

**FLIGHT LINE AVIONICS
(F-16 C/D)**

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- 1. Objective.** This standard is published as prescribed in AFI 38-201, *Determining Manpower Requirements*. 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 Regulation 66-14, *Maintenance Management*, 13 July 1988, contains policy and procedural guidance for the Flight Line Avionics work center. This ANGMS has been developed in accordance with procedures contained in AFPAM 38-208V1, *Air Force Management Engineering Program (MEP) Processes*, formerly AFR 25-5.
 - 3. Applicability.** Applies to all ANG Fighter Wings and Groups possessing F-16 C/D models. This standard applies to peacetime operations only.
 - 4. Standard Data:**
 - a. **Classification.** Type II.
 - b. **Approval Date.** 15 June 1994.
 - c. **Man-hour Data Source.** Operational Audit method (historical record and technical estimate techniques).
 - d. **Standard Man-hour Equation.** $Y = 79.85 + 6.039X$.
 - e. **Workload Factor:**
 - (1) **Title.** A Programmed Flying Hour.
 - (2) **Definition.** The average monthly 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 1569.61 through 3397.35.
 - 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 by substituting the appropriate workload value in paragraph 4e for the X value in the man-hour equation in paragraph 4d. The resultant number will be divided by the current civilian man-hour availability factor which will produce fractional manpower requirements. Use the fractional manpower table provided by ANGRC/XPME to determine requirements.
 - d. Refer to attachment 2, AF Form 1113, Standard Manpower Table, to determine specific Air Force specialties.
 - 6. Statement of Conditions.** The conditions listed below had no effect on the development of this standard, nor will they affect future applications. Analyses of these levels of service indicate no manpower impact:
 - a. Minimum response rates.
 - b. Minimum manpower levels.
 - c. Standardized crew complements.
 - d. Safety considerations.
 - e. Aircraft turn-around time.
 - f. Length of waiting periods.
 - g. Levels of backlog.
 - h. Hours of operation.

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

WORK CENTER DESCRIPTION

Flight Line Avionics (F-16 C/D)

DIRECT:

1. FIRE CONTROL SYSTEM MAINTENANCE. Inspects, troubleshoots, and repairs on-equipment.
 - 1.1. MAINTAINS FIRE CONTROL RADAR SYSTEM.
 - 1.2. MAINTAINS HEADS-UP DISPLAY SYSTEM.
 - 1.3. MAINTAINS FIRE CONTROL COMPUTER SYSTEM.
 - 1.4. MAINTAINS INERTIAL NAVIGATION SYSTEM.
 - 1.5. MAINTAINS AIRBORNE VIDEO TAPE RECORDER SYSTEM.
 - 1.6. MAINTAINS DATA TRANSFER EQUIPMENT.
 - 1.7. MAINTAINS DATA ENTRY/COCKPIT INTERFACE SET.
 - 1.8. MAINTAINS MULTI-FUNCTION DISPLAY SYSTEM.
 - 1.9. MAINTAINS COMBINED ALTITUDE RADAR ALTIMETER SYSTEM.
 - 1.10. MAINTAINS AVIONICS POWER PANEL SET.
 - 1.11. MAINTAINS A AND D MUX BUS SYSTEM.
 - 1.12. MAINTAINS THROTTLE GRIP ASSEMBLY.
2. INSTRUMENT AND FLIGHT CONTROL MAINTENANCE. Inspects, troubleshoots, and repairs on-equipment.
 - 2.1. MAINTAINS LANDING GEAR.
 - 2.2. MAINTAINS FLIGHT CONTROL SYSTEM:
 - 2.2.1. MAINTAINS PRIMARY FLIGHT CONTROL ELECTRONICS.
 - 2.2.2. MAINTAINS PRIMARY FLIGHT CONTROL ACTUATOR.
 - 2.2.3. MAINTAINS FLAPERON LIMIT SWITCH.
 - 2.2.4. MAINTAINS LEADING EDGE FLAP.
 - 2.2.5. MAINTAINS SPEEDBRAKE.

