

DEPARTMENT OF THE AIR FORCE AIR EDUCATION AND TRAINING COMMAND

AFI21-101_AETCSUP_ADDENDUM_A_AETCGM2022-01 19 AUGUST 2022

MEMORANDUM FOR ALL AETC UNITS

FROM: HQ AETC A4
266 F Street West
JBSA-Randolph TX 78150-4440

SUBJECT: Air Education and Training Command Guidance Memorandum to AFI 21-101 AETCSUP ADDENDUM A, Aircraft and Equipment Maintenance Management (F-35).

By Order of the Commander, Air Education and Training Command, this AETC GM immediately implements changes to AFI21-101_AETCSUP_ADDENDUM_A, dated 2 October 2020. Compliance with this memorandum is mandatory. To the extent its directions are inconsistent with other AETC publications, the information herein prevails, in accordance with DAFI 90-160, *Publications and Forms Management*.

This Guidance Memorandum continues previously published guidance implemented under AFI21-101_AETCSUP_ADDENDUM_A. The attached memorandum updates the F-35 audit procedures, documentation, and reporting template.

This memorandum becomes void after one-year has elapsed from the date of this memorandum, or upon publication of an Interim Change or rewrite of AFI21-101 AETCSUP ADDENDUM A, whichever is earlier.

AMY L. GRAVELEY, GS-15, DAF Director of Logistics, Engineering and Force Protection

Attachment: GUIDANCE CHANGES

GUIDANCE CHANGES

All references to 19 AF/LG changed to read 19 AF/A4 throughout.

All references to 19 AF/LGA changed to read 19 AF/A4D throughout.

All references to 19 AF/LGM changed to read 19 AF/A4M throughout.

All references to 19 AF/LGP changed to read 19 AF/A4P throughout.

Changed. This addendum complements AFI 21-101 AETCSUP, Aircraft and Equipment Maintenance Management. It prescribes policies and procedures governing aerospace equipment maintenance management of F-35 aircraft for Air Education and Training Command (AETC). Chapters align with DAFI 21-101. Chapter 10, Chapter 12, Chapter 13, Chapter 15, and Chapter 16 of DAFI 21-101 and the AETC Supplement do not require supplementation for the F-35 and are therefore, omitted from this publication. This publication does not apply to Air Force Reserve Command or the Air National Guard and their units; however, AFRC/ANG personnel assigned Classic Associate Units supporting AETC units will comply with the guidance provided within this supplement. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, or T-3") number following the compliance statement. See DAFMAN 90-161, Publishing Processes and Procedures, for a description of the authorities associated with the tier numbers. Submit requests for waivers on DAF Form 679, Department of the Air Force Publication Compliance Item Waiver Request/Approval, through the chain of command to the appropriate tier waiver authority, or alternately, to the publication Office of Primary Responsibility (OPR) for non-tiered compliance items. 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 the appropriate functional chain of command. Waivers/recommended changes must be approved by the group commander (or squadron commander, if not assigned to a group) before forwarding to 19 AF/A4 for action by 19 AF/A4PP. Ensure all records generated as a result of processes prescribed in this publication adhere to AFI 33-322, Records Management and Information Governance, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. This publication may be supplemented at the group/director level. 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.

4.8. Added. Fabrication Flight.

Attachment 6

F-35 AUDIT PROCEDURES, DOCUMENTATION AND REPORTING TEMPLATE

Table A6.1. Changed. F-35 Audit Procedures, Documentation and Reporting Template.

Create a work order in CMMS for the audit.

Perform Aircraft Safe for Maintenance (F35-AAA-A05210100000-120A-A) JTD Data Module.

Perform Audit utilizing Post Operations Servicing (POS(OML))- Inspection (F-35-AAAA13210300000-

281-A) JTD Data Module.

Input new damages and compare all damages/repairs to the OML with entries contained in LODEM. Update LODEM as the audit progresses.

Maintain an ongoing record during the audit for starting LOHAS MMU number, damages added, damages deleted, damages edited and final audit LOHAS MMU value for audit historical files.

The LOHAS and OML audit historical files will be maintained for 5 years. Each audit file will include at a minimum:

Name of person(s) performing the audit.

Date of audit.

Pre-audit LOHAS margin percentage.

Post-audit LOHAS margin percentage.

Number of new damages identified.

Number of damages marked but not in LODEM

Number of previously repaired damages not removed from LOHAS.

Number of duplicate entries identified.

Root cause and corrective action when post audit results in a +15% or -15% change.

Note: Report audit results upon completion to: 19AF.LGMS.All@us.af.mil

BY ORDER OF THE COMMANDER AIR EDUCATION AND TRAINING COMMAND



AIR FORCE INSTRUCTION 21-101

AIR EDUCATION AND TRAINING
COMMAND
Supplement
ADDENDUM A
02 OCTOBER 2020

Maintenance

AIRCRAFT AND EQUIPMENT MAINTENANCE MANAGEMENT (F-35)

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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(Mr. Jay C. Hennette)

Supersedes: AFI 21-101_AETCSUP_ Pages: 39

ADDENDUM A, 24 September 2015

This addendum complements AFI 21-101, Aircraft and Equipment Maintenance Management. It prescribes policies and procedures governing aerospace equipment maintenance management of F-35 aircraft for Air Education and Training Command (AETC). Chapters align with AFI 21-101, Chapter 10, Chapter 12, Chapter 13, Chapter 15 and Chapter 16 of AFI 21-101 and the AETC Supplement do not require supplementation for the F-35 and are therefore, omitted from this publication. This publication does not apply to Air Force Reserve Command or the Air National Guard and their units; however, AFRC/ANG personnel assigned Classic Associate Units supporting AETC units will comply with the guidance provided within this supplement. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, or T-3") number following the compliance statement. See AFI 33-360, Publications and Forms Management, for a description of the authorities associated with the tier numbers. Submit requests for waivers on AF Form 679, Air Force Publication Compliance Item Waiver Request/Approval, through the chain of command to the appropriate tier waiver authority, or alternately, to the publication Office of Primary Responsibility (OPR) for non-tiered compliance items. Refer recommended changes and questions about this publication through

your Major Command (MAJCOM) to the OPR using the AF Form 847, *Recommendation for Change of Publication*. Waivers/recommended changes must be approved by the group commander (or squadron commander, if not assigned to a group) before forwarding to 19 AF/LG for action by 19 AF/LGPP. Ensure all records created because of processes prescribed in this publication are maintained in accordance with (IAW) AFI 33-322, *Records Management and Information Governance Program*, and disposed of IAW the Air Force Records Disposition Schedule located in the Air Force Records Information Management System. This publication may be supplemented at the group/director level. 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. Specific F-35 policy is revised to align with the revision of AFI 21-101 and maximize standardization across the F-35 maintenance community. Additionally, guidance is provided for waivers of holes/ Electronic Equipment Log (EEL)/inconsistencies.

- 1.1.1. (Added) Sustainment Operating Instructions (SOIs) are F-35 joint program instructions provided by the Joint Program Office (JPO). They are developed with Service/Partner participation and provide source documentation for Air Force policies/instructions specific to the F-35 where legacy instructions may not be adequate for the given topic. SOIs are considered applicable and source guidance for use when there is no other Air Force guidance available. If conflict. Air Force guidance will take precedence. documentation/information that is relevant to AFI 21-101 is included in this publication and referenced to the specific SOI in applicable paragraphs of this publication. Ensure the SOI is current and active when referenced. SOIs may be accessed at the following web site: https://cs2.eis.af.mil/sites/12097/sustainment/af%20soi%20library/forms/allitems.aspx?Roo tFolder=%2fsites%2f12097%2fsustainment%2fAF%20SOI%20Library%2fUSAF%20Ap proved%20SOI%20Final%20Folder
- 1.1.2. (**Added**) The F-35 is a joint services platform that utilizes terminology that differs from legacy. For a frame of reference, the following are common terms (not all inclusive) and their legacy equivalent: ALIS=IMDS, JTD=MDS TO, RMA=DIFM, TCTD=TCTO, AR=107 request or ETAR, MEFL=MESL and LCN=WUC.
- 1.3.4.1. (Added) Action Requests (AR) are the primary method of problem reporting for the F-35 Air System. Refer to paragraph 11.46 to submit ARs to the Autonomic Logistics Global Sustainment (ALGS) Operations Center through the Autonomic Logistics Information System (ALIS). SOI 1514.02.
- 1.3.5. (Added) Prognostic Maintenance Inspections.
- 1.3.5.1. (Added) Prognostic and Health Management (PHM) will be viewed and tracked in the same manner as scheduled maintenance inspections (T-2).
- 1.3.6. (Added) O+ Maintenance.

- 1.3.6.1. (**Added**) The F-35 Joint Program employs a 2-level maintenance concept defined as organizational and depot levels of maintenance. Within the Organizational level, there are on-aircraft and O+ maintenance tasks.
- 1.3.6.2. (Added) O+ Scheduled Maintenance:
- 1.3.6.2.1. (**Added**) Scheduled maintenance requirements for off equipment will be listed within applicable Joint Tech Data (JTD) (**T-2**).
- 1.3.6.2.2. (**Added**) O+ scheduled maintenance will be documented and tracked for particular assets as detailed below:
- 1.3.6.2.2.1. (**Added**) Program provided Support Equipment (SE) scheduled maintenance will be managed, tracked and documented within Computerized Maintenance Management System (CMMS) (**T-2**).
- 1.3.6.2.2.2. (**Added**) Program provided Alternate Mission Equipment (AME) scheduled maintenance will be documented, tracked and managed within CMMS (**T-2**).
- 1.3.6.2.2.2.1. (Added) Tracking and managing scheduled inspections or shelf life of these same items while they are not installed on an Air Vehicle (AV) will be tracked in either Maintenance Management Production Asset Inspection Requirements (MM-PAIRS) as a shelf life tracked item or external to ALIS (i.e., Logistics Data Manager) (T-2).
- 1.5.3. Management of all F-35 AV Scheduled and Prognostic maintenance requirements are performed within the ALIS. Scheduled and Prognostic maintenance is performed IAW JTD, Time Compliance Technical Directive (TCTD) and as directed in an Action Request Response. Specific scheduled maintenance requirements are created by using the Health Inspection Task (HIT) in MM-PAIRS via ALIS.
- 1.9.4. (**Added**) Use of JTD. Verified JTD will be used for all maintenance actions/procedures (**T-2**). Where there is JTD that has not been authored or verified, refer to established SOI or User Guide procedures (**T-2**).
- 1.9.5. (Added) Lockheed Martin Aeronautics (LM) is the Joint-Service Technical Data Manager (JTDM) and has management responsibility for all Joint Strike Fighter (JSF) program technical data and technical data requirements. LM-JTDM provides overall management of the Joint Technical Data Action Request (JTDAR) internal process and updates required for all JSF JTD. Refer to established SOI or User Guide procedures.
- 1.9.6. (**Added**) Recommend improvements, corrections or additions to JTD by submitting a JTDAR to ALGS Operations Center through Customer Relationship Management (CRM) (**T-2**). The request should be clear, concise and provide enough detail to identify the recommendation. Additionally, the request should provide a recommended solution if known. The initiator shall recommend a JTDAR processing priority as applicable.
- 1.9.7. (**Added**) Expedited JTDAR are accomplished when personnel/property hazards, safety-of-flight conditions exist or a change that pertains to a procedure that will result in a work stoppage or damage to equipment if left uncorrected.
- 1.9.8. (**Added**) Accomplish routine JTDAR for all other changes that do not meet the Expedited or Category 1 (CAT 1) Action criteria.

