

**BY ORDER OF THE COMMANDER  
910TH AIRLIFT WING**

**910 AIRLIFT WING INSTRUCTION 21-110**

**1 DECEMBER 2011**



**Maintenance**

**ENGINE MANAGEMENT**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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OPR: 910 MXS/MXMP

Certified by: 910 MXG/CC  
(Col Dale C. Andrews)

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This instruction implements Air Force Instruction (AFI) 21-101, *Aerospace Equipment Maintenance Management*; AFI 21-101, Air Force Reserve Command Supplement (AFRCSUP) 1, *Aircraft Maintenance Guidance and Procedures*; Technical Order (T.O.) 00-25-254-1, *Comprehensive Engine Management System Procedures*; T.O. 25-1-18, *Preparation for Shipment and Storage of Gas Turbine Engines* and Air Force Manual (AFMAN) 24-204, *Preparing Hazardous Materials for Military Air Shipments*. The purpose of this instruction is to establish local procedures for the movement, management, and tracking of assigned aircraft engines. This instruction applies to SRAN 6656. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Air Force Form (AF) 847 from the field through the appropriate functional's chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, Management of Records, and disposed of in accordance with the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afirms/afirms>.

**1. Responsibilities:** Unit Engine Manager will assume management responsibility for all Engine Shipments and Receipts. Unit Engine Manager will also assume the Stock Record Account Number (SRAN) Engine Monitor responsibilities.

**2. Procedures:**

2.1. Determine engine shipping requirements based on failure mode, operating time, repair restrictions, and asset availability.

2.2. Coordinate with the AFRC Command Engine Manager for all Engine movements, including redistribution, transfers, 2LM inputs, stock level adjustments, and warranty work.

- 2.3. Obtain AFRC engine control number from the Command Engine Manager for tracking, control, and movement purposes; post on engine shipping document Department of Defense Form 1149 (DD1149 all acronyms must be spelled out the first time they are used).
- 2.4. Preserve/package engine IAW T.O. 2J-1-18 (Engine Shipping Instructions) and initiate shipping document, DD Form 1149. (72-hour shipment required for 2LM engine inputs.)
- 2.5. Notify the Traffic Management Office (TMO) Section supervisor that engine shipment is required (air or surface) and provide shipping documentation (DD1149) for transportation processing. For air shipment, coordinate with TMO Section on preparation of the Shipper's Declaration of Dangerous Goods.
- 2.6. Report to Comprehensive Engine Management System (CEMS), shipment transaction, and the date/time engine was accepted by the TMO Section as recorded on the DD1149.
- 2.7. Provide the Equipment Management Section a copy of the shipping document (DD1149) to process engine stand/trailer (adjust equipment level) for shipment/receipt actions.
- 2.8. Provide support personnel to assist in positioning and loading of engine, as workload permits.
- 2.9. Upon receipt of engine from TMO Section, check Station Record Account Number for correct "ship to" (FJ6656), ensure proper engine and Quick Engine Change (QEC) configuration, complete external damage assessment (including stand/trailer), process receipt transaction in the CEMS database.
- 2.10. Perform annual Engine Management training to personnel who will report engine status or are responsible for engine documentation and scheduling using Computer Based Training (CBT) Training Course at <https://cews.tinker.af.mil/cbt/cbt.htm>
- 2.11. Ensure that all personnel within Propulsion Branch report engine, module, prop, and component actions to Engine Management no later than the close of business of the next business day after the transaction occurs. (Note: all CEMS transactions will be accomplished as soon as possible.)

### **3. TMO Responsibilities (Engine Shipments and Receipts):**

- 3.1. Receives notification and required copy of the shipping document (DD1149) from the Unit Engine Manager or alternate 910th Propulsion (MXMP) personnel. Confirms shipping method (air or surface) and required delivery date.
- 3.2. Weigh and mark engine as required for air/surface shipment. Inspect engine and trailer for proper preparation and packaging. For air shipment, ensures Shipper's Declaration of Dangerous Goods is prepared and signed by a qualified individual authorized by the Squadron Commander.
- 3.3. Accepts engine for shipment (air or surface), generates cargo manifest and load plans as applicable IAW aircraft directives, and transports and loads engines for required shipment (air or surface).
- 3.4. Orders air-ride equipped vehicle for surface movement of engine (72-hour movement required for 2LM engine input). Provide and install required shoring/blocking for engine shipping security.

