BY ORDER OF THE COMMANDER ELLSWORTH AFB

AIR FORCE INSTRUCTION 21-101

AIR FORCE GLOBAL STRIKE COMMAND Supplement

ELLSWORTH AIR FORCE BASE Supplement

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Maintenance

AIRCRAFT AND EQUIPMENT MAINTENANCE MANAGEMENT

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AFI 21-101, 21 May 2015, and AFI 21-101_AFGSCSUP, 26 October 2015, is supplemented as follows: This supplement applies to all organizations assigned or attached to the 28th Bomb Wing (28 BW). Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual 33-363, Management of Records, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Send comments and suggested changes to this supplement on AF Form 847, Recommendation for Change of Publication to 28 MXG/MXQ, 1910 Bergstrom Drive, Ellsworth AFB SD 57706.

SUMMARY OF CHANGES

This instruction has been completely revised and should be reviewed thoroughly. This supplement has been revised to identify the realignment of the 28 BW from Air Combat Command to Air Force Global Strike Command.

1.6.2.1. All Engineer Technical Assistance Request (ETAR)'s will be generated utilizing local form, 28 MXG Form 107, and be routed in accordance with para 6.9.5.3.4.1.

2.4.46.1. Wing instructions for control of tools, equipment, and electronic devices from all wing agencies dispatching to aircraft parking/runway/taxi areas and aircraft maintenance areas are outlined in Chapter 8 of this publication.

2.4.63. 28 MXG/CC may appoint Wing Avionics Manager (WAM). If appointed, MXG/Supt will determine work center location for this individual. The typical functions of a WAM are as follows:

2.4.63.1. Serves as the MXG Aircraft Structural Integrity Program (ASIP) program manager.

2.4.63.2. Serves as the MXG Radar Warning Receiver (RWR)/Radar Threat Warning (RTHW) program manager.

2.4.63.3. Serves as the MXG Identify Friend or Foe (IFF) Mode IV program manager.

2.4.63.4. Serves as the MXG Electronic Warfare Integrated Reprogramming (EWIR) focal point. The WAM will work with the wing Electronic Warfare Officer (EWO) to ensure compliance with AFI 10-703.

2.4.63.5. Serves as the focal point for all Boeing Interim Contract Support (ICS) parts issues for Beyond Line Of Sight (BLOS), Laptop Controlled Target Pod (LCTP) and Integrated Battle Station (IBS) sustainment.

2.4.63.5.1. Tracks all incoming and outgoing BLOS, LCTP, and IBS parts until received or arrived at destination.

2.4.63.6. Manages all wing assigned Two-Level Maintenance (2LM) Pods.

2.4.63.6.1. Coordinates all pod shipments as directed by MAJCOM to/from base or operating location.

2.4.63.6.2. Tracks all incoming and outgoing pod parts and SE until received or arrived at destination.

2.4.63.6.3. Ensures accurate and timely pod and SE status is updated or verified daily on Sniper Spares website and Reliability, Availability, Maintainability, for Pods (RAMPOD) IAW AFI 21-103.

2.7.13.1. Refer to the Ellsworth AFB Explosive Loaded Aircraft Parking Plan for parking, launch and recovery of explosive loaded aircraft. Refer to the applicable Emergency Action Checklist for recovery of explosive loaded aircraft (i.e. Hung Stores, Retained Weapons or Hung Flares).

2.7.13.1.1. Prior to approaching aircraft, clearance must be obtained from the On Scene Commander (OSC), generally the Fire Chief. Approval to enter the danger area can be obtained by coordinating through MOC or direct with the Fire Chief on 311.00 Ultra High Frequency.

2.7.13.2. Aircraft may require impoundment IAW 21-101, Chapter 7. See the MOC Impoundment Checklist for more information.

2.7.13.3. Hung Store Procedures: See Attachment 2.

2.7.13.4. Supervisory post-load inspections (SPI):

2.7.13.4.1. All Weapons Section NCOICs, Shift Supervisors, Expeditors and qualified load crew chiefs may be qualified to perform SPIs if required by WWM.

2.7.13.4.2. Initial SPI qualification training and refresher will be provided by WS. The Weapons Section NCOIC will ensure SPI qualified individuals are tracked by the Weapons Load Crew Management Tool (WLCMT).

2.7.13.5. Minimum of 10 weapons CTKs per AMU Weapons Section and one located in WSS (21 total) will be maintained to satisfy training and contingency needs. 28 AMXS will supply replacement tools and equipment for the CTK located in WSS since this CTK is primarily used by AMU/SLC load crews.

2.7.13.6. The Wing Weapons Manager and Weapons Standardization must be notified of any transient aircraft loaded with munitions that require download/upload.

3.7.6.1.1. Procedures to review and clear repeat/recur and cannot duplicate (CND) discrepancies.

3.7.6.1.1.1. Debrief will: Enter "REPEAT" or "RECUR" in red on the AFTO Form 781A and enter "REPEAT" or "RECUR" at the beginning of the IMDS discrepancy block, then enter the appropriate symbol in the symbol block of the AFTO Form 781A.

3.7.6.1.1.2. Notify AMU Production Superintendent of all repeat/recur discrepancies.

3.7.6.1.1.3. CMCs should not be used alone to denote a repeat/recur write up. They can be used in conjunction with pilot reported discrepancies to denote repeat/recur write ups. Note: The “same malfunction” does not mean “same CMC” in every case.

3.7.6.1.1.4. AMXS Superintendent will notify all applicable agencies on 2nd and 3rd repeat/recur discrepancies.

3.7.6.1.1.5. In-flight operational checks will not be entered into aircraft forms without Production Superintendent’s concurrence.

3.7.6.1.1.6. Maintenance may request data sorties be flown in those cases where CDDS data is inadequate to pinpoint a fault and further data collection is required from subsequent flights.

3.7.6.1.1.7. Line Replaceable Unit (LRU)s removed/replaced from aircraft due to repeat/recur discrepancies will have “REPEAT” or “RECUR” annotated in the discrepancy block of AFTO Form 350 tag.

4.4.3.1.7. For 28th Maintenance Squadron Egress (28 MXS/MXMA) procedures and policies see Attachment 3 and Attachment 4 of this instruction

4.4.4.1.3. 28th Maintenance Squadron Fuels Section (28 MXS/MXMAF) personnel will manually refuel and defuel aircraft identified for fuel system maintenance as required.

4.4.4.2.2.1. Verify specialist confined spaces qualifications and monitor during entry into open fuel tanks.

4.5.1.9. 28th Maintenance Squadron AGE Flight (28 MXS/MXMG) responsibilities for managing fuel bowers.

4.5.1.9.1. Assign fuel bowsers to using/owning organizations.

4.5.1.9.2. Coordinate with using/owning organization for emptying fuel bowsers prior to scheduled/unscheduled maintenance.

4.5.1.9.3. Establish/maintain a ready line adjacent to 60 Row AGE fueling pumps.

4.5.1.9.4. Perform daily inspections of units located within the ready line and water bottom staging area (sloped areas behind 60 row docks).

4.5.1.9.5. Contact user/owning organization for any fuel bowser on the ready line between one-half to three-quarters full to relocate to the sloped areas between Docks 60 & 61, 61 & 62, or 62 & 63 for water bottoming.

4.5.1.9.6. After 28 LRS/LGRF (POL) has accepted the fuel bowser for draining, transport to/from Area D (building 8220).

4.5.1.10. Fuel Bowser using/owning organization responsibilities:

4.5.1.10.1. Control assigned fuel bowsers to include contents.

4.5.1.10.2. Ensure fuel bowsers are used for reusable aviation fuel only.

4.5.1.10.3. Ensure AF Form IMT 3126 is properly documented with a description of the task, aircraft/location, and quantity of bowser start/completion of task for historical tracking.

4.5.1.10.4. For water bottoming, park and ground fuel bowsers on the sloped areas between Docks 60 & 61, 61 & 62, or 62 & 63.

4.5.1.10.5. Coordinate fuel sample testing and draining through MOC when bowsers reach one-half to three-fourths capacity. NOTE: 28 MXS/MXMG (AGE) will not transport, and POL will not accept, a bowser over three-fourths capacity.

4.5.1.10.6. Drain water bottoms prior to fuel sample testing. If fuel sample testing fails due to water content, repeat water bottoms drain and have re-tested.

4.5.1.10.7. If fuel sample testing fails due to suspected contamination, coordinate testing and disposal through the Unit Environmental Coordinator (UEC). Clean the fuel bowser and return to serviceable condition once emptied.

4.5.1.11. POL will:

4.5.1.11.1. Test all fuel bowsers after a minimum 24 hours water bottoming. Properly document the fuel bowser tracking form.

4.5.1.11.2. Inform MOC of the test results. If tests pass, seal the bowser and document the fuel bowser tracking form.

4.5.1.11.3. Conduct initial water bottom training for user/owning organizations. Ensure personnel are qualified on draining procedures and proper disposal methods.

4.9.2.1.1. 28th Maintenance Squadron Repair and Reclamation Section (28 MXS/MXMMR) is responsible for recovery/reclamation of equipment and/or crashed, damaged, or disabled aircraft, and other tasks as directed by the 28 MXG/CC.

4.9.2.1.2. Aircraft Jacking: All docks on 70, 80, and 90 row, with the exception of (dock 92 (aircraft wash rack) and dock 93, Aircraft Fuel Systems Repair), are suitable for aircraft jacking. When tail-out docks are utilized, hangar doors must be at the full open position and lockout/tag out procedures implemented to prevent hangar door closure.

4.9.2.1.3. Fuselage jacking can be accomplished on any a/c parking spots. Winds must be within limits IAW 1B-1B-2-05JG-80-01. A/C may have to be adjusted on the parking spot to allow proper fuselage jack positioning IAW 05-81-05.

4.9.4.3.3 The Phase Inspection Section may use Paperless Forms IAW Technical Order 00-20-1.

4.9.4.3.3.1. Aircraft Owning Unit will:

4.9.4.3.3.1.1. Complete a full aircraft forms transcribe no sooner than one day prior to Pre-dock.

4.9.4.3.3.1.2. Phase Controller will:

4.9.4.3.3.1.2.1. Ensure the aircraft forms are deactivated per the deactivation/reactivation procedure.

4.9.4.3.3.1.2.2. Ensure all maintenance discrepancies, regardless of severity, are input into IMDS for maintenance tracking and accountability.

4.9.4.3.3.1.2.3. Ensure a full IMDS screen 380 is printed out at the beginning/end of each shift and annotate the date and time at the top.

4.9.4.3.3.1.2.4. Ensure a current IMDS screen 380 is posted outside the Controller's office when work is being performed and no controller is present.

