

# Standard Operating Procedure for Working on Water in Small Motorized Vessels

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Written By:	Manager, Environmental, Health & Safety		
Approved By:	Dean of Science, Faculty of Arts & Science		

# PURPOSE

This SOP has been created to provide Trent University specific information and direction that is compliant with the Occupational Health and Safety Act (OHSA) and the Canada Shipping Act (CSA), 2001 to ensure marine operations carried out by employees and students of Trent University are conducted in a manner that includes reasonable precautions for the protection of the employee and or students.

# OBJECTIVES

Trent University uses small vessels (motor powered boats) as part of work operations conducted on various water environments throughout the province of Ontario. All Trent owned or operated small vessels being used for work operations should be considered commercial vessels for the purpose of compliance with the CSA, as well as workplaces for the purpose of compliance with OHSA. As vessels are identified as workplaces, other legislation and Trent University directives related to workplace Health and Safety will also apply.

# SCOPE

All Trent University employees engaged in marine operations that involve motorized small commercial vessels (under 15 gross tons) are required to review and adhere to this SOP.

This SOP:

- Applies where university personnel (students or staff) utilize equipment owned by the University for marine operations.
- Applies where the university rents a small commercial vessel and university employees, or students operate or crew the vessel.
- Does not address commercial fishing vessels, vessels used for domestic ferry services, vessels over 15 gross tons or human-powered vessels (canoes).
- Is related to university-wide teaching and research tasks and their associated hazards. It may be necessary to develop Safe Operating Procedures (SOP) or consult other SOPs in order to identify controls for use of specific equipment or completion of specific tasks.

# DEFINITIONS AND ACRONYMS

Definitions not found below may be found in the <u>Small Vessel Regulations</u> (SVR) and/or the <u>Canada Shipping Act</u> (CSA).

Competent Person	
	Defined by the Occupational Health and Safety Act (OHSA) as one who:



	<ul> <li>a) is qualified because of knowledge, training and experience to organize the work and its performance</li> <li>b) is familiar with the OHSA and the regulations that apply to the work</li> <li>c) has knowledge of any potential or actual danger to health or safety in the workplace.</li> </ul>		
Crew Member	A person that is not an Operator or Passenger, who in the course of their workplace dutie assists in the operation of the vessel or uses the vessel as a work platform (e.g. biologist conducting sampling).		
Freeboard	The height of a vessels side between the waterline and the deck.		
Operator	The person in command and charge of a vessel. In some circumstances, an Operator of a vessel may not be an employee of Trent but a contractor.		
	Note: the operator has full control of the vessel but may or may not be deemed the supervisor of the workplace under the OHSA.		
Near Coastal Voyage, Class 2	A voyage that is not a sheltered waters voyage; is within 25 nautical miles from the shore; and within 100 nautical miles from a place of refuge.		
OSHA	Occupational Health and Safety Act		
Passenger	A person that is not an Operator or Crew because they do not assist in the operation of a vessel as part of regular or routine workplace duties. Employees who are being transported to their place of work are considered passengers.		
Personal Flotation Device (PFD)	A personal life-saving device designed to be worn in place of a lifejacket where allowed by regulations. A PFD is less buoyant than a lifejacket and may not have the capability of turning an unconscious person face-up in the water. Note: A PFD must be marked as approved by Transport Canada, Fisheries and Oceans Canada or the Canadian Coast Guard.		
Small Commercial Vessel	A vessel that is not a pleasure craft or used for commercial fishing and is no larger than 15 gross tons and, if it is used to carry passengers, carries no more than 12.		
Sheltered Waters Voyage	A voyage on a lake or river, above tidal waters, where the vessel can never be further than 2.5 nautical miles from shore (mainland or island suitable as a safe refuge from the weather). A voyage that is on the waters listed in the <u>Sheltered Waters Voyage Criteria</u> , during the period specified.		
Supervisor	For the purposes of the OHSA any employee may be deemed to be a supervisor. See Roles and Responsibilities section for details on what roles are applicable to any employee given "charge of a workplace or authority over a worker" as per subsection 1(1) of the OHSA. Reference the Ministry of Labour publication entitled " <u>Who is a Supervisor under the</u> <u>OHSA</u> " for further clarification.		
Supervisor of Vessel Operation	A person who has charge of organizing and implementing the work activity that involves the use of a vessel. (e.g. Principle Investigator or Course Instructor).		
Worker	(OHSA definition): Means any of the following:		



