

NONDESTRUCTIVE INSPECTION

(C-141)

1. **Objective.** As prescribed in AFR 8-10, 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 (ANG) Regulation 66-14 contains ANG policy and procedural guidance for the Nondestructive Inspection work center. This ANGMS has been developed in accordance with procedures contained in AFR 25-5, 16 May 88. This ANGMS is a result of a functional review.
3. **Applicability.** This standard applies to ANG C-141 Air Mobility Command gained flying units. This standard applies only to peacetime operations.
4. **Standard Data:**
 - a. **Classification.** Type III.
 - b. **Approval Date.** 4 Jan 93.
 - c. **Man-hour Data Source.** Operational Audit (historical record and technical estimate techniques).
 - d. **Standard Man-hour Equation.** $Y = 7.026 + 0.6150X$.
 - e. **Workload Factor:**
 - (1) **Title.** A Programmed Manpower Flying Hour.
 - (2) **Definition.** The average monthly programmed flying hours.
 - (3) **Source of Count.** USAF Program Document (PD), Volume II, maintained by NGB/FM.
5. **Application Instructions:**
 - a. The valid man-hour range for this ANGMS is 111.60 through 186.00. Should the extrapolation limits be exceeded, see AFR 26-1, Volume III, paragraph 1-20 for guidance.
 - b. The AF Form 1113, Standard Manpower Table, is an aggregate of total manpower by specialty title and Air Force Specialty Code (AFSC). The applicable instructions are as follows:
 - (1) Determine the value for the workload factor (WLF) identified in paragraph 4e.
 - (2) Substitute the appropriate WLF value into the man-hour equation for X.
 - (3) Divide the total man-hours by the current man-hour availability factor (MAF) to determine total requirements.
 - (4) Find the column in which the number of total authorizations fall; read up to determine manpower by AFSC.
 - c. Fractional manpower requirements resulting from application of this standard will not be aggregated.
6. **Statement of Conditions.** This work center's normal hours of operation are 8 hours a day, 5 days a week. There are no other standard of living constraints which affect the daily operation of this work center.

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

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WORK CENTER DESCRIPTION**Nondestructive Inspection****(C-141)****DIRECT:**

1. MAGNETIC PARTICLE INSPECTION: Prepares for work, performs preinspection to determine method suitability, performs inspection, and completes documentation.

1.1. PERFORMS IN-SHOP DIRECT CURRENT AND ALTERNATING CURRENT INSPECTION.

1.2. PERFORMS OUT-OF-SHOP DIRECT CURRENT AND ALTERNATING CURRENT INSPECTION.

2. ELECTROMAGNETIC INSPECTION: Prepares for work, performs preinspection to determine method suitability, performs inspection, and completes documentation.

2.1. PERFORMS IN-SHOP EDDY CURRENT INSPECTION.

2.2. PERFORMS OUT-OF-SHOP EDDY CURRENT INSPECTION.

2.3. PERFORMS IN-SHOP CONDUCTIVITY INSPECTION.

3. PENETRATING RADIATION (X-RAY) INSPECTION:

3.1. PERFORMS IN-SHOP X-RAY INSPECTION. Prepares for work, performs preinspection, performs x-ray safety inspection, and completes documentation.

3.2. PERFORMS OUT-OF-SHOP X-RAY INSPECTION. Prepares for work, performs preinspection, performs x-ray safety inspection, and completes documentation.

3.3. ENSURES RADIATION SAFETY PROGRAM IS ENFORCED. Inspects x-ray facility for serviceability and possible radiation exposure. Documents results of x-ray equipment, safety device, and x-ray facility inspection on ledger or general purpose form.

4. OPTICAL INSPECTION. Prepares for work, performs preinspection, performs inspection, and completes documentation.

5. FLUORESCENT DYE PENETRANT INSPECTION. Prepares for work, performs preinspection, performs inspection, and completes documentation.

5.1. PERFORMS IN-SHOP FLUORESCENT DYE PENETRANT INSPECTION.

5.2. PERFORMS OUT-OF-SHOP FLUORESCENT DYE PENETRANT INSPECTION.

6. ULTRASONIC INSPECTION. Prepares for work, performs preinspection, performs inspection, and completes documentation.

7. UNIT TRAINING ASSEMBLY (UTA) AND MOBILITY REQUIREMENT. Performs planning/scheduling task associated with preparation for UTA weekend and mobility requirement.

INDIRECT: Indirect work involves those tasks that are not readily identifiable with the work center's specific product or service. The major categories of 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							
Nondestructive Inspection/23170A			111.60 -186.00							
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT							
Nondestructive Inspection	458X1	CIV	1	2						
TOTAL			1	2						
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT							
TOTAL										