- 3.5. Provide one signed copy of the shipping document (DD1149) to the Unit Engine Manager for shipment transaction in the CEMS database.
- 3.6. Transportation funding is required on all engine surface shipments.
- 3.7. Engines arriving on base (air or surface) at receiving will be off-loaded, appropriate transportation documentation completed, and Unit Engine Manager notified of receipt.

**4. Unit Engine Manager/SRAN Engine Manager Responsibilities:**

- 4.1. Maintain the Maintenance Information System/Comprehensive Engine Management System database for Station Record Account FJ6656. Ensures compliance with all prescribing Comprehensive Engine Management directives, policies and procedures from the AFRC Command Engine Manager.
- 4.2. Inputs all reportable transactions on unit assigned aircraft, spare assets and tracked components using AF1534 and Maintenance Information System (MIS) reporting system in a timely manner, monitors/schedules required inspection and time change actions, ensures all engine maintenance requirements are coordinated with appropriate agencies and functions. Coordinates with Plans and Scheduling Documentation Section on engine related Time Compliance Technical Order (TCTO)s. During extended deployments of assigned aircraft, designates engine monitors from the 910th MXMP Section to assimilate and input/forward required engine maintenance data such as serially controlled engine or engine component replacement documentation transactions using local established Deployed Component Change Work Sheets. Methods of communication will be by telephone message, e-mail, or FAX.
- 4.3. Reconciles CEMS database (direct line reporting) to reflect the most current and correct engine information available. Takes immediate action to correct all reporting errors and variances.
- 4.4. In the event of interruption of service or connectivity problems (more than 48 hours) of direct line reporting to the Central Data Base (CDB), AF1534 documentation will be required to reflect engine status changes and forwarded to the CDB for updating. Air Force Technical Order (AFTO) Form 349 will be used for MIS (G0-81) to reflect engine status changes.
- 4.5. Cannibalization of engine components will be directed by the Cannibalization Authority (Production Superintendent) and will be coordinated between Maintenance Operational Control (MOC), Maintenance Supply Liaison (MSL), Propulsion Flight Chief or Shop Supervisor, and Unit Engine Manager. MOC will issue a Job Control Number (JCN) and input into G081, MSL will transfer the original Supply Document Number to the Cannibalization JCN.

STEPHEN J. LINSENMEYER, Col, USAFR  
Commander

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

AFI 21-101, *Aerospace Equipment Maintenance Management*, 26 July 2010

***Prescribed Forms***

AF Form 1534, *CEMS CDB REPORT*, 1 Oct 1991

***Abbreviations and Acronyms***

**910th MXMP**—Propulsion

**AF**—Air Force Form

**AFI**—Air Force Instruction

**AFMAN**—Air Force Manual

**AFRC**—Air Force Reserve Command

**AFRCSUP**—Air Force Reserve Command Supplement

**AFRIMS**—Air Force Records Information Management System

**AFTO**—Air Force Technical Order

**CDB**—Central Data Base

**CBT**—Computer Based Training

**CEMS**—Comprehensive Engine Management System

**DD**—Department of Defense Form

**IAW**—In Accordance With

**JCN**—Job Control Number

**MIS**—Maintenance Information System

**MOC**—Maintenance Operational Control

**MSL**—Maintenance Supply Liaison

**OPR**—Office of Primary Responsibility

**QEC**—Quick Engine Change

**RDS**—Records Disposition Schedule

**SRAN**—Stock Record Account Number

**T.O.**—Technical Order

**TCTO**—Time Compliance Technical Order

**TMO**—Traffic Management Office

**2LM**—Two Level Maintenance

**Attachment 2**

**DEPLOYED ENGINE/COMPONENT CHANGE WORKSHEET**

DEPLOYED ENGINE/COMPONENT CHANGE WORK SHEET

Date\_\_\_\_\_

Engine Serial Number\_\_\_\_\_

Reason Removed\_\_\_\_\_

Provide all information from the Deployed Location to the Engine Manager no later than the close of business on the First Duty Day after the Event (e.g., Removals, Installations, Updates, TCTO's, CANN Actions, etc.).

E-Mail information to Engine Manager or any Supervisor at 910th Propulsion Shop Youngstown Air Reserve Station, Ohio

Marlon.Richmond1@us.af.mil

Thomas.Seger1@us.af.mil

FAX information to 910th Propulsion Shop DSN 346-1896 Attention: Engine Manager.

Phone Message to DSN 346-1024/1328/1812.

MSgt Marlon Richmond

910th CEMS Engine Manager

Youngstown, Air Reserve Station, Ohio 44484

SRAN 6656

DSN 346-1024/1328/1812

COMM: 330 609-1024/1328/1812