•	A person who performs work or supplies services for monetary compensation.
•	Any student who performs work or supplies services for no monetary compensation under a work experience program authorized by a recognized educational institution that operates the school in which the student is enrolled.
•	A person who receives training from an employer, but who, under the Employment Standards Act, 2000, is not an employee for the purposes of that Act because the conditions set out in subsection 1 (2) of that Act have been met.
•	Such other persons as may be prescribed who perform work or supply services to an employer for no monetary compensation.

# **ROLES & RESPONSIBILITIES**

# Trent University is responsible for:

The CSA requires that each vessel of the owner have an Authorized Representative. Since the University is the owner of all Trent University vessels the President is considered to be the Authorized Representative who delegates duties to their Vice Presidents via delegation of authority.

Duties of the Authorized Representative will be carried out by various Trent University Employees including but not limited to Faculty, Principle Investigators, Research Technicians, Departmental Technicians.

# Manager/Supervisor (Authorized Representative or Supervisor of Vessel or Master under the CSA) is responsible for:

- Attend and/ or appoint a competent individual to complete <u>required training/certification</u> and carry required documentation on board the vessel (<u>Master Training Requirements Summary</u>).
- Some duties may be delegated to competent Crew Members as deemed by the Operator, however, the Master is accountable for ensuring correct procedures are adhered to and for the safety of the crew.
- Ensure that a Vessel Emergency Response Plan is in pace for each voyage, and communicated to all crew members
- Notify the Supervisor immediately in the event of any unplanned event including but not limited to a chemical or fuel spill, marine incident, injury, significant near miss, or traffic incident.
- If transporting a vessel, a circle check of the towing vehicle ,trailer and vessel shall be performed and shall include but is not limited to: signal lights and brake lights, visible damage, towing vehicle and trailer tire condition, all safety equipment and life jackets or PFD meet the applicable CSA Standard (Transport Canada, Canadian Coast Guard or Fisheries and Oceans Canada) (refer to Appendix 1). Confirm that the trailer registration information and an automobile liability insurance card are in the vehicle. Insurance information can be obtained by contacting the Finance Department: finance@trentu.ca.



- Conduct and document a <u>circle check</u> of the marine vessel prior to launch of vessel, including ensuring that all required safety equipment is on board. If the circle check is conducted by a Crew Member, the Operator must review the document before sailing. It is not necessary to carry insurance information in a marine vessel. Insurance information for marine vessels is updated annually and can be obtained by contacting the Finance Department: <u>finance@trentu.ca</u>.
- Be aware of local hazards such as rocks, shallow water, submerged power lines and others. If not familiar with
  the local waters; determine hazards by checking charts, if available and monitoring the marine radio if so
  equipped.
- Ensure the Supervisor is aware of voyage details such as destination, estimated time out/in, name of persons onboard and mode of communication if applicable.
- Check weather forecast before work on the water is undertaken and monitor throughout the voyage. Marine weather is available on the <u>Marine Forecasts and Warnings for Canada</u> website as well as through Environment Canada's Meteorological Service VHF <u>Weatheradio</u>.
  - o Do not undertake a voyage if the weather conditions make the voyage unsafe.
- Before setting out on a voyage, ensure that all <u>Crew Members are trained</u>, have participated in the <u>required drills and practice sessions</u> and each person has their training documentation on board. Identify the designated First Aid responder and ensure their certification is up to date.
- Advise the Supervisor if a Crew Member is unable to crew the vessel due to a condition that could jeopardize the safety of the vessel or those onboard.
- Report hazards, equipment defects and maintenance needs to the Supervisor. Do not operate a vessel that is in an unsafe condition.
- Provide a <u>safety briefing</u> for passengers and Crew Members who are unfamiliar with the vessel. Provide safety information to Crew Members if passenger activities or equipment pose additional hazards. Identify the First Aid responder.
- Ensure that persons on board the vessel wear an <u>approved lifejacket or approved PFD</u>. Ensure that the vessel carries an approved life jacket for each person on board, even if each person is wearing a PFD. Note: Certain PFDs may be used in place of lifejackets, provided they meet the conditions outlined in Transport Canada.
- Keep within the load limit and the horsepower limit of the vessel as found on the capacity plate. The capacity plate should be permanently fastened to the boat near the steering area, of the helm.
- Test navigation equipment and communication devices to ensure proper operation before the vessel reaches 100 metres from shore. If there is a cellphone for the vessel it may kept on his/her person while on the water or in an easily accessible location.
- Adjust speeds according to applicable <u>operation regulations and schedules</u> to ensure the safety of the Crew Members on board and other boaters in the area.
- Ensure <u>safe fueling procedures</u> are followed as per manufacturer's instructions.
- Take all reasonable precautions to ensure the safety of the vessel and those persons onboard.