4.9.4.3.3.1.2.5. Ensure all warning tags are properly logged and tracked on the warning tag tracking sheet.

4.9.4.3.3.1.2.6. Ensure any time a system is deactivated the discrepancy is entered into IMDS.
4.9.4.3.3.1.2.7. Ensure all AF Form 349 actions, when utilized, are completed in IMDS.

4.9.4.3.3.1.2.8. Store and maintain deactivated aircraft forms.

4.9.4.3.3.1.3. Phase Paperless Forms Process:

4.9.4.3.3.1.3.1. Deactivation/Reactivation of Aircraft Forms:

4.9.4.3.3.1.3.1.1. Verify IMDS and the AFTO 781A/K forms match prior to forms deactivation.

4.9.4.3.3.1.3.1.2. Remove the AFTO 781A/K forms from the aircraft forms binder after IMDS match verification.

4.9.4.3.3.1.3.1.3. Place Deactivation cover sheet stating "FORMS DATED FROM TO , (TOTAL NUBMER OF PAGES), HAVE BEEN DEACTIVATED AS OF (DATE)" in the forms binder after the AFTO 781A/K forms have been removed.

4.9.4.3.3.1.3.1.4. Prior to the post dock, reactivate the forms by transcribing ALL open discrepancies to the AFTO 781 A/K forms and remove the deactivation sheet.

4.9.4.3.3.1.4. Phase Supervisors/Area Leads will:

4.9.4.3.3.1.4.1. Review the aircraft IMDS screen 380 at the beginning and end of each scheduled shift to ensure knowledge of the discrepancies associated within their areas.

4.9.4.3.3.1.4.2. Ensure all personnel working in their area input all discrepancies into IMDS.
4.9.4.3.3.1.4.3. Assist the Phase Controller with tracking maintenance completion.

4.9.4.3.3.1.4.4. Ensure technicians have updated the Controller's working IMDS screen 380.

4.9.4.3.3.1.5. Technicians working within the Phase Section will:

4.9.4.3.3.1.5.1. Comply with the Controller and Area Lead instructions they are currently assigned.

4.9.4.3.3.1.5.2. Assist the Area Lead in reviewing the IMDS screen 380 at the beginning and end of each scheduled shift.

4.9.4.3.3.1.5.3. After completing a task/IMDS, report to the Controller's office and line through/initial with employee number the working IMDS screen 380.

4.9.4.3.3.1.6. Panel Sheet procedures:

4.9.4.3.3.1.6.1. Approved Phase panel sheets will be placed in the area binders prior to the removal of any panels.

4.9.4.3.3.1.6.2. Individuals will use the Phase panel sheet to track all panels removed/reinstalled onto the aircraft.

4.9.4.3.3.1.6.3. The Phase Controller/Area Lead will review the Phase panel sheet for accuracy after all panels are installed.

4.9.4.3.3.1.6.4. Panel sheet area discrepancies will be cleared in IMDS after the review.

4.9.4.3.3.1.7. Phase Aircraft System Warning Tags Procedures:

4.9.4.3.3.1.7.1. An AF Form 1492 Warning Tag continuity book will be maintained in the event any system is deactivated, and a warning tag requires installation.

4.9.4.3.3.1.7.2. When a system is deactivated, the technician will enter the discrepancy into IMDS with the statement, "WARNING: DO NOT APPLY / OPERATE (Insert sys/condition here)

4.9.4.3.3.1.7.2.1. PWR – electrical power

4.9.4.3.3.1.7.2.2. APU – auxiliary power units

4.9.4.3.3.1.7.2.3. AIR – cooling or bleed air

4.9.4.3.3.1.7.2.4. ENG – engines

4.9.4.3.3.1.7.2.5. HYD – hydraulic power

4.9.4.3.3.1.7.2.6. WS – wing sweep

4.9.4.3.3.1.7.2.7. JACK – jacking operations

4.9.4.3.3.1.7.2.8. Or the exact nature of the system/component that cannot be activated followed by the tag number, individual name and employee number installing the tag.

4.9.4.3.3.1.7.3. An AF Form 1492 Warning Tag will be handled as follows:

4.9.4.3.3.1.7.3.1. Part 1 will be hung, as directed, on the aircraft to ensure no inadvertent activation of the affected system

4.9.4.3.3.1.7.3.2. Part 2 will be attached to the binder ring on the warning tag continuity book and annotated on the warning tag tracking sheet.

4.9.4.3.3.1.7.3.3. Input a JCN into IMDS to include the system deactivated, tag number, individual installing the tag and date.

4.9.4.3.3.1.7.3.4. When the system deactivation is no longer required the technician will remove both Part 1 and Part 2.

4.9.4.3.3.1.7.3.5. Annotate the warning tag tracking sheet and sign off the JCN in IMDS to reflect the individual removing the tag and date removed.

4.9.4.8.1. In the event of network or IMDS system failure Phase Section will: NOTE: Do not discard or destroy any AF Form 349's

4.9.4.8.1.1. The Phase Controller will initiate the use of AF Form 349s to input, alter or clear any aircraft discrepancies.

4.9.4.8.1.1.1. Document JCN status change as follows:

4.9.4.8.1.1.1.1. The JCN will be completely transferred from the IMDS screen 380 backup copy to a blank AF Form 349.

4.9.4.8.1.1.1.2. The JCN will then be upgraded or downgraded IAW T.O. 00-20-1.

4.9.4.8.1.1.1.3. After the JCN is signed off on the AF Form 349, the respective job on the IMDS screen 380 printout will be lined through and initialed.

4.9.4.8.1.1.1.4. The upgraded or downgraded JCN will be input back into IMDS once the system is restored.

4.9.4.8.1.1.2. Document new JCNs as follows:

4.9.4.8.1.1.2.1. The Controller will assign new discrepancies a manual JCN per AFI 21- 101.

4.9.4.8.1.1.2.2. The JCN will be entered on an AF Form 349.

4.9.4.8.1.1.2.3. Enter all manual JCNs after the network or IMDS is restored.

4.9.4.8.1.1.2.4. Enter all completed tasks after the network or IMDS is restored.

4.9.4.8.2. File the Phase work package (include all IMDS screen 380 reports, deactivated forms, Phase panel sheets, and AF Form 349s) from the Phase Inspection with Plans and Scheduling during post dock.

5.2.2.8.1. When the Runway Condition Reading (RCR) is at or below a RCR of seven as determined by airfield management, only the 28th Maintenance Group Commander (28 MXG/CC), 28th Maintenance Group Deputy Commander (28 MXG/CD), or 28th Maintenance Group Superintendent (28 MXG/CCC) can authorize towing of aircraft.

5.2.2.1.11.1.1. The AMU Production Superintendent will authorize towing of aircraft with no braking capability (chock walk).

5.2.5.1.8.2.1. The Maintenance Management Analysis (MMA) section will maintain a listing of all work center mnemonic codes in IMDS. Additions, deletions, or changes to IMDS database work center mnemonic codes are coordinated by the requesting work center through the MMA section.

5.2.5.1.8.2.2. The MMA/NCOIC will be the approving authority on all requests.

5.2.5.1.8.2.3. Personnel and equipment re-alignments required as a result of mnemonic code changes are the responsibility of the owning work center.

5.2.5.3.2.1.8.1. Access to training Transaction Identification Codes (TRIC) requires a letter signed by the Maintenance Training Flight Superintendent.

5.2.5.3.3.1.1.1.2. The Data Base Manager (DBM) will grant IMDS access when personnel present a valid DD Form 2875, System Authorization Access Request (SAAR), signed by the supervisor and unit security monitor. The DBM will keep the forms on file. Subsystem monitors will sign and submit a letter identifying specific Transaction Identification Code (TRIC) options/restrictions for functional users.

5.2.5.9. Analytical Studies. MMA will provide results of investigations, analyses, or studies to work centers. Provide studies to the requester and retain a file copy for future reference. Disseminate the study by electronic means or include it in a monthly maintenance summary.

5.2.5.9.1. Studies will state assumptions up front, and will be summarized to state how the significance is measured.

5.2.5.9.2. Studies will begin with background information. The study should include the data, research, investigation, and statistical findings, along with their respective sources.

6.2.2.1. Incident reporting procedures:

6.2.2.1.1. When an incident occurs requiring a cost estimate, the 28 MXG/MXQI inspector will respond with the appropriate agencies and complete a 28 MXG Quality Assurance Cost Estimate worksheet obtaining necessary data from the Production Superintendent.

6.2.2.1.2. QA inspector will take photos as necessary, and provide initial cost estimate when obtained.

6.2.2.1.3. The applicable unit will provide the initial cost estimates to the 28 MXG/MXQ inspector as well as any changes/updates to the initial report.

6.9.5.1.1.1. Local deficiency reporting (DR) guidance is found at Ellsworth AFB SharePoint website under the 28 MXG Quality Assurance.

6.9.5.3.4.1. ETAR procedures are:

6.9.5.3.4.1.1. The requesting work center will prepare an ETAR worksheet using 28 MXG Form 107 found on the Ellsworth AFB SharePoint website under 28 MXG Quality Assurance.

6.9.5.3.4.1.2. 28 MXG/MXQ/PIM will validate the ETAR and submit the request through the Technical Support Center (TSC).

6.9.5.3.4.1.2.1. When ETARs involve a ground readiness test (GRT) and/or a Central Integrated Test System Maintenance Code (CMC), provide Software Analysis with required information.

6.9.5.3.4.1.3. AMU Production Superintendent will ensure ETARs are placed in the Aircraft Form 781 binder until a permanent repair has been performed.

6.9.5.3.4.1.4. 28 MXG/MXOS will load follow-up inspections for ETARs on the AFTO 781K. ETARs and AFTO 781K inspections will be validated for each ADR until a permanent repair takes place.

6.9.5.3.4.1.5. 28 MXG/MXOS will annotate the airframe AFTO Form 95, or MIS as applicable after permanent repair.

6.9.5.3.4.1.6. After ETAR prescribed maintenance has been accomplished on the affected aircraft or equipment sign off the discrepancy using the ETAR number.

6.11.4.1.1. 28 MXG Technical Order Distribution Office (TODO) will:

6.11.4.1.1.1. Assign identification numbers to all locally prepared documents.

6.11.4.1.1.2. Serve as the MXG OPR and provide guidance and examples to Units when preparing or revising locally prepared documents.

6.11.4.1.1.3. Ensure 28 MXG Quality Assurance subject matter experts assist TODO in reviewing locally developed documents.

6.11.4.1.1.4. Maintain all original copies of locally developed documents and forward AF Form 673 to the OPR when documents are due for review.

6.11.4.1.1.5. Notify the OPR when the source reference data has changed.

6.11.4.1.2. Unit Responsibilities for Developing Local Work cards, Supplements, Job Guides and Checklists.

6.11.4.1.2.1. Coordinate with 28 MXG TODO when a need for a local publication is determined.

6.11.4.1.2.2. Prepare AF Form 673 in accordance with TODO guidance.

6.11.4.1.2.3. Upon approval of locally developed document, make every attempt to submit appropriate change action to MAJCOM for possible fleet or Air Force wide applicability.