- 1.9.9. (**Added**) Submit an AR to the ALGS Operations Center for additional technical data waivers, deviations, improvements, corrections, or procedures (**T-2**). See paragraph **11.46**.
- 1.9.10. (**Added**) Support Equipment Maintenance Matrix (SEMM). Refer to established SOI or User Guide procedures.
- 1.9.10.1. (**Added**) The primary source for technical data used by authorized personnel to conduct maintenance for SE is verified JTD. In the absence of verified JTD, F-35 program approved legacy general tech data may be used.
- 1.9.10.2. (**Added**) The SEMMs are configured and managed by Air System Contractors (ASC), intended to be used as cross referenced tools for SE authorized maintenance personnel to assist in determining whether or not a particular SE maintenance task is authorized when no released JTD exists.
- 1.9.10.3. (Added) The referenced SE maintenance technical data in the SEMM is comprised of Original Equipment Manufacturer (OEM) and/or vendor Operation & Maintenance (O&M) manuals, Department of Defense Service SE technical publications and ASC-authored work cards.
- **1.11. Modification Management.** Submit an AR to the ALGS Operations Center through CRM for program specific equipment and aircraft modifications. Refer to established SOI or User Guide procedures.
- **2.4. Maintenance Group Commander (MXG/CC) Responsibilities.** The MXG/CC (or equivalent) will:
- 2.4.15.1. (**Added**) Identify shortfalls of critical equipment needed for essential maintenance assets to include aircraft, engines, pods, Aerospace Ground Equipment (AGE), SE, vehicles, etc., and engage with the MAJCOM and/or Lightning Support Team (LST) to mitigate.
- 2.4.32. The contractor performs Stock Record Account Number engine manager duties.
- 2.4.33. The contractor performs Engine Health Management Plus duties.
- 2.4.37. Appoint a project officer for Aircraft Structural Integrity Program (ASIP) function, when required. ASIP and the Individual Aircraft Tracking portion of ASIP are an integrated function within ALIS and the aircrew debriefing process. There is no maintenance intervention in the ASIP/Individual Aircraft Tracking data collection or reporting of quarterly data to the MAJCOM at this time (T-2).
- 2.4.64. (Added) Establish and maintain an effective LO maintenance program (T-2).
- 2.4.64.1. (Added) Work closely with Operations Group (OG)/CC to balance flying requirements with maintenance capability to minimize LO backlog.
- 2.4.64.2. (Added) Ensure Low Observable (LO) Training requirements are met.
- 2.4.64.2.1. (**Added**) Ensure all maintenance personnel complete LO awareness, panel-handling training through the Maintenance Training Section.
- 2.4.64.3. (**Added**) Approval authority for flying aircraft in approved Aero Only configuration is outlined in the latest revision of Interim Maintenance Procedure, F-35-IMP-A0110510105-960A-A (**T-2**).

- 2.4.64.4. (Added) Ensure panels are not removed from aircraft undergoing annual audits.
- 2.4.64.5. (Added) Establish a robust LO quality assurance program that includes focus aircraft Outer Mold Line (OML) inspections, LO annual audits, and LO repair processes.
- 2.7.12.2. (**Added**) Ensure JPO provided weapons load crew CTK contents meet production contract procurement requirements. WWM may modify CTKs, providing an AR is submitted to JPO to approve the weapons load crew CTK contents change.
- 2.8.1. The Operating Unit/Squadron will report mishaps/accidents in accordance with existing Service procedures and instructions and are responsible for contacting the ALGS Ops Center in accordance with the F-35 Mishap Communication Instruction. Operating Unit/Squadron policy will determine individuals or positions that will notify the ALGS Ops Center in the event of a mishap/accident (**T-2**).
- 2.9.2. Engine data is maintained in ALIS (T-2).
- 2.9.18. Special Purpose Recoverable Authorized Maintenance (SPRAM) accounts are not applicable.
- 2.9.19. Use ARs in ALIS to report materiel deficiencies. Refer to established SOI or User Guide procedures.
- 2.10.25.2. F-35 program of record deficiency reporting will be accomplished IAW JTDR AR Submittal Guide.
- 2.10.26. Review and track Return Material Authorizations (RMA) to ensure they are turned in within their allotted time frame.
- 2.10.27. Work center supervisors request bench stock levels via the unit Supply Section. The Supply Section will forward Pre-Expended Bin (PEB) levels through the quarterly review process. Refer to established SOI or User Guide procedures.
- 2.12.8. Ensure review of CMMS daily to monitor scheduled and deferred events. Refer to established SOI or User Guide procedures.
- 2.12.9. Ensure review of work center ALIS data entries for the previous day and all preceding non-duty days in CMMS for job accuracy and completeness.
- 2.12.23.2. (**Added**) F-35 hazardous material (HAZMAT) may be collocated with common HAZMAT; storage location is a local decision. Wherever it is stored, in addition to tracking in ESOH, track HAZMAT in Supply Chain Management (SCM) to ensure proper information is available for tracking and replenishment by the Hybrid Product Support Integrator (HPSI) (A). HAZMAT may be physically stored in the main warehouse or at a HAZMAT facility. Note: Once issued to maintenance, HAZMAT must be tracked using local procedures.
- 2.12.23.3. (Added) Customers are responsible for warehousing of common HAZMAT, including common petroleum, oil, and lubricants.
- 2.12.28. (Added) Ensure ALIS information (Built In Reporting Tool (BIRT) reports, P&S data, Configuration) is backed up at least once per day and stored for use in case of an ALIS offline situation unless mission dictates otherwise. Refer to ALIS offline User Guide procedures.
- 3.5.2.1. (Added) Release (exceptional release (ER)) aircraft for flight via the CMMS tool in ALIS. An ER will include review of all opened, closed, and deferred work packages produced

- since last ER. Additionally, review all Production Asset Inspection Requirements (PAIR) for currency. Refer to established SOI or User Guide procedures (T-2).
- 3.5.14. (**Added**) The MXG/CC may grant authority to waive holes/Electronic Equipment Log (EEL)/inconsistencies to MC aircraft via the Special Certification Roster (SCR) process IAW Chapter 11 and Table 11.1.
- 3.5.14.1. (Added) The holes/EELs/inconsistencies must be determined to have been caused by an update, Sustainment Parts Information Record, Distribution Tracking Record, etc., and the part in question can be verified correct and installed (T-2).
- 3.5.14.2. (Added) Life Limited Parts/Time Change Items (TCI) or PAIRS items with holes/EELs/inconsistencies will not be waived (T-2).
- 3.5.14.3. (Added) If holes/EELs/inconsistencies cannot be resolved locally, an AR must be written in ALIS to report the holes/EELs/inconsistencies IAW the JTD AR Submittal Guide and paragraph 11.46, prior to being waived.
- 3.5.14.4. (**Added**) Input a note in the AV status page of CMMS with the holes/EELs/inconsistencies being waived, along with the AR number and Job Control Number if applicable.
- 3.6.4. Maintain copies of the items listed in AFI 21-101, paragraph 3.6.4; reference 19 AF/LGA SharePoint for the Minimum Essential Function List (MEFL) https://usaf.dps.mil/sites/aetc-19af/LG/A4MA/CURRENT%20DOCUMENTS/Forms/AllItems.aspx?RootFolder=/sites/aetc-19af/LG/A4MA/CURRENT DOCUMENTS/MESL. The F-35 uses Logistics Control Numbers (LCN) and does not use Work unit Codes; therefore, it does not have a manual. Refer to the CMMS ALIS Work Instruction for list of LCNs. In Process Inspection listings are managed locally.
- 3.6.7.2. (Added) Use ALIS/CMMS tool to monitor back-ordered and requisitioned parts.
- 3.7.12. (Added) PHM Data Download.
- 3.7.12.1. (Added) Download Portable Maintenance Device (PMD) at the end of the flying day for each sortie. (T-2). Exceptions for the situations listed below:
- 3.7.12.1.1. (Added) Back-to-back missions that were pre-scheduled in ALIS.
- 3.7.12.1.2. (**Added**) Per Aircraft Release Authority's decision where ALIS is not available (away from the AV host Standard Operating Unit (SOU)) for a prompt processing of the PMD download.
- 3.7.12.1.3. (Added) An approved AR, A2UN or JTD guidance where ALIS is not available.
- 3.7.12.1.4. (**Added**) For failed PMD downloads follow the F-35 program current debrief users' guide.
- 3.7.13. (Added) Check ALIS for Airframe Time.
- 3.7.14. (**Added**) Ensure proper generation/execution of manual Health Reporting Codes (HRCs) resulting from AV exceedances.
- 3.8.1.2. Red gear (-21) is tracked and documented in CMMS.

