

Work Processes Schedule

ELECTRONICS MECHANIC

RAPIDS: 0170M

O*NET/SOC: 49-2011.00

REVISION DATE: 06/2015

Installs, overhauls, maintains, and repairs multiple types of electronic equipment such as radar, communication, or navigational equipment and related devices. Determines nature and extent of repair required using wiring diagrams, schematics, technical publications, and test equipment. Trouble-shoots malfunctions using specialized test and measuring instruments. Replaces defective parts, performs operational tests, and aligns interrelated circuits or systems. 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 areas. Actual work time must be recorded in the Work Experience Log.

Applicable Ratings/MOS

USMC MOS 1120, 1142, 1169, 2821, 2822, 2823, 2826, 2841, 2844, 2846, 2847, 2862, 2871, 2874, 2881, 2884, 2887, 2891, 5939, 5948, 5951, 5952, 5953, 5974, 5979, 6311, 6312, 6313, 6314, 6316, 6317, 6322, 6323, 6324, 6326, 6331, 6332, 6333, 6336, 6337, 6338, 6386, 6391, 6411, 6414, 6423, 6463, 6464, 6466, 6467, 6469, 6483, 6484, 6492, 8641

USCG ET, GM, IT

USN AT, AWW, CT, ET, FC, FT, GM, IC, IT, ITS, MT, ST

Related Instruction

Any trade related schools/courses totaling 576 hours.

Additional Requirement

CTT rating must have NEC 1702, 1734, 1736, or 1737;

Total Hours: **8000**

Skill	Description	Hours
A	<p>ORIENTATION TO COMPUTER SYSTEMS AND EQUIPMENT</p> <p>Console Control Panels, Memory Devices, Processors, Page Printers, Card Punchers, Sending and Receiving Units, Universal Keyboards, Peripheral and Terminal Apparatus, Test Equipment, Operations, Maintenance and Repair Techniques and Processes. Apply shop practices for the proper use, maintenance, care and storage of test equipment. Employ safety practices as outlined in established procedures pertaining to voltage and moving mechanical parts. Develop workshop and component equipment cleaning techniques. Observe an experienced repairer and participate in the identification, use, care and storage of hand tools and specialized trade tools.</p>	1600
B	<p>TROUBLESHOOT COMPUTER EQUIPMENT USING STANDARD DIAGNOSTIC METHODS, PROCEDURES AND TEST EQUIPMENT</p> <p>Study circuit diagrams and check processed cards and tapes. Interpret circuit and schematic diagrams, technical literature and related documents. Identify the location and purpose of components, sub-assemblies and auxiliary equipment. Determine malfunctions and the locations of mechanical and electrical components. Determine waveform, wave length and voltage amplification. Determine faulty components by direct current measurements, AC and DC voltage measurements and resistance measurements.</p>	2000
	<p>INSPECT AND REPAIR ELECTRICAL AND MECHANICAL COMPUTER EQUIPMENT AND COMPONENTS</p>	

C	Utilize and follow blueprints, diagrams and manufacturer's specifications. Compute voltage, amperage and resistance factors. Test faulty equipment components and circuits. Disassemble malfunctioning equipment and replace faulty components. Inspect, adjust and align components. Prepare and file maintenance records.	2000
D	<p>FINAL TEST OPERATE EQUIPMENT WITH STANDARD AND SPECIALIZED TEST INSTRUMENTS</p> <p>Ohmmeter and Multimeter. Vacuum tube voltmeters. Oscilloscopes. Tube checkers. Transistor checkers. Flip-flop circuit checkers. Pulse code board testing devices. Pulse code testing devices. Pulse generators.</p>	2000
E	<p>PERFORM ORGANIZATIONAL/PREVENTIVE MAINTENANCE AS REQUIRED</p> <p>Perform visual inspection. Clean machine, equipment, test equipment and tools. Lubricate per requirements and as necessary.</p>	400