

MAINE MARITIME ACADEMY

A College of Engineering, Management, Science, and Transportation

Electrician (Training Vessel) - 2470

POSITION OVERVIEW

The Electrician reports to the Chief Engineer or his/her designated subordinate. Employee, under the direction of the engineering department, is responsible for the maintenance, testing and repair of the ship's electrical equipment. Assigned duties, and jobs are scheduled through consultation with the vessel's 1st Assistant Engineer, 2nd Assistant Engineer or 3rd Assistant Engineer. Electrical systems include, but are limited to, power generation and distribution, engine-room monitoring, engine/bridge controls, alarms, navigational equipment, communications, and safety equipment aboard ship, and generators, motors, and simulators in laboratories ashore. Sailing experience on board commercial vessels or military vessels, and experience in the many aspects of shipboard electrical systems and their maintenance is strongly preferred.

DUTIES

- Assist in identifying and reporting needed electrical repairs, completing the repairs and testing completed repairs as directed.
- Responsible for using and maintaining electrical stores, spares, equipment and tools.
- Responsible for connecting and or disconnecting electrical and communication cables when dockside.
- Maintain and repair electrical motors and associated controllers.
- Maintain switchboards including main and emergency switchboards.
- Maintain emergency battery back-up systems.
- Maintain electrical systems associated with deck and engine stores cranes.
- Inspect and test various components of the ship's electrical systems including lighting systems, transformers, switches and breakers.
- Maintain records of repairs and testing made to all shipboard electrical equipment.
- Maintain and repair the ship's telephone systems, including sound powered phones and PA system.
- Assist with all engine and machinery overhauls as directed.
- Run various electrical and communication cable as needed.
- Maintain the electrical portion of the ship's fire detection system, fire alarm system, general alarm system, electronic automation systems and ship's lifeboat and rescue boat davits.
- Participate in the annual training cruise.
- Act as a working supervisor of students during maintenance functions.
- Required to teach Academy courses or labs relating to maintenance on the ship.
- Become familiar with the ship's Safety Management System (SMM) as it relates to the job.

- Assist with the organization, training and execution of emergency drills.
- Comply with all safety PPE requirements.
- May be required to assist with the maintenance or repair of other academy vessels.
- Adherence to MMA policies.
- Other duties as assigned

This job description reflects the general duties of the job but is not a detailed description of all duties which may be inherent to the position. The Academy may assign reasonably related additional duties to individual employees consistent with policy and collective bargaining agreements.

SKILLS/EXPERIENCE

- Thorough knowledge of electrical systems, including motor controllers, distribution panels, and PLCs.
- Proficient in reading and understanding wiring diagrams, electrical blueprints and manufacturer's installation manuals.
- Ability to perform panel and /or circuit surveys and assist in preparation of schematics.
- Ability to diagnose electrical faults, and trouble shoot, repair, replace or reprogram PLCs.
- Preferred experience aboard commercial or military vessels in the engine department as a ship's electrician or equivalent.
- Ability to properly, operationally test equipment after repairing same.
- Proficient in working with high voltage (440 V) DC and AC three phase systems.
- Experienced in the use of common electrical measuring instruments such as voltmeters, ammeters, ohmmeters, power analyzers and megohmmeters.
- Ability to work and excel in a student orientated training environment.
- Present a professional appearance and work ethic.
- Ability to work with a minimum of supervision and with a positive attitude.
- Must be able to communicate effectively in both written and verbal form.
- Must establish and maintain effective and professional working relationships.
- Knowledge of basic computer programs such as Excel and Word.

REQUIREMENTS

- Preferred: USCG issued MMC with electrician/electronics endorsement (or equivalent military service may be accepted) or Licensed Master Electrician or equivalent. A combination of education and experience will be considered.
- STCW endorsement desired and USCG medical certificate.
- Must have, or be able to obtain a TWIC.
- Valid US Passport.
- Pre-employment drug test.

Note: Applicants not possessing a TWIC, USCG issued MMC or valid US Passport, must be able to obtain one.

SPECIAL CONDITIONS

- Must participate in USCG drug testing program
- Tobacco-free employer
- Criminal background check required

PHYSICAL REQUIREMENTS

- The physical requirements as outlined in the NVIC 04-08, as updated periodically by the U.S. Coast Guard, are herein incorporated.
- Regularly, sit, stand, walk through narrow passages, ascend and descend ladders and stairs.
- Tolerate exposure to extreme weather conditions including, rain, snow, sleet and high winds and extremes of temperatures.
- Use hands to manipulate objects, tools or controls.
- Reach and work overhead with arms and hands.
- Lift at least a 40 pound load off the ground, and to carry, push or pull the same load.
- Open and close water tight doors of 55 pounds or more.
- Work in areas of high noise and or low light.
- Work aloft at heights above 6 ft.
- Work in confined spaces.

Maine Maritime Academy Position Factor Evaluation

Job
Title: Electrician

Job
Code: 2470

Wage Grade: 22

Total Points: 490

	<u>Factor</u>	<u>Degree</u>	<u>Points</u>
1	Knowledge and Skill	6	216
2	Effort		
	I. Mental and Visual Effort	5	40
	II. Physical Effort	4	40
3	Responsibility for Cost Control	5	40
4	Responsibility for Others		
	I. Injury to Others	5	40
	II. Supervisory Responsibility	3	24
	III. Sensitive Information and Records	2	16
5	Working Conditions	5	50
6	Responsibility for External and Internal Relations	3	24

Date of last reclassification 02/2017