraft Maintenance Squadron Production Superintendent will:

11.38.12.1. **(Added)** Ensure only fully trained personnel accomplish the collection of used engine oil and other fluids for analysis in accordance with applicable directives.

11.38.12.2. **(Added)** Ensure oil samples are taken within 15 to 30 minutes of engine shutdown and prior to adding any new oil to the tank. DD Form 2026, *Oil Analysis Request*, is initiated ensuring accuracy of entries; submitted with a sample to JOAP Laboratory for processing and analysis within 1 hour of sample receipt.

11.47. (Added) Aircraft De-icing Procedures.

11.47.1. **(Added)** The AMXS Support section maintains/provides de-icing equipment, including but not limited to de-ice trucks, communication equipment and personal protection equipment.

11.47.2. **(Added)** The Pro-super will determine priorities and coordinate with the Support Equipment Section the availability and preparation of de-ice trucks based on the alert aircraft and daily flying schedule.

11.47.3. **(Added)** Alert/Generating Aircraft will be cleared of snow accumulation at the first opportunity, including weekends and holidays. Snow accumulation removal will be accomplished as necessary using manual methods prior to administering De-icing/De-frosting process. De-icing of alert/ generating aircraft will be at the discretion of the Aircraft Commander.

11.47.4. **(Added)** Pro-Super/Expediter/Crew Chief will ensure flap wells, wheel wells and aileron/elevator balance bays are inspected for snow/ice accumulation prior to launch, consistent with de-icing procedures, following any unfavorable weather event (blowing/drifted snow, freezing rain, re-freezing melted snow, etc.).

11.47.5. **(Added)** With the exception of de-icing aircraft for the removal of frost (procedures outlined below) all de-icing with fluids, including transient, will be on De-ice spots 1 and 2 located on 600 ramp, Charlie 2, Charlie 3, Delta 2 and Delta 3 on MPA or alternate de-ice on taxiway G.

11.47.6. **(Added)** Any deviations from the approved locations and not listed in this instruction require coordination through the Base Civil Engineering Chief of Environmental

Management and approved by the MXG/CC. The MXG/CC will ensure the Wing Commander is briefed.

11.47.7. **(Added)** De-icing aircraft for the removal of frost only is allowed on the mass parking area (MPA) by approval and coordination of the Pro-Super.

11.47.8. **(Added)** Frost removal will be accomplished by utilizing the de-icing fluid injection system associated with the Model GL-1800 de-icing truck.

11.47.9. **(Added)** Tenant 1550 will be used to reclaim, to the greatest extent possible, any puddled de-icing fluid once the aircraft has launched from the parking spot. The fluid will then be dispensed into an approved containment facility.

11.47.10. **(Added)** Quantities of de-icing fluid used on the Mass Parking Area (MPA) to remove frost will be tracked using a manual tracking sheet located in the de-ice trucks. AMXS Support Equipment Section will be responsible for gathering quantities monthly.

11.47.11. **(Added)** Production Superintendents' or Expediter will ensure the de-icing recovery valve is open PRIOR to and CLOSED after all de-icing procedures.

11.48. (Added) Aircraft Refurbishment Procedures.

11.48.1. **(Added)** When scheduled, aircraft refurbishment will be accomplished as a complete process. The Maintenance Flight Chief or Refurb Coordinator and Crew Chief will inspect the 434th ARW aircraft during the Programmed Depot Maintenance (PDM) Acceptance Inspection using TO 1C-135-3-10, *Inspection, Refurbishment, and Marking Instructions for Interior Equipment and Ancillary Structure* and locally developed forms to evaluate those items requiring refurbishment. Refurb will be accomplished approximately one year after return from PDM.

11.48.2. **(Added)** Maintenance Flight Chief will:

11.48.2.1. **(Added)** Ensure the aircraft will be down-loaded of required - 21 and life support equipment prior to the start of the Refurb before towing into a nose dock

11.48.2.2. **(Added)** Ensure upon the completion of the Refurb the aircraft will be towed out, up-loaded and a full system check will be performed prior to returning aircraft to Aircraft Maintenance Squadron (AMXS) or gaining unit.

11.48.2.3. **(Added)** Ensure replenishment of consumable stock is an ongoing process that will be accomplished as stock levels are depleted, but far enough in advance to ensure adequate on-hand stock to support two Refurb aircraft.

11.48.2.4. **(Added)** Ensures adequate iPads are available for all technicians performing Maintenance on Refurb aircraft.

11.48.2.5. **(Added)** Establish and implement an alternate plan for those times in which FMXC2 is down for maintenance or is inoperable.

11.48.2.6. **(Added)** Ensures a FMXC2 generated aircraft status sheet, to include all supply and open 350 tags, at the end of each shift as a backup of open discrepancies in the case of FMXC2 or the network is unavailable.

11.48.2.7. **(Added)** Ensure a prominently displayed status board contains not only the minimum items required by this instruction but also Part B of AF Form 1492, *Warning*

Tags installed on Paperless refurb and a clipboard containing the aircraft panel sheet.

Note: Multiple status boards may be used.

11.48.2.8. **(Added)** Ensures all AF Form 1492 Warning Tags used on the Paperless Refurb aircraft are loaded in Tool Accountability System (TAS) and issued to the user by refurb personnel.

11.48.2.9. **(Added)** Ensures that all recurring tasks are loaded into the job standard package of the Maintenance Information Systems (MIS). The job standard package is reviewed annually for accuracy.

11.48.2.10. **(Added)** Establish and implement procedures for deactivating and reactivating aircraft AFTO Form 781 series during a Paperless Refurb Process.

11.48.2.11. **(Added)** Ensures all discrepancies annotated in the AFTO Form 781 series match those discrepancies in the MIS once the aircraft has entered the Paperless Refurb process. At this time the AFTO Form 781 series will be deactivated and locked away in the Maintenance Flight Chief's office.

11.48.2.12. **(Added)** Ensure all AFTO Form 781 series forms are transcribed with the words "Transcribed to paperless Refurb see FMXC2 printout dated from __to_" in the corrective action block for discrepancies completed during the Paperless Process and transcribe discrepancies not corrected during the Paperless Process per T.O. 00-20-1. Then forward transcribed forms to respected Flight Chief for review.

11.48.2.13. **(Added)** When possible ensure prior to reactivating AFTO Form 781 series that all backline checks, if required, are complete and all Paperless Refurb discrepancies completed are taken out of the MIS.

11.48.2.14. **(Added)** Ensure a new set of AFTO Form 781 series forms are printed and inserted in the AFTO Form 781 Series binder. At this time the AFTO Form 781 series will be reactivated and handed to the WL Crew Chief.

11.48.3. **(Added)** Shop Chiefs will provide a list of AF Form 1492 Warning Tags to the Maintenance Flight Chief to be Added in the Refurb Tool Accountability System (TAS). This list will be reviewed for content and accuracy every 2 years or as source data changes.

11.48.4. **(Added)** Technicians will: Review the status board(s) prior to performing any maintenance on the Paperless Refurb aircraft.

11.48.5. **(Added)** Squadron Superintendents will: Ensure man-power is available to support the entire Refurb process time frame.

11.48.6. **(Added)** Plans Scheduling and Documentation will:

11.48.6.1. **(Added)** Ensure down time needed to complete the Refurb process is scheduled.

11.48.6.2. **(Added)** Load a job standard package to ensure compliance with identified Refurb requirements and also schedule a pre-dock and a post-dock meeting.

11.48.7. **(Added)** Documentation Procedures:

11.48.7.1. **(Added)** The intent of paperless Refurb is to streamline the Refurb and documentation process and to provide real time data. To that end, all technicians will

document their work as it is being performed and complete all documentation prior to the end of their shift.

11.48.7.2. **(Added)** Due to the unique nature of the paperless Refurb documentation process, all AF Form 1492 Warning Tags required by each task shall be linked to a primary Job Control Number (JCN) via the WES option. Any additional AF Form 1492's will go through the Refurb Coordinator prior to being installed on the aircraft.

11.48.7.3. **(Added)** Pre-Printed laminated AF Form 1492 Warning Tags used must be signed out of Refurb's TC MAX. All non-preprinted AF Form 1492 Warning Tags will be coordinated through the Refurb Coordinator for accountability. Both pre-printed laminated and non-preprinted AF Form 1492 Warning Tag Part A will be installed on aircraft where applicable and part B will be added to the status board. Both Part A and Part B must be returned upon completion of the task requiring the tag and the pre-printed AF Form 1492 Warning Tag will be signed back in Refurb's TC MAX and the non-preprinted tags will be destroyed.

11.48.7.4. **(Added)** All Warning Tags required by a task will be installed prior to work being started and will not be removed until the discrepancy has been completed and/or a qualified technician has cleared the Work Event Separator (WES).

11.48.7.5. **(Added)** Certain circumstances may require several AF Form 1492 Warning Tags to be installed on the same switch, circuit breaker etc. In these cases, a single AF Form 1492 Warning Tag may be used with a statement on the AF Form 1492 stating "Several AF Form 1492's installed (see **Refurb Coordinator Note: Do Not Operate, Close, Reset, etc.**). Tag will be removed only by Refurb Coordinator or Maintenance Flight Chief" in the "Condition" section of tag.

11.48.7.6. **(Added)** Locally developed Warning Tags are authorized but must be properly identified. On the lower right corner of overprint tags, opposite the "AF FORM 1492 OCT 91" marking, enter the title of the squadron creating the overprint tags. (e.g. 434 overprint)

11.48.7.7. **(Added)** The Maintenance Flight Chief will take the following action when using the local panel removal form:

11.48.7.7.1. **(Added)** Ensure the appropriate panel worksheet is available and coincides with the Refurb.

11.48.7.7.2. **(Added)** Enter the technician's name and aircraft serial number on the appropriate sheet

11.48.7.7.3. **(Added)** Ensure the form is maintained on the Panel Sheet clipboard located on the Refurb status board.

11.48.7.7.4. **(Added)** Assigned technicians will enter their minimum signature and man number in the "REMOVED BY" column upon removal and enter their minimum signature and man number in the "INSTALLED BY" column upon panel installation. The "INSPECTED BY" column must be signed off by a Red X qualified inspector utilizing their minimum signature and man number.

11.48.7.7.5. **(Added)** The aircraft WL Crew Chief verifies all open panel sheet discrepancies are entered into FMXC2 prior to printing new AFTO 781 A's and exiting the Paperless Refurb process.

11.49. (Added) Clearing Repeat, Recur and Can Not Duplicate (CND) Discrepancies.

11.49.1. **(Added)** MOC will notify MXG/QA of any Red X conditions resulting in a CND discrepancy if needed. A designated representative from section and MXG/QA office representative will review past repairs if a Red X CND condition exists. MXG/QA will review additional maintenance actions of any Red X condition resulting in a CND sign-off.

11.49.2. **(Added)** MOC will identify any repeat/recurring discrepancies during the debrief process. The MOC will notify the MXG/CC or designated representative and QA of repeat/recurring discrepancies during the morning maintenance meeting using the Aircraft Landing Status Slide. QA will review the debrief records and perform follow-ups to ensure personnel take proper troubleshooting and corrective actions to correct the repeat/recurring discrepancy as directed by management.

11.50. (Added) Use of E-Tools and Mobile Work Stations.

11.50.1. **(Added)** E-Tools/Mobile Work Stations (MWS) are portable electronic devices for the purpose of viewing digital technical data for maintenance and documentation. All E-Tools and supporting equipment will be tracked as automated data processing equipment (ADPE) and will be maintained on the E-Tool ADPE account. The Maintenance Group Quality Assurance (MXG/QA) Lead Technical Order Distribution Office (TODO) will manage the Maintenance Group E-Tool ADPE account and will be the OPR of the E-Tool Program IAW eTool Lite System.

11.50.2. **(Added)** The TODO will ensure the Getac Tablets are configured with current software to support technical order (T.O.) and maintenance documentation. The Getac Tablets will not be used to replace desktop computers or for personal use. They will only be used for programs that directly support maintenance related activities. Personal Outlook will not be used on Getac Tablets. The only individuals allowed to use Outlook on the Getac Tablets are the Maintenance Expeditors using the official Expediter mailbox IAW eTool Lite System.

11.50.2.1. **(Added)** The maintenance shops and support sections will have required number of Getac Tablets issued and signed acknowledge receipt on an DAF 1297, *Temporary Issue Receipt*, from the TODO. Each section will be responsible for marking their Getac Tablets with a TCMax sticker.

11.50.2.2. **(Added)** The Getac Tablets will be marked with the TCMax worldwide identifier (WWID) for their section and MWS for identifying that it is an MWS and the appropriate number of MWS with a two digit number. **Example:** A MXG/QA Getac Tablets would be marked as: U2QAMWS01. The Tough books will be controlled in TCMax for each section IAW eTool Lite System.

11.50.3. (Added) Use of iPads.

11.50.3.1. **(Added)** The eTools Lite Program is executed from HQ AFRC/A4 and implements the use of iPads as eTO readers to support aircraft maintenance and supplement the current ruggedized MWS program. The eTools Lite Program is managed

with the A4/A6 eTools Lite CONOPS that is available for review in the TODO Office and will be reviewed in all iPad training.

11.50.3.2. **(Added)** The maintenance shops and support sections will have required number of iPads issued and signed acknowledge receipt on an DAF 1297, from the TODO. Each section will be responsible for marking their iPads with a TCMax sticker. The iPads will be marked with the TCMax worldwide identifier (WWID) for their section and PAD for identifying that it is an iPad and the appropriate number of iPad with a two digit number. **Example:** A MXG/QA iPad would be marked as: U2QAPAD01. The iPads will be controlled in TCMax for each section IAW eTool Lite System.

11.50.3.3. **(Added)** TODO will ensure iPad is updated with current software and updated eTOs at a minimum of every 7 days. The iPads will only be used for viewing eTOs and approved maintenance documents along with use of calculator only to support aircraft maintenance tasks IAW eTool Lite System.

11.50.3.4. **(Added)** The eTools Lite Program is executed from HQ AFRC/A4 and implements the use of Digital Devices as eTO readers to support aircraft maintenance and supplement the current ruggedized MWS program. The eTools Lite Program is managed with the A4/A6 eTools Lite CONOPS that is available for review in the TODO Office.

11.50.3.5. **(Added)** Prior to use, the eTool Device will be checked out from the tool accountability program, outer case inspected for broken or missing parts. Checked for cracks or damage and sufficient battery function IAW eTool Lite System.

11.50.3.6. **(Added)** Each user will ensure safe usage in compliance with AFRC eTools Lite SSP which can be reviewed in the TODO Office.

11.50.3.7. **(Added)** After use, eTool needs to stay powered on at all times.

11.50.3.8. **(Added)** Report any damage or functioning issues to support personnel at point of issue immediately.

11.50.3.9. **(Added)** Any damaged item requires DD Form 200, *Financial Liability Investigation of Property Loss* or In Lieu of Report of Survey completed prior to receiving a replacement item.

11.50.3.10. **(Added)** Support personnel will not place a work ticket thru COMM for eTool Devices. All function issues or damage will be reported to TODO or Quality Assurance (QA) Chief within 3 business days and shop Financial Liability Investigation completed within 15 days. Failure to complete will result in a MAJOR discrepancy IAW with the units MSEP plan.

11.50.4. **(Added)** Procedures in this instruction will be strictly enforced for all mobilizations.

11.50.5. **(Added)** All concerns with effective use of MWS equipment to satisfy user requirements in providing access to eTOs needed at the point of maintenance and support mandated processes should be addressed with the MXG TODO.

11.51. (Added) Job Control Numbers.

11.51.1. **(Added)** Each discrepancy on the KC-135 aircraft/associated equipment will have a separate JCN. The complete JCN is a nine-digit code number, the first two digits are the year,

the second three digits are the Julian Date and the last four are the block assignments designated below. These numbers are identified per specific JCN assignments in the following paragraphs.

11.51.2. **(Added)** The following JCNs apply for the type of recurring maintenance:

11.51.2.1. **(Added)** Periodic Inspections: FMXC2 generated JCN's will be used with the paperless periodic inspection process with an "A" in the sixth position of the JCN.

11.51.2.2. **(Added)** 900 Hour Inspections: FMXC2 generated JCN's will be used with the paperless 900 hour inspection process with a "B" in the sixth position of the JCN.

11.51.2.3. **(Added)** F108-100 Engine Inspections: Use in the sixth digit position a "W" for a #1 engine change, a "X" for a #2 engine change, a "Y" for a #3 engine change, and a "Z" for a #4 engine change.

11.51.2.4. **(Added)** Air Ground Equipment (AGE) Inspections: Basic inspection packages for equipment will be FMXC2 generated as an inspection package, with an "A" in the sixth position of the JCN.

11.51.2.5. **(Added)** All "Profiled JCNs" that are generated from the Plans and Scheduling Office will be identified with an alpha character in the fourth position of the JCN, with the Work Unit Code (WUC) being the primary identifier of the work being accomplished.

11.51.2.6. **(Added)** Refurbishment Maintenance: The start date of the inspection is the second three positions of the JCN, an "R" will be used in the sixth position, and positions seven (7), eight (8) and nine (9) will be in sequential order starting with 001.

11.51.3. **(Added)** Refer to **Table 11.4.** for Job Control number assignments.

Table 11.4. (Added) 434 ARW Job Control Number Assignments.

JCN BLOCK	USING ACTIVITY	PURPOSE
1600 - 1699	FMXC2 Generated	781K Section C Inspections
A001 - A999	Plans and Scheduling / SCHED PE Prep Package	PE Prep Package
B001 - B999	12mo/900 hr. Inspection	12mo/900 hr. Package
E001 - E999	Plans and Scheduling	Hourly Post Flight (HPO)
R001 - R999	AMXS/A1ACC/A1BCC, MXS & ISO	Refurbishment
W001 - W999	Engine Shop/ENGM	#1 Engine Change
X001 - X999	Engine Shop/ENGM	#2 Engine Change
Y001 - Y999	Engine Shop/ENGM	#3 Engine Change
Z001 - Z999	Engine Shop/ENGM	#4 Engine Change
1100 - 1199	Transient Maintenance (Input by MOC)	Transient Acft Support
1300 - 1399	Support Equipment	Maint. of Stands/Equip.
1500 - 1599	Decentralized Material Support	Scheduling Local Manufacture Work Orders
4950 - 4999	Engine shop\Spec Flt\A1ASP	Maintenance of Shop Equip.

5000 - 5049	Metals Technology/MTECH	Maintenance of Shop Equip.
5050 - 5099	NDI/NDIS	Maintenance of Shop Equip.
5100 - 5199	Munitions	Maintenance of Shop Equip.
5200 - 5299	Maintenance Operations Center (MOC)	Acft Parts Cannibalizations
5300 - 5325	Deployed Job Control Numbers	Maint. Group Deployed
5326 - 5330	Impoundment Job Control Numbers	Maint. Group Impounded
5331 - 5349	Structural Maintenance/SMCO	Maintenance of Shop Equip.
5350 - 5399	Survival Equipment/SURV	Maintenance of Shop Equip.
5400 - 5449	Fuel Cell/FUEL	Maintenance of Shop Equip.
5450 - 5499	Wheel & Tire AERO	Maintenance of Shop Equip. and Forward Supply Point
5500 - 5524	Engine Shop/ENGM	Maintenance of Shop Equip. and Engine Build Up/Tear Down
5525 - 5549	Engine Shop/A1ASP	Maintenance of Shop Equip.
5550 - 5599	PE Dock/ ISO1	Maintenance of Shop Equip.
5600 - 5649	Hydraulic Backshop/HYDR	Maintenance of Shop Equip.
5650 - 5699	Hydraulic Specialist Flt/A1ASH	Maintenance of Shop Equip.
5700 - 5799	Guidance Control/A1ASG	Maintenance of Shop Equip.
5800 - 5899	Comm/Nav Flt/A1ASC	Maintenance of Shop Equip.
5900 - 5949	Electro/Enviro Backshop /ELEN	Maintenance of Shop Equip.
5950 - 5999	Electro/Enviro Spec Flt/A1ASE	Maintenance of Shop Equip.
6050 - 6099	Powered Age/AGEFM	Maintenance of Shop Equip. and AGE Equipment Unscheduled Maintenance
6100 - 6199	MOC	Unscheduled Maintenance JCN's on Aircraft
6200 - 6250	ALL	Discrepancies discovered during acceptance inspection
9000 - 9999	FMXC2 Generated	TCTO's and One Time Inspection
6300 - 6308	57-001472	JCNs for Aircraft Debriefing
6327 - 6335	60-000322	JCNs for Aircraft Debriefing
6336 - 6344	60-000363	JCNs for Aircraft Debriefing
6345 - 6353	62-003518	JCNs for Aircraft Debriefing
6354 - 6362	62-003530	JCNs for Aircraft Debriefing
6363 - 6371	63-007996	JCNs for Aircraft Debriefing
6372 - 6380	63-008032	JCNs for Aircraft Debriefing
6381 - 6389	63-008041	JCNs for Aircraft Debriefing
6400 - 6408	58-000076	JCNs for Aircraft Debriefing
6409 - 6417	60-000314	JCNs for Aircraft Debriefing
6418 - 6426	60-000359	JCNs for Aircraft Debriefing
6427 - 6435	60-000364	JCNs for Aircraft Debriefing
6445 - 6453	61-000272	JCNs for Aircraft Debriefing
6463 - 6471	62-003510	JCNs for Aircraft Debriefing

6472 - 6480	62-003521	JCNs for Aircraft Debriefing
6481 – 6489	64-014834	JCNs for Aircraft Debriefing
Note: Crew Chiefs are authorized to use these JCNs on cross country flights provided no JCN has been issued by the host base or they are not assigned one by transient maintenance.		

11.51.4. **(Added)** All discrepancies other than scheduled maintenance will be assigned a JCN by the MOC, via the Expediter. Personnel discovering discrepancies are responsible for entering discrepancies into the MIS; exceptions are red ball, debrief discrepancies and work packages.

11.52. **(Added)** Hangar Door Awareness.

11.52.1. **(Added)** In order to ensure strict compliance, provide maximum safety of personnel, and prevent damage to equipment all personnel who operate electric hangar doors shall become familiar with the guidance included in this section.

11.52.2. **(Added)** Training requirements for electrically operated hangar doors.

11.52.2.1. **(Added)** All commanders or designated representatives must enforce hangar door training requirements. Supervision will select and authorize personnel to receive the training required to operate electric hangar doors IAW DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*.

11.52.2.2. **(Added)** A qualified hangar door operator/trainer of the 434 MXG can serve as hangar door operator trainer. These individuals will provide hands on training in operation of electric hangar doors. Training will be documented using AF Form 2426/class roster or equivalent and returned to MXOT for entry into ARCNet. A list of all MXG personnel authorized to operate hangar doors is available electronically on ARCNet and can be reviewed as required.

11.52.2.3. **(Added)** Individuals not assigned to the Maintenance Group will receive training from MXG certified individuals and will be provided a completed AF Form 2426 (or equivalent) for the member to return to their commander or designated representative. This will serve as documentation that proper training was received. The commander or designated representative will provide the MXG/CC an appointment letter of all members in their organization authorized and trained to operate hangar doors.

11.52.2.4. **(Added)** At a MINIMUM, hangar door training must consist of the following: Read and understand the relevant sections of this document. Demonstrate the dangers of operating hangar doors. Understand the purpose and operation of all switches. Show where the minimum door opening markings are and understand their purpose. Explain the Clear Zones and their functions.

11.52.3. **(Added)** Awareness Training.

11.52.3.1. **(Added)** Hangar doors have the potential to be very dangerous and potential loss of life may occur if not properly trained to perform hangar door operations. All personnel who routinely visit, work in, or pass through hangar facilities must receive initial and annual refresher hangar door awareness training, regardless of Air Force Specialty Code or duties. This training is part of, and listed as, Maintenance Safety Block Training in ARCNet.

11.52.4. **(Added)** Documentation:

11.52.4.1. **(Added)** All types of electrically operated hangar doors must have a separate training course. Courses for Grissom Personnel are loaded in ARCNet as follows:

11.52.4.1.1. **(Added)** Maintenance Safety Block Training (Hangar Door Awareness) 12 month recur.

11.52.4.1.2. **(Added)** Hangar Door Operation Docks 1 & 3 (one-time).

11.52.4.1.3. **(Added)** Hangar Door Operation Dock 2 (one-time).

11.52.4.1.4. **(Added)** Hangar Door Operation Dock 6 (one-time).

11.52.4.2. **(Added)** All Hangar Door training (Awareness & Operator) will be documented in ARCNet for Maintenance Group personnel. Personnel without ARCNet access for training will be documented on AF Form 55, employee Safety and Health record or equivalent and updated annually.

11.52.5. **(Added)** Hangar Door Operations (normal conditions).

11.52.5.1. **(Added)** Only properly trained and documented operators will open or close electric hangar doors. Door operators will visually check the doors, inside and out, door bays, alcoves and door wells ensuring all areas are clear for movement.

11.52.5.2. **(Added)** Ensure hangar doors' sounding devices are operational IAW DAFMAN 91-203. Discontinue operation any time the warning bells malfunction, and notify your supervisor or MXG Senior NCO to lock out the system until repaired.

11.52.5.3. **(Added)** For aircraft movement, ensure the doors are open to a point at or beyond the yellow floor markings (75' 5") and the overhead door is fully up prior to aircraft movement.

11.52.5.4. **(Added)** When closing the doors with aircraft in place, ensure main aircraft wheels are located in the painted boxes and the nose gear is centered on the yellow line. This will ensure the aircraft is centered correctly in the hangar.

11.52.5.5. **(Added)** When hangar doors are opened they will always be opened a minimum of 10 feet. Overhead doors will always be fully opened.

11.52.6. **(Added)** Hangar Door Operations (adverse conditions).

11.52.6.1. **(Added)** Electrical/Manually Operated hangar doors, in addition to items indicated in item five, the following items will apply:

11.52.6.2. **(Added)** Inspect the door tracks for snow/ice accumulation prior to any door operation. Remove all ice/snow from tracks prior to door operation. If necessary, apply heat until all ice/snow is removed and doors are able to move.

11.52.6.3. **(Added)** When the outside temperature is 40°F or below, hangar doors will remain closed until the point that aircraft or equipment are ready to move in or out of the hangar.

11.52.6.4. **(Added)** For aircraft movement in these conditions, the tow supervisor is responsible for minimizing the door open time. For equipment, it is the responsibility of the member making the movement.

11.52.6.5. **(Added)** Manual hangar doors do not require special training or tracking but caution must be used to ensure the safety of personnel pushing the doors. Special attention should be paid to protect from back injuries and pinch injuries between panels.

11.52.7. **(Added)** Additional Safety Procedures:

11.52.7.1. **(Added)** Vehicle operations around hangars. Vehicles will not be left unattended behind aircraft in hangars.

11.52.7.2. **(Added)** Clear space requirements. At the end of the duty day all support equipment, AGE, panel racks and high reaches will be removed from behind the aircraft. **Exception:** During aircraft PE Inspection, stationary work platforms may remain as long as all wheels and casters are locked.

Chapter 14

MAINTENANCE PLANS, SCHEDULING AND DOCUMENTATION (PS&D).

14.2. Data Documentation.

14.2.3. Aircraft Document Reviews (ADR). ADRs validate and correct any errors on airframe and engine operating times and cycles, TCTO documentation, TCI component operating times, time remaining to the next inspection, backordered supply document numbers and open deferred discrepancies. The aircraft AFTO Form 781-series for possessed aircraft are reviewed by aircraft crew chiefs, flightline maintenance functions, PS&D, Engine Management (EM) and LRS personnel to ensure the accuracy and validity of entries.

14.2.3.5. **(Added)** Aircraft Document Reviews at Deployed Locations.

14.2.3.5.1. **(Added)** If FMXC2 is available, the Scheduler will print the Document Review Package.

14.2.3.5.2. **(Added)** The Crew Chief, or designated individual, will take the forms to the Scheduling function.

14.2.3.5.3. **(Added)** Scheduler will conduct Aircraft Document Review (ADR) as conducted at home station

14.2.3.5.4. **(Added)** Engine Data will be reviewed and updated during the next Home Station Document Review.

14.2.3.5.5. **(Added)** If FMXC2 is not available, the Scheduler will review the aircraft forms with the Crew Chief or designated individual.

14.2.3.5.6. **(Added)** The Scheduler will make note of discrepancies and corrections.

14.2.3.5.7. **(Added)** Scheduler and Crew Chief will sign discrepancy/correction sheet to show document review compliance.

14.2.3.5.8. **(Added)** PS&D at home station will update MIS to reflect document review completion and next due date.

14.2.3.5.9. **(Added)** If there are no PS&D personnel deployed, aircraft forms and MIS will reflect overdue status of documents review until aircraft returns to home station.

14.2.4. Pre-Dock Meetings. PS&D personnel will:

14.2.4.1. Review planned aircraft inspection schedules and initiate an AF Form 2410, Inspection/TCTO Planning Checklist, or locally developed product for each aircraft prior to the pre-inspection meeting. (T-2)

14.2.4.1.2. **(Added)** Pre-dock & Post-dock meetings will be accomplished IAW DAFI 21-101 Paragraphs 14.2.4 and 14.2.5 for the following scheduled maintenance activities Periodic (PE) Inspections, CFT Maintenance Acceptance Inspections, and Refurbishment of aircraft.

14.2.4.2. Host meetings and notify the appropriate Maintenance Supervision and flight supervisors of any recurring problems with attendance. (T-2) Prior to the pre-dock meeting, PS&D will:

14.2.4.2.1. Determine pre-dock meeting attendees. (T-2)

14.2.4.2.1.3. **(Added)** Programmed Depot Maintenance (PDM) meeting will be held at least one week prior to scheduled input with assigned Crew Chief, Maintenance Operations (MO) Superintendent, Maintenance Squadron (MXS) Superintendent, Aircraft Maintenance Squadron (AMXS) Superintendent, Decentralized Materiel Support, Quality Assurance and any other required attendees.

14.2.4.3. At the pre-dock meeting, PS&D will brief representatives of the inspection schedule and scope, including TCTOs, TCIs, SIs, DDs, and special requirements to be accomplished. (T-2)

14.2.4.3.5. As a minimum, the following will also be discussed at the pre-dock meeting:

14.2.4.3.5.11. **(Added)** For a Periodic, Acceptance Inspections and Refurbishment program, meetings will include; review of delayed discrepancies for assessing the status of backordered parts, a review of applicable TCTOs, establishment of the length of the inspection and aircraft configuration. Provide a list of items identified as out-of-configuration to the Maintenance Flight Chief in the pre-dock package for verification/correction during the major inspection. All aircraft will be washed prior to all Periodic Inspections. The length of the refurbishment will be determined by the type of refurbishment.

14.3. Configuration, TCTO, SI and TCI Management.

14.3.2. Configuration Management. Configuration management provides unit managers the capability to determine the actual versus approved configuration of an aircraft or equipment. The intent of configuration management is to ensure selected serially controlled and/or TCIs are properly loaded to the MIS database with accurate, approved part numbers, Quantity per Assembly and Next Higher Assembly items by WUC/LCN. PS&D has overall responsibility for the Equipment Configuration Management or Aircraft Configuration Management subsystem of the MIS and will provide assistance to maintenance personnel. (T-2) The performing work center supervisor and PS&D will validate configuration change, TCTO, SI and TCI events using MIS on-line capabilities. (T-2) Individual work centers accomplishing TCIs are responsible for changing configuration information in MIS. Unless otherwise specified in local procedures, schedulers will process all removal, installation, TCI, SI and TCTO compliance updates for aircraft and equipment in the applicable MIS and EM will process engines and engine components in applicable engine information system. (T-2)

14.3.2.1. Lead Commands will ensure procedures exist and are executed to provide system configuration tables which are updated, validated, and provided to field maintenance personnel as configurations change. (T-2)

14.3.2.1.2. **(Added)** Aircraft Configuration Management:

14.3.2.1.2.1. **(Added)** Plans, Scheduling and Documentation (PS&D) will:

14.3.2.1.2.1.1. **(Added)** Maintain/Track the Aircraft Configuration Items in the MIS.

14.3.2.1.2.1.2. **(Added)** Distribute the Aircraft Configuration Listing and Locally Produced Spreadsheets to the Maintenance Dock Chief during Periodic Inspection Pre-Dock Meeting for verification during the Periodic inspection.

14.3.2.1.2.1.3. **(Added)** Identify out of configuration/missing items.

14.3.2.1.2.1.4. **(Added)** Load a discrepancy in the MIS against the Aircraft identified as having out of configuration/missing items. A workcenter event (WES) will be Added for each out of configuration/missing item.

14.3.2.1.2.1.5. **(Added)** Brief out of configuration/missing items at the daily maintenance meeting, and forward to the appropriate maintenance section for corrective action.

14.3.2.1.2.1.6. **(Added)** Coordinate with Lead Command Functional and air logistics center (ALC) item manager on items identified as missing data plates or without serial numbers.

14.3.2.1.2.1.7. **(Added)** Provide guidance to performing workcenters.

14.3.2.1.2.2. **(Added)** Aircrew Flight Equipment (434 OSS/OSL):

14.3.2.1.2.2.1. **(Added)** Track AFE items that will be installed and remain on the Aircraft.

14.3.2.1.2.2.2. **(Added)** Notify PS&D to add required AFE to the MIS.

14.3.2.1.2.3. **(Added)** AMXS/MXS/AFE Workcenters:

14.3.2.1.2.3.1. **(Added)** Perform verification of configuration items as tasked.

14.3.2.1.2.3.2. **(Added)** Document completion in the MIS.

14.3.2.1.2.3.3. **(Added)** Identify items missing data plate or with no serial number to PS&D.

14.3.2.1.2.3.4. **(Added)** Mark or install serial number identification as tasked.

14.3.3. TCTO Management. TCTOs are AF, MAJCOM/Lead Command or Numbered Air Force (NAF) directed modifications and inspections that provide units with instructions for doing a one-time change, modification, or inspection of equipment, (includes applicable FAA Airworthiness Directives, original equipment manufacturer service bulletins and service instructions, after concurrence by Lead Command). Lead Command, NAF and local inspections are considered OTIs. Use the MIS to process Lead Command and NAF OTIs or modifications in the same manner as TCTOs with compliance periods, remove from service dates and rescission dates IAW TO 00-5-15. TCTOs, with the exception of immediate and urgent action, are considered scheduled maintenance and integrated into maintenance planning cycles. **(T-2)** Consider concurrent accomplishment of TCTO work with other unscheduled or scheduled maintenance (such as, PH, ISO, HSC, HPO). Manage TCTOs using the MIS, TO 00-5-15 and specific MAJCOM instructions. **Note:** Communication of a grounding, or potential grounding event (TCTO, OTI, PM event) to weapon systems

operating in a deployed environment and/or under the authority of an operational command must follow the grounding procedures outlined in DAFMAN 11-401 and 63-101/20-101. Units must not directly communicate home station requirements to its deployed forces but provide communication through their respective MAJCOM. **(T-2)**

14.3.3.1. PS&D is responsible for managing all assigned weapon system TCTO programs and will monitor/provide oversight of all AF owned aircraft, weapon system, AGE, and commodity TCTOs to ensure all compliance requirements are met. **(T-2)**

14.3.3.1.4. **(Added)** Operations Support Squadron TCTOs will be managed by OSS/AFE.

14.3.3.2. PS&D will review MIS products weekly to ensure proper documentation and management by owning and managing TCTO agencies. **(T-2)**

14.3.3.2.4. PS&D will chair a TCTO review meeting attended by all TCTO owning and managing agencies after the monthly supply TCTO reconciliation meeting. **(T-2)** These meetings may be combined.

14.3.3.2.4. **(434 ARW)** Meeting held during the daily maintenance meeting.

14.3.3.3. Specific TCTO Responsibilities.

14.3.3.3.2. PS&D personnel will:

14.3.3.3.2.2. Chair a TCTO planning meeting with attendees from QA, owning and performing work centers and Flight Service Center/LRS IAW AFI 23-101, Chapter 4. **(T-2)**

14.3.3.3.2.2. **(434 ARW)** Meeting held during the daily maintenance meeting.

14.3.3.3.2.5. Use the ILS-S to order required kits/parts/tools IAW MIS manuals. **(T-2)** Kits, parts, tools, and software will be ordered within 24 hours of the TCTO meeting and document numbers input on the AF Form 2001, *Notification of TCTO Kit Requirements*. **(T-2)** Locally manufactured and obtained parts will be documented on the AF 2001. **(T-2)**

14.3.3.3.2.5. **(434 ARW)** Complete the AF Form 2001 to requisition TCTO Kits/Parts. Submit to the Maintenance Supply Liaison (MSL).

14.3.3.3.2.10. Schedule, track and monitor TCTO accomplishment. **(T-2)**

14.3.3.3.2.10.2. **(Added)** Load the TCTO in the MIS.

14.3.3.3.2.10.3. **(Added)** Identify TCTOs to be worked in the Monthly and Weekly Published Flying/Maintenance Schedules.

14.3.3.3.2.10.4. **(Added)** Track the Progress of active TCTOs. Ensure Status is correct when completed work order notification is received.

14.3.3.3.3. **(Added)** Performing work center:

14.3.3.3.3.1. **(Added)** Attend the TCTO Planning meeting.

14.3.3.3.3.2. **(Added)** Report deficiencies in technical instructions/applicability to Quality Assurance (QA).

14.3.3.3.3.3. **(Added)** Inventory TCTO kits prior to starting work, and identify discrepancies.

14.3.3.3.3.4. **(Added)** Perform the inspection/modification IAW DAFI 21-101 AFRCSUP and applicable technical data.

14.3.3.3.3.5. **(Added)** Document the TCTO in the MIS.

14.3.3.3.4. **(Added)** Maintenance Supply Liaison (LRS/LGRMM):

14.3.3.3.4.1. **(Added)** Attend the TCTO Planning meeting.

14.3.3.3.4.2. **(Added)** Order TCTO kits/parts from the AF Form 2001 supplied by PS&D.

14.3.3.3.4.3. **(Added)** Maintain TCTO kits/parts in the Aircraft Tail Number Bin or Hazardous Storage Locker.

14.3.3.3.4.4. **(Added)** Release TCTO kits/parts for work when directed by PS&D.

14.3.3.3.4.5. **(Added)** In conjunction with PS&D, complete a monthly TCTO reconciliation of TCTO kits/parts on-hand and on order.

14.3.3.3.5. **(Added)** Aircrew Flight Equipment (OSS/OSL):

14.3.3.3.5.1. **(Added)** Receive TCTOs from the OSS Technical Order Distribution Officer.

14.3.3.3.5.2. **(Added)** Establish TCTO folder.

14.3.3.3.5.3. **(Added)** Notify PS&D of active TCTO.

14.3.3.3.5.4. **(Added)** Perform the inspection/modification IAW applicable technical data.

14.3.3.3.5.5. **(Added)** Document completion of TCTO.

14.3.3.3.5.6. **(Added)** In conjunction with PS&D, complete a monthly TCTO reconciliation for active TCTOs.

14.3.4. SI and TCI Management:

14.3.4.3. PS&D will manage the assigned weapon systems TCI program. **(T-2)** PS&D Personnel will:

14.3.4.3.1. At least annually, meet with Egress and Aircrew Flight Equipment activities to verify each aircraft's egress data. **(T-2) Note:** MAJCOM/Units may direct more frequent verification of Egress and Aircrew Flight Equipment as required to maintain system integrity.

14.3.4.3.1.2. **(Added)** Aircrew Flight Equipment will be responsible for:

14.3.4.3.1.2.1. **(Added)** Review the Flight Equipment Records Management System or CAD/PAD and TCI assets.

14.3.4.3.1.2.2. **(Added)** Attend the quarterly TCI meeting.

- 14.3.4.3.1.2.3. **(Added)** Provide PS&D with the FERMS due date product for identified CAD/PAD and TCI requirements at the Quarterly TCI Meeting.
- 14.3.4.3.1.2.4. **(Added)** Order CAD/PAD and TCI assets as required.
- 14.3.4.3.1.2.5. **(Added)** Coordinate the issue, pick-up, and delivery of CAD/PAD items with MXS/MXMW.
- 14.3.4.3.1.2.6. **(Added)** Perform TCI as required.
- 14.3.4.3.1.2.7. **(Added)** Update FERMS when TCI completed.
- 14.3.4.3.1.2.8. **(Added)** Provide the 10 year forecast to PS&D NLT 1 September each year.
- 14.3.4.3.1.3. **(Added)** Submit the AFE 10-year forecast to the MAJCOM functional manager NLT 30 September each year.
- 14.3.4.3.6. Monitor and requisition TCI requirements based on projected equipment utilization. **(T-2)**
 - 14.3.4.3.6.1. Order parts using MIS or coordinate with LRS/DMS to order parts using AF Form 2005, unless otherwise specified in -11, -14 and -6 TOs. **(T-2)**
 - 14.3.4.3.6.1. **(434 ARW)** Decentralized Material Support (DMS) will:
 - 14.3.4.3.6.1.1. **(Added)** Attend the quarterly TCI meeting.
 - 14.3.4.3.6.1.2. **(Added)** Order/Assist Ordering TCI.
 - 14.3.4.3.6.1.3. **(Added)** Maintain non-explosive/non-hazardous TCI in the Aircraft Tail Number Bin.
 - 14.3.4.3.6.1.4. **(Added)** Maintain Hazardous TCI in the AMXS, Sortie Support Tool Room, and Hazardous Locker. Items will be maintained/identified by Aircraft.
 - 14.3.4.3.6.3. Notify the Munitions Flight of the need to order munitions items IAW TO 00-20-9 and DAFMAN 21-201. **(T-2)**
 - 14.3.4.3.6.3.3. **(Added)** Munitions will be responsible for:
 - 14.3.4.3.6.3.3.1. **(Added)** Attend the quarterly TCI meeting.
 - 14.3.4.3.6.3.3.2. **(Added)** Order CAD/PAD items as required on the AFTO Form 223, *Time Change Requirements Forecast*.
 - 14.3.4.3.6.3.3.3. **(Added)** Maintain/Store CAD/PAD assets.
 - 14.3.4.3.6.3.3.4. **(Added)** Issue/Receive CAD/PAD assets.
 - 14.3.4.3.6.3.3.5. **(Added)** Provide PS&D with new/current date of manufacture, date of installation increments for specific CAD/PAD items.
- 14.3.4.3.7. Schedule the time change in the MIS and incorporate it in the monthly/weekly/ quarterly maintenance schedule. **(T-2)**
 - 14.3.4.3.7.1. **(Added)** Time Change Items:

14.3.4.3.7.1.1. **(Added)** Review the MIS, G081, Replacement Schedule Section (Screen #9188), for accuracy of due dates, date of manufacture, date of installation.

14.3.4.3.7.1.2. **(Added)** Review the MIS, G081, Replacement Schedule Section (Screen #9188), for inclusion in the Annual, Quarterly, Monthly and Weekly Flying/Maintenance Schedules.

14.3.4.3.7.2. **(Added)** Schedule the TCI in the MIS NLT each Friday by COB, or Sunday by COB on UTA weekends the week before the affected schedule.

14.3.4.3.7.3. **(Added)** Schedule the TCI at any other time necessary for completion out of cycle.

14.3.4.3.7.4. **(Added)** Track the TCI in the Weekly Maintenance Schedule to ensure compliance.

14.3.4.3.9. Coordinate management of respective TCIs with applicable maintenance and operation work centers. **(T-2)**

14.3.4.3.9.1. **(Added)** Load Standardized Job Packages as necessary to support the required TCI at the request of Aircraft Maintenance or affected agency.

14.3.4.3.9.2. **(Added)** Receive the completion notice, and verify the TCI has properly updated in the MIS.

14.3.4.3.9.3. **(Added)** Verify the accuracy of newly installed date of manufacture, date of installation.

14.3.4.3.12. To facilitate quarterly requisitioning, P&S will submit the quarterly validated time-change AFTO Form 223, Spreadsheet, or IMDS/FMxC2 generated forecast to the Munitions Accountable System Officer. **(T-2)** This must be submitted between 45 and 60 calendar days Continental United States (CONUS) or between 90 and 120 calendar days Outside Continental United States (OCONUS) before the next calendar year quarter IAW DAFMAN 21-201 Table 7.3, OCONUS and CONUS Time Change Requisitioning Schedule. **(T-2)** If aircraft is scheduled to be in depot when time change will be required, home station P&S will coordinate with depot P&S to facilitate requisition of required assets by the depot munition's function IAW DAFMAN 21-201 Table 7.3 time frames. **(T-2)**

14.3.4.3.12.2. **(Added)** Completes the Air Force Technical Order (AFTO) Form 223 for Cartridge Activated Devices/Propellant Activated Devices (CAD/PAD) items.

14.3.4.3.12.3. **(Added)** Hold a quarterly TCI Meeting, NLT 60 days prior to the next quarter.

14.3.4.3.12.4. **(Added)** Present completed AFTO Form 223 to the appropriate agency during the quarterly TCI Meeting.

14.3.4.4. **(Added)** Special Inspections (SI):

14.3.4.4.1. **(Added)** Plans, Scheduling and Documentation (PS&D) will:

14.3.4.4.1.1. **(Added)** Review the Maintenance Information Systems (MIS), G081, Special Inspection and Maintenance Section (Screen #9188), for inclusion in the Monthly and Weekly published Flying/Maintenance Schedules.

14.3.4.4.1.2. **(Added)** Review the Flight Equipment Records Management System (FERMS) product from Aircrew Flight Equipment (AFE) for inclusion in the Monthly Published Schedule.

14.3.4.4.1.3. **(Added)** Schedule the Special Inspections in the MIS No Later than (NLT) each Friday by Close of Business (COB), or Sunday by COB on Unit Training Assembly (UTA) weekends.

14.3.4.4.1.4. **(Added)** Schedule the Special Inspections at any other time necessary for completion out of cycle.

14.3.4.4.1.5. **(Added)** Load Standardized Job Packages as necessary to support the required Special SI Item at the request of Aircraft Maintenance or affected agency.

14.3.4.4.1.6. **(Added)** Track the SI in the Weekly Maintenance Schedule to ensure compliance.

14.3.4.4.1.7. **(Added)** Receive the completion notice, and verify the SI has properly updated in the MIS.

14.3.4.4.2. **(Added)** Aircrew Flight Equipment (OSS/OSL):

14.3.4.4.2.1. **(Added)** Review the Flight Equipment Records Management System for SI items.

14.3.4.4.2.2. **(Added)** Provide plans and scheduling (P&S) with the FERMS due date product for identified SI requirements at the Quarterly Time Change Item (TCI) Meeting.

14.3.4.4.3. **(Added)** Performing work center:

14.3.4.4.3.1. **(Added)** Completes the SI.

14.3.4.4.3.2. **(Added)** Documents the completion of the SI in the MIS (G081 Screen #9099) or FERMS.

14.3.4.5. **(Added)** Maintenance Squadron (MXS):

14.3.4.5.1. **(Added)** Attend the quarterly TCI meeting.

14.3.4.5.2. **(Added)** Order TCI/Verify TCI is in stock as necessary when jobs are loaded into the MIS.

14.3.4.5.3. **(Added)** Complete the Munitions Issue/Turn-in Forms for CAD/PAD items.

14.3.4.5.4. **(Added)** Pick-up and return CAD/PAD items.

14.3.4.5.5. **(Added)** Performing work center completes the TCI, and documents the completion of the TCI in the MIS. (G081 Screen #9099)

14.3.4.5.6. **(Added)** Provide PS&D with date of manufacture, date of installation data as necessary for TCIs.

14.3.7.1. **(Added)** Aircraft Acceptance Procedures.

14.3.7.1.1. **(Added)** Aircraft Acceptance inspections are applicable to aircraft returning from Program Depot Maintenance (PDM); Contract Field Team (CFT). Aircraft transferred or loaned from Air Force Reserve Command (AFRC) units do not require a full acceptance inspection. Those aircraft will only require aircraft inventory and weight and balance (W&B) review.

14.3.7.1.2. **(Added)** All acceptance inspections will require local work cards and/or local JST to be accomplished.

14.3.7.1.3. **(Added)** The Production Superintendent and work leader (WL) Crew Chief (Acceptance Coordinator) will ensure Acceptance Inspection work cards and/or local JST are accomplished and will oversee all maintenance.

14.3.7.1.4. **(Added)** Aircraft Maintenance Squadron (AMXS) and Maintenance Squadron (MXS) Superintendents will ensure manpower is available to support the entire acceptance process timeframe.

14.3.7.1.5. **(Added)** All Air Force Specialty Codes (AFSC) Specialties will be required to load all work center affiliated jobs in the MIS/FMXC2.

14.3.7.1.6. **(Added)** All discrepancies noted will be documented on Air Force Technical Order (AFTO) Form 781A, as well as local developed worksheet. Quality Assurance (QA) will be notified prior to repair of any major discrepancy discovered. Forms documentation will be controlled by the assigned WL Crew Chief.

14.3.7.1.7. **(Added)** The Production Superintendent will schedule the down time needed to complete the Acceptance process and the WL Crew Chief will coordinate the acceptance inspection process.

14.3.7.1.8. **(Added)** Prior to aircraft arrival on station; Plans and Scheduling will schedule a pre-dock and a post-dock meeting. Including prior to and after an aircraft has been loaned to other units.

14.4. ENGINE MANAGEMENT (EM).

14.4.1. Engine Management (EM). EM manages unit efforts to maintain adequate engine support for mission requirements. EM monitors engine removals and replacements, component tracking, engine TCTOs and TCIs, engine records in the MIS and CEMS and performs engine manager duties.

14.4.1.2. EM will:

14.4.1.2.24. Establish a CEMS and MIS contingency plan for when either or both systems are down for more than 48 hours. **(T-2)**

14.4.1.2.24.2. **(Added)** In the event of interruption of service or connectivity problems (more than 48 hours) of FMXC2 or direct line reporting to the Central Data Base (CDB), AF Form 1534, *CEM CDB Report*, Excel Spreadsheets and local documentation will be required to reflect engine status changes. When

systems recover data / information, it will be input and updated by the Engine Manager.

14.4.1.2.25. Develop local engine tracking procedures and documentation methods to be used at deployed locations. **(T-2)**

14.4.1.2.25.3. **(Added)** During extended deployments of assigned aircraft, designates engine monitors from the 434th AMXS/MXAP and/or MXS/MXMP Sections to assimilate and input/forward required engine maintenance documentation transactions using local established Deployed Component Change Work Sheets. Individual designated as engine monitor on deployments will process downloaded engine data from the InFlight Data Recorder (IFDR) PCMIA card and then using the local procedures/instructions for ADADS, send the data to home station. Methods of communication will be by telephone message, e-mail, or FAX.

14.5. Maintenance and FHP Planning Cycle.

14.5.6. Weekly Scheduling. The weekly schedule is the final refinement to the monthly plan and results in the weekly flying and maintenance schedule.

14.5.6.3. Home and deployed units will publish a weekly schedule. **(T-2)** Include the following in the weekly flying and maintenance schedule:

14.5.6.3. **(AFRC)** Job Control Numbers and flying schedule will be loaded in MIS by 1600L on Fridays. **(T-2)** Exception: On Unit Training Assembly (UTA) weekends, the flying schedule and maintenance job control numbers may be loaded by 1600L Sunday.

14.5.6.3.9. **(AFRC)** Adding aircraft, sortie(s), expanding the flying window, tail number swap(s) or configuration change(s) require an AF Form 2407, *Weekly/Daily Flying Schedule Coordination* for audit and analysis purposes. **(T-2)** Changes made during the daily maintenance production meeting also require an AF Form 2407. **(T-2)**

14.5.6.3.9.3. **(Added)** An AF Form 2407, *Weekly/Daily Flying Schedule Coordination* will be initiated, coordinated and filed when there is a change to the weekly schedule affecting tail numbers, take-off and landing times of more than 15 minutes, fuel load changes, receiver changes, configuration, destination changes, plus all added or cancelled sorties.

14.5.6.3.9.3.1. **(Added)** Changes to more than one sortie may be documented on the same form.

14.5.6.3.9.3.2. **(Added)** The AF Form 2407 with specific change information and forward it for coordination through required agencies, Maintenance Group Production Superintendent (Pro-Super), Maintenance Operations Control (MOC), P&S, Command Post (CP), Operations Scheduling Representative at Training Operations (434 OSS/DOTO), through the use of digitally signed e-mails with the completed form attached.

14.5.6.3.9.3.3. **(Added)** Pro-super represents and coordinates as necessary with Aircraft Maintenance Squadron (AMXS) and the Maintenance Squadron Maintenance operations and in conjunction with Maintenance Operations

Center (MOC) will coordinate as necessary to ensure POL and MSL support. Operations Scheduling Representative and Command Post will handle necessary coordination with the Operations Officer and Operations Group.

14.5.6.3.9.4. **(Added)** Pro Super will authorize interchanges between aircraft that were scheduled for flight. Pro Super will initiate the AF Form 2407 with complete information and forward it via electronically signed e-mail through the following agencies in this order: Pro-Super/MOC; Command Post/Operations Scheduling Representative at DOTO; P/S&D; 434 MXG 2407 Validation.

14.5.6.3.9.5. **(Added)** Operations Scheduling Representative at DOTO will initiate operational changes by completing an AF Form 2407. The AF Form 2407 is available on the forms and reports navigation bar; forms folder in Patriot Excalibur (PEX). Notify all affected parties by electronically signed e-mail with a completed AF Form 2407 attached in the following order: Operations Scheduling Representative at DOTO; Pro-Super/MOC; Command Post; P/S&D; 434 MXG 2407 Validation.

14.5.6.3.9.6. **(Added)** Completed AF Forms 2407 will be placed in an organizational mailbox (434 MXG 2407 Validation) by initiating party after all coordination's have been received by electronically signed emails. MOC and Analysis will have access to the organizational mailbox for filing and reporting purposes.

14.5.7. **(Added)** 434 Specific Maintenance and FHP Planning Process.

14.5.7.1. **(Added)** Standardized Flying Window: Normal airfield hours are 0700-2300 daily with the exception of holidays.

14.5.7.1.1. **(Added)** Normal flying will be scheduled to occur during airfield hours.

14.5.7.1.2. **(Added)** Mission essential deviations to normal flying will be coordinated between Operations, Maintenance, and Airfield Operations.

14.5.7.2. **(Added)** Flying Rules:

14.5.7.2.1. **(Added)** Normal Flying Rules:

14.5.7.2.1.1. **(Added)** Up to five daily training flights per day planned as either 3 AM and 2 PM or 2 AM and 3 PM sorties.

14.5.7.2.1.1.1. **(Added)** Scheduled Cross Country Departures and Returns in addition to the training flights will not exceed the daily sortie capability established in the Annual Flying and Maintenance Plan, without negotiation.

14.5.7.2.1.1.2. **(Added)** Deviations will be negotiated during weekly scheduling meetings.

14.5.7.2.1.2. **(Added)** Unit Training Assembly (UTA) Weekend.

14.5.7.2.1.2.1. **(Added)** Up to two local sorties per day.

14.5.7.2.1.2.2. **(Added)** Scheduled Cross Country Departures and Returns in addition to the training flights will not exceed the daily sortie capability established in the Annual Flying and Maintenance Plan, without negotiation.

14.5.7.2.1.2.3. **(Added)** Deviations will be negotiated during weekly scheduling meetings.

14.5.7.2.1.3. **(Added)** The aircraft utilization will not exceed 80% of available aircraft each week to include Local, Cross Country, and Deployed aircraft.

14.5.7.2.2. **(Added)** Surge Flying Rules: Aircraft utilization will not exceed 85% of available aircraft.

14.5.7.2.3. **(Added)** Spare Aircraft.

14.5.7.2.3.1. **(Added)** Maintenance will provide 1 aircraft daily as a spare.

14.5.7.2.3.2. **(Added)** Spare configuration will be the standard configuration unless otherwise requested.

14.5.7.2.3.3. **(Added)** Additional spare and cross country spare requirements will be identified by Operations during the weekly pre scheduling meeting.

14.5.7.3. **(Added)** Quiet Hours: Quiet hours will be implemented for Official Business Only, and will be published in a NOTAMS by base operations.

14.5.7.4. **(Added)** Aircraft Maintenance:

14.5.7.4.1. **(Added)** The standard aircraft turn time for KC-135R aircraft will be 4 hours.

14.5.7.4.2. **(Added)** Aircraft should be crew ready No Later Than (NLT) 1.5 hours prior to the published take-off time.

14.5.7.5. **(Added)** Wing Flying and Maintenance Planning: Annually these procedures will be for the next Fiscal Year. (1 October – 30 September).

14.5.7.5.1. **(Added)** Maintenance Analysis (MMA) will:

14.5.7.5.1.1. **(Added)** NLT 1 August each year, compute the capabilities for the next Fiscal Year (FY), (1 October – 30 September).

14.5.7.5.1.2. **(Added)** Provide the capabilities to Maintenance Plans, Scheduling and Documentation.

14.5.7.5.2. **(Added)** Plans, Scheduling, and Documentation (P/S&D) will:

14.5.7.5.2.1. **(Added)** NLT 20 August each year, (Or within 10 working days of the receipt of the FY flying hour allocations), provide the Maintenance Group Command Staff, AMXS, MXS, Operations Scheduling Office (OSS/DOTO), Flying Squadron Commanders, and the Operations Support Squadron In Flight Refueling Program Manager (434 OSS/DOTB) with the following:

14.5.7.5.2.1.1. **(Added)** Aircraft Capabilities.

14.5.7.5.2.1.2. **(Added)** Aircraft Availability by month.

14.5.7.5.2.1.3. **(Added)** FY PDM Schedule.

14.5.7.5.2.2. **(Added)** NLT the last Operations Group (OG)/Maintenance Group (MXG) weekly scheduling meeting in September:

14.5.7.5.2.2.1. **(Added)** Maintain the approved FY Annual Flying/Maintenance Plan on file.

14.5.7.5.2.2.2. **(Added)** Post a copy of the approved FY Annual Maintenance plan in the MXG/MXG Info\Maintenance Schedule Folder on the local area network (LAN).

14.5.7.5.3. **(Added)** Operations Scheduling Office (OSS/DOTO) will:

14.5.7.5.3.1. **(Added)** NLT 20 August each year, (Or within 10 working days of the receipt of the FY flying hour allocations), provide the Maintenance Group Commander, Aircraft Maintenance Squadron (AMXS), Maintenance Squadron (MXS), Maintenance PS&D, Flying Squadron Commanders, and the Flying Squadron Chief Booms the following factors:

14.5.7.5.3.1.1. **(Added)** Required flying hours/sorties/missions per month.

14.5.7.5.3.1.2. **(Added)** Flying Days per month.

14.5.7.5.3.1.3. **(Added)** Aircraft/Aircrew Alert Requirements.

14.5.7.5.3.1.4. **(Added)** Known/Projected Temporary Duty (TDY) and Special Mission Requirements.

14.5.7.5.3.1.5. **(Added)** Known/Projected Configuration Requirements.

14.5.7.5.3.2. **(Added)** NLT the last OG/MXG weekly scheduling meeting in September, Present the Flying Hour Allocation plan.

14.5.7.5.4. **(Added)** 434 OSS/DOTB will: NLT 1 September, (Or within 10 working days of the receipt of the planning factors) provide PS&D with the Annual Cargo Load Training plan dates.

14.5.7.5.5. **(Added)** Maintenance Supervision will:

14.5.7.5.5.1. **(Added)** Coordinate the response with the Maintenance Group Deputy Commander.

14.5.7.5.5.2. **(Added)** NLT 1 September, (Or within 10 working days of the receipt of the planning factors) provide PS&D, Flying Squadron Commanders, and OSS/DOTO with the following factors:

14.5.7.5.5.2.1. **(Added)** Aircraft required for training.

14.5.7.5.5.2.2. **(Added)** Forecasted Personnel capability.

14.5.7.5.5.2.3. **(Added)** Number of supportable sorties per month.

14.5.7.5.5.2.4. **(Added)** Recommended Block Scheduling Pattern.

14.5.7.5.5.2.5. **(Added)** Statement of limitations.

14.5.7.6. **(Added)** Quarterly Flying and Maintenance Planning:

14.5.7.6.1. **(Added)** OSS/DOTO will:

14.5.7.6.1.1. **(Added)** NLT 25 days prior to the start of the next FY quarter, provide the Flying Squadron DOOs, Maintenance Supervision, and PS&D with the flying hour requirements by squadron per month for the quarter to include:

14.5.7.6.1.1.1. **(Added)** Sorties per Day.

14.5.7.6.1.1.2. **(Added)** Hours per Sortie.

14.5.7.6.1.1.3. **(Added)** Know or Projected Cross Country/Deployment Information.

14.5.7.6.1.1.4. **(Added)** Total Sorties/Hours per Week.

14.5.7.6.1.1.5. **(Added)** Total Sorties/Hours for the month.

14.5.7.6.1.2. **(Added)** NLT the 14 days prior to the start of the next FY Quarter, during the OG/MXG weekly scheduling meeting present the flying hour requirements.

14.5.7.6.1.3. **(Added)** Post the Quarterly Flying Plan in the 434 OG\Schedule\Weekly\Quarterly Schedule Folders on the LAN. File will be accessible by Operations and Maintenance.

14.5.7.6.2. **(Added)** PS&D will:

14.5.7.6.2.1. **(Added)** NLT the 35 days prior to the next FY quarter, provide the OG/CC, OSS/DOTO, Flying Squadron DOOs, and Maintenance Group Supervision the aircraft availability for each squadron per month by week for the next quarter.

14.5.7.6.2.2. **(Added)** Prepare the FY Quarterly Maintenance Plan Checkerboards for each Squadron to include at a minimum:

14.5.7.6.2.2.1. **(Added)** Alert Commitments.

14.5.7.6.2.2.2. **(Added)** Program Depot Maintenance (PDM)/ Conformal Fuel Tank (CFT) Aircraft.

14.5.7.6.2.2.3. **(Added)** Know Cross Country/Deployment/Higher Headquarters (HHQ) directed missions.

14.5.7.6.2.2.4. **(Added)** Periodic (PE)/ Isochronal Inspection (ISO)/Refurbishment Inspections.

14.5.7.6.2.2.5. **(Added)** Hourly Post flight Inspections.

14.5.7.6.2.2.6. **(Added)** Aircraft Wash.

14.5.7.6.2.2.7. **(Added)** Known training requirements.

14.5.7.6.2.2.8. **(Added)** Known Static Displays.

14.5.7.6.2.2.9. **(Added)** Special Inspections that will prevent the use of an aircraft for a day.

14.5.7.6.2.2.10. **(Added)** Time Change Items that will prevent the use of an aircraft for a day.

14.5.7.6.2.2.11. **(Added)** Time Compliance Technical Orders (TCTO) that will prevent the use of an aircraft for a day.

14.5.7.6.2.3. **(Added)** NLT the 14 days prior to the start of the next FY Quarter, during the OG/MXG weekly scheduling meeting:

14.5.7.6.2.3.1. **(Added)** Present the FY Quarterly Maintenance Plan Checkerboard for each Squadron.

14.5.7.6.2.3.2. **(Added)** Consolidate the Maintenance Checkerboards and OSS/DOTO allocation product.

14.5.7.6.2.3.3. **(Added)** Prepare the FY Quarterly Flying/Maintenance Plan Cover sheet for OG/CC, MXG/CC, and WG/CC approvals (Signatures may be obtained during the meeting or by routing the plan for signatures).

14.5.7.6.2.3.4. **(Added)** Maintain/Update the FY Quarterly Maintenance plan.

14.5.7.6.3. **(Added)** Aircrew Flight Equipment (434 OSS/AFE) will: Provide PS&D with the Inspection/Time Change listings for Aircrew Flight Equipment (AFE) equipment during the Quarterly Time Change meeting.

14.5.7.6.4. **(Added)** Wing Public Affairs (434 ARW/PA) will:

14.5.7.6.4.1. **(Added)** NLT 25 days prior to the start of the next FY quarter provide PS&D with the requirements for Static Display Aircraft to support the Wing's Tour Program.

14.5.7.6.4.2. **(Added)** Coordinate additional support as necessary.

14.5.7.7. **(Added)** Monthly Flying and Maintenance Planning

14.5.7.7.1. **(Added)** OSS/DOTO will:

14.5.7.7.1.1. **(Added)** NLT the first OG/MXG weekly scheduling meeting of the month, provide Maintenance Supervision and PS&D with the operational needs for the following month by Squadron, to include:

14.5.7.7.1.1.1. **(Added)** Sorties per Day

14.5.7.7.1.1.2. **(Added)** Hours per Sortie

14.5.7.7.1.1.3. **(Added)** Known or Projected Cross Country/Deployment Information

14.5.7.7.1.1.4. **(Added)** Total Sorties/Hours per Week

14.5.7.7.1.1.5. **(Added)** Total Sorties/Hours for the month

14.5.7.7.1.2. **(Added)** NLT the third OG/MXG weekly scheduling meeting of the month, present the monthly Flying Plan to the OG/CC, MXG/CC, and the WG/CC.

14.5.7.7.2. **(Added)** PS&D will:

14.5.7.7.2.1. **(Added)** NLT the 35 days prior to the start of the next Monthly Schedule provide the OG/CC, OSS/DOTO, Flying Squadron DOOs, and Maintenance Group Supervision the aircraft availability for each squadron by week for the month being planned.

14.5.7.7.2.2. **(Added)** Prepare the Monthly Flying/Maintenance Plan Checkerboards for each Squadron to include at a minimum:

14.5.7.7.2.2.1. **(Added)** Detailed Total Flying Hours/Sorties.

14.5.7.7.2.2.2. **(Added)** Known Cross Country/Deployed Aircraft Destinations/Configurations.

14.5.7.7.2.2.3. **(Added)** Alert Requirements.

14.5.7.7.2.2.4. **(Added)** PDM/CFT.

14.5.7.7.2.2.5. **(Added)** Scheduled Sorties/Turns.

14.5.7.7.2.2.6. **(Added)** Monthly Maintenance Requirements.

14.5.7.7.2.2.7. **(Added)** Scheduled Inspections, Time Changes, TCTOs, Engine Changes, Scheduled Delayed.

14.5.7.7.2.2.8. **(Added)** Discrepancies, Washes, Corrosion Control, Document Reviews, Known Training.

14.5.7.7.2.2.9. **(Added)** Aircraft, Known Display Aircraft.

14.5.7.7.2.2.10. **(Added)** Support Equipment scheduled inspections and known TCTOs.

14.5.7.7.2.2.11. **(Added)** Engine Removal 6 Month Forecast.

14.5.7.7.2.2.12. **(Added)** Known Special Activities.

14.5.7.7.2.2.13. **(Added)** Support Requirements.

14.5.7.7.2.2.14. **(Added)** Aircrew Flight Equipment Inspections.

14.5.7.7.2.2.15. **(Added)** Known Special Requirements.

14.5.7.7.2.3. **(Added)** NLT the third OG/MXG weekly scheduling meeting of the month, present the monthly Maintenance plan with flying requirements removed to the OG/CC, MXG/CC, and the WG/CC.

14.5.7.7.2.4. **(Added)** Prepare the Monthly Flying and Maintenance Plan Cover sheet for OG/CC, MXG/CC, and WG/CC approvals and include it with the consolidated the Monthly Flying and Maintenance Plan (Signatures may be obtained during the meeting or by routing the plan for signatures).

14.5.7.7.2.5. **(Added)** Post a copy of the approved Monthly Flying/Maintenance plan in the MXG/MXG Info\Maintenance Schedule Folder on the LAN.

14.5.7.7.3. **(Added)** Maintenance Supervision will:

14.5.7.7.3.1. **(Added)** Review the operational needs received from OSS/DOTO.

14.5.7.7.3.2. **(Added)** NLT the second OG/MXG weekly scheduling meeting of the month, notify the OSS/DOTO whether requirements can be met or limitations exist.

14.5.7.7.4. **(Added)** Wing Public Affairs (434 ARW/PA) will:

14.5.7.7.4.1. **(Added)** NLT 25 days prior to the start of the next Month, verify with PS&D the Quarterly requirements for Static Display Aircraft to support the Wing's Tour Program.

14.5.7.7.4.2. **(Added)** Coordinate additional support as necessary.

14.5.7.7.5. **(Added)** Weekly Flying and Maintenance Planning:

14.5.7.7.5.1. **(Added)** OSS/DOTO will:

14.5.7.7.5.1.1. **(Added)** NLT 1200 each Tuesday provide the next weekly flying requirements through the Global Decision Support System (GDSS) scheduling program or local product to PS&D to include:

14.5.7.7.5.1.1.1. **(Added)** Local Flying requirements/configurations

14.5.7.7.5.1.1.2. **(Added)** Cross Country/Deployment/HHQ Missions/PDM/CFT requirements/configurations

14.5.7.7.5.1.1.3. **(Added)** Known Off Station Sorties

14.5.7.7.5.1.1.4. **(Added)** Alert Lines

14.5.7.7.5.1.2. **(Added)** Chair the weekly pre-scheduling meeting at each Tuesday.

14.5.7.7.5.1.3. **(Added)** Attend/Present the Weekly Flying Schedule during the Thursday OG/CC, MXG/CC weekly scheduling meeting.

14.5.7.7.5.1.4. **(Added)** Publish the approved GDSS Flying Schedule NLT 1600 each Thursday.

14.5.7.7.5.2. **(Added)** P/S&D will:

14.5.7.7.5.2.1. **(Added)** Prepare the weekly maintenance checkerboards for each Squadron to include all maintenance requirements for the week.

14.5.7.7.5.2.2. **(Added)** Insert the flying requirements into the weekly checkerboards to ensure all maintenance and flying requirements can be met prior to the Tuesday pre-scheduling meeting.

14.5.7.7.5.2.3. **(Added)** Attend the Tuesday pre-scheduling meeting, and coordinate/discuss issues that affect Operations and Maintenance.

14.5.7.7.5.2.4. **(Added)** Attend/Present the Weekly Maintenance Schedule during the Thursday OG/CC, MXG/CC weekly scheduling meeting.

14.5.7.7.5.2.5. **(Added)** Prepare the Weekly and Maintenance Plan Cover sheet for OG/CC and MXG/CC approval.

14.5.7.7.5.2.6. **(Added)** After the Operations Flying Schedule has been published, finalize the combined Weekly Flying and Maintenance Schedule to include:

14.5.7.7.5.2.6.1. **(Added)** Daily Flying Requirements to include Line number, Scheduled Aircraft, Scheduled Takeoff, Scheduled Land, Fuel Load, Duration, Call Sign, Pilot, Configuration/Remarks, and receiver information.

14.5.7.7.5.2.6.2. **(Added)** Spare Aircraft.

14.5.7.7.5.2.6.3. **(Added)** Daily Scheduled Maintenance Requirements.

14.5.7.7.5.2.6.4. **(Added)** Daily Configuration Requirements.

14.5.7.7.5.2.6.5. **(Added)** Daily Special Meeting Requirements.

14.5.7.7.5.2.6.6. **(Added)** Weekly Technical Order Distribution Listing.

14.5.7.7.5.2.6.7. **(Added)** AGE Maintenance Inspections to include Equipment Type, Base Identification (ID), Type Inspection, and Due Dates.

14.5.7.7.5.2.6.8. **(Added)** Support Equipment Inspections to include Equipment Type, Base ID, Type Inspection, and Due Dates.

14.5.7.7.5.2.6.9. **(Added)** Weekly Checkerboards for each Squadron.

14.5.7.7.5.2.6.10. **(Added)** Published GDSS Schedule.

14.5.7.7.5.2.7. **(Added)** Route the completed combined Weekly Flying and Maintenance Schedule to the WG/CC for approval.

14.5.7.7.5.2.8. **(Added)** Post the approved Weekly Flying and Maintenance Schedule in the MXG/MXG Info\Maintenance Schedule Folder on the LAN. Notify all users when schedule is posted.

14.5.7.7.5.2.9. **(Added)** Maintain/File the completed Weekly Flying and Maintenance Schedule.

14.5.7.7.5.3. **(Added)** Wing Public Affairs (434 ARW/PA) will:

14.5.7.7.5.3.1. **(Added)** Provide details of Wing Tours requiring a Static Display Aircraft NLT 1200L each Tuesday the week prior to previously identified Tour Dates.

14.5.7.7.5.3.2. **(Added)** Coordinate additional support as necessary.

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

(Added-434 ARW) DAFI 21-101, *Aircraft and Equipment Maintenance Management*, 20 December 2023

(Added-434 ARW) DAFI 21-101_AFRCSUP, *Aircraft and Equipment Maintenance Management*, 27 March 2026

(Added-434 ARW) DAFI 21-101_AMCSUP, *Aircraft and Equipment Maintenance Management*, 15 July 2024

(Added-434 ARW) DAFI 90-160, *Publications and Forms Management*,

(Added-434 ARW) AFRPD 13-5, *Air Force Nuclear Mission*,

(Added-434 ARW) AFI 10-701, *Operations Security (OPSEC)*, 24 July 2019

(Added-434 ARW) AFMAN 11-2KC-135V3, *KC-135 Operations Procedures*,

(Added-434 ARW) GRISSOMARBI13-201, *Grissom ARB Airfield Operations*, 20 April 2020

(Added-434 ARW) 434 MXGOI 31-101, *Internal Security Operating Instructions*, 12 August 2015

(Added-434 ARW) TO 1C-135-3-10, *Inspection, Refurbishment, and Marking Instructions for Interior Equipment and Ancillary Structure*, 1 May 2022

(Added-434 ARW) TO 1C-135-6CF-1, *Operational Supplement Acceptance and/or Functional Check Flight Checklist*, 15 November 2024

(Added-434 ARW) TO 1C-135-6CL-1, *Pilot Acceptance and/or Functional Check Flight Checklist, Series -135 Aircraft*, 15 November 2024

(Added-434 ARW) TO 1C-135-6CL-3 *Boom Operator Acceptance and/or Functional Check Flight Checklist*, 15 November 2024

(Added-434 ARW) TO 1C-135-6WC-1, *Preflight /Postflight/Hourly Post-Flight Inspection Workcards*, 1 July 2026

(Added-434 ARW) TO 11A-1-61-1, *Storage and Outloading Instructions Conventional Ammunition (Igloo, Magazine, Military Van, Truckloading, and Carloading)*, 16 December 2024

Prescribed Forms

None

Adopted Forms

(Added-434 ARW) DD Form 200, *Financial Liability Investigation of Property Loss*

(Added-434 ARW) DD Form 791, *Aerial Tanker In-flight Issue Log*

(Added-434 ARW) DD Form 2056, *Telephone Monitoring Notification Decal*

(Added-434 ARW) DAF Form 68, *Munitions Authorization Record*

(Added-434 ARW) AF Forms 315, *United States Air Force AVFuels Invoice*

(Added-434 ARW) AF Form 664, *Aircraft Fuels Documentation Log*

(Added-434 ARW) AF Form 1534, *CEM CDB Report*

(Added-434 ARW) AF Form 3131, *General Purpose (11" X 8-1/2")*

(Added-434 ARW) AF Form 4331, *Munitions Transaction Sheet*

(Added-434 ARW) AMC Form 278, *Debriefing and Recovery Plan*

(Added-434 ARW) AFTO Form 43, *USAF Technical Order Distribution Office (TODO) Assignment or Change Request*

(Added-434 ARW) AFTO Form 102, *Munitions Inspection Document*

(Added-434 ARW) AFTO Form 223, *Time Change Requirements Forecast*

Abbreviations and Acronyms

(Added-434 ARW) **ADPE**—Automated Data Processing Equipment

(Added-434 ARW) **ACO**—Administrative Contracting Officer

(Added-434 ARW) **AFDPO**—Air Force Departmental Publishing Office

(Added-434 ARW) **AFF**—Aircrew Flight Equipment

(Added-434 ARW) **AMDS**—Aerospace Medical Squadron

(Added-434 ARW) **AO**—Accountable Officer

(Added-434 ARW) **A/R**—Aero Repair

(Added-434 ARW) **ARW**—Air Refueling Wing

(Added-434 ARW) **BE&PHS**—Bio Engineering & Public Health Services

(Added-434 ARW) **CAS**—Combat Ammunition System

(Added-434 ARW) **CBT**—Computer Based Training

(Added-434 ARW) **CEMP**—Comprehensive Emergency Management Plan

(Added-434 ARW) **CND**—Can Not Duplicate

(Added-434 ARW) **CP**—Command Post

(Added-434 ARW) **EED**—Electro-Explosive Devices

(Added-434 ARW) **FDR/CVR**—Flight Data Recorder and Cockpit Voice Recorder

(Added-434 ARW) **FERMS**—Flight Equipment Records Management System

(Added-434 ARW) **GARB**—Grissom Air Reserve Base

(Added-434 ARW) **GDSS**—Global Decision Support System

(Added-434 ARW) **IFDR**—InFlight Data Recorder

(Added-434 ARW) **ISP**—Installation Security Plan

(Added-434 ARW) **MASO**—Munitions Accountable Systems Officer

(Added-434 ARW) **MDU**—Maintenance Duty Uniform

(Added-434 ARW) **ME**—Mission Essential

(Added-434 ARW) **MPA**—Mass Parking Area

(Added-434 ARW) **MWS**—Mobile Work Stations

(Added-434 ARW) **MXG**—Maintenance Group

(Added-434 ARW) **OSC**—On-Scene Commander

(Added-434 ARW) **OSH**—Occupational Safety and Health

(Added-434 ARW) **PCMCIA**—Personal Computer Memory Card International Association

(Added-434 ARW) **PED**—Personal Electronic Devices

(Added-434 ARW) **PHEO**—Public Health Emergency Officer

(Added-434 ARW) **POV**—Privately Owned Vehicle

(Added-434 ARW) **PWCS**—Personal Wireless Communications Systems

(Added-434 ARW) **QANTTAS**—Quality Assurance Tracking and Trend Analysis System

(Added-434 ARW) **RDS**—Records Disposition Schedule

(Added-434 ARW) **RM**—Risk Management

(Added-434 ARW) **SARM**—Squadron Aviation Resource Management

(Added-434 ARW) **SBSS**—Standard Base Supply System

(Added-434 ARW) **TMO**—Transportation Management Office

(Added-434 ARW) **TRT**—Takeoff Rate Thrust
(Added-434 ARW) **TSC**— Technical Support Center
(Added-434 ARW) **WES**—Work Event Separator
(Added-434 ARW) **WPAFB**—Wright Patterson Air Force Base

Office Symbols

AF/RE—Air Force Reserve
(Added-434 ARW) **72 ARS**—72d Air Refueling Squadron
(Added-434 ARW) **74 ARS**—74th Air Refueling Squadron
(Added-434 ARW) **88 LRS/LGRMCD**—88th Logistics Readiness Squadron Management Command Division
(Added-434 ARW) **122 FW/MXS/MXMFN**—122d Fighter Wing Maintenance Squadron
(Added-434 ARW) **434 AMXS/MXAP**—434th Aircraft Maintenance Squadron Propulsion
(Added-434 ARW) **434 ARW**—434th Air Refueling Wing
(Added-434 ARW) **434 ARW/CP**—434th Air Refueling Wing Command Post
(Added-434 ARW) **434 ARW/FM**—434th Air Refueling Wing Financial Management
(Added-434 ARW) **434 ARW/PA**—434th Air Refueling Wing Public Affairs
(Added-434 ARW) **434 CS**—434th Communication Squadron.
(Added-434 ARW) **434 LRS/LGRMM**—434th Logistics Readiness Squadron Maintenance Support
(Added-434 ARW) **434 LRS/LGRR**—434th Logistics Readiness Squadron
(Added-434 ARW) **434 LRS/LGRVO**—434th Logistics Readiness Squadron Vehicle Operations
(Added-434 ARW) **434 MXG**—434th Maintenance Group
(Added-434 ARW) **434 MXS/MXMP**—434th Maintenance Squadron Motor Pool
(Added-434 ARW) **434 OG**—434th Operations Group
(Added-434 ARW) **434 OSS**—434th Operations Support Squadron
(Added-434 ARW) **434 OSS/AFE**—434th Operations Support Squadron Aircrew Flight Equipment
(Added-434 ARW) **434 OSS/DOTB**—434th Operations Support Squadron In Flight Refueling Program Manager
(Added-434 ARW) **434 OSS/DOTO**—434th Operations Support Squadron Scheduling
(Added-434 ARW) **434 OSS/OSL**—434th Operations Support Squadron Life Support

Terms

(Added) **Condition After Flight**—The state of an aircraft, with regard to its appearance, quality, or working order, the circumstances or factors affecting the way in which it operates.
(Added) **Knock-it-Off**—An assertive statement used anytime any member of the 434 ARW witnesses a potentially unsafe situation during maintenance activities.
(Added) **Pro Super**—The Production Superintendent.
(Added) **RED CAP**—Resample or special sample requested by Non-Destructive Laboratory to verify results.
(Added) **Working Copy**—A document possessing short-term or transitory value, utilized as related or reference-only information for a process or function. This document type may be referred to as a reference-only or draft copy.

Attachment 2

AIRCRAFT MAINTENANCE SQUADRON SUPPORT EQUIPMENT

Table A2.1. AMXS Support Equipment.

Equipment Type ID Number	Applicable Directive	Inspection Requirements	Frequency of Accomplishment
*BRAKE TRAILER (L/M) AGTL03	35-1-246WC-1	CARD 1-001, 3-001 ITEMS 1, 2, 3, 4	SP 6 Month Annual SP 2 Year
LOAD STAND AGR268	35-1-246WC-1	CARDS 18-001, 18- 002, 19-001	180 DAYS 360 DAYS 720 DAYS
LOAD STAND AGR784	35-1-246WC-1	CARDS 18-001, 18- 002, 19-001	180 DAYS 360 DAYS 720 DAYS
VIP STAND AGR920	35-1-246WC-1	CARD 6-002, 6-003, 6-004, 6-005	180 DAYS 360 DAYS
*TRAILER, RUDDERVATOR (L/M) AGRT01	35-1-246WC-1	CARD 1-001, 3-001	6 Month Annual 2 Year
*TRAILER, RUDDERVATOR (L/M) AGRT02	35-1-246WC-1	CARD 1-001, 3-001	6 Month Annual 2 Year
TRANSMISSION JACK AGSF03	35-1-246WC-1	CARD 2-002 ITEMS 3 AND 9	180 DAYS
TRANSMISSION JACK AGSF04	35-1-246WC-1	CARD 2-002 ITEMS 3 AND 9	180 DAYS
TRANSMISSION JACK AGEL18	35-1-246WC-1	CARD 2-001 ITEMS 1, 2A, 3B, 3C, 3D, AND 9	180 DAYS

Attachment 3

MAINTENANCE SQUADRON SUPPORT EQUIPMENT

Table A3.1. MXS Support Equipment.

Equipment Type ID Number	Applicable Directive	Inspection Requirements	Frequency of Accomplishment
*TRAILER, TIRE (L/M) AGTL04	35-1-246WC-1	CARDS vi para 10, 1- 001, 3-001	SP 6 Mo, Annual, SP 2 Year
TRAILER, JACK AGRT45	35-1-246WC-1	CARD 2-002, 2-003 ITEMS 1-5, 8, 9	6 Month 2 Year
*TRAILER FLIGHT CONTROL (L/M) AGTL05	35-1-246WC-1	CARD 1-001, 3-001	SP 6 Mo, Annual, SP 2 Year
*BATTERY LIFT CART AGEL04	Manufacture Manual	Manufacture's Manual	180 DAYS 360 DAYS
*EYEWASH STATION AGEL05	AFMAN 91-203	CHAPTER 9	30 DAYS
*WAYBACK MACHINE AGEL08	LWC-434ARW- 60-10	CARDS 1-13	360 DAYS
*TRAILER AGE AGTL01 (L/M)	35-1-246WC-1	CARD 1-001, 3-001	SP 6 Mo, Annual, SP 2 Year
*AIRCRAFT JACK TRAILER (L/M) AGTL02	35-1-246WC-1	CARD 1-001, 3-001	SP 6 Mo, Annual, SP 12 Mo, SP 2 Year
WELDER AGWE01	LWC- 434ARW- 60-5		180 DAYS 730 DAYS
*RADOME STAND AGRS01	35-1-246WC-1	CARD 1-001, 3-001	SP 6 Mo, Annual,
*FUEL BOWSER AWFB01	35-1-226WC-1	CARD 1-001 thru 3- 001	SP 6 Mo, Annual,SP 2 Year
*FUEL BOWSER AWFB02	35-1-226WC-1	CARD 1-001 thru 3- 001	SP 6 Mo, Annual,SP 2 Year
*FUEL BOWSER AWFB03	35-1-226WC-1	CARD 1-001 thru 3- 001	SP 6 Mo, Annual,SP 2 Year

*FUEL BOWSER AWFB05	35-1-226WC-1	CARD 1-001 thru 3-001	SP 6 Mo, Annual,SP 2 Year
*FUEL BOWSER AWFB06	35-1-226WC-1	CARD 1-001 thru 3-001	SP 6 Mo, Annual,SP 2 Year
*CELL HANGAR AGF 006	35-1-246WC-1	CARD 3-002 ITEM 10	30 DAYS
TAIL STAND AGTST1	35-1-246WC-1	CARD 18-001, 18-002 ITEMS 1-6, 9, 10, AND 11	365 DAYS 180 DAYS 360 DAYS
TRAILER, TIRE AGJT01	35-1-246WC-1	CARD 2-002, 2-003 ITEMS 1-5, 7, 8	6 Month 2 Year
*RUN FENCE (L/M) AGRF01	35-1-246WC-1	CARD 1-001, 3-001	6 Month 2 Year
*RUN FENCE (L/M) AGRF02	35-1-246WC-1	CARD 1-001, 3-001	6 Month 2 Year
*RUN FENCE (L/M) AGRF03	35-1-246WC-1	CARD 1-001, 3-001	180 DAYS 360 DAYS
*RUN FENCE (L/M) AGRF04	35-1-246WC-1	CARD 1-001, 3-001	6 Month 2 Year
*RUN FENCE (L/M) AGRF05	35-1-246WC-1	CARD 1-001, 3-001	180 DAYS 360 DAYS
*RUN FENCE (L/M) AGRF06	35-1-246WC-1	CARD 1-001, 3-001	6 Month 2 Year
*RUN FENCE (L/M) AGRF07	35-1-246WC-1	CARD 1-001, 3-001	6 Month 2 Year
*RUN FENCE(L/M) AGRF08	35-1-246WC-1	CARD 1-001, 3-001	180 DAYS 360 DAYS
*RUN FENCE(L/M) AGRF09	35-1-246WC-1	CARD 1-001, 3-001	6 Month 2 Year
*BONDING CART AGF040	00-25-172	Para 2.11.a. & b 1,-3; Para 2.11.c; Para 2.12. a-e & g	365 DAYS

*BONDING AGF041	CART	00-25-172	Para 2.11.a. & b 1,-3; Para 2.11.c; Para 2.12. a-e & g	365 DAYS
*EXTENSION AGF073	CORD	33-1-32	Chapter 3	180 DAYS
*EXTENSION AGF080	CORD	33-1-32	Chapter 3	180 DAYS
*EXTENSION AGF081	CORD	33-1-32	Chapter 3	180 DAYS
*EXTENSION AGF082	CORD	33-1-32	Chapter 3	180 DAYS
*EXTENSION AGF083	CORD	33-1-32	Chapter 3	180 DAYS

Attachment 4

MUNITIONS PRETASK BRIEFING

TABLE A4.1. Grissom ARB Emergency Numbers.

Emergency Phone Numbers at Grissom ARB	
Fire Department emergency only land line	911
If calling the Fire Department for an emergency with a cell phone do not use 911	(765) 688-3353
Fire Department non-emergency and fire symbol changes	(765) 688-3353
24 hrs Emergency Response Command Post	DSN 388-2124
Security Forces Desk	911 or 688-3385
MOC	688-3975/2462
Command Post	688-2124
Safety Office	688-3032

A4.1. Crew chief is responsible for brief all crew workers, supervisors and casuals on operations to be performed and on each person's role in the task. If visitors arrive after the operation is started, the operation will be stopped and visitors briefed on the hazards and evacuation procedures.

A4.1.1. CREW CHIEFS NAME: _____.

A4.1.2. TASK TO BE PERFORMED: _____.

A4.1.3. DATE: _____.

A4.1.4. TIME: _____.

A4.1.5. Location: _____.

A4.1.6. Applicable T.O. or Operating Instruction providing step-by-step instructions:
_____.

A4.2. Hazard class/ Division and Compatibility Group of all munitions involved in operation:

_____.

A4.2.1. Hazard/Fire Fighting Symbols of all munitions involved:
_____.

A4.2.2. Minimum withdrawal distance: _____.

A4.2.3. Meeting location: _____.

A4.2.4. Safety Requirements/Personal Protective Equipment Requirements:

_____.

A4.3. Explosive Limits: maximum amount of explosives allowed in a facility based on quantity distance. Explosive limits should be posted at each operation location; if not contact your supervisor before start of operation.

A4.3.1. 1.1 _____ lbs NEW.

A4.3.2. 1.2 _____ lbs NEW.

A4.3.3. 1.3 _____ lbs NEW.

A4.3.4. 1.4 _____ lbs NEW.

A4.3.5. Operational limits: Minimum quantity of assets required to support munitions operation. Keep Qty to QUP without exceeding explosive limits.

A4.3.5.1. Item _____ Qty _____.

A4.3.5.2. Item _____ Qty _____.

A4.3.5.3. Item _____ Qty _____.

A4.3.5.4. Item _____ Qty _____.

A4.3.5.5. Item _____ Qty _____.

A4.3.5.6. Item _____ Qty _____.

A4.4. Personal limits: Expose the minimum amount of people to the smallest amount of explosive for the shortest amount of time. Personnel should be kept to minimum essential personnel. Two-person rule (minimum of two personnel require to perform task) applies to all munitions operations involving unpackaged munitions other than small arms ammunitions less than .50 caliber. Casuals should be kept to a minimum.

A4.4.1. Workers.

A4.4.2. Supervisors.

A4.4.3. Casuals.

A4.5. Emergency Procedures:

A4.5.1. Cease all operations and sound the alarm.

A4.5.2. Evacuate all personnel to the Stop Sign at the intersection of Munitions Drive and Readiness Circle.

A4.5.3. Notify appropriate emergency personnel.

A4.5.4. Fight fire. If munitions are engulfed evacuate.

Refer to EOD checklist and Explosive incident/accident checklist in the munitions crew book for further guidance.

A4.5.4.1. _____ will man fire extinguisher.

A4.5.4.2. _____ will notify dispatch and/or fire department via radio or 911.

A4.5.4.3. _____ will ensure all personnel in area are evacuated and accounted for at meeting location. Then will brief emergency personnel on status of personnel accounted for or missing.

A4.6. Pretask Safety Checklist: Answering “no” to any of the following questions (except A4.6.6.) STOP and contact your supervisor before starting.

- A4.6.1. Are you qualified to perform this task? _____ .
- A4.6.2. Are your crew members qualified to perform this task? _____ .
- A4.6.3. Is the appropriate personal protective equipment available? _____ .
- A4.6.4. Are there any T.O. and/or MOIs for the task to be performed? _____ .
- A4.6.5. Have all personnel been briefed on the hazards involved and emergency procedures with this task? _____ .
- A4.6.6. Do any crew members feel they cannot perform this task? _____ .
- A4.6.7. Are there a minimum of two serviceable ABC fire extinguishers available at the operation location? _____ .
- A4.6.8. Have all watches, rings, and jewelry been removed by all crew members?
_____ .
- A4.6.9. Have all warnings, notes, and cautions from applicable tech data/T.O. been briefed?
_____ .
- A4.6.10. Are all cell phones turned off? _____ .
- A4.6.11. Are two forms of communication available in case of emergency (land line, two-way radio)? _____ .
- A4.6.12. Has a visual inspection been accomplished, prior to the start of the task, of all static/grounding bonding straps of the equipment and/or workbench? _____ .
- A4.7. Crew chief will ensure unauthorized personnel do not enter the explosive operation. If entry is required stop operation until visitor is briefed on hazards involved.

Attachment 5

EXPLOSIVE LIMITS

Table A5.1. 434 Explosive Limits.

BUILDING	HC/DC	LIMIT
696	1.1	100lbs N.E.W.
696	1.2.1	5000lbs N.E.W.
696	1.2.2	5000lbs N.E.W.
696	1.2.3	5000lbs N.E.W.
696	1.3	10000lbs N.E.W.
696	1.4	Physical Capacity
695	1.1	0
695	1.2.1	0
695	1.2.2	5000lbs N.E.W.
695	1.2.3	0
695	1.3	10000lbs N.E.W.
695	1.4	Physical Capacity
694	1.1	2125 N.E.W
694	1.2.1	0
694	1.2.2	0
694	1.2.3	0
694	1.3	0
694	1.4	Physical Capacity
694A1	1.1	425 N.E.W
694A1	1.2.1	0
694A1	1.2.2	0
694A1	1.2.3	0
694A1	1.3	0
694A1	1.4	Physical Capacity
694A2	1.1	425lbs N.E.W.
694A2	1.2.1	0
694A2	1.2.2	0
694A2	1.2.3	0
694A2	1.3	0
694A2	1.4	Physical Capacity

694A3	1.1	425
694A3	1.2.1	0
694A3	1.2.2	0
694A3	1.2.3	0
694A3	1.3	0
694A3	1.4	Physical Capacity
694A4	1.1	425lbs N.E.W.
694A4	1.2.1	0
694A4	1.2.2	0
694A4	1.2.3	0
694A4	1.3	0
694A4	1.4	Physical Capacity

Attachment 6

EXPLOSIVE ACCIDENT/MISHAP CHECKLIST

Figure A6.1. Explosive Accident/Mishap Checklist.

Upon notification of an explosive incident/accident, notify the following immediately:

1. Fire Dept.....911/688-3353
2. Security.....688-3385

Once reported to Fire Department and Security notify the following:

3. Munitions.....688-4122/4121
4. QA.....688-2315/4907
5. Command Post.....688-2124
6. MOC.....688-3975/2462
7. Safety.....688-3032
8. EOD.....Use EOD Checklist

Obtain the following information. However, do not delay evacuation or rescue/firefighting to record this information:

1. Date: _____ Time: _____
2. Notified By: _____
3. Location: _____
4. Explosive(s) Involved:

NSN _____	Nomenclature _____	Qty _____
NSN _____	Nomenclature _____	Qty _____
NSN _____	Nomenclature _____	Qty _____
NSN _____	Nomenclature _____	Qty _____
NSN _____	Nomenclature _____	Qty _____

5. Personnel Injured: Yes _____ No: _____

6. Names of all personnel involved in the operation:

7. Detailed description of mishap (Use attachment sheet if necessary):

Attachment 7

EOD CHECKLIST

Figure A7.1. EOD Checklist.

Use the Explosive Accident/Mishap checklist to record munitions information prior to calling EOD.

Upon notification of EOD obtain the following:

1. EOD Notified by: _____ Date/Time: _____
 2. Nature of incident: _____

3. Are munitions engulfed in flames: YES NO Time: _____
 4. Name/rank of EOD person taking the call: _____

Notify the following:

1. EOD (Selfridge ANGB, MI) DSN 273-
 5609/4503(24hr)
 Comm. (586) 307-6158
 2. Fire Dept.....911/688-3353

Use discretion on calling order

1. Safety.....688-3032
 2. Munitions.....688-4122/4121
 3. QA.....688-2315/4907
 4. Maint. Super..... 688-3986
 5. Command Post 688-2124
 6. MOC.....688-3975/2462

Detailed account of incident/accident (use attachment sheet if necessary): _____

Corrective Action given by EOD (use attachment sheet if necessary): _____

Attachment 8

AREA 1 PANEL SHEET

Table A8.1. Area 1 Panel Sheet.

TECHNICIANS:			ACFT TAIL #:	
			DATE:	
PANEL #	PANEL	REMOVED BY SIGNATURE & MAN#	INSTALLED BY SIGNATURE & MAN #	INSPECTED BY SIGNATURE & MAN #
1	RADOME			
2	NOSE STEERING METERING VALVE COVER			
3	ELEC COMP ACCESS DOOR (BEHIND NOSE GEAR)			
4	LOWER ALL PDI LIGHT DOORS			
5	CENTER WING EQUIPMENT BAY DOOR			
6	KEEL BEAM BAY ACCESS DOORS			
7	HYDR ACCESS PANEL B3-2			
8	HYDR ACCESS PANEL B3-5			
9	CREW ENTRY LATCH MECH COVER			
10	CREW ENTRY DOOR CABLE WINCH DRUM ASSY COVER			
11	STABTRIM CHAIN ACCESS PILOTS			

	CONTROL STAND (FWD)			
12	STABTRIM CHAIN ACCESS PILOTS CONTROL STAND (AFT)			
13	CARGO DOOR FWD HANDLE TORQUE TUBE ACCESS PANEL			
14	CARGO DOOR AFT HANDLE TORQUE TUBE ACCESS PANEL			
15	CARGO DOOR FWD LOUVERED ACCESS COVER			
16	CARGO DOOR AFT LOUVERED ACCESS COVER			
17	CARGO DOOR FWD PUSHROD ACCESS PANEL			
18	CARGO DOOR AFT PUSHROD ACCESS PANEL			
19	CARGO DOOR FWD RT LATCH HANDLE ACCESS COVER			
20	CARGO DOOR FWD LT LATCH HANDLE ACCESS COVER			
21	CARGO DOOR AFT RT LATCH HANDLE ACCESS COVER			

22	CARGO DOOR AFT LT LATCH HANDLE ACCESS COVER			
23	LATRINE FLOORING			
24	ALL HEADER DUCT FLOORING			
25	FLOOR PANEL W/W FLAP BYPASS VALVE ACCESS PANEL			
26	OTBD FLOORING FROM BS 620 TO BS 700			
27	OTBD FLOORING FROM BS 820 TO BS 1030			
28	FLOORING OVER PRESSURE RELIEF VALVES (BS 820 & 960)			
29	FLOORING OVER PRESSURE SEALS (BS 620 & 820)			
30	FLOORING IN FRONT OF CARGO DOOR			
31	FLOORING AT OVERWING AND AFT HATCHES			
32	FLOORING OVER CONTROL CABLES FROM BS 360 TO 1380			
33	FWD A/R PUMP PANEL (B3-9)			
34	AFT A/R PUMP PANEL (B3-11)			
35	LT JACK ACCESS PANEL			

36	RT JACK ACCESS PANEL			
37	NLG HORSESHOE FAIRING			

Attachment 9

AREA 2 PANEL SHEET

Table A9.1. Area 2 Panel Sheet.

TECHNICIANS:			ACFT TAIL #:	
			DATE:	
PANEL #	PANEL	REMOVED BY SIGNATURE & MAN#	INSTALLED BY SIGNATURE & MAN #	INSPECTED BY SIGNATURE & MAN #
1	LEADING EDGE WING ROOT PANEL			
2	LEADING EDGE PANEL INBD #2 ENG (MOST INBD)			
3	LEADING EDGE PANEL INBD #2 ENG (MIDDLE)			
4	LEADING EDGE PANEL INBD #2 ENG (MOST OTBD)			
5	LEADING EDGE PANEL BETWEEN #1 & #2 ENG			
6	LEADING EDGE PANEL OTBD #1 ENG (SMALL PANEL)			
7	LEADING EDGE PANEL OTBD #1 ENG (MOST INBD)			
8	LEADING EDGE PANEL OTBD #1 ENG (MIDDLE)			
9	LEADING EDGE PANEL OTBD #1 ENG (MOST OTBD)			
10	#1 ENG FWD NACELLE FAIRING (KNEECAP)			

11	#2 ENG FWD NACELLE FAIRING (KNEECAP)			
12	#1 ENG OTBD SAILBOAT ACCESS PANEL			
13	#1 ENG STRUT ACCESS PANEL ROUND (1 OF 3)			
14	#1 ENG STRUT ACCESS PANEL ROUND (2 OF 3)			
15	#1 ENG STRUT ACCESS PANEL ROUND (3 OF 3)			
16	#1 ENG STRUT ACCESS PANEL OVAL (1 OF 3)			
17	#1 ENG STRUT ACCESS PANEL OVAL (2 OF 3)			
18	#1 ENG STRUT ACCESS PANEL OVAL (3 OF 3)			
19	#1 ENG OTBD STRUT DRAG FITTING PANEL (FUSE PANEL)			
20	#1 ENG INBD STRUT DRAG FITTING PANEL (FUSE PANEL)			
21	#2 ENG FIRE EXTINGUISHER ACCESS PANEL			
22	#2 ENG STRUT ACCESS PANEL ROUND (1 OF 3)			
23	#2 ENG STRUT ACCESS PANEL ROUND (2 OF 3)			
24	#2 ENG STRUT ACCESS PANEL ROUND (3 OF 3)			
25	#2 ENG STRUT ACCESS PANEL OVAL (1 OF 3)			

26	#2 ENG STRUT ACCESS PANEL OVAL (2 OF 3)			
27	#2 ENG STRUT ACCESS PANEL OVAL (3 OF 3)			
28	#2 ENG OTBD STRUT DRAG FITTING PANEL (FUSE PANEL)			
29	#2 ENG INBD STRUT DRAG FITTING PANEL (FUSE PANEL)			
30	#1 OTBD UPPER GAP PANEL			
31	#1 OTBD LOWER GAP PANEL			
32	#1 INBD UPPER GAP PANEL			
33	#1 INBD LOWER GAP PANEL			
34	#2 OTBD UPPER GAP PANEL			
35	#2 OTBD LOWER GAP PANEL			
36	#2 INBD UPPER GAP PANEL			
37	#2 INBD LOWER GAP PANEL			
38	#2 WRAP AROUND PANEL			
39	OTBD DRY BAY PANEL (fuel equipment)			
40	INBD DRY BAY PANEL (SCOOP)		G081	G081
41	INBD DRY BAY PANEL (SCREEN)		G081	G081

42	OTBD AILERON INBD PUSHROD PANEL (SM PANEL BTM WING)			
43	OTBD AILERON OTBD PUSHROD PANEL (SM PANEL BTM WING)			
44	UPPER OTBD ALRN CONTROL LINK ACCESS PANEL			
45	OTBD ALRN ACCESS PANELS (UPPER BUBBLE PANEL)			
46	UPPER OTBD ALRN LOCKOUT PANEL			
47	LOWER OTBD ALRN LOCKOUT PANEL			
48	#1 SPOILER ACTUATOR ACCESS PANEL			
49	#2 SPOILER ACTUATOR ACCESS PANEL			
50	#3 SPOILER ACTUATOR ACCESS PANEL			
51	#4 SPOILER ACTUATOR ACCESS PANEL			
52	INBD ALRN SNUBBER ACCESS PANEL			
53	SPOILER CONTROL VALVE COVER (BIRD CAGE)			

54	INBD ALRN TAB PUSHROD PANEL (LWR BUBBLE PANEL)			
55	INBD ALRN BALANCE BAY PANEL			
56	FORWARD OUTBOARD STRUT DOOR			
57	W-44 ACCESS PANEL			
58	ALRN BUS CABLE COVER (IN WHEEL WELL)			
59	WING BEAVER TAIL PANEL			
60	ACCESS PANEL UNDER BEAVER TAIL PANEL			
61	INBD FLAP GEARBOX ACCESS PANEL (topside)			
62	OTBD SPOILER CONTROL VALVE ACCESS PANEL		G081	G081
63	MLG WHEEL WELL AFT BULKHEAD PANEL (LARGE)			
64	MLG WHEEL WELL AFT BULKHEAD PANEL (SMALL)			
65	HYDRAULIC RESERVIOR ACCESS PANEL			
66	LOWER #1 THRU #5 COVE LIP DOORS			
67	#1 & #2 ENG FAN DUCT COWLING			

68	LT INBD AILERON TRIM ACTUATOR (OKLA)			
69	LT INBD AILERON EQUIP PANEL			
70	LT OTBD FLAP, INBD GEARBOX ACCESS			
71	LT TRIANGLE WALKING BEAM ACCESS			
72	LT SQUARE WALKING BEAM ACCESS			

Attachment 10

AREA 3 PANEL SHEET

Table A10.1. Area 3 Panel Sheet.

TECHNICIANS:			ACFT TAIL #:	
			DATE:	
PANEL #	PANEL	REMOVED BY SIGNATURE & MAN#	INSTALLED BY SIGNATURE & MAN #	INSPECTED BY SIGNATURE & MAN #
1	LEADING EDGE WING ROOT PANEL			
2	LEADING EDGE PANEL INBD #3 ENG (MOST INBD)			
3	LEADING EDGE PANEL INBD #3 ENG (MIDDLE)			
4	LEADING EDGE PANEL INBD #3 ENG (MOST OTBD)			
5	LEADING EDGE PANEL BETWEEN #3 & #4 ENG			
6	LEADING EDGE PANEL OTBD #4 ENG (SMALL)			
7	LEADING EDGE PANEL OTBD #4 ENG (INBD)			
8	LEADING EDGE PANEL OTBD #4 ENG (MIDDLE)			
9	LEADING EDGE PANEL OTBD #4 ENG (OTBD)			
10	#3 ENG FWD NACELLE FAIRING (KNEECAP)			
11	#4 ENG FWD NACELLE FAIRING (KNEECAP)			

12	#4 ENG OTBD SAILBOAT ACCESS PANEL			
13	#4 ENG STRUT ACCESS PANEL ROUND (1 OF 3)			
14	#4 ENG STRUT ACCESS PANEL ROUND (2 OF 3)			
15	#4 ENG STRUT ACCESS PANEL ROUND (3 OF 3)			
16	#4 ENG STRUT ACCESS PANEL OVAL (1 OF 3)			
17	#4 ENG STRUT ACCESS PANEL OVAL (2 OF 3)			
18	#4 ENG STRUT ACCESS PANEL OVAL (3 OF 3)			
19	#4 ENG OTBD STRUT DRAG FITTING PANEL(FUSE PANEL)			
20	#4 ENG INBD STRUT DRAG FITTING PANEL(FUSE PANEL)			
21	#3 ENG FIRE EXTINGUISHER ACCESS PANEL			
22	#3 ENG STRUT ACCESS PANEL ROUND (1 OF 3)			
23	#3 ENG STRUT ACCESS PANEL ROUND (2 OF 3)			
24	#3 ENG STRUT ACCESS PANEL ROUND (3 OF 3)			
25	#3 ENG STRUT ACCESS PANEL OVAL (1 OF 3)			
26	#3 ENG STRUT ACCESS PANEL OVAL (2 OF 3)			

27	#3 ENG STRUT ACCESS PANEL OVAL (3 OF 3)			
28	#3 ENG OTBD STRUT DRAG FITTING PANEL(FUSE PANEL)			
29	#3 ENG INBD STRUT DRAG FITTING PANEL(FUSE PANEL)			
30	#4 OTBD UPPER GAP PANEL			
31	#4 OTBD LOWER GAP PANEL			
32	#4 INBD UPPER GAP PANEL			
33	#4 INBD LOWER GAP PANEL			
34	#3 OTBD UPPER GAP PANEL			
35	#3 OTBD LOWER GAP PANEL			
36	#3 INBD UPPER GAP PANEL			
37	#3 INBD LOWER GAP PANEL			
38	#3 WRAP AROUND PANEL			
39	OTBD DRY BAY PANEL (fuel equipment)			
40	INBD DRY BAY PANEL (SCOOP)		G081	G081
41	INBD DRY BAY PANEL (SCREEN)		G081	G081

42	OTBD AILERON INBD PUSHROD PANEL (SM PANEL BTM WING)			
43	OTBD AILERON OTBD PUSHROD PANEL (SM PANEL BTM WING)			
44	UPPER OTBD ALRN CONTROL LINK ACCESS PANEL			
45	OTBD ALRN ACCESS PANELS (UPPER BUBBLE PANEL)			
46	UPPER OTBD ALRN LOCKOUT PANEL			
47	LOWER OTBD ALRN LOCKOUT PANEL			
48	#5 SPOILER ACTUATOR ACCESS PANEL			
49	#6 SPOILER ACTUATOR ACCESS PANEL			
50	#7 SPOILER ACTUATOR ACCESS PANEL			
51	#8 SPOILER ACTUATOR ACCESS PANEL			
52	INBD ALRN SNUBBER ACCESS PANEL			
53	SPOILER CONTROL VALVE COVER (BIRD CAGE)			

54	INBD ALRN TAB PUSHROD PANEL (LWR BUBBLE PANEL)			
55	INBD ALRN BALANCE BAY PANEL			
56	FORWARD OUTBOARD STRUT DOOR			
57	W-54 ACCESS PANEL			
58	ALRN BUS CABLE COVER (IN WHEEL WELL)			
59	WING BEAVER TAIL PANEL			
60	ACCESS PANEL UNDER BEAVER TAIL PANEL			
61	INBD FLAP GEARBOX ACCESS PANEL			
62	OTBD SPOILER CONTROL VALVE ACCESS PANEL		G081	G081
63	MLG WHEEL WELL AFT BULKHEAD PANEL (LARGE)			
64	MLG WHEEL WELL AFT BULKHEAD PANEL (SMALL)			
65	HYDRAULIC RESERVIOR ACCESS PANEL			
66	LOWER #6 THRU #10 COVE LIP DOORS			
67	#3 & #4 ENG FAN DUCT COWLING			

68	RT INBD AILERON TRIM ACTUATOR(OKLA)			
69	RT INBD AILERON EQUIP PANEL			
70	RT OTBD FLAP, INBD GEARBOX ACCESS			
71	RT TRIANGLE WALKING BEAM ACCESS			
72	RT SQUARE WALKING BEAM ACCESS			

Attachment 11

AREA 4 PANEL SHEET

Table A11.1. Area 4 Panel Sheet.

TECHNICIANS:			ACFT TAIL #:	
			DATE:	
PANEL #	PANEL	REMOVED BY SIGNATURE & MAN#	INSTALLED BY SIGNATURE & MAN #	INSPECTED BY SIGNATURE & MAN #
1	HYDRAULIC ACCESS PANEL B-59			
2	HYDRAULIC ACCESS PANEL B-69			
3	BOOM OPERATORS SIGHTING DOOR			
4	BOOM POD FAIRING DOOR (BATHTUB)			
5	BOOM ACCESS PANEL (R-1)			
6	BOOM ACCESS PANEL (R-2)			
7	BOOM ACCESS PANEL (R-3)			
8	BOOM ACCESS PANEL (R-4)			
9	BOOM ACCESS PANEL (R-7)			
10	BOOM ACCESS PANEL (R-8)			
11	BOOM ACCESS PANEL (R-9)			
12	BOOM ACCESS PANEL (R-10)			
13	BOOM ACCESS PANEL (R-11)			

14	BOOM ACCESS PANEL (R-15)			
15	LT RUDDEVATOR POWER UNIT ACCESS PANEL (R-19)			
16	RT RUDDEVATOR POWER UNIT ACCESS PANEL (R-20)			
17	UPPER RUDDEVATOR ACCESS PANEL (R-21)			
18	UPPER RUDDEVATOR ACCESS PANEL (R-22)			
19	LOWER RUDDEVATOR ACCESS PANEL (R-23)			
20	LOWER RUDDEVATOR ACCESS PANEL (R-24)			
21	TAIL COMPARTMENT ACCESS DOOR (HELL HOLE)			
22	LT TAILCONE ATTACH FITTING ACCESS DOOR			
23	RT TAILCONE ATTACH FITTING ACCESS DOOR			
24	LT ELEVATOR SNUBBER ACCESS PANEL			
25	RT ELEVATOR SNUBBER ACCESS PANEL			
26	LT INBD ELEVATOR ACCESS PANEL			
27	RT INBD ELEVATOR ACCESS PANEL			

28	LT ELEVATOR TAB CONTROL ACCESS PANEL			
29	RT ELEVATOR TAB CONTROL ACCESS PANEL			
30	LEFT VERTICAL STAB GAP PANEL			
31	RUDDER FLUTTER DAMPER ACCESS COVER (LWR LT)			
32	YAW SERIES ACCESS PLATE			
33	LT RUDDER PCU PANEL			
34	RT RUDDER PCU PANEL			
35	Q-INLET ACCESS PANEL			
36	RUDDER CONTROL QUADRANT ACCESS PANEL			
37	RUDDER Q-SPRING ACCESS PANEL			
38	RUDDER L/E WRAP PANEL (RT SIDE)			
39	RUDDER TAB CONTROL ROD ACCESS PANEL (LONG ONE)			
40	RUDDER CENTER HINGE ACCESS PANELS (RIGHT SIDE)			

41	PLYWOOD FLOOR IN HELL HOLE (FOR CABLE INSP)			
42	AFT A/R PUMP ACCESS (B6-4)			
43	FWD A/R PUMP ACCESS (B6-2)			
44	BOOM SIGHTING WINDOW			
45	HF COUPLER ACCESS PANEL			
46	BOOM LOWER CHAIN GUARD AFT (ABOVE R-15 PNL)			
47	BOOM LOWER CHAIN GUARD FWD (ABOVE R-15 PNL)			