

ELECTRICIAN, AIRCRAFT

RAPIDS: 0160D

O*NET/SOC: 49-2091.00

REVISION DATE: 03/2021

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.

TRADE ELIGIBILITY REQUIREMENTS:

Service Member assigned, trained and working full time in this trade occupation;

Have a minimum of 12 months remaining on active duty when beginning this trade apprenticeship;

Agree to abide by the National Standards of Apprenticeship.

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 -- 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.	1500
B	MODIFY, REMOVE & REPLACE	1500

	-- 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.	
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.	1500
D	MAINTENANCE RECORDS -- Keep records of maintenance and repair work. -- Document maintenance in electronic records.	400
E	COORDINATION -- Coordinate work with that of engineers, technicians, and other aircraft maintenance personnel.	200
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.	700
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.	200