

**AIR TRAFFIC CONTROL RADAR MAINTENANCE
Combat Communications Squadron**

1. **Objective.** 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 the Air Traffic Control Radar Maintenance function.
2. **Authority.** The AFI 21-series (formerly 66-series) of Air Force and/or Air National Guard directives contain command policy and procedural guidance for the Air Traffic Control Radar Maintenance function. 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:**
 - a. This standard applies to all ANG Combat Communications Squadrons with full-time authorizations in the Air Traffic Control Radar Maintenance work center, FAC 2600C6.
 - b. This standard applies to peacetime operations only.
4. **Standard Data:**
 - a. Classification. Type III.
 - b. Approval Date. 16 June 1994.
 - c. Manpower Data Source. Staffing Pattern.
 - d. Standard Manpower Equation. $Y = 2$ (Constant Manpower).
 - e. Workload Factors. N/A.
5. **Application Instructions.** This work center requires constant manpower of two. No other application instructions apply.
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**Air Traffic Control Radar Maintenance****DIRECT:****1. RADAR SYSTEM:****1.1. MAINTAINS MPN-14K MOBILE LANDING CONTROL RADAR SYSTEM:**

1.1.1. PERFORMS SCHEDULED MAINTENANCE. Travels to site, performs scheduled maintenance, completes documentation, and returns to work center.

1.1.1.1. PERFORMS PRE-UNIT TRAINING ASSEMBLY (UTA) MAINTENANCE READY INSPECTION.

1.1.1.2. PERFORMS PERIODIC MAINTENANCE INSPECTION (PMI). Inspects equipment in accordance with (IAW) Periodic Inspection Work Card; performs required maintenance; and performs operational check.

1.1.1.2.1. PERFORMS MPN-14K DAILY PMI.

1.1.1.2.2. PERFORMS MPN-14K 7-DAY PMI.

1.1.1.2.3. PERFORMS MPN-14K 14-DAY PMI.

1.1.1.2.4. PERFORMS MPN-14K 28-DAY PMI.

1.1.1.2.5. PERFORMS MPN-14K 168-DAY PMI.

1.1.1.2.6. PERFORMS MPN-14K 336-DAY PMI.

1.1.2. SETS UP MPN-14K MOBILE LANDING CONTROL RADAR SYSTEM FOR DEPLOYMENT OR OPERATIONAL READINESS INSPECTION (ORI).

1.2. MAINTAINS PRECISION APPROACH RADAR SUBSYSTEM:

1.2.1. PERFORMS UNSCHEDULED MAINTENANCE. Troubleshoots and diagnoses malfunction; removes, replaces, and repairs component; aligns, conducts operational check, and verifies corrective action taken; and corrects other discrepancy as required.

1.2.2. SERVICES PRECISION APPROACH RADAR SUBSYSTEM. Performs servicing inspection IAW applicable technical order (T.O.) and performs minor repair discovered during inspection.

1.3. MAINTAINS AIRPORT SURVEILLANCE RADAR SUBSYSTEM:

1.3.1. PERFORMS UNSCHEDULED MAINTENANCE. Troubleshoots and diagnoses malfunction; removes, replaces, and repairs component; conducts operational check and verifies corrective action taken; and corrects other discrepancy as required.

1.3.2. SERVICES AIRPORT SURVEILLANCE RADAR SUBSYSTEM. Performs servicing inspection IAW applicable T.O. and performs minor repair discovered during inspection.

2. ASSOCIATED EQUIPMENT:

2.1. MAINTAINS AN/TPX42 (INFORMATION FRIEND-OR-FOE/SELECTIVE INFORMATION FRIEND-OR-FOE):

2.1.1. PERFORMS PRE-UTA MAINTENANCE READY INSPECTION.

2.1.2. PERFORMS UNSCHEDULED MAINTENANCE. Troubleshoots and diagnoses malfunction; removes, replaces, and repairs component; conducts operational check and verifies corrective action taken; and corrects other discrepancy as required.

2.1.3. PERFORMS PMI. Inspects equipment IAW Periodic Inspection Work Card; performs required maintenance; and performs operational check.

2.1.3.1. PERFORMS 28-DAY PMI.

2.1.3.2. PERFORMS 56-DAY PMI.

2.1.3.3. PERFORMS 168-DAY PMI.

2.1.3.4. PERFORMS 336-DAY PMI.

2.1.4. SETS UP AN/TPX42 FOR DEPLOYMENT OR ORL.

2.2. MAINTAINS AN/TPX49 TRANSPONDER:

2.2.1. PERFORMS UNSCHEDULED MAINTENANCE. Troubleshoots and diagnoses malfunction; removes, replaces, and repairs component; conducts operational check and verifies corrective action taken; and corrects other discrepancy as required.

2.2.2. SERVICES AN/TPX49 TRANSPONDER. Performs servicing inspection IAW applicable T.O. and performs minor repair discovered during inspection.

