

ELECTRO-ENVIRONMENTAL SYSTEMS

(F-16)

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1. **Objective.** As prescribed in AFI 38-201, *Determining Manpower Requirements*, this Air National Guard Manpower Standard (ANGMS) quantifies the manpower required to accomplish the tasks described in the work center description for varying levels of workload.
  2. **Authority.** Air National Guard Regulation 66-14, *Maintenance Management*, 13 July 1988, contains policy and procedural guidance for the Electro-Environmental Systems work center. This ANGMS has been developed in accordance with functional review procedures contained in AFPAM 38-208V1, *Air Force Management Engineering Program (MEP) Processes*, (formerly AFR 25-5).
  3. **Applicability.** Applies to ANG F-16 Fighter Wings, Groups, and the 114th Fighter Squadron. It excludes the 162nd Fighter Group and the 184th Fighter Group. This standard only applies to peacetime operations.
  4. **Standard Data:**
    - a. Classification. Type II.
    - b. Approval Date. 1 August 1992.
    - c. Man-hour Data Source. Operational Audit method (historical record and technical estimate techniques).
    - d. Standard Man-hour Equation.  $Y = 10.46 + 2.466X$ .
    - e. Workload Factor:
      - (1) Title. A 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 643.67 through 1339.72.
    - b. This ANGMS is appropriate for use with all peacetime civilian man-hour availability factors.
    - c. Determine the whole manpower requirements for this work center and refer to the appropriate column in the standard manpower table at attachment 2 to determine the required specialties.
  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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2 Attachments  
1. Work Center Description  
2. Standard Manpower Table

**WORK CENTER DESCRIPTION****Electro-Environmental Systems****(F-16)****DIRECT:****1. ON-EQUIPMENT MAINTENANCE:**

**1.1. MAINTAINS CREW STATION SYSTEM.** Inspects, troubleshoots, repairs, adjusts, removes, replaces, modifies, and performs functional check on-equipment.

**1.1.1. MAINTAINS COCKPIT SUPPORT STRUCTURE.**

**1.1.2. MAINTAINS CANOPY SUBSYSTEM.**

**1.1.3. MAINTAINS EJECTION SEAT SYSTEM.**

**1.1.4. MAINTAINS CREW COMPARTMENT RELAY MATRIX ASSEMBLY GROUP.**

**1.2. MAINTAINS LANDING GEAR.** Inspects, troubleshoots, repairs, adjusts, removes, replaces, and performs functional check on-equipment.

**1.2.1. MAINTAINS MAIN LANDING GEAR.**

**1.2.2. MAINTAINS NOSE LANDING GEAR.**

**1.2.3. MAINTAINS ARRESTING HOOK SYSTEM.**

**1.2.4. MAINTAINS BRAKE AND SKID CONTROL SYSTEM.**

**1.2.5. MAINTAINS LANDING GEAR CONTROL SYSTEM.**

**1.3. MAINTAINS FLIGHT CONTROL SYSTEM.** Inspects, troubleshoots, repairs, adjusts, removes, replaces, and performs functional check on-equipment.

**1.4. MAINTAINS TURBOFAN POWER PLANT ELECTRICAL SYSTEM.** Inspects, troubleshoots, repairs, adjusts, removes, replaces, and performs functional check on-equipment.

**1.5. MAINTAINS AUXILIARY POWER PLANT (EPU) AND JET FUEL STARTER (JTS) ELECTRICAL SYSTEM.** Inspects, troubleshoots, repairs, adjusts, removes, replaces, and performs functional check on-equipment.

**1.6. MAINTAINS ENVIRONMENTAL CONTROL SYSTEM.** Inspects, troubleshoots, repairs, adjusts, removes, replaces, and performs functional check on-equipment.

**1.7. MAINTAINS ELECTRICAL POWER SUPPLY SYSTEM.** Inspects, troubleshoots, repairs, adjusts, removes, replaces, and performs functional check on-equipment.

**1.8. MAINTAINS LIGHTING SYSTEM.** Inspects, troubleshoots, repairs, adjusts, removes, replaces, and performs functional check on-equipment.

