PEA Job Description

1. Position Identification

<table>
<thead>
<tr>
<th>Position Number</th>
<th>993785</th>
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<tbody>
<tr>
<td>Position Title:</td>
<td>Field Services Manager (FSM)</td>
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<tr>
<td>Department:</td>
<td>Ocean Networks Canada</td>
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<tr>
<td>Reports to:</td>
<td>Director, Marine Operations</td>
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<tr>
<td>Number of Direct/Indirect Reports</td>
<td>Direct__11____ Indirect____2____</td>
</tr>
<tr>
<td>Classification Level</td>
<td>SG 15</td>
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<tr>
<td>Last Updated</td>
<td>September/2018</td>
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2. Position Summary

Ocean Networks Canada (ONC) is a world-leading organization supporting ocean discovery and technological innovation. ONC is a not-for-profit society that operates and manages innovative cabled observatories on behalf of the University of Victoria that supply continuous power and Internet connectivity to various scientific instruments located in coastal, deep-ocean, and Arctic environments. ONC’s cable arrays host hundreds of sensors distributed in, on and above the seabed along with mobile and land based assets strategically located. These instruments address key scientific and policy issues (subsea earthquakes and tsunamis, ocean acidification, marine biodiversity, etc.) within a wide range of environments.

ONC's Observatory Operations' division is mandated to provide a reliable and relevant digital and coastal and sub-sea infrastructure that facilitates the goals of the observatory user communities. As a department within Observatory Operations, Marine Operations supports this mandate through the installation, maintenance and repair of the cabled arrays, mobile systems and land-based assets that comprise the coastal sub-sea infrastructure. In this regard, Marine Operations utilizes a team-based, client-focused approach that promotes a safe work environment and fosters an environment of mutual respect, cooperation and support. Together the Field Services, Testing & Development and Operations Support units within Marine Operations, work to efficiently, effectively and safely fulfill their core purpose. The Marine Technology Centre (MTC) in Sidney serves as the department's base of operations.

The Field Services unit is primarily responsible for preparing for and executing field service operations related to the day-to-day workings of the cabled observatories and other mobile and land based assets. This includes ship based activities that occur multiple times a year for up to four weeks duration, as well as day and multi day trips to service land and marine systems.

The FSM works in collaboration with the Operations Support and Testing & Development Teams, in the installation, maintenance and repair of ONC's coastal sub-sea infrastructure. The FSM's responsibilities include:

- Design, construction and installation of new equipment, platforms, structures and systems
- Field operations planning and execution
- Member of Marine Operations leadership team
- Participates and/or serves as Expedition Lead during at-sea observatory maintenance and installation expeditions as required
This position is expected to maintain certifications in forklift and crane operation, standard first aid or marine basic first aid, and a Transport Canada approved marine safety course such as SCTW-95 Basic Safety

This position, as with all Marine Operations positions, will on a rotating basis serve as the Marine Operations Safety Coordinator whose role it is to coordinate internal tasks required to ensure safety equipment, training and records are in place to meet Marine Operations workplace safety requirements. The Safety Coordinator sits on the ONC Joint Local Safety Committee.