Employees (may be Operator, crew member or passenger as defined in CSA) are responsible for:

- Follow all directions of the Supervisor or Operator
- If transporting a vessel, a circle check of the towing vehicle, trailer and vessel shall be performed and shall include but is not limited to , signal lights and brake lights, visible damage, towing vehicle and trailer tire condition, all safety equipment and life jackets or PFD meet the applicable CSA Standard (Transport Canada, Canadian Coast Guard or Fisheries and Oceans Canada) (refer to Appendix 1). Confirm that the trailer registration information and an automobile liability insurance card are in the vehicle. Insurance information can be obtained by contacting your supervisor.
- Conduct and document a <u>circle check</u> of the marine vessel prior to launch of vessel, including ensuring that all required safety equipment is on board. If the circle check is conducted by a Crew Member, the Master must review the document before sailing.

Be aware of local hazards such as rocks, shallow water, submerged power lines and others. If not familiar with the local waters; determine hazards by checking charts, if available and monitoring the marine radio if so equipped.

Ensure the Supervisor is aware of voyage details such as destination, estimated time out/in, name of persons onboard and mode of communication if applicable.

Check weather forecast before work on the water is undertaken and monitor throughout the voyage. Marine weather is available on the <u>Marine Forecasts and Warnings for Canada</u> website as well as through Environment Canada's Meteorological Service VHF <u>Weatheradio</u>.

 $\circ$  Do not undertake a voyage if the weather conditions make the voyage unsafe.

Report hazards, equipment defects and maintenance needs to the Supervisor or Operator. Do not operate a vessel that is in an unsafe condition.

Ensure that persons on board the vessel wear an <u>approved lifejacket or approved PFD</u>. Ensure that the vessel carries an approved life jacket for each person on board, even if each person is wearing a PFD. Note: Certain PFDs may be used in place of lifejackets, provided they meet the conditions outlined in Transport Canada.

Keep within the load limit and the horsepower limit of the vessel as found on the capacity plate. The capacity plate should be permanently fastened to the boat near the steering area, of the helm.

Test navigation equipment and communication devices to ensure proper operation before the vessel reaches 100 metres from shore. If there is a cellphone for the vessel it may kept on his/her person while on the water or in an easily accessible location.

Adjust speeds according to applicable <u>operation regulations and schedules</u> to ensure the safety of the Crew Members on board and other boaters in the area.

Ensure <u>safe fueling procedures</u> are followed as per manufacturer's instructions.

Take all reasonable precautions to ensure the safety of the vessel and those persons onboard.

#### SAFETY EQUIPMENT AND PROCESSES

General



No person shall operate or permit another person to operate a vessel unless the safety equipment required, as outlined in the SVR, is carried on board the vessel and the equipment meets the requirements identified under the CSA.

Safety Equipment as detailed in the Appendix: Safety Equipment Chart for Small Commercial Vessels is required.

The safety equipment required by this SOP shall be

- (a) in good working order;
- (b) readily accessible and available for immediate use; and

(c) except for a life raft, maintained and replaced in accordance with the manufacturer's instructions or recommendations.

A mark or label on the safety equipment required by this SOP, and any manufacturer's instructions or recommendations, shall be in English and French.

#### **Personal Life-Saving Appliances**

A personal flotation device or lifejacket shall not be altered in a way that compromises it original structural integrity or diminishes the integrity or readability of a marking set out in a standard related to it.