2.2.6. MAINTAINS AIR DATA SYSTEM.

2.2.7. MAINTAINS FLIGHT CONTROL RELAY MATRIX.

2.3. MAINTAINS ENGINE INSTRUMENT CONTROL:

2.3.1. MAINTAINS FUEL FLOW INDICATING SYSTEM.

2.3.2. MAINTAINS ENGINE INSTRUMENT.

2.4. MAINTAINS ENVIRONMENTAL CONTROL SYSTEM.

2.5. MAINTAINS ELECTRICAL POWER SUPPLY SYSTEM.

2.6. MAINTAINS AIRCRAFT FLIGHT INSTRUMENT SYSTEM:

2.6.1. MAINTAINS PRIMARY FLIGHT INSTRUMENT.

2.6.2. MAINTAINS ARTIFICIAL REFERENCE INSTRUMENT.

2.6.3. MAINTAINS SECONDARY INSTRUMENT.

2.6.4. MAINTAINS STANDBY INSTRUMENT.

2.6.5. MAINTAINS REFERENCE SELECTOR SUBSYSTEM.

2.6.6. MAINTAINS AIR DATA COMPUTER SYSTEM.

2.7. MAINTAINS CRASH SURVIVABLE FLIGHT DATA RECORDING SYSTEM.

3. COMMUNICATION, NAVIGATION, AND PENETRATION AID MAINTENANCE. Inspects, troubleshoots, and repairs on-equipment.

3.1. MAINTAINS VERY HIGH FREQUENCY SYSTEM AN/ARC 186.

3.2. MAINTAINS ULTRA HIGH FREQUENCY SYSTEM.

3.3. MAINTAINS INTERCOMMUNICATION SYSTEM.

3.4. MAINTAINS AIRCRAFT VOICE WARNING SYSTEM.

3.5. MAINTAINS IDENTIFICATION FRIEND OR FOE SYSTEM.

3.6. MAINTAINS SECURE SPEECH SYSTEM KY-58.

3.7. MAINTAINS MISCELLANEOUS COMMUNICATION EQUIPMENT.

3.8. MAINTAINS TACTICAL AIR NAVIGATION SYSTEM AN/ARN-118.

3.9. MAINTAINS INSTRUMENT LANDING SYSTEM AN/ARN-108.

3.10. MAINTAINS AIRCRAFT INTERFERENCE BLANKER SYSTEM.

3.11. MAINTAINS EXTERNAL ELECTRONIC COUNTERMEASURES POD SET.

3.12. MAINTAINS CHAFF/FLARE DISPENSER SYSTEM.

3.13. MAINTAINS RADAR THREAT WARNING SYSTEM .

4. MANUALLY TESTED EQUIPMENT MAINTENANCE. Maintains line removable units by inspecting, troubleshooting, aligning, modifying, and repairing.

4.1. MAINTAINS PILOT STICK GROUP ASSEMBLY.

4.2. MAINTAINS VERY HIGH FREQUENCY RADIO SYSTEM.

4.3. MAINTAIN ULTRA HIGH RADIO SYSTEM.

4.4. MAINTAINS SECURE VOICE SYSTEM.

4.5. MAINTAINS INTERCOMMUNICATIONS SYSTEM.

4.6. MAINTAINS IDENTIFICATION FRIEND OR FOE SYSTEM.

4.7. MAINTAINS MODE IV SYSTEM.

4.8. MAINTAINS TACAN SYSTEM.

4.9. MAINTAINS RING LASER GYRO INERTIAL NAVIGATION SYSTEM.

4.10. MAINTAINS COCKPIT TELEVISION VIDEO SYSTEM.

4.11. MAINTAINS ELECTRONIC COUNTERMEASURES POD ADAPTER.

4.12. MAINTAINS EMERGENCY BEACON RADIO.

5. AIRCRAFT INSPECTION. Performs special, phase, and hourly aircraft inspection.

5.1. PERFORMS SPECIAL INSPECTION. To include operational or confidence check.

5.2. PERFORMS PHASE/HOURLY INSPECTION.

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

7. TECHNICAL DATA SUBACCOUNT MAINTENANCE. Receives and posts data and changes to technical order file. Maintains file for serviceability.

8. HAZARDOUS WASTE MANAGEMENT PROGRAM:

8.1. PROCESSES HAZARDOUS WASTE. Identifies, labels, contains, and disposes of hazardous waste.

8.2. MAINTAINS COLLECTION FACILITY. Maintains hazardous waste accumulation point, satellite collection area, and container.

8.3. MAINTAINS PROTECTIVE EQUIPMENT. Inspects and maintains protective equipment.

9. BENCH SET AND MOCK-UP MAINTENANCE. Inspects, aligns, and repairs bench set, mock-up, and subsystem components.

10. HEADSET AND GROUND COMMUNICATIONS CORD MAINTENANCE. Performs periodic and required maintenance on headset and ground communications cord.

11. ALR-69 SYSTEM REPROGRAMMING. Reprograms the ALR-69 system for SERENE BYTE exercises.

12. AIRCREW DEBRIEFING. Attends aircrew debriefing.

13. GENERAL SHOP SUPPORT. Performs shop support task to include local manufacture items.

14. DOCUMENTATION. Enters information into the computer and maintains aircraft records.

15. UNIT TRAINING ASSEMBLY (UTA) PREPARATION. Performs planning/scheduling task associated with preparation for UTA.

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, 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								
Avionics Flightline Maintenance/24100D			1569.61 - 3397.35								
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT								
Aircraft F-16 Avionic Sys	2A3XX	CIV	1	1	1	1	1	1	1	1	1
	2A3X2	CIV	10	11	12	13	14	15	16	17	18
TOTAL			11	12	13	14	15	16	17	18	19
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT								
Aircraft F-16 Avionic Sys			1	1	1	1					
			19	20	21	22					
TOTAL			20	21	22	23					