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AIR COMBAT COMMAND**

**AIR FORCE INSTRUCTION 21-101**

**COMBAT AIR FORCES**

**Supplement**

**ADDENDUM B**

**10 OCTOBER 2012**

**Maintenance**

**CAF: AIRCRAFT AND EQUIPMENT  
MAINTENANCE MANAGEMENT (F-35)**



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This addendum implements AFI 21-101\_CAFSUP, *AIRCRAFT AND EQUIPMENT MAINTENANCE MANAGEMENT*. This supplement prescribes policies and procedures governing aerospace equipment maintenance management of F-35 aircraft for Air Combat Command (ACC). This addendum does not apply to the Air National Guard (ANG) or Air Force Reserve Command (AFRC); however, ANG/AFRC personnel assigned to Classic Associate Units supporting CAF units will comply with the guidance provided within this supplement. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm>. Contact supporting records managers as required. Send comments, questions, and suggested improvements to this publication on AF Form 847, Recommendation for Change of Publication, through channels to HQ ACC/A4QM, 130 Douglas Street, Suite 210, Langley AFB, VA 23665-2791.

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## Chapter 1

### MANAGEMENT PHILOSOPHY AND POLICY

#### 1.1. Introduction

1.1.1. Sustainment Operating Instructions (SOIs) are F-35 joint program instructions provided by the Joint Program Office (JPO). They have been developed with Service/Partner participation and provide information on F-35 unique processes where legacy instructions may not be adequate for the given topic. SOIs provide source documentation for Air Force policies/instructions related to the F-35 and are referenced throughout this publication. SOI language that is applicable to AFI 21-101 has been extracted and inserted into applicable areas of this publication.

1.1.2. The F-35 Joint Strike Fighter Program was developed as a Performance Based Logistics (PBL) program. The strategy employs an integrated and affordable performance package that is designed to optimize system readiness and reduce the demand on the logistics tail of a system. It is intended to meet performance goals through a support structure based on long-term performance agreements with clear lines of authority and responsibility.

1.1.2.1. A PBL concept provides a level of performance rather than managing and directing every aspect of the weapon system support. PBL moves the focus from the management of parts and suppliers to management of the suppliers responsible for delivering required performance. Many of the traditional / legacy aircraft requirements identified in AFI 21-101 may not apply to weapon systems purchased and managed IAW PBL standards.

1.1.3. The F-35 is a unique joint services platform that utilizes terminology that differs from legacy. For a frame of reference, the following are common terms and their legacy equivalent: ALIS=IMDS, JTD=MDS T.O., TCTD=TCTO, AR=AFTO -107 or ETAR, MEFL=MESL and LCN=WUC.

#### 1.2. Aircraft and Equipment Readiness

1.2.1. Management of all F-35 Air Vehicle (AV) Scheduled and Prognostic maintenance requirements are performed within the Autonomic Logistics Information System (ALIS). Scheduled and Prognostic maintenance is performed IAW Joint Technical Data (JTD), Time Compliance Technical Directive (TCTD) and as directed in an Action Request Response (ARR). Specific scheduled maintenance requirements are created by using the Health Inspection Task (HIT) in Squadron Health Management (SHM) via the ALIS. (See AFI 21-101, Paragraph 1.3)

#### 1.3. Maintenance Concept

1.3.1. Action Requests (AR) are the primary method of problem reporting for the F-35 Air System. Refer to paragraph 14.9 to submit ARs to the Autonomic Logistics Global Sustainment (ALGS) Operations Center through the ALIS. Additionally, the local OI shall include procedures for submitting ARs during periods when the ALIS has connectivity outages. SOI 1514.02. (See AFI 21-101, Paragraph 1.4.1)

#### 1.4. Use of Joint Technical Directives (JTD)

1.4.1. Recommend improvements, corrections or additions to Joint Technical Data (JTD) by submitting a Joint Technical Data Action Request (JTDAR) to ALGS Operations Center through the ALIS for JTD improvements, corrections or additions. 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 of Routine or Expedited Action as applicable. (See AFI 21-101, Paragraph 1.6.2.1)

1.4.1.1. Expedited Action changes to JTD are required 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.

1.4.1.2. Routine Action changes to JTD are required for all other changes that do not meet the Expedited Action criteria.