#### Working on Cold Water

Low Temperature Survival PFDs that provide thermal protection and buoyancy are recommended to be worn or available on board if operating a vessel in water colder than 15°C/ 59°F. Suits must have a buoyancy rating equal to or greater than the Transport Canada accreditation rating.

An individual should be able to unpack and properly don the immersion suit as per the manufacturer's instructions, unassisted, within two minutes.

Clear direction should be provided by the Supervisor for requirements for when these suits are to be worn.

# TRAINING AND ASSESSMENT REQUIREMENTS

#### General

A Pleasure Craft Operator Card (PCOC) is not a requirement for those that have a higher certification such as Small Vessel Operator Proficiency (SVOP). Marine Emergency Duties A3 (MED A3) is not considered by Transport Canada to be a higher certification and therefore PCOC will still be required if the only certification an employee holds is MED A3.

# Operator

<u>Small Vessel Operator Proficiency</u> and Marine Emergency Duties A1 or A3 certification are required for voyages in vessels greater than 8 Metres, or carrying more than 6 crew members (passengers) or travelling in Near Coastal, greater than 2 Nautical Miles from shore.

A <u>Pleasure Craft Operator Card (PCOC)</u> is required for voyages in vessels less 8 Metres travelling in Sheltered Waters or Near Coastal, Class 2 less than 2 Nautical Miles from Shore with less than 6 crew members (passengers). It is required that all Operators take the PCOC course, and recommended that all crew members take this training if possible.

#### Training Required for All Voyage Types:

- Review the Vessel Emergency Response Procedures (see Appendix B for template)- prior to each voyage
- Restricted Radio Operator Certificate Maritime (ROC-M) qualification, if the vessel is equipped with a Marine Radio – Lifetime validity



- Trent University Small vessel training (Blackboard module) Annual
- Supervisors can add training at their discretion

# First Aid:

Every voyage must have a minimum of one person with accredited first aid training, and it is recommended that each crew member has accredited first aid training. For further information on First Aid training, please contact Health and Safety.

All legally required (i.e. PCOC, VSOC, Restricted Radio, First Aid) training must be provided by a recognized body as identified in the Marine Personnel Regulations (SOR/2007-115)

# Working Alone:

It is discouraged that Trent employees and students work alone in and around aquatic. However, there may be circumstances where it is necessary. Supervisors must approve in writing (e.g. email) of any working alone in and around aquatic environments.

Supervisors should consider the following information prior to making a determination:

- Reason why working alone is required
- Whether a risk assessment has been conducted
- Whether safe work instructions have been developed and documented for working alone
- Confirmation that a vessel emergency response plan has been developed
- Confirmation that employee and/or students are trained and competent
- Confirmation that all personnel have reliable communication devices to ensure that assistance can be obtained if required

Documentation of Director approval is to be retained for as long as the approval is valid and shared with employees and the JHSC/HSR, if applicable.



Appendix A: Safety Equipment Cha	art for Small Commercial Ve	essels	
Required Safety Equipment	Not more than 6m	6m to 9m	9m to 12m
РРЕ	a properly sized approved lifejacket or PFD for each person on board	a properly sized approved lifejacket or PFD for each person on board	a properly sized approved lifejacket or PFD for each person on board
Manual Propelling Device/Anchor	a manual propelling device <b>or</b> an anchor with not less than 15 m of cable, rope or chain or any combination of cable, rope and chain	a manual propelling device <b>or</b> an anchor with not less than 15 m of cable, rope or chain or any combination of cable, rope and chain	an anchor with not less than 30 m of cable, rope or chain or any combination of cable, rope and chain
Bailer/Bilge Pump	a plastic/metal bailer or a manual bilge pump	a plastic/metal bailer or a manual bilge pump	a manual bilge pump
Communication	three flares of Type A, B or C (if more than 1 nautical mile from shore); a sound-signalling appliance or device (e.g. whistle or horn) a watertight flashlight	six flares of Type A, B or C (if more than 1 nautical mile from shore); a sound-signalling appliance or device (e.g. whistle or horn) a watertight flashlight	twelve flares of Type A, B, C or D, not more than six of which are of Type D (if more than 1 nautical mile from shore); a sound-signalling appliance device (e.g. whistle or horn) a watertight flashlight
Fire Controls (for vessels that are power-driven and equipped with an electrical system)	One Class 1A:5B:C portable fire extinguisher; an additional Class 1A:5B:C portable fire extinguisher, if the vessel is equipped with a fuel-burning cooking, heating or refrigerating appliance	One Class 2A:10B:C portable fire extinguisher; an additional Class 2A:10B:C portable fire extinguisher, if the vessel is equipped with a fuel-burning cooking, heating or refrigerating appliance, and; a 10B:C portable fire extinguisher at the entrance to the engine space	One Class 2A:10B:C portable fire extinguisher; an additional Class 2A:10B:C portable fire extinguisher if the vessel is equipped with a fuel-burning cooking, heating or refrigerating appliance, and; a 10B:C portable fire extinguisher at the entrance to the engine space; a fire axe and fire bucket



