BY ORDER OF THE CHIEF,
NATIONAL GUARD BUREAU

ANGMS 24140E
2 MARCH 1995

RADIO/RADAR/INERTIAL NAVIGATIONAL 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.

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 Radio/Radar/Inertial Navigational Systems 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. $Y = 26.90 + 2.984X$.
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 525.66 through 957.77.
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 grade and 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

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2 Attachments
1. Major General, USAF
2. Standard Manpower Table

OPR: ANGRC/XPME (Ms. D. Reamy)

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

WORK CENTER DESCRIPTION

Radio/Radar/Inertial Navigational Systems
(C-130E)

DIRECT:

1. ON-EQUIPMENT MAINTENANCE:

1.1. MAINTAINS AIRCRAFT SYSTEM AND COMPONENT. Inspects, troubleshoots, and repairs on-equipment.

1.1.1. MAINTAINS RADOME.

1.1.2. MAINTAINS ELECTRONIC TEST RECEPTACLE (APPLIES TO C-130B/E ONLY).

1.1.3. MAINTAINS ELECTRICAL POWER SUPPLY RELAY PANEL.

1.1.4. MAINTAINS RELAY INSTRUMENT SWITCHING (APPLIES TO C-130H ONLY).

1.1.5. MAINTAINS COCKPIT VOICE RECORDER SYSTEM.

1.1.6. MAINTAINS 618T-1/ARC-190 HIGH FREQUENCY (HF) COMMUNICATION SYSTEM.

1.1.7. MAINTAINS AN/ARC-186 VERY HIGH FREQUENCY (VHF) COMMUNICATION SYSTEM.

1.1.8. MAINTAINS AN/ARC-164 ULTRA HIGH FREQUENCY (UHF) COMMUNICATION SYSTEM.

1.1.9. MAINTAINS INTERCOMMUNICATION SYSTEM.

1.1.10. MAINTAINS APX-72/APX-64 IDENTIFICATION, FRIEND OR FOE (IFF) SYSTEM.

1.1.11. MAINTAINS EMERGENCY LOCATOR TRANSMITTER (ELT) SYSTEM.

1.1.12. MAINTAINS UNDERWATER ACOUSTIC LOCATOR SYSTEM.

1.1.13. MAINTAINS AN/ARA-25 UHF DIRECTION FINDER SYSTEM.

1.1.14. MAINTAINS DF-206 AUTOMATIC DIRECTION FINDER (APPLIES TO C-130H ONLY).

1.1.15. MAINTAINS AN/ARN-27 VISUAL OMNI RANGE/INSTRUMENT LANDING SYSTEM (VOR/ILS) (APPLIES TO C-130H ONLY).

1.1.16. MAINTAINS CAROUSEL INERTIAL NAVIGATION SYSTEM (APPLIES TO C-130H ONLY).

1.1.17. MAINTAINS AN/APN-169 STATION KEEPING EQUIPMENT (APPLIES TO C-130E AND 130H ONLY).

1.1.18. MAINTAINS AL-101 RADAR ALTIMETER SYSTEM (APPLIES TO C-130H ONLY).

1.1.19. MAINTAINS AN/ARN-118 TACAN SYSTEM.

1.1.20. MAINTAINS AN/ARN-6/DFA-73 RADIO COMPASS SYSTEM (APPLIES TO C-130B/E ONLY).

1.1.21. MAINTAINS MARKER BEACON SYSTEM (APPLIES TO C-130B/E ONLY).

1.1.22. MAINTAINS AN/ARN-14 VHF NAVIGATION SYSTEM (APPLIES TO C-130B/E ONLY).

1.1.23. MAINTAINS AN/ARN-18/AN/ARN-31 GLIDE PATH SYSTEM (APPLIES TO C-130B/E ONLY).

1.1.24. MAINTAINS AN/ARN-67 GLIDE PATH SYSTEM (APPLIES TO C-130B/EONLY).

1.1.25. MAINTAINS AN/ARN-131 OMEGA NAVIGATION SYSTEM.

1.1.26. MAINTAINS AN/APN-22 LOW RANGE RADAR ALTIMETER SYSTEM/DOPPLER NAVIGATION SYSTEM.

1.1.27. MAINTAINS SCR-718 HIGH RANGE RADAR ALTIMETER SYSTEM (APPLIES TO C-130B ONLY).

1.1.28. MAINTAINS AN/ASQ-14 RADAR PRESSURIZATION SYSTEM.

1.1.29. MAINTAINS CV-402 WAVE FORM CONVERTER SYSTEM (APPLIES TO C-130B/E ONLY).

1.1.30. MAINTAINS AN/APN-150 LOW RANGE RADAR ALTIMETER SYSTEM (APPLIES TO C-130E ONLY).

1.1.31. MAINTAINS AN/APN-133 RADAR ALTIMETER SYSTEM (APPLIES TO C-130E ONLY).

1.1.32. MAINTAINS AN/APN-147 DOPPLER RADAR SYSTEM (APPLIES TO C-130B/E ONLY).