**1.8.1. MAINTAINS EXTERIOR LIGHTING SYSTEM.**

**1.8.2. MAINTAINS INTERIOR LIGHTING SYSTEM.**

**1.8.3. MAINTAINS LIGHT ASSEMBLY.**

**1.9. MAINTAINS HYDRAULIC POWER SUPPLY ELECTRICAL SYSTEM.** Inspects, troubleshoots, repairs, adjusts, removes, replaces, and performs functional check on-equipment.

**1.10. MAINTAINS FUEL SYSTEM.** Inspects, troubleshoots, repairs, adjusts, removes, replaces, and performs functional check on-equipment.

**1.11. MAINTAINS LIQUID OXYGEN SYSTEM SUPPLY AND DISTRIBUTION.** Inspects, troubleshoots, repairs, adjusts, removes, replaces, and performs functional check on-equipment.

**1.12. MAINTAINS MISCELLANEOUS UTILITY.** Inspects, troubleshoots, repairs, adjusts, modifies, and performs functional check on-equipment.

**1.12.1. MAINTAINS FIRE DETECTION SYSTEM.**

**1.12.2. MAINTAINS OVERHEAT DETECTION SYSTEM.**

**1.13. MAINTAINS POWER TO STORES MANAGEMENT SYSTEM.** Inspects, troubleshoots, repairs, removes, replaces, and performs functional check on-equipment.

**1.14. PERFORMS INSPECTION.** Performs special, phase, and hourly aircraft inspection.

**1.14.1. PERFORMS SPECIAL INSPECTION.**

**1.14.2. PERFORMS PHASE INSPECTION.**

**1.14.3. PERFORMS HOURLY INSPECTION.**

**2. OFF-EQUIPMENT.** Inspects, troubleshoots, repairs, adjusts, and performs functional check off-equipment.

**2.1. MAINTAINS CREW STATION ELECTRICAL SYSTEM.**

**2.2. MAINTAINS LANDING GEAR ELECTRICAL SYSTEM.**

**2.3. MAINTAINS TURBOFAN POWER PLANT, EPU, AND JFS ELECTRICAL SYSTEM.**

**2.4. MAINTAINS ENVIRONMENTAL CONTROL SYSTEM.**

**2.5. MAINTAINS ELECTRICAL POWER SUPPLY SYSTEM.**

**2.6. MAINTAINS LIGHTING SYSTEM.**

**2.7. MAINTAINS HYDRAULIC POWER SUPPLY ELECTRICAL SYSTEM.**

**2.8. MAINTAINS FUEL SYSTEM.**

**2.9. MAINTAINS LIQUID OXYGEN SYSTEM SUPPLY AND DISTRIBUTION.**

**2.10. MAINTAINS MISCELLANEOUS UTILITY.**

**3. NONPOWERED AEROSPACE GROUND EQUIPMENT (AGE) AND SHOP INDUSTRIAL EQUIPMENT MAINTENANCE.** Inspects and maintains nonpowered AGE and shop industrial equipment.

**4. TECHNICAL ORDER SUBACCOUNT MAINTENANCE.** Receives and posts data and change to technical order file. Maintains file for serviceability.

**5. GENERAL SHOP SUPPORT.** Performs shop support to include local manufacture items.

**6. MAINTENANCE ASSISTANCE.** Assists other maintenance function in the performance of direct labor maintenance requirement to ensure effective use of maintenance personnel.

**7. TIME-COMPLIANCE TECHNICAL ORDER (TCTO) MAINTENANCE.** Performs maintenance required on and off the aircraft in accordance with applicable TCTO and completes documentation.

**8. CO2 BOTTLE SERVICE.** Services life raft CO2 bottle.

**9. COMPOSITE TOOL KIT (CTK) MAINTENANCE.** Performs start and end of day inspection. Maintains CTK by inspecting for serviceability, performing corrosion control, and replacing tool.

**10. UNIT TRAINING ASSEMBLY (UTA) PREPARATION.** Performs planning and scheduling task associated with preparation for UTA.

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

STANDARD MANPOWER TABLE										
WORK CENTER/FAC			APPLICABILITY MAN-HOUR RANGE							
Electro-Environmental Systems/23330D			643.67 - 1339.72							
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT							
Aircraft	452X0	Civ	1	1	1	1	1			
Tac Electronic & Environ Systems	452X5	Civ	4	5	6	7	8			
TOTAL			5	6	7	8	9			
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT							
TOTAL										