BY ORDER OF THE COMMANDER
RAF LAKENHEATH (USAFE)

DEPARTMENT OF THE AIR FORCE
INSTRUCTION

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Supplement

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Maintenance

AIRCRAFT AND EQUIPMENT
MAINTENANCE MANAGEMENT

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This supplement sets out Lakenheath-specific procedures for maintenance of all assigned aircraft and equipment. This publication applies to all assigned, attached or associated units of the 48th Fighter Wing (FW). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*. Route AF Form 847s from the field through the appropriate functional chain of command. This publication may not be supplemented or further implemented/extended. Ensure that all records created as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322*, Records Management and Information Governance Program,* and are disposed of in accordance with the Air Force Records Disposition Schedule which is located in the Air Force Records Information Management system.

SUMMARY OF CHANGES

This publication has been substantially revised and should be completely reviewed. It has been revised to accommodate changes to the parent publications. MXG guidance on Personal Electronic Devices (PED) has been added, along with the majority of the FOD/DOP program being removed to a local Operating Instruction. EOR procedures have also been removed to a local Operating Instruction.

DAFI 21-101, 16 January 2020, and DAFI 21-101 USAFE-AFAFRICA Supplement, 25 August 2020 are supplemented as follows:

1.3.4.1. **(Added)** Request for Maintenance Assistance. All 107 requests will be submitted into Automated Technical Assistance Request (AUTOTAR) and sent to MXG/CC or designated representative for awareness.

1.15.2.1.1. **(Added)** Royal Air Force Lakenheath (RAFL) Flightline Personal Electronic Device guidance:

1.15.2.1.1.1. **(Added)** Personal electronic or communication devices (e.g. cell phones, tablets etc.) possessed on the flight line or in maintenance work areas will ONLY be used for official/authorized business.

1.15.2.1.1.2. **(Added)** Use of PEDs for official business is an individual election and is not mandated. Therefore, any damage, service provider costs, or other fees will be the sole responsibility of the individual and not the USAF.

1.15.2.1.1.3. **(Added)** All use of PEDs WILL follow FOD prevention guidelines IAW DAFI 21-101 paragraph 11.8 and command supplements.

1.15.2.1.1.4. **(Added)** Units will ensure compliance with the following restrictions to protect the safety and security of personnel, aircraft, equipment and information:

1.15.2.1.1.4.1. **(Added)** PEDs WILL NOT be used during explosive loading, refuel/defuel O&M requiring electrostatic grounding of personnel. They shall be turned off or removed from the area (placing devices in the silent, vibrate or airplane mode does not satisfy this requirement). PEDs WILL NOT at any time be closer than 10 feet from ANY explosive or explosive components, aircraft fuel vent outlets, or within 50 feet of LOX servicing operations, nor will electronic devices be placed on grounded surfaces where explosives operations are conducted. Deviation from other applicable TOs or publications are not authorized. Personnel will comply with restrictions in TO 00-25-172, DESR 6055.09 AFMAN 91-201, *Explosive Safety Standards*, and AFI 91-207, *The US Air Force Traffic Safety Program*.

1.15.2.1.1.4.2. **(Added)** PEDs WILL NOT be near any Nuclear Surety operations under any circumstances.

1.15.2.1.1.4.3. **(Added)** PEDs WILL NOT be used in the vicinity of classified material or operations under any circumstances.

1.15.2.1.1.4.4. **(Added)** PEDs WILL NOT be used for official or unofficial photos. Inadvertent capture of images or video will be immediately reported to the base Information Protection Office. Capture of classified material or operations could result in confiscation of individual's personal device.

1.15.2.1.1.4.5. **(Added)** PEDs WILL NOT be utilized as eTools (technical data) while performing maintenance.

1.15.2.1.1.4.6. **(Added)** The use of PEDs in any capacity prejudicial to good order and discipline is strictly prohibited. Squadron Commanders may enforce more restrictive PED guidance to ensure safe maintenance and uninterrupted production efforts.

1.15.3.1. **(Added)** PEDs are not allowed in classified processing areas unless specifically authorized by other DoD regulations and/or AFIs.

2.2.3.2. **(Added)** All maintenance squadrons/units will ensure all eTools, electronic/cyber devices, test/support equipment meet the requirements for cyber discipline IAW AFMAN 17-1301, or the established requirement set out in applicable MDS/equipment TO and/or Equipment Program Office.

2.4.44.1. **(Added)** Prior to working repeat/recur discrepancies, ensure 7-level technician reviews a history of that system from IMDS using screen #123.

2.4.44.2. **(Added)** Ensure all subsequent maintenance actions for repeat/recur discrepancies are reported in IMDS using screen #907. Annotate with a comprehensive statement of corrective action(s).

2.4.44.3. **(Added)** For aircraft parts removed and turned into supply system, attach and annotate AFTO Form 350 with REPEAT, RECUR, or check for possible BAD ACTOR component. Technicians will also include their phone extension, work center, and a thorough explanation of the discrepancy to aid in troubleshooting.

2.4.44.4. **(Added)** For off-equipment item repair: Prior to the performance of any maintenance, personnel will make every effort to locate any previous maintenance history for the item. This includes reviewing history cards, local databases, IMDS records, and work packages.

2.4.44.5. **(Added)** Analysis Section will review repeat/recur, and CND data daily to identify technical errors and negative trends.

2.4.44.5.1. **(Added)** Provide trend analysis using data extracted from IMDS when requested. Maintenance Management Analysis will provide results of analysis to affected work centers.

2.4.44.6. **(Added)** If a repeat/recur/CND discrepancy is a red diagonal, the applicable corrective action will be reviewed and cleared by a technician, 7-level or higher. When satisfied that all pertinent maintenance procedures have been taken, the 7 level will take the following actions to clear the original discrepancy in the AFTO Form 781A, and IMDS: In the corrective actions block, enter a comprehensive statement of all actions that were taken to duplicate the discrepancy. Include TO page, paragraph, figure number or electronic reference for those actions.

2.7.13.1. **(Added)** WS and Wing Weapons Safety in coordination with the WWM will be the final authority for determining the appropriate aircraft Immediately Prior to Launch (IPL)/safe, arm/de-arm, and unloading procedures when major command directives do not address the situation.

2.7.13.2. **(Added)** During all Live Munition IPL/safing operations, a minimum of two certified 2W1X1 personnel, of which one must be a certified load crew team chief, will be present for live munitions (i.e. live CATM-9M, AIM-9, AIM-120, GBU-38, chaff/flare).

2.7.13.2.1. **(Added)** A minimum of two qualified 2W1X1 personnel (of which one must be checklist qualified) will be utilized for inert munitions (i.e. CATM-9X, CATM-120, and BDU-50/56s).

2.7.13.3. **(Added)** Aircraft Parking.

2.7.13.3.1. **(Added)** Aircraft carrying live forward-firing munitions will be positioned for IPL/Safing such that the weapon systems are directed towards a barrier (i.e. PAS doors) or using safe headings IAW Lakenheath Instruction 11-250, *Airfield and Flying Operations,* and Lakenheath Ministry Of Defence (MOD) Safe Headings Map. Aircraft will remain there until the

aircraft is armed/safe IAW applicable checklists. For all other aircraft not carrying live forward-firing munitions, IPL/safing will be conducted on Runways 24/06 arm/de-arm area parking spots.

2.7.13.4. **(Added)** Aircraft returning with hung external ordnance (Recovery):

2.7.13.4.1. **(Added)** Upon landing, the aircraft will be directed to park in the hung ordnance/hot gun area as designated by Lakenheath Instruction 11-250.

2.7.13.4.2. **(Added)** MOC will notify the WS Emergency Communications Center, MXG/MXQ, FW/SEW, Armament Flight and Munitions Control.

2.7.13.4.3. **(Added)** The SFO/Incident Commander (IC) will control access to the aircraft involved in hung ordnance/hot gun emergencies until munitions are safed IAW TO 1F-15A-33-1-2, *Non-nuclear Munition Loading Procedures,* and 1F-15E-33-1-2, *Non-Nuclear Munitions Loading Procedures*. Weapons personnel will not approach the aircraft until directed by the SFO/IC.

2.7.13.4.4. **(Added)** If the munitions can be safed IAW TO 1F-15A/E-33-1-2 the Weapons Expediter or senior Weapons person will direct the load crew to accomplish safing procedures.

2.7.13.4.5. **(Added)** If an abnormal condition exists (munitions cannot be safed) and the procedures in TO 1F-15A/E-33-1-2 do not address the irregularity, safe all munitions minus the affected area and advise SFO/IC to declare a ground emergency.

2.7.13.4.6. **(Added)** For F-15C/D/E Hung guns, inspect doors 42 and 45 for gun powder, loose parts or loose rounds and verify that rounds are in the clearing cam path. If the rounds are in the firing cam path and/or gun powder, loose parts or loose rounds are present, a ground emergency will be declared. Ground the aircraft and install the Hold Back Tool (HBT) to ensure the clearing sector is flush against the housing and the HBT is secured. Ensure the down load pin is removed and attempt to rotate the gun at least one full rotation to clear the system. If the gun does not rotate, re-verify HBT is installed correctly and then re-attempt to rotate gun. If the problem persists, advice SFO/IC for aircraft shut down. At this time the aircraft will be turned over to Armament Flight personnel to lead the assessment effort.

2.7.13.4.7. **(Added)** If an abnormal condition exists (munitions cannot be safed) and the procedures in TO 1F-15A/E-33-1-2 do not address the irregularity, a ground emergency will be declared. Notify MOC and run appropriate emergency checklist(s) as applicable. While the aircrew makes all efforts to proceed over to Hung Ordinance Area.

2.7.13.4.8. **(Added)** Responding to a hung missile. Upon landing, the aircraft will be directed to park in the hung missile area as designated by Lakenheath Instruction 11-250. The aircraft will taxi to the identified PAS apron and point the nose of the aircraft directly at the PAS main doors. **Note**: PAS main doors will be closed prior to the aircraft arrival.

2.7.13.5. **(Added)** Ground Emergencies involving munitions:

2.7.13.5.1. **(Added)** When a munitions mishap occurs or an unknown or unsafe condition is detected involving munitions, flightline personnel will declare a ground emergency and will notify the MOC.

2.7.13.5.2. **(Added)** Flightline personnel will evacuate non-essential personnel and establish a cordon with sentries to prohibit entry of pedestrians or vehicle traffic until arrival of the Fire Chief or designated representative.

2.7.13.5.3. **(Added)** Fire Chief or his designated representative is the SFO/IC and will control access to aircraft or munitions involved in the incident.

2.7.13.5.4. **(Added)** For fires involving explosives, follow the minimum withdrawal distances outlined in DESR 6055.09 AFMAN 91-201 and MOD Explosives Regulation DSA03.OME Part 2, *In-Service and Operational Safety Management of OME*, based on the class/division of the munitions involved. The SFO/IC may further adjust withdrawal distances or direct other evacuations as required. No one will reenter the evacuated area except as directed by the SFO/IC.

2.7.13.5.5. **(Added)** EOD will inspect the munitions IAW 60 series TOs to determine if munitions require application of safing procedures, emergency disposal or release munitions back to Weapons personnel for download or movement. No one will handle affected munitions until EOD has made an assessment.

2.7.13.5.6. **(Added)** Termination of the ground emergency will be declared by the SFO/IC.

2.7.13.6. **(Added)** Standard Gun/ammunition loading system jam clearing procedures.

2.7.13.6.1. **(Added)** Notify MOC, QA, Munitions Control, Armament Flight, and Weapons Standardization of all jammed guns, ammunition loading system.

2.7.13.6.2. **(Added)** Armament Flight will respond to all jams in a timely manner to assist flightline maintainers identify root cause.

2.7.13.6.3. **(Added)** Remove all live ammunition rounds from the gun and ammunition loading system prior to delivery to Armament Flight. If gun system cannot be cleared, notify Armament Flight prior to disconnecting the ammunition loading system for assistance.

3.5.12.1. **(Added)** Verify 1F-15()-1.

3.6.13. **(Added)** Track location of uninstalled Conformal Fuel Tanks (CFT) (if applicable) to control accountability of assets.

3.8.2.1.3. **(Added)** Dedicated Crew Chief or Assistant will bring a complete active set of aircraft forms. If aircraft is flying at the time of the scheduled pre-dock meeting and forms are not available, IMDS screens may be used (i.e. 380, 700, 525, 701, etc.) in lieu of the forms. In the event on line screens are used, the Airplane General (APG) Flight Chief or Dedicated Crew Chief will confirm the integrity of all actions and scheduled events for the aircraft's scheduled inspection.

3.9.4.3.1. **(Added)** Ensure that borescope inspection documents are forwarded to the EM section within 24 hours of completion of the inspection.

3.9.4.4. **(Added)** Perform aircraft engine downloads.

3.9.4.4.1. **(Added)** For F-15 aircraft, ensure that the downloads for F100-PW-220/229 engines are reconciled with the EM section daily via the Comprehensive Engine Trending and Diagnostic System (CETADS) workstation after the last flight of the day. Also, email the Engine Historical Record and download summary to the EM org box, MOS/MXOOE. If the CETADS workstation, host, or email are inoperable, bring the download disk to the EM Section. The reconciliation and email or download disk must be complied with NLT four hours after the last aircraft landing. For deployed units without CETADS capability, e-mail downloads by the end of the day's flying period to the EM section.

3.9.4.5. **(Added)** Ensure the AFTO Form 95 is forwarded to the EM section for all engine(s)/related components received from supply. Upon receipt of serially controlled components from supply, provide EM with the serviceability tags. **Note**: Load serially controlled components in IMDS to verify cycles/hours remaining before next aircraft scheduled sortie.

3.9.4.6. **(Added)** Coordinate with propulsion flight for possible CANN or one-for-one swaps on zero balance engine components.

3.10.1.9.1. **(Added)** Load crew scheduling will be populated by the 15th day of the month prior to the following month's schedule and will be annotated on the WS SharePoint. Changes may be made up until the 1st day of the month without receiving a deviation for scheduling effectiveness, but changes must be kept to a minimum. Any changes occurring after the 1st of the month will be limited to extenuating circumstances. These changes must be coordinated through the LSC office. Any deviation outside of these areas may be reported against the monthly Maintenance Standardization and Evaluation Program.

3.10.1.9.2. **(Added)** Coordinate all Weapons load crew training letters (Load Crew Alignment, Code-Out, Checklist Qualification, Senior Airmen Load Crew Team Chief and Initial Certification) five duty days prior to 1st of the following month (if applicable).

3.10.2.6.2.1. **(Added)** Provide a completed AF Form 2434 to MUNS Control and within 2 hours of final down time. Munitions and Weapons personnel will work jointly to clear up all discrepancies and maintain accurate accountability of expenditures before personnel leave for end of shift.

3.10.2.7.1. **(Added)** Munitions and Weapons personnel will work jointly to ensure all munitions movements to/from aircraft and flightline locations/containers are accurate before personnel leave for end of shift. Weapons Expediter is responsible for ensuring 100 percent aircraft munitions accountability in Theater Integrated Combat Munition System (TICMS).

3.10.2.12.1. **(Added)** Upon acceptance and signature of munitions assets, Expediters accept responsibility for the security and accountability of required munitions and safing gear.

3.10.2.12.2. **(Added)** The corresponding quantity of accountable safing gear (i.e., AIM-9 shorting caps) and expended impulse cartridges will be turned in to MUNS for all munitions expenditures.

3.10.2.12.3. **(Added)** Any safing gear or expended impulse cartridges not accounted for at the end of flying will be reported as a lost object.

3.10.4.2.2.1. **(Added)** Ensure AME/NIE scheduled for periodic inspection is delivered to the Armament Flight NLT the first duty day of the week in which inspections are scheduled. Any deviations to the schedule must be coordinated through the Flight Scheduler and/or Maintenance Section Chief the last duty day of the week prior to equipment turn-in deadline.

3.10.4.2.2.2. **(Added)** AMU Weapons Sections will ensure equipment removed for scheduled or unscheduled inspection turn-in to the Armament Flight will have after fire/end of firing day inspections completed (as required) and associated equipment or components attached. Exceptions: After fire and end of firing day inspections will not be accomplished on inadvertent or multiple release malfunctions. Launchers, racks, and dispensers involved with hung stores that pass electrical functional checks, will not have after fire/end of firing day inspections completed prior to turn-in to the Armament Flight.

3.10.4.2.2.3. **(Added)** Make every effort to turn malfunctioned AME/NIE into Armament Flight within 24 hours of malfunction. Ensure malfunctioned AME/NIE are accompanied by an IMDS screen #122 and properly annotated tags are attached IAW TO 00-20-1. The respective AMU will provide a detailed malfunction record, which must include at a minimum: what failed, which step, on the ground or in the air, was it a duplicate.

3.10.4.2.2.4. **(Added)** Coordinate all weapon/gun system scheduled maintenance conflicts with AMU Lead Production Superintendent, AMU PS&D, and Armament Flight Scheduler or Maintenance Section Chief.

3.10.4.2.2.5. **(Added)** Track all uninstalled AME/NIE on a locally approved AF Form 2430 electronic document or equivalent automated product.

3.10.4.2.2.6. **(Added)** Coordinate through Armament Flight's Maintenance Section supervision for issuance of PDM gun systems stored in the gun storage room. Approval requests to mix/cannibalize gun systems will be routed through Armament Flight Supervision.

3.10.4.2.2.7. **(Added)** AMU Weapons Section is responsible for identifying additional AME/NIE for deployment, TDY, etc., as required. If Armament personnel are not deployed, the responsibility of repacking AME/NIE for return shipment rests with the deployed AMU Weapons Section.