6.12.1. Procedures for initiating a one-time inspection (OTI).

6.12.1.1. The requester will provide Product Improvement Management (28 MXG/PIM) written details of the inspection requested.

6.12.1.2. 28 MXG/PIM will coordinate and implement the command-directed OTI's.

6.12.1.3. 28 MXG/MXQ will review the request for applicability and add any pertinent information.

6.12.1.4. PIM will assign a local OTI number, data code, and then forward the request to 28 MXG/MXQ

6.12.1.5. 28 MXG/CC, 28 MXG/CD, or 28 MXG/CCC approves or disapproves the inspection request.

6.12.1.6. PIM forwards a copy of the request to 28 MXG/MXOS. 28 MXG/MXQ will assist the performing work center with the first inspection as required.

6.12.1.7. 28 MXG/MXOS will input all pertinent data into IMDS and chair a TCTO/OTI meeting with representatives from 28 MXG/MXQ primary work center, and assisting work centers. 28 MXG/MXOS will monitor completion of the OTI as they do with any other TCTO.

6.12.1.8. 28 MXG/MXOS will schedule the inspection in IMDS and notify 28 MXG/MXQ and the performing work centers of the time and place of the first inspection.

6.12.1.9. Performing work centers will update IMDS and notify 28 MXG/MXQ of any problems. 6.13.1.1.1. OCF Procedures.

6.13.1.1.1.1. When an aircraft requires an OCF it will be coordinated between 28 AMXS Maintenance Supervision and the applicable Bomb Squadron Director of Operations, Assistant Director of Operations, and Operations Scheduler. The following actions are required when AMUs decide an OCF is required:

6.13.1.1.1.2. 28 AMXS Maintenance Supervision will notify 28 MXG/CC or 28 MXG/CD.

6.13.1.1.1.3. 28 AMXS Production Supervision will notify 28 MXG/MXQ and provide requirement/reason, tail number, and aircraft location.

6.13.1.1.1.4. Aircraft forms review must be accomplished by 28 MXG/MXQ. If requested, 28 MXG/MXQ will also inspect any completed maintenance action.

6.13.1.1.2. Aircraft configuration:

6.13.1.1.2.1. No weapons will be carried on an OCF unless weapons are required to complete the OCF.

6.13.1.1.2.2. Fuel loads will be determined by the affected Bomb Squadron.

6.13.1.1.3. Upon completion of the OCF:

6.13.1.1.3.1. Aircrew shall report status of OCF to the Bomb Squadron Top 3 and/or Production Superintendent via UHF radio. Aircraft may be immediately used for an engine run crew change (ERCC) IAW AFI 21-165 depending on status report.

6.13.1.1.3.2. 28 MXG/MXQ and the appropriate maintenance specialty or specialties will meet the aircrew at maintenance debrief.

6.13.1.1.3.3. 28 MXG/MXQ will review the OCF checklist and the aircraft forms with the flight crew during debrief to ensure all requirements were accomplished, and forward the completed OCF checklists to the 28 MXG/MXOS for filing in the aircraft jacket file.

6.17. When Chafing is discovered on wires, harnesses, or metal lines/tubes 28 MXG/MXQ will:

6.17.1. Record pertinent information and take pictures as required facilitating entry into the B-1 Technical Service Center (TSC) and QA Chafing Awareness Program (CAP) databases.

6.17.2. Generate a chafing report and distribute to 28 MXG leadership.

6.17.3. The QA Superintendent shall recommend initiating a 10 percent look if the affected aircraft indicates a chafing problem is an operational safety hazard.

6.17.4. The QA Superintendent shall recommend initiating an OTI if the sampled aircraft indicates a chafing problem or the detected chafing is an operational safety hazard.

8.2.3.1.1. The OIC/Flight Chief ensures strict control of warranty tools and designates program managers (PM) (primary and alternate) in writing.

8.2.3.1.2. Each support/work center OIC/Flight Chief who authorizes the purchase of warranty tools through GSA or base-wide contractors will strictly control all broken/warranted tools to identify trends.

8.2.3.1.3. The warranty tool program manager will track replacements. Broken warranty tools will be isolated from other broken tools.

8.2.4.1. Consumable hand tools such as blades, apexes, files, and file cleaners consumed during use may be placed on bench stock; however, strict accountability and control procedures must be included in unit procedures.

8.2.4.2. A stock of spare tools is authorized. These tools are used to replace broken, worn, or missing tools to prevent unnecessary work delays.

8.2.4.2.1. CTK custodians will:

8.2.4.2.1.1. Authorize spare tools and quantities to be maintained.

8.2.4.2.1.2. Inventory replacement tool stocks at least bi-annually.

8.2.4.2.1.3. During the inventory, the CTK custodian will validate the quantity of tools/items within each bin. To aid in accountability, control, and inventory, each tool/item will be separated by use of individual bins or dividers, and sequentially numbered accordingly.

8.2.4.2.1.4. Ensure access to spare tools is limited to the shift supervisor (or equivalent) and CTK custodian.

8.2.4.3. Mark consumables placed in CTKs. Only support section personnel/CTK monitors are allowed to replace consumables and only when the empty container or roll is returned.

8.2.4.4. Do not issue replacement tools without a turn-in of the unserviceable tool or AFGSC Form 145, Lost Tool/Object Report.

8.2.5.2. Outgoing/incoming personnel will document a thorough CTK inspection and accountability on the AFGSC Form 140, CTK Inventory and Control Log. The person giving up control of the CTK will ensure the AF IMT 3126, CTK Turnover Log (general purpose) is delivered to the Support Section for documentation of transfer in TC MAX.

8.2.8.1. All work center issued personal protective equipment (PPE) will be marked with first initial, last name, and employee number (e.g., J. Doe, 1234) for easy identification.

8.2.11.1. Locally manufactured tools/equipment items will be controlled IAW CTK control procedures, to include etchings/markings with the WWID code.

8.2.12.1. When a depot team, factory representative, or contract field team works on aircraft or equipment, they will comply with applicable Air Force procedures for tool control and accountability. Lost tool procedures will be followed if an item is lost.

8.2.12.1.1. The unit responsible for hosting depot teams, factory representatives, and contract field teams will ensure all memorandums of agreement (MOA) procedures are followed.

8.2.12.1.2. The unit will brief tool control procedures to include inventories and lost tool reporting procedures. All depot, contract field teams, and factory representatives will report any lost or missing item to production superintendent or escort. Once notified, the unit representative will process a lost tool report per this instruction.

8.3.6.7.1.1.1. Units will utilize 28 MXG Form 141.

8.3.10.1.1. Remove all clips from soft shell/hard shell headsets.

8.3.10.2. All communication cord switch ends will have the screws sealed over to prevent them from backing out.

8.3.10.3. If installed, all soft shell (boom equipped) headsets will have the volume control knob removed from the ear cup.

8.3.10.4. Remove all plastic caps, to the maximum extent possible, from maintenance ladders.

8.6.1.1.2.1. For CTK identification, the 28 BW will load and use the worldwide identification (WWID) codes in the Tool Control and Asset Management (TCMAX) system. The WWID codes are listed in (AFI 21-101 EAFB_SUP Table 8.1.)

Table 8.1. TCMAX WWID Numbering.

SQUADRON (SQ)	FLIGHT/SECTION	WWID	
		FIRST 4 DIGITS OF SQ ID	FIFTH DIGIT OF BRANCH ID
28 BW	FOD	EJBW	
28 MXS		EJX	
	Hydraulics	EJXA	
	Fuel Systems	EJXB	
	Electrical and Environmental	EJXC	
	Egress	EJXD	
	AGE Production Support/ Inspection Sections/AGE Mobility	EJXE EJXF	
	AGE Servicing	EJXG	
	AGE Munitions	EJXH	
	Structural Repair	EJXJ	
	Metals Technology	EJXK	
	NDI	EJXM	
	Inspection Section	EJXN	
	Repair & Reclamation	EJXP	
	Wheel & Tire	EJXR	
	Transient Alert	EJXS	
	Back Shop Avionics	EJXW	
	Propulsion Flight Support	EJXY	
28 AMXS		EJAM	
	34 AMU	EJ34	
	37 AMU	EJ37	
28 MUNS		EJM	
	Armament	EJM9	
	Conventional	EJMC	
	Equipment Maintenance	EJME	
	Inspection	EJMI	
	Storage	EJMS	

	Line Delivery	EJMH	
	Training	EJMT	
28 MOF		EJMO	
	AFREP	EJQA	A
	QA Inspectors	EJQA	Q
	Weapons Standardization	EJ28	
28 CS		EJCS	
28 LRS	Fuels Management	EJLR	F
28 CES		EJCE	
372 TRS		EJFT	
28 OSS	Survival Equipment	EJXL	

8.7.1.1. The QA Chief/Superintendent is designated as approval authority for locally manufactured tools and equipment.

8.9.2.1.1.1. Upon notification from MOC, QA will annotate the local lost tool/item tracking document.

8.9.2.7. Found Item Procedures:

8.9.2.7.1. When hardware, parts, or equipment items are found on the flight line (defined as the restricted area to include docks), the individual that found the item will immediately notify Production Superintendent who will in turn notify MOC.

8.9.2.7.2. All found items and the location where they were found will be given to the 28 BW FOD Monitor for further investigation.

9.20.2.2.1. Local manufacture part requests should be originated and validated from Decentralized Maintenance Supply (DMS). Once the asset is validated as unprocurable from DMS, the request is then routed to the 28 MXS/applicable work center(s) to ensure capabilities exist to locally manufacture the asset. Requesters will initiate 28 MXG local manufacture form (28 MXG Form 601), AFTO Form 350, Reparable Item Processing Tag, and IMDS job snapshot screen 122.

9.20.2.2.2. Approval authority for local manufacture parts is the applicable manufacturing section/flight or 28 MXS supervision.

9.20.2.4.2. Requesters are responsible for acquiring all necessary materials and parts for non-aircraft/aerospace support equipment local manufactures. Once all parts and materials necessary to complete the local manufacture are on hand, complete the bottom portion of the AFTO Form 350 tag.

9.20.2.5.1. Fabricating work center responsibilities:

9.20.2.5.1.1. Maintain a work order file for each local manufacture request from the Supply Local Manufacture Manager (SLMM).

9.20.2.5.1.2. Notify SLMM when the locally manufactured item is ready for pick up. MICAP parts will be allowed to be picked up by AMU/MXS Production Superintendent. Paperwork will be routed to SLMM the next duty day.

