

5 February 1993

**FLIGHT LINE MAINTENANCE**

**(C-141)**

1. **Objective.** As prescribed in AFR 8-10, this Air National Guard Manpower Standard (ANGMS) quantifies the full-time manpower requirement to accomplish the tasks described in the work center description for varying levels of workload volume.
2. **Authority.** Air National Guard (ANG) Regulation 66-14 contains ANG policy and procedural guidance for the Flight Line Maintenance work center. This ANGMS has been developed in accordance with procedures contained in AFR 25-5, 16 May 88. This ANGMS is a result of a functional review.
3. **Applicability.** This standard applies to ANG C-141 Air Mobility Command gained flying units. This standard applies only to peacetime operations.
4. **Standard Data:**
  - a. **Classification.** Type III.
  - b. **Approval Date.** 4 Jan 93.
  - c. **Man-Hour Data Source.** Operational Audit (historical record and technical estimate techniques).
  - d. **Standard Man-Hour Equation.**  $Y = 466.0 + 316.1X_1 + 1.400X_2$ .
  - e. **Workload Factors:**
    - (1) **Title:**
      - (a)  $X_1$ . A C-141 Aircraft Authorized.
      - (b)  $X_2$ . A Programmed Flying Hour.
    - (2) **Definition:**
      - (a)  $X_1$ . The average monthly C-141 aircraft authorized.
      - (b)  $X_2$ . The average monthly programmed flying hours.
    - (3) **Source of Count:**
      - (a)  $X_1$ . USAF Program Document (PD), Volume II, maintained by NGB/FM.
      - (b)  $X_2$ . USAF Program Document (PD), Volume II, maintained by NGB/FM.
5. **Application Instructions:**
  - a. The valid man-hour range for this ANGMS is 2604.81 through 4341.35. Should the extrapolation limits be exceeded, see AFR 26-1, Volume 3, paragraph 1-20 for guidance.
  - b. The AF Form 1113, Standard Manpower Table, is an aggregate of total manpower by specialty title and Air Force Specialty Code (AFSC). The application instructions are as follows:
    - (1) Determine the values for the two workload factors (WLF) identified in paragraph 4e.
    - (2) Substitute the appropriate WLF value into the man-hour equation for  $X_1$  and  $X_2$ .
    - (3) Divide the total man-hours by the current civilian man-hour availability factor to determine total requirements.
  - c. Fractional manpower requirements resulting from application of this standard will not be aggregated.
6. **Statement of Conditions.** This work center's normal hours of operation are 8 hours a day, 5 days a week. There are no other standard of living constraints which affect the daily operation of this work center.

**PUBLISHED UNDER AUTHORITY OF THE SECRETARY OF THE AIR FORCE**

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**No. of Printed Pages: 4**  
**OPR: ANGRC/XPME (Maj Castleberry)**  
**Approved by: Lt Gen Conaway**  
**Edited by: Ms. N. Salch**  
**Distribution: F, X**

**WORK CENTER DESCRIPTION****Flight Line Maintenance****(C-141)****DIRECT:****1. FLIGHT LINE MAINTENANCE:**

**1.1. PERFORMS PREFLIGHT INSPECTION.** Performs aircraft preflight servicing, inspection, and maintenance. Reviews/updates AFTO Form 781, AFORM Aircrew/Mission Flight Data Document.

**1.2. PERFORMS THROUGH-FLIGHT INSPECTION.** Performs aircraft servicing, inspection, and maintenance. Reviews/updates AFTO Form 781 series.

**1.3. PERFORMS BASIC POST-FLIGHT (BPO) INSPECTION.** Performs aircraft BPO inspection and maintenance.

**1.4. PERFORMS SPECIAL INSPECTION.**

**2. ISOCHRONAL INSPECTION.** Accompanies aircraft through look-phase and fix-phase inspection and attends pre/post inspection meeting.

**2.1. PERFORMS AIRCRAFT MAJOR INSPECTION.**

**2.2. PERFORMS AIRCRAFT MINOR INSPECTION.**

**2.3. PERFORMS AIRCRAFT HOME STATION CHECK INSPECTION.**

**2.4. PERFORMS AIRCRAFT REFURBISHMENT INSPECTION.**

**3. GROUND HANDLING, SERVICING, AND RELATED TASK.** Tows, positions, and parks aircraft, and performs general maintenance not included in categories 1 and 2.

**3.1. REFUELS/DEFUELS AIRCRAFT FOR MAINTENANCE.**

**3.2. SERVICES OXYGEN SYSTEM.**

**3.3. PERFORMS ENGINE RUN-UP.**

**3.4. TOWS AND POSITIONS AIRCRAFT.**

**3.5. PERFORMS AIRCRAFT JACKING.**

**3.6. PERFORMS AFTER-WASH LUBRICATION.**

**3.7. PERFORMS AIRCRAFT LAUNCH AND RECOVERY.**

**4. CORRECTIVE AND PREVENTATIVE MAINTENANCE:**

**4.1. PREPARES AIRCRAFT FOR CLEANING.** Prepares aircraft for cleaning to include washing, decontamination, and frost and ice removal.

