

# Work Processes Schedule

## ELECTRONICS MECHANIC (ANY INDUSTRY)

**RAPIDS: 0170N**

O\*NET/SOC: 49-2011.00

REVISION DATE: 03/2015

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, ETN, ETR, ETV, FC, FT, GM, IC, IT, ITS, MMW, MT, ST

### Related Instruction

Any trade related schools/courses totaling 576 hours

### Additional Requirement

CTT rating must have NEC 1702, 1734, 1736, or 1737; MMW Must have NEC 0750 or 0751

Total Hours: **8000**

Skill	Description	Hours
A	<p><b>SCHEMATICS, INSTRUCTIONS, AND MANUALS</b></p> <p>Read and interpret schematics, layouts, circuit diagrams, data flow charts, maintenance and service instruction, manuals, and handbooks; prepare sketches, schematics, and specifications.</p>	1000
B	<p><b>TROUBLESHOOT, MAINTAIN, AND REPAIR</b></p> <p>Troubleshoot, maintain, and repair electronics equipment and systems: Test for short circuits, grounds, and continuity of interconnecting cables; install and evaluate computer programs; perform waveform analysis; perform phase, balance, and read back adjustments to servo-amplifiers; perform modifications to avionics equipment; troubleshoot and repair radar and tactical displays, radar altimeters, DOPPLER navigation equipment, radio navigation equipment, digital data systems, analog computing devices, communicating systems, infrared devices, recorder systems, pressurized avionics equipment; identify, isolate, and control electrical noise.</p>	1500
C	<p><b>CONDUCT MAINTENANCE PLANNING AND QUALITY ASSURANCE</b></p> <p>Prepare schedules of preventive maintenance; perform quality assurance inspections; maintain a visual information display system.</p>	500
D	<p><b>CONDUCT CORROSION CONTROL AND MATERIAL PRESERVATION</b></p> <p>Inspect for corrosion; remove corrosion; apply corrosion preventive compound.</p>	500

<b>E</b>	<p><b>PERFORM ELECTRO/MECHANICAL MAINTENANCE</b></p> <p>Replace and service air filters and desiccants; inspect and replace electrical circuit protective devices; inspect and maintain pressurized equipment; clean and lubricate avionics equipment; perform frequency decibel measurements; remove, install, align, and zero synchros; maintain chaff dispensing systems; observe safety precautions.</p>	1500
<b>F</b>	<p><b>PERFORM MECHANIC MAINTENANCE</b></p> <p>Solder and splice electrical connections; secure and safety wire equipment and components.</p>	500
<b>G</b>	<p><b>ADMINISTRATION</b></p> <p>Administer and maintain shop technical library and tool control.</p>	500
<b>H</b>	<p><b>MAINTAIN AND CALIBRATE TEST EQUIPMENT</b></p> <p>Circuit analyzers, cathode ray oscilloscope, recording oscillograph, signal generators, frequency meters, decade resistors and condensers, and vacuum tube voltmeters.</p>	500
<b>I</b>	<p><b>ISOLATE MALFUNCTIONS</b></p> <p>Isolate malfunctions and make necessary repairs to receivers, transmitters, microwave oscillators and amplifiers, analog and digital computing devices, indicators and display devices, power supplies, synchronizers and timing devices, frequency and light sensitive devices, infrared devices, recording devices, and precision measuring equipment.</p>	1000
<b>J</b>	<p><b>COMPUTE REQUIRED WORKING RATINGS</b></p> <p>Compute required working ratings for component parts, such as resistors, condensers, and coils in such specific circuit applications as power supplies, bypass filter networks, and amplifiers; calculate ripple voltage at output of power supply filter network using accepted procedures and standard formulas.</p>	500