1.4.2. Waivers, deviations, improvements, corrections, or additional technical data procedures are submitted using an AR to the ALGS Operations Center through the ALIS. SOI 1514.02. (See AFI 21-101, Paragraph 1.6.2.3)

**1.5. Modification Management.** Submit an AR to ALGS Operations Center through the ALIS for program specific equipment and aircraft modifications. SOI 1514.02. (See AFI 21-101, Paragraph 1.11)

## **Chapter 2**

### **SAFETY**

#### **2.1. General Safety Guidance**

2.1.1. No additional guidance required for F-35 aircraft.

## Chapter 3

### GENERAL RESPONSIBILITIES FOR COMMANDERS AND KEY LEADERS

#### 3.1. Maintenance Group Commander Responsibilities

3.1.1. Ensure TOs are managed IAW TO 00-5-1 or the approved MDS process (e.g., JTD). SOI 1514.02 and 1511.01. (See AFI 21-101, Paragraph 3.4.1.15)

3.1.2. Provide maintenance cross-tell information IAW Chapter 8 of AFI 21-101 or by using the approved MDS process (e.g., Customer Relationship Management (CRM) application of the ALIS via an AR). SOI 1514.02. (See AFI 21-101, Paragraph 3.4.1.17)

3.1.3. For the F-35 Air System, Lockheed Martin (LM) Aeronautics (AERO) is the Joint-Service Technical data Manager (LM-JSTDM) and has management responsibility for all JSF program technical data and technical data requirements. LM-JTDM provides overall management of the JTDAR internal process and updates required for all JSF JTD. The Propulsion System Contractor (PSC) is responsible for all propulsion system JTD and manages PSC JTDARs in the same manner as LM-JTDM for updates on all PSC JTD. SOI 1511.01. (See AFI 21-101, Paragraph 3.4.1.18)

3.1.4. Manage Minimum Equipment Levels (MELs) for essential maintenance assets to include aircraft, engines, pods, AGE, vehicles, etc., using the approved MDS/MIS process (e.g., Lightning Support Team (LST) as determined by PBL standards). (See AFI 21-101, Paragraph 3.4.1.22)

3.1.5. Intermediate Repair Enhancement Program (IREP). Supply chain management functions are regulated through PBL. (See AFI 21-101, Paragraph 3.4.1.23)

3.1.6. Engine trending data is managed by Pratt & Whitney service engineers according to PBL standards. (See AFI 21-101, Paragraph 3.4.1.28)

3.1.7. Under the PBL contract; Stock Record Account Number (SRAN) engine manager duties are performed by the contractor. (See AFI 21-101, Paragraph 3.4.1.48)

3.1.8. Under the PBL contract; Engine Health Management Plus (EHM+) duties are performed by the contractor. (See AFI 21-101, Paragraph 3.4.1.49)

3.1.9. Wing Aircraft Structural Integrity Program (ASIP) and the Individual Aircraft Tracking (IAT) portion of ASIP are an integrated function within the ALIS and the aircrew debriefing process. There is no maintenance intervention in the ASIP/IAT data collection or reporting of quarterly data to the MAJCOM at this time. Units will still assign an ASIP Project Officer to coordinate any ASIP/IAT issues. (See AFI 21-101, Paragraph 3.4.1.53)

3.1.10. F-35 units use the ALIS to manage International Civil Aviation Organization (ICAO) codes for on/off-station possessed aircraft. (See AFI 21-101, Paragraph 3.4.1.64)

3.1.11. Ensure cannibalization of parts are properly coordinated and are not used to circumvent the supply system, which can have a costly impact to the PBL contract. (See AFI 21-101, Paragraph 3.4.1.67)

3.1.12. The intent of Air Force Repair Enhancement Program (AFREP) is performed through the established PBL standards. (See AFI 21-101, Paragraph 3.4.1.71)

### **3.2. Maintenance Operations Officer (MOO)/Maintenance Superintendent (MX SUPT) Responsibilities**

3.2.1. Ensure engine download data is fully maintained in the ALIS and Pratt & Whitney EMS. SOI 1513.06. (See AFI 21-101, Paragraph 3.8.8)

3.2.2. Special Purpose Recoverable Authorized Maintenance (SPRAM) accounts. All items are maintained IAW PBL standards as established by ALGS and LST. (See AFI 21-101, Paragraph 3.8.32)

3.2.3. Ensure the use of ARs in the ALIS to report materiel deficiencies. SOI 1514.02. (See AFI 21-101, Paragraph 3.8.33)

### **3.3. Flight Commander/Flight Chief or AMU Officer in Charge (OIC)/Superintendent:** These positions are rated on IAW 36-2406 and will:

3.3.1. Ensure maintenance is performed IAW JTD. SOI 1514.02 and 1511.01. (See AFI 21-101, Paragraph 3.9.6)

3.3.2. Ensure asset management is accomplished IAW PBL standards. Warranty Items are analyzed by the Joint Strike Fighter Program Office (JSFPO). Deficiency reporting is accomplished IAW paragraph 3.8.33 of this instruction. SOI 1514.02. (See AFI 21-101, Paragraph 3.9.33)

3.3.3. Recommend bench stock requirements through an Action Request. Approval authority resides with established PBL. SOI 1514.02. (See AFI 21-101, Paragraph 3.9.35)

### **3.4. /Chief**

3.4.1. Review the Computerized Maintenance Management System (CMMS) on a daily basis to monitor scheduled and deferred events. SOI 1505.16 and 1505.19. (See AFI 21-101, Paragraph 3.10.8)