a buoyant heaving line, not less than 15 m in length, with rescue quoit,a buoyant heaving line, not less than 15 m in length, with rescue quoit, or an approved lifebuoy that is attached to a buoyant buoyant line not less than 15 m in length, with rescue quoit, or an approved lifebuoy that is attached to a buoyant line not less than 15 m in length, with rescue quoit, or an approved lifebuoy that is attached to a buoyant line not less than 15 m in length; a re-boarding device, if the freeboard of the vessel is greater than 0.5 m.a buoyant heaving line, not less than 15 m length, with rescue quoit, or an approved lifebuoy that is attached to a buoyant line not less than 15 m in length; a re-boarding device, if the freeboard of the vessel is greater than 0.5 m.a buoyant heaving line, not less than 15 m in length, with rescue quoit; and an approved lifebuoy that is attached to a buoyant line not less than 15 m in length; a re-boarding device, if the freeboard of the vessel is greater than 0.5 m.NavigationIf the vessel is operated after sunste or before sunsise or in periods of restricted visibility, it must have navigation lights that meet the requirements of the Collision RegulationsNavigation lights that meet the requirements of the Collision RegulationsPPEa properly sized approved lifejacket or PFD for each person on boarda properly sized approved lifejacket or PFD for each person on boarda properly sized approved lifejacket or PFD for each person on boarda nanchor with not less than 30 m of cable, rope and chainManual Propelling Device/Anchora manual propelling device or an anchor wit				
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PPEa properly sized approved lifejacket or PFD for each person on boarda properly sized approved lifejacket or PFD for each person on boarda properly sized approved lifejacket or PFD for each person on boarda properly sized approved lifejacket or PFD for each person on boardManual Propelling Device/Anchora manual propelling device or an anchor with not less than 15 m of cable, rope or chain or any combination ofa manual propelling device or an anchor with not less than 15 m of cable, rope or chain or any combination ofa manual propelling device or an anchor with not less than 15 m of cable, rope or chain or any combination ofa manual propelling device or an anchor with not less than 15 m of cable, rope or chain or any combination ofa manual propelling device or an anchor with not less than 15 m of cable, rope or chain or any combination ofa manual propelling device or an anchor with not less than 15 m of cable, rope or chain or any combination ofa manual propelling device or an anchor with not less than 15 m of cable, rope or chain or any combination ofa manual propelling device or an anchor with not less than 15 m of cable, rope or chain or any combination ofa manual propelling device or an anchor with not less than 15 m or any combination ofa manual propelling or any combination ofa manual propelling or any combination of	Navigation	after sunset or before sunrise or in periods of restricted visibility, it must have navigation lights that meet the requirements of the Collision Regulations	after sunset or before sunrise or in periods of restricted visibility, it must have navigation lights that meet the requirements of the Collision Regulations	meet the requirements of the Collision Regulations
Manual Propelling Device/Anchordevice or an anchor with not less than 15 m of cable, rope or chain or any combination ofdevice or an anchor with not less than 15 m of cable, rope or chain or any combination ofthan 30 m of cable, rope or chain or any combination of	PPE	approved lifejacket or PFD for each person on	approved lifejacket or PFD for each person on	approved lifejacket or PFD for each person on
First Aid Kit Requirements for all vessel sizes, as outlined in Small Vessels Regulation, Section 8:		device <b>or</b> an anchor with not less than 15 m of cable, rope or chain or any combination of cable, rope and chain	device <b>or</b> an anchor with not less than 15 m of cable, rope or chain or any combination of cable, rope and chain	than 30 m of cable, rope or chain or any combination of cable, rope and chain