**4.2. PERFORMS AIRCRAFT AIRFRAME MAINTENANCE.**

**4.3. PERFORMS FUSELAGE COMPARTMENT AREA MAINTENANCE.** Refurbishes aircraft exterior, interior surface, and furnishing.

**4.4. REMOVES/REPLACES WHEEL, TIRE, BRAKE, AND ANTISKID SYSTEM.**

**4.5. PERFORMS FLIGHT CONTROL MAINTENANCE.**

**4.6. PERFORMS TURBOFAN POWER PLANT (TF-33) MAINTENANCE.**

- 4.7. PERFORMS AUXILIARY POWER PLANT MAINTENANCE.
- 4.8. PERFORMS MAINTENANCE ON AIR CONDITIONING, PRESSURIZATION, AND SURFACE ICE CONTROL SYSTEM.
- 4.9. PERFORMS MAINTENANCE ON ELECTRICAL POWER SUPPLY SYSTEM.
- 4.10. REMOVES/REPLACES LIGHTING SYSTEM COMPONENT.
- 4.11. PERFORMS MAINTENANCE ON HYDRAULIC POWER SUPPLY SYSTEM.
- 4.12. PERFORMS FUEL SYSTEM MAINTENANCE.
- 4.13. PERFORMS OXYGEN SYSTEM MAINTENANCE.
- 4.14. PERFORMS MISCELLANEOUS UTILITY MAINTENANCE.
- 4.15. PERFORMS INSTRUMENT COMPONENT MAINTENANCE.
- 4.16. PERFORMS MALFUNCTION ANALYSIS COMPONENT MAINTENANCE.
- 4.17. PERFORMS INTERPHONE SYSTEM COMPONENT MAINTENANCE.
- 4.18. PERFORMS RADIO NAVIGATION SYSTEM COMPONENT MAINTENANCE.
- 4.19. PERFORMS EMERGENCY EQUIPMENT MAINTENANCE.
- 5. **TIME COMPLIANCE TECHNICAL ORDER (TCTO).** Accomplishes directed TCTO and completes documentation.
- 6. **DIRECT LABOR MAINTENANCE.** Assists in the performance of direct labor maintenance requirement to ensure effective utilization of maintenance personnel.
- 7. **DEBRIEFING.** Attends aircrew debriefing.
- 8. **AIRCRAFT DOCUMENTATION.** Prepares and maintains aircraft documentation.
- 9. **UNIT TRAINING ASSEMBLY (UTA) AND MOBILITY REQUIREMENT.** Performs planning/scheduling task associated with preparation for UTA weekend and mobility requirement.
- 10. **COMPOSITE TOOL KIT (CTK) MAINTENANCE.** Performs maintenance on CTK to include scheduling of Precision Measuring Equipment for calibration. Ensures availability and serviceability of part/kit.
- 11. **FLIGHT LINE MAINTENANCE EXPEDITER WORKLOAD.** Controls/monitors maintenance in progress and coordinates requirement status with Job Control.

**INDIRECT:** Indirect work involves those tasks that are not readily identifiable with the work center's specific product or service. The major categories of standard indirect work are Supervision, Administration, Meeting, Training, Supply, Equipment Maintenance, and Cleanup. See AFMS 00AA for the standard indirect description.

| STANDARD MANPOWER TABLE        |       |       |                              |    |    |    |    |    |    |    |    |
|--------------------------------|-------|-------|------------------------------|----|----|----|----|----|----|----|----|
| WORK CENTER/FAC                |       |       | APPLICABILITY MAN-HOUR RANGE |    |    |    |    |    |    |    |    |
| Flight Line Maintenance/22110A |       |       | 2604.81 - 4341.35            |    |    |    |    |    |    |    |    |
| AIR FORCE SPECIALTY TITLE      | AFSC  | GRADE | MANPOWER REQUIREMENT         |    |    |    |    |    |    |    |    |
| Aircraft Maintenance           | 452XX | CIV   | 2                            | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| Airlift Acft Maint             | 457X2 | CIV   | 16                           | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| <b>TOTAL</b>                   |       |       | 18                           | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| AIR FORCE SPECIALTY TITLE      | AFSC  | GRADE | MANPOWER REQUIREMENT         |    |    |    |    |    |    |    |    |
| Aircraft                       | 452XX | CIV   | 2                            | 2  | 2  |    |    |    |    |    |    |
| Airlift Acft Maint Tech        | 457X2 | CIV   | 25                           | 26 | 27 |    |    |    |    |    |    |
| <b>TOTAL</b>                   |       |       | 27                           | 28 | 29 |    |    |    |    |    |    |

AF FORM 1113, Jun 91 (COMPUTER GENERATED). PREVIOUS EDITION IS OBSOLETE.