1.1.33. MAINTAINS AN/APN-35 DOPPLER COMPUTER SYSTEM (APPLIES TO C-130B/E ONLY).

1.1.34. MAINTAINS AN/APN-59E RADAR SYSTEM.

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

1.2.1. PERFORMS SPECIAL INSPECTION.

1.2.2. PERFORMS PHASE/HOURLY INSPECTION.

2. OFF-EQUIPMENT MAINTENANCE:

2.1. MAINTAINS AIRCRAFT SYSTEM AND COMPONENT. Inspects, troubleshoots, and repairs off-equipment.

2.1.1. MAINTAINS COCKPIT VOICE RECORDER SYSTEM.

2.1.2. MAINTAINS 618T-1/ARC-190 HF COMMUNICATION SYSTEM.

2.1.3. MAINTAINS AN/ARC-186 VHF COMMUNICATION SYSTEM.

2.1.4. MAINTAINS AN/ARC-164 UHF COMMUNICATION SYSTEM.

2.1.5. MAINTAINS INTERCOMMUNICATION SYSTEM.

2.1.6. MAINTAINS APX-72 IFF SYSTEM.

2.1.7. MAINTAINS ELT SYSTEM.

2.1.8. MAINTAINS UNDERWATER ACOUSTIC LOCATOR SYSTEM.

2.1.9. MAINTAINS AN/ARA-25 UHF DIRECTION FINDER SYSTEM.

2.1.10. MAINTAINS DF-206 AUTOMATIC DIRECTION FINDER (APPLIES TO C-130H ONLY).

2.1.11. MAINTAINS AN/ARN-27 VOR/ILS (APPLIES TO C-130H ONLY.

2.1.12. MAINTAINS CAROUSEL INERTIAL NAVIGATION SYSTEM (APPLIES TO C-130H ONLY).

2.1.13. MAINTAINS AN/APN-169 STATION KEEPING EQUIPMENT (APPLIES TO C-130E/H ONLY).

2.1.14. MAINTAINS AL-101 RADAR ALTIMETER (APPLIES TO C-130H ONLY).

2.1.15. MAINTAINS AN/ARN-118 TACAN SYSTEM.

2.1.16. MAINTAINS AN/ARN-6 RADIO COMPASS SYSTEM (APPLIES TO C-130B/E ONLY).

2.1.17. MAINTAINS MARKER BEACON SYSTEM (APPLIES TO C-130B/E ONLY).

2.1.18. MAINTAINS AN/ARN-14 VHF NAVIGATION SYSTEM (APPLIES TO C-130B/E ONLY).

2.1.19. MAINTAINS AN/ARN-18/AN/ARN-31 GLIDE PATH SYSTEM (APPLIES TO C-130B/E ONLY).

2.1.20. MAINTAINS AN/ARN-67 GLIDE PATH SYSTEM (APPLIES TO C-130B/E ONLY).

2.1.21. MAINTAINS AN/ARN-131 OMEGA NAVIGATION SYSTEM.

2.1.22. MAINTAINS AN/APN-22 LOW RANGE RADAR ALTIMETER SYSTEM/DOPPLER NAVIGATION SYSTEM.

2.1.23. MAINTAINS SCR-718 HIGH RANGE RADAR ALTIMETER SYSTEM (APPLIES TO C-130B ONLY).

2.1.24. MAINTAINS AN/ASQ-14 RADAR PRESSURIZATION SYSTEM.

2.1.25. MAINTAINS CV-402 WAVE FORM CONVERTER SYSTEM (APPLIES TO C-130B/E ONLY).

2.1.26. MAINTAINS AN/APN-150 LOW RANGE RADAR ALTIMETER SYSTEM (APPLIES TO C-130E ONLY).

2.1.27. MAINTAINS AN/APN-133 RADAR ALTIMETER SYSTEM (APPLIES TO C-130E ONLY).

2.1.28. MAINTAINS AN/APN-147 DOPPLER RADAR SYSTEM.

2.1.29. MAINTAINS AN/APN-35 DOPPLER COMPUTER SYSTEM.

2.1.30. MAINTAINS AN/APN-59E RADAR SYSTEM.

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

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

5. BENCH SET AND MOCK-UP. Inspects, aligns, and repairs bench set mock-up and subsystem component.

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

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

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

9. BASE RADIO REPAIR. Performs base radio repair.

10. 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 TITLE/CODE	STANDARD APPLICABILITY MANHOUR RANGE
Radio/Radar/Inertial Navigational Systems 24140E (C-130E)	525.66 - 957.77

AIR FORCE SPECIALITY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT											
Comm & Nav Systems	455X2A	Civ	4	5	6									
TOTAL			4	5	6									

AIR FORCE SPECIALITY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT											
TOTAL														

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