

JET ENGINE/PROPELLER

(C-130E)

-
1. **Objective.** As prescribed in AFI 38-201, *Determining Manpower Requirements*, this Air National Guard Manpower Standard (ANGMS) quantifies the full-time manpower required to accomplish the tasks described in the work center description for varying levels of workload volume.
 2. **Authority.** The AFI 21-series of Air Force (AF) and/or Air National Guard (ANG) directives contain US Air Force and Command policy and procedural guidance for the Jet Engine/Propeller work center. This manpower standard was developed using the functional review process under procedures outlined in AFPAM 38-208V1, *Air Force Management Engineering Program (MEP) Processes*, formerly AFR 25-5.
 3. **Applicability.** This standard applies to all Air National Guard C-130E airlift units except the 109th and 189th Airlift Groups, and the 193rd Special Operations Group. This standard only applies to peacetime operations.
 4. **Standard Data:**
 - a. **Classification.** Type II.
 - b. **Approval Date.** 9 July 1992.
 - c. **Man-hour Data Source.** Operational Audit method (historical record and technical estimate techniques).
 - d. **Standard Man-hour Equation.** $Y = 917.6 + 2.304X$.
 - e. **Workload Factor:**
 - (1). **Title.** A C-130E Programmed Flying Hour.
 - (2). **Definition.** The average monthly programmed flying hours.
 - (3). **Source.** USAF Program Document, Volume II, maintained by NGB/FM.
 5. **Application Instructions:**
 - a. The valid man-hour range for this ANGMS is 1170.85 through 2014.49.
 - b. This ANGMS is appropriate for use with all peacetime civilian man-hour availability factors.
 - c. Refer to the appropriate column in the standard manpower table at attachment 2 to determine the skill distribution.
 - d. Should the extrapolation limits be exceeded, see AFI 38-201, *Determining Manpower Requirements*, for guidance.
 6. **Statement of Conditions:**
 - a. There were no general conditions (environmental, equipment, or facility) which had an impact on the development or application of this manpower standard.
 - b. There were no approved enhancements that impacted the man-hour equation for this work center.

**DONALD W. SHEPPERD
Major General, USAF
Director, Air National Guard**

OFFICIAL

**DEBORAH GILMORE
Chief
Administrative Services**

**2 Attachments
1. Work Center Description
2. Standard Manpower Table**

WORK CENTER DESCRIPTION**Jet Engine/Propeller
(C-130E)****DIRECT:****1. ON-EQUIPMENT MAINTENANCE:**

1.1. MAINTAINS TURBOPROP POWER PLANT SYSTEM. Inspects, troubleshoots, and repairs on-equipment.

1.1.1. MAINTAINS NACELLE SYSTEM.

1.1.2. MAINTAINS ACCESSORY DRIVE SECTION.

1.1.3. MAINTAINS COMPRESSOR SECTION.

1.1.4. REMOVES AND REPLACES ENGINE AND QUICK ENGINE CHANGE.

1.1.5. MAINTAINS COMBUSTION SECTION.

1.1.6. MAINTAINS TURBINE SECTION.

1.1.7. MAINTAINS MAIN FUEL SYSTEM.

1.1.8. MAINTAINS REDUCTION GEAR SYSTEM.

1.1.9. MAINTAINS AIR INDUCTION SYSTEM.

1.1.10. MAINTAINS EXHAUST SECTION.

1.1.11. MAINTAINS IGNITION AND ELECTRICAL SYSTEM.

1.1.12. MAINTAINS ENGINE CONTROL SYSTEM.

1.1.13. MAINTAINS STARTER SYSTEM.

1.1.14. MAINTAINS ENGINE INSTRUMENT SYSTEM.

1.1.15. MAINTAINS ENGINE MOUNT AND NACELLE.

1.1.16. MAINTAINS AUXILIARY POWER UNIT.

1.1.17. MAINTAINS PROPELLER INSTALLATION ASSEMBLY:

1.1.17.1. MAINTAINS PACKING-BLADE RING/PACKING SEAT/PROPELLER.

1.1.17.2. MAINTAINS CONTROL COMPONENT.

1.1.17.3. MAINTAINS ELECTRICAL COMPONENT.

1.1.17.4. MAINTAINS PROPELLER CONTROL.

1.1.17.5. MAINTAINS LOW PITCH STOP.

1.1.17.6. MAINTAINS LOCK REGULATOR.

1.1.18. MAINTAINS FUEL FLOW TRANSMITTER.

1.1.19. MAINTAINS GENERATOR.

1.1.20. MAINTAINS HYDRAULIC PUMP.

1.1.21. MAINTAINS ANTI-ICING AND DE-ICING SYSTEM.

1.2. PERFORMS SUPPORT GENERAL MAINTENANCE:

1.2.1. PERFORMS SPECIAL INSPECTION.

1.2.2. PERFORMS ISOCHRONAL INSPECTION.

1.2.3. PERFORMS HOME STATION CHECK.

1.2.4. MAINTAINS AEROSPACE GROUND EQUIPMENT (AGE).

2. SHOP SUPPORT GENERAL CODE:

2.1. PERFORMS BUILDUP AND TEAR DOWN OF ENGINE.

2.2. PERFORMS BUILDUP AND TEAR DOWN OF PROPELLER.

2.3. PERFORMS TEST CELL RUN-UP.

2.4. PREPARES ENGINE/PROPELLER FOR STORAGE OR SHIPMENT.

3. AIRCRAFT RUN-UP. Performs aircraft run-up.

4. TIME COMPLIANCE TECHNICAL ORDER (TCTO). Performs maintenance required on/off the aircraft in accordance with applicable TCTO and completes documentation.

5. UNIT TRAINING ASSEMBLY (UTA), MOBILITY REQUIREMENT, AND BATTLE DAMAGE PROGRAM. Performs planning and scheduling tasks associated with preparation for UTA weekend, mobility requirement, and the Battle Damage Program.

6. COMPREHENSIVE ENGINE MANAGEMENT SYSTEM (CEMS). Accomplishes CEMS.

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							
Jet Engine Propeller/ 23230E (C-130E)			1170.85 - 2014.49							
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT							
Aircraft Aerospace Propulsion	452XX	Civ	1	1	1	1	1	1	1	
	454XXB	Civ	7	8	9	10	11	12	13	
TOTAL			8	9	10	11	12	13	14	
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT							
TOTAL										