- 3.8.1.4. (**Added**) Perform propulsion tasks to include Engine Equipment Maintenance Section responsibilities. (AFI 21-101, paragraph **3.8.1**).
- 3.8.1.5. (Added) Perform engine trailer maintenance, unless a local MOA exists for AGE flight to perform maintenance. (T-2).
- 3.9.2. Avionics Specialists will:
- 3.9.2.1. If available, OG personnel perform re-programming actions via Offboard Mission Support (as applicable)/PMD.
- 3.9.2.2. (Added) Perform all Electro Environmental tasks (T-2).
- 3.9.2.3. (**Added**) Include Controlled Cryptographic Items (e.g. KIV-78s, SKLs, etc.) not otherwise accounted for in SPRAM accounts (**T-2**).
- 3.9.2.4. (Added) Perform Backup Operations Servicing (BOS) cart maintenance.
- 3.9.2.5. (Added) Manage and perform authorized maintenance on removed 270 and 28 VDC batteries.
- 3.10.1.17. AME and Normally Installed Equipment inventory is tracked in ALIS.
- 3.10.1.17.1. (**Added**) The Operating Unit/Squadron will designate personnel responsible for receipt/turn in, acceptance, storage, usage tracking, aircraft configuration and management of AME items using ALIS CMMS in support of F-35 aircraft daily operations (**T-2**).
- 3.10.1.17.2. (**Added**) The Operating Unit/Squadron will ensure all automatically or manually populated AME data and on/off equipment requiring life tracking/usage parameter(s) are correctly annotated in ALIS and reviewed for accuracy (**T-2**).
- 3.10.1.17.3. (**Added**) AME Storage Designation: The physical storage location is virtually designated and annotated in CMMS. If a final virtual off-aircraft AME designation has not been established, contact your local ALIS administrator.
- 3.10.1.17.3.1. (Added) Establish and monitor gun room security and explosive licenses if required.
- 3.10.1.17.3.2. (**Added**) AME section (if formed). This section accounts for, stores, controls, unpacks and packs AME, in coordination with the AMU weapons section NCOIC and WWM.
- 3.10.1.17.3.3. (**Added**) Develop and implement a program for documenting issue and receipt of in-use AME (**T-2**).
- 3.10.1.17.3.4. (**Added**) Supply receives due-in AME items, performs an induction process per SCM instructions and loads the AME items into the ALIS SOU.
- 3.10.1.17.3.5. (**Added**) AME Operating Unit/Squadron Acceptance: Supply notifies the receiving Operating Unit/Squadron that a due-in AME item has been delivered and is ready for pickup, or per local SCM policies. Refer to established SOI or User Guide procedures.
- 3.10.1.17.3.6. (**Added**) Receiving Initial/New AME: When the gaining Operating Unit/Squadron receives AME they shall access CMMS and establish a life limited Track Usage Record (TUR) per the PAIR as listed in JTD A13-10 tables (**T-2**). Using the tools within CMMS, populate the TUR with the required life limited tracking data/usage parameters. Once established, the aircraft AME usage must be manually entered into CMMS (**T-2**).

- 3.10.1.17.3.7. (**Added**) The serviceable AME item requires a serviceable condition tag, which contains part and serial number, condition and current usage data. The AME item physically becomes the property of the gaining work center/assigned squadron and resides in their AME storage facility.
- 3.10.2.3. Maintain copies of the items listed in AFI 21-101, paragraph 3.6.4; reference 19 AF/LGA SharePoint for the MEFL https://usaf.dps.mil/sites/aetc-19af/LG/A4MA/CURRENT DOCUMENTS/MESL. The F-35 uses LCNs and does not use Work Unit Codes; therefore, it does not have a manual. Refer to the CMMS ALIS Work Instruction for list of LCNs. In Process Inspection listings are managed locally.
- 3.10.2.6.1.1. (**Added**) Maintain the ALIS for installed guns, gun systems, and gun component TCIs or inspection data, based on round count limits listed in the PAIR JTD Data Module, including updating rounds from the AF Form 2434, *Munitions Configuration and Expenditure Document*, or locally developed form.

3.12. AMU Decentralized Material Support (DMS). Supply support will:

- 3.12.1.1. (**Added**) Requisition parts through ALIS/CMMS module. When necessary, Supply personnel can assist with follow up via contacting LRS/ Aircraft Parts Store (F-35 APS).
- 3.12.4. Monitor Due-In From Maintenance (DIFM)/RMA through ALIS/CMMS Module tool and RMA listing provided by LRS/F-35 APS. Turn-ins of unserviceable items will be achieved (on average) in 4 days from the date of issue, per F-35 Performance Based Arrangement Bilateral Annex between F-35 JPO and USAF.
- 3.12.4.1. Notify AMU leadership when DIFM asset turn-in times exceed 4 days.
- 3.12.4.2. (Added) Use the Due-in list page in CMMS to view and manage parts that are awaiting turn-in from maintenance. Use this page to process retrogrades to accomplish turn-in correctly. Note: This does not include initial issue turn-ins (i.e. AME, SE).
- 3.12.5.1. (Added) The unit is responsible for management, including replacement of damaged or lost reusable containers. The LRS will subsume F-35 packaging and reusable container responsibilities consistent with process used for legacy assets.
- 3.12.6.1. (Added) Perform daily inventory of TNB assets to verify accuracy (T-2).
- 3.12.6.2. (Added) Review work orders associated with parts in TNB monthly to ensure they are still open. Coordinate with maintenance to ensure work order number has not changed. Turn in part if no longer needed.
- 3.12.6.3. (Added) Coordinate with Pro Super/Expediter and PS&D if a part has been in TNB 30 days or longer and is not required for a TCTD, time change, pending AR, or critical safety item, to determine whether to perform a turn in.
- 3.12.9. (Added) Review backorders monthly to ensure cancellation of orders no longer required and to remove erroneous data.
- 4.2.2. Base level repair capability is performed through the established PBL standards, if applicable.

- **4.4. Accessories Flight.** Electro Environmental responsibilities reside in Specialist Section in AMXS.
- 4.4.2.6. (Added) Perform nitrogen cart (8-bottle) maintenance, if used.
- 4.4.3.2.9.2. Accomplish annual verification of each aircraft's installed egress data with Plans Scheduling and Documentation (PS&D) by validating CMMS, JTD/MM-PAIRS against section records. Verify shelf/service life due dates against current JTD life frequencies, correct load of PAIR and item data matches.
- 4.4.3.2.11.2. If directed by the MXG/CC, and at the interval chosen, Egress Sections will conduct an egress final using a locally developed checklist.
- 4.4.3.2.13.8. When egress components are replaced between major PEs, egress will update the existing locally generated CAD/PAD with the new information, complete the work order in ALIS, and verify the PAIR reset in MM-PAIRS (**T-2**). ALIS is the source of record for all Egress Data and the aircraft tail binder CAD/PADs will be updated until next major PE. At next major PE, the locally generated Master CAD/PAD will be validated for accuracy, signed, and sent to PS&D.
- 4.4.3.2.13.9. (**Added**) Egress personnel will reconcile the data listed on the Cartridge Actuated Device/Propellant Actuated Device (CAD/PAD) verification sheet (extracted from the installed components) with ALIS using CMMS, MM-PAIRS, and JTD (**T-2**). The minimum data requiring verification include the component part or serial number, lot number, position installed, date of manufacture, date of installation (or INSTALL_FIRST date if applicable), date of expiration, and time change frequency listed in applicable tech data, CMMS or MM-PAIRS.
- 4.4.3.2.13.9.1. (**Added**) Use locally generated CAD/PAD master document in lieu of planning requirements (PRAs) for CAD/PAD verification/validation. Provide PS&D a verified, updated, and signed copy.
- 4.4.3.2.13.9.2. (**Added**) If the data matches (no errors or omissions are noted), the egress technician or supervisor performing the verification will sign all copies of the locally generated CAD/PAD document and forward one copy to PS&D to file in the aircraft jacket file (**T-2**). File the original in the Egress work center tail number binder for subsequent verifications.
- 4.4.3.2.13.9.3. (**Added**).**I** f errors or omissions are noted before the aircraft's next scheduled sortie, the egress technician or supervisor performing the verification will update ALIS to match what is actually installed or submit an AR to correct the discrepancy and immediately notify PS&D (**T-2**). Annotate the correct data in red on the existing locally generated CAD/PAD and place in a suspense file (**T-2**). After receiving a response from engineers and corrections have been completed, verify the corrections have been made to ALIS, update the locally generated CAD/PAD, sign all copies, forward a copy to PS&D, and dispose of the suspense copy (**T-2**). Retain the original in the egress work center for subsequent verification.
- 4.4.3.2.13.9.4. (Added) PS&D will review the corrected locally generated CAD/PAD for any TCI due dates that may change because of an incorrect database (T-2). Current TCI forecasts will be validated for accuracy and an adjusted forecast submitted as required. PS&D will file the signed CAD/PAD in the aircraft historical record file (T-2).

- 4.5.1.5.1. (**Added**) Support Equipment is managed and maintained in ALIS. The SEMM is the primary source for AGE technical data until the technical data is entered into JTD. For detailed information on the SEMM, refer to established SOI or User Guide procedures.
- 4.5.2.1. Refer to paragraph **2.4.15.1** for AGE Minimum Essential Levels.
- 4.5.2.11.1. (**Added**) Ensure equipment is shipped according to AF Support Equipment Controlling Authority disposition instructions/requirements.
- **4.6. Armament Flight.** Armament Flight responsibilities are accomplished through the AMU Weapons Section.
- **4.7. Avionics Flight.** Avionics Flight does not exist under the maintenance concept.
- 4.8.4.5. Establish/obtain NDI inspection technique files by submitting an AR to ALGS Operations Center and LST through CRM (**T-2**). Refer to established SOI or User Guide procedures.
- 4.8.5. LO Aircraft Structural Maintenance Section. Manages all aspects of Low Observable Health Assessment System (LOHAS) for assigned aircraft (see **Attachment 3**), Low Observable Defect Entry Module (LODEM), Signature Assessment Module (SAM) and LO Maintenance Management Module (LOMMM).
- 4.8.5.7. (Added) Monitor fleet LOHAS margin used values and ensure aircraft are scheduled for LO margin reduction when individual aircraft LOHAS values reach 80% margin used (T-2).
- 4.8.5.8. (**Added**) Coordinate with AMU Supervision, Production Superintendent, and AMU PS&D to ensure aircraft downtime is scheduled for LO margin reduction at the appropriate time, based on overall fleet health and/or LOMMM damage priority screen (**T-2**).
- 4.8.5.9. (Added) Adhere to concurrent maintenance restrictions as determined by Maintenance Supervision and local bioenvironmental during corrosion prevention/treatment or coatings restoration when hazardous/toxic materials are in use requiring the use of specialized personal protective equipment.
- 4.8.5.10. (**Added**) Follow guidance contained in JSF Maintenance Coding Reference Guide (F35-UGP-A0122000104-090A-A) in JTD to ensure Maintenance Work Orders created in Computer Managed Maintenance System (CMMS) capture qualitative and standardized data for LO Reliability & Maintainability analysis (**T-2**).
- 4.8.5.11. (Added) Establish a Post Operations Service (POS) Outer OML inspection team rotation plan to ensure all LO personnel remain proficient. Final finish POS inspections are required at the end of each flying day (T-2).
- 4.8.6. (Added) LO Signature/Fleet Management Section
- 4.8.6.1. (**Added**) Schedule aircraft with an LOHAS exceedance equal to or greater than 100% Maintenance Margin Used (MMU) at the earliest opportunity and/or during the next Shared Resources meeting (**T-2**).
- 4.8.6.2. (**Added**) Unscheduled F-35 LO maintenance/LO FOM may be scheduled separately from Shared Resources meeting (**T-2**).
- 4.8.6.3. (Added) Responsible for performing annual OML audits on each assigned aircraft. The audit is used to confirm that damages and repairs entered into the LOHAS during routine OML

