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MACDILL AIR FORCE BASE (AMC)

DEPARTMENT OF THE AIR FORCE
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21-101

AIR MOBILITY COMMAND
Supplement

MACDILL AIR FORCE BASE

Supplement

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MAINTENANCE

AIRCRAFT AND EQUIPMENT
MAINTENANCE MANAGEMENT

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This supplement implements and extends the guidance of Department of Air Force Instruction (DAFI) 21-101_AMCSUP, *Aircraft and Equipment Maintenance Management*. It applies to all personnel assigned or attached to the 6th Maintenance Group, 927th Maintenance Group, 6th Operations Group, and 927th Operations Group, MacDill Air Force Base (AFB). This supplement does not apply to the Air National Guard. This supplement may be supplemented at any level, but all publications and/ or supplements must be routed to Office of Primary Responsibility (OPR) for coordination prior to certification and approval. Refer recommended changes and questions about this publication to the OPR using the DAF Form 847, *Recommendation for Change of Publication,* route DAF Forms 847 from the field through appropriate functional chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-

0, T-1, T-2, T-3") number following the compliance statement. See Department of the Air Force Manual (DAFMAN) 90-161*, Publishing Processes and Procedures*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the requestor's commander for non-tiered compliance items. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Compliance with the attachments in this publication is mandatory. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

SUMMARY OF CHANGES

This publication has been substantially revised and must be completely reviewed in its entirety. Major changes to this supplement are as follows: Added Repeat/Recur/CND procedures, QA RCA procedures, procedures for removing aircraft plugs and covers, and paperless Warning Tag tracking procedures. Removed duplicate procedures covered by parent AMC supplement and other Technical Data. Additionally, this publication incorporates M MACDILLAFBI 21-108 *Foreign Object Damage/Dropped Object Prevention*, MACDILLAFBI 21-107, *Wing Tool Control and Cyber Discipline*, MACDILLAFBI 21-104 *Crashed, Damaged, or Disabled Aircraft Recover (CDDAR)*, and MACDILLAFBI 91-215 *Hangar Door Operations and Safety*.

1.7.2.1.3.3. **(Added)** See **Paragraph 1.20** for local MacDill procedures, forms, and incident response.

1.20. **(Added) MacDill Cyber Maintenance Discipline and Hygiene Requirements and Control Procedures.**

1.20.1. **(Added)** The following requirements and controls are intended to fulfill requirements outlined in AFMAN 17-1301, *Computer Security (COMPUSEC)*, without incurring requirement for waivers.

1.20.2. **(Added)** No device other than Common Interface Computer, test sets, Personal Computer Memory Card International Association (PCMCIA) cards, or other software storage media will be connected to aircraft via Universal Serial Bus, card reader or cannon plug. These devices will only be connected to the aircraft through procedures outlined in MDS technical orders. Note: Devices may be connected to power outlets if device wattage does not exceed technical data.

1.20.3. **(Added)** Personnel will install updates, security patches, and software as directed by Air Force Network Alerts on Air Force enterprise network enabled desktops, laptops, and eTools. Non-enterprise network enabled eTools will not be connected via Wi-Fi®, Bluetooth, IR, etc., to an aircraft or other government furnished/owned equipment other than to charge device through a standard power outlet. Non-enterprise network enabled eTools will receive updates via LOGNET or Technical Order Distribution Office (TODO) IAW Technical Order (T.O.) 31S5-4-ETOOL-1.

1.20.4. **(Added)** Microphones and cameras will be administratively disabled on all eTools in compliance with approved Standard Desktop Configuration (SDC).

1.20.5. **(Added)** When aircraft commander designates that aircraft has classified information stored, processed or discussed onboard, the following controls will be required:

1.20.5.1. **(Added)** Common interface computers, eTools, PCMCIA cards, or other software storage media will only be carried on aircraft with aircraft commander approval.

1.20.5.2. **(Added)** eTools will be powered down while classified information is processed or discussed. If eTools need to be operated while classified information is processed or discussed, the additional actions will occur: LOGNET will administratively disable Wi-Fi® on eTool. If this cannot be pre-arranged prior to mission, personnel will put eTool in "Airplane Mode". The eTool will remain in airplane mode until the eTool can be returned to LOGNET for tracking purposes, and full wipe and load of SDC.

1.20.5.3. **(Added)** All other portable electronic devices not previously identified will not be carried onboard aircraft.

1.20.6. **(Added)** When aircraft does not have classified information stored, processed or discussed onboard, the following controls will be utilized:

1.20.6.1. **(Added)** eTools may have enabled Wi-Fi® to connect to DoD network.

1.20.6.2. **(Added)** All other portable electronic devices will have disabled Wi-Fi® and Bluetooth and will not be connected to the aircraft.

1.20.7. **(Added)** In addition to automated enterprise network enabled scan and updates, the following controls will be established:

1.20.7.1. **(Added)** Quality Assurance inspectors will inspect during Technical Order inspections:

1.20.7.1.1. **(Added)** Anti-virus software installation based on configured SDC,

1.20.7.1.2. **(Added)** Anti-virus software update status, and

1.20.7.1.3. **(Added)** Disabled microphone and webcam, as applicable.

1.20.7.2. **(Added)** Quality Assurance will send any Cyber Maintenance Discipline or Hygiene related findings to LOGNET for resolution.

1.20.7.3. **(Added)** All eTools deployed for more than 30 days will be turned into LOGNET for full wipe and load, if required, to ensure eTools maintain compliance with AFMAN 17-1301 and T.O. 31S5-4-ETOOL-1 configuration requirements.

1.20.8. **(Added)** Cyber Maintenance Discipline forms are as follows:

1.20.8.1. **(Added)** MacDill Air Force Base Visual Aid (MACDILLAFBVA) 21-101, *Aircraft Avionics Emergency Quick Response Aid*, will be maintained in active aircraft forms as a visual aid explaining actions in response to suspected compromised aircraft. Visual aid will be distributed by Wing Avionics Manager (WAM) and posted to digital Master Forms Binder when contact information changes.

1.20.8.2. **(Added)** Personnel identified in **Paragraph 1.20.8.3** will complete MACDILLAFB Form 110, *Aircraft Platform Software/Data Transfer & Handling Agreement*, and submit digitally to WAM or designated representative. The form will be maintained in accordance with AFRIMS Table 21-02 Rule 08, Agreements, Receipts, and Correspondence.

1.20.8.2.1. **(Added)** MACDILLAFB110 will be maintained for 2 years after compromise investigation completion and after personnel separation for adverse conditions.

1.20.8.2.2. **(Added)** A copy of MACDILLAFB110 will be provided to personnel who PCS to another unit or deploy. Recommend retention in mobility folder until form is transferred to new or deployed unit WAM.

1.20.8.2.3. **(Added)** The original MACDILLAFB110 will be maintained for 1 year after PCS or separation for non-adverse conditions.

1.20.8.3. **(Added)** Personnel will identify specialized handling roles on MACDILLAFB110 as follows:

1.20.8.3.1. **(Added)** TODO personnel receive software and digital technical orders on removable media, may download software from web services, e.g., Electronic Software Distribution System, and will select this option. Users outside TODO function may be required to identify this role if they have authorized access to Electronic Software Distribution System, or web service to download software directly.

1.20.8.3.2. **(Added)** Users transferring, uploading, or verifying platform information system data to DoD Information System will select this role. Engine Management and Debrief personnel receive removable media with platform information system downloaded data for upload to DoD network enabled systems and will select this option. Personnel outside these positions will be required to identify this function if they may upload aircraft data to network enabled system.

1.20.8.3.3. **(Added)** Personnel, e.g., avionics technicians, mission planners, combat crew communications, and boom operators, who connect test equipment or other transfer devices with the purpose of two-way communication or transfer with platform information system, will select this role. Personnel, who solely utilize equipment that capture aircraft data to blank removable media and do not upload data to network enabled system, do not need to select this role.

1.20.8.4. **(Added)** MACDILLAFB Form 111, *Platform Information System Upload Document*, will be updated when Common Interface Computer (CIC) is connected to FDR and all avionic component software is loaded, and will be maintained in aircraft forms. Download of FDR data from Data Display and Transfer Unit (DDTU) does not require update. Transcribe MACDILLAFB111 with AFTO Form 781*, Arms Aircrew/Mission Flight Data Document*, series forms, and maintain in aircraft jacket file.

1.20.8.4.1. **(Added)** Complete MACDILLAFB111 as follows:

1.20.8.4.2. **(Added)** "FROM". Enter current date form was added to aircraft forms.

1.20.8.4.3. **(Added)** "MDS". Enter mission designator series for aircraft.

1.20.8.4.4. **(Added)** "ACFT TAIL NUMBER". Enter aircraft tail number.

1.20.8.4.5. **(Added)** "PAGE". Enter page number starting with 1.

1.20.8.4.6. **(Added)** "DATE". Enter current date that software or data was uploaded to platform information system.

1.20.8.4.7. **(Added)** "SYSTEM". Enter aircraft system, which is being updated, e.g., Common Computing Module.

1.20.8.4.8. **(Added)** "POSITION(S)". List positions loaded or enter "N/A".

1.20.8.4.9. **(Added)** "Transfer Device Type". List equipment being used to transfer data, e.g., CIC.

1.20.8.4.10. **(Added)** "Serial # or CTK EID". Enter serial number or Equipment Identification Number (EID).

1.20.8.4.11. **(Added)** "Software or Data Loaded Description". List common description of data loaded.

1.20.8.4.12. **(Added)** "Minimum signature". Annotate minimum signature per T.O. 00-20-1 **Paragraph 3.6.**.

1.20.8.4.13. **(Added)** "TO" and Total Pages (Page 1 of #) will be entered on first page during forms transcription in accordance with T.O. 00-20-1.

1.20.8.5. **(Added)** Use MACDILLAFB Form 112, *Platform Information System Transfer Document*, for removable media and test equipment (excluding COMSEC equipment) to log when software, mission plans and other data are loaded to removable media and test equipment, and to document date and time software or data is transferred to each aircraft. This form will be maintained with test equipment, transfer device, or removable media. This form will be transcribed upon semi-annual inspection/inventory of equipment and will be submitted digitally to the Wing Avionics Manager. The WAM will retain this form for 6 months after transcription date. Complete MACDILLAFB112 as follows:

1.20.8.5.1. **(Added)** "FROM". Enter current date form was added to aircraft forms.

1.20.8.5.2. **(Added)** "Serial # or CTK EID". Enter serial number or (EID for transfer equipment.

1.20.8.5.3. **(Added)** "Equip Type". List equipment being used to transfer data, e.g., CIC.

1.20.8.5.4. **(Added)** "PAGE". Enter page number starting with 1.

1.20.8.5.5. **(Added)** "DATE". Enter current date that software or data was transferred to or from platform information system.

1.20.8.5.6. **(Added)** "Upload/Download". Indicate whether transfer was upload to aircraft or download from aircraft.

1.20.8.5.7. **(Added)** "Aircraft Tail#/Serial#/CTK EID". Enter aircraft or equipment identifier to which upload or download occurred.

1.20.8.5.8. **(Added)** "Software or Data Loaded Description". List common description of data uploaded or downloaded.

1.20.8.5.9. **(Added)** "Minimum signature". Annotate minimum signature per T.O. 00-20-1 **paragraph 3.6**

1.20.8.5.10. **(Added)** "TO" and Total Pages (Page 1 of #) will be entered on first page during forms transcription in accordance with T.O. 00-20-1.

1.20.9. **(Added)** Aircraft Cyber Security Incident Response Procedures. Upon suspected aircraft cyber security incident as identified in MACDILLAFBVA 21-101 the following procedures will occur:

1.20.9.1. **(Added)** Aircrew or ground maintenance personnel will notify Production Superintendent of suspected aircraft cyber security incident.

1.20.9.2. **(Added)** Maintenance personnel and/or production will notify WAM of suspected compromised aircraft.

1.20.9.3. **(Added)** Avionics personnel dispatched and overseen by WAM will validate whether system is compromised by validating software in accordance with T.O. 1C-135-8-1 and applicable Time Compliance Technical Orders (TCTO) and performing operational checkouts IAW 1C-135-2-11-40-series technical orders.

1.20.9.3.1. **(Added)** If aircraft(s) is/are determined to not be compromised, aircraft will be released to maintenance after validation of all software and coordination between WAM and Mission Defense Team (MDT).

1.20.9.3.2. **(Added)** If aircraft is suspected to be compromised, the following actions will occur:

1.20.9.3.2.1. **(Added)** The WAM will distribute initial report to MDT and follow procedures outlined in **paragraph 1.20.9.3**

1.20.9.3.2.2. **(Added)** The MDT will follow procedures outlined in **paragraph 1.20.9.4**

1.20.9.3.2.3. **(Added)** Production will follow procedures outlined in **paragraph 1.20.9.5**

1.20.9.3.2.4. **(Added)** Quarantine release procedures are outlined in **paragraph 1.20.9.6**

1.20.9.4. **(Added)** Aircraft Cyber Security Incident Record Collection and Aircraft Quarantine. The WAM will:

1.20.9.4.1. **(Added)** Collect aircraft forms and aircraft jacket file.

1.20.9.4.2. **(Added)** Utilize MACDILLAFB110 to identify potential sources of Platform Information Technology (PIT) cyber security intrusion to weapon system.

1.20.9.4.3. **(Added)** Quarantine equipment and transfer devices, and use device cross-utilization to identify or eliminate equipment that is not the source of suspected compromise IAW T.O. 33-1-38.

1.20.9.4.4. **(Added)** Secure aircraft forms and aircraft from tampering until the arrival of Authorizing Official/Security Control Assessor (AO/SCA) dispatched team.

1.20.9.4.5. **(Added)** Act as primary liaison for dispatched AO/SCA team until investigation is complete.

1.20.9.4.6. **(Added)** Brief MXG/CC and production on status of quarantined aircraft.

1.20.9.5. **(Added)** Aircraft Quarantine Procedures. The MDT will:

1.20.9.5.1. **(Added)** Ensure distribution of initial report to 6th Air Refueling Wing Commander (6 ARW/CC), OG/CC, MXG/CC, and external agencies identified in USAF PIT System Security Plan within 24 hours.

1.20.9.5.2. **(Added)** Ensure final detailed report is distributed due within 7 duty days.

1.20.9.5.3. **(Added)** Assist WAM with identification and elimination of equipment and transfer devices as source of suspected compromise IAW T.O. 33-1-38.

1.20.9.5.4. **(Added)** Act as alternate liaison for dispatched AO/SCA team in the absence of the WAM.

1.20.9.5.5. **(Added)** Ensure coordination with Wing Cyber Security Office and Cryptographic Account Manager.

1.20.9.6. **(Added)** Production will:

1.20.9.6.1. **(Added)** Communicate with Aerospace Vehicle Distribution Officer to ensure aircraft possession code "BQ" change occurs upon communication of quarantined aircraft.

1.20.9.6.2. **(Added)** Restrict access to quarantined aircraft until release by 6 ARW/CC.

1.20.9.6.3. **(Added)** Limit maintenance actions on quarantined aircraft to those items listed in T.O. 1C-135-6WC-1 Card 5-009. All other special inspections, time change items, and hourly or calendar inspections until release of aircraft by 6 ARW/CC. Cannibalization actions on quarantined aircraft will only be authorized with concurrence by investigation authority, KC135 program office, and Communicate with Aerospace Vehicle Distribution Officer. These actions will require possession code change if authorized.

1.20.9.6.4. **(Added)** Coordinate with Aerospace Vehicle Distribution Officer to ensure aircraft possession code "CA" change occurs upon quarantine release by 6 ARW/CC.

1.20.9.7. **(Added)** Aircraft Quarantine Release.

1.20.9.7.1. **(Added)** AO/SCA team will recommend release of quarantined aircraft to 6 ARW/CC.

1.20.9.7.2. **(Added)** The WAM and MDT will compile all reports and data as a single record. This record will be stored as follows:

1.20.9.7.2.1. **(Added)** For aircraft cleared of malicious software, retain record for 2 years in aircraft jacket file, WAM file plan, and MDT file plan.

1.20.9.7.2.2. **(Added)** For aircraft not cleared of malicious software, retain record until aircraft is retired from service in aircraft jacket file, WAM file plan, and MDT file plan.

1.20.9.7.2.3. **(Added)** If aircraft is transferred, the losing unit WAM and MDT will retain record for 6 months after confirmed receipt of record by gaining unit WAM and MDT.

1.20.9.7.3. **(Added)** The 6 ARW/CC is the authorized quarantined aircraft release authority IAW USAF PIT System Security Plan.

2.4.44.1. **(Added)** Repeat/Recur, and CND Discrepancy Procedures.

2.4.44.2. **(Added)** To clear a Repeat/Recur/CND discrepancy; member must be identified on the special certification roster to clear Red-X discrepancies and must be qualified on the affected task(s). Additionally, personnel qualified on the special certification roster to clear Red-X discrepancies for all systems may clear Repeat/Recur/CND discrepancies for any system. Qualified personnel shall clear Repeat/Recur/CND discrepancies IAW T.O. 00-20-1 and DAFI 21-101. Authorizations to clear CND's will be tracked through G081 course code MCDL000099. The approval authority will be the Squadron Operations Officer or Maintenance Superintendent via an AMC Form 64, *Request for Special Certification*.

2.4.44.3. **(Added)** Repeat and Recur Procedures.

2.4.44.3.1. **(Added)** AMXS debrief will:

2.4.44.3.1.1. **(Added)** Run a complete history using the G081 8070 screen against the system WUC for the affected pilot reported discrepancy. Debrief personnel will look for history as directed by production.

2.4.44.3.1.2. **(Added)** Annotate "Repeat" or "Recur" in the applicable DISCREPANCY block of the AFTO Form 781A, *Maintenance Discrepancy and Work Document*, and MACDILLAFB Form 1, *Aircraft Sortie Recap Worksheet*.

2.4.44.3.2. **(Added)** After an attempted sortie/ground abort, the Production Superintendent will ensure a thorough history review is conducted on the affected system using the G081 8070 screen, to verify the discrepancy is not a Repeat/Recur.

2.4.44.3.3. **(Added)** A systems-qualified technician will:

2.4.44.3.3.1. **(Added)** Clear discrepancy IAW T.O 00-20-1.

2.4.44.3.3.2. **(Added)** Re-verify all troubleshooting procedures, inspect any previous corrective actions, and the latest corrective action. This step is performed by a civilian equivalent, 7-level technician or higher or regardless of whether the symbol is a "Red X" or "Red /". This ensures that a thorough follow-up has been performed.

2.4.44.4. **(Added)** Cannot Duplicate Procedures. A minimum of qualified 7-level technician, or civilian equivalent, and/or qualified Production Superintendent (authorized by AFSC or All Systems Red X) will clear a CND discrepancy.

