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, 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

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<tr>
<th>Skill</th>
<th>Description</th>
<th>Hours</th>
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<tr>
<td>A</td>
<td>ASSEMBLY</td>
<td>1500</td>
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</table>
-- Assemble components such as switches, electrical controls, and junction boxes, using hand tools or soldering irons.

-- Connect components to assemblies such as radio systems, instruments, magnetos, inverters, and in-flight refueling systems, using hand tools and soldering irons.

-- Fabricate parts and test aids as required.

**B MODIFY, REMOVE & REPLACE**

-- Install electrical and electronic components, assemblies, and systems in aircraft, using hand tools, power tools, or soldering irons.

-- Adjust, repair, or replace malfunctioning components or assemblies, using hand tools or soldering irons.

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**C TESTING**

-- Test and troubleshoot instruments, components, and assemblies, using circuit testers, oscilloscopes, or voltmeters.

-- Set up and operate ground support and test equipment to perform functional flight tests of electrical and electronic systems.

-- Assemble prototypes or models of circuits, instruments, and systems for use in testing.

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**D MAINTENANCE RECORDS**

-- Keep records of maintenance and repair work.

-- Document maintenance in electronic records.

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**E COORDINATION**

-- Coordinate work with that of engineers, technicians, and other aircraft maintenance personnel.

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**F TROUBLESHOOTING**

-- Interpret flight test data to diagnose malfunctions and systemic performance problems.

-- Troubleshoot equipment or systems to ensure proper functioning.

-- Test and troubleshoot instruments, components, and assemblies, using circuit testers, oscilloscopes, or voltmeters.

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**G TECHNICAL PUBLICATIONS USAGE**

-- Operate computer-aided drafting and design applications to design avionics system modifications.

-- Lay out installation of aircraft assemblies and systems, following documentation such as blueprints, manuals, and wiring diagrams.