

MORGAN STATE UNIVERSITY JOB SPECIFICATION



MARINE RESEARCH VESSEL ENGINEER

Class Code: 1065

FLSA Code: N/E (Non-Exempt)

Pay Range: 13

JOB SUMMARY

Under general supervision, performs moderately complex duties and tasks associated with the maintenance, repair, and modification of inland and coastal research vessels and related scientific sampling gear.

PRIMARY DUTIES

1. Performs comprehensive preventive maintenance/repairs to main propulsion systems, ship service generators, electrical systems, hydraulic systems, heating/air-conditioning systems, piping, pumps, winches, and other auxiliary equipment.
2. Responds to all related repair requests and troubleshoots problems. May oversee outside contractors for repair and installation work.
3. Assists in the development of specifications for repairs, upgrades, and modifications. Prepares estimates of time and materials required to perform this work. May provide guidance and instruction on repairs or technical matters.
4. Leads and assists in performing repairs, upgrades, and modifications to the vessels.
5. Ensures that adequate shop supplies, spare parts, and preventive maintenance items are maintained. Purchases minor equipment and supplies.
6. Fabricates equipment and basic scientific sampling gear. Makes and/or interprets drawings or sketches of equipment to facilitate fabrication.
7. Operates and maintains shop tools and other equipment of the trade. Maintains shop in a safe, orderly, and clean manner.

Morgan State University Job Specification
Marine Research Vessel Engineer
Page Two

8. Performs routine welding tasks in mild steel, aluminum, and stainless steel.
9. Sails on vessels as additional or relief crew member.

Note:

The intent of this list of primary duties is to provide a representative summary of the major duties and responsibilities of this job. Incumbents perform other related duties assigned. Specific duties and responsibilities may vary based upon departmental needs.

MINIMUM QUALIFICATIONS

EDUCATION: High School Diploma or GED

EXPERIENCE: Five years in the maintenance and repair of vessels propelled by gasoline and diesel engines.

OTHER: LICENSE: Current U.S. Coast Guard license as "Master of Inland Steam and Motor Vessels of not more than 50 Gross Tons". Current FCC "Marine Radio Operator Permit".

REQUIRED KNOWLEDGE/SKILLS/ABILITIES

Thorough knowledge of gasoline and diesel engines; of marine propulsion systems; of electrical, plumbing, HVAC, and hydraulic systems; of hoisting equipment, boat construction, and carpentry. Ability to troubleshoot and repair problems in such systems. Ability to make, read, and interpret sketch drawings. Working knowledge of and skill in the maintenance and use of hand and power tools of the trade. Ability to weld steel, aluminum, and stainless steel. Ability to supervise and provide instruction, to maintain records; to understand and follow oral and written instructions; to communicate effectively. Ability to work in, on, around, over and under fixed equipment or machinery; to work at heights up to 50 feet; manipulation of heavy equipment, tools, supplies and/or exertion of force up to 70 pounds; to concurrently manipulate multiple controls on machinery and equipment; to work in hazardous or irritating environments, confined spaces and under adverse weather or temperature conditions; to wear and work in personal protective equipment.

**Morgan State University Job Specification
Marine Research Vessel Engineer
Page Three**

OTHER:

Except for qualifications established by law, additional related experience and formal education in which one has gained the knowledge, skills, and abilities required for full performance of the work of the job class may be substituted for the education or experience requirement on a year-for-year basis with 30 college credits being equivalent to one year of experience.

CONDITIONS OF EMPLOYMENT

Candidates selected for employment may be subject to medical inquiries and/or medical examinations and drug test (per U.S. Coast Guard requirements) to determine physical ability to perform the job. Weekend, holiday, shift work, on-call and overnight travel will be required. Valid Maryland Non-commercial Class C or equivalent driver's license may be required.