4.4.3.1.4.2. **(Added)** Egress explosive storage and maintenance will only be conducted in approved/licensed facilities. Seats with fitted explosives will not be stored or left in any other facility.

4.4.3.1.6. **(Added)** Ejection seat removal and installation or ejection seat raises/lowers will not be performed on the flightline/apron. Removal and installation of the ACES II ejection seat will be accomplished inside a maintenance hangar or PAS.

4.4.3.1.7. **(Added)** Egress maintenance will not be performed on aircraft hoisted on jacks. Egress inspections (Egress finals/ CAD/PAD) are not prohibited.

4.4.3.1.8. **(Added)** Egress maintenance will not be started on unsheltered aircraft when raining and will be terminated when precipitation starts or is imminent as determined by CMS Production Superintendent.

4.4.3.1.9. **(Added)** Squadron Production Superintendent will coordinate with the respective AMU and phase personnel to ensure no other technicians are dispatched to the aircraft to perform maintenance that will conflict with egress personnel performing maintenance or inspections.

4.4.3.1.10. **(Added)** Once an egress maintenance task/inspection has started, the specialists involved will not be dispatched to another job unless it is an emergency. Interruption of egress work in progress could lead to a serious explosive incident.

4.4.3.1.11. **(Added)** When egress explosive operations are being performed on the aircraft no other maintenance tasks or inspections will be accomplished in the cockpit area unless the egress supervisor deems it necessary. No external power will be applied to the aircraft unless the egress supervisor deems it necessary to comply with DAFI 21-101, paragraph 4.4.3.1.2. The egress supervisor is responsible for stopping the operation when any unauthorized personnel enter the area during an explosive operation.

4.4.3.1.12. **(Added)** Operators of an explosive laden vehicle must have completed and be current on Egress Explosive Safety Training and qualified on the particular type of vehicle being driven IAW AFI 24-301, *Ground Transportation*.

4.4.3.1.13. **(Added)** Minimum essential personnel and limited quantities of 1.3 and 1.4 explosives as required to accomplish normal mission requirements may be transported together in the cargo compartment of vehicles, including metro and multi-stop types, as long as the explosives are secured and clearly marked.

4.4.3.1.14. **(Added)** Reference DESR 6055.09_AFMAN 91-201 for procedures and restrictions of explosive maintenance during lightning conditions.

4.4.3.1.15. **(Added)** In the event of an unsafe condition involving the egress system, the maintenance/inspection action will be stopped and the section chief or shift supervisor will be notified. Maintenance/inspection will not resume until the unsafe condition is corrected and the aircraft is deemed safe by the egress supervisor.

4.4.3.1.16. **(Added)** In the event of an explosive accident or incident, the following actions will be taken by the fastest means possible:

4.4.3.1.16.1. **(Added)** Egress supervisor will notify MOC and the Squadron Production Superintendent immediately and provide the type and location of incident or accident. MOC will dispatch any emergency aid required (fire, medical, EOD, etc.).

4.4.3.1.16.2. **(Added)** Attempt to put out the fire if explosive(s) have not been consumed by fire.

4.4.3.1.16.3. **(Added)** The area will be secured to prevent further injury, damage, or tampering with possible evidence for mishap investigations.

4.4.3.1.16.4. **(Added)** Nothing at the scene will be disturbed, unless it presents a hazard to personnel or equipment.

4.4.3.1.16.5. **(Added)** All personnel involved will remain at the scene until relieved by competent authority, unless medical attention is necessary.

4.4.3.2.6.2.2. **(Added)** Newly assigned uncertified egress personnel may assist in performing egress systems maintenance. These personnel will never clear (sign off) AFTO Form 781-series entries, MIS, or condition tags.

4.4.4.1.1.1. **(Added)** 48 AMXS will maintain serial number inventory accountability for all CFTs.

4.4.4.1.1.2. **(Added)** CMS will maintain serial number inventory accountability for all external fuel tanks.

4.6.1.2.1. **(Added)** Approve/disapprove requests to mix or cannibalize gun systems.

4.6.2.6. **(Added)** Coordinate with PS&D for equipment requiring in-shop inspections. When possible, calendar NIE inspections are scheduled concurrent with nearest aircraft hourly inspection within the calendar interval. However, do not allow NIE/AME scheduled inspections to become overdue (-6 TO). Include NIE/AME inspection schedules in both the monthly and weekly maintenance plan/flying schedule.

4.6.2.6.1. **(Added)** If removed for PDM, aircraft gun systems will be stored in the Armament Flight facility. Whenever possible, gun systems issued to flightline Weapons Sections will be issued as a complete system (gun, conveyor and drum/container).

4.6.2.6.2. **(Added)** 2W1X1 personnel performing the scheduling function, if no 2R1XX personnel are assigned, will process IMDS-Central Database screen #128 for all scheduled in-shop special inspections and TCIs.

4.6.2.6.3. **(Added)** Armament Flight will utilize an AF Form 1297 or spreadsheet (Microsoft Excel or similar) maintained on the Armament SharePoint to track the turn-in and issue of AME/NIE. The tracker will provide a historical record of all equipment transactions and document equipment type, full serial number, date, and AMU involved in transaction.

4.9.2.2. **(Added)** Repair and Reclamation (R&R) Section is responsible for rigging, removal/replacement, functional checks, rig checks and removal to FOM beyond the capability of other activities as indicated in **Attachment 15**. **Attachment 15** is to be used as a guide and not an all-inclusive checklist.

4.9.3.3. **(Added)** Tire wear criteria:

4.9.3.3.1. **(Added)** Dry weather criteria: Due to weather conditions at RAFL and surrounding bases, dry weather criteria is not authorized for 48 FW aircraft unless authorized by MXG/CC.

4.9.3.3.2. **(Added)** Wet weather criteria: Flight operations during the periods of 1 January through 31 December will use the inspection limits set in TO 4T-1-3, *Inspection Maintenance Instruction, Storage and Disposition of Aircraft Tires and Inner Tubes*, concerning wet weather tire wear for Main Landing Gear (MLG) Tires.

4.9.3.3.3. **(Added)** Cuts in aircraft tires caused by FOD will be reported by EMS Wheel and Tire to the wing FOD monitor within 24 hours of receipt, with all pertinent information concerning the incident. When routing cut tires to EMS/Wheel and Tire Facility ensure the AFTO Form 350 is properly filled out.

4.9.3.3.4. **(Added)** Deployed 48 FW aircraft are authorized to use host base tire policy. If no policy exists, the deployed commander will make the determination on the criteria, as stated in TO 4T-1-3, based on climate conditions.

4.11.3.5.3. **(Added)** Any components found removed during the receiving inspection will be annotated on the part number/serial number verification sheet prior to the work package being reviewed by the EM section.

4.11.3.6.2.11.2. **(Added)** Ensure engine work packages are completed and reviewed by respective section, EM section will review the package prior to QVI.

4.11.3.6.2.11.2.1. **(Added)** Ensure engine/module impound documentation is forwarded to the EM section when completed work packages are turned in for review.

4.11.3.6.2.15.2.2. **(Added)** Ensure the EM is advised of the serial number of engines being transported during exercise or real world deployments 48 hours prior to scheduled chalk time.

4.11.3.9. **(Added)** Coordinate with EM for verification of serviceability for engine and component(s) CANN actions prior to removal/installation of component(s)/engines. EM will verify and document remaining life of item with signature and employee number on CANN paperwork.

4.11.4.6. **(Added)** Engine Courtesy Runs. The definition of a courtesy run is an engine that will be operated on the test cell, after organizational maintenance tasks were performed, and will be returned directly back to the flightline. These engines may require leak checks, operational checks or troubleshooting that cannot be performed due to equipment or accessibility constraints while the engine is installed, or will be operated on the test cell due to management decision. These engines remain property of the AMU.

4.11.4.6.1. **(Added)** CMS Supervision and AMXS/AMU will coordinate priority of engine courtesy runs. AMU personnel will be responsible for all maintenance actions performed on the engine, including borescope inspections, serviceability inspections, pre and post run preparations and inspections. CMS Propulsion Flight technicians may assist the AMU personnel as required. The AMU will provide an engine specialist to accompany the engine during all phases of testing and inspection.

4.11.5.1. **(Added)** Applicable module documentation will mirror requirements listed in DAFI 21-101 Section 4.11.3.6 and supplements.

5.2.2.1.14.2. **(Added)** All form 2407s will be approved/signed by MUNS Supervision when they are the affected Direct Supporting Unit.

6.7.6.1.3.1. **(Added)** Ensure a PE is accomplished on all technicians that perform maintenance to include Maintenance Training Section (MTS) instructors who sign off tasks, not to exceed 12 months from the time the individual performed their last PE. Do not reset date upon PCS. If a new individual arrives from a base that didn't track PEs, accomplish PE within 6 months of arrival and every 12 months after that. Airmen arriving from Tech School shall accomplish a PE within 12 months of arrival on station.

6.12.2.1.2. **(Added)** For FCF requirements see AFI 11-202V3_USAFEsup_Lakenheathsup, *General Flight Rules*, Attachment 8.

6.16. **(Added)** Chafing Awareness Program. QA will manage this program and must monitor and track instances of wire, harness and metal line/tube chafing. Units will contact the QA office when a chafing condition is identified.

6.16.1. **(Added)** When directed by MXG/CC, a randomly selected 10 percent of assigned aircraft will be inspected when notification is received of a potential chafing problem involving like model/lot number/block of aircraft.

6.16.2. **(Added)** The QA Chief Inspector shall recommend initiating an OTI if the sampled aircraft indicates a chafing problem or the detected chafing is an operational safety hazard.

6.16.3. **(Added)** QA must track wire and harness chafing problems identified through OTIs and maintenance cross-tell reports. Consult the database before expending man-hours performing inspections.

6.16.4. **(Added)** Chafing Awareness training will be conducted by the MTS during initial block training upon PCS.

7.2.4.1.1. **(Added)** QA will maintain an impoundment log and keep Lakenheath Form 25, *Aircraft Impoundment Checklist,* on file for a minimum of 12 months.

7.4.2.1. **(Added)** Lakenheath Form 4, *F-15 Flight Control Impoundment Debrief Checklist,* and/or Lakenheath Form 25 will be used depending on the reason for the impound.

7.4.4. **(Added)** Review aircraft/equipment records and IMDS to identify any historically related discrepancies.

7.5.2.1. **(Added)** MXG/CC and CD are the sole releasing authority for cost estimates related to aircraft/engine/equipment damage incidents to any agency outside of the MXG.

7.5.4.1. **(Added)** If Automatic Flight Control System or autopilot is paddled off and the malfunction ceases, impoundment is not required.

7.5.5.1. **(Added)** Inadvertent weapon release includes expendables (e.g. chaff and flare).

7.6.1.1. **(Added)** Engine/aircraft component impoundments:

7.6.1.1.1. **(Added)** When aircraft impoundment can be directly related to an engine/aircraft component, release can only be accomplished once the engine/component is removed from the aircraft. Prior to transferring the impound, the safety office will be contacted to authorize the transfer, if involved in an active safety investigation. The impounded engine/aircraft component will be transferred to an Impoundment Official (IO) from the applicable engine/off equipment support shop.

7.6.1.1.2. **(Added)** The originating impound official, gaining impound official and QA will meet at the losing unit for forms review before the equipment is released by an Impound Authority (IA). Items involved for review are as follows: Lakenheath Form 25, AFTO Form 95, Aircraft Forms 781 series, records, and 48 MXG F-15C/D/E Document Review Checklist, (as required).

7.6.1.1.3. **(Added)** For impound transfer, the IA, Operations Officer/Squadron Superintendent, will sign the original Lakenheath Form 25 to transfer the impound. The IA will sign off the Red X discrepancy for impound stating “Impound transferred to (specific engine/aircraft component). Aircraft no longer requires impound.”. The IA discrepancy shall be cleared by the Operations Officer/Squadron Superintendent with a statement in the Corrective Action block stating “Aircraft Impoundment transferred to engine serial number XXXX (or equivalent). Aircraft investigation complete.”

7.6.1.1.4. **(Added)** The gaining IO will notify MOC when the impound has transferred. MOC will close out the airframe impound and take information for the new component impound. The impound number will remain the same. A new Lakenheath Form 25 will be initiated for the suspect engine/component. The original Lakenheath Form 25 will be maintained IAW **paragraph 7.6.8.7**, along with the transferred Lakenheath Form 25 when released.

7.6.1.2. **(Added)** When aircraft/equipment is impounded, the owning unit will bring aircraft/equipment records to QA to receive a JST and Lakenheath Form 25. **Note**: IO can delegate signing the impoundment JST block "aircraft released for maintenance” due to availability.

7.6.8.1. **(Added)** IO will ensure all documentation is complete and all prudent actions have been taken. If complete, the IO signs the “Inspected By” block for the forms review, ensures “Corrective Action” block of Lakenheath Form 25 contains a complete and accurate list of all troubleshooting and corrective actions, and then begins clearing the remainder of the impounded aircraft forms.

7.6.8.2. **(Added)** QA will conduct a review of AFTO Form 781A Forms documentation for completeness, accuracy, and adequacy. If not satisfied, inform the IO as to further actions recommended. If IO and QA do not agree, QA will sign non-concur on the Lakenheath Form 25. Once the Lakenheath Form 25 is signed by QA, the impound will go to MXG/CC, or designated

official, for review to make a determination on corrective actions for impound release. If concurred, sign the "Inspected By" block of the AFTO Form 781A forms review entry.

7.6.8.3. **(Added)** QA will review Lakenheath Form 25 documentation for completeness and adequacy. Ensure document review information is documented if material failure is determined. Make comments on reverse side of form stating concurrence, non-concurrence, or recommendations.

7.6.8.4. **(Added)** Once QA is complete, the IO will take aircraft forms and Lakenheath Form 25 to MXG/CC, MXG/CD, or MXG/CEM for impoundment release. If satisfied with corrective actions, the MXG/CC, MXG/CC, MXG/CEM, or designated representative, will show concurrence by signing and dating block 23 "Release Authority" on the Lakenheath Form 25.

7.6.8.5. **(Added)** IO will ensure the Lakenheath Form 25 and the impound/flight control checklist is returned to QA the day it is released from impoundment.

7.6.8.6. **(Added)** If approved, the Impoundment Release Authority will clear the forms by entering "Investigation Complete, all corrective actions have been reviewed, aircraft or equipment released" referring to original discrepancy in the Corrective Action block, signing the Inspected By block, and initialing over the Red X symbol.

7.6.8.7. **(Added)** QA will maintain an impoundment log and keep Lakenheath Form 25 IAW AFI 33-322, and dispose of IAW AFRIMS (Air Force Records Information Management System).

7.6.11. **(Added)** For Impoundment of Servicing Equipment:

7.6.11.1. **(Added)** The equipment owning work center will appoint an IO. When contaminated LOX, fuel, oil, or hydraulic fluid is suspected, the using organization will determine which equipment/unit(s) were used and impound it.

7.6.11.2. **(Added)** Maintenance Supervision of the unit discovering the contamination will immediately isolate the unit.

7.6.11.2.1. **(Added)** Aircraft serviced from the same suspected unit(s) will be impounded.

7.6.11.2.1.1. **(Added)** Contact RAFL NDI Laboratory for oil. Contact RAFL Fuels Management Laboratory for hydraulic fluid, fuel and LOX. **Note**: Fuel/LOX samples will be drawn by RAFL Fuel Management Laboratory and then sent to Royal Air Force Mildenhall (RAFM) Aerospace Laboratory for full specification testing. Only test results from an Aerospace Laboratory can clear suspected fuel/LOX for use or determine if fuel/LOX was a factor in a mishap.

7.6.11.2.1.2. **(Added)** All suspected components will be directly routed to DMS/Supply. Attach a red bordered AFTO Form 350, with "Impoundment" clearly stated on it, job number, aircraft tail number, detailed discrepancy and requirements (i.e. bench check). DMS/Supply will ensure components are sent to the intermediate shops for repair.

7.6.12. **(Added)** When a malfunction/incident which may require impoundment occurs, the following procedures will be followed:

7.6.12.1. **(Added)** Debrief will:

7.6.12.1.1. **(Added)** Notify Production Superintendent of malfunction/incidents which may warrant impoundment.

7.6.12.1.2. **(Added)** Notify flying squadron's operations desk to ensure Data Transfer Module and Audio Video Tape Recorder data are available during impoundment.

7.6.12.2. **(Added)** MOC will notify:

7.6.12.2.1. **(Added)** QA

7.6.12.2.2. **(Added)** Flight Safety (when applicable)

7.6.12.2.3. **(Added)** FOD Officer/NCO (if aircraft is involved in FOD incident)

7.6.12.2.4. **(Added)** EMS Maintenance Supervision (when applicable)

7.6.12.2.5. **(Added)** CMS Maintenance Supervision (when applicable)

7.6.12.2.6. **(Added)** MUNS Maintenance Supervision (when applicable)

7.6.12.2.7. **(Added)** Fuels Management Flight (when applicable).

7.7.1.5. **(Added)** Aircraft will be impounded when a hung ordnance/inadvertent release occurs. Aircraft and/or associated support equipment will also be impounded when one or more of the following conditions occur, or when deemed necessary by appropriate personnel.

7.7.1.5.1. **(Added)** An inadvertent weapon release, explosive mishap, unexplained weapon release abnormality, or unexplained/significant damage to the aircraft, or uncommanded gun system firing/rotation.

7.7.6. **(Added)** All weapons and armament system impounds will be brought to the WWM prior to QA for review before the equipment is released by the MXG/CC or CD.

