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# AEROSPACE EQUIPMENT MAINTENANCE INSPECTION DOCUMENTATION, POLICIES, AND PROCEDURES

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This supplement implements and extends the guidance of TO 00-20-1, Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures, 1 June 2018 and TO 00-20-1, AETC Supplement, 31 July 2018. This supplement identifies Autonomic Logistics Information System (ALIS) user responsibilities and procedures. This supplement provides guidance for documentation utilizing embedded forms capabilities in Computerized Maintenance Management System (CMMS) within ALIS in accordance with (IAW) the parent document, paragraph 3.2. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of IAW Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management System (AFRIMS). 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. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, Recommendation for Change of Publication; route AF Forms 847 from the field through the appropriate functional chain of command.

## **SUMMARY OF CHANGES**

This document has been substantially revised. A complete review is required.

- 3.7.1. (Added) "Notes" are required for information pertaining to Maintenance Actions (MA) that require additional documentation (e.g. Previously Complied With (PCW) information, MA Times, cure/adhesive check time/date it's due and status, follow on maintenance reference, operational check status, fuel truck number, fluid servicing cart number, hydraulic mule number, etc.).
- 3.7.1.1. (Added) The "Notes" section **will not** be used for missing signatures. If a Work Order (WO) or MA is missing a signature(s), create a new WO or MA and reference to erroneous WO/MA.
- 4.5.1.1. Signatures will reflect the "Severity" of the MA. For example, a Red X requires one "CORRECTED BY" and one "INSPECTED BY" signature, a Red Diagonal requires one "CORRECTED BY" signature, and a Red Dash requires one "INSPECTED BY" signature.
- 4.5.1.1.1. MAs with pre-loaded signatures (e.g. panel removal with two signatures loaded automatically) can have both of the signatures signed off by the personnel performing the task due to no available option to delete signature lines.
- 4.5.1.2. Red X MAs require an IAW reference. For example, adhoc MAs do not automatically populate IAW references. If the MA does not have an IAW annotated, the IAW reference will be documented in the "Notes" section of the MA.
- 4.6.1.5.4. If a WO is created in error or a duplicate made, the WO will not be cancelled, but signed off with correct IAW.
- 5.7. AFTO Form 781A is represented by the Work Order Details page and Execution Page in ALIS.
- 5.7.1.3.11.3. Removal of parts, panels, low observable coatings, and equipment, or the opening of doors will be annotated as a Red Diagonal requiring one "CORRECTED BY" signature. In addition, the individual signing off the removal action is responsible for ensuring the corresponding install MA is created as a Red X condition.
- 5.7.1.3.11.4. "Cautions" and "Warnings" will be annotated with any immediate hazards or specific precautions within the WO. Verification of the "Caution" or "Warning" being updated on applicable status pages is the responsibility of the user who annotated the "Caution" or "Warning."
- 5.7.1.3.11.5.1. When a required condition exists, a warning tag (AF Form 1492 or AFTO Form 492) will be applied to the aircraft.
- 5.7.1.3.11.5.1.1. (Added) Warning tags will be located on the MIP strut.
- 5.7.13.11.5.1.1.1. For AF Form 1492 only, in the event ALIS is unavailable Part A will be located on the MIP strut and Part B will be located in the Contingency Operations Plan (Cops).

- 5.7.1.3.11.5.4 (Added) The following blocks shall be completed on the AFTO Form 492:
- a. JCN. Enter the job control number of warning tag Red X discrepancy. See Paragraph 5.7.1.3.11.5.7.
- b. TAG\_\_\_\_OF\_\_\_. Enter the tag number and total number of tags.
- c. ITEM TAGGED. Enter the item tagged (ex. EDU #2, 270V Battery, etc..) and enter the condition for the tag, include a warning note written or underlined in red. For Example: "Aircraft on Jacks NOTE: Do Not Tow" or "EDU #2 Removed NOTE: Do Not Apply Electrical Power"
- 5.7.1.3.11.5.7. The warning tag will have its own MA and will be annotated as a Red X. The applicable Aircraft Cautions and Warnings checkboxes will be check marked on the WO details page.
- 5.7.1.3.11.5.7.1. (Added) The MA will have the total number of warning tags installed and an applicable warning note annotated. For example, 2 each warning tags installed. NOTE: DO NOT OPERATE LANDINGGEAR.
- 5.7.1.3.11.5.7.2. (Added) All warning tags grouped in a single MA will be removed and signed off concurrently. If a condition still exists requiring a warning tag, a new MA/warning tag will be created for the condition.
- 5.7.1.3.11.5.7.3. (Added) The individual that removes the final grouped warning tag will ensure that each warning tag itemized in the MA has been properly annotated as removed in the "Notes" (for applicable MA) prior to clearing the Red X per para 4.5.1.2 of TO00-20-1.
- 5.7.1.3.11.6.1. An In-Process Inspection (IPI) will not be documented in the "Notes" section of the MA that requires the IPI. IPIs will be documented as a separate MA in the WO with a "Red X" as the severity.
- 5.7.2. (Added) User will update the Work Order Details Page as follows:
- 5.7.2.1. (Added) When the WO is created/reviewed, the WO severity and work center assignment will be updated accordingly.
- 5.7.2.2. (Added) When the WO is created/reviewed, the "State" will accurately reflect AWM, AWP, INW, or CURE option.
- 5.7.2.3. (Added) The "Severity" will reflect the overall WO discrepancy. Ex. A POS inspection will be a Red ( $\cdot$ ), a tire worn beyond limits will be a Red ( $\times$ ).
- 5.7.2.4. (Added) Deferred WOs must have a red dash (-) or red diagonal (/), whichever is applicable, as the overall severity. MAs contained within the deferred WO do not need a red symbol entry until the WO is started.

- 5.7.2.5. (Added) Related WOs, to include follow on maintenance, will be referenced to each other using the hyperlink option in the Work Orders section on the Work Orders Details page.
- 5.7.3. (Added) User will update Work Order Execution page as follows:
- 5.7.3.1. (Added) Any work accomplished will be documented/signed off as soon as possible (Corrected by block), not to exceed the end of the maintainer's duty day (Inspected by does not have a time limit).
- 5.7.3.2. (Added) Configuration changes will be annotated at the time of removal. If a MA is created for a configuration change, only one corrected by signature is required for the MA.
- 5.7.3.3. (Added) "Skipped" MAs will not have a severity symbol.
- 5.7.3.3.1. (Added) All Skipped MAs will have a reason for the skip annotated. If the reason for the skip is because of a duplicate WO, MA or a PCW task, a reference to the JCN of the original WO, MA or PCW task will be annotated with the correct IAW and the reason for the skip. The "Notes" section can also be used to annotate the skipped reason and IAW.
- 5.7.3.3.2. (Added) In the event a MA is skipped with a symbol entered in the MA, the "Notes" section will be utilized to document and clear IAW 00-20-1 para 4.6.1.5.1 and 4.6.1.5.2.
- 5.7.3.4. (Added) Solution sets that have not been started do not require a "Severity" symbol for the MAs within that solution. If a MA within the solution has been started or skipped, the remaining MAs may remain in "N/A" status unless required.
- 5.7.3.5. (Added) Completed Maintenance Actions
- 5.7.3.5.1. (Added) MA times will reflect each individual's time taken on the task. This will also include times to reflect each signature for the MA. For example, on a Red X MA, the 7- level will also document time taken for inspection of thetask.
- 5.7.3.5.2. (Added) When using a Verification Information Report (VIR) or an Action Request (AR) to accomplish a MA, reference the VIR/AR number in the "Notes" section of the MA.
- 5.7.3.5.3. (Added) When Completing a WO, a statement reflecting the work that was accomplished to correct the discrepancy will be entered in the "Corrective Action" block. For example, "Panel 4116 removed and installed."
- 5.7.3.5.3.1. (Added) After verifying proper completion and documentation of all MAs, WOs will be signed off by using the "Reviewed By" option in the qualification block.
- 5.13.1. <u>AFTO Form 781H is represented by the Air Vehicle (AV) Status Page in ALIS.</u> Users will update AV Status page as follows:
- 5.13.1.2.12. Update the "Manually Entered" consumable amounts every time servicing actions are performed, if applicable.

- 5.13.2 (Added) Update the Cautions and Warnings tab IAW para. 5.7.1.3.10.5. and para 5.7.1.3.10.5.3. of this document upon completion of the coinciding MA.
- 5.13.3 (Added) The Flight Servicing Tab will be used to create all flight servicing inspections. For example, Before Operations Servicing (BOS), Inter Operations Servicing (IOS), and Post Operations Servicing (POS).
- 5.13.4 (Added) The "Limitations" entry will be annotated by the Maintenance Operations Center (MOC) with the aircraft or aircraft system limitations that affect mission effectiveness.
- 5.13.5 (Added) The aircraft "Driver" entry will be updated by the MOC to reflect the most current estimated time in commission (ETIC).
- 5.13.6 (Added) The aircraft "Location" will be updated by the MOC to reflect the current location of the aircraft.
- 5.13.7 (Added) The "Last Wash" tab will be updated after the completion of an aircraft wash.

## 7.1. Support Equipment (SE)

- 7.5.1. All Support Equipment maintenance and inspections will be documented in ALIS and will reflect information documented on AF Form 244/245, which includes symbols, signatures, and IAW references or up/down status arrow on Lockheed Martin Form1581.
- 7.5.1.4. (Added) When the WO is created the work order severity and work center assignment will be updated.
- 7.5.1.5 (Added) The "Severity" will reflect the most serious condition of the MA that remains open within that WO.
- 7.5.1.6 (Added) Deferred WOs must have a red dash (-) or red diagonal (/), whichever is applicable, as the overall severity. MAs contained within the deferred WO do not need a red symbol entry until the WO is started.
- 7.5.1.7 (Added) The Requisitions Tab will reflect all parts ordered against the WO. In the event that a part cannot be ordered, the user will order the part using the parts catalog feature and annotate the Req ID in the "Notes" section. The user is responsible to ensure this information is correct.
- 7.5.1.8 (Added) Related WOs, to include follow on maintenance, will be referenced to each other using the hyperlink option in the Work Orders section on the Work Orders Detailspage.
- 7.5.1.9 (Added) The removal of parts will be annotated as a Red Diagonal requiring one "CORRECTED BY" signature. In addition, the individual signing off the removal action is responsible for ensuring the corresponding install MA is created as a Red X condition.
- 7.5.1.10 (Added) Red X MAs require an IAW reference. If the MA does not have an IAW annotated, the IAW reference will be documented in the "Notes" section of the MA.
- 7.5.1.11 (Added) When using a VIR or an AR to accomplish a MA, reference the VIR/AR number in the "Notes" section of MA.

- 7.5.1.12 (Added) MAs accomplished (Corrected by block) will be signed off as soon as possible, not to exceed the end of the maintainer's duty day (Inspected by does not have a time limit).
- 7.5.1.13 (Added) MA times will reflect each individual's time taken on the task. This will also include times to reflect each signature for the MA. For example, on a Red X MA the 7-level will also document time taken for inspection of the task.
- 7.5.1.14 (Added) "Skipped" MAs will not have a severity symbol. See para 5.7.3.3.1. and 5.7.3.3.2. of this document for additional instruction.
- 7.5.1.15 (Added) When Completing a WO, a statement reflecting the work that was accomplished to correct the discrepancy will be entered in the "Corrective Action" block.
- 7.5.1.16 (Added) If a WO or MA requires further documentation, see para. 3.7.1. and 3.7.1.1. of this document for instructions.
- 7.6.2. <u>AFTO Form 244 Part II</u> Prior to use inspections for non-powered and powered AGE will be completed and documented on Part II of the 244 or Lockheed Martin Form 1581.
- 7.6.3. <u>AFTO Form 244 Part III</u> Date due in Part III on the AFTO form 244 will match the Date due in ALIS.
- 7.6.4. AFTO Form 244 Part IV The supervisory review will be completed every 180 days.
- 7.7. (Added) Support Equipment requiring vendor repair will have all WOs/MAs cleared with the corrective action "Unit requires Vendor maintenance". Regardless of the severity no IAW is required for sign-off.
- 11. (Added) <u>ALIS Offline Usage</u> In the event that ALIS is unavailable the use of offline forms will be dependent on the condition that is presented. Refer to ALIS Working Offline 3.X 19D- PP-5162 F35-UGP-A0120000402-090A-A for additional guidance on usage offorms.
- 11.1. (Added) When COP forms are transcribed into ALIS by an individual other than the individual(s) that originally completed the maintenance actions, the MA(s) will be signed off as previously complied with (PCW) and will reference the original COP form IAW 00-20-1 para 5.7.1.3.14.4.
- 11.1.1. (Added) The COP form must be uploaded into the applicable Work Order via "CMMS Attachment Upload" tab on the Work Order Details Page.
- 11.2 (Added) Manual AV Release/Acceptance Data Capture Form 1505.22.004 will be used to document aircraft exceptional release.
- 11.3. (Added) The AFTO Form 244/245, or Lockheed Martin Form 1581 will be used for all Support Equipment documentation for inspections/maintenance performed until ALIS is available again.
- 11.4. (Added) Work Order 1505.22.002 form and Maintenance Action 1505.22.001 form will be used to document all maintenance performed until ALIS is available again.

- 11.5. (Added) The AFTO form 244/245, Work Order 1505.22.002 form and Maintenance Action 1505.22.001 form will be transcribed as soon as the Standard Operating Unit (SOU) is available.
- 11.6. (Added) The individual doing the transcribing will sign off the work order with the appropriate signature blocks according to the symbol.
- 11.7. (Added) In the "Notes" section of the MA it will reflect the individuals that performed the maintenance.
- 11.8. (Added) Ensure configuration changes are complied with and show accurate component history.
- 11.9.(Added) In the event that a Portable Memory Device (PMD) Reader is not available debrief will capture the Health Reporting Codes (HRC) on a locally created checklist.

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## **APPENDIX A**

## LIST OF ACRONYMS

- AGE Aerospace Ground Equipment
- ALIS Autonomic Logistics Information System
- AR Action Request
- AV Air Vehicle
- **BOS** Before Operations Servicing
- ETIC Estimated Time in Commission
- HRC Health Reporting Code
- IAW In Accordance With
- IOS Inter Operations Servicing
- IPI In Process Inspection
- JCN Job Control Number
- MA Maintenance Action
- MOC Maintenance Operation Center
- PCW Previously Complied With
- PMD Portable Memory Device
- POS Post Operations Servicing
- PRR Problem Reporting and Resolution
- SOI Sustainment Operating Instruction
- SOU Standard Operating Unit
- TO Technical Order
- VIR Verification Information Report
- WO Work Order