2.4.53.1.1. **(Added)** Production Superintendents will ensure assigned aircraft forms and MIS are reviewed each shift and that all aircraft reflect the correct status IAW T.O. 00-20-1, T.O. 00-20-2, DAFI 21-101, and DAFI 21-103, *Equipment Inventory, Status and Utilization Reporting.*

2.4.53.1.2. **(Added)** Production Staff will perform a thorough review of aircraft forms, equipment forms, and MIS on all extensive maintenance events and/or Depot Field Team maintenance actions to ensure proper documentation prior to the team's departure. The review will be documented in the aircraft forms, equipment forms, and MIS.

2.4.53.2.1. **(Added)** Production Staff will ensure completion of a comprehensive Aircraft forms and MIS review is accomplished prior to the Exceptional or Conditional Release activity for the next projected sortie.

2.4.53.3. Operational Check Flight (OCF)/Functional Check Flights (FCFs) are required per the airframe specific -6 technical data. Any other instance of an OCF/FCF or High Speed Taxi Checklist (HSTC) request when not identified by airframe specific guidance will be authorized by MXG/CC and OG/CC, at the recommendation of maintenance personnel, and communicated thought the MXG QA and OG Stan-Eval offices.

2.4.56. See **paragraph 1.20** for local MacDill procedures, forms, and incident response.

2.9.23. **(Added)** Oversee production and supervisory inspections for their unit and ensure section chiefs perform inspections. Superintendents will determine appropriate number of supervisory inspections and report trend analysis/significant findings to QA for trend analysis and possible incorporation onto quarterly MSEP brief.

3.2.2.1. **(Added)** When an aircraft has an actual or suspected hot brake condition, notify the Maintenance Operations Center (MOC). The MOC will implement the appropriate checklist.

3.2.2.2. **(Added)** In accordance with AFI 32-2001, *Fire and Emergency (F&ES) Program*, if brakes or tires are on fire/overheated, the aircraft is under the control of the Senior Fire Chief (SFC) until the aircraft is released back to maintenance personnel. Personnel will approach aircraft with hot brakes from front or rear only, not the side.

3.2.2.3. **(Added)** The following actions will be accomplished when an aircraft has hot brakes prior to arriving at its designated parking spot:

3.2.2.3.1. **(Added)** The Production Superintendent (Wing assigned aircraft) or the Transient Alert (TA) shift supervisor (transient aircraft) will:

3.2.2.3.1.1. **(Added)** Respond immediately with a qualified 7-level or higher (or equivalent level for TA) to meet with the fire department near the aircraft and be available to inspect the brakes and tires IAW applicable T.O. when cleared by the SFC. **Note**: Obtain permission from the control tower prior to entering any controlled taxiway or runway using tower net on MX land mobile radios (LMR).

3.2.2.3.1.2. **(Added)** Assemble a tow team with tow tractor/tow bar and place on standby, if needed. **Note**: The tow tractor will be equipped with LMR and obtain permission from the control tower prior to entering any controlled taxiway or runway using tower net on LMR.

3.2.2.3.2. **(Added)** When cleared by the SFC to enter the aircraft area, maintenance personnel will enter area to perform the following actions, IAW applicable T.O.s:

3.2.2.3.2.1. **(Added)** Verify that the aircraft brakes have been released and all systems have been shut down.

3.2.2.3.2.2. **(Added)** Verify that the aircraft radar is in the standby mode or is shutdown prior to approaching the aircraft.

3.2.2.3.2.3. **(Added)** Ensure aircraft is chocked.

3.2.2.3.3. **(Added)** After termination of the emergency, tow or taxi the aircraft to the appropriate parking spot.

3.2.2.4. **(Added)** The following actions will be accomplished if aircraft hot brakes are detected after arriving at the parking spot:

3.2.2.4.1. **(Added)** Ground personnel will notify the aircrew and all personnel to evacuate the area to a minimum distance of 300 feet and notify the MOC of the emergency.

3.2.2.4.2. **(Added)** With the SFC approval, the Production Superintendent will dispatch a qualified 7-level or higher to inspect and/or evaluate the situation prior to termination of the emergency IAW applicable T.O.

3.5.8.1. **(Added)** ETIC assignment will be used using the following:

3.5.8.2. **(Added)** Ending in 00 series (e.g. 0700) – A fix to make the jet FMC is in work, expecting to be finished by this time.

3.5.8.3. **(Added)** Ending in 30 series – Indicating that an Engineer Technical Assist Request (ETAR) or Maintenance Assist Request (MAR) has been submitted. The hour column preceding the "30 series" indicates when the ETIC will expire. Example: A 0930 ETIC will need to be reassigned at 0859 not 0929.

3.5.8.4. **(Added)** Ending in 50 series – Troubleshooting ETIC stating that more information will follow at or before the hour listed. The hour column preceding the "50 series" indicates when the ETIC will expire. Example: A 1450 ETIC will need to be reassigned at 1359 not 1449.

6.7.13.1.3. **(Added)** Root Cause Analysis are required on Major Findings and Observations.

6.7.13.1.4. **(Added)** The MXG/CC determines Major Findings that do not require an RCA. The MXG/CC will determine when trending items require corrective action plans and get-well date.

6.7.13.1.4.1. **(Added)** Section/Flight Chief/Superintendent will provide root cause to QA Supervision.

6.7.13.1.4.2. **(Added)** When corrective action plans are required, Section/Flight Chiefs/Superintendent will provide corrective action plans and get-well dates to QA Supervision.

6.10.4.4. **((Added)** MacDill Local Work Card/Local Checklist (LWC/LCL) Procedures.

6.10.4.4.1. **(Added)** The MXG TODO will:

6.10.4.4.1.1. **(Added)** Ensure all new submitted LWC/LCL are properly formatted.

6.10.4.4.1.2. **(Added)** Review LWC/LCL for typographical errors, route the LWC/LCL through QA for review and applicability.

6.10.4.4.1.3. **(Added)** Assign the LWC/LCL number after QA concurs with LWC/LCL.

6.10.4.4.1.4. **(Added)** Maintain a copy of the LWC/LCL (MXG/CC's original signature) along with background information and coordination documentation.

6.10.4.4.1.5. **(Added)** Once approved by the MXG/CC, reproduce and distribute LWC/LCL to affected agencies.

6.10.4.4.1.6. **(Added)** Maintain LWC/LCL and inform units of any rescinded LWC/LCL.

6.10.4.4.2. **(Added)** The OPR will:

6.10.4.4.2.1. **(Added)** Prepare a draft for any new LWC and the OPR will submit a letter of justification for the LWC/LCL. All information will be submitted with a signed copy of all documentation and routed for approval on a DAF673.

6.10.4.4.2.2. **(Added)** Establish an AF Form 1768, *Staff Summary Sheet*, or email equivalent, with the following routing for both 6 MXG and 927 MXG; OPR, OPR/CCC, OPR/CC, MXG/MXQ, MXG/CCC, MXG/CD, and MXG/CC. **Note**: If the LWC/LCL affects other squadrons, it must be routed through their supervision.

6.10.4.4.2.3. **(Added)** Notify TODO of any changes that might affect the LWC/LCL.

6.10.4.4.2.4. **(Added)** Validate all LWC/LCL in January of each year. This will be accomplished by submitting an AF1768 or email equivalent. Coordination will be the same as **paragraph 6.10.4.4.2.2**.

6.10.4.4.3. **(Added)** To ensure LWC/LCLs are reviewed/updated when source data changes, the following procedures will be followed.

6.10.4.4.3.1. **(Added)** Shops will submit list of source T.O.s for each LWC/LCL.

6.10.4.4.3.2. **(Added)** QA will distribute a monthly report for local work cards/checklists requiring review due to ETIMS technical order changes received within the prior month.

6.10.4.4.3.3. **(Added)** Shops will respond with updated local work cards/checklists or indicate that no change is required.

6.10.4.4.3.4. **(Added)** LWC/LCL review status will be published as open reviews in monthly MSEP reports if applicable.

6.10.5.4. **(Added)** QA will distribute a monthly report for packages requiring review due to ETIMS technical order changes received within the prior month.

6.10.5.5. **(Added)** Work center will review package and determine if change is required.

6.10.5.5.1. **(Added)** If no change is required, work center will scan and update record in package to confirm that package is up to date.

6.10.5.5.2. **(Added)** When a work center determines existing job package requires change, the following process will occur:

6.10.5.5.2.1. **(Added)** Lead technician or designated alternate for the performing work center will document and send requested changes, additions, and deletion to QA for review.

6.10.5.5.2.2. **(Added)** QA will reply to requesting lead technician or designated alternate with approval or additional required revisions.

6.10.5.5.2.3. **(Added)** After QA concurrence with changes is received, the performing work center's lead technician and designated alternate are the only personnel authorized to make change(s). The G081 access key will not be circulated to ensure that the job packages remain current with what's on file in QA.

6.10.5.5.2.4. **(Added)** After work center's lead technician or designated alternate make changes to JST, recommend performing work center use the "Windows Snipping Tool" to capture the JST screen shot with the change(s). Performing work center will forward to QA for file plan archive.

6.12.1.2. **(Added)** Requests for an FCF, OCF, or HSTC not directed by -6 T.O. requirements will be authorized by MXG/CC and OG/CC.

6.12.2.6. A local copy of completed MACDILLAFB Form 105, *Aircraft FCF/OCF Briefing Checklist*, and MACDILLAFB Form 106, *High Speed Taxi Checklist*, will be kept in the FCF/OCF Folder for deficiency and trend analysis.

6.12.3.3.3. **(Added)** Utilize MACDILLAFB105 to document FCF/OCFs and MACDILLAFB106 to document HSTCs.

6.15.5. **(Added)** The following local procedures apply to all maintenance activities and personnel assigned to the MXG. QA manages the W&B Program and will ensure W&B inventories are accomplished, accurate records maintained and aircraft are weighed when required IAW T.O. 1-1B-50, T.O. 1C-135-5-1, DAFI21-101_AMCSUP, AFMAN11-2KC-135V3_ ADDENDA-A, *C/KC-135 Aircraft Configuration*, and T.O. 00-20-1, and when required by other Technical data or TCTO.

6.15.5.1. **(Added)** All W&B discrepancies will be documented on a Red X in the aircraft AFTO Form 781A and G081.

6.15.5.2. **(Added)** The Maintenance Operations (MXO) Plans, Scheduling, and Documentation (PS&D) Office will:

6.15.5.2.1. **(Added)** Make an entry in G081 for QA to verify and update W&B information for aircraft that: depart to or arrive from PDM or modification facility; newly assigned aircraft; and all Time Compliance Technical Order (TCTO) modifications that affect W&B.

6.15.5.2.2. **(Added)** Notify QA W&B Program Manager of any TCTO or modification affecting aircraft W&B, to arrange for a qualified W&B technician to attend initial TCTO meeting.

6.15.5.3. **(Added)** AMXS debrief office will ensure that W&B discrepancies generated by flight crews are entered in the AFTO Form 781A, G081 and MACDILLAFB Form 1, *Aircraft Sortie Recap Worksheet*.

6.15.5.4. **(Added)** The AMXS/MXS Production Superintendent will ensure that QA is notified when W&B discrepancies exist.

6.15.5.5. **(Added)** AMXS -21 Section personnel will:

6.15.5.5.1. **(Added)** Complete the W&B Computer Based Training and be qualified on INSP 000151 on Special Certification Roster prior to signing coordination block of the 6 Air Refueling Wing Computer Generated Load Planning Worksheet (AF Form 4100, *KC-135 Load Planning Worksheet)* IAW AFMAN11-2KC-135, Volume 3, Addenda A, **paragraph 1.5.2**.

6.15.5.5.2. **(Added)** Upload the required aircraft configurations IAW AF4100, sign coordination block, and place in the supplemental W&B handbook in front of the Chart C.

6.15.5.5.3. **(Added)** AMXS supervision may augment -21 personnel with previously qualified -21 personnel provided they have previously met training requirements and are on Special Certification Roster for INSP 000151.

6.15.5.6. **(Added)** Aircraft maintenance technicians will ensure the supplemental W&B handbook remains serviceable and stored in the T.O. rack onboard the aircraft and will document all items removed in AFTO Form 781As.

6.15.5.6.1. **(Added)** Personnel will document any temporarily removed, without immediate replacement, T.O. 1C-135-21 equipment under 5 pounds (lbs.) (e.g., heat socks, fire gloves, or first aid kits), as a Red Diagonal in aircraft forms and order replacement equipment through Standard Base Supply System or Government Purchase Card purchase as applicable. No W&B update is required unless these items are to be permanently removed. All items over 5 pounds that are permanently added, moved, or removed but are not documented on a signed AF4100, require a AFTO Form 781A Red X discrepancy added for "Chart "A" Update required see job control numbers (JCN)____".

6.15.5.6.2. **(Added)** Production or shop personnel will notify QA when W&B update is required.

6.15.5.7. **(Added)** QA W&B Officials will:

6.15.5.7.1. **(Added)** Investigate and clear flight crew generated W&B discrepancies.

6.15.5.7.2. **(Added)** Perform W&B calculations and corrections, and record changes in appropriate forms as outlined in technical data and instructions referenced above.

6.15.5.7.3. **(Added)** Maintain and update primary W&B handbooks located in the QA Office.

6.15.5.7.4. **(Added)** Maintain and update the W&B history of each aircraft located in the QA office.

6.15.5.7.5. **(Added)** Maintain and update the supplemental W&B handbooks located in the aircraft T.O. rack.

6.15.5.7.6. **(Added)** Document load configuration training for all AMXS -21 personnel in training records, once the W&B computer-based training is complete.

6.15.5.7.7. **(Added)** Standard and approved configurations on computer generated load planning worksheets (AF4100) are available on the MXG QA homepage: **https://usaf.dps.mil/sites/6mxg/cce/QA/Weight%20and%20Balance/Aircraft%20Configurations/Forms/AllItems.aspx**

7.4.1. The Impoundment Official will sign out the Impoundment Binder from QA and return upon completion of impound.

7.4.2. The Impoundment Official will use MACDILLAFB Form 146, *Aircraft/Equipment Impoundment Checklist*, found at AF E-Publishing website (**www.e-publishing.af.mil**). The impoundment checklist will be placed in the front of the AFTO From781, *Arms Aircrew/Mission Flight Data Document*, binder during the impoundment process until released.

7.4.3. The aircraft may be impounded on the flight line or in a hangar whichever is more convenient. An entry control point will be established to control movement of all personnel. Impoundment Official will use MACDILLAFB Form 147, *Impoundment Control Log*, to control and record all personnel movement. A copy will be located in the Impoundment Binder as a record and document personnel movement.

7.6.3.5. The placard will also identify the impoundment official's name, unit, and DSN. If required notify security forces of cordon requirements IAW DAFI 91-204, *Safety Investigations and Reports*.

7.6.11. **(Added)** The AMXS or MXS Production Superintendent(s) will:

7.6.11.1. **(Added)** Meet with the aircraft commander to obtain a full description of the malfunction with appropriate specialist(s) during debrief.

7.6.11.2. **(Added)** Ensure aircraft/equipment is safe for maintenance.

7.6.11.3. **(Added)** Ensure no maintenance is performed on the aircraft/equipment unless directed by the Impoundment Official. (**Note**: Engine oil servicing/oil samples may be accomplished once approved by the Impoundment Official).

7.6.11.4. **(Added)** On aircraft impounded for potential safety related incidents, ensure the FDR circuit breakers are pulled immediately after engine shutdown or before applying external power to safeguard FDR data.

7.6.12. **(Added)** MOC will:

7.6.12.1. **(Added)** Notify the MXG/CC, MXG/CD, MXG/CCC, QA Office, Wing Flight/Occupational Safety Office, and affected shops of possible impoundment actions for all deployed and non-deployed aircraft. Upon notification of impoundment, immediately secure aircraft and all related automated aircraft/equipment forms databases (i.e., G081and program F-9012, Aircraft Lock/Unlock Files).

7.6.12.2. **(Added)** Notify TACC and the aircraft's parent unit MXG/CC and/or MOC of impoundment actions involving aircraft deployed/transient to MacDill AFB.

7.6.12.3. **(Added)** Notify all agencies when impoundment termination decisions are made.

7.6.13. **(Added)** QA will:

7.6.13.1. **(Added)** Ensure that the Impoundment Binder is issued to Impoundment Official as soon as possible after the impoundment decision is made by the Impoundment Authority.

7.6.13.2. **(Added)** Act as OPR for group procedures but will not be tasked to perform Impoundment Official duties. QA will oversee impoundment and sever as a focal point for Impoundment training.

7.6.13.3. **(Added)** Coordinate with MOC to develop a standardized impoundment checklist that meets local needs.

7.6.13.4. **(Added)** Evaluate the value for cross-tell of information to the MAJCOM weapons system manager and lead commands.

8.2.1.2. **(Added)** Unit commanders are responsible for ensuring an effective program is in place and compliance with this instruction for all sections that perform duties on the airfield or in aircraft maintenance facilities/back shops. Commanders must also ensure that contractors who work on the airfield or in and around aircraft maintenance facilities understand the importance of tool control and cyber discipline in these areas and follow the requirements listed in **Para 8.2.12.1**.

8.2.1.2.1. **(Added)** All Base agencies that perform duties on the airfield or in and around maintenance facilities are responsible for safeguarding their equipment against loss by ensuring 100% accountability before and after each trip. Non-maintenance group functions will immediately notify the MOC and Airfield Management Operations of lost tool by providing item description, all areas traveled while on the airfield, and contact information. MOC will run the appropriate checklist.

8.2.1.2.2. **(Added)** Pilots and aircrew members must account for all equipment and personal items after each flight and ensure any items that became lost during the flight are documented in the Air Force Technical Order (AFTO) Form 781A, *Maintenance Discrepancy and Work Document,* as prescribed by Technical Order (T.O.) 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policy and Procedures*, DAFI 21-101 and DAFI 21-101_AMCSUP. If the item is not recovered, aircrew must initiate a lost tool/item report using MACDILLAFB Form 145, *Lost Tool/Object Report*, located on the e-Publishing website.

8.2.3.1. All warranty tools will be tracked by annotating classification as a warranty tool on the MIL for the CTK. Broken tools awaiting warranty disposition will be kept in a separate location. A listing of these tools will be kept, and an inventory will be accomplished and documented monthly, and a warranty claim will be filed and tracked with this inventory.

8.2.5.1. When mission needs require on site transfer of CTKs/equipment, maintenance Senior Non-Commissioned Officer, Officer, or civilian equivalent can approve it. If this action takes place, a CTK-assigned person shall do the inventory with both the outgoing and incoming party in attendance. This will not continue beyond 24 hours (Exception: alert aircraft and special equipment, e.g., boom sling, locks, caps and plugs, fuel system repair equipment). The individual who was relieved of responsibility for the CTK will ensure that Tool Control & Asset Management System (TCMax®) is updated before release from duty. While temporary duty (TDY) the inventory will be accomplished by any Non-Commissioned Officer appointed by the approving individual.