2.2.3. SETS UP AN/TPX49 FOR DEPLOYMENT OR ORL.

2.3. MAINTAINS GPA-131, TD/1074/16 VIDEO MAPPER SYSTEM:

2.3.1. PERFORMS PRE-UTA MAINTENANCE READY INSPECTION.

2.3.2. PERFORMS UNSCHEDULED MAINTENANCE. Troubleshoots and diagnoses malfunction; removes, replaces, and repairs component; conducts operational check and verifies corrective action taken; and corrects other discrepancy as required.

2.3.3. PERFORMS PMI. Inspects equipment IAW Periodic Inspection Work Card; performs required maintenance; and performs operational check.

2.3.3.1. PERFORMS DAILY PMI.

2.3.3.2. PERFORMS 14-DAY PMI.

2.3.3.3. PERFORMS 28-DAY PMI.

2.3.3.4. PERFORMS 168-DAY PMI.**2.3.4. SETS UP FOR DEPLOYMENT OR ORL****2.4. MAINTAINS 15G14(T5) RADAR TARGET SIMULATOR:****2.4.1. PERFORMS PRE-UTA MAINTENANCE READY INSPECTION.**

2.4.2. PERFORMS UNSCHEDULED MAINTENANCE. Troubleshoots and diagnoses malfunction; removes, replaces, and repairs component; conducts operational check and verifies corrective action taken; and corrects other discrepancy as required.

2.4.3. PERFORMS SCHEDULED MAINTENANCE TO INCLUDE PMI. Inspects equipment IAW Periodic Inspection Work Card; performs required maintenance; and performs operational check.

2.5. MAINTAINS MOVING TARGET INDICATOR PRECISION APPROACH REFLECTOR SYSTEM. Travels to site, repairs system, completes documentation, and returns to work center.

3. INSPECTION/CERTIFICATION:

3.1. ASSISTS IN QUALITY CONTROL INSPECTION. Assists in performing quality control technical inspection by providing technical assistance and performing task(s) as necessary.

3.1.1. ASSISTS IN WORK CENTER TECHNICAL INSPECTION.

3.1.2. ASSISTS IN WORK CENTER SPECIAL INSPECTION.

3.1.3. ASSISTS IN WORK CENTER ACTIVITY INSPECTION.

3.2. ASSISTS IN FEDERAL AVIATION ADMINISTRATION EQUIPMENT EVALUATION AND CERTIFICATION:

3.2.1. PREPARES FOR FLIGHT CHECK. Gathers tool(s), technical information, form(s), and test equipment; obtains and prepares vehicle; and loads vehicle.

3.2.2. OPERATES EQUIPMENT FOR CERTIFICATION. Unloads material from vehicle; notifies monitoring facility of arrival; sets up test equipment; brings equipment to on-line status; monitors, optimizes, and adjusts equipment during official certification; records appropriate information; returns equipment to normal configuration; and notifies monitoring facility of completed action.

4. SUPPLY:

4.1. MAINTAINS REPAIR CYCLE ASSET:

4.1.1. REPAIRS DUE IN FROM MAINTENANCE ASSET.

4.1.2. ACQUIRES REPLACEMENT PART.

4.2. ORDERS EXPENDABLE PART. Researches and orders part associated with equipment preventative maintenance, equipment repair, equipment modification, and minor installation/removal.

4.3. ORDERS REPAIR CYCLE ASSET. Determines need and authorization; researches stock number or nomenclature; prepares justification, submits request, takes follow-up action on supply level, DIFM,

Maintenance Deficiency Report (MDR)/Quality Deficiency Report; and receives or turns in equipment.

4.4. PROCESSES EQUIPMENT MDR.

4.5. PERFORMS FUNCTIONAL CHECK OF FORWARD SUPPLY POINT ASSET.

4.6. MAINTAINS BENCH STOCK.

5. CORROSION CONTROL PROGRAM:

5.1. PREPARES UNIT. Prepares unit for repainting and paints unit.

5.2. STENCILS UNIT. Stencils or applies decal to unit.

5.3. PERFORMS OPERATIONAL CHECK OF EQUIPMENT.

6. EQUIPMENT MAINTENANCE:

6.1. PERFORMS EQUIPMENT MODIFICATION/TIME COMPLIANCE TECHNICAL ORDER.

6.2. ASSISTS VISITING TEAM. Arranges for transportation, test equipment, and equipment downtime; provides escort and operates equipment; and assists in maintenance action. Documents visit, updates historical record, and accomplishes maintenance data collection.