8.2.3.2. **(Added)** Section Chiefs/NCOICs ensure control of warranty/spare tools and designate program managers (primary and alternate) in writing.

8.2.3.3. **(Added)** The Program Manager will:

8.2.3.3.1. **(Added)** Maintain a list of all warranty tools and copies of Warranty/Quality tool purchase contracts in a central file.

8.2.3.3.2. **(Added)** Ensure broken or damaged warranty tools are isolated and under strict control until replaced.

8.2.3.3.3. **(Added)** Isolate warranty tools from other replacement tools. Broken warranty tools will be replaced according to manufacturer's warranty agreement.

8.2.4.1. **(Added)** Issue FOD bags with dispatchable CTK. **Note**: FOD bags shall not be permanently attached to the CTK. Inspect and empty the FOD bag upon sign out/in. Do not stow trash/FOD in CTKs.

8.2.4.2. **(Added)** Expendable hand tools (blades, extraction tools, etc.) consumed during use may be placed on bench stock; however, strict accountability and control procedures must be included in unit procedures.

8.2.4.3. **(Added)** A stock of spare tools is authorized as determined by unit leadership to prevent unnecessary work delays. CTK custodians will authorize the tools and quantities to be maintained with a quarterly inventory. Access to spare tools will be limited to the shift supervisor (or equivalent) and CTK custodians.

8.2.4.3.1. **(Added)** To aid in accountability, control, and inventory, like items will be separated by use of individual bins or dividers, and sequentially numbered accordingly.

8.2.4.3.2. **(Added)** During the quarterly inventory, the CTK custodian will validate the quantity of like items within each bin.

8.2.5.2. **(Added)** Decentralized CTK custodians. All SNCOs, designated NCOs, and support personnel are authorized to complete job site transfers of tools/CTKs/Tool Kits and will be identified in IMDS utilizing course code 8006 (Tool Control Procedures).

8.2.5.2.1. **(Added)** When transfers occur, the technician turning in the tools/CTKs/Tool Kits, the technician assuming control, and any designated Decentralized CTK custodian, will inventory the CTK.

8.2.5.2.2. **(Added)** An AF Form 1297 will be used to issue the tools/CTKs/Tool Kits to the technician assuming control. All three individuals will sign the AF Form 1297 to indicate a complete inventory has taken place.

8.2.5.2.2.1. **(Added)** All CTKs will be inspected by the decentralized CTK custodians or Support personnel at the end of the shift.

8.2.5.2.3. **(Added)** Technician turning in the tools/CTKs/Tool Kits will immediately turn in the signed AF Form 1297 to the Support Section, who will in turn transfer the items in TC-Max to the new technician.

8.2.5.2.4. **(Added)** All long termed tools/equipment will be inspected/verified for accountability/long term necessity by a SNCO from the section at least every 14 days, except for tools/equipment that are TDY. CTKs will not be allowed to be checked out long term, except TDY/contingency operations.

8.2.5.2.5. **(Added)** All maintenance personnel will ensure all CTK and/or tools/equipment that are checked out to them have been turned in or transferred by unit support sections at the end of their shift.

8.2.8.1. **(Added)** Individually issued and/or personally purchased checklist pouches may be used while performing maintenance or loading operations on the flightline and in maintenance areas. Checklist pouches, PPE, and reflective belts will be marked IAW **para 8.2.8** (USAFEAFAFRICA) guidelines. Plastic and metal clips, hooks, carabiners and additional straps that are not sewn to pouches, PPE, or belt must be removed to prevent FO hazards.

8.2.9.4. **(Added)** Rags will be counted each time the container is issued or turned in. Rag containers kept in CTKs will be marked with the CTK's EID and will show the number of rags in the container. Missing rags will be treated as a lost tool.

8.2.10.1. **(Added)** Procurement of replacement tools is limited to CTK custodians with the approval of the squadron OICs/Flight Commanders/Chief. **Note**: If the CTK custodians do not possess a Government Purchase Card, procurement may be delegated to designated individuals.

8.2.13.2. **(Added)** Dispersal of CTK assets throughout the PASs is authorized in order to meet mission requirements.

Note: Procedures for automated tool control systems with remote inventory capabilities will be established separately from this instruction, and will be located on the QA Sharepoint.

8.2.13.2.1. **(Added)** Location and number of decentralized CTKs, tools, and equipment will be at the discretion of the Squadron Operations Officer or Superintendent.

8.2.13.2.2. **(Added)** CTK will be secured to the facility in its designated location via a lanyard and lock if not checked out for use. If a CTK is moved to meet mission requirements, it will be coordinated through the Production Super and Support Section to ensure positive control and accountability of each CTK.

8.2.13.2.3. **(Added)** Support Section will account for each sub-located CTK by using the PAS number. CTK keys will be secured in the Support Section when not issued to maintenance personnel.

8.3.6.3.1. **(Added)** All MILs will be signed by the Section Chief or designated CTK Custodian.

8.3.6.4.2.1. **(Added)** Individual entries on MIL will state sizes for like items (i.e. 2-cell flashlight, 3-cell flashlight, 5-inch vise-grip, etc.).

8.3.6.5.2. **(Added)** Consumables that are assigned to CTKs will be marked with the CTK EID they are located in. Consumables that are not feasible to mark (petroleum, grease, safety wire, etc.) will be placed in a suitable container that can be marked. Keep consumables placed into CTKs to the absolute minimum needed to perform a specified maintenance task.

8.3.6.7.1.1.1. **(Added)** Document missing, removed, and/or broken tools/items on the Lakenheath Form 3, *Broken/Removed Tool Log,* (if applicable), as well as in TC-Max. Lakenheath Form 3 will be kept with the MIL on/in the item.

8.3.6.8. **(Added)** Commonly used checklists or job guides may be assigned to the CTK (i.e. hot pits, weapons loading, servicing, and inspection). They will be identified on the CTKs MIL and be marked with the CTKs EID.

8.3.9.2.1. **(Added)** While performing a 90 day CTK inspection on LOX only tools, tools will be cleaned and then inspected utilizing the bright white and ultraviolet light inspection methods as described in TO 15X-1-1.

8.5.6. **(Added)** All CTKs will have, as a minimum, a 90-day inspection. The 90-day inspection will be documented in TC-Max. As a minimum, the following items will be inspected: etchings/legibility of etchings and required markings, condition of tools, corrosion, foreign objects, condition/currency of any Technical Data in the CTK, and proper documentation on MIL. MILs and Lakenheath Form 3s will be replaced (as required) during this inspection to prevent confusion and deterioration. MILs will be checked against the Master MIL and TC-Max to ensure standardization. Check for calibration currency and ensure all sets contain the proper number of items (that which is marked on the container), AFTO Form 394, *TMDE Certification,* (white) or AFTO 398, *Limited TMDE Certification,* (yellow) with initials, and correct EID.

8.5.6.1. **(Added)** Mobility CTKs in storage will have a 180-day inspection completed. The 90-day inspection criteria will start after the first time the CTK is used and will be conducted on all items before returning them to the 180-day inspection interval. Mobility CTKs should only be used for actual or simulated deployments. The Support Section or deployed Section Supervisor will provide a secure area for storing mobility CTKs.

8.5.6.2. **(Added)** Crash Recovery Response Trailer CTK will be inspected every 180 days, and prior to use. The crash recovery equipment will be inspected by both Support and Crash Recovery.

8.6.1.1.1. **(Added)** Spill Recovery Units, Environmental Protection Agency Trailers, and Hazardous Waste Accumulation points that contain safety equipment and PPE will be marked with the squadron and accumulation site or trailer number. An equipment content listing will be kept with all spill kits. For further guidance, reference **para 1.8**.

8.6.1.2.1.4. **(Added)** Stencils used to mark CTKs will have characters no smaller than half inch in height. To facilitate accurate inventories, deleted tools will have shadows painted over or inlays filled in. All tools assigned to a shadow board will have the same number as the shadow board, along with a position number. Mini kits assigned to a shadow board will have the same number as the shadow board.

8.7.2.1. **(Added)** A new review will be conducted after coordination of Lakenheath Form 5, *Local Manufacture Request*, and addition of new local manufacture tools and equipment. This then restarts the biennial (2-year) review for that section.

8.9.2.1.1.1. **(Added)** Aircrew members must account for all equipment and personnel items before and after each flight. If items are identified as missing, the aircrew will conduct an immediate search of the cockpit. If the item is not recovered, the aircrew must notify debrief and ensure that the proper documentation is annotated on the AFTO Form 781A.

8.9.2.3.1.1. **(Added)** Egress will raise seats as necessary to aid in the search. If the item is not found following a minimum 1 hour search, to include use of borescope, the seat(s) and/or canopy will be removed. Egress will then search the seat itself; its surrounding structure, seat components, and survival equipment. For FO in cockpit not found, reference **paragraph 7.5** to determine if an impound is warranted.

8.9.2.6.2.1. **(Added)** Lakenheath Form 24, *Lost Tool/Object Report,* will be initiated if the item is not found within 1 hour of initial notification. **Note**: Once initiated, the Lakenheath Form 24 must be completed even if the lost tool/item is found. The completed Lakenheath Form 24 will be submitted to QA within 5 duty days from date of initiation for filing. QA files/maintains the report for one year. Additionally, a copy of the report may be filed/maintained by the Wing FOD Monitor if the Vice Wing Commander has assigned responsibility for tracking lost tools/items.

8.9.2.6.2.1.1. **(Added)** Procedures for Lakenheath Form 24 are as follows: The Lakenheath Form 24 will be stamped with a QA stamp to indicate it has been reviewed and all actions are complete. QA will keep the signed original Lakenheath Form 24. A copy of the Lakenheath Form 24 will accompany the aircraft forms when reviewed by the impoundment releasing authority (if engine is impounded) and kept with aircraft jacket file if an aircraft is involved. A copy of the Lakenheath Form 24 will also be filed with the CTK custodian and a copy will be forwarded to the Wing FOD Monitor. When lost tools are found, notify AMU PS&D, owning Support Section, Wing FOD Monitor, and MXG/QA.

8.9.2.6.2.2. **(Added)** MOC will issue lost tool or item control numbers for all lost tools or objects. The control number will be annotated on Lakenheath Form 24. This control number must be passed to QA when notifying them of the lost tool or object.

8.9.2.6.2.3. **(Added)** If aircraft are not involved, or the tool or object was lost in transit, the same effort will be taken to locate the missing tool or item. Immediate notification is essential so that aircraft taxiing can be halted and taxiways and runways searched/swept. If the tool or object is lost on or near equipment, the equipment will not be used or operated until it is found, or a thorough

search has been conducted, and the Maintenance Superintendent and/or Operations Officer is satisfied that the tool or object cannot affect the equipment's operation.

8.9.2.6.4. **(Added)** Operations Officer/Maintenance Superintendent terminates the search and signs the Lakenheath Form 24 for both items that are found and not found.

9.17.1.1. **(Added)** The local manufacture of aircraft panels, hydraulic tubing, brackets, tabs, bushings and repair fittings will be authorized by the flight chief of the manufacturing element when the item has a field-level local manufacture SMR code. These codes are listed in the illustrated parts breakdown for the applicable airframe. TO 00-25-195 outlines assets with procurable SMR codes. Procurable items, depot manufactured, salvage, etc. will be ordered regardless of availability to place a demand on the supply system. Items not SMR coded as local manufacture and the MXG has the capability to locally manufacture and test IAW applicable tech data may be approved for manufacture by MXG/CC, CD or designated representative.

9.17.2.4.2. **(Added)** Squadron Maintenance Supervision and the Flight Chief responsible for the manufacturing section will coordinate local manufacture requests as specified in T.O. 00-25-195.

9.17.3. **(Added)** MXG Procedures:

9.17.3.1. **(Added)** Requesters will:

9.17.3.1.1. **(Added)** Requesting activity submits the requirement to the LRS/Customer Service on Lakenheath Form 5, AF Form 2005 and/or DD Form 1348M, *DoD Single Line Item Requisition System Document,* (with necessary drawings) for non-stock numbered items. Customer Service Personnel process these request and LRS/supply activity coordinates approval/signature on Lakenheath Form 5 from the requester.

9.17.3.1.2. **(Added)** Uses IMDS screen #85, to create a JCN. If materials are not available, schedule job deferred AWP status, with appropriate WCE, for all work centers involved in the manufacture process.

9.17.3.1.3. **(Added)** Coordinates approval/signature on Lakenheath Form 5 from the primary manufacturing shop, Fabricating Section's Flight Commander/Chief, the manufacturing Squadron's Operations Officer/Chief and, when applicable, QA and the MXG/CC or designated representative.

9.17.3.1.4. **(Added)** Requester forwards the Lakenheath Form 5, AF Form 2005, DD Form 1348M, engineering or technical drawings and IMDS screen #122, to the local manufacture Monitor at Flight Service Center for processing.

9.17.3.2. **(Added)** LRS Customer Service Responsibilities:

9.17.3.2.1. **(Added)** Processes the issue request (TEX 7) for local manufacture end item, and annotates the AF Form 2005.

9.17.3.2.2. **(Added)** Processes a post-post Special Requisition, and manually prepares a DD Form 1348M. Copy one serves as both the requisition and receipt document.

9.17.3.2.3. **(Added)** Forwards a copy of the Lakenheath Form 5, and the DD Form 1348M to the manufacturing shop. Copy one must be signed and an Estimated Completion Date (ECD) provided by the manufacturing shop supervisor and returned back to LRS/LGRMF.

9.17.3.2.4. **(Added)** Upon receiving copy one of the DD Form 1348M annotated with the ECD from the manufacturing activity, processes a Transaction Identification Code AE1, Local Manufacture Status routing identifiers, to record the status provided by manufacturing shop.

9.17.3.2.5. **(Added)** Coordinates with 48 LRS/Customer Support to obtain M30 (Due Out Listing), D18 (Requisition Priority Listing), to identify and validate all requisitions with a local manufacture routing identifier. Provides the Manufacturing Flight and section with weekly status of each local manufacture item to include status updates for back ordered materials against local manufacture document numbers.

9.17.3.2.6. **(Added)** Upon completion of the local manufacture, collects the asset from the manufacturing section. Copy 3 of the DD Form 1348M must be signed and final cost annotated by the manufacturing section's supervision. **Note**: LRS/Documented Cargo Section (D&D-Flight) collects items from maintenance activities and contacts the requestor to pick up local manufactured item.

9.21.3.3. **(Added)** Technician requesting repair of asset will research part availability through DMS and determine if the asset can be repaired under the Bench-Check and Repair Policy. After verification of non-availability of asset, DMS will create a document number in IMDS (kill notice), but will not create a back order yet.

9.21.3.4. **(Added)** Upon repair determination, technician will remove, drain, cap/plug and tag component to prepare for transport to the appropriate repair facility.

9.21.3.4.1. **(Added)** Technician will ensure the asset has an AFTO Form 350 installed, and a valid JCN is created in IMDS and attach a maintenance snap shot (screen #122) to the AFTO Form 350. The document number will be annotated on the AFTO Form 350. DMS will provide a 235 Document Inquiry from Integrated Logistics System-Supply. The discrepancy shall be annotated as clearly as possible, outlining specifically how the part is discrepant.

9.21.3.5. **(Added)** Repair facility will attempt to repair the asset within 72 hours or notify DMS if the repair will exceed 72 hours.

9.21.3.5.1. **(Added)** If asset is repaired within 72 hours, repair facility will notify DMS who will in turn delete the document number in IMDS. Repair facility will notify owning unit's production superintendent to arrange pick up of the asset. Repair facility will fill out the AFTO 350 Form Part II, and DMS will route the asset and AFTO Form 350 Part II to the Flight Service Center for Turn-Around processing. **Note**: Repair center DIFM monitors may process AFTO 350 Form.

9.21.3.5.1.1. **(Added)** AFTO Form 350 Disposition. Leave Part 1 of the AFTO Form 350 attached to the item. Part II of the AFTO Form 350 will be used for return processing actions.

9.21.3.5.2. **(Added)** If asset is AWP, repair facility will coordinate, as needed, with the owning unit's DMS to order any parts required to repair the end item.

9.21.3.5.3. **(Added)** If asset is NRTS, the DMS will reprocess the kill notice and establish a MICAP back order in coordination with Production Superintendent. Repair facility will coordinate with the owning unit to turn in the unserviceable part to Flight Service Center.

9.21.3.5.4. **(Added)** Repair facility production superintendent will coordinate with the owning unit to arrange pick up for the asset.

9.21.3.5.5. **(Added)** Repair facility will fill out and route the AFTO Form 350, Part II, to the Flight Service Center for processing.

9.21.3.5.6. **(Added)** Owning unit will ensure proper packaging for the NRTS asset and process it for turn in to Flight Service Center.

10.1.1.1. **(Added)** The WWM defines a dispenser as any multi-store suspension equipment, including but not limited to, CFTs and BRU-61 units. For generation exercises and simulated training purposes, live and inert munitions (to include training and practice) are authorized to be loaded on different aircraft stations. These mixed load configurations must be documented as a Red X, enter "Aircraft is in a mixed load condition. Aircraft Will Not Fly in Mixed Load Condition" on last open discrepancy block in the 781As.

10.3.3.5.4. **(Added)** An Evaluator Proficiency Evaluation on dual MDS (F-15C/E) LSC/Lead Crew members need only be performed on one aircraft and documented as such on the AF Form 2419 within the Weapons Load Crew Management Tool.

10.4.2.2. **(Added)** Augment wing inspection/evaluation teams during integration and/or local exercises to assess munitions loading capabilities and activities.