3.4.2. Review the work center ALIS data entries for the previous day and all preceding non-duty days in CMMS for job accuracy and completeness. (See AFI 21-101, Paragraph 3.10.9)

3.4.3. Use the ALIS to submit an AR identifying discrepancies. SOI 1514.02. (See AFI 21-101, Paragraph 3.10.30)

### **3.5. Production Superintendent (Pro Super)**

3.5.1. Release (exceptional release (ER)) aircraft for flight via the CMMS tool in the ALIS IAW SOI 1505.18. An ER will include review of all opened, closed, and deferred work packages produced since last exceptional release. Additionally, all Production Aircraft Inspection Requirements (PAIRs) will be reviewed for currency. SOI 1505.18. (See AFI 21-101, Paragraph 3.11.3)

3.5.2. When authorized by the MXG/CC, ensure cannibalization of parts are properly coordinated and are not used to circumvent the supply system, which can have a costly impact to the PBL contract. (See AFI 21-101, Paragraph 3.11.10)

## Chapter 4

### AIRCRAFT/HELICOPTER MAINTENANCE SQUADRON (AMXS/HMXS)

#### 4.1. Flightline Expediter

4.1.1. Maintain copies of the following in the expediter vehicle: Flying schedule, emergency action and functional checklists, base grid map with cordon overlay, Quick Reference List (QRL) (if developed), and tracking device for aircraft status. The Minimum Essential Function Listing (MEFL), Logistic Control Number (LCN), and IPI listing are internal to the ALIS. (See AFI 21-101, Paragraph 4.6.8)

4.1.1.1. Any limitations to Low Observable (LO) status will be tracked in Low Observable Health Assessment System (LOHAS). (See AFI 21-101, Paragraph 4.6.8.1)

4.1.2. Use the ALIS/CMMS tool to monitor back-ordered and requisitioned parts. (See AFI 21-101, Paragraph 4.6.12)

4.1.3. Debrief is accomplished electronically after each flight via the ALIS. SOI 1513.05. (See AFI 21-101, Paragraph 4.6.16)

#### 4.2. Aircrew and Maintenance Debrief Section

4.2.1. Check the ALIS for Airframe Time. (See AFI 21-101, Paragraph 4.7.4)

4.2.2. Schedule deviations are part of the process embedded within the ALIS. (See AFI 21-101, Paragraph 4.7.9)

#### 4.3. Aircraft Section

4.3.1. Aircraft Sections will perform propulsion tasks.

#### 4.4. Weapons Section

4.4.1. The weapons section NCOIC/Chief will:

4.4.1.1. AME and NIE on-equipment inventory is tracked in the ALIS. (See AFI 21-101, Paragraph 4.10.1.18)

4.4.1.2. Dash-21 inventory is tracked in the ALIS. (See AFI 21-101, Paragraph 4.10.1.25)

4.4.1.3. Ensure JSFPO provides CTKs IAW production contract guidelines. (See AFI 21-101, Paragraph 4.10.1.26)

#### 4.5. Weapons expediter

4.5.1. Maintain copies of the following in the expediter vehicle: Flying schedule, emergency action and functional checklists, base grid map with cordon overlay, Quick Reference List (QRL) (if developed), and tracking device for aircraft status. The Minimum Essential Function Listing (MEFL), Logistic Control Number (LCN), and IPI listing are internal to the ALIS. (See AFI 21-101, Paragraphs 4.6.8 and 4.10.5.12)

#### 4.6. AMU Supply Support Element. Supply support will:

4.6.1. Requisition parts through the ALIS/CMMS tool. When necessary, Supply personnel can assist with follow up via contacting JSF Supply warehouse. (See AFI 21-101, Paragraph 4.13.1)

4.6.2. DIFM/RMA assets will be tracked within the PBL construct via JSF Supply warehouse using the Industrial and Financial System (IFS) tool. (See AFI 21-101, Paragraph 4.13.4)

4.6.3. In accordance with the PBL contract, 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. (See AFI 21-101, Paragraph 4.13.5)

4.6.4. The aircraft Tail Number Bin (TNB) will be controlled and managed within the support sections consistent with existing legacy procedures. (See AFI 21-101, Paragraph 4.13.6)

## Chapter 5

### MAINTENANCE SQUADRON (MXS)

#### 5.1. MX Operations Officer(MOO)/MX SUPT Responsibilities

5.1.1. Base level repair capability is performed through the established PBL standards, if applicable. (See AFI 21-101, Paragraph 5.2.2)

5.1.2. Utilize the CRM tool in the ALIS to submit an AR for JTD changes/clarification. SOI 1514.02. (See AFI 21-101, Paragraph 5.2.6)

#### 5.2. Specialist Support.

5.2.1. Perform reviews of the ALIS to determine status prior to beginning any tasks on an aircraft. SOI 1505.13. (See AFI 21-101, Paragraph 5.4.1.2)