7. MOBILITY:

7.1. DEVELOPS/MAINTAINS UNIT TYPE CODE LOGISTICS PLAN (LOG PLAN).

7.2. PERFORMS PREDEPLOYMENT TASKING:

7.2.1. REVIEWS DOCUMENTATION. Reviews Logistic Detail for accuracy and makes adjustment to LOG PLAN as necessary.

7.2.2. PERFORMS INVENTORY. Ensures that vehicle, van, pallet, or box has appropriate contents according to LOG PLAN.

7.2.3. PREPARES FOR TRANSPORT:

7.2.3.1. LOADS TRUCK FOR DEPLOYMENT.

7.2.3.2. LOADS PALLET FOR DEPLOYMENT.

7.3. PERFORMS POST DEPLOYMENT TASKING:

7.3.1. PERFORMS POST DEPLOYMENT INVENTORY. Ensures that equipment is accounted for, clean, and serviceable.

7.3.2. ORDERS REPLACEMENT ITEM AS REQUIRED.

7.3.3. CLEANS AND ENSURES SERVICEABILITY OF EQUIPMENT.

7.3.4. REPACKS AND STORES EQUIPMENT.

8. TRADITIONAL GUARDSMAN PROFICIENCY TRAINING:**8.1. REVIEWS INDIVIDUAL TRAINING RECORD/JOB PROFICIENCY GUIDE.****8.2. DETERMINES TRAINING REQUIREMENT.****8.3. DEVELOPS/REVIEWS TRAINING PLAN.****8.4. ANNOTATES TRAINING RECORD.****9. TECHNICAL DATA SUBACCOUNT MAINTENANCE.** Receives and posts data and change to file. Maintains file for serviceability.**10. SNOW AND ICE REMOVAL.** Unloads tool(s) from vehicle, notifies monitoring facility of arrival; removes snow and ice from critical surfaces of and around sensitive equipment; and notifies Maintenance Control of completed action.**INDIRECT:****I1. SUPERVISION:****I1.1. ADMINISTERS PERSONNEL:****I1.1.2. INDOCTRINATES PERSONNEL:****I1.1.2.3. INDOCTRINATES CIVILIAN.****I1.1.3. RATES PERFORMANCE:****I1.1.3.2. IMPLEMENTS CIVILIAN PERFORMANCE APPRAISAL SYSTEM:****I1.1.3.2.1. PREPARES CIVILIAN PERFORMANCE PLAN.****I1.1.3.2.2. PREPARES CIVILIAN PERFORMANCE RATING.****I1.2. SUPERVISES PERSONNEL:****I1.2.2. DEVELOPS STANDARD PUBLICATION OR OTHER DIRECTIVE:****I1.2.2.1. DEVELOPS POLICY LETTER, PROCEDURE, OR OPR INSTRUCTION.****I1.2.3. DIRECTS WORK CENTER ACTIVITY:****I1.2.3.3. INFORMS WORK CENTER PERSONNEL:****I1.2.3.3.2. INFORMS INDIVIDUAL.****I1.3. REVIEWS INCOMING DISTRIBUTION.****I1.4. REVIEWS OUTGOING DISTRIBUTION.****I1.7. INSPECTS FACILITY:**

I1.7.2. INSPECTS WAREHOUSE/MAINTENANCE FACILITY.

I1.9. REVIEWS REPORT AND STATISTICAL DATA.

I2. ADMINISTRATION:

I2.5. MAINTAINS LOG AND REGISTER.

I2.13. ACKNOWLEDGES VISITOR.

I2.15. MAINTAINS MICROCOMPUTER SYSTEM.

I3. MEETING:

I3.1. PREPARES FOR MEETING:

I3.1.2. PREPARES FOR UNIT MEETING.

I3.2. CONDUCTS OR ATTENDS MEETING:

I3.2.2. CONDUCTS OR ATTENDS UNIT MEETING.

I5. SUPPLY:

I5.1. PROCESSES EQUIPMENT REQUEST.

I5.2. CONDUCTS INVENTORY.

I5.3. MAINTAINS CUSTODIAN DOCUMENT.

I6. EQUIPMENT MAINTENANCE:

I6.1. MAINTAINS SHOP EQUIPMENT:

I6.1.1. MAINTAINS MACHINERY:

I6.1.1.1. MAINTAINS MACHINERY (NONAIRCRAFT MAINTENANCE FUNCTION).

I6.1.2. MAINTAINS TEST EQUIPMENT:

I6.1.2.1. MAINTAINS TEST EQUIPMENT (NONAIRCRAFT MAINTENANCE FUNCTION).

I6.1.3. MAINTAINS CONSOLIDATED TOOL KIT (CTK):

I6.1.3.1. MAINTAINS CTK (NONAIRCRAFT MAINTENANCE FUNCTION).

I6.1.4. MAINTAINS INDIVIDUAL TOOL KIT.

I7. CLEANUP:

I7.1. PREPARES WORK AREA.

I7.2. PUTS WORK AWAY.

I7.3. CLEANS WORK AREA.

STANDARD MANPOWER TABLE										
WORK CENTER/FAC				APPLICABILITY MAN-HOUR RANGE						
Air Traffic Control/Radar Maintenance				Constant Manpower						
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT							
Air Traffic Control Radar	2E0X1	CIV	2							
TOTAL			2							
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT							
TOTAL										