10.7.2.3. **(Added)** Additional aircraft requirements prior to entry into the WLT facility will have a completed 48 MXG Aircraft Towing and Hangaring Checklist*,* and will ensure the following:

10.7.2.3.1. **(Added)** Aircraft will have encoder/decoder and power supplies installed and follow-on operational checkouts complied with for nuclear WLT.

10.7.2.3.2. **(Added)** F-15E aircraft will be configured with Sniper and Navigation pods to the maximum extent possible.

10.7.2.3.3. **(Added)** F-15E Station 5 will be configured with a SUU-73/A pylon.

10.7.2.3.4. **(Added)** Each owning AMU will be responsible for cleaning any hazardous material spills and collecting/replacing their respective aircraft spill pads.

10.7.2.3.5. **(Added)** Deviations to F-15C/D/E aircraft configuration requirements prior to entry into WLT will be coordinated during the weekly shared resources meeting. WS will make the final determination of any proposed deviations.

10.7.2.3.6. **(Added)** F-15C/D/E aircraft will be configured with Station 2 & 8 External Fuel Tanks to the maximum extent possible.

10.9.1. **(Added)** If a specific type or model of munition has been requisitioned but not received or not available, any type or model of the basic item may be used for load crew training until receipt of the munition. LSC/Lead crew personnel will teach the major differences between training and War Reserve Material munitions.

10.11.2.1.2. **(Added)** No crew will be coded out from load training prior to the NCOIC/Section Chief forwarding an exemption letter to the LSC and/or WS Superintendent NLT five days prior to the end of the month. The letter will contain the individual(s) name(s) and legitimate reason for coding out. Load crews/members may be decertified on the first day of the next month if the individual(s) have not loaded munitions IAW the WS Minimum Required Proficiency Load schedule.

10.16.7.6.1. **(Added)** While performing AIM-9/CATM-9 missile movements on a trailer, a minimum of two certified/qualified personnel are required. If the AIM-9/CATM-9 has to be taken off the trailer for positioning, three certified/qualified personnel are required.

10.16.9.1.1.1. **(Added)** A single cross-loading operation is defined as a download and upload of a single munition from one aircraft to another. No more than two aircraft will be involved in a single cross-loading operation. Exception: Multiple chaff and flare magazines may be treated as a single munition.

10.16.9.1.2.1. **(Added)** Only Captive Air Training Munitions, Dummy Air Training missiles, chaff and flare magazines, and inert munitions are eligible for cross-loading operations.

10.16.9.1.3.1. **(Added)** Prior to moving to a different aircraft, Load Crew Chiefs will inspect the current aircraft being downloaded or uploaded for security, serviceability and proper configuration.

10.16.9.1.4.1. **(Added)** Checklist qualified personnel will complete the emergency data page with the tail number and parking location info for both aircraft involved in the cross-loading operation.

10.16.9.1.4.2. **(Added)** During a single cross-loading operation, annotate the applicable loading checklist steps for the munition being downloaded and uploaded. Reset all checklist steps prior to beginning a new cross-loading operation.

11.8.3.1.4. **(Added)** Ensure variable-ramp louvers and the bypass door are covered to prevent FO intrusion when maintenance is performed in the area during extensive maintenance or HPO/periodic inspections. **Note**: Covers will not introduce more FO potential (i.e. jackets or other items with buttons or similar objects).

11.8.3.1.5. **(Added)** FOD prevention extends to off equipment components removed to FOM and munitions handling equipment.

11.8.3.2.2.1. **(Added)** Perform visual FO inspection of area upon completion of tasks in the engine ingestion danger area and remove any FO. When all FO cannot be removed from within the variable ramp, perform NDI IAW **paragraph 11.8.3.22.6** If FO is found, remove remaining FO and attach it to the appropriate radiograph and return to NDI for comparison immediately. When all FO cannot be removed contact NDI for further guidance.

11.8.3.2.2.2. **(Added)** A two person concept for intake rivet replacement is required, one person to prevent unintentional startup of motor or aircraft operation and assist with tool accountability while individual is inside the intake, and one for the maintenance action. A FOD bag is required to secure all debris, including that created by maintenance. Use Lakenheath Form 26, *Aircraft Structural Maintenance (ASM) Intake Maintenance Checklist*, as prescribed by this supplement. Prior to performing maintenance on the F-15C/D/E, the checklist will be taped in plain sight on the side of the variable-ramp. Upon completion of maintenance, a copy of the checklist will be maintained by the ASM Section Chief and a copy forwarded to the aircrafts owning PS&D, and QA by individuals completing maintenance.

11.8.3.2.2.3. **(Added)** When repair or rivet replacement is required on the exterior of the intake, a 7-level Structural Maintenance Craftsman will determine if there is a possible migratory path from the area of maintenance to the inside of the intake IAW TOs 1F-15C-3-2, *Fixed Structure,*

1F-15E-3-2, *Fixed Structure,* and 1F-15C-3-4, *Control Surfaces and Removable Structural Components,* 1F-15E-3-4, *Control Surfaces and Removable Structural Components*.

11.8.3.2.2.4. **(Added)** Prior to performing maintenance in the inlet area, completely seal off the area aft of the maintenance by using barrier paper or a locally manufactured plug. A Red X entry will be placed in AFTO Form 781A documenting this condition. Sample write-up, "Number 1, 2 inlet masked for maintenance {DO NOT RUN OR DRY MOTOR ENGINE}" (in red).

11.8.3.2.2.5. **(Added)** Vacuum area and inspect inlet, ramps for FO after completion of any maintenance in the area. **Note**: If maintenance was performed on variable ramp see **paragraph 11.8.3.22**.

11.8.3.2.2.6. **(Added)** Immediately inventory all CTKs after intake/exhaust maintenance.

11.8.3.2.2.7. **(Added)** At no time will items, (e.g., trash bags, rags, cloths), be inserted inside open cavities or ducts of the Environmental Control System and/or components. When there are no approved manufactured coverings and/or caps available for use, cover open ducts and/or cavities externally to prevent foreign objects from being introduced. Prior to installing caps/covers, inspect opening/cavities/ducts for FO.

11.8.3.2.2.8. **(Added)** Dispatchable support equipment with small attaching hardware, introduces the possibility of FO to aircraft, engines, and subsystems. To mitigate FOD threat, dispatchable items that are assembled and are not intended to be disassembled during normal use (i.e. communication cords, e-tools etc.) should have flexible sealant applied to prevent small attaching hardware from falling out during use. Do not apply any type of sealant to tools or items that could void any warranties.

11.8.3.12.4. **(Added)** Prior to entering and exiting the cockpit, personnel will remove and account for all personal items from pockets.

11.8.3.12.5. **(Added)** When performing maintenance in the cockpit, inventory tools, small parts, and hardware prior to entry and on exit of the cockpit.

11.8.3.13.1. **(Added)** Aircraft/Engine Run (if MDS applicable):

11.8.3.13.1.1. **(Added)** Verify with MOC for ice FOD conditions/notifications.

11.8.3.13.1.2. **(Added)** Before starting engines, inspect inlet/intake for ice or moisture. If present, remove all ice and moisture from intake(s).

11.8.3.15.1. **(Added)** When towing aircraft from Hangar 6, Hangar 7, Paint Barn, Fuel Barn, or Wash Rack, a FOD check will be completed, to include a "Roll-Over" check, on the tow vehicle, aircraft and trailing vehicle prior to crossing the vehicle lane and driving on to Sierra taxiway. No other aircraft tows require these procedures. This fulfills the "Roll-Over" check at the entryway to the parking ramps.

11.8.3.20.1. **(Added)** Remove all munitions, rockets, chaff, flare, impulse cartridges, and inert missiles from the aircraft and PAS prior to performing x-ray. ACMI pods are not considered munitions and may be left on.

11.8.3.20.2. **(Added)** Do not conduct engine runs, towing or ramp maintenance until the x-ray film has been reviewed and aircraft forms have been documented.

11.8.3.22. **(Added)** See **Attachment 16** for additional FOD Prevention Measures, Ramp FO Procedures.

11.8.3.22.1. **(Added)** Aircraft Structural Maintenance:

11.8.3.22.1.1. **(Added)** Will ensure personnel are trained to identify variable inlet ramp structures as allowable or non-allowable for the purpose of FO retrieval in the engine ingestion hazard area IAW the FO criteria and limitations in TOs 1F-15(C/E)-3-4 and 1F-15(C/E)-3-2. A qualified 7-level or civilian equivalent ASM technician shall be the training official for structural maintenance pertaining to engine inlets and exhausts. Training will be documented in the member's training record.

11.8.3.22.1.2. **(Added)** Perform training on F-15 specific limitations for hardware substitution in the engine ingestion hazard area including inlets and variable ramps.

11.8.3.22.1.3. **(Added)** Make form entries for required follow-on inspections upon completion of structural maintenance i.e. "NDI due" and "visual inspection due".

11.8.3.22.1.4. **(Added)** During hardware replacement, a Lakenheath Form 26 will be taped in plain sight on the variable inlet ramp or immediate surrounding structure.

11.8.3.22.1.5. **(Added)** Will retrieve FO associated with structural repair process i.e. rivets, nutplates, olympic-lok fasteners, stump-type lockbolts.

11.8.3.22.2. **(Added)** NDI responsibilities:

11.8.3.22.2.1. **(Added)** Will ensure personnel are trained to identify variable inlet ramp FO and assist ASM and 2A3X3 personnel with FO location in the engine ingestion hazard area IAW the FO criteria and limitations in TOs 1F-15(C/E)-3-4 and 1F-15(C/E)-3-2.

11.8.3.22.2.2. **(Added)** Will perform NDI of the ramp(s) as required by TO 1F-15C-36, *Non destructive Inspection*. **Note**: Jobs such as; changing a nut plate, minor safety wire repair, the removal/installation of aircraft panels done for the purpose of inspection/retrieval of FO, will not constitute an NDI x-ray inspection (as long as ALL FO is accounted for after job completion).

11.8.3.22.2.3. **(Added)** Review film, circle suspected FO on the film and report results to requesting work centers.

11.8.3.22.2.4. **(Added)** Assist in interpreting and placement of film during FO searches.

11.8.3.22.2.5. **(Added)** Store last film shot for each aircraft IAW TO 33B-1-1.

11.8.3.22.2.6. **(Added)** Only 5-level or 7-level technicians may verify that FO retrieved during searches correspond to the item(s) circled on the film. **Note**: If disagreement or doubt exists that retrieved FO matches the film, report the problem to maintenance supervision for resolution. Assistance is available from QA, AFETS, and WR/ALC Engineering.

11.8.3.22.2.7. **(Added)** Aircraft PDM return NDI inspections.

11.8.3.22.2.7.1. **(Added)** When aircraft return from PDM, NDI will review x-ray film of the variable inlet ramp taken while the aircraft was at depot.

11.8.3.22.2.7.2. **(Added)** If FO is discovered on the PDM x-ray film (not previously documented by PDM or NDI personnel) and is located in a non-allowable area, an x-ray inspection of the ramp will be re-accomplished to validate FO.

11.8.3.22.2.7.3. **(Added)** If PDM x-ray was not accomplished (or no x-ray film is returned with the aircraft) IAW TO 1F-15(C/E)-36, a complete x-ray of the variable inlet ramp will be accomplished.

11.8.3.22.3. **(Added)** Phase/Flightline 2A3X3:

11.8.3.22.3.1. **(Added)** If the FO is in a non-allowable area, the phase or flightline 2A3X3 7-level will determine the FO as significant/insignificant (dust, shavings, hardware). If deemed significant, FO retrieval will commence.

11.8.3.22.3.2. **(Added)** Will retrieve FO not described in **paragraph 11.8.3.22.7.1**

11.8.3.22.3.3. **(Added)** Retrieved FO will be taped to the corresponding radiograph for verification of removal.

11.8.3.22.3.4. **(Added)** Use the following JSTs for impoundments involving engine FOD:

11.8.3.22.3.4.1. **(Added)** 492 AMU = 6210.

11.8.3.22.3.4.2. **(Added)** 493 AMU =12374.

11.8.3.22.3.4.3. **(Added)** 494 AMU = 9028.

11.8.3.22.3.4.4. **(Added)** CMS (-220 engine) = 00220

11.8.3.22.3.4.5. **(Added)** CMS (-229 engine) = 00208

11.8.3.23. **(Added)** All personnel will immediately report any damaged pavement areas to MOC.

11.8.3.24. **(Added)** AMUs will utilize FOD sweeper to the maximum extent within the areas of the AMU. It is the goal to utilize the FOD sweeper for 10 hours per week, per AMU. It is the responsibility of the AMU FOD representative to ensure this is achieved. FOD sweeper usage start and stop times will be called into MOC for tracking purposes.

11.8.4.4. **(Added)** QA FOD responsibilities:

11.8.4.4.1. **(Added)** For impoundments involving engine FOD, use the JSTs in **paragraph 11.8.3.22.7.4**

11.8.5.6. **(Added)** Report all FOD/DOP incidents and forward reports to the USAFE FOD manager. Correspondence that requires off-base distribution will be approved by FW/CV, or if unavailable, MXG/CC before forwarding to the USAFE FOD manager.

11.8.5.7. **(Added)** Maintain master FOD/DOP logs and archive all files and reports for a minimum of two years.

11.8.5.8. **(Added)** Develop and manage the FOD Prevention Awards program.

11.8.5.9. **(Added)** Generate and distribute FOD prevention material to squadron FOD representatives.

11.8.5.9.1. **(Added)** Maintain the Failure Analysis Service Technology (FAST) kit and be the point of contact of the program. The FAST program will be used if deemed appropriate by MXG/CC or CD in coordination with owning units maintenance supervision.

11.8.6.1.2. **(Added)** Upon discovery of FOD, cease operations in the affected area of the aircraft/engine and notify the flightline expeditor/supervisor and MOC.

11.8.6.1.3. **(Added)** If confirmed engine FOD, the appropriate IA will impound the aircraft/engine IAW **Chapter 7** of this publication, and notify the MXG/CC, OG/CC, or their representative of the incident.

11.8.6.1.3.1. **(Added)** QA will secure the aircraft forms or engine work package for review.

11.8.6.1.3.2. **(Added)** With Propulsion Flight assistance, the Wing FOD Monitor will inspect the damaged engine to determine if FOD entered the intake or material failure occurred internally. If there is no evidence of material failure, the aircraft and/or engine will be impounded.

11.8.6.1.3.3. **(Added)** The IO or other investigating office should interview personnel involved and take written statements as necessary of any recent action on the aircraft or engine to help determine the cause of FOD.

11.8.6.1.3.4. **(Added)** The IO or other investigating office will also inspect the aircraft and/or engine and associated equipment for missing hardware, panel, etc. to help determine the cause of the damage. Inspection areas should include but not be limited to cockpit areas, areas forward of the intakes, nose and main wheel well areas, top of the aircraft, PAS, aprons and taxiways.

11.8.6.3.1.1. **(Added)** MOC will notify Wing Safety of all bird strikes.

11.8.6.3.1.2. **(Added)** Owning units will coordinate with FW/SE for the collection of beaks, feet, and feathers after strikes. Ensure bird remains are identified locally through the base bird control contractor.

11.8.6.3.1.3. **(Added)** For an engine inlet bird strike, enter a Red-X in the AFTO Form 781A with the discrepancy, "Suspected/Actual Bird Strike Damage to Engine #."

11.8.6.10. **(Added)** Perform borescope inspections for FOD/DOD when any of the following conditions occur:

11.8.6.10.1. **(Added)** Engine is determined to have FOD damage that requires blending by applicable technical data.

11.8.6.10.2. **(Added)** Anything found missing during inlet inspection.

11.8.6.10.3. **(Added)** When Cockpit FO is not located and/or retrieved during initial search prior to seat removal.

11.8.6.11. **(Added)** Only certified engines technicians will inspect the discrepancy; review the aircraft/engine forms and determine corrective action. If no further damage is found while inspecting the compressor/fan blades, blend and blue-dye the blade(s) IAW TO 2-1-111, *Standard Maintenance Procedures Navy and USAF P&W Aircraft Engines*.

11.8.6.11.1. **(Added)** Complete IMDS, send a printout of screen 122 (IMDS product) within 24 hours to EM section for entry into CEMS, and notify the Wing FOD Monitor. IMDS discrepancy will include description of the blend to include dimensions, area, type of blend, and the number of blades blended.

11.8.6.12. **(Added)** All FOD will be documented IAW TO 00-20-1 and reported to the Wing FOD Monitor and QA.

11.8.6.12.1. **(Added)** A records action event will be documented in IMDS for all FOD discovered, whether it is serviceable as is or requires repair. Entries will include size, amount, and

location of damage. It is important that the cumulative amount of FOD be tracked to evaluate engine condition and to prevent impoundment of previously evaluated engine.

11.8.6.13. **(Added)** If a fan/compressor blade is found to have unserviceable damage that has not been blue-dyed or previously documented in the aircraft/engine forms, the technician will notify the Production Super who will then notify MOC. Cease maintenance until otherwise directed by the Wing FOD Monitor.

11.8.6.14. **(Added)** If the discrepancy was previously documented in the aircraft/engine forms and IMDS/CEMS, and the blue-dye had been washed away, a certified technician will ensure smoothness of the blended, contoured area and re-apply blue-dye IAW TO 2-1-111.

11.8.9. **(Added)** Specific Responsibilities:

11.8.9.1. **(Added)** CMS Propulsion Flight.

11.8.9.1.1. **(Added)** Report and coordinate any suspected FOD discovered during engine maintenance to MOC, QA, and the Wing FOD Monitor.

11.8.9.1.2. **(Added)** Report blades that require blending to the wing FOD monitor, reporting is not required if blades/stators are blended for minor sand nicks or roughness.