3. Key Responsibilities and Expectations

<table>
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<tr>
<th>Key Responsibilities. % of time</th>
<th>Expectations:</th>
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| **Design, construction and installation of new equipment, platforms, structures and systems: 45%** | • Oversees the implementation of project plans and budgets for new equipment, platforms, structures and systems; ensures project plans, budget, requirements and milestones are met and projects are delivered on time and on quality  
• Leads the design and construction of new equipment, platforms, structures and systems that are compatible with the observatory  
• Determines the breadth of testing required for developmental systems before acceptance of engineering work is provided  
• Collaborates with the Testing and Development Manager in the design and manufacture of equipment, platforms and structures as required  
• Oversees the assembly, preparation and staging of instrument platform systems for observatory deployments, and assists as required  
• Reports to Director Marine Operations major financial and operational matters that are anticipated to impact Marine Operations  
• Collaborates with ONC Project Management, Innovation and Science Services staff, and the Director Marine Operations, in the implementation of project plans  
• Ensures regulatory and permitting issues associated with observatory installations are addressed, consulting with stakeholders to verify and where necessary assisting with permitting  
• Coordinates with other ONC Department heads on the administration of the various ONC document management systems. |
| Leadership: 20% | • Participates in day-to-day department, and annual planning and long-term strategic planning activities as a member of the Marine Operations leadership team  
• Provides input into the development of project plans, budgets and technical reports for new equipment, platforms, structures and systems  
• Manages unit activities, resources and priorities to effectively achieve unit and project objectives  
• Leads unit measuring, monitoring and reporting and project-based reporting activities  
• Leads the development, implementation and monitoring of unit policies, protocols and procedures while ensuring compliance with University policies, government regulations and best practices  
• Improves the efficiency and effectiveness of unit systems, processes and practices, consulting with members of the |
Testing & Development and Operations Support teams regarding their support requirements
- Leads regular team meetings to set priorities, plan unit activities, review project implementation plans and budgets and encourage collaborative working relations
- Develops technical and professional skills of staff through mentoring, coaching and effective performance management
- Collaborates with Director Marine Operations in the development of unit job descriptions and recruitment activities
- Facilitates cross training so specialized knowledge can be shared between Marine Operations' team members
- Develops and maintains co-operative, productive, solution-oriented working relationships
- Provides technical support on shore, or at sea, during ONC expeditions and field work as required

### Field operations planning and execution: 20%  
- Leads expedition planning, mobilization and demobilization activities in collaboration with the Director Marine Operations and Testing & Development and Operations Support Managers
- Develops installation deployment and recovery plans that support the established Expedition Plan
- Participates and/or serves as Expedition Lead during at sea maintenance expeditions as required
- Oversees documentation of sea expeditions including checklists, expedition reports etc.

### Management of MTC Field Services work areas: 10%  
- Oversee Field Services work areas at MTC; ensure work areas are tidy, organized and safe
- Works with the Operations Support Manager to collaboratively manage MTC work areas used by the Field Services Team, and identify the Teams’ equipment and facility needs and requirements

### Safety: 5%  
- Monitors the safety of ONC staff and contractors working in MTC's Field Services work areas and at in-shore and shore stations
- Works with University Occupational Health & Safety and Environment, and Testing & Development and Operations Support Managers on operational safety planning at MTC
- At MTC and in the field, makes decisions with safety as the top priority

## 4. Classification Factors:

### Problem-Solving:
The FSM leads technical design and development that is of a highly innovative nature, where in many instances there are no precedents. The challenges encountered when developing new solutions require problem solving skills of a different nature; the eventual outcome is heavily reliant on creativity, practicality and a specialized knowledge of the environment and how technology can be successfully utilized.

Work requires in-depth analysis of complex and variable problems as well as critical thinking and judgment to identify solutions that are difficult to find. Solutions require the interpretation, evaluation and adaptation of procedures, policies and precedents. Investigation and innovative thinking are required to develop new methods and procedures.

### Responsibility for Financial & Material resources:
The FSM is responsible for the management of the $1.1M field services budget, the equipment and infrastructure of all instrument ONC systems, its maintenance and repair, and for developing and maintaining reference documentation for the individual installations.
The FSM provides input into the development of project budgets valued at approx. $500-800K and monitors the implementation of project budgets, advising Director of Marine Operations of major financial matters.

The FSM communicates with suppliers, contractors and vendors to arrange for maintenance and servicing of the stations and collaborates with the Operations Support Manager in the initiation of RFQ and RFP processes and to procure hardware required for their ongoing operation.

This position holds a $15K P-card.

**Responsibility for Human Resources:**
The FSM receives supervision from and reports to the Director Marine Operations.

The FSM directly supervises Field Services staff and indirectly supervises work study and/or co-op students. Direct supervision of unit staff includes job description development, staff recruitment, recommendations for hiring, and evaluation of staff performance.

