



Job Title: Marine Engineering Technician

Purpose: As the Marine Engineering Technician, you will be responsible for technical fault diagnosis, repair and maintenance of mechanical and electrical systems of the Nexus Ferry, (including but not limited to) vessels, landings, fuelling, hydraulics, electrical (High & Low voltage supplies), hull, pumps, fire suppression, HVAC, Radar, VHF Comms, sewage treatment plant, propulsion, domestic facilities and supplementary associated safety critical equipment and systems in use.

The post has been identified as a Marine Safety Critical role.

Remuneration: RBM 4

1. Principal areas of responsibility

The following list is typical of the duties, which the post holder will be required to perform. It is not necessarily exhaustive and other duties of a similar type or level may be required from time to time.

- 1.1 To maintain Shields Ferry assets in accordance with the planned maintenance schedule to ensure safety, reliability and performance of the Ferry assets are maximised. Carry out effective repair and maintenance in all aspects of electrical and mechanical work such as engines, gearbox, generators, hydraulics, mechanical interlocks, and fire suppression equipment on Nexus ferries and infrastructure. Ensure all work is carried out strictly in accordance with the organisational standards and procedures that reflect the safety critical nature of the role. To fit new equipment in line with held competence to meet legislative requirements.
- 1.2 To conduct advanced fault diagnosis and remedial works as required to ensure vessel safety and reliability is maintained.
- 1.3 Complete system safety inspections and remedial testing following defect rectification, whilst using calibrated engineering inspection and testing equipment to support validation of maintenance activity tolerances.
- 1.4 Interpret highly intricate, multifaceted technical marine engineering information for each vessel, including safety critical engineering information on propulsion, electrical and hydraulic systems to support out of routine engineering tasks.
- 1.5 Use of advanced methods for identifying the origins of mechanical faults and failures. These methods include half-split, emergent sequence, six point, and injection & sampling techniques. When conducting fault diagnosis on live equipment, it is crucial to implement safety-critical control measures in accordance with relevant mechanical fault diagnosis principles to ensure the safety of personnel. Additionally, the Marine Fitter must ensure full compliance with the 'Safe System of Work' and 'Life Saving Rules' based on mechanical fault diagnosis principles.
- 1.6 To ensure compliance with Nexus ferries Safety Management System, engineering guidelines, rules, policies and procedures. Including completion of dynamic risk assessments to control task specific safety risks. Through the application of generic risk assessments and safe systems of work, controlling high risk activities i.e. working at height, confined spaces entry, high voltage, sewage treatment, heavy lifting, lone worker, HAV's, COSHH, radiation, dirty environments, marine working with restricted access and egress.
- 1.7 To liaise with external suppliers in the procurement of engineering stores and services in support of routine and emergency maintenance tasks. To use the designated company procurement system to order essential engineering stores as required. To ensure stock levels are maintained and recorded.

- 1.8 The post holder is expected to be flexible in undertaking the duties and responsibilities attached to their job and may be asked to perform other duties, which reasonably correspond to the general character of their job and their level of responsibility and may include acting as a competent crew member.
- 1.9 The post holder is expected to maintain personal and professional development to meet the changing demands of the job and participate in appropriate learning and development activities.
- 1.10 The post holder will ensure that Nexus's Vision, Values and Behaviours are at the forefront of all that they do.
- 1.11 The post holder will when appropriate work shifts, carry out stand by and call out duties and participate in emergency return to work situations.

2. Dimensions

2.1 Communications

2.1.1 The post holder will communicate using effective verbal and written reporting methods interpret, clarify and support understanding at all levels engineering maintenance tasks.

2.1.2 The post holder will communicate relatively complex information, using telephone, hand-held radio devices, electronic communication, writing and verbally, to all stakeholders detailing technical faults. The information conveyed will include reasons for failure, how long equipment will be unavailable, alternative arrangements, sources of further help and contact information.

2.1.3 The post holder will liaise with and direct third-party contractors. They will also provide support and assistance with complex technical issues requiring external support from Principal Engineers or other industry experts, influencing positive outcomes to support engineering requirements.

2.1.4 The post holder is expected to provide, develop and sustain positive working relationships and share complex technical knowledge with colleagues across the wider Nexus business.

2.2 Initiative & Independence

2.2.1 The post holder will be required to use their own initiative and work unsupervised frequently and as part of a team.

2.2.2 The post holder will make autonomous decisions to prioritise work to ensure the safe system of work is maintained when working alone, or as part of a team, conforming with legislative and company requirements.

2.2.3 The post holder will be required to analyse and solve complex technical problems when working independently.

2.2.4 A frequent requirement to undertake fault-finding activities while working on highly complex marine assets, safety protection systems, lifesaving aids & other vital vessel installations (VHF Comms/Radar). Faults are largely non-routine and require the interpretation of in-depth technical information including schematic diagrams, operation & maintenance literature, Cause & Effect matrices, and 'as built vessel/landing' system information.

2.2.5 There may be a requirement to temporarily deputise for the next line of the management structure were applicable.

2.2.6 Provide feedback and improvements to working practices/procedures and identify remedies to problems where appropriate.

2.3 Resources

- 2.3.1 The role requires considerable resourcefulness to overcome difficult non-routine and varied problem-solving techniques on a variety of assets under the control of engineering section of the Ferry to ensure crew/customer safety and service is a priority.
- 2.3.2 Operation of a large range of specialist plant, tools and equipment to facilitate such as; working at height, heavy loads, transportation, high/low volt testing, fuelling, fire detection systems, ramp hydraulics, high pressure system and other common tasks.
- 2.3.3 Drive the company vehicle provided to attend off site locations when conducting works on contractor sites and deliver stores to support works being undertaken. Comply with company vehicle guidelines and maintain a current UK driving license.
- 2.3.4 Follow training, procedures and operational guidelines for the equipment being used.
- 2.3.5 Procure high value stores to support engineering requirements for scheduled maintenance and emergency defect rectification.
- 2.3.6 Being accountable for receipting of high value marine engineering stores using Business Central.

2.4 People

- 2.4.1 No direct responsibility for people other than general awareness and care for colleagues.
- 2.4.2 To assist with and deliver practical training and mentoring of colleagues to achieve competence (e.g., engine startups and fueling) and exchange technical information and skills developed in the course of routine duties.

2.5 Health & Safety

- 2.5.1 Directly responsible for ensuring compliance with the safe system of work in place, ensuring vessel, crew and passenger safety are not compromised when conducting maintenance tasks and fueling.
- 2.5.2 To ensure competence levels are maintained to allow high risk work such as confined space entry, working at height, electrical isolations and other hazardous works can be completed in a safe manner.
- 2.5.3 To ensure all plant and tools are operated in accordance with nexus policies and manufacturer's instructions.
- 2.5.4 To wear and maintain company uniform and PPE as required in support of the safe system of work.
- 2.5.5 To complete and pass all company training in accordance with the current competence role profile.
- 2.5.6 To ensure compliance with Health & Safety Regulations. Nexus Safety Policy, Ferry Domestic Management System, Maritime & Coastguard Agency Regulations and MARPOL guidelines and all relevant safety procedures associated with the works being undertaken.
- 2.6.3 To report noncompliance items and safety concerns to the Designated Person Ashore (DPA) and to assist/participate in investigations as required.

- 3. The Holder of this post must have access to required safety publications and personal equipment/PPE.