

NONDESTRUCTIVE TESTER

RAPIDS: 1010D

O*NET/SOC: 17-3029.01

REVISION DATE: 09/2019

TRADE DESCRIPTION: Test the safety of structures, vehicles, or vessels using x-ray, ultrasound, fiber optic or related equipment.

TASK PERFORMANCE: Demonstrate knowledge and skills for qualifying as Journeyman. Applicable Job Qualification Requirements will be used as a guide in performing tasks and demonstrating knowledge in the following skill areas. Actual work time must be recorded in the Work Experience Log; each skill area must be completed.

Applicable Ratings/MOS/NEC

USMC MOS: 6033

USCG: None

USN: 763B, AM, U48A, U49A, U50A

USA MOS: None

Related Instruction:

Trade related On-The-Job-Training (OJT) or Any Trade related schools/courses totaling 144 or more hours.

Additional Requirement:

Must hold NEC: 763B, U48A, U49A, OR U50A

Total Hours: **2000**

Skill	Description	Hours
A	ADMINISTRATION -- Document non-destructive testing (NDT) methods, processes, or results. -- Prepare reports on non-destructive testing (NDT) results.	250

B	<p>EQUIPMENT</p> <p>Select, calibrate, or operate equipment used in the non-destructive testing (NDT) of products or materials.</p>	500
C	<p>PERFORM INSPECTIONS</p> <ul style="list-style-type: none"> -- Visually examine materials, structures, or components using tools and equipment such as endoscopes, closed circuit television systems, and fiber optics for signs of corrosion, metal fatigue, cracks, or other flaws. -- Select, calibrate, or operate equipment used in the non-destructive testing (NDT) of products or materials. -- Examine structures or vehicles such as aircraft, trains, nuclear reactors, bridges, dams, and pipelines using non-destructive (NDT) techniques. -- Conduct liquid penetrant tests to locate surface cracks by coating objects with fluorescent dyes, cleaning excess penetrant, and applying developer. -- Identify defects in concrete or other building materials, using thermal or infrared testing. -- Make radiographic images to detect flaws in objects while leaving objects intact. -- Map the presence of imperfections within objects using sonic measurements. -- Produce images of objects on film using radiographic techniques. -- Identify defects in solid materials using ultrasonic testing techniques. 	650
D	<p>INTREPRET RESULTS</p> <ul style="list-style-type: none"> -- Interpret or evaluate test results in accordance with applicable codes, standards, specifications, or procedures. -- Interpret the results of all methods of non-destructive testing (NDT) such as acoustic emission, electromagnetic, leak, liquid penetrant, magnetic particle, neutron radiographic, thermal or infrared, ultrasonic, vibration analysis, and visual testing. 	350
E	<p>DEVELOP</p> <p>Develop or use new non-destructive testing (NDT) methods such as Computed Radiography, Digital Radiography, and thermal or infrared testing.</p>	50
F	<p>SUPERVISE</p> <p>Supervise or direct the work of non-destructive testing (NDT) trainees or staff.</p>	200