9.20.2.5.1.3. Perform periodic reconciliation with the SLMM to ensure all paperwork is being properly processed.

10.13.8. MHU-196/204 mate/de-mate operations with live or inert munitions require initial certification and will be evaluated semiannually.

10.18.1.1. Dual bay (B-1) loading is required.

11.3.8. B-1 Wing Sweep Program. Personnel authorized to perform wing sweep operations are broken down into three groups: Wing Sweep System Operators, Wing Sweep Team Leaders, and Wing Sweep Certifying Officials.

11.3.8.1. Wing Sweep System Operator certification. Personnel initially appointed as Wing Sweep System Operators will complete the Wing Sweep System Operators Course taught by the 28 MXG/MXOT, pass a written test with a minimum score of 90 percent, and demonstrate proficiency to a Wing Sweep Certifying Official.

11.3.8.2. Wing Sweep Team Leader certification. Personnel initially appointed as Wing Sweep Team Leaders will complete the Wing Sweep Team Leader course taught by Air Force Engineering and Technical Services (AFETS), pass a written test with a minimum score of 90 percent, hold a 7-skill level, must be signed off as a Wing Sweep System Operator, and demonstrate proficiency to a Wing Sweep Certifying Official.

11.3.8.3. Wing Sweep Certifying Officials. Wing Sweep Certifying Officials will hold a 7- skill level, and have 1-year experience as a Wing Sweep Team Leader.

11.3.8.4. Annual recertification. Annual recertification is required for Wing Sweep System Operators, Wing Sweep Team Leaders, and Wing Sweep Certifying Officials. All will successfully pass the applicable written exam administered by the 28 MXG/MXOT with a minimum score of 90 percent.

11.3.8.5. Wing sweep certification will be documented and tracked in IMDS and on the SCR.

11.3.8.6. Wing Sweep System malfunctions. If the Wing Sweep System develops a mechanical malfunction or a suspected un-commanded movement occurs during normal operations, all operations will immediately cease and the Production Superintendent will be notified.

TABLE 11.1 Mandatory SCR and Prerequisites

	A	B
ITEM	Mandatory SCR Item Titles	Prerequisites
46	Authorize Sign Danger Tags	SSgt or higher, minimum 7-skill level (or civilian equivalent), must be a Red-X certified technician (Note 2)
47	Wing Sweep System Operator	Minimum 5-skill level (or civilian equivalent). (Note 2)

48	Wing Sweep Team Lead	SSgt or higher 7-skill level (or civilian equivalent). (Note 2)
49	Wing Sweep Operation Certifier	SSgt or higher 7-skill level (or civilian equivalent), minimum one year wing sweep team leader. (Note 1)
50	Authorize Sign Off /Repeat/Recur	SSgt or higher 7-skill level (or civilian equivalent), minimum one year time on weapon system (Note 2)
51	CND	SrA or higher, minimum 5-skill level (or civilian equivalent), minimum one year time on weapon system (Note 2)
52	B1 Sec Structure/Panel Inspection	SSgt or higher 7-skill level (or civilian equivalent) (Note 1)
NOTES: 1----Approved by MXG/CC 2----Approved by MOO/MX SUPT		

11.8.3.6.4.1. All loose articles and head gear will be removed and/or stowed within 25 feet of an aircraft with operating engines. Note: During inclement weather watch caps and head socks may be worn. For safety measures; watch caps and head socks may be worn with ear defenders provided the ear defenders make full skin contact.

11.8.3.8.1.1. Vehicle FOD containers may be locally manufactured and secured with a bungee cord or similar device that will prevent the container from tipping over while the vehicle is in motion.

11.8.3.8.1.1.1. Vehicles which do not have the ability to properly secure the FOD container (i.e. patrol car, fire truck, ambulance, etc.) do not need to secure the FOD container to the vehicle provided the FOD container's lid can be latched; for example, AMMO container.

11.8.3.8.1.1.1. Vehicle FOD containers will be marked with the vehicle ID number and added to the AF Form 1800 (or applicable vehicle form) in the appropriate block for accountability. Note: Permanently affixed FOD containers do not need to be etched with the vehicle ID number, but will be annotated on the vehicles AF Form 1800 (or applicable vehicle form).

11.8.3.9.1.1.1. All loose hardware will be contained in either a cloth or zip lock bag and retained with the part(s); document the JCN, nomenclature, aircraft tail number, engine number, LRU part/serial number and quantity on the bag as required. In back-shop environments, small parts containers may be used in lieu of cloth/zip lock bags during active, ongoing maintenance where the use of bags is impractical.

11.8.3.11.1. As a minimum, FOD walks will include:

11,8.3.11.1.1. Production Superintendents will ensure a FOD walk is conducted on rows prior to the first aircraft launch and where recovery/maintenance operations are taking place. In addition, Pro Supers will ensure the following requirements are met, during all FOD walks.

11.8.3.11.1.1.1. The Pro Super, Expeditor, or designated personnel will contact the MOC at start- up and completion of the FOD walk for tracking/documentation purpose.

11.8.3.11.1.1.2. Special attention will be placed in areas under and immediately in front of all aircraft, tail side of all docks and center line of each row.

11.8.3.11.1.1.3. Personnel will be spaced to ensure effective FOD walks are being accomplished.

11.8.3.11.1.1.4. Flashlights will be used during the hours of darkness.

11.8.3.11.1.1.5. When the ramp is snow/ice covered, it may be postponed at the Pro Super discretion.

11.8.3.11.1.2. Production Superintendents or the Hot Pit Super will ensure a FOD check is conducted prior-to and after aircraft Hot Pit Refuel on the Spot which the refuel operation is being performed.

11.8.3.11.1.3. FOD checks will be performed by the user on; 20, 30, 40, 50, 100 Rows, LOLA, Spots 10- 26, Hot Cargo Pad and Alert Pad.

11.8.3.11.1.4. All maintenance personnel working in aircraft docks will perform FOD walks in their respective areas, at a minimum of once per shift.

11.8.3.11.2. The following units/squadrons are responsible for Weekly FOD walks in the identified areas:

11.8.3.11.2.1. MXS: On 60 row from the fence line to the back side of the blast fence on 70 row; to include, areas around the docks on 60 row.

11.8.3.11.2.2. AMXS: On 70, 80, and 90 rows from 70 row blast fence to the nose side of 90 row hangars; to include, areas around the docks on 70,80 and 90 rows, all areas around AMXS facilities, and vehicle parking areas.

11.8.3.11.2.3. WPNS: Load Training Facility: Building 7225; to include, around the building, road and parking lot.

11.8.3.11.2.4. LRS/POL: Front and back of building 618; to include, backside of building 618 to the edge of the grass parallel to Taxiway Alpha.

11.8.3.11.3. Areas which require the use of the base sweeper, personnel will contact the MOC, who will in-turn notify Airfield Management Operations (AMOPS).

11.8.3.11.4. A FOD Boss Sweep will be performed, at a minimum of three times per week. The FOD Boss will be inspected and made FOD free prior-to and after use. For tracking/documentation purpose AMXS and MXS personnel will contact the MOC at start-up and completion of FOD Boss Sweep.

11.8.3.11.4.1. AMXS: will perform a FOD Boss Sweep on 70, 80, and 90 rows.

11.8.3.11.4.2. MXS: will perform a FOD Boss Sweep on 60 row.

11.8.3.11.5. When possible, the FOD Boss will not be dragged behind a vehicle that is being used to perform other duties (i.e., expediting, performing pro-super duties, etc.).

11.8.3.13.2.1. Bomb Squadron personnel will develop a local FOD prevention briefing checklist. All aircrew personnel will complete the FOD prevention briefing checklist prior to aircrew step. The FOD prevention briefing checklist will include, but is not limited, to the following:

11.8.3.13.2.1.1. Ensure any loose items that may fall off during flight are removed prior to entering the aircraft cockpit/flight deck.

11.8.3.13.2.1.2. Ensure all pockets are closed/zipped prior to entering the aircraft and during flight. Note: If an item must be removed, ensure pocket is fully closed/zipped and maintain accountability of all items.

11.8.3.13.2.1.3. Ensure all items (i.e., equipment items, personal items, etc.) taken into the cockpit/flight deck are accounted for upon exiting the aircraft.

11.8.3.14. Prior to any aircraft engine operation, personnel will ensure the following:

11.8.3.14.2. Winter operations: B-1 engine runs will not be performed until a 4-foot area around all landing gears and 25-feet forward of engine inlets has been cleared of all ice (loose and solid) and snow; eliminating any potential of the aircraft sliding and FOD.

11.8.3.16.1. Tire rollover checks are mandatory and will be performed by rolling the vehicle forward allowing for inspection of tire underside.

11.8.3.16.2. After departing an unpaved surface onto a paved surface the vehicle operator/occupants will immediately perform a tire rollover check of all vehicle/equipment tires.

11.8.3.16.3. The vehicle operator/occupants will ensure that the vehicles interior is kept free of FO, whenever present.

11.8.3.16.4. All wing agencies dispatching by vehicle or other means to aircraft parking/runway/taxiway and aircraft maintenance areas will ensure all items (i.e., tools, supplies, packing materials, etc.) are accounted for, at all times. Note: Unaccounted for item will be reported as a lost object/item in accordance with Chapter 8 of this instruction.

11.8.3.16.5. Initial emergency response vehicles responding to an In-Flight Emergency (IFE)/Ground Emergency will perform a vehicle FOD inspection, as time permits, at any of the FOD checkpoints/ECPs.

11.8.3.16.6. Failure to perform a FOD inspection may result in suspension of the vehicle operator’s flight line driving privileges.

11.8.3.16.6.1. The 28 BW/FOD Monitor, Airfield Management and 28 BW/SEF have the authority to suspend driving privileges.

11.8.3.16.6.2. Violators are subject to suspension of flight line driving privileges for a minimum of 15 days.

11.8.3.16.6.2.1. Return of privileges will require written proof of retraining and a written statement from the individual along with the corrective course of action from the unit commander provided to the 28 BW/CV.

11.8.3.16.7. Flashlights assigned to a vehicle must be marked with the vehicles ID number and annotated on the AF Form 1800 unless attached to the vehicle's key chain, where it will be tracked in TC Max.

11.8.3.16.7.1. Flashlights assigned to a vehicle will not be utilized in any aircraft/back shop maintenance.

11.8.3.17.2.1. Maintenance units will inspect and clean all grounding points within their respective area on a regular basis. They will ensure the grounding points are kept free of sand and rock build-up that could hide potential FOD sources.

11.8.3.18. AMXS, MXS, LRS, CES and OSS will have magnetic bars either towed by, or attached to their vehicle(s), as follows.

11.8.3.18.1. AMXS: recommended, will have six vehicles (three per unit) with magnetic bars.

11.8.3.18.2. MXS: recommended, will have four vehicles (Phase and Fuel Cell one each per section and AGE two vehicles) with magnetic bars.

11.8.3.18.3. LRS: recommended, will have two vehicles (POL) with magnetic bars.

11.8.3.18.4. CES: recommended, will have two vehicles (Base Sweepers) with magnetic bars.

11.8.3.18.5. OSS: recommended, will have one vehicle (AMOPS) with magnetic bars.

11.8.3.18.6. During inclement weather, these bars may be removed if considered a hazard.

11.8.3.19.1. FOD removal tools assigned to a vehicle must be annotated on the vehicles AF Form 1800 (or applicable vehicle form). Note: FOD removal tool secured to the vehicle's key chain and tracked through either TC Max or applicable checklist do not require annotation on the AF Form 1800.

11.8.3.19.2. For accountability purposes: Equipment/items assigned to the vehicle (i.e. ice scraper, vehicle chocks, fire extinguisher, etc.,) that are not tracked through TC Max or applicable vehicle inventory checklist will be marked with the vehicles ID number and annotated on the vehicles AF Form 1800 (or applicable vehicle form).

11.8.4.2. The alternate 28 BW/FOD Monitor shall be appointed from within 28 MXG/QA. Any trained and qualified TSgt may perform these duties, but a TSgt from the 2A6X1 or 2A5X4 are preferred.

11.8.5.3.1. The 28 BW/FOD Monitor will perform a failure analysis test on all engines with suspected FOD exceeding $50K or as directed by the BW/CV, and track results for trending purpose.

11.8.5.5.1. The 28 BW/FOD Monitor will coordinate with and/or assist AMOPS anytime a portion of the airfield is being considered for reopening after construction.

11.8.5.5.2. The 28 BW/FOD Monitor or a representative will be present for the Airfield Certification/Safety Inspection, hosted by the Airfield Manager.

11.8.5.7. Monitor the 28 BW/FOD program for validity by performing FOD checks, documenting high interest areas, performing FOD sweeps (with the use of a FOD Magnet or FOD Boss), maintaining a database with monthly FOD trends and analysis.

11.8.5.8. The 28 BW/FOD Monitor will conduct and document annual assessments on all unit FOD prevention programs to validate effectiveness and brief unit commanders of findings.

11.8.5.9. In coordination with AMOPS the 28 BW/FOD Monitor will be responsible for weekly FOD sweeps on Taxiway Alpha (from Taxiway Bravo to Taxiway Golf; to include Taxiway Delta East) and Spots 1-12.

11.8.5.10. The 28 BW/FOD Monitor will plan and coordinate Wing-Wide FOD walks, at a minimum of twice annually; to include, Active Runway, all Taxiways, parking locations, and airfield infield.

11.8.5.11. The 28 BW/FOD Monitor will publish FOD flashes and literature pertinent to safe FOD free flying operations.

11.8.5.12. The 28 BW/FOD Monitor will train all Unit FOD Monitors on all aspects of FOD education, prevention and protection.

11.8.5.13. All Squadrons CC's that have personnel performing flight line operation will appoint a Primary and Alternate(s) Unit FOD Monitors. An electronic copy of Unit FOD Monitor appointment letters will be sent to the 28 BW/FOD Monitor.

11.8.5.13.1. Unit FOD Monitors will:

11.8.5.13.1.1. Conduct a minimum of one monthly spot inspection to ensure compliance with the FOD Prevention Program.

11.8.5.13.1.1.1. Spot inspections can include, but is not limited to the following; validating compliance of the unit's continuity binder(s), bulletin board(s), vehicle(s), FOD Boss usage, vehicle magnet usage, FOD brief, performing a follow-up FOD walk inspection, etc.

11.8.5.13.1.1.2. Tracking method is up to the Unit FOD Monitor, but at a minimum will consists of the following; date, inspectors name, inspected area, and findings.

11.8.5.13.1.2. Maintain a FOD bulletin board at each work center. Note: One centrally located FOD bulletin board may be used in areas where multiple shops are located in a single building.

11.8.5.13.1.3. Unit FOD Monitors can find all FOD bulletin board information on the 28 BW/FOD SharePoint: At a minimum, the board will contain the following:

11.8.5.13.1.3.1. Current FOD Point of Contact (POC) visual aid of Wing and Unit FOD POCs.

11.8.5.13.1.3.2. Incentive Program; to include current FOD Poster and FOD Fighter of the Month/FOD Poster of the Month Worksheet.

11.8.5.13.1.3.3. All current FOD Flashes.

11.8.5.13.1.4. Maintain a FOD continuity binder (hard copy or electronic). At a minimum, the binder will contain the following items in each of the following tabs:

11.8.5.13.1.4.1. Tab A – current Unit FOD Monitor appointment letter.

11.8.5.13.1.4.2. Tab B – completed Quarterly Self-Inspection Checklist (must maintain for one year).

11.8.5.13.1.4.3. Tab C – Spot Inspection tracker/documentation, FOD briefing (if applicable), and unit FOD walk policy letter (only applicable to units that are required to perform daily/weekly FOD walks, per this instruction).

11.8.5.13.1.4.4. Tab D – 28 BW/FOD Committee Meeting minutes (must maintain for one year).

11.8.5.13.1.5. The 28 BW/FOD Monitor will assign Entry Control Point (ECP) FOD Container to applicable units (AMXS, MXS, CE, and SFS). The unit will be responsible for the cleanliness of the ECP FOD Container, on a weekly basis; to include an inspection of the immediate area for any loose debris.

11.8.6.1.1. Upon notification of a FOD related incident the MOC will notify – 28 BW/CP, 28 MXG/MXQ, 28 OSS/OSAA, 28 MXG/CD, 28 MXG/CCC, 28 AMXS/MXA, 34th/37th AMU/MXAB, 28 MXS/MXM, and 28 BW/SE.

11.8.6.1.1.1. During off-shift operations, 28 MXG/MXQ will dispatch an inspector who will initiate an initial investigation of the FOD incident. Once on-shift, the 28 BW/FOD Monitor will assume responsibility for the investigation, and prepare and release the necessary reports.

11.8.6.1.1.2. The 28 BW/FOD Monitor will be notified of all FODs, DOPs, and Lost Tools/Objects. Lost Tools/Objects will be tracked and discussed during the Quarterly FOD Committee Meeting. The 28 BW/FOD Monitor will track, report and investigate all FOD/DOP to completion and provide a synopsis' of each event to the 28 BW/CV.

11.8.6.1.1.3. Units will complete the Ellsworth FOD/DOP Worksheet (located in EACL Binders) and route to the 28 BW/FOD Monitor within 24-hours.

11.8.6.4.4.1.4. Units will complete the Ellsworth Blade Blend Worksheet (located in EACL Binders) and route to the 28 BW/FOD Monitor within 24-hours.

11.8.6.15. In addition to the prescribed T.Os a full engine borescope inspection will be performed when any of the following conditions occur:

11.8.6.15.1. Engine is determined to have FOD damage that requires blending by applicable TO.

11.8.6.15.2. Any hardware/material found missing forward of the engine inlet and any damage to the first or second stage fan blades.

11.8.6.15.3. A bird strike that has occurred forward of, and on the underside of the aircraft near the engine intake; unless specific TO addresses bird strike borescope requirements.

10.7.5.14.0.

11.8.6.16. For Class A/B/C/D and other mishaps, investigation personnel must coordinate with the wing or base safety office to ensure the requirements of AFI 91-204 are met.

11.8.7. Quarterly meetings will be conducted if the wing's FOD rate is less than the established standard.

11.8.7.1.1. Minimum attendee representation is all group commanders, and commanders of units with maintenance personnel, flight/ground safety, CE, Airfield Manager, and security forces.

11.8.9. FOD Prevention Incentive Program:

11.8.9.1. The FOD prevention incentive program is used to recognize anyone contributing significant value to the FOD Prevention Program, by increasing FOD awareness, to all applicable personnel and is established by the 28 BW. All FOD Fighter of the Month and FOD Poster nominations must be submitted to the 28 BW/FOD Monitor NLT the 25th of each month.

The 28 BW/FOD Monitor will submit nominations to the 28 BW/CV; who has final approval and selects the winner. The winner receives a certificate signed by the 28 BW/CV and a one-day pass.

11.8.9.1.1. FOD Fighter of the Month Award: Any person, from any level of supervision, may nominate an individual for the FOD Fighter Award.

11.8.9.1.1.1. The Ellsworth FOD Fighter Worksheet and all collected FOD will need to be submitted to the 28 BW/FOD Monitor; worksheet can be found on the FOD SharePoint. Note: Nominations can be submitted via e-mail or dropped-off at the 28 BW/FOD Monitor's office (located within the 28 MXG/QA bldg.) If submitting via e-mail, take picture(s) of the FOD and include with the FOD Fighter Worksheet.

11.8.9.1.2. FOD Poster Award: Any person may submit a FOD Poster. Posters must be on a standard 8 ½" X 11" paper (or electronic equivalent) and include a slogan with the acronym "FOD". The slogan must be relative to FOD prevention and in good taste. Note: The Ellsworth FOD Poster Worksheet and FOD Poster will be submitted to the 28 BW/FOD Monitor; either via e-mail or dropped-off at the 28 BW/FOD Monitor's office (located within the 28 MXG/QA bldg.) Worksheet can be found on the FOD SharePoint.

11.8.9.2. Golden Bolt Award: Once a month, a unit will be selected and the 28 BW/FOD Monitor (or designated representative) will place the "Golden Bolt" somewhere on the Airfield or in the back shop/work center. The bolt will remain under constant surveillance and the unit will be given a reasonable amount of time; allowing their personnel to find the Golden Bolt. The winner receives a certificate signed by the 28 BW/CV and a one-day pass.

11.10.4.3.4.1. AMXS/MXA will appoint in writing a primary and alternate ASIP monitor for each AMU.

11.10.4.3.4.2. AMXS/MXAAS/MXABS ASIP Monitors will be responsible for establishing controls to collect ASIP data.

11.10.4.4.1. AMXS/MXAS Aircraft debrief section will initialize, store, and account for all aircraft IDARS cards. At the end of each calendar month all ASIP data will be sent to OC-ALC for data collection/review.

11.13.5.3. The CA will validate CANN documentation in IMDS-CDB weekly, with AMU supply and inform AMU supervision of its accuracy.

11.13.7.1.1. The CA will coordinate with 28 MXS Production and Propulsion Flight for engine-to-aircraft CANNs.

11.14.1.1.1. MOC will maintain a listing of all Hangar Queen aircraft, identifying the date the aircraft last flew, current status, and a projected date for the next flight.

11.14.1.1.2. AMXS Production Superintendent will notify 28 MXG/MXQ before the last document review on a Hangar Queen to ensure a final 28 MXG/MXQ records check is completed.

11.25.4.1. When induction icing conditions exist, an ice observer will be present in the immediate refueling area as an extra member to the Hot Pit refuel team.

11.25.6.6. Additional ice observer is required when induction icing conditions exist. Individual will possess flight line maintenance AFSC, and have one (1) year of flight line maintenance experience.

15.1.3.2.1. Manual JCN assignment responsibilities:

15.1.3.2.1.2. The MOC Senior Controller will inform all work centers when to start using manual event numbers.

15.1.3.2.1.3. Work center supervisors will:

15.1.3.2.1.3.1. Ensure proper use of their assigned block of event numbers during extended IMDS- CDB downtime and deployment exercises/Operational Readiness Exercises (OREs).

15.1.3.2.1.3.2. Ensure all manual JCNs are loaded into IMDS when the system comes back on line.

15.1.3.2.1.3.3. Ensure all equipment form entries with manual JCNs for are cleared IAW TO 00-20-1, Aerospace Equipment Maintenance Inspection, Documentation, Policies and Procedures.

15.1.3.2.1.3.4. The manual event number will consist of nine digits. The first two digits will be the current year. The next three digits will be the current Julian date and the last four digits will be one of a block of numbers assigned by this section. The listed event numbers in Table 15.1. are assigned to specific organizations or events in 28 BW maintenance areas.

Table 15.1. Event Numbers Assignment Table.

EVENT NUMBERS	DESCRIPTION
0001	IMDS ASSIGNED – DO NOT USE
0002-4000	IMDS ASSIGNED – DO NOT USE
4001-4200	MOC (RED BALLS)
4234-4267	34 AMU (B-1B CANN)
4301-4333	37 AMU (B-1B CANN)
4334-4400	28TH MAINTENANCE GROUP QA
4401-4500	AMXS SUPPORT SECTION
4501-4600	PLANS, SCHEDULING, AND DOCUMENTATION
4601-4700	34 WEAPONS ELEMENT
4701-4800	37 WEAPONS ELEMENT
4801-4900	AMXS DEBRIEFING/DISPATCH (B-1B)
4901-5200	PHASE INSPECTION SECTION DOCK #1
5201-5400	PHASE INSPECTION SECTION DOCK #2
5401-5600	REPAIR AND RECLAMATION

5601-5700	ENGINE MANAGEMENT ELEMENT (CEMS)
5701-5750	FABRICATION FLIGHT
5751-5900	PROPULSION FLIGHT
5901-6050	WHEEL & TIRE
6051-6250	ACCESSORY FLIGHT
6251-6450	ARMAMENT FLIGHT
6451-6650	AGE FLIGHT
6651-6850	PMEL
6851-7050	AVIONICS FLIGHT
7051-7300	MUNITIONS PRODUCTION
7301-7450	28 MO/MAINTENANCE TRAINING FLIGHT
7451-7475	FIELD TRAINING DETACHMENT (Det 8)
7476-7500	MXG/MO PS&D TIME CHANGES
8401-8500	MXG/MO PS&D TCTOs
8501-8600	AGE MOBILITY
8601-8800	CONTRACT FIELD TEAM

15.2.2.4.2. Deployed records procedures: AMU supervision will adhere to the following Table 15.2 to ensure the required records are taken during aircraft movements.

Table 15.2. Deployed Records Procedures.

DEPLOYED PERIOD	DEPLOYED RECORDS ACTION
30 days or less	Forms 781 binder only
31 - 89 days	Forms 781 binder and 180-day Planning Requirements (PRA) or MSAT equivalent when the MIS is not available
90 days or more	Forms 781 binder and full PRA or MSAT equivalent when the MIS is not available
PDM/Transfer 30 days or more	Forms 781 binder and aircraft jacket file

15.2.5.1.5.1.1. PS&D will run another IMDS 990 displaying missing/out of configuration items prior to the post dock to discuss any items that remain.

15.3.1.2.1. Hazardous material (HAZMAT) ordering: The performing work center will order HAZMAT items for TCTO compliance.

GENTRY W. BOSWELL, Colonel, USAF
Commander, 28th Bomb Wing

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

ACC 11-103, Management Reports and Guidance for Flying Hour Program.

ACCI 21-165 Ellsworth AFB Supplement, Aircraft Flying and Maintenance Scheduling Procedures

AFI 11-2B-1V3 EAFB SUP1, B-1, Operations Procedures

AFI 21-103, Equipment Inventory, Status, and Utilization Reporting.

AFMAN 33-363, Management of Records, 1 Mar 2008

EAFBI 11-250, Airfield Operations, and Base Flying Procedures

TO 00-35D-54, USAF Deficiency Reporting and Investigating System

TO 00-20-1, Aerospace Equipment Maintenance Inspection, Documentation, Policies and Procedures. TO 11A-1-33, Handling and Maintenance of Explosives Loaded

TO 1B-1B-2-05JG-20-1, Aircraft Ground Handling and Safety—Safety and Protective Devices

TO 00-25-107, Maintenance Assistance Procedures

Adopted Forms

AF Form 673, Air Force Publication/Form Action Request

AF Form 847, Recommendation for Change of Publication

AF Form 1492, Warning Tag

AF Form 2410, Inspection/TCTO Planning Checklist

AF Form 2692, Aircraft/Missile Equipment Transfer/Shipping Listing

AF Form 3126, *General Purpose (81/2" X 11"*

AFTO Form 95, *Significant Historical Data*

AFTO Form 22, *Technical Manual (TM) Change Recommendation and Reply*

AFTO Form 350, *Repairable Item Processing Tag*

AFTO Form 781, *Arms Aircrew/Mission Flight Data Document*

AFTO Form 781A, *Maintenance Discrepancy and Work Document*

AFTO Form 781K, *Aerospace Vehicle Inspection, Engine Data, Calendar Inspection and Delayed Discrepancy Document*

Abbreviations and Acronyms

28 AMXS—28th Aircraft Maintenance Squadron

28 AMXS/MXA—28th Aircraft Maintenance Squadron, Maintenance Supervision

28 BW—28th Bomb Wing

28 BW/CP—28th Bomb Wing Command Post

28 BW/SE—28th Bomb Wing Safety

28 CES—28th Civil Engineering Squadron

28 CS—28th Communications Squadron

28 LRS—28th Logistics Readiness Squadron

28 LRS/LGRF—28th Logistics Readiness Squadron Fuels

28 LRS/LGRR—28th Logistics Readiness Squadron Readiness

28 MOF—28th Maintenance Operations Flight

28 MUNS/MXWKA—28th Munitions Squadron Munitions Control

28 MUNS/WR—28th Munitions Squadron Armament Section

28 MXG/MXOS—28th Maintenance Group Maintenance Operations Plans and Scheduling

28 MXG/MXOT—28th Maintenance Group Maintenance Training Facility

28 MXS—28th Maintenance Squadron

28 MXG—28th Maintenance Group

28 MXG/CC—28th Maintenance Group Commander

28 MXG/CD—28th Maintenance Group Deputy Commander

28 MXG/CCC—28th Maintenance Group Superintendent

28 MXG/MXQ—28th Maintenance Group Quality Assurance

28 MXG/MXWPB—28th Maintenance Group Munitions Handling section

28 MXS—28th Maintenance Squadron

28 MXS/MXM—28th Maintenance Squadron Maintenance Superintendent

28 MXS/MXMAG—28th Maintenance Squadron Egress Section

28MXS/MXMAE—28th Maintenance Squadron Electro-Environmental Section

28 MXS/MXMAF—28th Maintenance Squadron Fuel System Repair Section

28 MXS/MXMG—28th Maintenance Squadron Aerospace Ground Equipment Flight

28 MXS/MXMMR—28th Maintenance Squadron Repair and Reclamation Section

28 MXS/MXMV—28th Maintenance Squadron Avionics Flight

28 OSS—28th Operations Support Squadron

28 OSS/OSAA—28th Operations Support Squadron Airfield Manager/Management

28 OSS/OSL—28th Operations Support Squadron Aircrew Flight Equipment

28 OSS/OSO—28th Operations Support Squadron Aviation Resource Management

28 OSS/OSOF—28th Operations Support Squadron Flight Records

34 AMU/MXAP—34th Aircraft Maintenance Unit Production Superintendent

37 AMU/MXAP—37th Aircraft Maintenance Unit Production Superintendent

372 TRS—372d Detachment 8 Training Squadron

ADR—Aircraft Document Review

AFREP—Air Force Repair and Enhancement Program

AFTO—Air Force Technical Order

AGE—Aerospace Ground Equipment

AME—Alternate Mission Equipment

AMU—Aircraft Maintenance Unit

ARM—Aircrew Records Management

AVUM—Aerospace Vehicle Utilization Monitor

BCS—Bench Checked Serviceable

CA—CANN Authority

CAD/PAD—Cartridge/Propellant Activated Device

CAF—Combat Air Forces

CANN—Cannibalization

CBMTS—Conventional Bomb Module Test Set

CDB—Central Database

CDDS—Central Deployable Diagnostic System (CDDS)

CITS—Central Integrated Test System (CITS) Deployable Diagnostic System (CDDS)

CFT—Contract Field Team

CND—Can Not Duplicate

CMC—Maintenance Code

COSO—Combat Oriented Supply Organization

CTK—Consolidated Tool Kit

DAS—Defensive Avionics System

DBM—Database Manager

DCC—Dedicated Crew Chief

DIT—Data Integrity Team

DR—Deficiency Report/Document Review

EAFB—Ellsworth Air Force Base

ECP—Entry Control Point

EOD—Explosive Ordnance Disposal

ERCC—Engine Run Crew Change

ETAR—Engineering Technical Assistance Request

EWO—Electronic Warfare Combat Officer

EXCM—Expendable Counter Measures

FCGMS—Fuel Center of Gravity Management System

FOD—Foreign Object Damage

FCF—Functional Check Flight

GRT—Ground Readiness Test

HAZMAT—Hazardous Material

IAW—In Accordance With

IFC—Instrument Flight Control

IMDS—Integrated Maintenance Data System

IMT—Information Management Tool

IFE—In-Flight Emergency

ISO—Isochronal Inspection

JCN—Job Control Number

JDAM—Joint Direct Attack Munition

JML—Job Standard Master Listing

JST—Job Standard

LSC—Load Standardization Crew

LRU—Line Replaceable Unit

MIS—Maintenance Information Systems

MOC—Maintenance Operations Center

MPRL—Minimum Proficiency Requirement Loading

MSAT—Maintenance Scheduling Application Tool

MSDA—Maintenance System Data Analysis

NCOIC—Non-Commissioned Officer In Charge

NDI—Non-Destructive Inspection

NLT—No Later Than

OAP—Oil Analysis Program

OC-ALC—Oklahoma City Air Logistics Center

OCF—Operational Check Flight

OSC—On Scene Commander

OTI—One-Time Inspection

PDM—Programmed Depot Maintenance

PEID—Program Element Identification

PIM—Product Improvement Manager

PPE—Personal Protective Equipment

POL—Petroleum, Oil, and Lubricants

PRA—Planning Requirements

PS&D—Plans Scheduling and Documentation

QA—Quality Assurance

RCR—Runway Condition Reading

SCR—Special Certification Roster

SDR—Software Deficiency Report

SPI—Supervisory post-load inspections

SLMM—Supply Local manufacturer Manager

SMR—Source of Maintenance and Recoverability

SQ—Squadron

TCMAX—Tool Control and Asset Management

TCI—Time Change Item

TCTO—Time Compliance Technical Order

TDY—Temporary Duty

TEP—Technical Engineering Program

TRIC—Transaction Identification Code

TSC—Technical Support Center

UMS—Universal Maintenance Stand

WAM—Wing Avionics Manager

WBT—Weapons Bay Tank

WS—Weapons Standardization

Attachment 2

AIRCRAFT HUNG STORES PROCEDURES

This attachment establishes responsibilities and procedures for the safe recovery of aircraft with hung, suspected hung stores, flares and towed decoys.

B.1 28 BW Hung Store/Weapon Procedures

Note: If an abnormal condition is encountered during the following steps, work will be stopped and technical guidance will be obtained before continuing the operation. A weapons load crew may assist EOD in downloading the affected munition(s) once the explosive hazard has been eliminated. Ensure 1- hour wait time is observed if JDAM battery activation has occurred.

B.1.1. Maintenance personnel required: one Weapons Expediter, one qualified 7-level Weapons Technician, and two qualified Aircraft Technicians (2A5X4).
B.1.2. Production superintendent will assemble all essential personnel and equipment at the appropriate hung store recovery area.
B.1.3. Ensure firefighting equipment is available to include one 150-pound halon 1211 extinguisher.
B.1.4. Fire Protection Flight will control the area until termination and provide standby assistance (as required).
NOTE: The on-scene senior fire official controls entry to the aircraft and will direct crew chiefs to park aircraft.

B.1.5. Crew Chiefs will: marshal, chock, establish communications and perform engine shut down and Auxiliary Power Unit (APU) start-up procedures with the aircrew. Applicable aircraft safe-for- maintenance procedures will be accomplished. (If live munitions are on board the aircraft, everyone will evacuate except the aircraft commander who will run APUs, as required)
B.1.6. Weapons personnel will check in with on-scene senior fire official prior to entering area. Aircraft will be checked for physical damage to include the exterior of the weapons bay doors, TDS fairings, and EXCM cavities for visible damage/hung stores. If there is physical damage or hung stores, direct the aircrew to shut down and evacuate the aircraft to a minimum of 300 feet. Notify EOD of any damage or hung store/weapon.
B.1.6.1 If there is no physical damage/hung store, slowly open the weapons bay doors just wide enough to ensure there are no munitions or equipment lying on the doors. If no weapons are lying on the bay doors, open the doors to the full position and place weapons bay door safing handle to vertical. Place weapons ejector ground safety handle to the vertical position. Lock the module safety handle if applicable. Once the aircraft is safed it can be towed as required.

B.1.7 When flight line hung stores troubleshooting procedures have been exhausted and it is determined the AME requires further troubleshooting, the equipment will be turned in to 28 MUNS/MXWR/Armament.

B.2 Hung Flare Procedures

NOTE: If any portion of the flare cartridge is protruding from the dispenser, cease all operations, withdraw (1.3) 600 feet from the area, and notify the fire department and EOD.

B.2.1 Once cleared by the on-scene commander, weapons personnel will safe the counter measures system and inspect flares. Once the system is confirmed safed, coordinate incident termination with the on-scene commander.

B.3 Hung Towed Decoy Procedures

NOTE: If any portion of the towed decoy is protruding from the dispenser, cease all operations, withdraw 300 feet from the area to preclude injury from explosive squibs and notify the fire department and EOD.

B.3.1. If decoys are in an unsafe condition, notify the on-scene commander and coordinate with EOD personnel to safe the munitions. If applicable, weapons personnel will assist EOD personnel in downloading the decoys.

B.3.2. In the case of a hung decoy, once cleared to the recovery area by the on-scene commander, weapons personnel will establish a safe zone 10 feet to the side and 50 feet to the rear of the TDS fairing (IAW T.O. 1B-1B-2-00GV-1) and will then retrieve safety pins from aircrew compartment.

B.3.3. Weapons personnel will get number of expended towed decoys from aircrew to determine how many towed decoys are hung.

B.3.4. Weapons personnel will install all required safety pins. After safing the system, weapons personnel will remain clear of the potential deployment area (10 feet to the side and 50 feet to the rear) while *verifying* the quantity of decoys deployed.

B.3.5. Once the aircraft is safed, coordinate with the on-scene commander for termination of the incident.

Attachment 3

EGRESS EXPLOSIVE COMPONENT PROCEDURES

This attachment establishes explosive storage, operating, and handling criteria, safety precautions, mishap reporting procedures, and training requirements for the 28 MXS Egress Section and 28 MXS Electro- Environmental Section.

A3.1. Explosive Operating and Storage Locations

A3.1.1. Building 7520, room 151 is the designated off equipment explosive maintenance area for ejection seats and egress system components. Ejection seats or explosives will not be left unattended overnight in the maintenance area. They will be returned to the designated explosive storage area within the 28 MXS Egress Facility.

A3.1.2. Building 7520, room 150 is the only approved explosive storage area for the 28 MXS Egress Section and the 28 MXS Electro-Environmental Section. A limited quantity of in-use explosive components of C/D 1.2, 1.3, and 1.4 may be held in the 28 MXS Egress Section explosive storage area when these items are removed from aircraft undergoing maintenance. The quantity will not exceed the total net explosive weight stated on the AF IMT 2047 "Explosives Facility License". The AF IMT 2047 will be posted outside of room 150.

A3.1.3. The two primary locations for removing ejection seats and hatches from aircraft are Dock 71 using the overhead hoist system and Dock 93 using the 7.5 ton crane or mini crawler crane (spider crane). Seat removals at any other location must be approved by the 28 MXS Production Superintendent on a case-by-case basis.

A3.1. 3.1 The 28 MXS Egress Section Chief is responsible for ensuring adequate personnel are trained on the 7.5 ton crane or mini crawler crane (spider crane) for ejection seat and hatch removals.

A3.1.4. The appropriate fire symbol signs will be posted at all entrances leading into the 28 MXS Egress Section, explosive storage room, and off-equipment maintenance area (if present), whenever explosives are present in the facility.

A3.1.5. Personnel in charge of explosive operations will notify the EAFB Fire Department whenever there is a change in fire symbol.

A3.2. Explosive Transportation

A3.2.1. Only personnel who have received work center-specific explosive safety training will operate a vehicle while transporting explosives.

A3.2.2. The transporting vehicle must conform to the standards set forth in AFMAN 91-201.

A3.2.3. Limited quantities of C/D 1.2, 1.3, and 1.4 may be transported with the minimum amount of personnel in the cargo compartment of the 28 MXS Egress vehicle and the 28 MXS Electro-Environmental vehicle.

A3.2.4. Maximum of two ejection seats or four catapults (C/D 1.3) may be transported at any one time.

A3.2.5. Any number of C/D 1.4 explosives may be transported with the above items provided suitable containers are used and properly secured.

A3.2.6. All explosives will be properly secured during transport to prevent movement. Aircraft seats will contain all required safety pins and devices and be secured to prevent movement during transit.

A3.2.7. The 28 MXS Vehicle Control NCO will ensure a backup vehicle meets all requirements in AFMAN 91-201, and is available for transporting explosives.

A3.2.8. Vehicles transporting explosives will have the emergency brake set and one rear tire will be chocked during loading or unloading explosives. Explosive laden vehicles will never be left unattended.

A3.2.9. Vehicles used for transporting explosives will be inspected prior to use IAW AFMAN 91-201.

A3.2.10. Vehicles will not be refueled while transporting explosives.

A3.2.11. Vehicles transporting explosives will have a minimum of two serviceable 2A:10BC fire extinguishers available.

A3.3. Explosive Operations Procedures and Safety Precautions

A3.3.1. All personnel performing explosive operations will read and comply with all explosives handling procedures outlined in AFMAN 91-201.

A3.3.2. The minimum number of personnel will be exposed to the minimum amount of explosives for the minimum amount of time.

A3.3.3. Personnel Limits: The maximum personnel limits for explosives maintenance per the AF IMT 2047 are two supervisors, four workers, and two casuals.

A3.3.4. In all explosive operations where components are handled, a minimum of two certified technicians will perform the task.

A3.3.5. Prior to starting an explosive operation, the task supervisor will conduct the Explosive Pre- operation/Emergency Procedures Briefing. See **Attachment 4**.

A3.3.6. Personnel will ground themselves prior to performing any off-equipment maintenance on the B-1 ACES II ejection seat or any electrically actuated explosive devices.

A3.3.7. A serviceability pre-inspection of all explosive devices will be performed prior to installation.

A3.3.8. Unserviceable explosives will be segregated from serviceable explosives and be turned in to 28 MUNS/MXWCMB as soon as possible.

A3.3.9. Handheld radios, cell phones, and other RF transmitting devices will not be used within 25 feet of electrically actuated explosive devices.

A3.3.10. The 28 MXS Production Superintendent will coordinate with the respective AMU Production Superintendent and/or 28 MXS Phase Dock Chief to ensure no other technicians are dispatched to the aircraft to perform maintenance that will conflict with egress personnel performing explosive maintenance.

A3.3.11. No other maintenance tasks or inspections will be accomplished on the aircraft without the approval of the egress supervisor while egress explosive operations are being performed. No external power will be applied to the aircraft without the approval of the egress supervisor during

explosive operations. The egress supervisor is responsible for stopping the explosive operation when any unauthorized personnel enter the area.

A3.3.12. Once an explosive maintenance task has been started, the specialists involved will not be dispatched to another job until the task has been completed, unless it is an emergency. Interruption of in-progress explosive maintenance could lead to a serious explosive incident.

A3.3.13. When there is the potential for lightning within 10 nautical miles of the installation, no new egress explosive maintenance tasks will be started; however, task(s) already in progress will continue until lightning is observed within five nautical miles of the installation.

A3.4. Explosive Mishap Procedures

A3.4.1. In the event of an unsafe condition involving the egress system, the maintenance or inspection action will be stopped and the section chief or shift supervisor will be notified. The maintenance or inspection will not resume until the unsafe condition is corrected and the aircraft has been deemed safe by the egress supervisor.

A3.4.2. In the event of an explosive accident or incident, the following actions will be taken by the fastest means possible:

A3.4.2.1. The task supervisor will notify MOC and the squadron maintenance production supervisor immediately and provide the type and location of incident or accident. MOC will dispatch any emergency aid required (fire, medical, EOD, etc.).

A3.4.2.2. Attempt to put out the fire if the explosive(s) have not been consumed by fire.

A3.4.2.3. Nothing at the scene will be disturbed unless it presents a hazard to personnel or equipment.

A3.4.2.4. The area will be secured to prevent further injury, damage, or tampering with possible evidence for mishap investigations.

A3.4.2.5. All personnel involved will remain at the scene until relieved by competent authority, unless medical attention is necessary.

A3.5. Explosive Safety Training Requirements

A3.5.1. Training will be conducted annually by the responsible work centers and the 28 MXS Additional Duty Weapons Safety Monitor (ADWSM) will administer the explosive safety test. The 28 MXS ADWSM will maintain two explosive safety tests. Twenty-five percent of the test questions must be changed annually. Test results will be documented and updated. Memorandums reflecting work center training and due dates will be forwarded to the 28 MXS ADWSM from the responsible work center. Explosive safety training plans and tests will be reviewed annually by the 28 MXS/ADWSM and 28 BW Weapons Safety.

A3.5.2. Egress personnel will be trained annually on this attachment and the Egress Explosive Safety computer-based training available from 367 TRSS, Hill AFB. Training will be documented in Integrated Maintenance Data System (IMDS).

Attachment 4

EXPLOSIVE PRE-OPERATION/EMERGENCY PROCEDURES BRIEFING

A4.1. Prior to the start of any operation, brief the following:

_____a. A description of the operation to be performed and specific location:

b. Explosives involved:

A4.1.1. Class/Division-Withdrawal Distance: 2500ft. (Base Gym)

A4.1.2. Class/Division-Withdrawal Distance: 600ft. (Pride Hangar)

A4.1.3. Class/Division-Withdrawal Distance: 300ft. (Football Field)

_____c. Brief all principle hazards, warnings, notes and applicable cautions from item TO.

_____d. Personnel Limits:

_____ Supervisors (2)

_____ Team Members (4)

_____ Visitors (2)

_____e. Remove all rings and wrist jewelry.

_____f. Check all fire extinguishers for serviceability.

_____g. All personnel will ground themselves prior to handling/maintenance on any ejection seat or components.

_____h.

_____will sound the alarm. If that individual is injured, then

_____will sound the alarm. will direct emergency vehicles to the scene. will direct firefighting efforts until the fire department arrives, unless such actions are determined to be too dangerous. All non-essential personnel will evacuate to

_____.

A4.2. If an abnormal condition exists, stop the operation until technical guidance can be obtained to correct the condition.

A4.3. Immediately notify the Fire Department/MOC of the incident to include the type, quantity, fire symbol, location, and the number of personnel requiring first aid and/or rescue.

A4.4. Evacuate the area upwind to the appropriate withdrawal distance for the Class/Division of the munitions involved.

A4.5. Immediately perform a roll call to ensure all personnel are present and accounted for.

A4.6. Do not return to the scene of the incident unless directed by the Base Fire Chief or EOD personnel.

Attachment 5

ENGINE MANAGEMENT

A5.1. Responsibilities: Supervisors at all levels are responsible for briefing personnel in accordance with this instruction. Strict compliance with this instruction is mandatory.

A5.2. Procedures:

A5.2.1. **Aircraft Maintenance Unit's Responsibilities:**

A5.2.1.1. E-mail aircraft engine downloads within 24 hours of the last flight of the day to 28 MXG MXOM Engine Management. If an aircraft condition prevents downloading, inform the Engine Management (EM) section of the condition within the timeframe mentioned above. The Common Engine Transfer System (CETS) should be downloaded into the AMU's Comprehensive Engine Trending and Diagnostic System (CETADS) computers and reconciled with the host computer located in the EM section daily.

A5.2.1.2. Provide Integrated Maintenance Data System (IMDS) documentation for the engine removal by close of business (COB). This is required to be processed in IMDS in order to add back shops profile WUC's to the engine removal job control number, IAW 00-20-2, paragraph 2.2.4. Engine installations or engine line replaceable units (LRU) documentation is required within 24 hours of the occurrence. This will also include CANN actions when moving engine parts from one aircraft to another.

A5.2.1.3. Provide home station, TDY, or deployed EM section all required part/serial number verification information by COB the day the item is changed.

A5.2.1.4. Perform and document a physical verification of all the engines installed on newly assigned aircraft, as well as those returning from PDM, TDYs lasting over 30 days and deployments. This is also required to be accomplished at every HPO inspection. Provide a copy of the verification sheet to EM within 24 hours of being accomplished, but no later than prior to the first flight.

A5.2.1.5. Downloads are required at the end of the flying day during TDYs, deployments, and air shows (that are scheduled to fly) lasting over 2 weeks.

A5.2.1.6. Aircraft Maintenance Units must deploy with a laptop computer programmed with CETADS installed and e-mail capability, a CETS, CETS charger, and the Deployed Engine Manager book.

A5.2.1.7. Two weeks prior to departure appointed deployed Engine Manager will contact EM section to set up an appointment to ensure all training requirements are met and to ensure laptop is configured correctly. The laptop will be checked out and updated with the most current information.

A5.2.1.8. Once download letter is received from EM, an email response will be required with all missing down load information NLT 3 business days.

A5.2.2. **Maintenance Squadron Propulsion Personnel Responsibilities:**

A5.2.2.1. Provide all requested serial number or part number verifications to the EM Section within 24 hours of the request.

A5.2.2.2. Provide copies of all LRU AFTO Forms 95 to the EM Section for verification.

A5.2.2.3. Prepare engines for shipment as required. Obtain shipping paperwork from the EM section for all engine shipments which will be included with the delivery to Traffic Management Office (TMO).

A5.2.2.4. Upon receipt of an engine from TMO, bring the engine records and shipping documents to EM section for verification and filing.

A5.2.2.5. When Jet Engine Intermediate Maintenance (JEIM) completes maintenance on an engine, it will not be considered a spare until EM verifies the following:

A5.2.2.5.1. No overdue time change items (IMDS Screen 713, Option 8).

A5.2.2.5.2. No grounding TCTOs (IMDS Screen 525 Option 4, including indentured items).

A5.2.2.5.3. Ensure the inventory and replacement checklist in the work package matches IMDS Screen 810.

A5.2.2.5.4. If there are any errors, the engine will not leave the JEIM section until all corrections are made.

A5.2.2.6. Phase dock is required to perform a physical verification of all engines on the aircraft. Fill out the physical verification sheet and send it back to EM section prior to post dock.

A5.2.3. **Engine Management Section Responsibilities**

A5.2.3.1. Every Wednesday EM will send PS&D data required for management to plan engine maintenance or deployments which will be included in aircraft utilization plans. This includes but is not limited to TCTO, TCI, SI, USM, and CANN information.

A5.2.3.2. Load all engine parts into IMDS and the CEMS databases when required.

A5.2.3.3. Clear the suspense validation (IMDS Screen 128) at least twice a day.

A5.2.3.4. After JEIM has completed work on an engine, update history in IMDS/CEMS using applicable screens.

A5.2.3.5. Before an aircraft deploys for more than 30 days, ensure a copy of historical records (can be on disks) on all engines are included in the deployment package. Check all inspections and time changes to ensure nothing is overdue and has appropriate amount of time left, mitigating any limiting factors. Ensure original records are maintained at the home station unless directed to transfer to a gaining Stock Record Account Number (SRAN).

A5.2.3.6. For all engine shipments and transfers ensure DD Form 1348-1/1A is prepared. Annotate the reason for shipment in the engine's history in IMDS/CEMS using IBEMS toolbox screen 392 in GIMMS. If GIMMS is not available use screen 295 in CEMS and screen 392 in IMDS. TMO/A4/receiving and delivering EM section will be notified of all shipments and transfers via message, e-mail, or FAX.

A5.2.3.7. Perform weekly review on downloads completed. Ensure alignment with the last weeks flying schedule. Document missing downloads on the download letter and send to all applicable agencies and leadership. If there is no response received within 3 duty days the issue will be presented to appropriate AMU's OIC.

A5.2.4. **Deployed Engine Manager Responsibilities**

A5.2.4.1. Units deploying on TDY assignments requiring spare engine support will appoint a Deployed Engine Manager.

A5.2.4.2. Prior to departure date **not later than 2 weeks prior,** the deployed Engine Manager will call and make an appointment with the EM Section. The deployed Engine Manager will receive a briefing conducted by the SRAN Engine Manager on their duties while TDY. The Engine Manager and deployed Engine Manager will conduct an operational check of the deploying laptop computer and ensure all information is correct. The deployed Engine Manager will receive the Deployed Engine Manager book outlining duties while TDY. The book will also contain appropriate contact numbers for home station and examples of required documents for shipment of engines.

A5.2.4.3. All engine/component changes and any time-change items will be reported to the SRAN Engine Manager by e-mail, telephone or fax prior to the next scheduled flight. Numbers are located in deployed Engine Manager book.

A5.2.4.4. Information to be reported to the EM Section and in IMDS will include, date and time of engine/component removal or installation, reason for removal, How Malfunction Code, aircraft tail number, total airframe time, along with engine operating time, engine flying hours and total engine Time Accumulated Cycles (TACS).

A5.2.4.5. Report any and all parts changed, to include old part/serial number removed and new part/serial number installed and also a brief narrative of change to EM Email Distro Box **28.MXG.MXOM.Engine.Management@us.af.mil** or at a minimum a phone call to EM office at 385- 1157/1160.

A5.2.4.6. Engines requiring shipment will be coordinated by deployed EM with the AOR deployed EM ensuring appropriate disposition of engines to include Transportation Control Number (TCN) off the DD Form 1348-1/1A shipping document and coordinate with TMO to assure engine is shipped properly and promptly. TMO/A4/base EM section must be informed of all engines being shipped via message, e-mail, or fax.

A5.2.4.7. Process engine downloads in CETADS format and e-mail files back to the SRAN Engine Manager for processing in the EM Section within 24 hours after the aircraft is debriefed.

A5.2.4.8. It will be the responsibility of the deployed Engine Manager to ensure that all engines (with all their parts), trailers, and adapters are returned to home station or designated location as determined by SRAN Engine Manager.

A5.2.5. **Transportation of Jet Engines by Towing:**

A5.2.5.1. All engines will be prepped and towed IAW T.O. 2J-1-18 and T.O. 00-85-20.

A5.2.5.2. All engines will be towed to and from the flight line with the approved route of travel, see Attachment 6).

Attachment 6

APPROVED ROUTE OF TRAVEL FOR TOWING ENGINES

Figure A6.1, Approved Route of Travel for Towing Engines