#### 5.3. Accessories Flight

5.3.1. Electro Environmental responsibilities reside in Specialist Section in AMXS. (See AFI 21-101, Paragraph 5.5)

#### 5.4. Aerospace Ground Equipment (AGE) Flight

5.4.1. The AGE Flt CC/Chief will:

5.4.1.1. The AGE MEL is determined in accordance with PBL standards. (See AFI 21-101, Paragraph 5.6.2.1)

5.4.1.2. Ensure equipment is shipped according to program disposition instructions. (See AFI 21-101, Paragraph 5.6.2.13)

#### 5.5. Avionics Flight

5.5.1. The intent of the Avionics Flight is accomplished through the established PBL standards. (See AFI 21-101, Paragraph 5.8)

#### 5.6. Fabrication Flight

5.6.1. The NDI section NCOIC will establish/obtain NDI inspection technique files by submitting an AR to ALGS Operations Center and LST through the ALIS. SOI 1514.02. (See AFI 21-101, Paragraph 5.9.4.2.3)

5.6.2. Low Observable Aircraft Structural Maintenance Section. Follow CAFI 21-105 as applicable.

#### 5.7. Propulsion Flight

5.7.1. Propulsion Flight responsibilities are performed by Aircraft Section due to the F-35 maintenance concept. (See AFI 21-101, Paragraph 5.12)

#### 5.8. Test, Measurement, and Diagnostic Equipment (TMDE) Flight

5.8.1. TMDE responsibilities are managed through the PBL contract for program specific PMEL items.

## Chapter 6

### MAINTENANCE OPERATIONS SQUADRON

#### 6.1. Maintenance Operations Flight (MOF)

##### 6.1.1. MOF/CC/Chief (MOF/SUPT). Will:

6.1.1.1. Ensure aircraft status and assignment/possession changes are accurately reported and maintained in the ALIS. SOI 1505. (See AFI 21-101, Paragraph 6.2.1.5)

6.1.1.2. Use the ALIS to manage ICAO codes for on/off-station possessed aircraft. (See AFI 21-101, Paragraph 6.2.1.8)

6.1.1.3. Workspace for MSL not applicable. (See AFI 21-101, Paragraph 6.2.1.10)

##### 6.1.2. Maintenance Operations Center (MOC)

6.1.2.1. The MOC will use the ALIS to monitor and coordinate sortie production, maintenance production, communicate priorities, and execution of the flying and maintenance schedules while maintaining visibility of fleet health indicators. (See AFI 21-101, Paragraph 6.2.2)

6.1.2.2. Reference the ALIS and SOI 1505.13 for air vehicle status reporting. (See AFI 21-101, Paragraph 6.2.2.23.1)

##### 6.1.3. Maintenance Management Analysis (MMA) Section

6.1.3.1. The ALIS is the primary source of data. MMA requirements are limited by the ALIS capabilities. The ALIS administrators will act as the group POC for MIS issues. (See AFI 21-101, Paragraph 6.2.6)

6.1.3.2. The intent of IREP is performed through the established PBL standards. (See AFI 21-101, Paragraph 6.2.6.7)

6.1.3.3. The ALIS administrators are responsible for system database management. (See AFI 21-101, Paragraph 6.2.6.11)

6.1.3.4. Base Repair Program/IREP is performed through the established PBL standards. (See AFI 21-101, Paragraph 6.2.6.13)

6.1.3.5. The ALIS administrators are responsible for system database management. (See AFI 21-101, Paragraph 6.2.6.16.4)

6.1.3.6. PS&D will be the POC for special inspection, time change, TCTD, and aircraft equipment transfer; however, the contractor is responsible for overall management. (See AFI 21-101, Paragraph 6.2.6.16.5.2)

6.1.3.7. The DIT will include participation from PS&D, MOC, Debrief Section, and QA as determined by MMA. Data Integrity Team (DIT) meetings will be held quarterly (at a minimum). (See AFI 21-101, Paragraph 6.2.6.16.6)

## Chapter 7

### MAINTENANCE PLANS, SCHEDULING AND DOCUMENTATION (PS&D)

#### 7.1. General

7.1.1. PS&D requirements are limited by the ALIS capabilities. (See AFI 21-101, Paragraph 7.1)

7.1.2. The intent of suspense validation is an embedded function within the ALIS. (See AFI 21-101, Paragraph 7.1.6)

7.1.3. The ADR process checklist is an embedded function within the ALIS. (See AFI 21-101, Paragraph 7.1.10)

#### 7.2. Manage the following programs for assigned aircraft and equipment using the following guidelines:

7.2.1. Prior to pre-dock meeting use the ALIS as the source of record for items out of configuration. (See AFI 21-101, Paragraph 7.2.2.1.7)