11.8.9.1.3. **(Added)** Assist the Wing FOD Monitor and Wing Safety, as necessary, during FOD investigations.

11.8.9.1.4. **(Added)** Perform disassembly of engine modules or components, as required, for FOD investigations.

11.8.9.1.5. **(Added)** Provide repair cost data to the Wing FOD Monitor and Wing Safety.

11.8.9.2. **(Added)** EMS.

11.8.9.2.1. **(Added)** Notify the Wing FOD monitor of fan blade NDI inspections.

11.8.9.2.2. **(Added)** Wheel and Tire Section:

11.8.9.2.2.1. **(Added)** Provide monthly cut tire statistics to the Wing FOD Monitor for inclusion into Monthly Status Reports.

11.8.9.3. **(Added)** MOC:

11.8.9.3.1. **(Added)** Notify the Wing FOD Monitor and Wing Safety of all occurrences of FOD/ dropped objects.

11.8.9.3.2. **(Added)** Coordinate with airfield management for dispatch of sweepers when requested for FOD removal on taxiways.

11.8.9.3.3. **(Added)** Track FOD walk start/stop times and FOD sweeper usage by MXG units IAW area of responsibility map (see **Attachment 17**).

11.8.9.3.4. **(Added)** Initiate the applicable Quick Reaction Checklist for all instances of FOD and bird strikes.

11.9.2.2.1. **(Added)** Upon discovery of dropped object notify the Flightline Expeditor, Production Superintendent, and MOC. **Note**: Minor hardware (i.e...screws, fasteners, bolts, nuts) will not be considered dropped objects.

11.12.1.1.1. **(Added)** In addition to specific -6 T.O. requirements, the AMUs will conduct EOR Radar Warning Receiver (RWR) checks a minimum of twice a month to ensure the local fleets health of the RWR system.

11.12.1.1.2. **(Added)** Responsibility of EOR RWR/IFF checks will rotate between the 492, 493, and 494 AMU.

Table 11.3. (Added) AMU RWR Rotation.

Month	Unit	Month	Unit
January	492 AMU	July	492 AMU
February	493 AMU	August	493 AMU
March	494 AMU	September	494 AMU
April	492 AMU	October	492 AMU
May	493 AMU	Novemeber	493 AMU
June	494 AMU	December	494 AMU

11.12.1.1.2.1. **(Added)** If the responsible AMU is TDY or deployed the remaining units will coordinate with each other to ensure EOR RWR checks are completed.

11.12.1.1.3. **(Added)** AMUs will coordinate and document which day of the week EOR RWR checks will be accomplished, during the last weekly scheduling meeting of the month prior.

11.12.1.1.4. **(Added)** Each AMU will provide a technician to support EOR RWR checks. The scheduled AMU for the month should provide the task qualified team chief.

11.12.1.1.5. **(Added)** The team chief is responsible for collecting and providing the results to the WAM by the end of the duty day that the EOR RWR checks were completed. The team chief will up-channel equipment issues/shortfalls regarding the AN/PLM-4 to the equipment custodian and WAM.

11.13.1.1. **(Added)** The following guidance establishes CANN aircraft program operating procedures to balance CANN program timelines, inspection requirements, and CANN program managers' processes. CANN programs within the F-15 units should operate within these guidelines.

11.13.1.1.1. **(Added)** Pre-rebuild inspection: A pre-rebuild (Pre-flight (PR)/Basic Post Flight (BPO)) inspection should be accomplished by the CANN Manager and assigned personnel prior to CANN rebuild. This inspection is designed to catch damage that may have occurred during the CANN process.

11.13.1.1.2. **(Added)** CANN Managers will be appointed in writing by the AMU OIC or Superintendent. They should be SSgt or TSgt, be a 7-level, and have at least 1 year experience on the applicable airframe.

11.13.1.1.3. **(Added)** The following criteria will be used when selecting a CANN aircraft:

11.13.1.1.3.1. **(Added)** Aircraft for consideration should be close to the midpoint of its current HPO cycle in order to take full advantage of the CANN Enhancement Program. Example, aircraft with a 400-hour phase interval should enter CANN status with 200 hours (+/- 30) remaining to phase.

11.13.1.1.3.2. **(Added)** To maximize manning availability, aircraft should not be scheduled for CANN down/rebuild during exercises, holidays, or long weekends.

11.13.1.1.3.3. **(Added)** Projected CANN aircraft should be published in the monthly schedule. PS&D sections should work closely with AMU Lead Pro Super to develop long-range CANN aircraft plans.

11.13.3.2.1. **(Added)** CANN Managers will:

11.13.3.2.1.1. **(Added)** Coordinate with AMU PS&D and EM to ensure adequate time remains on the item to be cannibalized and aircraft/engine records and IMDS are updated.

11.13.3.2.1.2. **(Added)** Coordinate with DMS to ensure the MARK FOR is changed and each CANN is documented in the aircraft's AFTO Form 781A and IMDS.

11.13.3.2.1.3. **(Added)** Be responsible for complying with all provisions regarding Hangar Queen Management IAW DAFI 21-101, paragraph 11.14.

11.13.3.2.1.4. **(Added)** Perform an aircraft Document Review every 7 calendar days, once aircraft enters CANN status. **Note**: Not required if aircraft is in "CANN Rebuild" status.

11.13.3.2.1.5. **(Added)** Inspect IMDS/forms at the beginning and end of each shift for warnings, tags, and TO references.

11.13.3.4. **(Added)** CANN Enhancement Process: each AMU will develop policies and procedures for their CANN enhancement process.

11.14.5. **(Added)** AMUs will ensure the use of Hangar Queen JST.

11.14.5.1. **(Added)** Ensure a 7-level conducts and documents a PR/BPO inspection on all Hangar Queen aircraft.

11.14.5.2. **(Added)** QA will perform a PR/BPO QVI and forms/IMDS review prior to the first scheduled flight. An aircraft which completed a Phase inspection and has a valid BPO inspection and phase KTL will not require another Hangar Queen BPO QVI until 30 days has surpassed from the post dock date IAW TO 00-20-1.

11.15.4.2.4.1. **(Added)** To include egress and fire control systems.

11.23.1.2. **(Added)** Permanently installed equipment will be positioned as specified by **Attachment 18**.

11.23.1.3. **(Added)** When parking two aircraft in a PAS, see 48 MXG OI 21-115.

11.23.2.1. **(Added)** PAS electrical system switches must not be changed during refuel/defuel operations. Electrical outlets will not be used during servicing.

11.23.3.1. **(Added)** PAS doors will be fully open during peacetime refueling operations.

11.23.4.5. **(Added)** Do not open PAS aircraft doors until ice, snow or debris is removed from the roller guide track and door roller path. Opening PAS aircraft doors with clogged door roller guides can cause severe damage to the door and door drive system.

11.23.4.6. **(Added)** The door operator and spotter will continuously monitor opening/closing procedures to ensure door tracks and areas are clear of personnel and equipment. A spotter is not required if warning siren is operational.

11.23.4.7. **(Added)** PAS doors shall be fully opened during any aircraft towing operations.

11.23.4.8. **(Added)** During nuclear WLT and focus generations, PAS doors shall remain closed, except when powered AGE is being operated inside.

11.23.4.8.1. **(Added)** When no PAS ventilation system exists, open PAS doors a minimum of 10 feet, but not to exceed 50 percent, and exhaust/blast doors to the maximum limit.

11.23.12. **(Added)** PAS Security:

11.23.12.1. **(Added)** Responsibility for PAS and priority resource security rest with the using organization. During non-duty/weekends all PAS occupied with assigned or transit aircraft will be secured by closing and securing blast doors, closing front doors and securing personnel door with a medium/high security lock. Units will work with SFS/S5RP Electronic Security Systems office for any other AFI 31-101 Integrated Defense and Installation Defense Plan requirements.

11.23.13. **(Added)** AMXS Facility Managers Roles/Responsibilities:

11.23.13.1. **(Added)** AMXS Facility Managers will be the primary shelter monitor. They will:

11.23.13.1.1. **(Added)** Act as the point of contact for all repair actions with FW/CE. Coordinate and submit all AF Form 332, as prescribed by AFMAN 32-1001, *Civil Engineer Operations,* and obtain and track status of work order requests.

11.23.13.1.2. **(Added)** Maintain customer copy of AF Form 332 or electronic equivalent.

11.23.13.1.3. **(Added)** Maintain emergency work order log.

11.23.13.1.4. **(Added)** Maintain a PAS maintenance inspection status folder to include the following items:

11.23.13.1.4.1. **(Added)** Findings from inspectors.

11.23.13.1.4.2. **(Added)** Weekly PAS inspection report.

11.23.13.1.4.3. **(Added)** Perform a monthly inspection of all assigned PAS.

11.23.13.1.4.4. **(Added)** Ensure each AMU performs monthly operational checkouts of the shelter telephone to ensure 100 percent coverage within a 30-day period. All discrepancies will be annotated in the Potential Explosive Site (PES) logbook and the work order initiated to repair the discrepancy.

11.23.13.2. **(Added)** AMU Production Superintendents/Expediters will:

11.23.13.2.1. **(Added)** Notify MOC and the Squadron Facility Manager when advised of defective PAS doors and request emergency repairs.

11.23.13.3. **(Added)** AMXS Safety Representatives will:

11.23.13.3.1. **(Added)** Track work order numbers in the PES logbook along with date and time the work order number was submitted.

11.23.13.3.2. **(Added)** Maintain the PES logbook IAW MOD ESTC Standard No. 6 **Part 1**, *Manual of Standards for Storage and Transport of Military Explosives,* chapter 12.

11.23.13.3.3. **(Added)** Submit PES logbook to AMXS/MXAM as well as the AMU OICs for review before forwarding to the FW/SE. Ensure the PES logbook is submitted to FW/SE NLT the third Monday of each month; and NLT the fourth Monday for RAF/CC review.

11.23.13.3.4. **(Added)** Position a notice board in each PAS on the wall immediately to the right of the personnel entrance door. The board will contain, but not be limited to: Fire Symbol reference sheet, Shelter Inspection Guide, Shelter Layout, and emergency phone numbers. The items posted on the PAS notice board must be current and should be protected. For Shelter Layout/Munitions Positioning see **Attachment 18**.

11.23.13.4. **(Added)** For emergency repairs, the MOC will contact Civil Engineer Customer Service.

11.28.1.1. **(Added)** For local procedures see Lakenheath Instruction 21-107, *Emergency Response & Crash Damaged Disabled Aircraft Recovery (CDDAR)*.

11.33.4. **(Added)** EOR specific procedures will be defined by local Operating Instruction.

11.33.4.1. **(Added)** The EOR Arm/De-Arm team will consist of (at a minimum) two task qualified 2A3X3 and two task qualified 2W1X1 personnel.

11.33.4.1.1. **(Added)** For live munitions other than qualification items, refer to **paragraph 2.7.13.2.1** of this instruction for required personnel.

11.33.5. **(Added)** If a defect is identified on an aircraft the applicable AMU Production Superintendent will be notified. Final determination as to the severity of discrepancies (flyable or non-flyable) will be made by a qualified maintenance technician (7-level or 9-level) or upon determination by the aircraft aircrew. Once maintenance has been notified of a defect/problem at EOR, the EOR crew will proceed to the next aircraft awaiting EOR inspection.

11.38.3.2.2. **(Added)** Each organization responsible for taking samples, will deliver them to the OAP lab. Any DD Form 2026 submitted with no information entered in required areas will appear as errors on the quarterly error listing. On F100 engines, engine operating time is used.

11.38.6.6.8. **(Added)** Work with Production Superintendent to reconcile the daily flying schedule after the last sortie is flown to ensure aircraft flown have been sampled and the MOC has the correct OAP codes on their status board.

11.38.8. **(Added)** Operations Officer/Maintenance Superintendent Responsibilities:

11.38.8.1. **(Added)** Ensure using organizations oil servicing carts are sampled weekly after the last scheduled flight of the week and delivered to the OAP laboratory prior to the first scheduled flight of the next week. Oil carts not sampled will be identified on the Wing Status Sheet as grounded and removed from service until the sample has been analyzed and results are known. If oil carts are, or suspected contaminated, the using organization will notify the AGE flight, place a Red X in the AFTO Form 244 and remove the oil cart from service until the discrepancy is corrected and a new sample taken is returned Code A.

11.38.9. **(Added)** NDI/OAP lab technician responsibility:

11.38.9.1. **(Added)** Will immediately notify MOC and Propulsion Flight Chief when an oil sample indicates a confirmed abnormal trend. All abnormal OAP results require a resample Code P to verify the abnormal trend. Contact CMS Propulsion Flight for guidance and disposition of the abnormal trend recommendation (Example: OAP Code T). Will contact MOC to notify applicable AMU Production Superintendent/Expediter.

11.38.9.2. **(Added)** OAP lab will notify the appropriate organization through MOC when a documentation error is found on the DD Form 2026. Upon notification, that organization will correct the error within the samples traditional response time.

11.38.9.2.1. **(Added)** OAP Document Error is the terminology used to identify a discrepancy on the DD Form 2026. MOC will be notified if OAP Document Errors exist for a particular 2026.

11.38.9.3. **(Added)** In addition to the conditions listed in TO 33-1-37-1, the following DD Form 2026 errors will be identified by OAP Code D until corrected. **Note**: Applies to all engines whether installed or not.

11.38.9.3.1. **(Added)** Time/Date Sample Taken.

11.38.9.3.2. **(Added)** Engine position is incorrect.

11.38.9.3.3. **(Added)** If the DD Form 2026 contains a deviation of more than +10 hours from OAP Analysis Database the OAP Lab, the OAP Lab shall confer with IMDS or CEMS prior to Error consideration. **Note**: If Engine Operating Time and Oil Change Time are not in sync with previous database entry, but times with no more than +10 hours, it will not be considered an error.

11.38.9.4. **(Added)** If the DD Form 2026 contains correct aircraft tail number but no engine change/install sample was provided to the lab prior to the current routine sample, it is not considered a OAP Document Error.

11.38.9.4.1. **(Added)** However, the install run OAP sample that was not provided to the OAP Lab will be reported quarterly as a "sample not analyzed as required".

11.38.10. **(Added)** Flightline Expediter responsibility:

11.38.10.1. **(Added)** Ensure maintenance personnel coordinate with the OAP Lab prior to drain-and-flush actions.

11.38.10.2. **(Added)** Will not allow drain-and-flush actions to be performed to reduce or eliminate wear metals reported by the OAP Lab.

11.38.10.3. **(Added)** After drain-and-flush action is accomplished, ensure that it is documented in the remarks section of the DD Form 2026.

11.38.10.4. **(Added)** Shall notify NDI lab of any aircraft Cross Country (XC), TDY or Out-and-Backs (O&B).

11.38.10.5. **(Added)** Report results of chip detector, filter, screen and sump inspections to the OAP Lab when directed, for abnormal engine operation, oil-wetted maintenance and engine changes as they occur.

11.38.10.6. **(Added)** Ensure that chip detector results for any chips that are LEVEL 2 or larger are annotated on DD Form 2026 and delivered to the OAP lab. F100 engines will be placed on Code E for a minimum of three flights when experiencing chip detector results for any chips that are LEVEL 2 or larger.

11.38.10.7. **(Added)** Ensure the OAP Lab is contacted for oil analysis records prior to aircraft or spare engines deploying for XC, TDY or O&B.

11.38.10.8. **(Added)** Will ensure aircraft going XC will have a computer generated copy of the current oil analysis history (DD Form 2026) completed by the OAP lab. The printout will be inserted in the aircraft AFTO Form 781s.

11.38.10.9. **(Added)** Ensure all accumulated DD Form 2026s, DD Form 2026s and any unprocessed XC samples are taken to the OAP lab. The paperwork and samples will be returned along with the first sample taken after the aircraft has returned from XC or deployment. All OAP samples from aircraft returning from XC flights or deployments will be clearly identified as XC return on the sample bag and in the remarks section of the DD Form 2026. DD Form 2026s not returned to the OAP lab will be Coded D until the paperwork is returned. If the DD form 2026 is lost or not returned to the OAP lab, the engine will be Coded C until a new trend can be established.

11.38.11. **(Added)** PS&D Section responsibility:

11.38.11.1. **(Added)** Shall notify the OAP Lab when aircraft or engine(s) are scheduled for transfer or PDM input.

11.38.12. **(Added)** Under no circumstance will aircraft on surveillance be allowed to depart XC without prior approval of the MXG/CC or CD.

11.38.13. **(Added)** Engines from the spare line that have not established a baseline require an OAP after its initial installation run. The DD Form 2026 will be annotated with the words "ENGINE INSTALL RUN" in the remarks section of the form. F100 engines will be placed on Code C for three flights when the following conditions apply: maintenance of major rotating oil-wetted engine components or when at least half of the oil capacity is replaced or replenished, and will require the DD Form 2026, to include amount of oil added due to servicing.

11.38.14. **(Added)** Oil Cart owning agency (AMUs):

11.38.14.1. **(Added)** Will notify OAP lab of oil carts in for maintenance and TDY on the first duty day of the week, prior to the first flight of the day. If the first duty day of the week is a no-fly day, the OAP Lab will be contacted prior to flying.

14.1.7. **(Added)** MXG/CC has overall responsibility for all 48 FW aircraft maintenance, and sustainment scheduling processes as well as direct coordination with OG and other supporting agencies for flying schedule.

14.1.7.1. **(Added)** OG/CC has overall responsibility for the scheduling of all flight operations.

14.1.7.2. **(Added)** OSS/OSO is the OPR for all airspace scheduling.

