

## ELECTRICIAN, AIRCRAFT

RAPIDS: 0160D

O\*NET/SOC: 49-2091.00

REVISION DATE: 09/2019

**TRADE DESCRIPTION:** Install, inspect, test, adjust, or repair avionics equipment, such as radar, radio, navigation, and missile control systems in aircraft or space 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:** 6313, 6314, 6316, 6317, 6322, 6323, 6324, 6326, 6332, 6333, 6336, 6337, 6338, 6386, 6391, 6423, 6432, 6483

**USCG:** AET

**USN:** AE, AT, AWV

**USA MOS:** 15E, 15F, 15J, 15N, 15Y

### Related Instruction:

Trade related On-The-Job-Training (OJT) or Any Trade related schools/courses totaling 432 or more hours.

### Additional Requirement:

None

Total Hours: **6000**

Skill	Description	Hours
A	ASSEMBLY	1500

	<ul style="list-style-type: none"> <li>-- Assemble components such as switches, electrical controls, and junction boxes, using hand tools or soldering irons.</li> <li>-- Connect components to assemblies such as radio systems, instruments, magnetos, inverters, and in-flight refueling systems, using hand tools and soldering irons.</li> <li>-- fabricate parts and test aids as required.</li> </ul>	
<b>B</b>	<p><b>MODIFY, REMOVE &amp; REPLACE</b></p> <ul style="list-style-type: none"> <li>-- Install electrical and electronic components, assemblies, and systems in aircraft, using hand tools, power tools, or soldering irons.</li> <li>-- Adjust, repair, or replace malfunctioning components or assemblies, using hand tools or soldering irons.</li> </ul>	<b>1500</b>
<b>C</b>	<p><b>TESTING</b></p> <ul style="list-style-type: none"> <li>-- Test and troubleshoot instruments, components, and assemblies, using circuit testers, oscilloscopes, or voltmeters.</li> <li>-- Set up and operate ground support and test equipment to perform functional flight tests of electrical and electronic systems.</li> <li>-- Assemble prototypes or models of circuits, instruments, and systems for use in testing.</li> </ul>	<b>1500</b>
<b>D</b>	<p><b>MAINTENANCE RECORDS</b></p> <ul style="list-style-type: none"> <li>-- Keep records of maintenance and repair work.</li> <li>-- Document maintenance in electronic records.</li> </ul>	<b>400</b>
<b>E</b>	<p><b>COORDINATION</b></p> <ul style="list-style-type: none"> <li>-- Coordinate work with that of engineers, technicians, and other aircraft maintenance personnel.</li> </ul>	<b>200</b>
<b>F</b>	<p><b>TROUBLESHOOTING</b></p> <ul style="list-style-type: none"> <li>-- Interpret flight test data to diagnose malfunctions and systemic performance problems.</li> <li>-- Troubleshoot equipment or systems to ensure proper functioning.</li> <li>-- Test and troubleshoot instruments, components, and assemblies, using circuit testers, oscilloscopes, or voltmeters.</li> </ul>	<b>700</b>
<b>G</b>	<p><b>TECHNICAL PUBLICATIONS USAGE</b></p> <ul style="list-style-type: none"> <li>-- Operate computer-aided drafting and design applications to design avionics system modifications.</li> <li>-- Lay out installation of aircraft assemblies and systems, following documentation such as blueprints, manuals, and wiring diagrams.</li> </ul>	<b>200</b>