7.2.2. Use the ALIS in lieu of IMDS for pre-dock meetings. (See AFI 21-101, Paragraph 7.2.2.2)

7.2.3. Use the ALIS in lieu of IMDS for post-dock meetings. (See AFI 21-101, Paragraph 7.2.3)

7.2.4. Configuration Management (CM) is managed by the contractor through the ALIS. (See AFI 21-101, Paragraph 7.2.4)

7.2.5. For major maintenance work processing PS&D will coordinate on AR submissions through the ALIS CRM application IAW paragraph 14.9. SOI 1514.02. (See AFI 21-101, Paragraph 7.2.5.1)

#### 7.2.6. TCTO Management

7.2.6.1. QA personnel will use the CRM application in the ALIS to submit an AR to report TCTD deficiencies, IAW F-35 Addendum paragraph 14.9. SOI 1514.02. (See AFI 21-101, Paragraph 7.2.6.2.1.3)

7.2.6.2. TCTD management is in accordance with PBL standards. (See AFI 21-101, Paragraph 7.2.6.2.2.1)

7.2.6.3. TCTD kits will be managed by the Air System Contractor (ASC) or Propulsion System Contractor (PSC). (See AFI 21-101, Paragraph 7.2.6.2.2.5)

7.2.6.4. PS&D will control and release TCTD kits from contractor sources in accordance with PBL standards. (See AFI 21-101, Paragraph 7.2.6.2.2.6)

7.2.7. TCI forecasting is managed in accordance with PBL standards. (See AFI 21-101, Paragraph 7.2.7)

#### 7.3. Reference SOI 1505. 19 for Maintenance and Operations Planning. (See AFI 21-101, Paragraph 7.6.1)

**7.4. Wing Aerospace Vehicle Distribution Officer (AVDO).** This responsibility is handled through the Action Request process, IAW paragraph 14.9. (See AFI 21-101, Paragraph 7.10.1)

## Chapter 8

### QUALITY ASSURANCE (QA)

#### **8.1. Chief Inspector Responsibilities**

8.1.1. A master standardized AFTO IMTs 781-series forms binder not applicable. (See AFI 21-101, Paragraph 8.4.10)

#### **8.2. QA Product Improvement Programs (PIP)**

8.2.1. Use the Action Request in the ALIS to report materiel deficiencies, IAW SOI 1514.02 and paragraph 14.9. (See AFI 21-101, Paragraph 8.12.2.1)

**8.3. Configuration Management (CM) and Modification Management.** CM is managed by the contractor through the ALIS. (See AFI 21-101, Paragraph 8.13)

**8.4. Technical Order Distribution Office (TODO).** JTD is managed by ALGS and LST. (See AFI 21-101, Paragraph 8.14)

**8.5. 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 as follow on to a TCTD, via an Action Request Response (ARR) or as outlined in AFI 21-101. SOI 1505.23. (See AFI 21-101, Paragraph 8.16)

#### **8.6. Weight and Balance (W&B) Program**

8.6.1. If discrepancies exist within Weight and Balance records/data an AR must be submitted utilizing the CRM tool in the ALIS to correct discrepancies, IAW SOI 1505.20 and paragraph 14.9. (See AFI 21-101, Paragraph 8.19.1)

## **Chapter 9**

### **IMPOUNDMENT PROCEDURES**

#### **9.1. Impoundment Process and Procedures**

9.1.1. When required, the Impoundment Official will notify the ALIS system administrator for system lockdown. SOI 1505.14. (See AFI 21-101, Paragraph 9.6.5.2)

## Chapter 10

### TOOL AND EQUIPMENT MANAGEMENT

**10.1. Tool and Equipment Management.** F-35 program provided tools will be tracked and maintained in the ALIS, each tool is marked with an appropriate logistics control/sequence number. SOI 1508.06. (See AFI 21-101, Paragraph 10.1)

## Chapter 11

### MAINTENANCE SUPPLY SUPPORT

**11.1. Ordering Parts.** Aircraft parts are ordered from JSF Supply warehouse through CMMS/IFS interface. (See AFI 21-101, Paragraph 11.4)

**11.2. MICAP Processing.** Mission Capable sourcing and request for upgrade, downgrade and cancel MICAP requirements are coordinated with JSF Supply. (See AFI 21-101, Paragraph 11.5)

**11.3. Bench Stock.** Workcenter supervisors request bench stock levels through an Action Request. (See AFI 21-101, Paragraph 11.7)

**11.4. Time Compliance Technical Order (TCTO) Kit Procedures.** TCTD kits are provided through the established PBL contract. (See AFI 21-101, Paragraph 11.17)

**11.5. Production Scheduling.** The intent of production scheduling is performed through the established PBL standards. (See AFI 21-101, Paragraph 11.20)

**11.6. Repair Cycle Assets.** The intent of repair cycle asset management is performed through the established PBL standards. (See AFI 21-101, Paragraph 11.22)

**11.7. DIFM.** DIFM will be managed IAW applicable SOIs, SCM Warehouse Guide, ALIS Users Guide and established PBL/PBA metrics. (See AFI 21-101, Paragraph 11.23)