inspections provides for an accurate representation of the LO system health. OML audit must be completed by separate entity within the LO section, excluding OML team members. This can only be performed by physically matching aircraft damages/repairs with the entries in the LODEM. Errors identified during the audit must be recorded in an audit historical file, corrected on the aircraft OML and reflected in LOHAS for defects or repairs found deficient. Any aircraft audit that results in a +15% or -15% LOHAS margin deviation indicates a potential deficiency with the OML inspection process. See **Attachment 6** for Audit procedures and reporting requirements (**T-2**).

- 4.8.6.4. (Added) Report fleet LOHAS mission capable status to 19AF.LGMS.All@us.af.mil at the beginning of each week. LOHAS fleet average reports must not include non-possessed aircraft. See Attachment 5 for a LOHAS Fleet Average Template and notes for additional reporting information. (T-2).
- 4.8.6.5. (Added) Key information includes LOHAS maintenance margin used number for each aircraft, fleet LOHAS average, a brief description of damages or repairs that drive a signature delta from previous OML and identify aircraft in an "Aero Only" configuration and associated panels (T-2).
- 4.8.6.6. (Added) LOHAS margin values for each aircraft with a LOHAS exceedance will be reported as identified in LOMMM until it reaches 200% of the MMU. Do not report values greater than 200% to ensure fleet averages are not unnecessarily impacted (T-2).
- **4.11. Propulsion Flight.** Propulsion Flight responsibilities to include Engine Equipment Maintenance Section responsibilities are performed by Aircraft Section due to the F-35 maintenance concept.
- **4.12. Test, Measurement, and Diagnostic Equipment (TMDE) Flight.** TMDE responsibilities are managed through the PBL contract for program specific Precision Measurement Equipment Laboratory items.
- 5.2.1.5.2. Use the ALIS to manage International Civil Aviation Organization codes for on/off-station possessed aircraft. Since the capability does not exist for utilization of Purpose Identifier Codes (PIC) in ALIS, submit PIC changes to the MAJCOM Aerospace Vehicle Distribution Officer (AVDO). (AFI 21-101, paragraph 5.2.1.5.1). Note: ALIS CMMS status only allows the aircraft to be in a FMC, PMCM, PMCS, NMCM, NMCB or NMCS status. Legacy statusing is utilized, but does not match ALIS.
- 5.2.1.10. Base level repair is Not Applicable.
- 5.2.2.1.1. The MOC will use ALIS to monitor and coordinate sortic production, maintenance production, communicate priorities, and execution of the flying and maintenance schedules while maintaining visibility of fleet health indicators.
- 5.2.4. **Plans, Scheduling, and Documentation.** PS&D will be the POC for managing and tracking TCTD, PAIRs, and aircraft equipment transfer.
- 5.2.5. **Maintenance Management Analysis (MMA).** MMA requirements are limited by ALIS capabilities.
- 5.2.5.1.12. ALIS administrators are responsible for system database management.

- 6.4.5.1. Provide maintenance crosstell information by using the approved MDS process (e.g., CRM application of ALIS via an AR). Reference established SOI or User Guide procedures.
- 6.4.10.1. (Added) A master standardized AFTO Form 781-series forms binder is not applicable.
- 6.9.4.1. Configuration management and modifications are managed within CRM. Use an AR in ALIS to resolve discrepancies IAW JTD AR Submittal Guide and paragraph 11.46.
- 6.9.5.1.3. Use an AR in CRM to report materiel deficiencies, IAW JTD AR Submittal Guide and paragraph **11.46**.
- **6.10. Technical Order Distribution Office (TODO).** JTD is managed by ALGS and LST.
- 6.10.1. TCTD management is accomplished IAW PBL standards.
- 6.10.1.3. Date stamping TCTDs is not compatible with program requirements, as TCTDs are distributed through ALIS.
- **6.12.** Functional Check Flights (FCFs) to include Operational Check Flights (OCFs). The criteria used to determine if/when a Check Flight is required is identified within JTD, directed by AR, during TCTD follow-on checks, via an Aircraft Return Action or as outlined in AFI 21-101.
- **6.15.** Weight and Balance (W&B) Program. If capability exists and equipment is available, QA is responsible for the management and control of the W&B Program and records. If capability does not exist, the physical accomplishment of an F-35 W&B is a depot level task, requiring only the local management and control of the W&B handbook and applicable updates required by unit level personnel.
- 6.15.1.3. (Added) If discrepancies exist within Weight and Balance records/data, contact F35 AWBS Management for corrections.
- 6.15.5. (Added) Transfer of Air Vehicle Weight Balance records.
- 6.15.5.1. (Added) The transferring of data files between the ALIS work station and the Government Furnished Equipment (GFE) laptop/work station hosting the Automated Weight and Balance System software is carried out in accordance with established SOI or User Guide procedures. Data transfer devices will comply with service policies and regulations. This can include TCTD mod packages, Zero Fuel Mass Properties, Aircraft Data Load and Form F records.
- 7.6.1. Indicate the reason for impoundment in the cautions and warnings section on the AV status page in CMMS.
- 7.6.4.2. For parts that are removed as a part of an investigation, mishap or accident the following applies:
- 7.6.4.2.1. (**Added**) For SE, use the process of locking down the asset and do not turn in the part to supply until authorized (**T-2**).
- 7.6.4.2.2. (Added) Parts orderable within ALIS will be quarantined (T-2).
- 7.6.4.2.3. (Added) Release items from Quarantine only when authorized (T-2).
- **8.2. Guidelines for Program Management.** F-35 program provided tools will be tracked and maintained in ALIS. Each tool is marked with an appropriate logistics control/sequence number

- or Equipment Identification Designator. Use of TCMAX for daily issue of tools and equipment does not relieve the requirement to maintain data in ALIS. Non-permanent marking with locally assigned Equipment Identification Designator is authorized to facilitate optional use of TCMAX, but does not change the program mandated marking/tracking requirements.
- 8.2.17. (Added) Ensure JPO provides CTKs IAW production contract guidelines.
- 8.2.18. (Added) Support personnel will requisition a new tool in ALIS. Ensure replacement tools received are appropriately marked (T-2).
- 8.2.18.1. (**Added**) Common Hand Tools and Tool Containers procured under emergency conditions may be delivered unmarked. In those cases, the receiving unit shall locally etch the replacement tool or container with the same Tool ID number as the broken or lost tool/container it is replacing (**T-2**).
- 8.2.18.2. (Added) Globally pooled tools on loan to another unit will be transferred in ALIS. Globally pooled assets will not be permanently etched (T-2).
- 8.3.6. CMMS is unable to provide Master Inventory Lists, restrict tools, track shift change inventories, or perform basic tool control procedures. Until CMMS is able to accomplish these tasks, a Commercial-Off-the-Shelf (COTS) product (e.g. TC-Max) may be used to aid in tool accountability. As each version of ALIS is upgraded, units will evaluate whether or not CMMS has basic tool control capabilities. Units will keep accurate status of all global pooled assets in the COTS product and ALIS (T-2).
- **8.7.** Locally Manufactured, Developed, or Modified Tools and Equipment. Modification to program-provided equipment must be submitted through an AR for approval. Locally manufactured, developed, or modified tools used on program-provided equipment or aerospace vehicles will be submitted through an AR for approval (**T-2**). Units are not required to submit ARs for tools previously locally manufactured, developed, or modified prior to establishment of this AR requirement in September 2015.
- 8.9.2.5.2. (**Added**) If a tool is found, personnel can find the tool owner by comparing the sequence number to the Tool Marking Organizational Matrix for additional contact information.
- **8.10.** (Added) Support Equipment Maintenance Matrix (SEMM). The primary source for technical data used by authorized personnel to conduct maintenance for SE is verified JTD. For information on the SEMM, see paragraph 1.9.9
- **9.1.** General. Supply chain management functions are regulated through PBL.
- 9.2.4.1. Mission Capable sourcing and request for upgrade, downgrade and cancel Mission Impaired Capability Awaiting Part (MICAP) requirements are coordinated with LRS/F-35 APS. Sample MICAP Verification Worksheet (**Attachment 4**) may be used to assist in the verification process prior to backorder.
- **9.5. Bench Stock.** The main users of bench stock (PEB) items are Maintenance and back shops, where bench stock may also be stored. **Note:** CMMS currently does not identify shelf-life items, so they must be tracked using manual procedures.
- 9.5.2. When bench stock falls below the minimum supply level established in CMMS (**Note:** this is not necessarily 50%), work center supervisors ensure a material request is initiated in CMMS and Warehouse personnel follow procedures in the Supply Users Guide to issue the

- items if available locally or backorder items if not available locally. PEB will be inventoried monthly as a minimum, but replenishment orders can be placed at any time.
- 9.5.6. (Added) Parts ordering for consumables and PEB are carried out to support the WO execution for replacement of minor hardware and consumable items. Refer to https://cs2.eis.af.mil/sites/12097/Supply%20Chain/Forms/AllItems.aspx for the General Use Consumable List. Consult unit DMS for ordering details. Note: consumable, shop use, and RMA initial issue items can be ordered through the parts catalog.
- 9.5.7. (Added) Excess PEB items identified by CMMS maximum quantity must be returned to the warehouse.
- 9.5.7.1. (Added) Warehouse and Maintenance personnel will communicate any suggestions/changes regarding bench stock inventory to their Supply Field Service Representative quarterly at a minimum. This includes requests for bench stock items not currently stocked, suggestions to remove items from bench stock that are no longer needed, and requests to increase or decrease the quantity of specific items. Field Service Representatives collect these suggestions and, on a quarterly basis, communicate them to the HPSI (A). The HPSI (A) validates the PEB additions/deletions/changes and orders any additional or new bench stock items needed.
- **9.18. DIFM Management.** DIFM will be managed IAW applicable SOIs, SCM Warehouse Guide, ALIS Users Guide and established PBL/PBA metrics.
- 9.18.3.2. Repair cycle asset management is performed through the established PBL standards.
- 9.18.3.2.1. (Added) Source of Repair Identification.
- 9.18.3.2.1.1. (**Added**) Upon part turn-in, the local supply specialist will be notified by ALIS SCM as to whether the part can be repaired locally or requires shipment to an OEM/depot.
- 9.18.3.2.1.2. (**Added**) Routing of the part to OEM/depot will be carried out using the details provided for shipment by SCM.
- 9.18.3.2.1.3. (Added) Routing of part to an O+ maintenance work center.
- 9.18.3.2.1.3.1. (**Added**) Identification of the O+ (off-equipment) maintenance work center is carried out by the local supply specialist, based on local/unit level capabilities.
- 9.18.7.5. (Added) Parts Turn-In. The part turn-in process is the same regardless of On- or Off-Equipment maintenance tasks.
- 9.18.7.6. (Added) The parts turn in process is carried out for each repairable item that is identified by SCM as requiring turn in. For those parts that generate a "Due In" status in CMMS/SCM, the details for each part will be listed on the "Due In List".
- 9.18.7.7. (**Added**) For parts that require quarantine in support of investigations or exhibit management, follow the part turn-in process detailed in Supply User Guide.
- 9.18.7.8. (Added) Turn-in of GFE/GFM parts will be done in line with Service policy and procedures outside of ALIS.
- 9.18.8. (Added) Requisition Management and Reporting:
- 9.18.8.1. (Added) CMMS material requisition listing:

- 9.18.8.1.1. (Added) CMMS provides a searchable view of requisitions from the Material Requisition Page. From this page, an authorized user can edit, receive, turn in and adjust requisitions on the SOU.
- 9.18.8.1.2. (Added) CMMS BIRT reports are available from the Material Requisition Page and provide detailed listings of requisitions, PEB and other supply process related information.
- 9.18.9. (Added) The Due-In list page allows users to view and manage parts that are awaiting turn-in from maintenance.
- 9.18.10. (Added) CMMS order cancellation can be accomplished from the Material Request Details Page and only on requisitions in the state of New, Released, or Picked. This is a permission-based function within CMMS and control of this function is left to the Operating Unit/Squadron to authorize in line with Service policy. **Note:** Order cancellation must be done prior to WO cancellation. (T-2).
- **9.21. Bench Check and Repair Policy.** Bench check and repair is performed through the established PBL standards.
- **9.22. Maintenance Turn-Around Record Update Processing.** Maintenance turn-around record update processing is performed through the established PBL standards.
- **9.23. Buildup Items.** ALIS will be used to manage built up items (e.g. wheel/tire) from alternate locations.
- 9.23.1. Send items to appropriate work centers for build-up and return them to the section (i.e. DMS) for re-issue.
- 9.23.1.1. Use locally developed control log to track items being sent for build-up.
- 9.23.1.2. Validate control log daily, follow-up actions required for items over 10 days old.
- 9.24. **DR Exhibits.** F-35, Deficiency reporting is done via an AR submitted in ALIS/CRM. (**T-2**).
- 9.24.1. (Added) DMS will verify that the AR number is annotated on the unserviceable tag prior to turn in. (T-2).
- **9.27. Parts Ordering.** Aircraft parts are ordered through CMMS/SCM interface by appointed maintenance or supply personnel.
- 9.27.14. (**Added**) The process outlined in this addendum is applicable to only those parts that can/will be ordered using ALIS. Any requisitions outside of ALIS, using either legacy or other processes/systems, will be left to Service policy to detail, manage and control.
- 9.27.15. (**Added**) Ordering and turn in of GFE/Government Furnished Material (GFM) parts will be done using the legacy system in line with Service policy.
- 9.27.16. (Added) For Propulsion System parts, ordering will be carried out using the Propulsion System Contractor (PSC) Workstation.
- 9.27.17. (Added) Classified and Controlled parts will be marked in accordance with Service policy for classified asset markings.
- 9.27.18. (Added) Parts ordering for On/Off-Equipment maintenance will be:

- 9.27.18.1. (Added) Carried out to support the Work Order (WO) execution phase. Parts that are considered retrogrades (RMA) need to be ordered through the WO/Solution Set and not as Ad Hoc order unless with Pro Super approval. (T-2). Note: GFE/GFM parts ordering for On-Equipment maintenance will not be selectable for ordering within the CMMS application, consult the local supply specialist for ordering details.
- 9.27.19. (**Added**) Review backorders monthly to ensure cancellation of orders no longer required and to remove erroneous data.
- 9.27.20. (**Added**) Parts shall be ordered priority 1 when a discrepancy has resulted in an NMC status. (Supply User Guide, Vol 2)
- 9.27.21. (Added) Parts shall be ordered Priority 2 when a discrepancy has resulted in a PMC status, derived from an HRC or linked to an open work order. (Supply User Guide Vol 2)
- 9.27.22. (**Added**) Only PEB replenishment items not linked to a work order shall be ordered priority 3. (Supply User Guide Vol 2)
- 9.27.23. All parts, with the exception of incomplete TCTO kits will be picked up and signed for from the warehouse within 3 duty days or warehouse personnel will turn back in to stock.

9.29. (Added) Hazardous Material (HAZMAT).

- 9.29.1. (Added) Common HAZMAT requisitions will be processed using MIS in accordance with established policies and procedures.
- 9.29.2. (Added) Issue to Maintenance:
- 9.29.2.1. (Added) It is the responsibility of the Local HAZMAT facility (either at the Retail Warehouse or Local HAZMAT facility, dependent on local policy) to communicate to the Retail Supply Warehouse that F-35 HAZMAT material has been issued to a maintenance organization. Authorized personnel will track material issues and adjust the inventory levels for F-35 unique HAZMAT in ALIS SCM (T-2). The Local HAZMAT facility and the Retail Supply Warehouse will determine how they will coordinate the information when HAZMAT materials are issued (e.g., MOA). ALIS SCM automatically notifies the ASC Item Analyst who will forecast and analyze replenish needs.
- 9.29.3. (Added) Reconciliation Process:
- 9.29.3.1. (**Added**) A process for inventory reconciliation between the Retail Supply Warehouse and the Local HAZMAT facility shall be described in a formal document (e.g., Memorandum of Agreement) (**T-2**).

Chapter 10

MUNITIONS POLICY AND WEAPONS LOAD CREW PROGRAM (OMITTED)

ADDITIONAL MAINTENANCE REQUIREMENTS AND PROGRAMS

Table 11.1. Mandatory Special Certification Roster and Prerequisites (T-2).

	A	В
ITEM	Mandatory SCR Item Titles	AETC Prerequisites
45	Waive holes/EELs/inconsistencies (Note 1)	MSgt or higher (or civilian equivalent).

Notes:

1----Approved by MXG/CC or equivalent may be delegated IAW AFI 21-101, Paragraph 11.3.1.

- 11.8.6.2.1. For suspected material failure, utilize an AR IAW paragraph 11.46
- 11.9.2.1. For deficiencies discovered/suspected, submit an AR IAW paragraph 11.46.
- 11.10. Aircraft Structural Integrity Program (ASIP). Refer to paragraph 2.4.37.
- 11.11.1.1. Perform IFF checkouts when prescribed per JTD.
- 11.12.1. External testing is not required.
- 11.12.2. Appointment of RWR/RTHW manager is not required.
- 11.17.10.2. Part I and Part II testing does not apply to Portable Maintenance Aid (PMA) operators from the ground.
- 11.17.11. Personnel qualified for "In cockpit Integrated Power Plant (IPP)" will be tracked on the SCR (**T-2**).
- 11.17.11.1. IPP operators using only the PMA from the ground need not be tracked on the SCR.
- 11.28.1. Additional CDDAR training can be provided at the Integrated Training Center or lead command approved locations.

11.46. (Added) Customer Relationship Management Program. Refer to established SOI or User Guide procedures.

- 11.46.1. (Added) Responsibilities (T-2).
- 11.46.1.1. (Added) The CRM is a tool within ALIS that shall be used to report problems via an AR. All ARs raised via CRM shall be transmitted via the Optional Screening Point (OSP) and Required Screening Points (RSP). These points screen ARs for integrity and accuracy of entries and information as well as prevent classified, sensitive or International Trade in Arms information from being transmitted. OSP and RSP personnel shall be designated via the ALIS System Permission Request to ALIS administrators. Those units not assigned to established groups will be designated by the appropriate site lead or QA department.

- 11.46.1.1.1 (**Added**) RSP for the MXG will reside in QA, ordinarily in the Product Improvement Manager office.
- 11.46.1.2. (**Added**) ARs shall be submitted for reporting actions that require rectification outside the capability of the local unit. Examples of such cases are JTD changes, modifications, engineering analysis, ALIS issues, TCTD discrepancies, etc. Many of these occasions have specific forms in existing policy documents; the AR process will replace these mediums in the F-35 environment.
- 11.46.1.3. (**Added**) The AR "Severity" provides an additional level of classification to the AR beyond that provided by the category. Severities are ranked as high, medium and low with each having its own corresponding impact.
- 11.46.1.4. (**Added**) The AR "Category" identifies conditions by relative importance and the urgency of the resolution required. Category 1 with severity classification of "high" has the most severe consequences, resulting in potentially hazardous condition. ARs must provide adequate detail to support the desired category.
- 11.46.1.5. (**Added**) To ensure a thorough review prior to submittal, ARs should not be processed as initiator, OSP and RSP by the same individual. Exceptions may be made if there are no alternative measures available.
- 11.46.2. (Added) Overall timelines for ARs.
- 11.46.2.1. (**Added**) Established timelines will be adhered to in the AR process. These timelines are general guidelines for AR initiation. Every level of approval must remain cognizant of timelines to prevent undue delay of ARs. Delays must be communicated to the OSP and RSP during the AR initiation process.
- 11.46.3. (Added) AR Submission Process.
- 11.46.3.1. (**Added**) Initiator shall:
- 11.46.3.1.1. (Added) Exhaust all available means of resolution prior to submitting an AR.
- 11.46.3.1.2. (Added) If applicable, inform expeditor or aircraft crew chief of AR requirement.
- 11.46.3.1.3. (Added) Inform supervision of AR request to be implemented.
- 11.46.3.1.4. (**Added**) Utilize AR Submittal Guide F35-UGP-A0122000111-090A-A and SOI 1514.02 for all AR submissions. Review AR to ensure it contains no sensitive or classified information. If classified or sensitive information is required, submit a classified AR per JTD F35-UGP-A0120000189-090A-A: ALIS Work Instruction-CRM.
- 11.46.3.1.4.1. (**Added**) Submit ARs for a single issue, clearly stated in the title. Clearly identify owning work center in the title (for example, (LO) ACFT 12-5095 / AF-96 composite damage on skin 5333012 (PNL 2344)).
- 11.46.3.1.5. (**Added**) Complete AR in its entirety by completing all specific data element fields. Provide as much detail as possible for the remaining data fields to prevent vagueness.
- 11.46.3.1.6. (Added) Include tail number of aircraft if AR is related to an aircraft.
- 11.46.3.1.7. (Added) Include JTD number if AR is related to JTD.

- 11.46.3.1.8. (Added) Utilize SOI 1514.02 to ensure correct AR categorization, severity and classification.
- 11.46.3.1.9. (Added) Notify work center OSP of AR submittal.
- 11.46.3.1.10. (Added) Monitor AR status via CRM tool.
- 11.46.3.2. (Added) OSP will follow the JTD AR Submittal Guide and shall:
- 11.46.3.2.1. (**Added**) Review all AR submissions to ensure the correct priority is assigned and the AR submission is valid.
- 11.46.3.2.2. (**Added**) Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable).
- 11.46.3.2.3. (Added) Ensure details provided by initiator explain problem completely.
- 11.46.3.2.4. (**Added**) Review AR to ensure it contains no sensitive or classified information. If classified or sensitive information is required, screen AR per JTD F35-UGP-A0120000189-090A-A: ALIS Work Instruction-CRM.
- 11.46.3.2.5. (Added) Approve and submit ARs to the RSP.
- 11.46.3.2.6. (Added) Notify RSP of AR submittal.
- 11.46.3.2.7. (Added) Monitor AR status via CRM tool.
- 11.46.3.3. (Added) RSP will follow the JTD AR Submittal Guide and shall:
- 11.46.3.3.1. (Added) Ensure AR has been routed through OSP prior to submittal.
- 11.46.3.3.2. (Added) Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable).
- 11.46.3.3.3. (**Added**) Review AR to ensure it contains no sensitive or classified information. If classified or sensitive information is required, screen AR per JTD F35-UGP-A0120000189-090A-A: ALIS Work Instruction-CRM.
- 11.46.3.3.4. (Added) Ensure details provided by initiator and OSP explain problem completely.
- 11.46.3.3.5. (Added) Once request is validated, submit AR to ALGS and monitor the AR's status via CRM tool.
- 11.46.3.4. (**Added**) ALGS role.
- 11.46.3.4.1. (Added) ALGS responsibilities are outlined in the JTD AR Submittal Guide.
- 11.46.4. (Added) Resolution of AR Disparities:
- 11.46.4.1. (Added) Disparities will be resolved by the MXG/CC or OG/CC.
- 11.46.5. (Added) AR Review Team.
- 11.46.5.1. (**Added**) ARs shall be reviewed at all levels to ensure proper categorization and severity is assigned. See **Attachment 2**. Refer to established SOI or User Guide procedures.
- 11.46.5.2. (Added) Squadron OSP and respective RSP must consider fleet implications when preparing ARs for submittal. Depending upon the circumstances for the AR, an AR may have an

impact on all assigned aircraft/equipment regardless of the squadron assigned. Generally, ARs categorized as Category I (High, Medium, Low) or Category II (High) will fall into this criteria.

- 11.46.5.3. (Added) If an AR has fleet implications, respective squadron RSP will coordinate with additional squadrons to review the potential AR prior to submittal. All affected squadron RSPs will review the potential AR for impacts on their unit. Additionally, an AR review will be conducted to ensure all information is accurate and the proper category and severity has been assigned.
- 11.46.5.4. (**Added**) The review team shall consist of the following if applicable as determined by RSP:
- 11.46.5.4.1. (Added) QA Representative.
- 11.46.5.4.2. (Added) OG Representative.
- 11.46.5.4.3. (Added) Contractor Representative.
- 11.46.5.4.4. (Added) Subject Matter Expert.
- 11.46.5.5. (**Added**) ARs determined to have fleet implications will be annotated on AR by respective squadron RSP. Respective squadron RSP will annotate the review in the AR comment section prior to submittal by listing affected organizations and members of AR Review Team in attendance.
- 11.46.6. (Added) AR process flow.
- 11.46.6.1. (Added) Normal AR process flow.
- 11.46.6.1.1. (**Added**) Squadron initiator prepares AR and informs supervision of intent for submittal. Notify Squadron OSP of AR submittal.
- 11.46.6.1.2. (**Added**) Squadron OSP reviews AR submission to ensure the correct priority has been assigned and AR submission is valid. Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable). Submit AR for RSP approval.
- 11.46.6.1.3. (Added) Respective squadron RSP reviews AR submission to ensure the correct priority has been assigned and AR submission is valid. Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable). Submit AR to ALGS.
- 11.46.6.2. (Added) AR process flow having potential fleet implications.
- 11.46.6.2.1. (**Added**) Squadron initiator prepares AR and informs supervision of intent for submittal. Notify Squadron OSP of AR submittal.
- 11.46.6.2.2. (**Added**) Squadron OSP reviews AR submission to ensure the correct priority has been assigned and AR submission is valid. Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable). Submit AR for RSP approval.
- 11.46.6.2.3. (Added) The group RSP reviews AR submission to ensure the correct priority has been assigned and AR submission is valid. Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable).

- 11.46.6.2.4. (**Added**) Group RSP coordinates AR through all affected squadrons then annotates AR when complete. Coordination can take place by meeting, phone, email or any medium necessary to inform all units of potential fleet implications.
- 11.46.6.2.5. (Added) Respective squadron RSP submits AR to ALGS.
- 11.46.7. (Added) Leadership review of CAT I, High ARs.
- 11.46.7.1. (**Added**) It is the RSP's responsibility to ensure group leadership is notified prior to AR submittal. All major maintenance will be coordinated with respective group commander or their designated representative prior to AR submittal. For instance, QA is responsible for notifying MXG/CC prior to submitting an AR for major maintenance resulting in an unserviceable condition of an aircraft.
- 11.46.7.2. (Added) Squadron and group leadership should be briefed periodically on high interest ARs.
- 11.46.7.3. (Added) Reports available in ALIS CRM are encouraged for briefing material.
- 11.46.7.4. (**Added**) Group commanders may further define guidelines for AR reviews within their group prior to AR submittal.
- 11.46.8. (Added) Operations under more than one SOU.
- 11.46.8.1. (Added) All procedures as defined above will apply.
- 11.46.8.2. (Added) Procedures will be further defined as additional SOUs are established.
- 11.46.9. (Added) CRM team member composition.
- 11.46.9.1. (**Added**) CRM is arranged by teams. Each team is comprised of members from specified squadrons and groups. Obtaining team composition is imperative to assignment of AR review responsibilities.
- 11.46.9.2. (**Added**) QA will designate team members requiring OSP and RSP permissions to the local ALIS administrators, the ALGS and LST by letter for the team/teams under their area of responsibility:
- 11.46.9.2.1. (Added) This process of gaining OSP and RSP permissions does not alleviate completing the permissions section on ALIS System Permission Request Form.
- 11.46.9.2.2. (**Added**) Distribution Team members are responsible for receiving UFN, TCTD and other correspondence from ALGS.
- 11.46.9.3. (Added) Distribution team responsibilities include the following at a minimum:
- 11.46.9.3.1. (**Added**) Information is forwarded to appropriate organization within their team/teams for action.
- 11.46.9.3.2. (**Added**) Receipt of information forwarded to ALGS as required. For example, when a UFN is received, QA will report receipt to ALGS for items concerning the MXG. This notification is confirmation to ALGS that the field has received the UFN.
- 11.46.10. (**Added**) Contingency Back-up. In the event CRM is down, the following process shall be utilized to initiate an AR.

- 11.46.10.1. (**Added**) Submit AR through designated RSP via: Fax 1-817-777-1868, Email **jsf-algs-center.fcaero@lmco.com** and/or Phone 1-888-433-5677.
- 11.46.11. (Added) Classified AR procedures.
- 11.46.11.1. (**Added**) Ensure classified ARs are produced IAW F35_UGP-A0120000189-090A-A: ALIS Work Instruction-CRM and JTD AR Submittal Guide.
- 11.46.11.2. (Added) Protect classified information during the AR initiation process.
- 11.46.11.3. (Added) Consult ALIS administrator for assistance, if necessary.

MAINTAINING COMMERCIAL DERIVATIVE AIRCRAFT (CDA) (OMITTED)

CENTRALIZED REPAIR FACILITIES (CRF) (OMITTED)

- 14.1.4.5. Provide Subject Matter Experts on all maintenance scheduling issues. EELs management embedded in ALIS replaces AFTO Form 95, *Significant Historical Data* (**T-2**).
- 14.1.5.3. (**Added**) Ensure the asset transfer approval process and coordination between losing and gaining units required prior to, during, and after an Asset transfer is accomplished and coordination on any outstanding supply demands.
- 14.1.5.3.1. (**Added**) Any problems including lost or corrupt data will be dealt with by the AR process.
- 14.1.5.3.2. (Added) Coordinate on status reporting AR submissions
- 14.1.5.3.3. (**Added**) Utilize Logistics Information Management System-Enterprise View (LIMS-EV) for aerospace vehicle inventory transactions.
- 14.2.1.2. EELs are embedded in ALIS and replace legacy AFTO Form 95 (T-2).
- 14.2.2. Aircraft Jacket Files are not required. The F-35 program does not use paper logbooks for components; instead, this documentation requirement is met by using an EEL.
- 14.2.3. Aircraft Document Reviews. Not required. At least every 60 days, F-35 aircraft crew chiefs, with LRS assistance, will review all open/backordered supply requisition IDs to track EDDs and confirm receipt of items.
- 14.3.2. Configuration Management is managed by ALIS.
- 14.3.2.1. Units are responsible for accurate reporting of AV configuration in ALIS (T-2).
- 14.3.2.2. Maintenance personnel discovering an item with a missing data plate, or one that does not have a serial number will submit an AR within CRM application in ALIS for disposition (**T-2**).
- 14.3.2.4. ALIS notifies users of out of configuration items in real time.
- 14.3.3. TCTD Management. TCTD management is accomplished IAW PBL standards. PS&D will chair a monthly meeting, due to the program's supply chain management structure. There is no need for QA to distribute copies of TCTDs because ALIS will distribute them digitally; therefore, there is no need to maintain copies of TCTDs in a TCTD folder. Additionally, TCTD validations are not accomplished IAW TO 00-5-15, *Air Force Time Compliance Technical Order Process*, and a local form may be used for TCTD proofing.
- 14.3.3.3.1.5. QA personnel will use the CRM application in ALIS to submit an AR to report TCTD deficiencies IAW paragraph 11.8. SOI 1514.02.
- 14.3.3.3.2.5. TCTD kits are managed by the ASC or PSC. Use SCM requisition option to order required parts/kits/tools.
- 14.3.3.3.2.5.3. (Added) The ASC and/or PSC will ensure kits and/or parts are assembled prior to release (T-2).
- 14.3.3.3.2.5.4. (Added) PS&D will control and release TCTD kits from contractor sources.

- 14.3.4.1. Job Standard Master Listing/ PAIR Management
- 14.3.4.1.1. ALIS MM-PAIRs and A13-10 table within JTD represent all PAIRs applicable to an aircraft.
- 14.3.4.2.4.2. Perform a review of the A13-10 Table and all PAIRs for accuracy and currency when PAIR audit TCTD is received (**T-2**).
- 14.3.4.2.4.2.1. PS&D will review PAIRs in the MIS as soon as an automated JTD update is received within ALIS, and will promptly notify all affected sections for action (**T-2**).
- 14.3.4.2.4.2.2. PS&D will monitor PAIRs for all inspections and time changes listed in the JTD A13-10 table within ALIS. Job Standards are automated by JTD A13-10 table within ALIS (**T-2**).
- 14.3.4.2.4.3. For Remaining Life Estimate (RLE)/ Time to Maintenance (TTM), red is displayed upon the end of life or time limit reached and extensions can only be granted via the AR process or MAJCOM policy. Upon reaching the end of life or time limit, a WO will automatically be generated for that event. If a WO is not automatically generated, manually generate a WO. Refer to established SOI or User Guide procedures.
- 14.3.4.2.4.3.1. ALIS JTD A13-10 table depicts the total number of Special Inspections and TCIs loaded for each assigned aircraft/system.
- 14.3.4.3. TCI accomplishment is managed in ALIS MM-PAIRs by PS&D
- 14.3.4.3.1. Monitor, schedule and manage TCIs through JTD application within ALIS, AFMAN 21-201, *Munitions Management* or identified as Federal Supply Group (FSG 13) and Materiel Management Code AQ Items (**T-2**).
- 14.3.4.3.3. MM-PAIRs application within ALIS automates RLE/TTM.
- 14.3.4.3.3.3. ALIS is the source of record for all egress data (**T-2**).
- 14.3.4.3.3.1. Forecasting of CAD/PAD items for long-term CAD/PAD spare requirements will be accomplished by SCM through contractor management and control (**T-2**).
- 14.3.4.3.4. Initiate, validate, and submit TCI extension requests via AR within CRM application in ALIS (**T-2**).
- 14.3.4.3.12. All time changes are ordered through SCM guidelines within ALIS (T-2).
- 14.3.4.4. (**Added**) Management of all AV and propulsion system Scheduled and Prognostic Maintenance will be carried out within ALIS via MM-PAIRs.
- 14.3.4.5. (Added) Scheduled Maintenance Inspections:
- 14.3.4.5.1. (**Added**) Only authorized individuals will perform PAIR creation. Refer to established SOI or User Guide procedures.
- 14.3.4.5.2. (**Added**) Each PAIR is applicable to specific type variance effectivities (TVE) as detailed in JTD. Specific details about the PAIR and work requirements will be detailed within JTD.
- 14.3.4.5.3. (**Added**) Authorization to deviate, along with any applicable latitudes, from Scheduled/Prognostic maintenance requirements may be granted via the AR process.

- 14.3.4.5.4. (**Added**) If an AR Response directs an inspection requirement, the MM-PAIRs tool will be used to initiate these requirements.
- 14.3.4.5.5. (**Added**) If there is a requirement to adjust or correct usage on an aircraft or part, the MM-PAIRs can be utilized by an ALIS administrator to make the necessary changes through AR submission.
- 14.3.5. Coordinate on all major maintenance through AR submission within ALIS through CRM application (**T-2**).
- 14.3.10. (Added) Depot Induction.
- 14.3.10.1. (Added) Maintenance Unit/Squadron will prepare aircraft and equipment for entry to depot level work efforts. Refer to established SOI or User Guide procedures.
- 14.3.10.2. (Added) Maintenance Unit/Squadron will participate in the Pre and Post meetings for their respective aircraft. Pre-dock will be held no later than 30 days prior to aircraft induction into depot. Pre-dock/induction meeting will have, as a minimum, the Baseline Scheduled Work Package and the F-35 Maintenance Request Form. Aircraft configuration required for depot induction will be discussed during Pre-dock/induction meeting. A Post-dock meeting will be held no later than 10 days prior to scheduled aircraft completion.
- 14.3.10.3. (**Added**) Maintenance Unit/Squadron will report unsatisfactory receipt, at either the squadron or the depot level, through the Depot Feedback Questionnaire within 30 days. Submit an AR as required.
- 14.3.10.4. (Added) Additional work requests (Unit Level TCTDs), One Time Inspections, Delayed Discrepancies, and PAIRs will be annotated on a Maintenance Request Form submitted to the F-35 JPO no later than 60 days prior to aircraft induction for consideration. The F-35 JPO will notify requesting unit of what work will be approved and included in the depot work package.
- 14.3.10.5. (Added) Non-ALIS portion of an asset's records will be transferred by electronic media/jacket file.
- 14.3.10.6. (**Added**) When directed to transfer an asset, the originating unit will input all current state data associated with a PAIR for the AV to a Deferred Work Order.
- 14.3.10.7. (Added) In addition to ALIS SOU transfer, pertinent factory documentation will be transferred.
- 14.3.10.8. (Added) CMMS will cancel all requisitions after the initiation of an asset transfer. The losing and gaining unit will coordinate to ensure necessary demands are transferred.
- 14.3.10.9. (Added) The losing Maintenance Unit/Squadron will ensure all requisition details are included in any, deferred WO or Follow on Maintenance Requirement prior to asset transfer.
- 14.3.10.10. (**Added**) The losing Maintenance Unit/Squadron will inform local SCM administrator/user of any outstanding requisitions that must be transferred/redirected to the gaining Operating Unit/Squadron. Transferal or redirection of open requisitions is a SCM responsibility.

- 14.3.10.11. (Added) The receiving unit will ensure that all necessary requisitions are reordered on the gaining unit's SOU. If problems or anomalies occur, an AR is to be initiated for resolution.
- 14.3.10.12. (**Added**) The gaining ALIS admin will notify the losing unit to initiate the deletion of the AV from their SOU after the gaining unit has loaded and verified the data.
- 14.4.1. Propulsion Flight does not exist under the maintenance concept. Engine Management responsibilities are performed by the AMXS/AMU Dedicated Scheduler.
- 14.4.1.1.1 Engine Management focal point is Pratt & Whitney at Hartford, CT for both the Engine Trending and Diagnostics and the Engine Health Management Plus program when applicable.
- 14.4.1.2.5. Engine PAIRs are automated within ALIS through MM-Pairs application.
- 14.4.1.3. SRAN Engine Manager does not exist under the maintenance concept.

AIRCRAFT SUN SHADE SUSTAINMENT (OMITTED)

AIRCRAFT AND EQUIPMENT CONTRACT SURVEILLANCE (OMITTED)

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GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 21-101, Aircraft and Equipment Maintenance Management, 16 January 2020

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

AFI 33-360, Publications and Forms management, 1 December 2015

AFI 36-2650, Maintenance Training, 2 May 2019

AFMAN 21-201, Munitions Management, 26 March 2019

TO 00-5-1, AF Technical Order System, 15 February 2019

Adopted Forms

AF Form 679, Air Force Publication Compliance Item Waiver Request/Approval

AF Form 847, Recommendation for Change of Publication

AF Form 2434, Munitions Configuration and Expenditure Document

AFTO Form 95, Significant Historical data

Abbreviations and Acronyms

AETC—Air Education and Training Command

AGE—Aerospace Ground Equipment

ALIS—Autonomic Logistics Information System

ALGS—Autonomic Logistics Global Sustainment

AME—Alternate Mission Equipment

AR—Action Request

ASC—Air System Contractor

ASIP—Aircraft Structural Integrity Program

AV—Air Vehicle

AVDO—Aerospace Vehicle Distribution Officer

BIRT—Built In Reporting Tool

BOS—Backup Operations Servicing

CAD/PAD—Cartridge Actuated Device/Propellant Actuated Device

CMMS—Computerized Maintenance Management System

CRM—Customer Relationship Management

CTK—Consolidated Tool Kit

DIFM—Due In From Maintenance

DMS—Decentralized Maintenance Support

EEL—Electronic Equipment Log

ER—Exceptional Release

FCF—Functional Check Flight

GFE—Government Furnished Equipment

GFM—Government Furnished Material

HAZMAT—Hazardous Material

HRC—Health Reporting Code

HIT—Health Inspection Task

HPSI—Hybrid Product Support Integrator

IAW—In Accordance With

IFF—International Friend or Foe

IFS—Industrial and Financial System

IPP—Integrated Power Plant

JPO—Joint Program Office

JSF—Joint Strike Fighter

JTD—Joint Tech Data

JTDAR—Joint Technical Data Action Request

JTDM—Joint-Service Technical Data Manager

LCN—Logistics Control Number

LIMS-EV—Logistics Information Management System-Enterprise View

LM—Lockheed Martin

LO—Low Observable

LODEM—Low Observable Defect Entry Module

LOHAS—Low Observable Health Assessment System

LOMMM—Low Observable Maintenance Management Module

LST—Lightning Support Team

MAJCOM—Major Command

MEFL—Minimum Essential Function List

MICAP—Mission Impaired Capability Awaiting Part

MM-PAIRS—Maintenance Management Production Aircraft Inspection Requirements

MMU—Maintenance Margin Used

O&M—Operation & Maintenance

OEM—Original Equipment Manufacturer

OG—Operations Group

OML—Outer Mold Line

OSP—Optional Screening Point

PAIR—Production Aircraft Inspection Requirement

PBL—Performance Based Logistics

PEB—Pre-Expended Bin

PHM—Prognostics and Health Management

PMA—Portable Maintenance Aid

PMD—Portable Maintenance Device

POS—Post Operations Service

PRA—Planning Requirements

PSC—Propulsion System Contractor

PS&D—Plans Scheduling and Documentation

QA—Quality Assurance

RLE—Remaining Life Estimate

RMA—Return Material Authorizations

RSP—Required Screening Point

SAM—Signature Assessment Module

SCM—Supply Chain Management

SCR—Special Certification Roster

SE—Support Equipment

SEMM—Support Equipment Maintenance Matrix

SOI—Sustainment Operating Instruction

SOU—Standard Operating Unit

SPRAM—Special Purpose Recoverable Authorized Maintenance

TCI—Time Change Item

TCTD—Time Compliance Technical Directive

TNB—Tail Number Bin

TTM—Time to Maintenance

TUR—Track Usage Record

UFN—Urgent Field Notice

WO—Work Order

EXAMPLE AR ROUTING SCENARIOS

A2.1. Example AR scenario where first level RSP submits AR to ALGS.

A2.1.1. Contractor maintenance personnel discovers a broken nut plate that requires drilling. During the repair process, the drill bit fails and creates a scratch in the aircraft panel. JTD is not available to repair the damaged panel. AR is drafted for repair procedures and submitted by initiator to OSP for review. OSP reviews the AR, annotates comments, approves AR and forwards to RSP. RSP reviews the AR, annotates comments, approves the AR and forwards to ALGS. AR Review Team is not organized because damage is from a known source and does not have fleet wide implications.

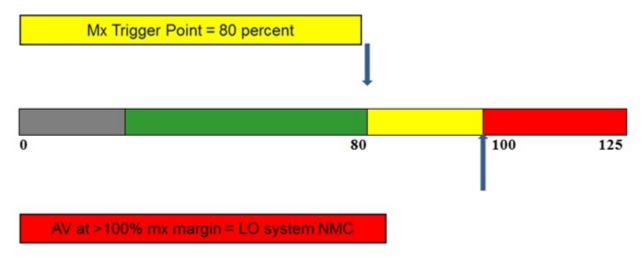
A2.2. Example AR scenario with fleet implications.

A2.2.1. Maintainer discovers a stress crack on panel 100. JTD does not exist to repair damage on the panel. AR is drafted for repair procedures by and submitted by initiator to OSP for review. OSP reviews the AR, annotates comments, accepts and forwards the AR to first level RSP. First level RSP reviews the AR, annotates comments and determines stress crack may have fleet wide implications. First level RSP informs additional squadrons and starts actions to stand-up AR Review Team. AR Review Team reviews AR and agrees with potential impact to the fleet. First level RSP annotates AR upon completion of AR Review Team review. In this scenario, an AR Review Team review is conducted because the damage is caused by an unknown source and may have fleet wide implications. The first level RSP will ensure all units are aware of potential fleet problem. First level RSP will annotate AR after AR Review Team review is complete.

LO HEALTH ASSESSEMENT SYSTEM (LOHAS) MARGIN DEFINITION

A3.1. The Maintenance Margin Used (MMU) or "gas gauge" below (**Figure A3.1**) shown in LOHAS displays the residual signature used by defect repairs, the defect impacts, and the current signature status of the aircraft, based upon Effects of Repair (EoR) and Effects of Defects (EoD) data that resides within the SAM. It depicts the maintenance margin used to determine the mission capable status for the aircraft <u>LO system</u>.

Figure A3.1. LOHAS Maintenance Margin Used or "Gas Gauge".



- A3.1.1. The LO margin for each aircraft is determined via the OML inspection in concert with LOHAS. An aircraft is fully mission capable for the <u>LO system</u> when the LOHAS margin is less than 100 percent. LO margin reduction is required when the maintenance margin is equal to or greater than 100 percent. Utilize the Defect Prioritization Report within the LO Maintenance Management Module (LO3M) to determine which defects, if repaired will return the <u>LO system</u> to a fully mission capable status. **Note:** A depleted (NMC) LO system does not render an aircraft unflyable.
- A3.1.2. Manage LO maintenance by taking advantage of opportunistic downtime or scheduling LO margin reduction when the maintenance margin approaches the 80 percent trigger point. In order to effectively manage/control LO signature margin growth, <u>fleet</u> LOHAS margin averages should be maintained at or below 80 percent.

SAMPLE MICAP VERIFICATION WORKSHEET

Figure A4.1. Sample MICAP Verification Worksheet.

Tail number	NOUN Quantity IFS Purchase Order# Pro Super Signature		Part Number Priority IFS Customer Order # 1 Pro Super Print		
Requisition ID					
Job Control Number					
Maintainer Who Ordered Part					
CANN Action	9				
CANN From Aircraft & LC	CANN To Aircraft & LCN				
CANN From JCN		CANN	ΓοJCN		
Pro Super Signature Pro Sup			er Print		
Supply Checklist		inc.		1	T
Checklist Item			Yes	No	N/A
Is the warehouse balance ze					
Are assets available in TNB					
Has base repair capability been verified?					
Did you document MICAP on Supply Status Board?					
Cancel MICAP	Anna con con		20000		
Cancellation Code	Pro Super Sig	gnature	Pro	Super Print	
MICAP Cancellation Codes 1-RECEIVED FROM ALTER	NATE F35 SOU	RCE			
2-RECEIVED FROM GOVT	SERVICE/OTH	ER SERVI	CES (GFE/I	DLA)	
3-CANNIBALIZATION ACT	MON				
-RECEIVED FROM BASE	ASSETS (DSP/B	ENCHSTO	CK/PEB)		
5-ALT P/N SATISIFED REQ	UIREMENT				
		e IM direct	ed cancellat	ions and requi	irements w
5-SUSTAINMENT DIRECTE would not track such as TCTD					
would not track such as TCTD					
vould not track such as TCTD 7-OTHER	, time change, m	od etc.)			
	, time change, m	od etc.) AINT	ON		

LOHAS FLEET AVERAGE TEMPLATE

Figure A5.1. LOHAS Fleet Average Template.

LOHAS FLEET AVERAGE TEMPLATE

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UNCLASSIFIED

DAILY LOHAS Maintenance Margin Used (MMU) ROLLUP
LOHAS MMU per Tail Number
Current as of:
February 14, 2017
8:30

Aircraft	: 13-5XXX (AFXXX)		Aircraft	13-XXXX (AFXXX)		
Margin:	LOHAS Margin		Margin:	LOHAS Margin		
No Change		26	No Change	76		
	Previous Day			Previous Day		
Notes:		76	Notes:	76		
**Standard Ranking	Difference		**Standard Ranking	Difference		
Pending**		76	Complete**	36		
Aircraft	: 13-XXXX (AFXXX	Aircraft: 13-XXXX (AFXXX)				
Margin:	LOHAS Margin		Margin:	LOHAS Margin		
LH Vert Bulb Seal		16	No Change	76		
Replaced	Previous Day			Previous Day		
Notes:		76	Notes:	76		
**Standard Ranking	Difference		**Standard Ranking	Difference		
Pending**		%	Pending**	56		
Aircraft	: 13-XXXX (AFXXX)	Aircraft:	13-XXXX (AFXXX)		
Margin:	LOHAS Margin		Margin:	LOHAS Margin		
No Change		16	No Change	76		
	Previous Day		3 0 - 20 C 10 C	Previous Day		
Notes:		76		76		
**Standard Ranking	Difference		**Standard Ranking	Difference		
Pending**		16	Pending**	36		
			Fleet LOHAS			
			MMU Average	%		

A5.1. Note: Key information includes LOHAS maintenance margin used number for each aircraft, fleet LOHAS average, a brief description of damages or repairs that drive a signature delta from the previous OML and number of aero only panels. LOHAS margin value will be capped at 200% for each aircraft with a LOHAS margin exceedance over 100%.

F-35 AUDIT PROCEDURES, DOCUMENTATION AND REPORTING TEMPLATE

Table A6.1. F-35 Audit Procedures, Documentation and Reporting Template.

Create a work order in CMMS for the audit.

Perform Aircraft Safe for Maintenance (F35-AAA-A05210100000-120A-A) JTD Data Module.

Perform Audit utilizing Post Operations Servicing (POS(OML))- Inspection (F-35-AAA-A13210300000-281-A) JTD Data Module.

Input new damages and compare all damages/repairs to the OML with entries contained in LODEM. Update LODEM as the audit progresses.

Maintain an ongoing record during the audit for starting LOHAS MMU number, damages added, damages deleted, damages edited and final audit LOHAS MMU value for audit historical files.

The LOHAS and OML audit historical files will be maintained for 5 years. Each audit file will include at a minimum:

Name of person(s) performing the audit.

Date of audit.

Pre-audit LOHAS margin percentage.

Post-audit LOHAS margin percentage.

Number of new damages identified.

Number of previously repaired damages not removed from LOHAS.

Number of duplicate entries identified.

Root cause and corrective action when post audit results in a +15% or -15% change.

Note: Report audit results upon completion to: 19AF.LGMS.All@us.af.mil