

RADIO MECHANIC

RAPIDS: 0465D

O*NET/SOC: 49-2021.01

REVISION DATE: 09/2019

TRADE DESCRIPTION: Test or repair mobile or stationary radio transmitting and receiving equipment and two-way radio communications systems used in ship-to-shore communications and found in service and emergency vehicles.

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: 2831, 2841, 2847, 2848, 2862, 5939, 5954

USCG: ET

USN: CTM, ET

USA MOS: 25C, 25L, 25Q, 25U, 25W, 29E, 948B, 94E

Related Instruction:

Trade related On-The-Job-Training (OJT) or Any Trade related schools/courses totaling 216 or more hours.

Additional Requirement:

None

Total Hours: **3000**

Skill	Description	Hours
A	INSTALLATION	1000

	<ul style="list-style-type: none"> -- Install, adjust, and repair stationary and mobile radio transmitting and receiving equipment and two-way radio communication systems. -- Mount equipment on transmission towers and in vehicles such as ships or ambulances. -- Insert plugs into receptacles and bolt or screw leads to terminals to connect equipment to power sources, using hand tools. -- Calibrate and align components, using scales, gauges, and other measuring instruments. 	
B	<p>ANALYSIS/TROUBLESHOOTING</p> <ul style="list-style-type: none"> -- Test equipment functions such as signal strength and quality, transmission capacity, interference, and signal delay, using equipment such as oscilloscopes, circuit analyzers, frequency meters, and wattmeters. -- Examine malfunctioning radio equipment to locate defects such as loose connections, broken wires, or burned-out components, using schematic diagrams and test equipment. -- Test batteries, using hydrometers and ammeters, and charge batteries as necessary. -- Turn setscrews to adjust receivers for maximum sensitivity and transmitters for maximum output. -- Test emergency transmitters to ensure their readiness for immediate use. -- Monitor radio range stations to detect transmission flaws and adjust controls to eliminate flaws. 	1000
C	<p>REPAIR</p> <ul style="list-style-type: none"> -- Repair circuits, wiring, and soldering, using soldering irons and hand tools to install parts and adjust connections. -- Remove and replace defective components and parts such as conductors, resistors, semiconductors, and integrated circuits, using soldering irons, wire cutters, and hand tools. -- Clean equipment, parts, or tools to repair or maintain them in good working order. -- Lubricate equipment to allow proper functioning. -- Repair electrical components and equipment. 	1000