**11.8. Bench Check and Repair Policy.** The intent of bench check and repair is performed through the established PBL standards. (See AFI 21-101, Paragraph 11.26)

**11.9. Maintenance Turn-Around (TRN) Record Update Processing.** The intent of maintenance turn-around record update processing is performed through the established PBL standards. (See AFI 21-101, Paragraph 11.27)

**11.10. Buildup Items.** The ALIS will be used to manage built up items (e.g. wheel/tire) from alternate location. (See AFI 21-101, Paragraph 11.29)

**11.11. Deficiency Report (DR) Exhibits.** Utilize the AR program. (See AFI 21-101, Paragraph 11.31)

**11.12. Work Center Supply Management.** Government furnished materiel/equipment (including POL and common hazardous material) will be ordered via organic/legacy supply system (i.e., SBSS, EESOH-MIS, etc). (See AFI 21-101, Paragraph 11.32)

**11.13. Maintenance Repair/Supply Delivery Priorities.** Priorities are managed through the ALIS. (See AFI 21-101, Paragraph 11.33)

**11.14. Intermediate Repair Enhancement Program (IREP).** The intent of IREP is performed through the established PBL standards. (See AFI 21-101, Paragraph 11.34)

## Chapter 12

### WING WEAPONS MANAGER AND WEAPONS STANDARDIZATION

#### 12.1. Wing Weapons Manager (WWM)

12.1.1. Ensure an AR is submitted for SE requiring repair when procedures are not established. (See AFI 21-101, Paragraph 12.1.31)

#### 12.2. Loading Standardization Crew (LSC)

12.2.1. Review and coordinate loading related JTD ARs in the ALIS CRM tool. (See AFI 21-101, Paragraph 12.3.4)

## **Chapter 13**

### **MOBILITY AIRCRAFT DEFENSIVE SYSTEMS LOADING POLICY**

#### **13.1. General**

13.1.1. No additional guidance required for F-35 aircraft.

## Chapter 14

### ADDITIONAL MAINTENANCE REQUIREMENTS AND PROGRAMS

#### 14.1. Aircraft Structural Integrity Program (ASIP)

14.1.1. The Individual Aircraft Tracking (IAT) portion of ASIP is an integrated function within the ALIS and the aircrew debriefing process. There is no maintenance intervention in the ASIP/IAT data collection or reporting of quarterly data to the MAJCOM at this time. Units will still assign an ASIP Project Officer to coordinate any ASIP/IAT issues. (See AFI 21-101, Paragraph 14.6.1)

#### 14.2. Cannibalization Program

14.2.1. Unnecessary cannibalization of parts to circumvent the supply system can have a costly impact on the PBL contract. SOI 1505.15. (See AFI 21-101, Paragraph 14.8.1)

#### 14.3. Crash Damaged or Disabled Aircraft Recovery (CDDAR) Program

14.3.1. Additional CDDAR training will be provided at the Integrated Training Center (ITC). SOI 1505.01. (See AFI 21-101, Paragraph 14.10.7.1)

#### 14.4. Dropped Object Prevention (DOP) Program

14.4.1. For deficiencies discovered/suspected submit an AR IAW para 14.9. SOI 1514.02. (See AFI 21-101, Paragraph 14.11.1.4)

#### 14.5. Engine Run Training and Certification Program

14.5.1. Integrated Power Plant (IPP). (See AFI 21-101, Paragraph 14.15.2.3)

14.5.2. Part I and Part II testing does not apply to PMA operators from the ground. (See AFI 21-101, Paragraph 14.15.11.2)

14.5.3. IPP operators using only the PMA from the ground need not be tracked on the SCR. (See AFI 21-101, Paragraph 14.15.12.1)

#### 14.6. Foreign Object Damage (FOD) Prevention Program

14.6.1. Utilize an AR IAW paragraph 14.9. SOI 1514.02 . (See AFI 21-101, Paragraph 14.19.5.1.1)

14.6.2. Utilize an AR IAW paragraph 14.9. SOI 1514.02 . (See AFI 21-101, Paragraph 14.19.5.2.3)

#### 14.7. Hot Refueling Procedures

14.7.1. Units coded "CC" certified for hot refueling develop and maintain the capability to quickly and safely hot refuel those assigned aircraft (applicable to ANG if tasked). (See AFI 21-101, Paragraph 14.23.1)

#### 14.8. Radar Warning Receiver (RWR)/Radar Threat Warning (RTHW) Testing

14.8.1. External testing and appointment of RWR/RTHW manager is not required. (See AFI 21-101, Paragraph 14.28.1)

#### 14.9. Customer Relationship Management Program. SOI 1514.02

#### 14.9.1. Responsibilities.

14.9.1.1. The CRM tool within the ALIS shall be used to report problems via an AR. All ARs raised via CRM shall be transmitted via the Optional and Required Screening Points (OSP & RSP). These points screen ARs for accuracy of entries and information as well as prevent classified, sensitive or International Trade in Arms (ITAR) information from being transmitted. In addition to the ALIS System Permission Request (ASPR), OSP and RSP personnel shall be designated in writing to the ALIS administrators by the group commander assigned (MXG/CC or OG/CC) based upon squadron. Those units not assigned to established groups will be designated by the appropriate site lead or QA department.

