

# Master Mariner

## ROLE OVERVIEW

**Working as the commander in chief of a vessel you will be responsible for the health, safety, and wellbeing of all members of your crew onboard.**

You will operate and command a vessel used to transport passengers and cargo on oceans, coastal, and inland waters while maintaining supervision and control of the activities of the deck crew.

You may be employed by marine transportation companies, federal government departments, or private companies. To be successful in this position you must not only have strong understanding of the life at sea but also have the necessary leadership skills and abilities to manage a crew of seafarers in a variety of complex environmental conditions.

## STRATA LEVEL: 3A – Manager

### Also Known as:

- Ship Captain
- Boat Captain
- Charter Boat Captain
- Vessel Captain

### Education and Experience:

- High School Diploma or Equivalent.
- Experience as a fishing vessel deckhand
- Marine Emergencies Duties (MED) Certificate
- Certificates of Competency by Transport Canada (Master Mariner, Mariner 3000 GT, Mariner 500 GT, Mariner 150 GT, Ship Pilots License).

### Associated NOC(s):

- **2273** – Deck Officers, Water Transport



## TECHNICAL



### Meteorological and Hydrological Forecasting

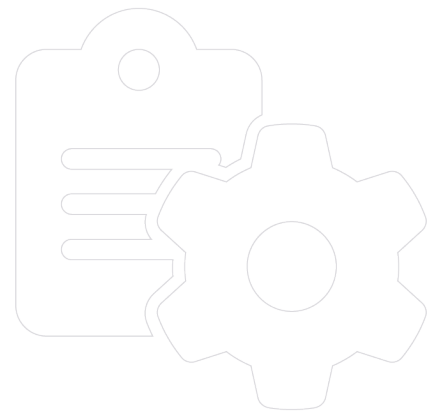
**Monitor meteorological and hydrological data to determine and forecast conditions to make informed decisions based on the interpretation of data.**

- Uses instruments and secondary data sources to obtain meteorological information prior to taking watch to make informed decisions.
- Uses instruments and secondary data sources to obtain hydrological information prior to taking watch to make informed decisions.
- Maintain a dynamic situational awareness of conditions to determine appropriate course of actions.
- Recognize significant changes to environmental conditions to assess the potential impacts of changes to adjust plans accordingly.
- Immediately alert necessary parties of changes to environmental conditions and plans of action to ensure all parties know active duties.

### Ship Stability

**Takes appropriate measures to stabilize the vessel to ensure the safety of the crew and equipment onboard.**

- Applies knowledge of transverse and longitudinal stability principles to assess the stability of the vessel to reduce the risk of capsizing.
- Adjusts the positions of weight onboard to correct unstable and neutral equilibrium to maintain vessel stability.
- Uses pre-calculated operating conditions to ascertain adequate stability to adapt ships stability under conditions of duress.
- Uses displacement and TPI/TPC scales to determine displacement from draft and vice versa.
- Maintains integrity of the hull and superstructures to prevent flooding and capsizing.



## Chartwork and Pilotage

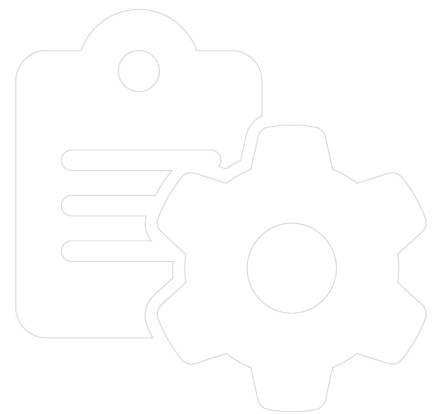
**Uses charts, nautical publications, and instruments to pilot a vessel in and out of harbors or anchorages, along coastlines, and through channels.**

- Uses nautical charts to identify navigable areas, shorelines, and non-navigable areas to safely navigate vessel.
- Maintains an up-to-date collection of Canadian nautical publications to use as navigation aids to ensure vessel safety.
- Determines a vessel positioning by using landmarks, navigation aids, and dead reckoning to chart a true course between observed positions.
- Maintains an up-to-date log book and a record of compass errors to ensure accurate reporting on the progress of the vessel.
- Interprets the effects of wind, current, and tides to calculate the speed between two positions.
- Uses navigable aids and precalculations of tidal heights to alter courses when navigating vessel through confined waters.
- Creates a passage plan to determine an efficient route, alternate routes and possible ports of refuge in case of emergency, anticipated weather conditions, the abilities of the crew, the condition of the boat and its equipment, and necessary charts to ensure safe passage of a vessel.

