

Position: **Reference Job # MR02**

Ministry: Transportation and Highways

Working Title: **Marine Engineer**

Branch: Marine Branch, Albion Ferry

Level: Range 21

Location: Albion

NOC Code: 2274

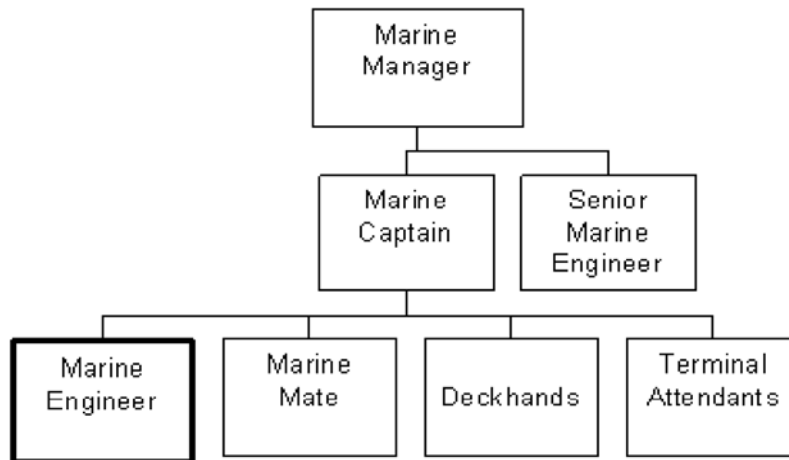
PRIMARY FUNCTION

To provide maintenance and repairs of main propulsion machinery, generators and related machinery and equipment on an inland ferry which require a third class engineering ticket.

JOB DUTIES AND TASKS

1. Monitors, maintains and repairs equipment, engines, auxiliary equipment, generators, compressors, refrigeration, water cooling and fuel systems and pumps on an inland ferry
 - a. monitors and detects any unusual noises and vibrations, performs trouble-shooting on equipment and determines whether repairs are necessary
 - b. performs routine maintenance such as oil changes, filter changes and cleans suction strainers
 - c. diagnoses and conducts repairs including performing plumbing, welding and cutting if required
 - d. estimates costs and recommends major repairs or whether to pull vessel out of service if necessary
 - e. designs replacement parts and recommends parts to be ordered in case of breakdown
 - f. greases machinery and working parts
 - g. changes light bulbs and indicator lights
 - h. completes reports on breakdowns and accidents
 - i. calibrates steering system
2. Performs electrical maintenance and repairs
 - a. performs electrical maintenance on motors including changing over generators
 - b. changes regulators, fuses, ballasts in light fixtures and switches
 - c. maintains and repairs electrical and manual ram winches
 - d. checks gang motors and gangway controls
 - e. checks, adjusts and recounts equipment such as natural gas sensors
3. Checks and maintains safety equipment
 - a. checks diesel and hydraulic fire pumps
 - b. maintains anchor winch
 - c. participates in safety drills
4. Performs other related duties
 - a. cleans machinery, bulkhead and decks
 - b. attends meetings as required to discuss mechanical problems and safety issues etc.

- c. trains new engineers in day-to-day mechanical and procedural operations and instructs deckhands and mates on equipment
- d. directs firefighting crew and organizes emergency parties
- e. assigns, monitors and examines work of maintenance/repair workers or instructs contractors who are brought in to perform repairs and checks and signs contractor's work as completed
- f. maintains and updates performance and maintenance logs
- g. fuels up ferry with natural gas and diesel fuel and verifies and signs fuel and oil bills for ferry



FACTOR	REASON FOR CLASSIFICATION	DEGREE	POINTS
1	<p>JOB KNOWLEDGE</p> <p>Understand the principles of marine engineering to provide maintenance and repair of main propulsion machinery, generators and related machinery and equipment on an inland ferry.</p>	G	250
2	<p>MENTAL DEMANDS</p> <p>Judgement to use the principals of marine engineering, reviews the work of trades contract repairs to vessel propulsion systems</p>	F	175
3	<p>INTERPERSONAL COMMUNICATION SKILLS</p> <p>Discretion required to provide direction for completion of work tasks to deckhands.</p>	C	30
4	<p>PHYSICAL COORDINATION AND DEXTERITY</p> <p>Significant coordination and dexterity required to calibrate and adjust equipment to precise tolerances.</p>	D	22.5
5	<p>RESPONSIBILITY FOR WORK ASSIGNMENTS</p> <p>Guided by marine engineering standards, applies accepted work methods in a different way to diagnose problems and repair marine equipment.</p>	E	120
6	<p>RESPONSIBILITY FOR FINANCIAL RESOURCES</p> <p>Moderate financial responsibility to provide cost data for purchasing decisions/contracts requiring subject matter knowledge.</p>	D	22.5

FACTOR	REASON FOR CLASSIFICATION	DEGREE	POINTS
7	RESPONSIBILITY FOR PHYSICAL ASSETS/INFORMATION Considerable responsibility to perform full maintenance and repair of marine equipment.	E	33
8	RESPONSIBILITY FOR HUMAN RESOURCES Responsibility to assign, monitor and review work of maintenance/repair workers (up to 1 FTE of employees).	CC	13
9	RESPONSIBILITY FOR WELL BEING/SAFETY OF OTHERS Significant care and attention to ensure the safety of others by maintaining and repairing marine equipment on a passenger ferry.	D	25
10	SENSORY EFFORT/MULTIPLE DEMANDS Intense sensory concentration visually and by touch monitor and operate marine machinery almost always.	D	18
11	PHYSICAL EFFORT Relatively heavy physical effort to frequently work in awkward positions.	E	24
12	SURROUNDINGS Exposure to frequently working in confined spaces.	D	9
13	HAZARDS Significant exposure to hazards from frequently repairing moving equipment.	D	9

Total Points: 751

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