14.9.1.2. 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 etc. Many of these occasions have specific forms in existing policy documents; the AR process will replace these mediums in the F-35 environment.

14.9.1.3. 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.

14.9.1.4. 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.

14.9.1.5. 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.

#### 14.9.2. Overall timelines for ARs.

14.9.2.1. 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.

#### 14.9.3. AR Submission Process.

##### 14.9.3.1. Initiator shall:

14.9.3.1.1. Exhaust all available means of resolution prior to submitting an AR.

14.9.3.1.2. Inform expeditor or aircraft crew chief of AR requirement.

14.9.3.1.3. Inform supervision of AR request to be implemented.

14.9.3.1.4. Ensure detail is added to AR to alleviate vagueness.

14.9.3.1.5. Include tail number of aircraft if AR is related to an aircraft.

14.9.3.1.6. Include JTD number if AR is related to JTD.

14.9.3.1.7. Utilize SOI 1514.02 to ensure correct AR categorization, severity and classification.

14.9.3.1.8. Submit AR with format shown in Attachment 3.

14.9.3.1.9. Notify Squadron OSP of AR submittal.

14.9.3.1.10. Monitor AR status via CRM tool.

14.9.3.2. OSP shall:

14.9.3.2.1. Review all AR submissions to ensure the correct priority has been assigned and AR submission is valid.

14.9.3.2.2. Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable).

14.9.3.2.3. Ensure details provided by initiator explain problem completely.

14.9.3.2.4. Approve and submit ARs to the RSP.

14.9.3.2.5. Notify RSP of AR submittal.

14.9.3.2.6. Monitor AR status via CRM tool.

14.9.3.3. RSP shall:

14.9.3.3.1. Ensure AR has been routed through OSP prior to submittal.

14.9.3.3.2. Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable).

14.9.3.3.3. Ensure details provided by initiator and OSP explain problem completely.

14.9.3.3.4. Once request is validated submit AR to ALGS and monitor the AR's status via CRM tool.

14.9.3.4. ALGS role.

14.9.3.4.1. ALGS responsibilities are outlined in SOI 1514.02.

14.9.4. Resolution of AR Disparities:

14.9.4.1. Disparities of AR submittals will be resolved by the MXG/CC or OG/CC.

14.9.5. AR Review Team.

14.9.5.1. ARs shall be reviewed at all levels to ensure proper categorization and severity is assigned.

14.9.5.2. 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 1 (High, Medium, Low) or Category II (High) will fall into this criteria.

14.9.5.3. 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.

14.9.5.4. The review team shall consist of the following if applicable as determined by RSP:

- 14.9.5.4.1. QA Representative.
- 14.9.5.4.2. OG Representative.
- 14.9.5.4.3. Contractor Representative.
- 14.9.5.4.4. Subject Matter Expert.

14.9.5.5. 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 (see Attachment 3).

14.9.6. AR process flow.

14.9.6.1. Normal AR process flow.

14.9.6.1.1. Squadron initiator prepares AR and informs supervision of intent for submittal. Notify Squadron OSP of AR submittal.

14.9.6.1.2. 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.

14.9.6.1.3. 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.

14.9.6.2. AR process flow having potential fleet implications.

14.9.6.2.1. Squadron initiator prepares AR and informs supervision of intent for submittal. Notify Squadron OSP of AR submittal.

14.9.6.2.2. 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.

14.9.6.2.3. 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).

14.9.6.2.4. Squadron RSP coordinates AR through all affected squadrons. Coordination can take place by meeting, phone, email or any medium necessary to inform all units of potential fleet implications.

14.9.6.2.5. All affected squadron RSPs review AR. Respective squadron RSP annotates AR when AR Review Team review is complete (see Attachment 3).

14.9.6.2.6. Respective squadron RSP submits AR to ALGS.

#### 14.9.7. Leadership review.

14.9.7.1. 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.

14.9.7.2. Squadron and group leadership should be briefed periodically on high interest ARs.

14.9.7.3. Reports available in the ALIS CRM are encouraged for briefing material.

14.9.7.4. Group commanders may further define guidelines for AR reviews within their group prior to AR submittal.

#### 14.9.8. Operations under more than one Standard Operating Unit (SOU).

14.9.8.1. All procedures as defined above will apply.

14.9.8.2. The ALIS accounts will be established on additional SOUs as required. As the ALIS matures, personnel may be loaded on additional SOUs as Customer Review Board representatives.

14.9.8.3. Procedures will be further defined as additional SOUs are established.

#### 14.9.9. CRM team member composition.

14.9.9.1. 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.