## Marine Communications

**Maintains communications with Vessel Traffic Services to prevent near-misses and ensure marine safety.**

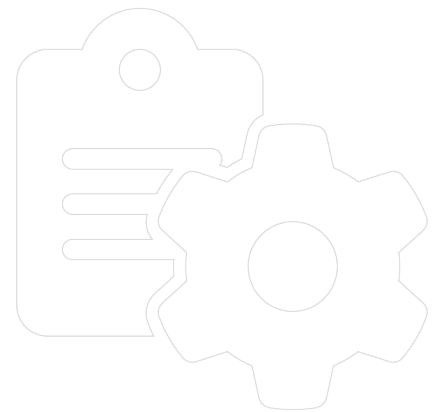
- Applies the international code of signals to interpret messages to ensure appropriate action can be taken in accordance with incoming messages.
- Transmits and receives information by visual signals, such as Morse, to communicate between ships over long distances where other telecommunications are not available or not appropriate.
- Implores the use of standard marine navigational vocabulary to assist in the greater safety of navigation and conduct of ships.
- Contacts Vessel Traffic Services to obtain clearance prior to departure or passing through sovereign waters.
- Maintains a listening watch on designated marine high frequency radio channels to communicate with Vessel Traffic Services to receive assistance, information, navigation safety, weather information, or other details pertaining to marine safety.



## Radar Navigation

**Interprets and analyzes information obtained from radar system to direct and maintain safe navigation of a ship.**

- Uses navigation equipment to determine a craft's position fix, course, and speed to safely navigate through an area.
- Accounts for environmental, meteorological, and hydrological conditions to set a craft's course and speed to ensure safe navigation.
- Adjusts controls and inputs variables into radar system to navigate the safe voyage of the vessel.
- Identifies critical echoes from radar navigation to chart ship through various traffic situations.
- Uses radar systems to detect course and speed changes of other ships to adjust craft's positioning accordingly.
- Applies appropriate plotting techniques to determine the course, speed, closest point of approach, time of closest point of approach and aspect of targets to plan avoiding action in conflict scenarios.
- Plans and prepares a vessel passage plan by selecting chart and lay off courses accordingly to exercise passage instructions.



## PERSONAL AND PROFESSIONAL



### Communication

**Positively directs outcomes by delivering communication that results in a better understanding of goals and objectives and that capture interest and gain support for immediate action.**

- Provides clear instructions, information, and duties to supervised employees to ensure employees clearly understand their position.
- Maintains a clear line of communication in situations of duress to ensure the safety of all crew onboard.
- Understands and applies nautical slang/ship speak when communicating with crew.

### Leadership

**Promotes and leads cooperation among supervised personal to achieve a collective outcome.**

- Allocates duties and informs crew of expected standards of work and behaviour to meet a standard result.
- Shares relevant and useful knowledge, experience, or expertise to aid crew accomplish their objective more efficiently or effectively.
- Encourages other team members to assist one another by expressing others contribute their knowledge, expertise, or efforts to achieve objectives.
- Provides junior members of crew with training and developmental objectives to improve operational capabilities and current levels of competence.



## Problem Solving

**Identifies problems and uses logic, judgement, and evidence to evaluate alternative scenarios and recommend solutions to achieve a desired goal.**

- Analyzes radar and environmental information to determine the most optimal areas to fish.
- Identifies service and maintenance issues to equipment or vessel and coordinates with crew to alleviate problems.
- Assesses environmental conditions to determine safe navigation passage and evasion from dangerous scenarios.

## Attention to Detail

**Delivers a concentrated concern, including monitoring and checking information, organizing tasks and resources efficiently, or all areas involved towards the completion of an objective.**

- Provides accurate, consistent information on all pieces of work to ensure reliable results.
- Routinely expresses concern that procedures and standards are followed thoroughly in the completion of a task[s].
- Stays calm under pressure and distress to ensure operation are maintained under situations of duress.
- Applies a concentrated concern to interpreting navigational information to ensure vessel maintains true course.