The FSM provides functional supervision to all ONC employees working in the Field Services work areas at MTC. As Expedition Lead, the FSM supervises marine operators, Remote Operated Vehicle (ROV) service providers, and contractors, and delegates assigning roles and responsibilities to ONC crew.

**Impact of Decisions and Actions:**
The FSM must complete all work within established frameworks and allotted plans and budgets, meet program, service and business requirements, function effectively as a team leader and member of Marine Operations leadership team, and ensure safety is considered in all aspects of their work.

Specifically, the FSM is accountable for ensuring the safe and efficient operation of the Field Services work areas at MTC, instruments, equipment, platforms and structures are designed and manufactured to meet the appropriate criteria and functionality in order to avoid or to mitigate failure and positively impact the performance of the ONC observatory. Careful expedition planning and at sea decision making by the FSM has a significant bearing on the performance of the facility and hence the reputation of ONC as a reliable provider of long term, uninterrupted data series. The FSM also acts on behalf of ONC when consulting with external contractors.

Given tight deployment deadlines, the value of the instruments and systems, and the high costs associated with deployment and recovery operations at sea, these tasks are critical. The decisions and actions taken by this position impact both the success of the network and the reputation of ONC and ultimately UVic based on the reliability of the network.

**Independence:**
The FSM makes timely decisions related to the design, construction and installation of new equipment, platforms, structures and systems, and field operations planning and execution.

The FSM assists in determining and enforcing ONC maintenance policies, procedures and practices to ensure the most effective use of limited staff resources. As manager, the FSM collaborates with the Director Marine Operations and the Executive Director Observatory Operations, in the setting of long-term program strategies, direction and goals for Marine Operations. Informed guidance is difficult to obtain.

Issues that are abnormal, or are of consequence (e.g. major financial, operational or time considerations), staff performance management concerns, or safety issues, will be escalated to the Director Marine Operations in a timely and appropriate manner.
### 5. Summary of Qualifications:

The successful candidate will have a minimum of a Bachelor’s Degree in Engineering and a minimum of ten years’ experience in engineering, or the equivalent combination of education and experience. The candidate must either be a member of the Association of Professional Engineers of British Columbia, or eligible to become a member.

Essential qualifications include experience with oceanographic instrumentation and equipment, shipboard experience in deployment of marine equipment, as well as a strong technical background in relevant technologies.

**Requirements:**
- Experience with PC based command, control and data acquisition
- Thorough command of serial communications protocols (EIA 232, 422, 485)
- Good knowledge of Ethernet hardware, TCP/IP and UDP
- Facility with systems-level hardware integration
- Experience with microprocessor-based control systems
- Experience with CAD engineering design software, database applications and standard office software
- Experience with financial/budget administration
- Supervisory experience

**Competency Requirements:**
- Resourceful, with strong problem-solving abilities
- Strong interpersonal, verbal, written and computational communication skills
- Ability to coordinate complex logistics of an ocean-going campaign, among a range of expert technical resources (ship, ROV, scientific technical staff)
- Ability to manage multiple tasks in a fast-paced, deadline-driven environment
- Ability to process data from oceanographic instruments and assess data quality
- Ability to plan, organize and monitor the work and activities of self and direct reports according to priorities, established schedules and deadlines.
- Ability to analyze, interpret and evaluate problems and provide practical, cost effective solutions.
- Ability to communicate effectively with co-workers, scientists, technologists, customers, contractors and the general public, both orally and in writing in the English language.
- Ability to serve as spokesperson, facilitator or participant in meetings and presentations to discuss engineering projects or proposals.
- Ability to provide leadership and establish and maintain a collegial working environment conducive to positive morale, individual style, quality, creativity, and teamwork.

**Assets:**
- Forklift certification
- A Transport Canada approved marine safety course such as Small Craft Basic Safety
- A current Standard First Aid or Marine Basic First Aid certificate

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**Employee’s Signature:**

**Date:**

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**Manager’s/Supervisor’s Signature**

**Date:**