8.2.6. See Section **8.9** for lost tool procedures.

8.2.7. See **Attachment 11** for EID assignments.

8.2.8.1. Personal owned tools (e.g., Leatherman and Gerber's, flashlights, buck knives, etc.) or any item not issued by the unit, are not authorized on or around the airfield.

8.2.9.3. Rag control applies to all sections and personnel performing on/off-equipment aircraft maintenance, jet engine maintenance, and aerospace ground equipment maintenance. Positive rag control procedures must be adhered to. Rags will be controlled as tools and will be issued in pre-packed pouches with the number of rags and CTK number marked on each pouch. CTK custodians will establish procedures to ensure how many rags are on hand (clean, dirty, and those ready for dispatch). Rags will be replaced on an equal-share basis (e.g., one-for-one, five-for-five).

8.2.10. Those authorized to procure tools will be appointed in writing by the Support Flight Chief or Commander.

8.2.12. Depot teams, factory representatives, and contract field teams, may use local CTKs if practical and approved by owning unit and will be maintained IAW this instruction. If they use their own tools, a QA representative will inventory and document the unit's tools prior to the start of their first day of work, and again once the work is completed.

8.2.14. All CTKs/equipment stored and located in vehicles/trailers such as equipment used for aircraft crash recovery response equipment, to include items permanently stored/located in response trailers, will be maintained IAW this instruction and all other technical data regarding the management of tools and equipment.

8.2.15.1. If there is no CTK person on duty or available, an on-duty supervisor will inventory and turn in all CTK items.

8.2.16.1. **(Added)** Flight chief/section Non-Commissioned Officer in Charge (NCOIC) (or equivalent) will designate in writing an entry authority letter for controlled access to tool rooms.

8.2.16.2. **(Added)** Shift verification of tool turn-in will be done by referencing TCMax® or AF Form 1297 during network outage. Items still checked out in TCMax® or documented on AF Form 1297 at the end of their shift will be either turned in prior to releasing shift personnel or validated as still in use, i.e., will be turned in during the next shift or transferred to another individual (see **para 8.2.5.2**). Do not include items checked out for TDYs or deployments for the purpose of this verification.

8.3.13. **(Added)** Sections may "secure seal" low use tools. This method involves sealing items with a physical indicator to speed inventory by avoiding unnecessary inventorying. This can be accomplished by placing an adhesive label with date last inspected over container opening, or by securing container with zip tie and attached chit with date last inspected. Only tools that are signed out occasionally (less than once a month) should be considered low use. These items are not exempt from the semi-annual inspection.

8.3.14. **(Added)** All CTKs/equipment that are assigned, but not maintained, in the main CTK will be indicated as such on the MIL (Example: Item/CTK number MA02-21 sub located to -21 Section).

8.5.1.2.4.1. **(Added)** Limited quantities of replacement tools may be maintained in tool rooms and support sections. CTK custodians authorize the tools and quantities maintained. TCMax®

will be used to track replacement tools. An inventory of all serviceable replacement tools will be accomplished quarterly and kept with the contents.

8.5.1.2.4.2. **(Added)** Replacement tools will not be issued without receipt of all pieces of the unserviceable tool, or documentation indicating the tool is lost and reported IAW lost tool procedures. Replacement tools will be marked prior to use. Completely de-etch any prior CTK assigned markings.

8.5.1.2.4.3. **(Added)** Replacement, expendable and consumable hand tools may not be placed in bench stock. Because of the need for strict control and management of these items, they will be accounted for the same as all other replacement tools.

8.5.1.2.4.4. **(Added)** Update replacement tool quantities in TCMax when replacement tools are issued and ensure quantities are accurate.

8.5.3.3. At least semi-annually, an inventory/inspection of all tools and equipment will be conducted on all CTKs/equipment/eTools. This inventory/inspection is more extensive than the daily beginning and end of shift inventory. The purpose of this inventory/inspection is to ensure all tools and equipment are accounted for, etchings/markings are correct, tool listings are up to date, and corrosion control, serviceability, and cleanliness. Document these inventory/inspections utilizing TCMax® or computer-based system equivalent. TA contract maintenance will use a locally developed form.

8.5.7. **(Added)** General MacDill procedures.

8.5.7.1. **(Added)** CTKs that are maintained strictly for mobility/TDY purposes may be exempted from daily inspection requirements provided these kits are segregated from other CTKs, clearly identified, and remain in a secure place. These CTKs will be inventoried or inspected prior to use, semiannually, and upon implementation of applicable contingency plans.

8.5.7.2. **(Added)** CTKs used in an off-equipment environment and not dispatched may be left open for all personnel to use during a shift. An inventory will be accomplished when the CTK is opened, after each job, and before it is closed for the shift.

8.5.7.3. **(Added)** Fall protection equipment will be tracked as a kit or single item.

8.5.7.3.1. **(Added)** AFTO Form 244, *Industrial/Support Equipment Record*, will be used to document pre-use inspections, e.g., AFTO 244, Section I and II. Horizontal lifelines left installed for prolonged periods must have daily documented inspections.

8.5.7.3.2. **(Added)** Defects that do not affect safe operation of equipment will be documented in AFTO 244, Section V or equivalent document. If equipment with prior minor defects is replaced, this defect will be closed IAW T.O. 00-20-1 AMC if AFTO 244 is used.

8.5.7.3.3. **(Added)** Any equipment which is deemed unserviceable will be removed immediately for replacement. Update fall protection kit inventory to correct quantity until replacement equipment is installed (Pencil changes are recommended). If aircraft is off station, equipment will be removed upon return to home station. Update W/B as required IAW **Para 6.15.5.6.1** and subsequent paragraphs.

8.5.7.3.4. **(Added)** All periodic inspections will be tracked in AFTO Form 781Ks, *Aerospace Vehicle Inspection, Engine Data, Calendar Inspection and Delayed Discrepancy Document*, for aircraft kits; TCMax® for equipment available for CTK checkout; and on annual inspection log

for hangar fall arrest systems in Hangar binder. There will be no documentation required on AFTO 244 or equivalent document for periodic inspection completion or documentation.

8.5.7.3.5. **(Added)** Recurring supervisor reviews are not required to be documented on fall protection equipment utilizing AFTO 244.

8.5.7.3.6. **(Added)** Historical records will be maintained throughout equipment service life, and for one year after fall protection equipment is removed from service.

8.5.7.3.7. **(Added)** Fall protection CTKs or aircraft fall protection kit equipment items will be labeled with CTK EID or MacDill kit ID, e.g., MACDILL01, respectively.

8.5.7.3.8. **(Added)** Fall protection equipment will be labeled with in-service date and next inspection due date via attached label or chit IAW T.O. 00-25-245 and DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards.*

8.5.7.3.9. **(Added)** Document each serial number for installed Personnel Fall Arresting System (PFAS) on inspection card.

8.6.1.3. See **Attachment 11** for MacDill EID assignments.

8.6.1.4.5.1. The container/case will also be marked to show the contents as shown (Example: a set of 8 drill bits and case will read “8 pieces + case”). If the tool is not listed on the container it is packaged in, the inventory listings will annotate each tool (Example: Each wrench size or each punch size will be annotated on the inventory).

8.6.7. Support equipment, test equipment and mini kits containing tools such as wire repair kits, blade blending kits (blue die will be kept in hazardous material pharmacy), lead seals kits, etc., require an inventory list, and all items marked with CTK EID.

8.7.1. See **paragraph 8.7.4** thru 8.7.9. for MacDill procedures.

8.7.4. **(Added)** All initial requests will be routed, in written format, through work center flight chiefs, Squadron leadership, the fabricating section and QA prior to MXG/CC coordination using Local Manufacture Checklist, **Attachment 18**. The QA office will assign a control number and route for MXG/CC approval. All requests for locally manufactured tools and equipment will be forwarded through the QA office for assignment of control number. Requests will include the use for the tool, any tech data references where the tool would be utilized, a list of materials, and diagram/picture of the tool. QA will maintain records of all approved tools and equipment.

8.7.5. **(Added)** Once approved, using work center will maintain copy of MXG commander approved local manufacture tool paperwork and will review biennially (every two years) for applicability and current configuration. All locally manufactured tools and equipment will be considered a tool unless authorized in specific technical data and will be maintained IAW this instruction and all other technical data regarding the management of tools and equipment.

8.7.6. **(Added)** For locally manufactured Aircraft parts see **Para 9.17.3**.

8.7.7. **(Added)** For outside agency requests, the requesting agency is responsible for providing a completed Local Manufacture Package through LRS IAW this instruction, to include all specifications, material size and type, drawings, and finishing requirements.

8.7.8. **(Added)** The applicable MXS section chief will contact the LRS aircraft parts store to sign DD Form 1348-1A, *Issue Release/Receipt Document,* (Copies 1, 2, and 3), and pick up completed local manufactured item.

8.7.8.1. **(Added)** Copy 1 is the customer's receipt.

8.7.8.2. **(Added)** Copy 2 is filed in the "complete" file by the applicable section chief for 90 days.

8.7.8.3. **(Added)** Copy 3 is returned to LRS/aircraft parts store via base distribution or hand-carried to the LRS local manufacture point of contact.

8.7.9. **(Added)** The Local Manufacture Package will be used for the local manufacture routing process. The package can be retrieved from the QA office or downloaded from ePublishing.

8.9.2.1.1. Notify Production Superintendent immediately upon discovery of a lost item. The initial search of the immediate work area will not last longer than one hour.

8.9.2.3.1. Expediter/Production Superintendent will ensure a thorough search has been conducted, for a minimum of 2 hours (including initial 1 hour search). Production Superintendents will maximize available resources, to the fullest extent, to ensure the lost tool/item is found. The MXG/CC or MXG/CD may waive the 2-hour minimum search timeline, on a situational basis. Additionally, the waiver authority may be delegated to the DO.

8.9.2.3.3. **(Added)** MOC will be notified and a MACDILLAFB145will be initiated by the Production Superintendent after the initial search has been conducted. The Form can be found on AF E-publishing.

8.9.2.3.4. **(Added)** The shift Production Superintendent will ensure MACDILLAFB145 is filled out entirely and immediately submitted to the squadron DO or Maintenance Superintendent.

8.9.2.3.5. **(Added)** The MOC will notify, PS&D, MXG/CCC, MXG/CD or MXG/CC, and other affected agencies upon notification of a lost tool/object.

8.9.2.6.3. The Maintenance DO/Maintenance Superintendent will sign indicating whether the report is still open (search continues) or has been closed (item has been found) and will ensure the report is routed to QA within 24 hours.

8.9.2.7. **(Added)** If an item is confirmed lost and is suspected to be on a jet after take-off, the individual discovering the lost item will immediately notify the Production Superintendent and MOC. MOC will immediately notify the MXG/CC or MXG/CD and will take the appropriate actions to alert the flight crew. The Production Superintendent will also immediately notify Operations Officer.

8.9.2.8. **(Added)** For aircraft that are TDY, the crew chief will notify the aircraft commander and the home station MOC. The MOC will notify the MXG/CC or MXG/CD, the MXG/CCC, and Production Superintendent immediately. The Production Superintendent is responsible for notifying Maintenance DO and for ensuring that an entry in the automated system is made immediately upon return to home station.

8.9.2.9. **(Added)** If a tool/object is found after the report is finished and routed to QA, it will be turned over to the Production Superintendent to return the tool/object to the owning work center. The Maintenance DO/Maintenance Superintendent will mark as closed, write date tool was found, sign report, and forward to QA, so lost tool report can be closed out.

8.9.2.10. **(Added)** QA will include lost tool/object report information in FOD program data and forward the report to PS&D as required.

9.17.3. **(Added)** MXG Local Manufacture Component Program.

9.17.3.1. **(Added)** General. To provide standardized procedures for controlling local manufacture items in the MXG maintenance shops and ensure proper processing procedures of locally manufactured parts.

9.17.3.2. **(Added)** MacDill Directives.

9.17.3.2.1. **(Added)** Local Manufacture paperwork is not required if part is non-procurable. Component must have MF or MO Source, Maintenance, and Recoverability (SMR) code.

9.17.3.2.2. **(Added)** A request to manufacture a component to be used on aerospace equipment that does not have a T.O. reference requires engineer approval.

9.17.3.2.3. **(Added)** The approving authority for a local manufacture work order is the applicable MXS section chief or acting section chief.

9.17.3.2.4. **(Added)** All outside agency requests will be authorized by the Fabrication Flight Commander, Flight Chief, or Production Superintendent.

9.17.3.2.5. **(Added)** The requester is responsible for processing all local manufacture paperwork, and will provide samples, drawings and technical data to the applicable MXS section chief, accompanied by an automated AFTO Form 350, *Reparable Item Processing Tag*, tag.

9.17.3.2.6. **(Added)** If the MIS (G081) is off-line or the requesting organization cannot gain access to the system, a manual AFTO Form 350 tag will be processed with the request. As soon as access is regained, the requesting work center will transfer the manual tag information to the automated system and promptly coordinate with the manufacturing activity.

9.17.3.2.7. **(Added)** The applicable MXS section chief is responsible for tracking all open work orders, closing out completed jobs, and interfacing with the LRS local manufacture monitor. They will also coordinate with the MXS Production Superintendents on prioritizing approved requests and establishing anticipated completion dates and times.

9.17.3.3. **(Added)** Procedures.

9.17.3.3.1. **(Added)** The requestor will coordinate with appropriate work center(s) to ensure local manufacture capabilities are present at MacDill Air Force Base.

9.17.3.3.2. **(Added)** Requesters will use an AF Form 2005, *Issue/Turn-In Request*, for supply item local requests and an AF IMT 601 for equipment requests if item is to be turned into supply.

9.17.3.3.3. **(Added)** In situations where the component is needed urgently, (e.g., if an aircraft is scheduled to fly within 12 hours) the requester will coordinate through LRS and verify the SMR code. The requestor will then take the sample and/or drawing directly to the applicable MXS section chief or designee. Upon approval by the Production Superintendents or applicable Flight Commander/Flight Chief, the part will be fabricated while the paperwork is being processed. The parts will not be released until all appropriate paperwork has been received by the performing work center unless directed otherwise by the MXG/CC or designated representative.

9.17.3.3.4. **(Added)** When the work order is completed, the MXS section chief or representative of the final work center will sign block 27 of the DD1348-1A, *Issue Release/Receipt Document*

(Copy 3), enter unit and total price in the appropriate blocks, and enter the account code of the PRIMARY work center in block 26.

11.6.6. **(Added)** Red Ball responsibilities and procedures.

11.6.6.1. **(Added)** Production Staff will inform MOC of the Red Ball discrepancy and request a JCN. The complete write-up and JCN will then be entered into the AFTO Form 781A (aircraft forms).

11.6.6.2. **(Added)** In the event G081 is down, the MOC will maintain a manual documentation log of all events.

11.6.6.3. **(Added)** As soon as G081 becomes operational, the MOC will enter discrepancies using the documentation log as a source document. MOC will then inform the work center that the discrepancies have been entered into G081.

11.6.6.4. **(Added)** The work center that performed the maintenance will immediately clear discrepancies.

11.6.6.5. **(Added)** If MXS support is required during Red Ball maintenance, the AMXS Production Superintendent will contact the MXS Production Superintendent.

11.6.6.6. **(Added)** If a component removal/installation is required and necessitates an operational check, the aircrew may perform this function as long as all checks are completed in accordance with applicable job guides and signed off by the specialist working the system.

11.6.6.7. **(Added)** Maintenance personnel will perform a Foreign Object (FO) check, Composite Tool Kit (CTK) and T.O. inventory prior to Exceptional Release.

11.6.6.8. **(Added)** The AMXS Production Superintendent or equivalent will ensure all Red X discrepancies are cleared in the AFTO Form 781A and G081 prior to launch.

11.8.3.2.1. Covers shall remain installed on the aircraft as close to crew show as possible to prevent FOD. Plugs and covers may be left removed once the Exceptional Release has been accomplished when an aircraft is on the flying schedule (AF FORM 2407) with the exception of the ARC-210 and Pitot covers, which will remain installed until crew show and the aircrew preflight procedures are initiated.

11.8.3.11.3. **(Added)** Airfield Management will:

11.8.3.11.3.1. **(Added)** Conduct daily F.O. checks of the primary takeoff, landing, and taxi surfaces prior to the start of flying activities.

11.8.3.11.3.2. **(Added)** Request sweeper trucks as required.

11.8.3.11.3.3. **(Added)** Notify the FOD Program Manager of any changes in airfield conditions that may cause a potential FOD hazard.

11.8.3.11.3.4. **(Added)** Ensure individuals receiving passes for privately owned vehicles to be operated on airfield are briefed on FOD prevention.

11.8.3.11.3.5. **(Added)** Inspect airfield construction, repair and maintenance activities for foreign objects, safety, and compliance. Develop procedures to monitor and track contractors working on or near the airfield.

11.8.3.11.3.6. **(Added)** Forward a copy of all hazards/discrepancies identified in airfield inspections to 6 CES.

11.8.3.11.3.7. **(Added)** The 6th Civil Engineer Squadron (6 CES) is responsible for the Airfield Sweeper Operations Plan (**Attachment 13**). This plan is coordinated between the 6 CES and Airfield Manager.

11.8.3.11.4. **(Added)** Unit Responsibilities:

11.8.3.11.4.1. **(Added)** Each unit commander, to include tenant units, who have personnel that work or operate within the airfield will appoint a primary and alternate Unit FOD Monitor and forward a copy of the appointment letter to 6 MXG/MXQ. The following organizations are considered members of the Wing FOD Committee and are required to attend all FOD meetings:

Table 11.2. (Added) MacDill AFB Wing FOD Committee Members.

6th Air Mobility Wing, Wing Safety (6 ARW/SE)
927th Air Refueling Wing, Wing Safety (927 ARW/SE)
6th/927th Aircraft Maintenance Squadron (6/927 AMXS)
6th/927th Maintenance Squadron (6/927 MXS)
6th/927th Maintenance Operations (6/927 MXO)
6th Operations Support Squadron, Airfield Management (6 OSS/OSAA)
6th/927th Operations Support Squadron, Aircrew Flight Equipment & Combat Crew
Communication (6/927 OSS/OSL & OSAC)
6th/927th Security Forces Squadron (6/927 SFS)
6th Communications Squadron (6 CS)
6th/927th Logistics Readiness Squadron (6/927 LRS)
6th Civil Engineer Squadron (6 CES)
310th Airlift Squadron (310 AS)
45th Aero Evacuation Squadron (45 AES)
50d Air Refueling Squadron (50 ARS)
91st Air Refueling Squadron (91 ARS)
63d Air Refueling Squadron (63 ARS)
Transient Alert (TA)
23d Wing Detachment 1 (23 WG, Det. 1)

11.8.3.11.4.2. **(Added)** The Unit FOD Monitor will attend FOD meetings and assist the FOD Program Manager in corrective actions needed to prevent recurrences of FOD mishaps.