## Professional Ethics

**Demonstrates honesty, responsibility, respect, and fairness in decision making to diminish risk, increase trust, and improve long term success.**

- Understands sustainable catch rates and does not overfish populations to ensure stock biomass is not reduced.
- Establishes and promotes a culture of respect and ethics with the crew to ensure successful operations.
- Adheres to all regulatory and legislative procedures, processes, and programs to ensure fair and equal access to shared resources.



## LEGAL, REGULATORY, AND POLICY



### Navigation Safety

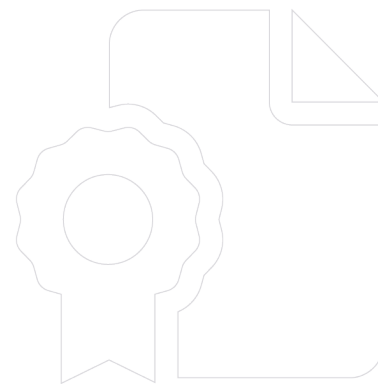
**Adheres to the International Regulations for Preventing Collisions at Sea with Canadian Modifications to ensure the safety of vessels and crews while at sea.**

- Demonstrates knowledge of navigational safety, including distress, fog, and manoeuvring signals to ensure safe navigation.
- Considers all relevant factors, as describes in the STCW code, to assign watchkeeping duties to officers onboard to maintain a safe navigational watch.
- Provides standing orders and other special instructions, where necessary, to officers to maintain the navigation of the ship.
- Compares compasses and synchronizes repeaters with the officer in charge of navigational watch to determine standard compass error.
- Exchanges information with the navigational watch on navigational procedures, weather conditions, and ship's characteristics to maintain an accurate check on the ships position and movement.

### Regulatory Compliance

**Abides to specific regulations, codes, and legislation within a defined jurisdiction to ensure the health and safety of others.**

- Inspects vessel and equipment regularly, taking into account of the Transport Canada Marine Safety and Security inspection regime, to ensure the regulatory compliance of vessel.
- Studies and analyses different fisheries management approaches, accounting for international treaties and industry norms to analyze fisheries management regulations.
- Monitor and control compliance with legislative requirements while onboard to ensure the safety of life at sea.
- Renews certificates and documents required to be onboard ships to ensure the continued validity of inspected items and equipment.

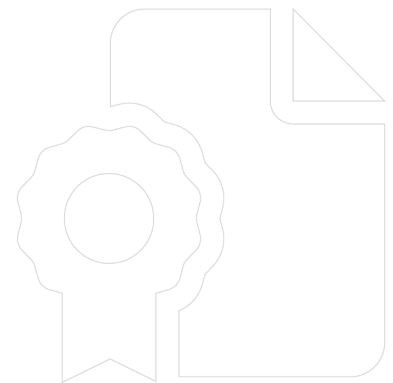




## Marine Emergency Duties

**Assesses, prepares, and responds to onboard emergency situations to assist in their own or crew's survival and rescue.**

- Identifies and applies damages control techniques for various flooding scenarios to prevent capsizing.
- Plans regular safety exercises, drills, or scenarios to maximize safety in potentially dangerous scenarios.
- Develops and implements onboard safety programs in accordance with regulations, standards, and legislation to mitigate potentially dangerous scenarios.
- Applies onboard and practical firefighting training in the event of an emergency to work as a team to extinguish fires.
- Identify muster signals in the event of an emergency to take appropriate measures to ensure the safety of self and crew.
- Operates survival craft equipment in the event of an emergency to ensure the safety of self and crew.
- Administer CPR or first aid in order to provide help to a sick or injured person until they receive more complete medical treatment.



## ENVIRONMENTAL

**Marine Pollution Prevention**

**Takes appropriate precautions and follows procedures to control pollution and byproducts caused by vessel operations to protect the marine environment.**

- Takes appropriate precautions to prevent pollution of the marine environment.
- Applies procedures for monitoring shipboard operations to comply with legislative requirements to ensure a positive environmental reputation.
- Ensures vessel has the requisite and functional equipment while at sea to mitigate operational pollution.
- Adheres to appropriate legislations and regulations in response to reporting pollution incidents to ensure pollution is addressed.