14.9.9.2. Respective RSPs 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:

14.9.9.2.1. This process of gaining OSP and RSP permissions does not alleviate completing the permissions section on the ALIS System Permission Request Form.

14.9.9.2.2. Distribution Team members are responsible for receiving Urgent Field Notices (UFN), Time Compliance Technical Data and other correspondence from ALGS.

14.9.9.3. Distribution team responsibilities include the following at a minimum:

14.9.9.3.1. Information is forwarded to appropriate organization within their team/teams for action.

14.9.9.3.2. Receipt of information forwarded to ALGS as required. For example, when a UFN is received, MOC will report receipt to ALGS for items concerning the MXG. This notification is confirmation to ALGS that the field has received the UFN.

14.9.10. Contingency Back-up. In the event CRM is down, the following process shall be utilized to initiate an AR.

14.9.10.1. Utilize the AR draft template found in Attachment 4.

14.9.10.2. Submit AR via:

14.9.10.2.1. Fax - 1-817-777-1868.

14.9.10.2.2. Email - [jsf-algs-center.fcaero@lmco.com](mailto:jsf-algs-center.fcaero@lmco.com).

14.9.10.2.3. Phone - 1-888-433-5677.

14.9.11. Classified AR procedures.

14.9.11.1. Ensure classified ARs are produced IAW SOI 1514.02.

14.9.11.2. Protect classified information during the AR initiation process.

14.9.11.3. Consult assigned security manager for assistance, if necessary.

## Chapter 15

### MAINTAINING COMMERCIAL DERIVATIVE AIRCRAFT

#### 15.1. Background Information and Objective

15.1.1. No additional guidance required for F-35 aircraft.

## Chapter 16

### AIRCREW EGRESS SYSTEMS MAINTENANCE

#### 16.1. Egress Maintenance:

16.1.1. Egress personnel are responsible for egress systems canopy maintenance. (See AFI 21-101, Paragraph 16.1.2)

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Director of Logistics

**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 21-101, *Aircraft and Equipment Maintenance Management*, Interim Change 1, 11 Aug 2011

AFI 21-101, CAFSUP\_I, *CAF: Aircraft and Equipment Maintenance Management*, 11 Jul 2012

AFI 36-2406, *Officer and Enlisted Evaluation Systems*, Interim Change 3, 11 Oct 2011

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

CAFI 21-105, *Fabrication Program*, 2012

TO 00-5-1, *AF Technical Order System*, 1 May 2011

***Adopted Forms***

AF Form 847, *Recommendation for Change of Publication*

***Abbreviations and Acronyms***

**ALIS**—Autonomic Logistics Information System

**ALGS**—Autonomic Logistics Global Sustainment

**AR**—Action Request

**ASC**—Air System Contractor

**CMMS**—Computerized Maintenance Management System

**CRM**—Customer Relationship Management

**ICAO**—International Civil Aviation Organization

**IPP**—Integrated Power Plant

**JPO**—Joint Program Office

**JTD**—Joint Tech Data

**LCN**—Logistics Control Number

**MEFL**—Minimum Essential Function List

**PBL**—Performance Based Logistics

**PMA**—Portable Maintenance Aid

**PSC**—Propulsion System Contractor

**SOI**—Sustainment Operating Instruction

**TCTD**—Time Compliance Technical Directive

## Attachment 2

### EXAMPLE AR ROUTING SCENARIOS

#### **Example AR scenario where first level RSP submits AR to ALGS.**

Contractor maintenance personnel discovers a broken nutplate 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.

#### **Example AR scenario with fleet implications.**

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 (see Attachment 3). 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 at Eglin AFB. First level RSP will annotate AR after AR Review Team review is complete.

**Attachment 3****AR TEMPLATE FOR SUBMITTAL**

**Assigning a Title.** When writing the title of the AR, include section designation (i.e. MIL for military, SCM for Supply Chain Management, etc). Ensure to include specific JTD or tail number in title (Example, "MIL – ACFT 0748 Panel 1 Crack).

**Body of comments.** Include all detailed information involving the AR. Be descriptive as possible and keep in mind not all personnel reviewing the AR will know specialty code specific language, use common terms and abbreviations. As applicable include left/right, forward/aft, upper/lower, inboard/outboard, dimensions (length/width/depth); photographs, part numbers, and stock numbers. Also, annotate if an example or sample has been provided with the AR.

**OPR**

Office

Contact Number

**AR Team Review (If applicable)**

Annotate Date of Review

Annotate Team Members Involved

Annotate Comments

**Attachment 4**

**AR CONTINGENCY TEMPLATE FOR SUBMITTAL**

Response Type:

Date Reported:

Severity:

Category:

Part Number (If Applicable):

Location:

Aircraft Tail Number ( If Applicable):

OPR (Office, Contact Number):

Initiator (Rank, Name, Office, Contact Number):

OSP (Rank, Name, Office, Contact Number):

RSP (Rank, Name, Office, Contact Number):

Initiator Details:

OSP Comments:

RSP Comments: