BY ORDER OF THE CHIEF,
NATIONAL GUARD BUREAU

ANGMS 23330E
2 MARCH 1995

ELECTRICAL/ENVIRONMENTAL SYSTEMS

(C-130E)

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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 Electrical/Environmental Systems work center. This manpower standard was developed using the functional review process under procedures outlined in AFPAM 38-201V1, *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. $Y = -222.3 + 2.298X$.
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 237.34 through 419.22.
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, 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.

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OFFICIAL

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

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Certified by: NGB/CF (Col P. S. Kimmel)
Pages: 6/Distribution: F, X

WORK CENTER DESCRIPTION

Electrical/Environmental Systems
(C-130E)

DIRECT:

1. ON-EQUIPMENT ENVIRONMENTAL SYSTEMS MAINTENANCE:

1.1. MAINTAINS AIR CONDITIONING, PRESSURIZATION, AND SURFACE ICE CONTROL SYSTEM. Inspects, troubleshoots, and repairs equipment.

1.1.1. MAINTAINS AIR CONDITIONING SYSTEM.

1.1.2. MAINTAINS PRESSURIZATION SYSTEM.

1.1.3. MAINTAINS BLEED AIR SYSTEM.

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

1.1.5. MAINTAINS TEMPERATURE AND PRESSURE INSTRUMENT SYSTEM.

1.1.6. MAINTAINS UNDERFLOOR HEATING SYSTEM.

1.2. MAINTAINS FIRE EXTINGUISHER SYSTEM.

1.3. MAINTAINS OXYGEN SYSTEM. Inspects, troubleshoots, and repairs oxygen system.

1.3.1. MAINTAINS FIXED OXYGEN SYSTEM.

1.3.2. MAINTAINS LIQUID OXYGEN SYSTEM.

1.3.3. MAINTAINS PORTABLE OXYGEN SYSTEM.

1.4. PERFORMS INSPECTION. Performs special, phase, and hourly aircraft inspection.

1.4.1. PERFORMS SPECIAL INSPECTION.

1.4.2. PERFORMS PHASE/HOURLY INSPECTION.

1.5. MAINTAINS AIR TURBINE MOTOR SYSTEM.

1.6. MAINTAINS FIRE EXTINGUISHER SQUIB.

2. OFF-EQUIPMENT ENVIRONMENTAL SYSTEMS MAINTENANCE:

2.1. MAINTAINS AIR CONDITIONING, PRESSURIZATION, AND SURFACE ICE CONTROL SYSTEM. Inspects, troubleshoots, and repairs equipment.

2.1.1. MAINTAINS AIR CONDITIONING SYSTEM.

2.1.2. MAINTAINS PRESSURIZATION SYSTEM.

2.1.3. MAINTAINS BLEED AIR SYSTEM.

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

2.1.5. MAINTAINS TEMPERATURE AND PRESSURE INSTRUMENT SYSTEM.

2.1.6. MAINTAINS UNDERFLOOR HEATING SYSTEM.

2.2. MAINTAINS OXYGEN SYSTEM. Inspects, troubleshoots, and repairs oxygen system.

2.2.1. MAINTAINS FIXED OXYGEN SYSTEM.

2.2.2. MAINTAINS LIQUID OXYGEN SYSTEM.

2.2.3. MAINTAINS PORTABLE OXYGEN SYSTEM.

2.3. MAINTAINS ATM SYSTEM.

2.4. MAINTAINS FIRE EXTINGUISHER SQUIB.

2.5. MAINTAINS FIRE EXTINGUISHER SYSTEM.

3. ON-EQUIPMENT ELECTRICAL SYSTEMS MAINTENANCE:

3.1. MAINTAINS ELECTRICAL POWER SUPPLY SYSTEM. Inspects, troubleshoots, and repairs on-equipment.

3.1.1. MAINTAINS POWER SUPPLY, DIRECT CURRENT (DC).

3.1.2. MAINTAINS POWER SUPPLY, ALTERNATING CURRENT (AC).

3.1.3. MAINTAINS DISTRIBUTION SYSTEM.

3.1.4. MAINTAINS INVERTER HIRAN SYSTEM.

3.1.5. MAINTAINS INVERTER SYSTEM.

3.1.6. MAINTAINS INSTRUMENT SYSTEM.

3.1.7. MAINTAINS ELECTRICAL GROUP A.

3.1.8. MAINTAINS ENGINE ELECTRICAL SYSTEM:

3.1.8.1. MAINTAINS TURBO PROP POWER PLANT ELECTRICAL SYSTEM.

3.1.8.2. MAINTAINS AUXILIARY POWER PLANT ELECTRICAL SYSTEM.

3.1.8.3. MAINTAINS HYDRAULIC PROPELLER ELECTRICAL SYSTEM.

3.2. MAINTAINS LIGHTING SYSTEM. Inspects, troubleshoots, and repairs on-equipment.

3.2.1. MAINTAINS INTERIOR LIGHTING SYSTEM.

3.2.2. MAINTAINS EXTERIOR LIGHTING SYSTEM.

3.2.3. MAINTAINS EMERGENCY EXIT LIGHTING SYSTEM.

3.3. MAINTAINS LANDING GEAR. Inspects, troubleshoots, and repairs on-equipment.

3.3.1. MAINTAINS LANDING GEAR ELECTRICAL COMPONENT.

3.3.2. MAINTAINS MAIN LANDING GEAR.

3.3.3. MAINTAINS BRAKE SYSTEM.

3.4. MAINTAINS FLIGHT CONTROL SYSTEM. Inspects, troubleshoots, and repairs on-equipment.

3.5. PERFORMS INSPECTION. Performs special, phase, or hourly aircraft inspection.

3.5.1. PERFORMS SPECIAL INSPECTION.

3.5.2. PERFORMS PHASE OR HOURLY INSPECTION.

3.6. MAINTAINS FIRE EXTINGUISHER. Maintains fire warning and overheat system.

3.7. MAINTAINS AIR FRAME ELECTRICAL SYSTEM.

3.8. MAINTAINS COCKPIT AND FUSELAGE ELECTRICAL SYSTEM.

3.9. MAINTAINS AIR CONDITIONING, PRESSURIZATION, AND SURFACE ICE CONTROL ELECTRICAL SYSTEM.

3.10. MAINTAINS FUEL ELECTRICAL SYSTEM.

3.11. MAINTAINS HYDRAULIC AND PNEUMATIC POWER SUPPLY ELECTRICAL SYSTEM.

4. OFF-EQUIPMENT ELECTRICAL SYSTEMS MAINTENANCE:

4.1. MAINTAINS ELECTRICAL POWER SUPPLY SYSTEM. Inspects, troubleshoots, and repairs off-equipment.

4.1.1. MAINTAINS POWER SUPPLY, DC.

4.1.2. MAINTAINS POWER SUPPLY, AC.

4.1.3. MAINTAINS ENGINE ELECTRICAL SYSTEM.

4.2. MAINTAINS FUEL ELECTRICAL SYSTEM.

4.3. MAINTAINS COCKPIT AND FUSELAGE ELECTRICAL SYSTEM.

4.4. MAINTAINS LANDING GEAR ELECTRICAL SYSTEM.

4.5. MAINTAINS FLIGHT CONTROL ELECTRICAL SYSTEM.

4.6. MAINTAINS LIGHTING SYSTEM.

4.7. MAINTAINS FIRE EXTINGUISHER ELECTRICAL SYSTEM.

5. PERIODIC MAINTENANCE OF ELECTRICAL EQUIPMENT IN BASE SUPPLY. Performs periodic functional check or calibration of equipment stored in Base Supply to maintain shelf life and to ensure serviceability before use.

6. NONPOWERED AEROSPACE GROUND EQUIPMENT (AGE). Maintains AGE.

7. SHOP SUPPORT GENERAL CODE. Performs shop support general code.

8. GROUND HANDLING, SERVICING, AND RELATED TASK. Performs ground handling, servicing, and related task.

9. ASSISTANCE. Assists other Maintenance function in the performance of direct labor maintenance requirement to ensure effective utilization of maintenance personnel.

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

11. 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.

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
Electrical/Environmental/ 23330E (C-130E)	237.34 - 419.22

AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT								
Systems	454X0	Civ	1	1							
Airlift Elect & Envir Sys	454X5	Civ	1	2							
TOTAL			2	3							

AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT								
TOTAL											

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