14.1.7.3. **(Added)** MXO/MXOS is the OPR for all maintenance and aircraft scheduling procedures. **Note**: For unique scheduling Tactics, Techniques and Procedures which do not fall under annual, quarterly, or weekly procedures, refer to **Attachment 19**.

14.2.3.4.1.1. **(Added)** PS&D will perform ADR. **Note**: Document reviews will be finished by the end of the 24 hr duty day on the day they are scheduled. If PS&D has gone home for the day, document reviews will be submitted to PS&D by 0730hrs the next day. Anything submitted after this time will be considered late, and therefore result in a MSE hit.

14.2.3.4.2.1. **(Added)** APG Section crew chief will:

14.2.3.4.2.1.1. **(Added)** If an ADR is not used, reports from IMDS (screen #s 255 (optional), 726, 713, 329, 701 (hours and days), 525 (with indentured items selected), and 380 (with supply data)

will be used instead. This will produce adequate engine, time change, inspection, TCTO, Delayed Descrepancies, and supply data needed to complete the ADR.

14.2.3.4.2.1.2. **(Added)** Verify current airframe times, total engine flight times, and oil change time. Once validated, provide information to NDI Lab (MXMFN), NLT close of business the same day. Contact PS&D for assistance if there are 781 Forms/IMDS disparities that cannot be resolved.

14.2.3.4.2.1.3. **(Added)** Ensure Delayed Discrepancies are deferred in IMDS. **Note**: Use the defer codes listing in IMDS: screen #474, option 4, Maintenance Indicator of M.

14.2.4.3.6. **(Added)** Pre-dock procedures:

14.2.4.3.6.1. **(Added)** The pre-dock meeting will be published in each AMU weekly maintenance plan IAW DAFI 21-101. The owning AMU PS&D will chair pre-dock meetings and ensure that all criteria are met as outlined. A document review shall be performed prior to or in conjunction with the pre-dock and signed off in IMDS.

14.2.4.3.7. **(Added)** The PS&D office will:

14.2.4.3.7.1. **(Added)** Accomplish/prepare the AF Form 2410 at least 1 week prior to dock input. An electronic copy of AF Form 2410 shall be forwarded to the inspection dock chief for review, prior to the pre-dock meeting.

14.2.4.3.7.2. **(Added)** Ensure that aircraft records and current IMDS products, with supply data, and completed AF Form 2410s are taken to the pre-dock meeting.

14.2.4.3.7.3. **(Added)** HPO/PE/Phase Maintenance Contract and AF Form 2410, are the basis of the maintenance contract and will serve as an agreement between the AMU and the inspection dock.

14.2.4.3.7.4. **(Added)** Notify EM of all aircraft pre-docks at least 2 duty days prior to the scheduled pre-dock meeting. EM will, in turn, review all required data for installed engines and notify PS&D of maintenance requirements to be included in the phase contract.

14.2.5.1.1.1. **(Added)** The owning AMU PS&D section will conduct the post-dock meeting. The PS&D scheduler and inspection dock chief will determine the time and date of the post-dock meeting. A document review must be scheduled and performed by the AMU, prior to the first flight after phase.

14.2.6.5. **(Added)** Manually assigned JCNs (event ID) are developed by Analysis host Database Management. The HPO/Periodic/Phase inspection dock coordinator will act as its controlling agency. The manual events will have the first two positions of the current year, with the next three as Julian date. The last four positions are outlined in **Attachment 20**.

14.2.6.6. **(Added)** Once normal online processing is resumed, IMDS will be manually updated. For jobs opened and completed during system non-availability, use screen # 907, input manual job number option and an ‘M’ in the transmit block and transmit. This allows data recovery of manual transactions. Open jobs and HPO/Periodic events use screen #53 (to create the discrepancies) and screen #907 to close the required WCE. Upon completion of system updates, normal processing can continue.

14.2.6.7. **(Added)** AMUs may assign their aircraft support general JCNs for manual use, out of their block of assigned JCNs.

14.2.6.8. **(Added)** Manually assigned JCNs for inspections, HPO and Periodic Inspections, will have an ALPHA character in the sixth position of the JCN. The remaining positions will be NUMERIC (Example: 08001A100).

14.3.1.1.2.2. **(Added)** Egress will manage Egress related CAD/PAD, TCI, and JSTs. Clear install and removal suspenses, and load due dates to applicable parts. Notify PS&D of all unscheduled/emergency issue requests submitted during the week of execution. PS&D will verify the accuracy of all Egress managed asset JSTs. PS&D and Egress will discuss any issues at the Shared Resources meeting following the week of execution utilizing Shared Resource calendars and IMDS screen #701 printouts as source documents.

14.3.3.2. **(Added)** Proofing of TCTO may be accomplished on aircraft, providing there is no hindrance to the phase accomplishment and with the approval of Maintenance Supervision.

14.3.3.3.2.1.1.1. **(Added)** Upon receipt of a TCTO that changes the quantity per application, installed on chain, adds or modifies a part number, notify the affected work centers of the change and ensure changes are reflected upon completion of the TCTO. Coordinate with WR-ALC, or appropriate agency, to verify the new requirement is loaded to the applicable configuration table.

14.3.4.2.4.2.2.1. **(Added)** Coordinate with the Egress Section Chief, or designated representative, for concurrence on egress specific TCI and SI JSTs.

14.3.4.3.3.1. **(Added)** At least semi-annually (e.g. in conjunction with the semi-annual JML review) coordinate with the Egress Section Chief, or designated representative for concurrence on egress specific TCI JSTs.

14.3.4.3.12.2. **(Added)** A meeting will be held between PS&D, Egress, and Munitions, prior to the AFTO Form 223 submission to the Munitions Accountable Systems Officer, for each applicable quarter. During this meeting Munitions, PS&D, and Egress will reconcile all requisitions annotated on the AFTO Form 223, with assets currently backordered, to ensure Munitions are tracking accurate allocations in TICMS.

14.3.4.3.12.3. **(Added)** PS&D will forecast requisitions that are due for the upcoming quarter, plus 9 months. Assets on backorder will not be included. These allocations will be added to the requisitions submitted on the AFTO Form 223 in TICMS by Munitions.

14.3.5.4. **(Added)** PS&D will coordinate Weight & Balance at the shared resources meeting to determine time and location with QA/AMU.

14.3.7.1. **(Added)** Maintenance personnel or Acceptance Team will:

14.3.7.1.1. **(Added)** Make a Red Dash entry in the AFTO Form 781A, “Aircraft Acceptance Inspection Due”, and load appropriate JST for Aircraft Acceptance.

14.3.7.1.2. **(Added)** Perform a Chart A inventory.

14.3.7.1.3. **(Added)** Obtain Consolidated AF Form 2692, *Aircraft/Missile Equipment Transfer/Shipping List,* for all -21 equipment that will accompany the aircraft from Equipment Custodian and forward to PS&D. Copies will be distributed IAW AFI 21-103. PS&D will provide the maintenance personnel or Acceptance Team with a master AF Form 2692, which will be placed in the aircraft jacket file once complete.

14.4.1.2.14.1. **(Added)** Produce daily tracking sheets for TCI parts. Tracking sheet will contain the status of engine components with 100 TACs/hours or less remaining. EM will notify PS&D if there is a delay updating these sheets.

14.4.1.2.16.3. **(Added)** Produce 6-month Engine Time Change data and will ensure the AMU PS&Ds receive monthly updates. This product will cover at least 400 hours/cycles on all engine modules (not Line Replaceable Units).

14.4.1.3.4.2.1. **(Added)** Process and clear all maintenance transactions in the EM suspense file by close of duty the day they are received (provided maintenance documentation paperwork is received i.e. borescope sheets).

14.4.1.3.10.2. **(Added)** Review completed work packages for engines/modules undergoing in shop maintenance prior to release of the asset for QVI. Work packages will be reviewed and returned to the performing work center within 24 hours (provided there are no outstanding component/TCTO issues).

14.4.1.3.11.1.1. **(Added)** Complete DD Form 1348M, as prescribed by DLM 4000.25-1, *Military Standard Requisitioning and Issue Procedures*, upon notification of any engine shipment and give to JEIM for delivery with engine to outbound TMO. E-mail Command Engine Manager, outbound TMO, destination Engine Manager and deployed unit (if applicable), with engine serial number, Transportation Control Number, destination and estimated delivery time to TMO.

14.5.1.6. **(Added)** Annual FHP Procedures:

14.5.1.6.1. **(Added)** MXOS PS&D and OSS/OSO will:

14.5.1.6.1.1. **(Added)** Co-host and initiate/chair First Look FHP meetings as necessary to develop the 48 FW's FHP plan. Attendees will include, but not limited to, the Chief of Scheduling from each Fighter Squadron (FS), MXOS representative(s), and the dedicated maintenance scheduler from each AMU.

14.5.1.6.1.2. **(Added)** Jointly generate the consolidated proposed FHP and provide to OG/CC and MXG/CC by the 30th of April for approval, prior to presenting to FW/CC.

14.5.1.6.2. **(Added)** MXO, as the wing's scheduling focal point, will be the liaison between 48 FW and HHQ.

14.5.1.6.3. **(Added)** OSS/OSO will:

14.5.1.6.3.1. **(Added)** Be the liaison between 48 FW and HQ ACC/USAFE/A3T.

14.5.1.6.3.2. **(Added)** Provide guidance on O&M days projected commitments.

14.5.1.6.3.3. **(Added)** Provide a draft of O&M days product; listing all 48 FW non-fly days, goal days, training days, safety days, and UK Bank Holidays, as well as determine when night flying starts and ends.

14.5.1.6.3.3.1. **(Added)** Goal days will be scheduled once each quarter for FW/CC approval. Goal days known in advance will be included in signed schedules as a means to reflect the most accurate plan. This will be accomplished in sufficient time for FW/CC review and approval.

14.5.1.6.4. **(Added)** Fighter Squadrons will:

14.5.1.6.4.1. **(Added)** Prepare a "breakdown" of the required amount of sorties necessary to fulfill their Ready Aircrew Program requirements.

14.5.1.6.4.2. **(Added)** Use the fully developed budget plan numbers for flying hours, average sortie duration, and UTE rates for planning guidance.

14.5.1.6.4.3. **(Added)** Create fully developed programs using standardized 48 FW FHP contract templates and provided models, IAW the guidance in the HQ ACC/USAFE First Look Message.

14.5.1.6.4.4. **(Added)** Provide OSS/OSO with an electronic and color paper copy of their FHPs NLT 15 September.

14.5.1.6.4.4.1. **(Added)** Both copies must be signed by the FS/CC, Director of Operations, respective AMXS/CC, AMXS Operations Officer, Superintendent, or designated representative.

14.5.4.5.3.1. **(Added)** Quarterly Scheduling Procedures:

14.5.4.5.3.1.1. **(Added)** Schedulers ensure quarterly plans are as detailed and accurate as possible at the time of preparation. Forecast and monitor requirements for the current and next 2 months. Include known special missions, depot maintenance input and output schedules, higher headquarters commitments, and lateral command support requirements.

14.5.4.5.3.1.2. **(Added)** Once an approved quarterly plan is established, MXO PS&D will forward a copy to OS, AMXS, MOS, OG, and MXG/CCs along with all scheduling agencies. The plan will be posted so it may be viewed by both maintenance and operations.

14.5.5.3.5. **(Added)** Monthly Scheduling Procedures:

14.5.5.3.5.1. **(Added)** Respective AMUs and FS will input a checkerboard using locally developed monthly turn pattern calendar, coversheet with applicable signatures.

14.5.5.3.5.2. **(Added)** AMUs will produce a monthly maintenance scheduling page to include, but not limited to: CANN, Starbird, WLT, FTD, Military Training flight (MTF), Engines, Weapons, and Egress maintenance.

14.5.5.3.5.3. **(Added)** RWR Traps as prescribed in **paragraph 11.12.1.1.1** will be included in the monthly plan and coordinated between all AMU/FS to consolidate days to the greatest extent possible.

14.5.5.3.5.3.1. **(Added)** The EWO will provide specific and rotating threats to the WAM for each specific RWR quadrant for each RWR traps occurrence.

14.5.5.3.5.4. **(Added)** Applicable work centers will provide requirements for schedule inclusion:

14.5.5.3.5.4.1. **(Added)** WLT (load schedule).

14.5.5.3.5.4.2. **(Added)** FTD (training aircraft/equipment schedule).

14.5.5.3.5.4.3. **(Added)** MTF (training aircraft/equipment schedule).

14.5.5.3.5.4.4. **(Added)** AGE (equipment inspection schedule).

14.5.5.3.5.4.5. **(Added)** EM (six month forecast).

14.5.5.3.5.4.6. **(Added)** Armament (equipment inspection schedule).

14.5.5.3.5.4.7. **(Added)** Fuels (external tank inspection schedule).

14.5.5.3.5.4.8. **(Added)** Corrosion (aircraft, AGE, and trailer wash and paint schedule).

14.5.5.3.5.5. **(Added)** MXO/MXOS will compile all data and distribute the approved wing monthly schedule, to include posting to the local MXO SharePoint page.

14.5.5.3.5.6. **(Added)** All scheduling meetings and suspense dates falling on a federal holiday, wing down day, or goal day, will be scheduled on the first duty day prior to the normally scheduled day, unless specifically stated.

14.5.6.1.1.1. **(Added)** AMU PS&D in conjunction with AMU Production Superintendents will:

14.5.6.1.1.1.1. **(Added)** Develop a checkerboard for inclusion into the weekly flying scheduling meetings.

14.5.6.1.1.1.2. **(Added)** Inputs to the weekly flying schedules will include a cover sheet, checkerboard, configuration code key and all required munitions, a scheduled maintenance forecast, and Patriot Excalibur (PEX) computer generated daily flying pages for each day of the week.

14.5.6.1.1.1.3. **(Added)** See **Attachment 19** for Flying Schedule Development.

14.5.6.1.1.1.4. **(Added)** See **Attachment 21** for Quiet Hours Procedures.

14.5.6.1.1.1.5. **(Added)** See **Attachment 22** for Standardized Major Maintenance Downtime.

14.5.6.1.1.2. **(Added)** FS will:

14.5.6.1.1.2.1. **(Added)** Enter requested take-off and land times into the next week's schedule in PEX NLT 0900L each Wednesday of the week. PEX entries must include standardized line numbers (see **Attachment 19**).

14.5.6.1.1.2.2. **(Added)** Use appropriate aircraft/weapon configuration codes standardized by MDS.

14.5.6.1.1.2.3. **(Added)** Include in PEX remarks column additional significant information such as surges, Hot Pits, RCS, unique configurations, live ordnance, Hot Guns, or any priority training to be accomplished.

14.5.6.1.1.3. **(Added)** OSS/OSO will:

14.5.6.1.1.3.1. **(Added)** Update the following week's turn pattern slides NLT 1100L Wednesday.

14.5.6.1.1.4. **(Added)** MXO/MXOS will:

14.5.6.1.1.4.1. **(Added)** Draft all daily flying pages, extracted from PEX for the following week's schedule by 1400L Thursday. Exception: Changes briefed at the Thursday Wing Standup will be made immediately after standup and a new or revised schedule will be coordinated (as necessary) through MXO/MXOS NLT 1600.

14.5.6.1.1.4.2. **(Added)** Publish the wing weekly schedule to the MXO SharePoint page by 1300L Friday, and 1600L with pen and ink changes.

14.5.6.1.1.5. **(Added)** MXG/CC and OG/CC will co-chair a weekly scheduling meeting to be held after the Wing's Daily Standup every Thursday, or Wednesday if there is a Holiday or Wing/Squadron down day.

14.5.6.1.1.5.1. **(Added)** Representatives from each FS and AMU, OSS, CMS, EMS, MUNS, MXO and LRS will attend.

14.5.6.1.1.5.2. **(Added)** Two weekly schedules will be coordinated for publication the week prior to planned exercises and prior to 3-day or shorter fly weeks.

14.5.6.1.1.6. **(Added)** FW/CC will review and sign the Weekly Schedule NLT 1200 every Friday or the last duty day of the week.

14.5.6.1.1.7. **(Added)** Locally developed sortie sequence numbers for home station, TDYs, and deployed locations use **Attachment 23**.

14.5.6.3.8.3. **(Added)** PS&D, will accept changes to the following week's schedule up until 1400 hours on Thursday, or Wednesday when Thursday is the last duty day of the week.

14.5.6.3.9.2.1. **(Added)** AF Form 2407 Procedures for Lakenheath are as follows:

14.5.6.3.9.2.1.1. **(Added)** A computer generated AF Form 2407 may be used instead of paper, to coordinate all changes as necessary in **Attachment 24**, and with strict adherence to procedures outlined in DAFI 21-101_USAFE-AFRICASUP and this instruction. AF Form 2407 will indicate the name, rank, and time individual was notified.

14.5.6.3.9.2.1.2. **(Added)** Coordinated AF Form 2407 will clearly identify the changes, and dates of affected changes, and specify a detailed reason for the change (Examples: FCF after Mod required, Maintenance or Operation adds, take-off and landing times, exact configuration needed, etc.).

14.5.6.3.9.2.1.3. **(Added)** The initiator (maintenance/operations personnel) of the change to the schedule is responsible for coordinating and routing the AF Form 2407.

14.5.6.3.9.2.1.3.1. **(Added)** Initiator will provide an approved and signed copy of AF Form 2407 to all required agencies listed in **Attachment 24**.

14.5.6.3.9.2.1.3.2. **(Added)** PS&D must receive the original copies of all AF Form 2407s and pen & ink changes for filing, and MUST NOT BE the individual coordinating the changes. Exception: Changes due to errors made by PS&D personnel will be routed by the respective dedicated scheduler.

14.5.6.3.9.2.1.4. **(Added)** **Attachment 18** lists the mandatory approval authority for each type of change to the schedule. If any agency within the requesting unit non-concurs/disapproves, the Squadron Commanders or designated representative must approve the change. If any agency external to the requesting unit non-concurs/disapproves; MXG/CC, OG/CC or designated representative must approve the change.

14.5.6.3.9.2.1.5. **(Added)** AF Form 2407 and/or Pen and Ink 2407 will state “See Attached Schedule” as a reference for any significant amount of changes, or rewrite of the schedule (i.e. exercise/contingency operations, holiday schedule impacts).

14.5.6.3.9.2.1.6. **(Added)** PS&D will maintain all AF Form 2407s on file with the affected weekly schedule for one year.

14.5.6.3.9.2.1.7. **(Added)** See **Attachment 24** and **Attachment 25** for further guidance on Munitions Scheduling and 2407 approval.

14.7. **(Added)** Static Display Procedures.

14.7.1. **(Added)** The primary point of contact for scheduling all formal static requests is MXO/MXOS (NCOIC, Scheduling).

14.7.2. **(Added)** Static Display requests will be initiated NLT 30 days before the scheduled event. Any changes or requests (i.e. configurations, maintenance support) must be coordinated through MXG/CC, or designated representative.

14.7.3. **(Added)** Specific details such as aircraft tail number, and location will be provided to both OSS/OSO and MXO/MXOS for inclusion into the Weekly Flying Schedule NLT one week prior to the event.

14.7.4. **(Added)** 48 FW Protocol/Public Affairs (48 FW/CCP/PA) will:

14.7.4.1. **(Added)** Ensure all required data is validated and be made at least 30 days prior to the event date.

14.7.4.1.1. **(Added)** Fill out and forward requests to both OSS/OSO & MXO/MXOS (NCOIC, Scheduling).

14.7.5. **(Added)** OSS/OSO will:

14.7.5.1. **(Added)** Coordinate with the appropriate FS Director of Operations to determine aircrew availability.

14.7.5.2. **(Added)** Present the request during the OG/MXG's weekly scheduling meeting for a coordinated recommendation to FW/CC.

14.7.5.3. **(Added)** Notify 48 FW/CCP/PA once the final decision is made by FW/CC.

14.7.6. **(Added)** MXO/MXOS will:

14.7.6.1. **(Added)** Present request(s) for coordination and or approval at the following meetings:

14.7.6.2. **(Added)** Shared Resources (Monday).

14.7.6.3. **(Added)** Schedule Review Meeting (Wednesday).

14.7.6.4. **(Added)** MXG Standup (Thursday).

14.7.6.5. **(Added)** MXG/OG Scheduling Meeting (Thursday).

14.7.6.6. **(Added)** Affected FS and AMXS will determine effects on the long/short range maintenance plan and the FHP.

JASON A. CAMILLETTI, Colonel, USAF
Commander, 48th Fighter Wing

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

48 MXG OI 21-115, *Maintenance,*13 May 2020

AFI 11-202 V3_USAFESUP_LAKENHEATHSUP, *General Flight Rules*, 24 May 2017

AFI 24-301, *Ground Transportation,* 22 October 2019

AFI 33-322, *Records Management and Information Governance Program,* 23 March 2020

AFI 91-207, *The US Air Force Traffic Safety Program,* 26 July 2019

AFMAN 32-1001, *Civil Engineer Operations,* 4 October 2019

DESR 6055.09_AFMAN 91-201, *Explosive Safety Standards*, 28 May 2020

DLM 4000.25-1, *Military Standard Requisitioning and Issue Procedures,*4 May 2018

DSA03.OME Part 2, *In-Service and Operational Safety Management of OME***,** 18 June 2020

Lakenheath Instruction 11-250, *Airfield and Flying Operations*, 15 June 2021

Lakenheath Instruction 21-107, *Emergency Response & Crash Damaged Disabled Aircraft Recovery (CDDAR)*, 22 December 2020

MOD ESTC Standard No. 6 Part 1, *Manual of Standards for Storage and Transport of Military Explosives*, 2013 Edition

TO 1F-15A-33-1-2, *Non-nuclear Munition Loading Procedures*, 16 December 2019

TO 1F-15C-3-2, *Fixed Structure*, 15 June 2020

TO 1F-15C-3-4, *Control Surfaces and Removable Structural Components*, 15 June 2020

TO 1F-15C-36, *Non destructive Inspection*, 1 October 2020

TO 1F-15E-3-2, *Fixed Structure*, 15 May 2020

TO 1F-15E-3-4, *Control Surfaces and Removable Structural Components*, 1 January 2020

TO 1F-15E-33-1-2, *Non-Nuclear Munitions Loading Procedures*, 15 February 2020

TO 2-1-111, *Standard Maintenance Procedure –Navy and USAF –P&W Aircraft Engines*, 1 April 2018

TO 4T-1-3, *Inspection Maintenance Instruction, Storage and Disposition of Aircraft Tires and Inner Tubes,* 23 April 2020

USAFEI 11-201, *Flying Operations Conducted at USAF-Occupied Royal Air Force Installations in the United Kingdom (UK*), 20 June 2017

Prescribed Forms

Lakenheath Form 3, *Broken/Removed Tool Log*

Lakenheath Form 4, F-15 *Flight Control Impoundment Debrief Checklist*

Lakenheath Form 5, *Local Manufacture Request*

Lakenheath Form 25, *Aircraft Impoundment Checklist*

Lakenheath Form 26, *Aircraft Structural Maintenance Intake Maintenance Checklist*

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

AF Form 2692, *Aircraft/Missile Equipment Transfer/Shipping List*

AFTO Form 394, *TMDE Certification*

AFTO Form 398, *Limited TMDE Certification*

DD Form 1348M, *DoD Single Line Item Requisition System Document*

Abbreviations and Acronyms

48 FW/CCP/PA—Wing Protocol/Public Affairs

A/A—Air to Air

A/G—Air to Ground

A/R—As Required

AEF—Aerospace Expeditionary Forces

AFI—Air Force Instruction

AFRIMS—Air Force Records Information Management System

APG—Airplane General

AUTOTAR—Automated Technical Assistance Request

BPO—Basic Post Flight

CETADS—Comprehensive Engine Trending and Diagnostic System

CFT—Conformal Fuel Tank

ECD—Estimated Completion Date

FAST—Failure Analysis Service Technology

FS—Fighter Squadron

FW—Fighter Wing

HBT—Hold Back Tool

IA—Impound Authority

IAW—In Accordance With

IC—Incident Commander

IO—Impoundment Official

IPL—Immediately Prior to Launch

MLG—Main Landing Gear

MTF—Military Training flight

MTS—Maintenance Training Section

NMCMM—Non-Mission Capable Flyable

O&B—Out-and-Back

OPR—Office of Primary Responsibility

PED—Personal Electronic Device

PES—Potential Explosive Site

PEX—Patriot Excalibur

PR—Pre-Flight

PROSUP—Production Supervisor

R&R—Repair and Reclamation

RAFL—Royal Air Force Lakenheath

RAFM—Royal Air Force Mildenhall

RDS—Records Disposition Schedule

RTB—Return to Base

RWR—Radar Warning Receiver

SFO—Senior Fire Officer

SOF—Supervisor of Flying

TACAN—Tactical Air Navigation

TICMS—Theater Integrated Combat Munition System

XC—Cross Country

A8.3.14.1. **(Added)** Reporting Maintenance Codes: Upon Return To Base (RTB), aircrew will report all aircraft Maintenance Codes to Top-3. The Top-3 will coordinate with the Production Superintendent (PROSUP) to determine flightworthy aircraft and the next Go's Line-up based on Mission Type, aircraft status, and configurations. Aircrew must immediately communicate any changes to their aircraft status to Top-3 and PROSUP (post-engine shutdown) as it could affect the next Go's Line-up.

A8.3.14.2. **(Added)** Aircraft Flightworthy Coordination: Unless the aircraft is returned to maintenance for anything other than minor servicing, the Top-3 and Pilot in Command maintain the authority to determine the flightworthy status of the aircraft based on the previous sorties reported codes. Specifically, the aircraft is flightworthy for the follow-on RCS sortie (day only) if a single anti-collision beacon is failed and will be reported Code 3 upon landing. Top-3s will coordinate closely with PROSUP to determine the flightworthiness of Code 2 systems based on the follow-on sortie Mission Type.

A8.3.14.3. **(Added)** Post-Flight Blue Ball Maintenance: When an aircraft system is reported as Code 3, the PROSUP will work closely with Top 3 to determine flightworthiness of the aircraft for the next go. If it is determined flightworthy, the PROSUP will status the aircraft according to the MESL. Specifically, a Code 3 for Radar or Tactical Air Navigation (TACAN) can be statused Non-Mission Capable-Flyable (NMCMM) and flown in the follow-on sortie with Top 3's concurrence based on mission needs. If the aircraft system is not flightworthy or the aircraft system is required for the follow-on sortie, the PROSUP will determine the feasibility of performing Blue Ball maintenance. If Blue Ball maintenance can be attempted within a reasonable timeframe to be able to be effective for the following sortie, the PROSUP will relay the Blue Ball maintenance being performed to Top-3, MOC, and Debrief using the flown sortie line number.

A8.3.14.4. **(Added)** Aircraft forms and maintenance write-ups: Aircrew will write the sortie flight time in the aircraft forms and leave the forms at the jet for any Code 1 or Code 2 status. If the jet is Code 3, aircrew will bring the forms into Maintenance Debrief unless there is a Redball in work which the maintenance team on the aircraft would take responsibility for annotating forms for their corrective actions on the spot. Aircrew will write-up all aircraft discrepancies for each sortie at Maintenance Debrief.

A8.3.14.5. **(Added)** Face-to-Face Aircrew briefs: IAW USAFE Guidance, returning aircrew will provide a face-to-face aircraft status brief to departing aircrew. This brief should include system discrepancies, info notes, and any troubleshooting that was accomplished.

Attachment 15 (Added)

AREAS OF RESPONSIBILITY - R&R

Table A15.1. (Added) Areas of Responsibility - R&R.

A15.1. An X indicates a R&R specific task. A blank space indicates a task that can be performed by any qualified personnel. This guide is not all inclusive.

F-15 Repair and Reclamation Tasks.					
WUC	**SYSTEM**	**Remove / Replace**	**Rigging**	**OPS CK**	**FOM**
11AF0	Windscreen	X	N/A	N/A	X
11PA0	Side Load Scissors				
11PAA	1st Ramp Assy	X	X		X
11PAB	2nd Ramp Assy	X			X
11PAC	3rd Ramp Assy	X			X
11PAE	Ramp Sys Actuators				
11PAF	Diffuser Ramp	X			X
12C00	Canopy	X	X	X	X
13AD0	Strut, MLG (Basic)	X	X	X	X
13AE0	LG Emergency Release	X	X	X	X
13AH0	MLG Mechanism	X	X	X	
13AH0	MLG Doors		X	X	
13B00	Strut, NLG (Basic)	X	X	X	X
13BD0	NLG Doors		X	X	
13BD0	NLG Mechanism	X	X	X	
13BEB	NWS/Emergency Brake Cable	X	X	X	X
13BEJ	Nose Wheel Steering Cable	X	X	X	X
13C00	Arresting Hook Cable				
13CCD	Arresting Hook Actuator		X		
13DEM	Brake Control Cable	X	X		X
14A00	Control Stick	X	X	X	X
14AB0	PRCA			X	
14ABA	Pitch Ratio Changer		N/A	X	
14ABB	Pitch Trim Compensator		N/A	X	
14ABC	Roll Ratio Control		N/A	X	
14AC0	ARI			X	
14AD0	Mixer Assembly	X	X	X	X
14AE0	Rudder Pedals	X	X	X	

14CA0	Stabilator Assembly	X	X	X	X
14CBA	Longitudinal Feel Trim Actuator	X	X	X	X
14CC0	Longitudinal Control Linkage	X	X	X	X
14CDA	Stab Servo Cylinder		X	X	
14DA0	Rudder Surface Assembly		X	X	
14DBA	Directional Feel Trim Actuator	X	X	X	X
14DC0	Directional Control Linkage	X	X	X	X
14DCM	Aileron Rudder Int Cable	X	X	X	X
14DCN	Rudder Limiter actuator	X	X	X	X
14ED0	Speed Brake Surface		X	X	
14GB0	Aileron Assembly		X	X	
14GCJ	Aileron Servo Cylinder		X	X	
14GE0	Lateral Control Linkage	X	X	X	X
14GFA	Lateral Feel Trim Actuator	X	X	X	X
14H00	Flap System		X		
231F0	Throttle Assembly	X	X	X	X
231LC	Throttle Control Cable Left	X	X	X	X
231LD	Throttle Control Cable Right	X	X	X	X

Note 1: Owning unit will jack aircraft for required rig and operational check. Owning unit is also responsible for servicing/air bleeding of aircraft systems.

Note 2: For landing gear strut removal, the owning unit is responsible for the removal and installation of the nose wheel steering unit, actuators, wheel and tire assemblies, and the wiring harness attached to the landing gear.

Attachment 16 (Added)

FOD PREVENTION MEASURES (THIS ATTACHMENT IS USED AS A GUIDE)

A16.1. (Added) Inspect aircraft for the following:

A16.1.1. **(Added)** Condition of boarding ladder (loose hardware, cracked/broken braces, etc.).

A16.1.2. **(Added)** Check cockpit and interior of aircraft for FOD.

A16.1.3. **(Added)** Check all accessible areas and where maintenance is being performed for FOD.

A16.1.4. **(Added)** Ensure all tires are FOD free.

A16.2. (Added) Inspect flightline support equipment, AGE, and vehicles for the following:

A16.2.1. **(Added)** Cleanliness, loose hardware, and the proper tire valve stem caps (plastic only).

A16.2.2. **(Added)** Pintle hook cotter pin installed and secured with a lanyard.

A16.2.3. **(Added)** FOD containers secured to vehicle and stenciled with contrasting letters no smaller than 2 inches.

A16.2.4. **(Added)** Ensure all tires are FOD free.

A16.3. (Added) Inspect support sections for the following:

A16.3.1. **(Added)** Control of bench stock (nuts, bolts, etc.).

A16.3.2. **(Added)** Loose/missing hardware on equipment.

A16.3.3. **(Added)** FOD in CTKs, bins and test equipment containers.

A16.3.4. **(Added)** Ensure continual housekeeping, “Clean As You Go”.

A16.4. (Added) Inspect phase docks for the following:

A16.4.1. **(Added)** Cleanliness during maintenance.

A16.4.2. **(Added)** Ensure strict hardware and part control during all phases of maintenance. Use screw bags/FOD cans as appropriate.

A16.4.3. **(Added)** Ensure all areas are inspected for FOD before installing panels, closing engine panels or compartments.

A16.5. (Added) Inspect aircraft hangars for the following:

A16.5.1. **(Added)** Cleanliness/housekeeping.

A16.5.2. **(Added)** Trash cans/FOD containers used appropriately.

A16.5.3. **(Added)** Door tracks/drainage system for FOD.

A16.6. (Added) Inspect CTKs for the following:

A16.6.1. **(Added)** Serviceability of box (latches, hinges, pin, etc.).

A16.6.2. **(Added)** Serviceability and etching of tools.

A16.6.3. **(Added)** Updated MIL.

A16.6.4. **(Added)** FOD (especially under tools and foam inserts).

A16.7. (Added) Inspect flightline fire extinguishers for the following:

A16.7.1. **(Added)** Proper valve stem caps (plastic only) on pneumatic tires and charging stem.

A16.7.2. **(Added)** Security of attaching hardware (nuts/bolts) and lead seal.

A16.7.3. **(Added)** Trash/FOD in/on the unit.

A16.8. (Added) Inspect spare engine ready lines for the following:

A16.8.1. **(Added)** Use of covers/plugs on the engine inlet/ exhaust, tubing, and components.

A16.8.2. **(Added)** Area for cleanliness and FOD.

A16.9. (Added) Inspect PAS and Test Cell Facilities:

A16.9.1. **(Added)** Cleanliness/good housekeeping.

A16.9.2. **(Added)** Trash/ FOD containers in use.

A16.9.3. **(Added)** Door tracks for FOD.

A16.9.4. **(Added)** Condition of ramp/exhaust deflector.

A16.10. (Added) Performing FOD Walks:

A16.10.1. **(Added)** Follow-up/supervisory involvement.

A16.10.2. **(Added)** Concentrate on aircraft taxiway/parking spots.

A16.10.3. **(Added)** Check drainage/recessed grounding points.

Attachment 17 (Added)

FOD WALK AREAS OF RESPONSIBILITY (AOR)

Figure A17.1. (Added) FOD Walk AOR, (For FOD Walk additional responsibilities, see Lakenheath Instruction 21-102).

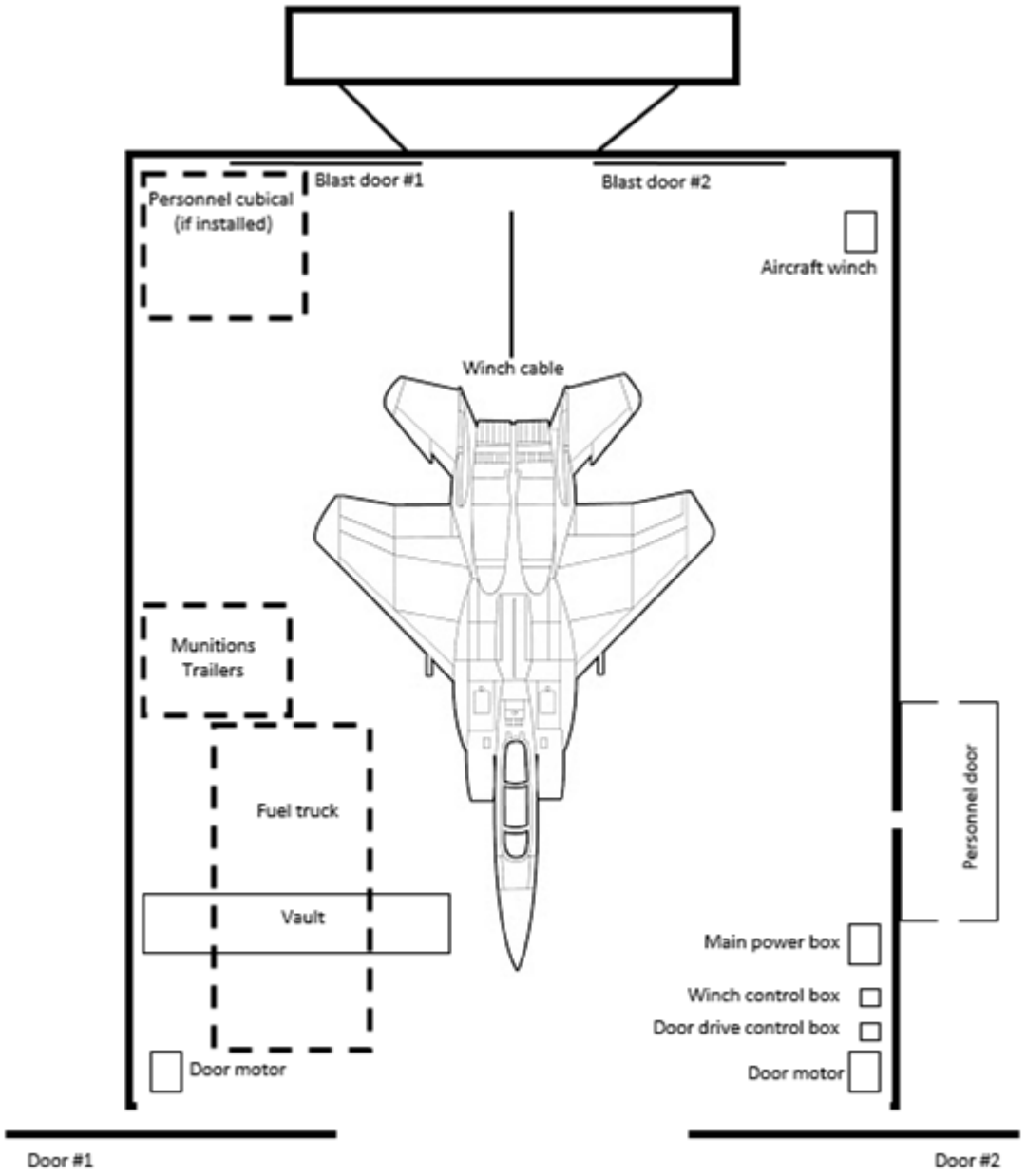
Table A17.1. (Added) FOD Walk AOR.

ALPHA	48 OSS	GOLF	48 MUNS
BRAVO	48 OSS	HOTEL	48 CMS
CHARLIE	48 EMS	KILO	48 MUNS
DELTA	48 MUNS	LIMA	493 AMU
EOR NORTH	48 AMXS	UNIFORM	492 AMU
EOR SOUTH	48 AMXS	VICTOR UPPER	48 LRS
FOX	48 CMS	VICTOR LOWER	494 AMU

Attachment 18 (Added)

SHELTER LAYOUT/MUNITIONS POSITION

Figure A18.1. (Added) Shelter Layout/Munitions Position.



Attachment 19 (Added)

48 FW FLYING SCHEDULE DEVELOPMENT PROCEDURES

A19.1. (Added) The following instructions will be used in developing schedules:

A19.1.1. **(Added)** All FS and AMU will use the turn times listed in **Tables A21.1**/2 as the minimum time for each event. To the maximum extent possible, the overall wing flying window will not exceed 12 hours. The goal is to compress the wing flying window to the shortest time practical. The required turn time from last landing to next fly-days first take off will be a minimum of 10 hours.

A19.1.2. **(Added)** Off-station flying operations (i.e. exercises, airshows and off station turns) must be evaluated for maintenance support at least four weeks before the event. AMXS must have MXG/CC or CD approval to provide off station support.

A19.1.3. **(Added)** A sortie surge must be annotated on the flying schedule and comply with instructions outlined in DAFI 21-101 USAFE-AFAFRICASUP. The number of goes must be pre-coordinated with MXG/CC or CD.

A19.1.4. **(Added)** RCS, Hot Pits, and EOR times will be deconflicted between AMUs. Any conflicts will be addressed during the weekly OG/MXG scheduling meeting.

A19.1.5. **(Added)** Utilization of live munitions will be coordinated between AMXS and MUNS at least three weeks out and will need to be annotated on both the monthly and weekly schedules for the respective flying squadron. Scheduling more than three weapon configurations per squadron in the same week requires OG/CC and MXG/CC approval.

A19.1.6. **(Added)** Weekend duty maintenance will be discussed during the Friday or last production meeting of the week (1500L). Any deviation from the meeting discussion will be coordinated with MXG/CD prior to the end of swing-shift.

A19.1.7. **(Added)** Standard Mission Symbols. Use these mission symbols, when necessary, for the daily schedule in the MISSION column in PEX and in the weekly flying schedule. Scheduling priorities (i.e., Fighter Data Link, airspace, etc.) are based on mission type and, therefore, accurate mission identifiers will facilitate accurate distribution of these assets. As a minimum, indicate the line as either Air to Air (A/A) or Air to Ground (A/G).

A19.1.8. **(Added)** XC and O&B sorties launched from home station will have take-off and land times printed in the Weekly Schedule, as required.

A19.1.9. **(Added)** Off station flying ops must be evaluated for maintenance support at least four weeks before the event.

A19.1.10. **(Added)** XC and O&B sorties launched from other than home station will have “As Required” (A/R) in the take off and land times. The estimated land time (local) at home station will be printed in the remarks section of the flying pages for planning purposes.

A19.1.11. **(Added)** If an exercise, or ATO is forecasted, the unit will publish a “normal’ schedule with projected take off and land times in the weekly schedule. After the ATO is published, the schedule can only be changed IAW DAFI 21-101.

A19.1.12. **(Added)** For exercise purposes, schedules will be built the week prior to START EX (2 week build).

Table A19.1.

MDS	Time
F-15C/D/E Crew Ready	1.5 hrs
Crew Show	60 minutes prior to takeoff
F-15 C/D/E Engine Start	30 minutes prior to takeoff

Table A19.2. Standard Turn Times.

Mission	C/D Models	E-Models
A/A A/G	3.0 hrs	3.5 hrs
Hot Pit Turn	45 minutes	1.0 hr

A19.2. (Added) Turn Time Notes:

A19.2.1. **(Added)** Maintenance will not replenish ammo between Quick Turns and Hot Pits.

A19.2.2. **(Added)** Crew Show and Crew Ready times will be relayed to MOC and will be used as a primary cause of a deviation. This provides maintenance a standard time to expect aircrew and ensure maintenance personnel and aircraft are ready. Crews may show early if maintenance is given an updated crew show time at the morning operations/production supervisor meeting.

Attachment 20 (Added)

JCN BLOCK ASSIGNMENT LISTING

Table A20.1. (Added) JCN Block Assignment Listing.

IMDS Computer Assigned Numbers	XXX0001 through XXX1999
Maintenance Operations Center (MOC)	XXX2000 through XXX2099
MXG Maintenance Supply Liaison	XXX2000 through XXX2099
Quality Assurance	XXX2200 through XXX2249
Engine Management	XXX2250 through XXX2299
Transient	XXX2300 through XXX2349
Aircraft Wheel and Tire Shop	XXX2350 through XXX2399
Repair & Reclamation (Crash & Recovery)	XXX2400 through XXX2449
Armament Sys Flight	XXX2450 through XXX2529
Munitions Control Element	XXX2530 through XXX2549
AGE FLIGHT:	
AGE Cell 1 (BAGE)	XXX2550 through XXX2599
AGE Cell 2 (GAGE)	XXX2600 through XXX2649
Maintenance (RAGE)	XXX2650 through XXX2699
Servicing (WAGE)	XXX2700 through XXX2749
FABRICATION FLIGHT:	
Metals Technology	XXX2750 through XXX2799
Structural Repair	XXX2800 through XXX2849
Survival Equipment	XXX2850 through XXX2899
NDI	XXX2900 through XXX2949
ACCESSORY MAINTENANCE FLIGHT:	
Electro-Environmental	XXX2950 through XXX2999
Pneudraulics	XXX3000 through XXX3049
Fuel System	XXX3050 through XXX3099
Misc.	XXX3100 through XXX3149
Egress	XXX2150 through XXX2199
AVIONICS FLIGHT:	
IS	XXX3150 through XXX3199
Sensors	XXX3200 through XXX3249
APG:	
492nd AMU	XXX3350 through XXX3399
493rd AMU	XXX3400 through XXX3449
494th AMU	XXX3450 through XXX3499
AMU SUPPORT/DMS SECTIONS:	
492nd AMU	XXX3550 through XXX3599
493rd AMU	XXX3600 through XXX3649
494th AMU	XXX3650 through XXX3699
AMU DEBRIEF SECTIONS:	
492nd AMU	XXX3800 through XXX3899
493rd AMU	XXX3900 through XXX3999

494th AMU	XXX4000 through XXX4099
AMU SPECIALIST SECTIONS:	
492nd AMU	XXX4200 through XXX4299
493rd AMU	XXX4300 through XXX4399
494th AMU	XXX4000 through XXX4099
AMU WEAPONS SECTIONS:	
492nd AMU	XXX4600 through XXX4699
493rd AMU	XXX4700 through XXX4799
494th AMU	XXX4800 through XXX4899
HPO/PE/PHASE:	
Dock A	XXX4900 through XXX4999
Dock B	XXX5000 through XXX5099
Dock C	XXX5100 through XXX5199
	XXX5200 through XXX5299
PS & D:	
492nd AMU	XXX5400 through XXX5899
493rd AMU	XXX5900 through XXX6399
494th AMU	XXX6400 through XXX6899
Aircrew Flight Equipment Section	XXX6900 through XXX6999
Weapons Standardization	XXX7000 through XXX7200

Attachment 21 (Added)

QUIET HOURS PROCEDURES

A21.1. (Added) Standard Quiet Hours: For standard quiet hours, reference USAFEI 11-201, *Flying Operations Conducted at USAF-Occupied Royal Air Force Installations in the United Kingdom (UK*).

A21.1.1. **(Added)** Aircraft providing support to Supreme Allied Command Europe, Deputy Commander United States European Command, Component Commanders, NAF Commanders, USAFE/CC, USAFE/CV and Deputy Commander Air Headquarters Ramstein are granted standing waiver authority for operations during NAF, Wing or lower echelon organization quiet hours.

A21.1.2. **(Added)** Maintenance engine (installed) runs will occur no earlier than 0600L and NLT 2200L without waiver approval. Waiver authority: MXG/CC or designated representative.

A21.1.3. **(Added)** MXG/CC or CD are designated as the approval authority for quiet hours deviations for mission essential maintenance engine runs above idle without sound suppression equipment. When conducting ground engine runs during quiet hours, the goal is to maintain engine run noise below open air, idle engine noise levels. Due to local populace sensitivity, quiet hour engine runs outside should be limited to the absolute minimum necessary.

A21.1.4. **(Added)** Quiet hour requests for local special events are approved by MXG/CC and OG/CC.

A21.1.5. **(Added)** Requests are routed through OSS/OSO NLT noon, three weeks prior to the event start date. The request must include the type of event, location, and expected start and end times (in Local and Zulu). Any changes to information submitted in the request must be forwarded to OSS/OSO as soon as possible or may result in the change request being disapproved.

A21.1.6. **(Added)** OSS/OSO will determine, based on the information in the request, what types of operations will be restricted to provide a reasonable balance between flying operations and reduced noise for the event. Before forwarding the request to the OG/CC and MXG/CC, OSS/OSO will assign a quiet hour code from the following list:

Table A21.1. (Added) Quiet Hour Codes.

Code	Code Description
A	No takeoffs, landings, engine runs, taxis, or AGE equipment operation. NO NOISE ON THE AIRFIELD.
B	No takeoffs, engine runs, AGE equipment operation or taxis on the south side of the runway. Landings straight in to a full stop, hold on the North side of the runway.
C	No takeoffs or taxis on south side of the runway. Landings straight in to a full stop, hold on the north side of the runway. No engine runs or AGE equipment operation near (location of event).
D	No takeoffs. Landings straight in to a full stop (Used for Lakenheath indoor events and RAFM quiet hours).

E	No takeoffs, multiple Visual flight Rules patterns or RAFM over flight (Used for RAFM quiet hours).
F	No takeoffs or RAFM over flight (Used for RAFM quiet hours).
G	No RAFM over flight (Used for RAFM quiet hours).
Notes: When approved, OSS/OSO will notify the FS, Airfield Operations (OSS/OSA), OG Standardization and Evaluation (OG/OGV), MXO/MXOM, and MOS/MXOS. OSS/OSA will submit a Notice to Airmen indicating airspace restrictions. OG/OGV will ensure the Supervisor of Flying (SOF) is aware of any restrictions during operations. MXG/MXOS will distribute the information to appropriate "noise producing" units. The SOF is the POC for aircraft ground (engine start and taxi) and flying operations; MOC is the POC for maintenance operations during quiet hours. The SOF and MOC will determine if an activity (i.e., engine run, taxi) can be conducted during quiet hours.	

Attachment 22 (Added)

48 FW STANDARDIZED MAJOR MAINTENANCE DOWNTIME

A22.1. (Added) The following scheduled maintenance guidelines listed below should be followed to the maximum extent possible in order to increase aircraft availability and decrease downtime.

Table A22.1. (Added) Standardized Major Maintenance Downtime.

Maintenance	C/D Models	E-Models
18M Gun	2 Days* 2 Days w/Drives*	2 Days* 2 Days w/Drives*
36M Seat & Canopy	C-Model 2 Days D-Model 3 Days	3 Days
180 Day Weapons Inspection	1 Day	1 Day
180 Day TEWS (JSECTS)	1 Day	1 Day
Aircraft W&B	2 Days	3 Days
Aircraft Reclass	5 Days	5 Days
Aircraft Declass	3 Days	3 Days
* This timeline is based on the use of a ready spare gun.		

Attachment 23 (Added)

48 FW SORTIE LINE NUMBER DESIGNATION

Table A23.1. (Added) Sortie Line Number Designation.

	492 FS	493 FS	494 FS
Home Station sorties	201-270	301-370	401-470
Home Station added sorties (i.e., weather, operations, HHQ, etc.)	271-280	371-380	471-480
FCF/OCF	021-029	031-039	041-049
XC/O&B sorties/PDM input	281-299	381-399	481-499
TDY sorties: non-contingency (i.e. Red Flag, TLP)	101-130	131-160	161-190
Contingency Sorties (i.e., AEF/POTUS, HHQ, etc.	551-599	651-699	751-799
Exercise missions (Phase I/II & launched from home station or TDY location)	501-550	601-650	701-750
Guest units	001-020		

Attachment 24 (Added)

AF FORM 2407 ROUTING COORDINATION MATRIX

Table A24.1. (Added) Routing Matrix.

Agency	Reason							
	Add or Delete Tail number Changes	Pen & Ink Changes	Add or delete lines	Change Flying Window	Change T/O and Land Times	Configuration Changes	Change Sched Mx internal to AMU	Change Sched Mx External to AMU
Initiator	Name, Office	Name, Office	Name, Office	Name, Office	Name, Office	Name, Office	Name, Office	Name, Office
AMU PS&D	Coord	Coord	Coord	Coord	Coord	Coord	Coord	Coord
Pro Super	Coord	Coord	Coord	Coord	Coord	Coord	Coord	Coord
AMU Sup	Coord	Coord	Coord	Coord	Approval	Coord	Approval	Approval
FS OPS Sup	Coord	Coord	Coord	Coord	Approval	Coord	Coord	Coord
Wg PS&D	Coord	Coord	Coord	Coord	Coord	Coord	Coord	Coord
MUNS	Info	Info	Coord	Coord	Coord	Coord	Info	*Coord
CMS	Info	Info	Info	Info	Info	Info	Info	*Coord
EMS	Info	Info	Info	Info	Info	Info	Info	*Coord
AMXS Sup	Coord	Coord	Coord	Coord	Coord	Info	Info	Info
MOC	Info	Info	Info	Info	Info	Info	Info	Info
OG/CC Rep	Approval	Approval	Approval	Approval		Info		
MXG/CC Rep	Approval	Approval	Approval	Approval		**Info/ Approval		

Note: Pen & Inks not affecting lines/turn pattern, or change the fly window do not require 48 OG/CC approval.
*If not applicable to unit then info
**Approval only need for munitions reconfigurations, all other configuration changes will be info

Attachment 25 (Added)

MUNITIONS SCHEDULING

Table A25.1. (Added) Munitions Requirement Changes.

Munitions Requirement Changes					
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
WEEK	2407 needed to change munitions requirements *				
WEEK +1	2407 needed to change munitions requirements				
WEEK +2	Changes made prior to scheduling meeting require no action. Any changes made after scheduling meeting require signed e-PEX to change munitions requirements				
Note	* Counts against scheduling effectiveness				