11.8.3.11.4.3. **(Added)** Units will ensure all personnel receive initial and annual refresher FOD awareness training. This may be accomplished via classroom, computer-based training, block

training, or testing procedures if coordinated with UTM. MXG personnel will receive initial training through Maintenance Qualification Training Program (MQTP) Phase I. Recurring training (annual) and initial (for those who do not attend MQTP) will be provided through the unit training program monitor. Training will be tracked in Maintenance Information Systems (MIS) for MXG personnel. All other units will use an AF Form 1098, *Special Task Certification and Recurring Training*, or automated training program.

11.8.3.11.4.4. **(Added)** Units will conduct weekly FOD walks within their areas of responsibility (AOR) (**Attachment 12**) on the first duty day of each week at 0730 prior to the start of the flying period and will conduct additional FOD walks as required to ensure safe operations. The only acceptable changes for the date a FOD walk are performed are environmental hazards, weather, mission requirements, and seasonal hours of darkness. If a squadron cancels due to any of these issues, the FOD walk will be accomplished on the next acceptable duty day. In the event the FOD walk is cancelled, the Unit FOD Monitor will notify the Maintenance Operation Center (MOC), the appropriate unit Flight Safety Officer, and the 6 ARW FOD/DOPP Monitor with a rescheduled date/time.

11.8.3.11.4.5. **(Added)** FOD walks will be accomplished in the following manner: Personnel will line upside-by-side with appropriate spacing and perform a sweeping pass of their respected AOR. This may take several passes depending on the amount of people and the size of the AOR to be walked.

11.8.3.11.4.6. **(Added)** Wing FOD Areas of responsibility are as follows.

11.8.3.11.4.6.1. **(Added)** AMXS, 91 ARS, and 63 ARS: North and South parking ramps and all facilities in use by AMXS.

11.8.3.11.4.6.2. **(Added)** MXS, 50 ARS, 6 OSS and 927 OSS: Building 552, Aerospace Ground Equipment (AGE) parking area, North ramp area between red line and fence line to include apron access road starting at AGE wash rack to MacDill Distinguished Visitor lead sign past building 193, Area located between 50 Row and Heron Place flight line Entry Control Point (ECP) starting at the apron access road out to taxi line and Hangar 5, Building 1071, Fuel Cell Apron to North Ramp access ECP, Hangars 1/2/3/4/5, and any facilities in use by MXS.

11.8.3.11.4.6.3. **(Added)** MXG, MXO, and 373 TRS, Det. 2: Will participate in FOD walks in respective areas to include policing F.O. in Hangar 4 and around occupied facilities.

11.8.3.11.4.6.4. **(Added)** Transient Alert: DV parking spots 1/2/3/4 and Tango Row as available but prior to use.

11.8.3.11.4.6.5. **(Added)** 23 WG, Det 1: Deployed Unit Complex flight line area prior to use.

11.8.3.11.4.6.6. **(Added)** 6 LRS (Petroleum, Oil, and Lubricants Flight): All North ramp fuel pits when utilized, building 1065 to include fuel truck parking area, Building 1061 and entire flight line access apron between fence line to North Ramp redline/ECP.

11.8.3.11.4.6.7. **(Added)** Users of the North Ramp outdoor wash rack, Alert Pad, and Alternate Fuel Cell are responsible for FOD walking or sweeping the area as required before use.

11.8.3.11.4.6.8. **(Added)** All Base Personnel: Mass FOD walks will be conducted after air shows, airfield construction/maintenance projects, and any special events performed on the airfield as necessary.

11.8.3.11.4.7. **(Added)** MXG personnel will perform F.O. checks of their work area after the completion of any maintenance. In addition, personnel will be constantly alert for any form of F.O. during all phases of maintenance and ensure work areas are continually policed to eliminate F.O.

11.8.3.21. **(Added)** A "parts bag" (cloth bag(s) with draw strings or plastic bags that can be sealed) will be used and securely attached to the removed panels/components to store hardware and small parts. Annotate/label the parts bag with the aircraft/equipment serial number and component nomenclature. Strictly control all hardware and expendable items. Issue all bench stock items on a "take what you need" basis to the maximum extent possible. Under no circumstances will these items exceed the amount that can be accounted for. Bench stocks will be strictly controlled and monitored to prevent personnel from taking excess quantities into work areas. Scrounge bags or excess hardware storage collections are NOT authorized.

11.8.3.22. **(Added)** All removed aircraft panels will have associated compartments inspected for foreign objects before closing panels.

11.8.3.23. **(Added)** The wearing of headgear (uniform/organizational hats) while on the flight line and flight line apron/ramp up to facility doors facing the flight line, extending from Building 524 (Wash Rack Storage Building) to the South parking ramp (Calibration Dock) is not authorized. ***Exceptions****:* Berets/Headgear for personnel carrying arms are authorized but will not be worn within 50 feet of operating jet engines or in PL2 (protection level) areas. A watch cap may be worn during cold weather and must comply with DAFI 36-2903, *Dress and Personal Appearance of United States Air Force and United States Space Force Personnel*.

11.8.3.24. **(Added)** Anyone performing maintenance on or around the aircraft will secure restricted area line badges to their outer clothing by subdued nylon/cotton cord, quick disconnect necklace style holder, or plastic armband.

11.8.3.25. **(Added)** Special attention will be paid to the flight deck, cargo compartment, and boom pod during all maintenance inspections.

11.8.3.26. **(Added)** Remove all foreign objects, unnecessary items, and check equipment accountability.

11.8.3.27. **(Added)** Pay close attention to obscure areas under the rudder pedals, pilot, co-pilot, and forward boom operator seats, under the navigation table and behind wanes coating behind the crew entry grate. These areas will be inspected before and after every flight.

11.8.3.28. **(Added)** Maintenance personnel will inspect aircraft parking spots for foreign objects prior to an aircraft blocking in and prior to an aircraft launch. After the aircraft departs, the parking spot will be cleaned of all non-essential equipment, liquid spills, and foreign debris.

11.8.3.29. **(Added)** Implement and enforce the "Clean as You Go" concept while performing maintenance.

11.8.3.30. **(Added)** Aircraft hangars and maintenance facilities will be kept F.O. free. The organization that uses the hangar will be responsible for ensuring it is F.O. free.

11.8.3.31. **(Added)** An organization performing maintenance in a hangar will accomplish a FOD walk immediately following the removal of aircraft.

11.8.3.32. **(Added)** Utilize the FOD-BOSS to the maximum extent within the areas of the aircraft maintenance units as available. AMXS/MXS will develop a schedule and maintain FOD BOSS assemblies as required.

11.8.6.1.1. In addition to the above requirements, MOC will also notify MXG/CC/CD/CCC through normal incident reporting procedures.

11.8.6.1.2. **(Added)** In coordination with the flight chief, designate an individual to initiate an investigation of the incident and generate a FOD Report Worksheet (**Attachment 2**) due to the Wing FOD Monitor within 12 hours of incident.

11.8.6.1.3. **(Added)** FOD Manager will conclude the investigation. Brief 6 MXG/CC on the results of the investigation. Report the FOD incident to Headquarters (HQ) AMC/A4MR in accordance with DAFI 21-101 and DAFI 21-101_AMCSUP.

11.9.1.7. **(Added)** All maintenance personnel involved in on-equipment maintenance will receive annual DOPP awareness training. This training will consist of viewing the DOPP video, "Dropped Object Prevention Program". Training will be tracked in the MIS.

11.9.1.8. **(Added)** Effective prevention of dropped objects starts when an aircraft door, panel, or cowling is opened for maintenance and during munitions build-up, loading, and arming. Maintenance personnel will ensure the serviceability of fasteners and the proper fit of doors, panels, connectors, etc. Place special attention on the correct length of fasteners and condition of nut plates and other securing devices. Supervisors place special emphasis on these areas during the inspection of completed maintenance actions. All discrepancies pertaining to defective fastening devices will be entered in the AFTO Form 781A and/or automated forms.

11.9.3.2. **(Added)** The following will be accomplished in addition to all DAFI21-101 requirements and DAFI21-101 AMC SUP requirements.

11.9.3.3. **(Added)** Assigned (Home station) Aircraft: Incidents will be reported to the Production Superintendent on duty.

11.9.3.3.1. **(Added)** The Production Superintendent will:

11.9.3.3.2. **(Added)** Notify the MOC.

11.9.3.3.3. **(Added)** Ensure proper documentation of aircraft AFTO Forms 781 and MIS.

11.9.3.3.4. **(Added)** In coordination with the flight chief, designate an individual to initiate an investigation of the incident and generate a MACDILLAFB Form 108, *Foreign Object Damage (FOD)/Dropped Object Prevention (DOP) Incident Worksheet* located on e-Publishing. MACDILLAFB108 is due to the Wing FOD monitor within 12 hours of incident.

11.9.3.3.5. **(Added)** Upon notification of a dropped object or lost item the MOC will notify the MXG/CC, MXG/CD, MXG/CCC, Airfield Management Operations, and QA/DOPP monitor with all available information to include the aircraft tail number, parking location, time of discovery, and nomenclature of the lost object.

11.10.6. **(Added)** MacDill ASIP Roles and Responsibilities.

11.10.6.1. **(Added)** ASIP Project Officer & Monitors.

11.10.6.1.1. **(Added)** The MXG/CC will appoint a primary and alternate ASIP Project Officer from within the MXG Quality Assurance Office.

11.10.6.1.2. **(Added)** Primary ASIP Program Monitor will be Aircraft Maintenance Squadron Debrief Section NCOIC. All other assigned debrief section personnel will be considered alternate ASIP Program Monitors and will perform functions as delegated by primary.

11.10.6.2. **(Added)** Aircraft Maintenance Squadron (AMXS).

11.10.6.2.1. **(Added)** Personnel will download Flight Data Recorder and Cockpit Voice Recorder (FDR/CVR) data to PCMCIA cards during thru-flight and quick turn inspections as required in T.O. 1C-135-6WC-1, Preflight/Postflight/Hourly Post-Flight Inspection Workcards. Cards will be taken to AMXS debrief section to verify the existence of data on the card. AMXS debrief section will take cards into AMXS Support section to process PCMCIA accountability transfer in Tool Control Asset Management Control (TCMax®) while waiting for Engine Management (EM) pick-up the following duty day. All PCMCIA card custodial transfer actions not tracked in TCMAX will be documented and tracked via a local form maintained by AMXS Debrief.

11.10.6.2.2. **(Added)** During deployment or TDY to locations that do not have upload capability, downloads will be accomplished and stored on PCMCIA card(s) then transferred into Aircraft Data Acquisition and Distribution System (ADADS) upon return to home station by qualified personnel.

11.10.6.2.3. **(Added)** When FDR/CVR data cannot be downloaded to a PCMCIA card due to DDTU malfunctions, download will be accomplished by use of CIC and uploaded into ADADS by qualified personnel.

11.10.6.2.4. **(Added)** Composite Tool Kit (CTK)/Sortie Support will assign a CTKEID to maintain accountability and serviceability for all PCMCIA cards.

11.10.6.2.5. **(Added)** Debrief will verify via standalone computer for all downloaded sorties flown that have been received. Debrief will not release the aircraft forms binder until the PCMCIA card has been received.

11.10.6.3. **(Added)** Maintenance Squadron (MXS).

11.10.6.3.1. **(Added)** Will collaborate with AMXS to ensure data is provided to EM.

11.10.6.3.2. **(Added)** Will follow same guidance as AMXS.

11.10.6.4. **(Added)** Maintenance Operations (MXO).

11.10.6.4.1. **(Added)** EM will coordinate with Debrief and CTK section if EM will not be able to pick up PCMCIA cards at start of duty day, to schedule debrief drop off of PCMCIA cards.

11.10.6.4.2. **(Added)** EM will accept custodial accountability of PCMCIA cards through AMXS Support section TCMax® transfer.

11.10.6.4.3. **(Added)** EM will upload PCMCIA card data to ADADS and confirm system data upload.

11.10.6.4.4. **(Added)** EM will return PCMCIA cards to Support section prior to first home station sortie scheduled landing time to reduce use of TDY or backup PCMCIA cards.

11.10.7. **(Added)** Storage Media.

11.10.7.1. **(Added)** FDR/CVR records and stores individual aircraft usage data.

11.10.7.2. **(Added)** Data is downloaded and transferred using PCMCIA storage media or by a portable laptop computer, CF-28/CF-29/CF-31 CIC, in instances when DDTU malfunctions will not allow data transfer to PCMCIA cards.

11.10.7.3. **(Added)** Each aircraft assigned to MacDill AFB will have at least one designated PCMCIA card per aircraft located in AMXS CTK and tracked in TCMax® for post recovery download. Additional PCMCIA cards will be available for TDY checkout or if EM has not returned PCMCIA cards to AMXS support section after ADADS upload prior to return of first sortie of the day.

11.10.7.4. **(Added)** CICs and PCMCIA cards will be controlled as CTK items.

11.10.8. **(Added)** Deployed Procedures. Units will comply with local procedures at of deployed locations, when they exist. If no procedures exist at the deployed location, and the capability to download data is available, units will comply with the same procedures in this instruction while deployed. If download capability does not exist at the deployed location, downloads will be accomplished and stored on PCMCIA card then transferred into ADADS upon return to home station.

11.10.9. **(Added)** TDY Procedures.

11.10.9.1. **(Added)** For TDYs and off-station sorties, the lead Mission Essential Personnel (MEP) will ensure sufficient PCMCIA cards are checked out to record all sorties planned during the mission.

11.10.9.2. **(Added)** Calculations shall be based on average sortie duration of 3-4 hours equaling 7MB of data.

11.10.9.3. **(Added)** Lead MEP will return all previously filled in MACDILLAFB Form 1's to home station following mission completion for documentation.

11.10.10. **(Added)** ASIP Training Requirements.

11.10.10.1. **(Added)** Individual users of ADADS will receive cascade training from qualified trainers. Training will consist of On-the-Job Training and will be documented on an AF Form 797, Job Qualification Standard Continuation.

11.10.10.2. **(Added)** Individuals performing DDTU download via CIC will be trained and qualified in Training Business Area to perform task IAW T.O. 1C-135-2-11-40-7, Flight Monitoring.

11.11.3.2. **(Added)** Identify Friend of Foe (IFF) Mode IV and Mode V Procedures.

11.11.3.3. **(Added)** IFF Mode 4/5 checks will be performed by AMXS personnel for all missions departing CONUS to overseas locations, on all alert missions, and all missions flying outside US airspace and returning to CONUS. Additionally, IFF Mode 4/5 checks will be scheduled IAW 1C-135-6.

11.11.3.4. **(Added)** IFF Mode 4/5 maintenance operational checks not accomplished due to lack of maintenance test equipment will be written up in the AFTO Form 781A on a Red Dash. IFF Mode 4/5 maintenance operational checks when documented as follow-on maintenance, will be documented as separate discrepancies. Operational check will be accomplished at the next location where equipment is available.

11.11.4. **(Added)** IFF program manager will be familiar with AFMAN 17-1302-O, *Communications Security (COMSEC) Operations.*

11.13.8.4. Aircraft will be designated as excessively cannibalized at the discretion of the MXG/CC or MXG/CD.

11.13.9. **(Added)** Responsibilities. The MOC will monitor and track all aircraft Cannibalization (CANN) actions. Cannibalization authorities except AGE are responsible for notifying the MOC of any CANN action. In the event of a 618 Air Operations Cell (AOC) directed CANN on the weekend, and when no MXG CANN authority is present, MOC will contact the MXG/CD and the weekend duty production superintendent for coordination.

11.13.10. **(Added)** Aircraft CANN Procedures.

11.13.10.1. **(Added)** When parts must be CANN'd from the Periodic Inspection aircraft, the AMXS and MXS Production Superintendents will coordinate actions and notify the MOC of their intentions. If the MXS needs to CANN parts from a flightline aircraft, they must coordinate with the AMXS Production Superintendent (**Note**: Part(s) CANN'd from backshop spare engines will be accomplished IAW section 15.4.5.3.4.).

11.13.10.2. **(Added)** The MOC will assign a CANN number to all CANNs and enter them into G081 along with any directed aircraft status changes. They will call the Aircraft Parts Store (APS)/Mission Capability (MICAP) section and give all required information pertaining to the CANN.

11.13.10.3. **(Added)** The APS/MICAP section, when notified by the MOC, will enter the required document number(s) into G081.

11.13.10.4. **(Added)** The person performing the CANN action will ensure write-ups, document numbers, cross reference to receiving aircraft and CANN numbers are entered on AFTO Forms 781.

11.13.10.5. **(Added)** When CANN actions are complete, the person performing the maintenance will ensure required documentation in G081 and AFTO Form 781A is completed and notify both the Production Superintendent and the MOC as soon as possible. (**Note**: In all circumstances, notification must occur prior to the end of their shift).

11.17.8.1. MOC will provide monthly engine run rosters to UTMs for update in G081.

11.28.2.6.3. **(Added)** Ensure all CDDAR team members are properly trained in/on the following areas:

11.28.2.6.3.1. **(Added)** All tools and support equipment for a safe aircraft recovery operation (e.g., lifting bags, slings, etc.)

11.28.2.6.3.2. **(Added)** Proper use of all PPE as determined by applicable technical orders and 6 AMW Bioenvironmental Engineering Contact BEE @ 827-9570.

11.28.2.6.3.3. **(Added)** Composite Hazard Cleanup in accordance with AFPAM 32-4004, 6 MXS Crash Recovery Respiratory Protection Plan, AFI 48-137, *Respiratory Protection Program*, 29 CFR 1910.134, and T.O. 00- 105E-9, **Chapter 3**.

11.28.2.6.3.4. **(Added)** Ensure the CDDAR trailer is maintained by CDDAR team members in a combined effort with the 6 MXS ISO CTK to properly track TCMAX and equipment,

weatherproof storage and mobility, with at least the minimum required equipment authorized by T.O. 1C-135-2-07.

11.28.2.6.3.5. **(Added)** Ensure availability of a full-size crew cab 4X4 6 passenger truck capable of towing 15,000 lbs. for in-flight emergencies and ground CDDAR response.

11.28.2.6.3.6. **(Added)** Maintain all required PPE for CDDAR operations and composite recovery as determined by T.O. 00-80C-1 and base bioenvironmental engineering.

11.28.2.6.3.7. **(Added)** Maintain a training & qualification roster of team members in order to assign specific CDDAR duties/special purpose vehicle operations. Use **Attachment 7** template for roster and locate it in the Team Chief's Crash Recovery Binder under Tab I.

11.28.2.6.3.8. **(Added)** Obtain & review a current recall roster for after normal duty hours and make available to the Maintenance Operations Control Center (MOC) and the Wing Command Post. The roster will have current assigned personnel and telephone numbers. This list will be updated annually or whenever a change occurs. The MOC and Wing Command Post will use the CDDAR Team recall roster for after duty hours response.

11.28.2.6.3.9. **(Added)** Review all support agreements, response plans, and CDDAR lesson plan annually.

11.28.2.6.3.10. **(Added)** Ensure all procedures and plans are coordinated with all base agencies as required.

11.28.2.6.3.11. **(Added)** Complete annual CDDAR equipment inventory no later than 31 August to allow for MXG/CC signature and report sent to MAJCOM no later than 30 September IAW DAFI 21-101 para 11.28.2.5.7. Inform the MXG Commander annually and MAJCOM no later than 30 September per DAFI 21-101 para 11.28.2.5.7, in writing, of any equipment shortages/serviceability issues that impact recovery operations.

11.28.2.6.3.12. **(Added)** Conduct and participate in annual training exercises. All exercises will be coordinated with the production supervisors and plans and scheduling.

11.28.2.6.3.13. **(Added)** Ensure that adequate tools and special equipment is serviceable and available for aircraft recovery operations and maintain a list of all CDDAR Tools and Equipment: Attachment 17.

11.28.2.6.3.14. **(Added)** Coordinate with Quality Assurance (QA) Weight and Balance NCOIC or Technician when weight and Center of Gravity (CG) conditions are unknown.

11.28.2.6.3.15. **(Added)** Report to the On Scene Commander (OSC), Incident Commander or Recovery Operations Commander once notified of a mishap.

11.28.2.6.3.16. **(Added)** Coordinate procedures with the Safety Office as required.

11.28.2.8. **(Added)** Command Post.

11.28.2.8.1. **(Added)** Implement the MACDILL OPLAN 91-1 Mishap Response Plan and coordinate with the required agencies listed in T.O. 00-80C-1 **Paragraph A5.1** during normal duty hours.

11.28.2.8.2. **(Added)** In the event of a crashed/disabled aircraft, The MACDILL Installation Emergency Management Plan (IEMP) 10-2 and MACDILL OPLAN 91-1 Mishap Response Plan will be initiated by the Wing Command Post. MOC will initiate Major Aircraft Accident/Incident

Quick Reaction Checklist (QRC) #25 A/B along with the Command Post and then notify the CDDAR Team Chief to assemble the CDDAR team.

11.28.2.9. **(Added)** Maintenance Operation Center (MOC).

11.28.2.9.1. **(Added)** Verify the Command Post (6 AMW/CP) has notified the Wing Commander (6/927 AMW/CC) of the incident. Ensure 6 AMW/CPs is informed throughout the incident.

11.28.2.9.2. **(Added)** Implement Checklist 512.

11.28.2.9.3. **(Added)** The Senior Controller will:

11.28.2.9.4. **(Added)** Notify the 6 MXG/CC of nature of mishap.

11.28.2.9.5. **(Added)** Notify the 6 AMXS Production Supervisor (6 AMXS/MXAA) of nature of mishap.

11.28.2.9.6. **(Added)** Notify the 6 MXS Production Supervisor (6 MXS/MXM) of nature of mishap.

11.28.2.9.7. **(Added)** Notify the 6 MXG Quality Assurance (QA) of nature of mishap.

11.28.2.9.8. **(Added)** Lock-out aircraft forms in the aircraft maintenance data collection automated system (G081).

11.28.2.9.9. **(Added)** Obtain necessary clearance from Air Traffic Control Tower, 6th Operations Support Squadron (6 OSS/ OSAT) via FM net for maintenance vehicles to enter the controlled movement area to reach the recovery site if required.

11.28.2.9.10. **(Added)** Direct all personnel to stay clear of the recovery site unless requested by the incident commander.

11.28.2.9.11. **(Added)** Contact the 6th Logistics Readiness Squadron, Fuels Management Flight (6 LRS/LGRF), to impound any fuel trucks used during ground refueling operations if mishap aircraft's last ground refuel took place at MacDill Air Force Base (AFB).

11.28.2.10. **(Added)** 6th Civil Engineering Squadron (CES).

11.28.2.10.1. **(Added)** Provide manpower and equipment necessary to support the recovery mission as directed by the OSC and CDDAR Team Chief. Assist in providing access to crash site and assist in site setup in accordance with MACDILL OPLAN 91-1 Mishap Response Plan and MACDILL IEMP 10-2. Will make provisions to recall a representative for non-duty hours.

11.28.2.10.2. **(Added)** Coordinate delivery of heavy machinery with operators as determined by the CDDAR Team Chief and OSC.

11.28.2.10.3. **(Added)** Procure and deliver necessary supplies needed for the recovery/removal operation (e.g., dunnage, plywood, planking, etc.)

11.28.2.10.4. **(Added)** When directed by the OSC and Safety Investigation Board (SIB), CE will complete a grid survey of the area and identify the location of aircraft parts and remains.

11.28.2.10.5. **(Added)** Additional responsibilities are outlined in MACDILL OPLAN 91-1 Annex C Item 18 and CAT QRC 25 A/B.

11.28.2.11. **(Added)** Fire Chief (6 CES/CEF). Responsibilities are outlined in MACDILL OPLAN 91-1 Annex C Item 19, MACDILL IEMP 10-2 and CAT QRC 25 A/B.

11.28.2.12. **(Added)** 6th Air Mobility Wing Safety Office (6 AMW/SE).

11.28.2.12.1. **(Added)** Safety office representative will also provide guidance for preservation of evidence for the SIB

11.28.2.12.2. **(Added)** Additional responsibilities are outlined in MACDILL OPLAN 91-1 Annex C Item 2 and CAT QRC 25 A/B.

11.28.2.13. **(Added)** 6th Medical Group (6 MDG).

11.28.2.13.1. **(Added)** Will assist the OSC and be available for medical consultation and evaluation of CDDAR personnel in case of ill effects of composite exposure or any other hazards.

11.28.2.13.2. **(Added)** Additional responsibilities are outlined in MACDILL OPLAN 91-1 Annex C Item 23 and CAT QRC 25 A/B.

11.28.2.13.3. **(Added)** 6th Aerospace Medicine Squadron Bioenvironmental Engineering (6 AMDS/SGPD).

11.28.2.13.3.1. **(Added)** Provide constant updated site conditions to Incident Commander and CDDAR Team Chief. Bioenvironmental Office will also work with the Incident Commander, CDDAR Team Chief and Security Forces in determining the peripheral area (The peripheral area should be more than 25 feet away from damage composite parts, depending on environmental conditions). (Ref -00-105E-09 **Chapter 3**.)

11.28.2.13.3.2. **(Added)** Be responsible for the evaluation of any contamination to the environment, assessing the necessary cleanup, disposal of contaminated components, and coordination with the appropriate Federal and State Regulatory agencies.

11.28.2.13.3.3. **(Added)** Brief recovery personnel on all potential hazards and specify proper PPE as required based on assessment.

11.28.2.13.3.4. **(Added)** Additional responsibilities are outlined in MACDILL OPLAN 91-1 Annex C Item 25 and CAT QRC 25 A/B.

11.28.2.14. **(Added)** 6th Security Forces Squadron (6 SFS).

11.28.2.14.1. **(Added)** Establish a cordon area and ECP (entry/exit control point) in conjunction with the Fire Chief, Bioenvironmental Office and OSC. The cordon size may expand as the situation warrants. (Ref T.O. 00-105E-09, **Chapter 3**.)

11.28.2.14.2. **(Added)** Additional responsibilities are outlined in MACDILL OPLAN 91-1 Annex C Item 20 and CAT QRC 25 A/B.

11.28.2.15. **(Added)** 6th Operations Support Squadron Airfield Management (6 OSS/OSAA). Responsibilities are outlined in MACDILL OPLAN 91-1 Annex C Item 11 and CAT QRC 25 A/B.

11.28.2.16. **(Added)** 6th Logistics Squadron Vehicle Operations (6 LRS/LGRD).

11.28.2.16.1. **(Added)** Provide a dedicated vehicle, 24/7 capable of transporting the CDDAR trailers (12,000 pounds load capacity). At the request of the OSC or CDDAR Team Chief, Vehicle Operations will provide support vehicles to transport CDDAR team members and any other equipment items required (e.g., 40-foot flatbed semitrailer and tractor, van, truck, etc.). Make provisions to recall a representative for non-duty hours. Vehicle Operations will designate and

make provisions for distribution of base vehicle assets to be utilized by the CDDAR team, dependent upon area and terrain.

11.28.2.16.2. **(Added)** Additional responsibilities are outlined in MACDILL OPLAN 91-1 Annex C Item 17 and CAT QRC 25 A/B.

11.28.2.17. **(Added)** 6th Force Support Squadron (6 FSS).

11.28.2.17.1. **(Added)** Provide billeting, meals, ice, water, etc. and any other services as deemed necessary by the OSC.

11.28.2.17.2. **(Added)** Additional responsibilities are outlined in MACDILL OPLAN 91-1 Annex C Item 21 and CAT QRC 25 A/B.

11.28.2.18. **(Added)** Explosive Ordnance Disposal Flight. Responsibilities are outlined in MACDILL OPLAN 91-1 Annex C Item 18 Item 3d and CAT QRC 25 A/B.

11.28.2.19. **(Added)** Base Contracting. Procure needed supplies and coordinate with the OSC and CDDAR Team Chief for availability and delivery of all emergency requests.

11.28.2.20. **(Added)** Financial Management Office. Establish a fund site to procure needed equipment and supplies necessary for CDDAR recovery operation.

11.28.2.21. **(Added)** 6th Aircraft Maintenance Squadron (6 AMXS) Production Supervisor.

11.28.2.21.1. **(Added)** Request 6 LRS de-fuel equipment be placed on stand-by status for possible use in recovery operation (i.e., aircraft gear collapse).

11.28.2.21.2. **(Added)** Ensure impoundment procedures are implemented through Quality Assurance office.

11.28.2.21.3. **(Added)** Preposition personnel and equipment as required by the CDDAR Team Chief, or Aerospace Repair Section Chief.

11.28.2.21.4. **(Added)** Direct ground movement of any home station or transient aircraft the incident commander requests to be moved to facilitate CDDAR operations.

11.28.2.21.5. **(Added)** If required, provide a tow vehicle with tow bar, tow vehicle operator, tow supervisor, and tow team to stand by during recovery operations. Tow team personnel will take directions from the CDDAR team chief. The team will remain available to the CDDAR team for any assistance necessary to aid in the recovery operation.

11.28.2.22. **(Added)** 6th Maintenance Squadron (6 MXS).

11.28.2.22.1. **(Added)** Provide adequate number of qualified CDDAR team personnel. CDDAR qualified personnel will be tracked by G081 course code ACFT 000100 Initial CDDAR Training and/or ACFT 000101 Reoccurring CDDAR Training.

11.28.2.22.2. **(Added)** Ensure the CDDAR equipment, **Attachment 17**, is prepared to respond.

11.28.2.22.3. **(Added)** 6 MXS Production Supervisor.

11.28.2.22.3.1. **(Added)** Complete MACDILLAFB Form 151, *Major Peacetime Accident Response Checklist Aerospace Repair Element*. See **Attachment 15** for a sample and download form at AF E-publishing (**www.e-publishing.com**).

11.28.2.22.3.2. **(Added)** Ensure CDDAR team is assembled and available to respond to the recovery site when directed by the Incident Commander and or MOC.

11.28.2.22.3.3. **(Added)** Coordinate AGE support. The CDDAR team chief will choose the required equipment for that particular recovery operation.

11.28.2.23. **(Added)** Response Procedures **NOTE**: In the event of a crashed/disabled aircraft, The MACDILL OPLAN 91-1, MACDILL IEMP 10-2 plan and CAT QRC # 25 A/B will be implemented. MOC will notify the CDDAR Team Chief to recall the CDDAR team.

11.28.2.23.1. **(Added)** CDDAR Team Chief.

11.28.2.23.2. **(Added)** Contact the 6 AMXS production supervisor for a situation update. Once turnover has been accomplished, notify the MOC that the CDDAR Team Chief has assumed recovery responsibilities under the direction of the incident commander.

11.28.2.23.3. **(Added)** Review and start MACDILLAFB Form 152, *Crashed, Damaged, or Disabled Aircraft Recovery (CDDAR) 6th Maintenance Group Team Chief's Initial Checklist.* See sample at **Attachment 14**; form can be downloaded at AF E-publishing (**www.e-publishing.af.mil**).

11.28.2.23.4. **(Added)** Coordinate with 6 LRS any additional transportation requirements of CDDAR equipment.

11.28.2.23.5. **(Added)** Assemble CDDAR team in the Aero Repair Section, located in Hangar 2 (Commercial 813-828-8881; DSN 968-8881). Ensure the CDDAR team and equipment are prepared for response.

11.28.2.23.6. **(Added)** Responsible for directing and coordinating CDDAR operations as directed by the incident commander. CDDAR team chief will be designated by the 6 MXG/CC.

11.28.2.23.7. **(Added)** Prior to any recovery actions, coordinate with Wing Safety (6 AMW/SE), 6th Civil Engineer Squadron, Fire Protection Flight (6 CES/CEF), Bio Engineering Flight, Explosive Ordnance Disposal (6 CES/CED) (if applicable), and incident commander about aircraft condition and removal procedures to ensure all hazards including toxic materials, munitions, and radioactive materials are eliminated, and the aircraft is made safe for recovery activities and investigation team members. Major fuel spills will be reported to MacDill Fire Department and the 6 CES Environmental Office at Commercial 813-828-0465 or 813-610-4383. ***NOTE****:* Immediately notify the Fire Department thru the MOC if the spill is beyond your capability to safely contain and clean the site, or if medical assistance is needed. ***CAUTION****:* The area will be maintained in an undisturbed state until the aircraft is released to maintenance by the appropriate authority. The crash site will only be disturbed to the extent necessary to eliminate a situation that is detrimental to the aircraft, support equipment, or personnel. Once recovery actions begin, only personnel designated by the CDDAR team chief will enter the recovery area.

11.28.2.23.8. **(Added)** Evaluate the aircraft damage and prepare for recovery operations. If more recovery personnel are required, a recall of additional qualified personnel will be initiated. Provide updated CDDAR capability to the MOC, incident commander, and others as necessary.

11.28.2.23.9. **(Added)** Request additional expertise or equipment through the MOC via the Recovery Operation Chief. If the items or personnel are not under the jurisdiction of the 6 MXG/CC, they will be requested through the Incident Commander/ Recovery Operation Commander. If recovery of aircraft requires a crane, refer to Crane Company Information

(**Attachment 16**). If extra shoring is required, it will be acquired through civil engineering per **paragraph 1.5**.

11.28.2.23.10. **(Added)** Maintain continuous communication with the MOC via the Recovery Operation Chief and keep them informed on the progress of the recovery operation to include CDDAR team limitations.

11.28.2.23.11. **(Added)** Ensure complete safety briefings are given at shift change, detailing hazards to personnel.

11.28.2.23.12. **(Added)** Complete Planning and Preparation Checklist in T.O. 00-80C-1 Tab F.

11.28.2.23.13. **(Added)** 6 MXG Quality Assurance (QA). Complete the Aircraft Mishap Response Checklist extracted from 6 AMW OPLAN 91-1 Annex C Item 15.

11.46. **(Added) Engine Run Procedures.**

11.46.1. **(Added)** MOC will maintain roster employee number, date, and aircraft tail number.

11.46.2. **(Added)** MOC will provide monthly engine run roster to UTMs for update IAW **Para 11.17.8.1.1**.

11.46.3. **(Added)** When aircraft are parked on the North Ramp, engine runs above idle will have a manned vehicle posted behind the aircraft and away from the blast to ensure the 900-foot clearance.

11.46.4. **(Added)** Engine washes will be performed on B-2 and B-4, or the Hot Cargo Pad. Eco engine washes may be performed on any spot. Any spot may be used with Airfield Management authorization.

11.47. **(Added) Paperless Warning Tag Tracking Procedures.**

11.47.1. **(Added)** Paperless Warning Tag Documentation. When using the paperless documentation process, all paper warning tags will be documented IAW 00-20-1 AMC Sup paragraph **5.7.1.3.11.5.7** and **5.18.2.8** If option 2 is utilized IAW 00-20-1 AMC Sup, **paragraph 5.18.2.8.1.2**, a locally approved warning tag tracking sheet will be used.

11.47.2. **(Added)** One warning tag ("Master Tag") will be installed and attached to the system (CB/Handle/Switch). Redundant warning tags will be documented in both the locally approved tracking method and in IMDS.

11.47.3. **(Added)** The locally approved tracking method will be located in the Periodic Inspection Warning Tags Continuity Book/board and maintained in the PE Dock Coordinator’s office.

11.47.4. **(Added)** As discrepancies are finished, the required warning tags will remain attached to the system until all applicable work-centers sign off their entry in the warning tag tracker. References will be signed off/removed from the locally approved tracking method when it is no longer required to be tagged for that respective JCN or Work Center Event/Work Event Separator (WES/WCE). The "Master tag" will not be removed until all JCN and WES/WCE references are completed and no longer affect system operation.

11.48. **(Added) Full Aircraft Jacking Locations.**

11.48.1. **(Added)** Full Aircraft Jacking will only be performed on authorized jacking locations, per MacDill AFB Airfield Manager, or inside any hangar except hangar 1071.

11.48.2. **(Added)** Aircraft Jigs, which simulate wing flex in flight or when required to complete integral tank repairs, may be performed in Hangar 1071.

11.48.3. **(Added)** Hydraulic pumping units for aircraft jacks (jacking manifolds) are hereby authorized to be operated inside hangars designated as authorized jacking locations for purpose of aircraft jacking. Hydraulic pumping unit design shall ensure all electrical equipment, sparking contacts, hot surfaces and other possible ignition sources are at least 18 inches above floor level. Hydraulic pumping units shall be placed at least 25 feet from the aircraft in an area free of combustible material.

11.48.4. **(Added)** Nose jacking, and axel jacking may be performed at any aircraft parking location on Alpha or Bravo Ramp.

11.49. **(Added) Lightning Within 5 NM Follow-up Inspection Procedures.**

11.49.1. **(Added)** General.

11.49.2. **(Added)** When a weather warning exists for lightning within 5 nm of the airfield, maintenance personnel will remain vigilant to the proximity of lightning strikes to aircraft. If, in the judgment of the on-duty Production Superintendent, lighting has impacted close enough to have potentially endangered aircraft, they may direct the MOC to load potential lightning strike inspection packages (see section 1.18.2) on aircraft as they see fit.

11.49.3. **(Added)** The on-duty Production Superintendents shall monitor lightning strikes to determine any potential strikes on the flightline. Production Superintendents shall direct potential lightning strike inspections to be performed on potentially affected aircraft immediately after the cancellation of the weather warning.

11.49.4. **(Added)** If a potential lightning strike inspection is required maintenance personnel shall document the 781A and follow the requirements outlined in 1C-135-6.

11.50. **(Added) Hangar Door Operations.** This section outlines responsibilities and procedures for safe operation of hangar doors on MacDill Air Force Base.

11.50.1. **(Added)** Roles and Responsibilities. Group commanders within each group who have personnel that operate Hangar Doors are responsible for ensuring the content of this instruction and other related instructions are strictly complied with.

11.50.2. **(Added)** MXG/CC will:

11.50.2.1. **(Added)** Be the Point of Contact for all hangar issues and develop procedures for all hangar door operations.

11.50.2.2. **(Added)** Ensure a comprehensive group-training program for hangar door operations is established and implemented.

11.50.3. **(Added)** Squadron Commanders will:

11.50.3.1. **(Added)** Ensure all requirements in DAFMAN 91-203 para 24.14. Are followed.

11.50.3.2. **(Added)** Ensure assigned personnel that operate hangar doors are trained and training is properly documented in accordance with DAFI 36-2670, Total Force Development, AFI 91-202, The US Air Force Mishap Prevention Program, **Paragraph 1.8.22.5.2**, and DAFMAN 91-203, Paragraphs 24.14.3

11.50.3.3. **(Added)** Ensure personnel are qualified on each hangar they will need to operate, as each hangar has specific requirements.

11.50.4. **(Added)** Hangar/building Custodians will:

11.50.4.1. **(Added)** Ensure all AF Forms 332, *Base Civil Engineer Work Request*, submitted for hangar door repairs are tracked and completed.

11.50.4.2. **(Added)** Ensure each hangar has a training/operating/emergency binder as each hangar door operating procedure is unique. For uniformity, the binder will be placed inside the hangar near the large hangar doors (right hand side when facing flightline).

11.50.4.3. **(Added)** As a minimum, binder content will include training plan, door hazards, door operating procedures (include power off procedure, if applicable), emergency

11.51. **(Added) Hangar Procedures (In).**

11.51.1. **(Added)** When towing aircraft into a hangar all tow positions (wing and tail walkers) will be manned.

11.51.2. **(Added)** Stop the aircraft immediately outside of hangar to check for alignment with taxi lines and to verify that hangar doors are fully open. For hangars equipped with a tail door (Hangars 1, 2, 3 and 4), ensure the tail door is fully opened before moving aircraft into the hangar.

11.51.3. **(Added)** When an aircraft protrudes outside the hangar, a barrier (e.g., cones and ropes) will be placed around the entire exposed section of the aircraft on the ground to allow a minimum of 10 feet of clearance.

11.51.4. **(Added)** MACDILLAFB Form 148, *Aircraft Hangar Towing Checklist*, is used prior to and after an aircraft is towed into the hangar.

11.51.5. **(Added)** A laminated copy of MACDILLAFB148 will be posted in Hangars 1, 2, 3, 4, and Hangar 1071 (fuel cell). The tow team supervisor will ensure that the posted Hangaring checklist is completed at the conclusion of all hangar-in tows.

11.52. **(Added) Responsibilities for Hangared Aircraft.**

11.52.1. **(Added)**

11.52.2. **(Added)** When an aircraft is parked inside a hangar, vehicles will not be driven or parked inside the hangar unless it is mission essential. When vehicles are driven or parked inside the hangar, the vehicle operator will use a marshaller during all phases of vehicle movement and/or until the vehicle has cleared the hangar.

11.53. **(Added) Hangar Procedures (Out).**

11.53.1. **(Added)** Remove and properly stow all support equipment used (if required, clean all drip pans before stowing). Prior to aircraft movement, ensure the entire area is cleared for towing the aircraft out of the hangar.

11.53.2. **(Added)** Ensure all hangar doors are fully opened.

11.53.3. **(Added)** For hangars equipped with a tail roll-up door (Hangars 1, 2, 3, and 4), ensure the tail roll-up door is fully opened before moving aircraft out of the hangar.

11.54. **(Added) Emergency Removal of Aircraft from Hangars.**

11.54.1. **(Added)** Notify the MOC of the emergency and requirement to tow the aircraft.

11.54.2. **(Added)** The Production Superintendents or (TA Site Lead), as applicable, will respond to the emergency with a complete tow team as soon as possible.

11.54.3. **(Added)** The on-scene supervisor (senior maintenance person) will:

11.54.3.1. **(Added)** Direct opening (if closed) of hangar doors.

11.54.3.2. **(Added)** If main doors do not open, notify MOC.

11.54.3.3. **(Added)** If the tail doors do not open with power, use emergency chain to open tail door fully. **Note**: Hangar 3 does not have a chain; Call CES 828-4531.

11.54.3.4. **(Added)** Direct preparations of aircraft for tow.

11.54.3.5. **(Added)** Direct supervisor and personnel to accomplish tow.

11.55. **(Added) Securing Unattended Hangars.**

11.55.1. **(Added)** Hangar doors will be closed any time a hangar will be left unattended for weekends, holidays, or unmanned shifts.

11.55.2. **(Added)** The last shift of the day, prior to an un-manned shift or weekend/holiday, will be responsible for completing MACDILLAFB Form 149, *Hangar Securing Checklist,* before leaving premises.

11.55.3. **(Added)** If mission requires re-opening the hangar doors after personnel have left (i.e., aircraft tow in/out, unforeseen maintenance, weekend work), the responsibility to re-accomplish checklist will rest with the supervisor of performed maintenance, if the hangar will still be left unattended after completion.

11.55.4. **(Added)** A laminated copy of MACDILLAFB 149 will be posted in Hangars 1, 2, 3, 4, 5, and 1071 (fuel cell).

11.56. **(Added) Periodic Inspection Procedures and Guidance.**

11.56.1. **(Added)** Responsibilities.

11.56.2. **(Added) The MXO PS&D section is responsible for developing the aircraft periodic inspection schedule with inputs from the AMXS Lead Production Superintendents and the MXS Maintenance Flight, MXS Lead Production Superintendents.** Once PE slots have been allocated, aircraft will be scheduled for the necessary workdays to complete the inspection.

11.56.3. **(Added)** General Procedures.

11.56.3.1. **(Added)** The PE Coordinator loads authorized PE job packages in G081.

11.56.3.2. **(Added)** CANN of aircraft parts will be coordinated between the responsible AMXS and MXS Production Superintendents and coordinated with the PE Coordinator, dock chief (or shift representative), and the MOC.

11.56.3.3. **(Added)** All personnel not assigned to the PE Dock will sign in with the PE Coordinator before beginning work. Prior to departure, personnel will sign out with the PE Coordinator and brief status of inspections, completed operational checks, and required follow-on maintenance. After hours coordination will be through MXS Production Superintendent.

11.56.4. **(Added) AMXS will complete and forward all periodic inspection documentation to the PS&D section after completion of post-dock to include:**

11.56.4.1. **(Added)** Initially transcribed forms.

11.56.4.2. **(Added)** Inspection sign off sheets.

11.56.4.3. **(Added)** Panel R&R sheets.

11.56.4.4. **(Added)** Part/serial number verification sheet.

11.56.4.5. **(Added)** Current 8035 and 8044 screen print outs from MIS.

11.56.5. **(Added)** MXS will Perform preflight and launch of first flight following PE inspection, unless coverage is pre-coordinated with AMXS to mitigate scheduling conflict.

11.57. **(Added) Transfer Inspections.**

11.57.1. **(Added)** Responsibilities. This Section is applicable to all maintenance activities and personnel assigned to the MXG. All squadron commanders, supervisors, superintendents, and flight chiefs are responsible for ensuring the contents of this section and other related data are strictly complied with. It is to be used in conjunction with T.O. 00-20-1, T.O. 00-20-1 AMCSUP, T.O. 00-35D-54, and DAFI21-101_AMCSUP.

11.57.2. **(Added)** Procedures.

11.57.2.1. **(Added)** Upon arrival of any aircraft from PDM, a modification facility, or newly assigned to the 6 ARW, the MXO scheduling office will schedule the aircraft for a transfer inspection. The discovering work center personnel will enter discrepancies found in the aircraft's AFTO Forms 781A and G081. A transfer inspection meeting will be scheduled with QA, AMXS Production Super, MXS Production Super, Flight Equipment, and -21 Section.

11.57.2.2. **(Added)** MXO Scheduling will:

11.57.2.2.1. **(Added)** Ensure all applicable Time Compliance Technical Orders (TCTOs) and One-Time Inspection are complied with and documented in the AFTO Form 781 during the inspection.

11.57.2.2.2. **(Added)** Verify all required depot level TCTOs and modifications were accomplished, and all work approved on part C of the AFTO Form 103 (Aircraft Missile Condition Statement) was accomplished.

11.57.2.2.3. **(Added)** Aircraft will not be flown until all configuration managed items, TCIs, Sis, TCTOs, engine and engine components are loaded, and due dates/times are verified in MIS. PS&D personnel will ensure this validation is accomplished.

11.57.2.2.4. **(Added)** Completed validations will be filed in the aircraft jacket file IAW DAFI 21-101.

11.57.2.2.5. **(Added)** Load transfer inspection package into G081.

11.57.2.2.6. **(Added)** Plans, Scheduling, and Documentation Section will comply with all aerospace vehicle distribution office responsibilities.

11.57.2.3. **(Added)** AMXS work center personnel will:

11.57.2.3.1. **(Added)** Complete all required inspections entered in G081 and annotate findings in the aircraft's AFTO Forms 781A and G081. For KC-135 aircraft accomplish the appropriate after flight inspection and then accomplish a preflight inspection.

11.57.2.3.2. **(Added)** Complete a serial number verification worksheet for all serially controlled components, on newly assigned aircraft.

11.57.2.3.3. **(Added)** Complete a fire extinguisher squib inventory verifying part number, lot number, date of manufacture, and date of installation, on newly assigned aircraft.

11.57.2.3.4. **(Added)** Inventory -21 equipment using AF Form 2692, *Aircraft/Missile Equipment Transfer/Shipping Listing*, in accordance with AFI 21-103, AMCSUP, *Equipment Inventory, Status and Utilization Reporting*.

11.57.2.3.5. **(Added)** Accomplish an aircraft document review coordinating with Supply, Debrief, PS&D, and EM.

11.57.2.3.6. **(Added)** Accomplish a review of all ETARs in the active aircraft forms to ensure that discrepancies noted in the ETARs have not been previously complied with or that the ETAR conditions are otherwise still valid. Verification should include visual inspections or operational checks of conditions noted in the ETARs when such verification can be accomplished without inducing an unreasonable maintenance effort. Otherwise, ETAR verification can be accomplished by a MDS history of related aircraft parts/systems or by any other means necessary to sufficiently verify ETAR validity.

11.57.2.3.7. **(Added)** Notify LRS/POL of gain and request 6 ARW fuel card. Notify the 6 OG/RA of gain to transfer or order 6 ARW fuel card.

11.57.2.3.8. **(Added)** Complete physical and operational checkouts on depot TCTO modified systems as applicable. If defects are found, submit MIS history, pictures, and description as acceptance inspection Deficiency Report (DR) IAW T.O. 00-35D-54.

11.57.2.4. **(Added)** MXS work center personnel will:

11.57.2.4.1. **(Added)** Complete all required inspections entered in G081 and annotate findings in the aircraft's AFTO Forms 781A and G081.

11.57.2.4.2. **(Added)** Paint all required unit markings on the aircraft. Painting will be scheduled with MXS and AMXS supervision and assigned a separate job number in G081.

11.57.2.5. **(Added)** AMXS Production Superintendent will notify the QA office after aircraft is configured and ready for Weight and Balance inspection no later than 24 hours prior to the first flight. The QA Office will verify accuracy and update weight and moment calculations on aircraft prior to first flight.

11.57.2.6. **(Added-Depot Only)** The assigned crew chief will gather all discrepancies (open and completed) from G081 and deliver them to the PIM in QA. The crew chief will go over all write-ups with the PIM to determine if major discrepancies exist. If major discrepancies are identified on an aircraft received from depot, the PIM will prepare a DR IAW 00-35D-54 and upon coordination/approval of the MXG/CD, forward it through appropriate channels.

11.57.2.7. **(Added)** Upon arrival of any spare/installed engines and support equipment:

11.57.2.7.1. **(Added)** MXS Inspection section will accomplish transfer inspections on newly received spare engines using appropriate technical data and report the findings to EM and the PIM office. MXS will also thoroughly inspect all support equipment upon arrival. This inspection will be accomplished visually using, at a minimum, the manufacturers "preparation for use" section and the applicable servicing inspection workcards. All discrepancies noted will be entered on the appropriate form and G081. Findings will be forwarded to the PIM office in QA for inclusion in a transfer inspection report.

11.57.2.7.2. **(Added)** If major discrepancies are identified on spare aircraft engines received from depot, the PIM will prepare a DR IAW 00-35D-54 and upon coordination/approval of the MXG/CC, forward it through appropriate channels.

14.2.4.3.4.2. **(Added)** PS&D will only be contacted should issues with G081 arise, such as part being loaded to another aircraft/unit or part/serial number issues.

14.2.6.1.2. **(Added)** Work center supervisors will be responsible for ensuring proper use of their assigned block of JCNs IAW T.O. 00-20-2. When G081 is not available, analysis will assign a sufficient amount of JCN using **Table 14.1**.

Table 14.1. (Added) MacDill Job Control Numbers.

Last 4 of Control #	Description
0100-0299	MOC, Unscheduled Maintenance
0300-1450	MacDill AFB Packages
1700-3553	Packages cont.
5700-7999	Packages cont.
1451-1500	Fuel Cell
1600-1699	-6 Inspections and Time Change
4001-4050	Red Balls
4400-4499	Debrief
5300-5325	Off-Shore Support
5326-5330	Impoundments
9500-9699	TCTOs
9800-9998	TCTOs
A001-A999	Periodic Inspection
D001-D999	G081 HPO (all MDS)
G001-G999	Engine Change (1-4)
F001-F099	Contingency Inspection
P001-P999	900-hr Inspection

14.2.6.1.3. **(Added)** The MOC senior controller will inform all work centers authorized to enter discrepancies in G081 when to start using manual JCNs. MOC will record all other unscheduled maintenance discrepancies and enter them into G081 as soon as it becomes operative.

14.3.3.3.2.7. LRS/Supply Flight Service Center TCTO monitor will only release kits to technicians who have a F8070 snapshot of the open JCN for the TCTO signed by the PS&D TCTO

Monitor. FSC will log the kit release in the appropriate AF Form 2001, *Notification of TCTO Kit Requirements*, in the TCTO folder and notify PS&D once the kit is released.

14.4.4. **(Added)** Unit Responsibilities.

14.4.4.1. **(Added)** Ensure prompt and accurate documentation of all engines related maintenance is accomplished in the MIS (G081).

14.4.4.2. **(Added)** Provide to EM all narrative and documentary information for engine removal actions, CANNs, blade blending, special inspections, time change items, borescopes, receiving/transfer inspections, transfers or shipments of engines, data corrections, preservations, record reviews and other significant information (e.g., FO damage) for inclusion in the applicable CEMS automated AFTO Form 95, *Significant Historical Data*, no later than close of business the first duty day after the event (e.g., part removal, installation, time update, TCTO status change) IAW DAFI 21-101.

14.4.4.3. **(Added)** Procedures for Specific Occurrences.

14.4.4.3.1. **(Added)** Transfer Inspections of Installed/Uninstalled Engines and Support Equipment.

14.4.4.3.1.1. **(Added)** AMXS personnel will accomplish transfer inspections on newly assigned aircraft installed engines and report the findings to EM and the PIM's office in QA. The engine transfer inspection will be completed during the aircraft transfer inspection. DRs will be completed on Depot aircraft only.

14.4.4.3.1.2. **(Added)** MXS personnel will accomplish transfer inspections on newly received spare (uninstalled) engines IAW T.O. 1C-135-6WC-8 and support equipment using appropriate technical data and report the findings to EM and the PIM office in QA. This inspection will be completed within 48 hours after receipt of the engine or support equipment.

14.4.4.3.2. **(Added)** Engine Change Procedures.

14.4.4.3.2.1. **(Added)** EM will be notified immediately when an unscheduled engine removal is warranted. The squadron performing the engine change will provide EM with a discrepancy report stating all related maintenance actions accomplished substantiating the engine change. EM will then identify which spare engine will be utilized. If the primary (SRAN) Engine Manager or assistant is unavailable, the MXS Production Superintendent on-duty will verify the engine change and give the squadron access to the appropriate pre-identified spare engine.

14.4.4.3.2.2. **(Added)** EM will inform HQ AMC/A4MJP of the engine change and annotate the maintenance transaction on the automated AFTO95 in CEMS.

14.4.4.3.3. **(Added)** Engine Ground Shipping Procedures.

14.4.4.3.3.1. **(Added)** The squadron performing the engine change will properly configure the engine for shipment in accordance with T.O. 2J-1-18. This will be accomplished within 3 duty days after the engine runs are completed verifying operability on the newly installed engine.

14.4.4.3.3.2. **(Added)** When the engine to be shipped is correctly configured, EM will contact the Transportation Management Office (TMO) to arrange shipment. Note: Without exception, all engines undergoing ground transportation will be transported on an air ride truck/flatbed trailer combination.

14.4.4.3.3.3. **(Added)** EM will provide HQ AMC/A4MJP with the How Malfunction Code, current engine times, and cycles before shipment. They will obtain an AMC shipping control number (if required).

14.4.4.3.3.4. **(Added)** EM will prepare a DD1348-1A, *Issue release/receipt document*, or a DD Form 1149, *Requisition and Invoice/Shipping Document*, in accordance with T.O. 00-25-254-1. The shipping control number obtained from HQ AMC (if required) will be annotated in the remarks section. Once the DD1348-1A or DD1149 is completed, TMO will sign and give a copy to EM.

14.4.4.3.3.5. **(Added)** Once transportation arrives, TMO and EM will oversee loading the engine on the air ride trailer. The squadron performing the engine change will assist EM during loading of the engine. EM will ensure the engine is properly secured on the flatbed trailer in accordance with T.O. 00-85-20 and the engine records are placed in a records pouch and attached to the engine's trailer.

14.4.4.3.4. **(Added)** Spare Engine Cannibalization.

14.4.4.3.4.1. **(Added)** Sound management discretion is a must when considering CANN action from a serviceable spare engine. It is imperative to maintain prescribed AMC levels of War Ready Engines at all times. If on-hand spare numbers fall below our War Ready Engines level, a message must be sent to HQ AMC by EM referencing Engines Non-Mission Capable Supply as a result of CANN actions. Prior to cannibalizing an engine to maintain a Mission Capable aircraft or an AMC Mission Essential aircraft, consider the following sources: APS/MICAP section, aircraft in Non-Mission Capable status, down for extended maintenance, scheduled periodic (PE) inspection, and as a last resort, the spare engine.

14.4.4.3.4.2. **(Added)** After all other cannibalization possibilities have been exhausted, a spare engine becomes a potential CANN source. The Production Superintendent will contact EM to determine whether a cannibalization action from a spare engine is appropriate. Authority to CANN from the spare engine will come from the appropriate MXG/CC or MXG/CD. After normal duty hours, the Production Superintendent should attempt to contact EM personnel prior to the CANN action. MOC will be notified of the CANN action and will continue attempting to contact EM at the earliest opportunity.

14.4.4.3.4.3. **(Added)** A job number will be obtained from MOC prior to any CANN action. EM will pre-designate which spare engine the component can be removed from and ensure status is updated in CEMS and the Air Force Portal.

14.4.4.3.4.4. **(Added)** The squadron performing the CANN is responsible for the following: attaching an AFTO Form 350 tag to the affected system identifying all leak and operational checkouts required upon installation of the engine onto an aircraft, ensuring hardware removed is properly bagged and attached to spare engine to facilitate installation of replacement component, capping all openings/lines to prevent FOD, documenting the appropriate engine's AFTO 95, and performing all inspections required to return the engine back to full serviceability including re-preservation if required.

14.4.4.3.5. **(Added)** Engine documentary/trending data download/upload procedures:

14.4.4.3.5.1. **(Added)** Documentation data for aircraft with inoperative FDR/CVR system and aircraft TDY to locations without data transmission capabilities will be collected via aircrew

provided In Flight Data Sheets (IFDS). Note: An In-Flight Data Sheet is required for each TDY sortie and during each sortie that the FDR/CVR system has been identified as inoperable. TDY aircraft will be required to complete this form, including oil servicing data, regardless of the condition of the FDR/CVR system unless FDR/CVR download data transmission capability exists. If IFDS are used and deployment is for more than 96 hours, the Aircraft Commander is required to transmit the data back to home station. If deployment is less than 96 hours, the forms will be maintained by the Aircraft Commander and turned into maintenance debrief upon return to home station. IFDS forms are generated using AFTO Form 782, *KC-135 Inflight Data*, for KC-135 aircraft.

14.4.4.3.5.2. **(Added)** Data download for aircraft with operative FDR/CVR systems at TDY locations where data processing/transmission capabilities are available will be accomplished per procedures in **paragraph 14.4.5.3.5.1**, with the following exception: Downloaded data files will be converted to *.RDF format IAW T.O. 1C-135-2-11-40-7 and uploaded to the ADADS website as soon as practical after flight. Upon upload completion, deployed personnel will e-mail home station EM a list of uploaded file names.

14.4.4.3.5.3. **(Added)** Documentary data upload to aircraft will be accomplished (when required). Documentary data upload/FDR re-initialization will be accomplished on FDR/CVR equipped aircraft by AMXS personnel using an AMXS maintained Ground Readout Equipment computer IAW T.O. 1C-135-2-11-40-7. Data to include aircraft and engine serial numbers, current aircraft flight time, engine operating/flight time, major/minor cycle count, and time above temperature counts will be provided to AMXS personnel by EM when required.

14.4.4.3.6. **(Added)** Engine Monitoring Program Data Processing Procedures. EM will process data from downloaded PCMCIA cards, TDY data uploaded to ADADS, or IFDS downloads in the CEMS and the Comprehensive Engine Trending and Diagnostics System (CETADS) computer systems each duty day as follows:

14.4.4.3.6.1. **(Added)** Documentary data will be input to the CEMS computer system to update engine hours/cycles for engine special inspections, TCTOs, and time change item replacements.

14.4.4.3.6.2. **(Added)** Trending data will be input in the EM maintained CETADS trending and diagnostic program to detect developing internal failure of engine gas path parts or shifts in instrumentation calibration or accuracy. Strict compliance with these program directives is essential per T.O. 00-25-257-7. If CEMS is down, EM must maintain a folder for each aircraft and log all engine information in a date/time sequence. When CEMS operations resume the data can be input in to CEMS in a chronological sequence.

14.4.4.3.7. **(Added)** Unit Engine Monitor (UEM) Pre-Deployment Procedures. Prior to deployment, the ranking deploying engine technician will be identified as the UEM by the EM. This UEM must out-process through the EM, receive a briefing explaining his/her responsibilities and sign out a deployed UEM binder. This individual is responsible for relaying required data to the home station EM section. The UEM is the focal point for all engine related information for the deployed unit and assumes accountability for all deployed engines (installed and spares).

14.5.6.8.3. **(Added)** PS&D will ensure that all planned maintenance actions contained in each unit's weekly maintenance plan have valid JCNs listed in the schedule. On a daily basis, NLT 0730, PS&D personnel will verify previous day's maintenance actions on the maintenance page that have been accomplished within G081 database. Credit for completed maintenance actions

will be received as long as the maintenance action's JCN is completed on or before the applicable scheduled date. If the action is not complete within the MIS, PS&D will maintain the snapshot of the applicable G081 Screen F9050 for records. Additionally, PS&D will contact the applicable maintenance section to find out the reason for the missed action and for proper deviation recording. Any actions canceled or not completed due to higher headquarters tasking will be recorded as a deviation but will not count towards MSE computation.

Adam D. Bingham, Colonel, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI21-103_AMCSUP, *Equipment Inventory, Status and Utilization Reporting*, 1 Sept 2020

AFI 32-2001 *Fire Emergency Services (FES) Program*, 28 Jul 2022

AFI 33-322, *Records Management and Information Governance Program*, 28 Jul 2021

AFI 48-137, *Respiratory Protection Program*, 12 Sept 2018

AFI 91-202, *The US Air Force Mishap Prevention Program*, 12 Mar 2020

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T.O. 00-25-257-7, *Engine Health Management Plus (EHM) User's Manual Instructions for Turbofan Engine Model: F108-100201,* 15 April 2016

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T.O. 1C-135-6, *Aircraft Scheduled Inspection and Maintenance Requirements, USAF Series All - 135 Aircraft,* 15 May 2022

T.O. 1C-135-6WC-1, *Preflight/Postflight/Hourly Post-Flight Inspection Workcards USAF Model All 135 Aircraft,* 15 May 2022

T.O. 1C-135-6WC-8, *Engine Inspection and Conditioning Workcards USAF Model All 135 Aircraft,* 1 April 2014

Prescribed Forms

MACDILLAFB Form 1, *Aircraft Sortie Recap Worksheet*

MACDILLAFB Form 105 *Aircraft FCF/OCF Briefing Checklist*

MACDILLAFB Form 106 *High Speed Taxi Checklist*

MACDILLAFB Form 108, *Foreign Object Damage (FOD)/Dropped Object Prevention (DOP) Incident Worksheet*

MACDILLAFB Form 110, *Aircraft Platform Software/Data Transfer & Handling Agreement*

MACDILLAFB Form 111, *Platform Information System Upload Document*

MACDILLAFB Form 112, *Platform Information System Transfer Document*

MACDILLAFB Form 145, *Lost Tool/Item Checklist*

MACDILLAFB Form 146, *Aircraft/Equipment Impoundment Checklist*

MACDILLAFB Form 147, *Impoundment Control Log*

MACDILLAFB Form 148, *Aircraft Hangar Towing Checklist*

MACDILLAFB Form 149, *Hangar Securing Checklist*

MACDILLAFB Form 150, *Local Manufacture Sheet*

MACDILLAFB Form 151, *Major Peacetime Accident Response Checklist Aerospace Element*

MACDILLAFBFORM 152, *Crashed, Damaged, or Disabled Aircraft Recovery (CDDAR) 6th Maintenance Group Team Chief's Initial Checklist*

Adopted Forms

AF Forms 332, *Base Civil Engineer Work Request*

AF Form 1098, *Special Task Certification and Recurring Training*

AF Form 1768, *Staff Summary Sheet*

AF Form 2001, *Notification of TCTO Kit Requirements*

AF Form 2005, *Issue/Turn-In Request*

AF Form 2407, *Weekly/Daily Flying Schedule Coordination*

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

AF Form 4100, *KC-135 Load Planning Worksheet*

AF Form 797, *Job Qualification Standard Continuation*

AFTO Form 95, *Significant Historical Data*

AFTO Form 244, *Industrial/Support Equipment Record*

AFTO Form 350, *Reparable 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*

AFTO Form 782, *KC-135R Inflight Data*

AMC Form 64, *Request for Special Certification*

DAF Form 847, *Recommendation for Change of Publication*

DD Form 1149, *Requisition and Inventory Shipping Document*

DD Form 1348-1A, *Issue Release/Receipt Document*

Abbreviations and Acronyms

ADADS—Aircraft Data Acquisition and Distribution System

AO/SCA—Authorizing Official/Security Control Assessor

AOR—Area of Responsibility

APS—Aircraft Parts Store

CANN—Cannibalization

CCM—Common Computing Module

CETADS—Comprehensive Engine Trending and Diagnostics System

CIC—Common Interface Computer

DO—Director of Operations

EGI—Embedded Global Positioning System/Inertial Navigation System

EMP—Engine Monitoring Program

EMR—Electromagnetic Radiation

ESDS—Electronic Software Distribution System

ETAR—Engineering Technical Assistance Request

FAO—Functional Assistance Office (G081-DISA)

FCIF—Flight Crew Information File

FMC—Fully Mission Capable

GPC—Government Purchase Card

GPS—Global Positioning System

HERO—Hazards of Electromagnetic Radiation to Ordnance

HSTC—High Speed Taxi Checklist

IFDS—In Flight Data Sheets

INMARSAT—International Maritime Satellite Telephone

INU—Inertial Navigation Unit

LPS—Lightning protection system

MDT—Mission Defense Team

MIAP—Mainframe Internet Access Protocol

MME—Modern Mobile Emitter

OGV—Operations Standard Evaluations

PCMCIA—Personal Computer Memory Card International Association

PIT—Platform Information Technology

PSS—Production Support Section

Q-D—Quantity-Distance

RDS—Records Disposition Schedule

SAASM—Select Availability Anti-Spoofing Module

SDC—Standard Desktop Configuration

SFC—Senior Fire Chief

SKL—Simple Key Loader (SKL)

SOP—Standard Operating Procedure

SSD—Safe Separation Distance

SSP—System Security Plan

TCP/IP—Transmission Control Protocol/Internet Protocol

TMO—Transportation Management Office

USB—Universal Serial Bus

WAM—Wing Avionics Manager

Attachment 11 (Added)

CTK EQUIPMENT IDENTIFICATION DESIGNATORS (EID)

A11.1. Numbering of CTKs: All master CTKs/Tool room, dispatchable CTKs, and equipment will be numbered for identification.

A11.2. Identification markings will consist of letters and numerals at least one-quarter inch in height when possible.

A11.3. All shops within the MXG will have their CTKs identified with the following World Wide Identification (WWID) code:

Table A11.1. WWID Squadron and Shop Accountability Codes.

SQ	SHOP	TCMax® WWID
MXS	PE	MAMP-
	JETS	MAMJ-
	A/R	MAMA-
	ELECTRO-ENVIR	MAME-
	HYD	MAMH-
	FUELS	MAMF-
	MUNITIONS FLT	MAMW-
	CORROSION	MAMR-
	WASH RACK	MAMI-
	NDI	MAMN-
	AGE	MAMG-
	HAZMAT	MAMZ-
	PMEL	MAMC-
	FAB FLT	MAMM-
AMXS	CTK	MA02-
	TRANS ALERT	MAAT-
	AVIONICS LAB	MAAV-
	MOBILE DEVICE EQPMT	MAIP-
NOTE: Fifth letter in EEID for MAIP indicates squadron. Sixth letter indicates device type. Equipment managed by unit administrators.		
MXO	MQTP	MAMT-
MXG	QA	MAMQ-

A11.4. Tools/equipment must have a nine-character equipment identifier. The intent is for the four characters of the WWID to identify the base (first and second character), unit (third character), and shop (fourth character) in order to leave the remaining five characters available for tool/CTK/equipment numbering; e.g., MA (Base), M (Maintenance Squadron), P (Shop). If after marking with the required identifiers listed above plus the toolbox numbers and the characters do

not equal nine, then add zeros until it does (e.g., MAMP-CC1=7 characters, with zeros added MAMP-CC100=9 characters). Dashes may be used but will not be counted in the nine- character identifier.

Attachment 12 (Added)

FOD AREAS OF RESPONSIBILITY

Figure A12.1. FOD AOR-Outdoor Wash Rack.

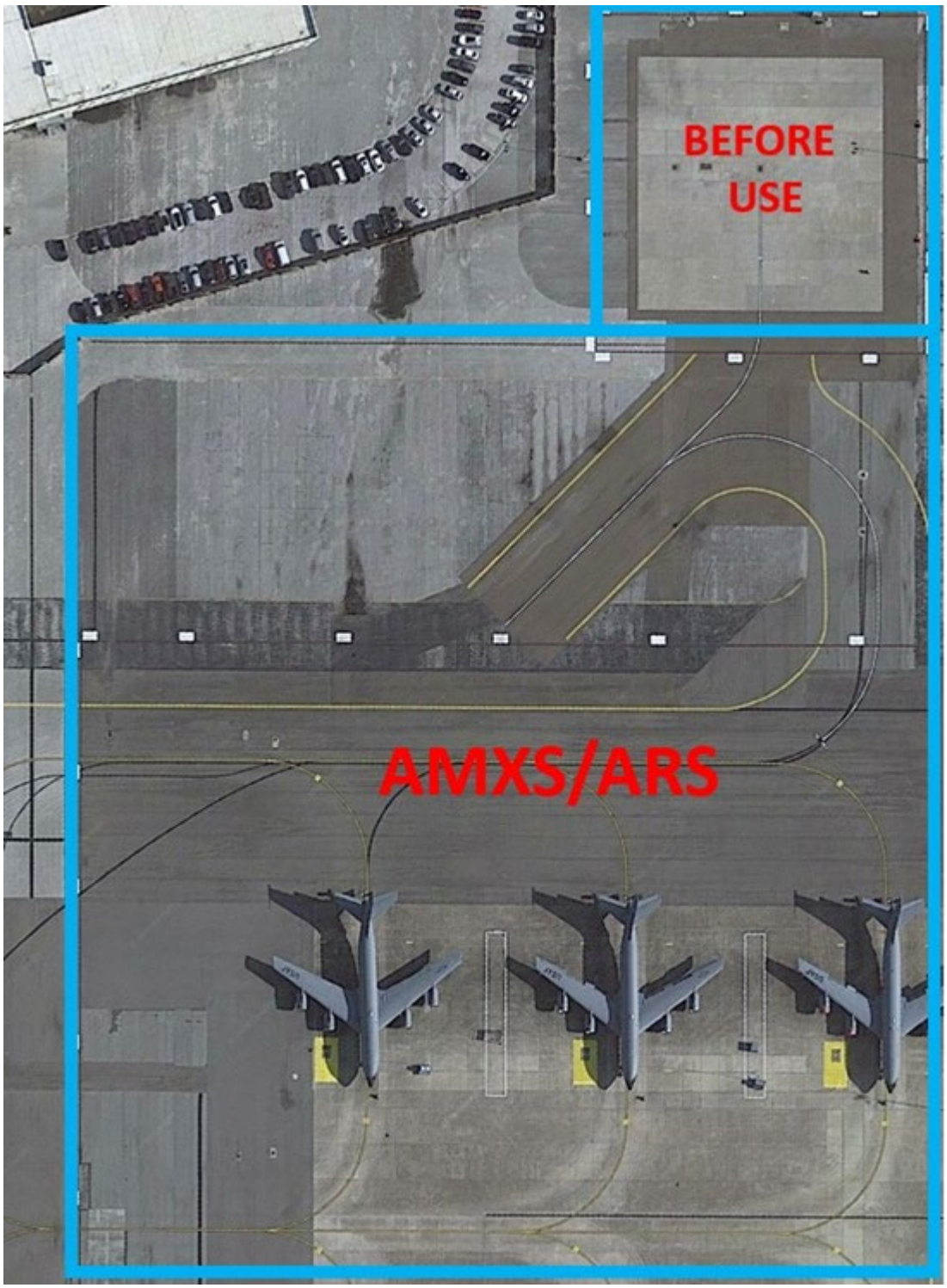


Figure A12.2. FOD AOR-Alpha, Bravo, TA, and DV Parking Ramps.

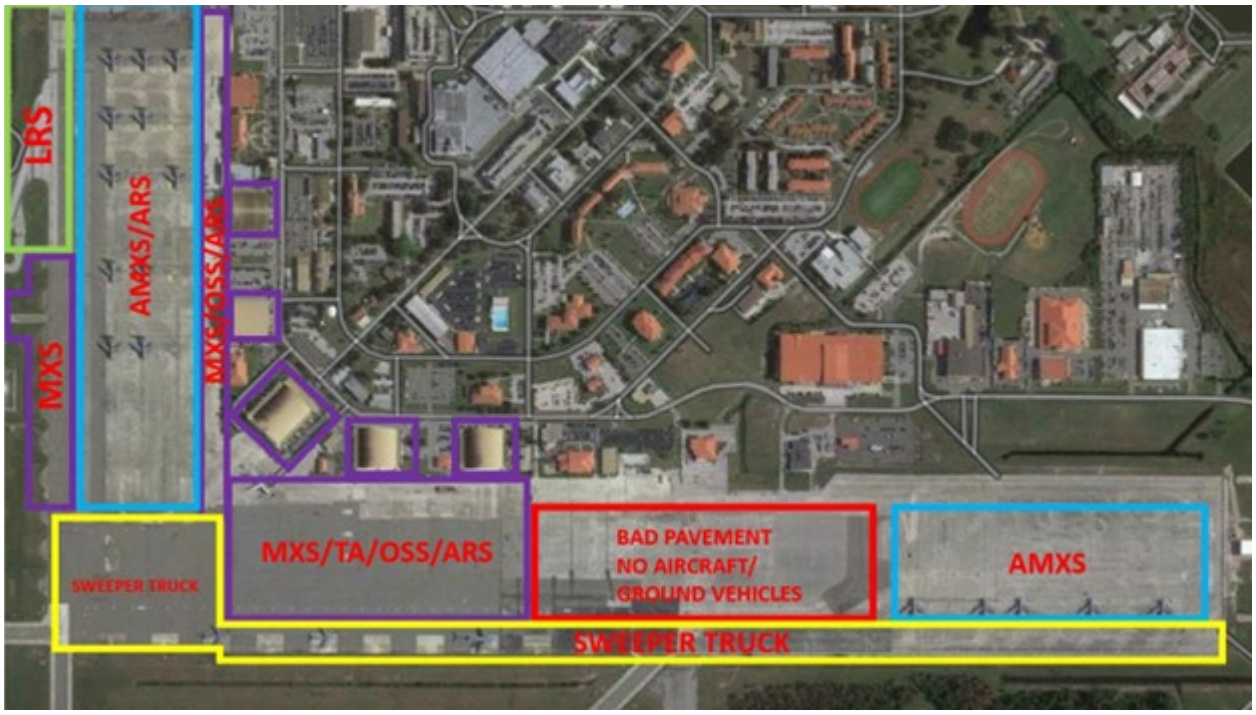


Figure A12.3. FOD AOR-Fuel Cell and POL Access Roads.

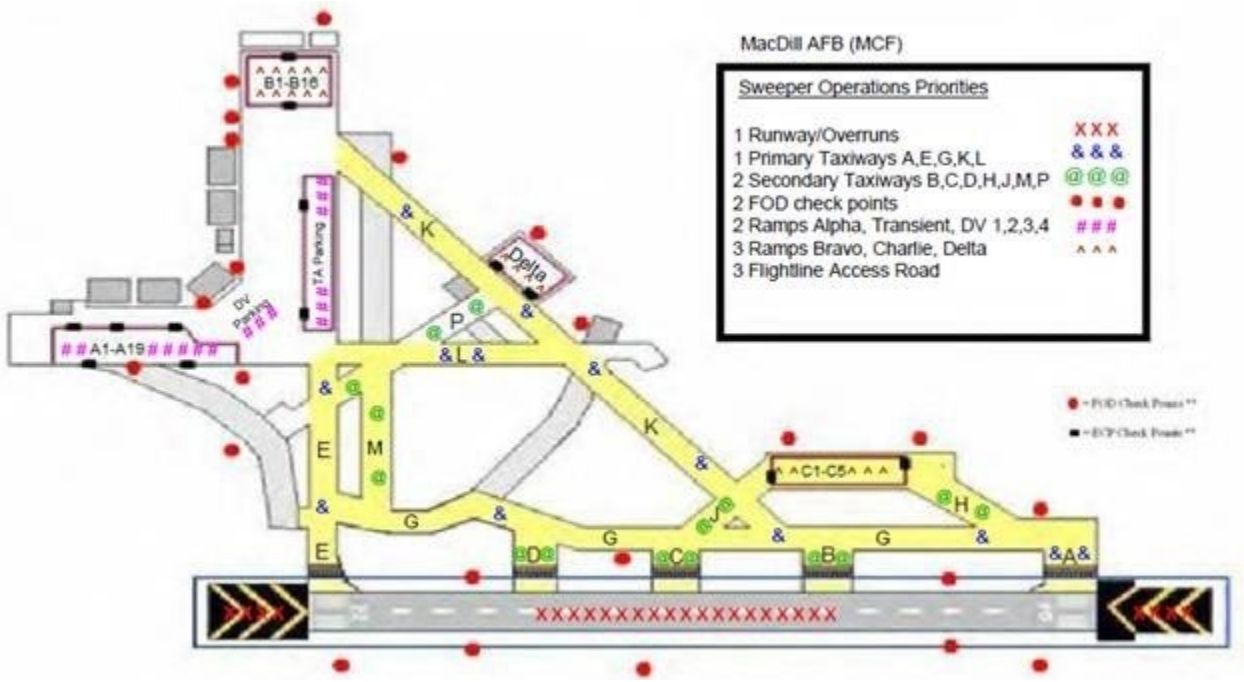
Figure A12.4. FOD AOR-Alert/Charlie Ramp.

Figure A12.5. FOD AOR-Deployed Unit Compound.

Attachment 13 (Added)

AIRFIELD SWEEPER OPERATIONS PLAN

Figure A13.1. Sweeper Operations Map.



Attachment 14 (Added)

MACDILLAFB FORM 152, CDDAR 6 MXG TEAM CHIEF'S INITIAL CHECKLIST

Figure A14.1. MACDILLAFB Form 152, CDDAR 6 MXG Team Chief's Initial Checklist.

CRASHED, DAMAGED, OR DISABLED AIRCRAFT RECOVERY (CDDAR)
6TH MAINTENANCE GROUP TEAM CHIEF'S INITIAL CHECKLIST

- ☐ Obtain turnover from the 6 AMXS Production Supervisor on duty
- Type Aircraft ☐ | Tail # ☐ | Location ☐
- Nature of Emergency: ☐
- Wind Direction/Speed ☐ | Hazardous Cargo SELECT
- Map Coordinates ☐ | ECP Coordinates ☐ | Time Notified ☐
- ☐ Perform a 100% CDDAR Team recall and coordinate a two shift 24 hour operation
- ☐ Contact 6 LRS @ 828-5281 for additional transportation as required (i.e. drivers, A/T fork lift, tractor trailer, 4x4 Truck)
- ☐ Gather continuity books
- ☐ Team Chief Crash Recovery Book (A/R Section Chief's Office)
- ☐ CDDAR Team Respiratory Program Book (A/R Section Chief's Office)
- ☐ CDDAR Team HazCom Program Book (Wheel and Tire Shop)
- ☐ Brief CDDAR Team on assigned duties, event, safety, equipment, T.O. situational awareness, communication, weather, work-rest cycles, time frame, urgency
- ☐ Have CDDAR Team gather equipment required for recovery operation (BLDG 1137)
  - ☐ Technical Data - 2 lap tops minimum (1C-135-3-1, 1C-135-2-07, 00-80C-1, 00-105E-9)
  - ☐ Shoring - Plywood (Local purchase, additional down town)
  - ☐ Slings
  - ☐ Full Jack Set-up - Coordinates all AGE requirements with 6 MXS Production Supervisor
  - ☐ Personal Protective Equipment (PPE)
    - ☐ Gloves
    - ☐ Hard hats (as required)
    - ☐ Safety Goggles (as required)
    - ☐ Reflective belts (as required)
- ☐ Stand-by until instructed to enter the mishap scene by the Incident Commander/ Recovery Operation Commander, MOC or production Supervisor
- ☐ Coordinate with Wing agencies prior to recovery operation to insure the scene is safe
  - ☐ Wing Safety
  - ☐ Civil Engineering Squadron
  - ☐ Fire Chief
  - ☐ Bio-Engineering Flight
  - ☐ EOD
  - ☐ Incident Commander/ Recovery Operation Commander
- ☐ Evaluate the aircraft damage once authorized by the Incident Commander/ Recovery Operation Commander
  - ☐ Notify the MOCC for additional equipment and personnel on station required for recovery operation
  - ☐ Notify the Incident Commander/ Recovery Operation Commander for additional equipment and/or specialized teams required for recovery operation
  - ☐ Crane lifting - Will be coordinated through the Incident Commander/ Recovery Operation Commander with off base agencies listed on Attachment 4
  - ☐ Full aircraft lift via Air Bags - Notify Incident Commander/ Recovery Operation Commander to coordinate with Seymour Johnson AFB per 6 MXS/916 MXS Crash Recovery MEMORANDUM OF AGREEMENT dated 13 Nov 2014. 916 MXS MOC DSN: 722-2809 (All info located in Crash Recovery Binder Hanger 2 A/R office, Rm 221)
- ☐ Additional assistance, contact Depot OC-ALC/LCRA @ DSN: 336-5620
- ☐ Complete Planning and Preparation Checklist in TO 00-80C-1 Tab F

MACDILLAFB FORM 152, TBD

Attachment 15 (Added)

MAJOR PEACETIME ACCIDENT RESPONSE CHECKLIST (AEROSPACE REPAIR ELEMENT)

A15.1. Purpose. To aid in Accident response.

A15.2. Responsibility. The 6th Maintenance Squadron Production Supervisor is responsible for providing qualified Crashed, Damaged, or Disabled Aircraft Recovery (CDDAR) personnel for response to major accidents.

Figure A15.1. Sample Major Peacetime Accident Response Checklist Aerospace Repair Element.

MAJOR PEACETIME ACCIDENT RESPONSE CHECKLIST
AEROSPACE REPAIR ELEMENT

Type Aircraft		Tail #		Runway	
EST Time Landed		Wind Speed		Hazardous Cargo	SELECT
Map Coordinates		ECP Coordinates		Time Notified	

- ☐ Assemble required personnel (as required)
  - ☐ 2A5X4 (AR personnel/augmentees)
  - ☐ 2A6X5 (Hydro)
  - ☐ 2A6X6 (E/E)
  - ☐ 2A6X4 (Fuels)
  - ☐ 2A (Avionic) FDR/CVR removal
  - ☐ 2A (Avionic) FDR/CVR removal

  Time Completed
- ☐ Ensure applicable Technical Orders are available
  - ☐ 1C-135-3-1
  - ☐ 1C-135-2-07
  - ☐ 00-80C-1
  - ☐ 00-105E-9

  Time Completed
- ☐ Vehicles and equipment are ready for dispatch. Call Vehicle Dispatch at 813-828-5281, DSN 968-5281
  - ☐ Crash Trailer
  - ☐ 6 Pack 4X4
  - ☐ Metro Truck

  Time Called

  Time Arrived
- ☐ Notify below upon below full assembly of crash recovery team. MOC will notify the incident commander.
  - ☐ Maintenance Flight Commander
  - ☐ Chief
  - ☐ OIC
  - ☐ AMXS Production Super
  - ☐ MOC

  Time Completed
- ☐ Brief assembled team members on safety precautions, conditions, and situation.

  Time Completed

Stand-by for directions from Incident Commander/ Recovery Operation Commander.

MACDILLAFB FORM 151, TBD

Attachment 16 (Added)

CRANE COMPANY INFORMATION

Figure A16.1. Crane Company Information.

CRASH AND RECOVERY OPERATIONS

PRIMARY

Sims Crane and Equipment
(Accepts IMPAC card)
Commercial 813-626-8102
Equipment available 24 hours a day, 7 days a week, 365 days.
Capabilities: various load ratings up to 150 tons.
Will provide equalizer spreader bar for vertical load lift.

Anthony Cranes
(AF Form 9, *Request for Purchase*, required)
Commercial 813-623-1111
Equipment available 24 hours a day, 7 days a week, 365 days.
Capabilities: various load ratings up to 150 tons.
Will provide equalizer spreader bar for vertical load lift.

Attachment 17 (Added)

CDDAR EQUIPMENT LIST

Table A17.1. CDDAR EQUIPMENT LIST.

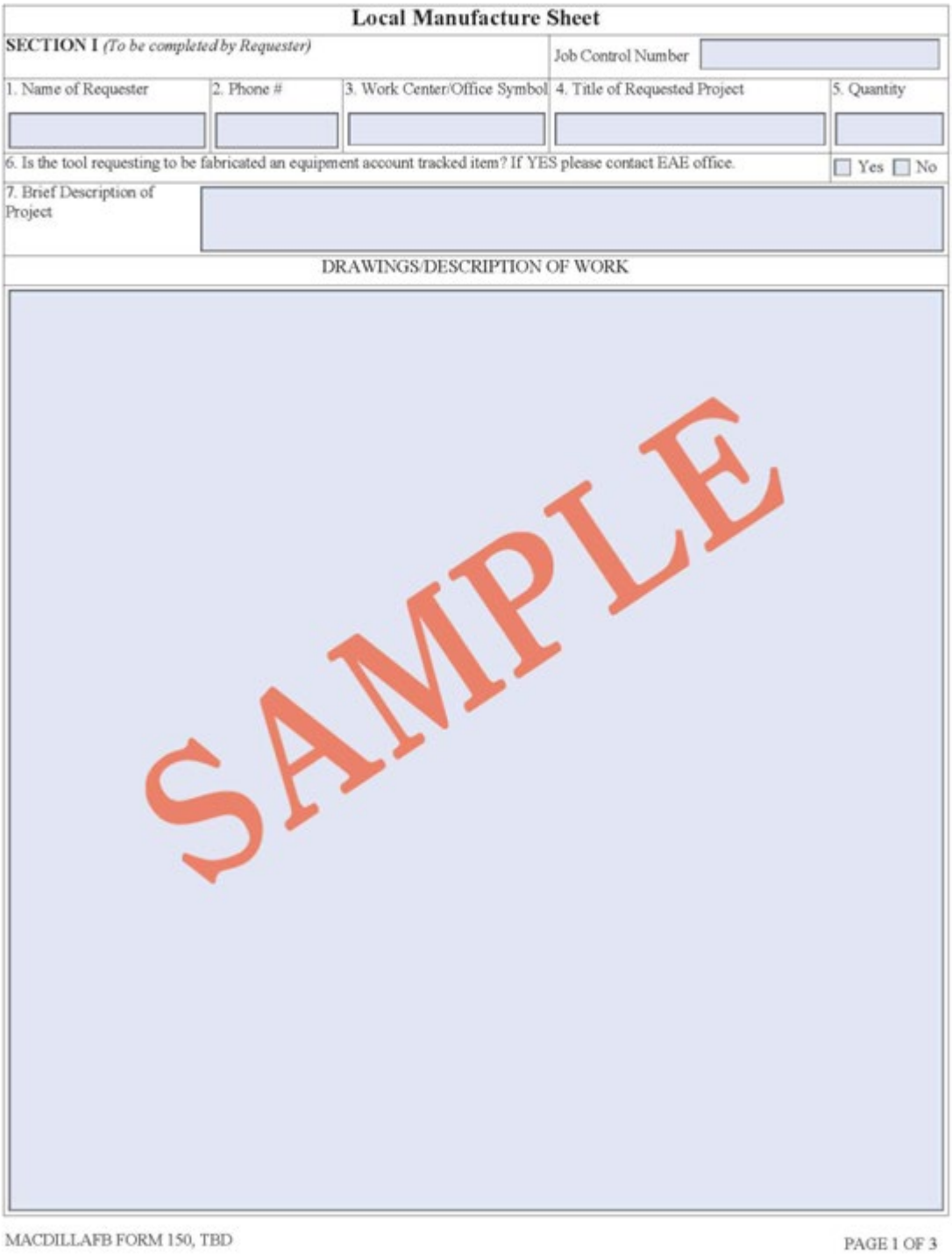
NOUN						
AMS 26t bag assembly						
MC-7 cart						
Consoles for Bags						
Air Supply Hoses						
Air Distribution Manifolds						
Air Bag Containers						
Tether Systems						
Anchor kits						
Dynamometers (5K) w/ radio						
Dynamometers (100K) w/radio						
Dynamometer Radio Communicator						
Pads/Kevlar wraps						
Timbers (cribbing)						
Plywood						
Cradles						
Weatherproof trailer						
Synthetic [debog] mats						
Snatch cables						

Chain binders						
Cargo straps						
Shackles/clamps/ cable thimbles						
Axes/picks/shovels/ pry bars/etc.						
Comm Devices						
Generator						
Portable lights						
KC-135 Minimum Equipment List items on hand						

Attachment 18 (Added)

MACDILLAFB FORM 150, LOCAL MANUFACTURE CHECKLIST

Figure A18.1. Sample Local Manufacture Checklist, Page 1 of 3.



Local Manufacture Sheet

SECTION I *(To be completed by Requester)*			Job Control Number	
1. Name of Requester	2. Phone #	3. Work Center/Office Symbol	4. Title of Requested Project	5. Quantity
6. Is the tool requesting to be fabricated an equipment account tracked item? If YES please contact EAE office.				☐ Yes ☐ No
7. Brief Description of Project				

DRAWINGS/DESCRIPTION OF WORK

SAMPLE

MACDILLAFB FORM 150, TBD PAGE 1 OF 3

Figure A18.2. Sample Local Manufacture Checklist, Page 2 of 3.

SECTION II *(To be completed by Fabrication Section(s))*

8a. Fabrication Shop #1	8b. EST Man Hours	8c. EST Material Cost	8d. Material on Hand
			☐ Yes ☐ No

Attach a list of required materials by Stock Number/Part Number, Quantity and Nomenclature See SECTION III

8e. Fabrication Shop #1 Technician Name	8f. Signature	8g. Date

9a. Fabrication Shop #2	9b. EST Man Hours	9c. EST Material Cost	9d. Material on Hand
			☐ Yes ☐ No

Attach a list of required materials by Stock Number/Part Number, Quantity and Nomenclature See SECTION III

9e. Fabrication Shop #2 Technician Name	9f. Signature	9g. Date

The Last Shop Will Provide the Total Estimated Man-Hours and Estimated Material Cost. Return Package to the Requester.

10. Total Estimated Man-Hours Required		11. Total Estimated Material Cost	

SECTION III (To be completed by QA)

Job Control Number

SECTION IV *(To be completed by Fabrication Section(s))*

12a. Fabrication Shop #1	12b. Actual Man Hours	12c. Actual Material Cost

12d. Fabrication Shop #1 Technician Name	12e. Signature	12f. Date

13a. Fabrication Shop #2	13b. Actual Man Hours	13c. Actual Material Cost

13d. Fabrication Shop #2 Technician Name	13e. Signature	13f. Date

The Last Shop Will Provide the Total Actual Man-Hours and Actual Material Cost. Return Package to the Requester.

14. Total Estimated Man-Hours Required	
15. Total Estimated Material Cost	

MACDILLAFB FORM 150, TBD

PAGE 2 OF 3

Figure A18.3. Sample Local Manufacture Checklist, Page 3 of 3.

SECTION V *(To be completed by Unit Supply Representative)*

MATERIAL REQUIREMENTS FOR LOCAL MANUFACTURE

NOUN	STOCK NUMBER	PART NUMBER	COST PER ITEM	QUANTITY	ITEM TOTAL

16. TOTAL COST

SECTION VI *(Local Manufacture Checklist)*

17. Requester: Submitted list of Material Requirements and prepared AF Form 2005 by Stock number, Quantity, Nomenclature and submitted to Unit Supply Representative? (See SECTION V)	☐ Yes	☐ No	☐ N/A
18. Requester: Coordinated with the Fabrication Section(s)? (See SECTION II)	☐ Yes	☐ No	☐ N/A

19a. Quality Assurance: Approval		
19b. Quality Assurance Representative Name	19c. Signature	19d. Date
20a. Quality Assurance Superintendent: Approval		
20b. Quality Assurance Superintendent Name	20c. Signature	20d. Date
21a. Fabrication Shop: Approval ☐ Approved ☐ Disapproved ☐ Deferred based on estimated man hours/cost		
21b. Fabrication OIC/Flight Chief Name	21c. Signature	21d. Date
22a. Wing Safety: Approval ☐ N/A		
22b. Safety Representative Name	22c. Signature	22d. Date
23a. MXG/CC: Approval		
23b. MXG/CC Name	23c. Signature	23d. Date

MACDILLAFB FORM 150, TBD PAGE 3 OF 3