• Container: Waterproof case capable of being tightly closed

- Reference: Up-to-date first aid manual or first aid instructions, in English and French
- Analgesic Medication: 48 doses (non-narcotic)
- Safety Pins/Adhesive: 6 pins or 1 roll first aid tape
- Scissors: 1 pair bandage or safety scissors
- Resuscitation Shield: 1 resuscitation face shield



- Examination Gloves: 2 pairs
- Antiseptic: 10 applications
- Burn Preparations: 12 applications
- Adhesive Plasters: 20 in assorted sizes
- Compression Bandages: 10 sterile in assorted sizes
- Elastic Bandage: 4 metres
- Gauze Compresses: 2 sterile
- Triangular Bandages: 2
- Contents List: Waterproof in English and French

OR: A first aid kit that meets the requirements of Ontario *WSIA* First Aid Regulation 1101 with the addition of a resuscitation face shield and two pairs of examination gloves is also acceptable

# Notes on Fire Extinguishers:

- A small vessel is not required to carry a fire extinguisher if it is not power-driven and is not equipped with an electrical system.
- A portable fire extinguisher shall be mounted with a clamp or bracket that provides a quick and positive release.
- Fire extinguishers that contain a gas extinguishing agent shall not be intended for use in or stored in accommodation spaces.
- Portable fire extinguishers intended to be carried and operated by hand shall not weigh more than 23 kg.
- Fire extinguishers intended for use in enclosed engine spaces shall contain carbon dioxide or another agent with similar fire-smothering characteristics and be in addition to other fire extinguishers.
- A vessel not more than 6 metres in length that is fitted with an enclosed inboard engine space, shall have means for discharging a portable fire extinguisher directly into the engine space without opening the primary access.

# Notes on Fire Extinguishers:

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- Fire extinguishers intended for use in enclosed engine spaces shall contain carbon dioxide or another agent with similar fire-smothering characteristics and be in addition to other fire extinguishers.
- A vessel not more than 6 metres in length that is fitted with an enclosed inboard engine space, shall have means for discharging a portable fire extinguisher directly into the engine space without opening the primary access.



#### Appendix B: Vessel Emergency Response Procedures (VERP) Template

The VERP shall be completed by the Operator and approved by the Manager/Supervisor.

VERPs are to be reviewed for accuracy and efficiency after an incident occurs that requires it to be used, alterations are made to the vessel that may impact the plan or at minimum on an annual basis.

This is a template and is meant to be customized by the user. The following headings are required, the detailed information provided is for example only and may be revised as needed. The Operator is required to ensure all requirements of the VERP are in place prior to departure.

# Introduction

This Vessel Emergency Response Plan pertains to [location], [operations].

#### Safety Briefing

Prior to launch, all crew must receive a Safety Briefing from the Operator.

- All persons onboard the vessel must wear a personal flotation device (PFD) or other flotation device depending upon circumstances (e.g. flotation suit, survival suit).
- Demonstration of proper donning and use of the type of lifejacket, PFD or other flotation device that has been provided for use.
- Location and use of personal life saving appliances, visual signals and vessel safety equipment (e.g. pyrotechnic signals, heaving line, life buoys, fire extinguisher, communication equipment).
- Location of first aid kit and identification of the designated First Aid responder.
- Location and use of manual pump or bailer.
- Prevention of fire and explosions where applicable.
- The effect movement of those onboard will have on vessel stability.
- Importance of keeping arms and legs in the vessel while approaching or departing the dock

#### **Personal Protective Equipment Required**

A properly sized and approved lifejacket or PFD is available for each person on board and must be worn.

#### Means of communication

Operator will ensure that a satellite or cell phone (where cell coverage exists) for emergency communications is on board.

#### **Emergency Contact Numbers**

- Supervisor: Office, Home, Cell
- Campus Security: (705) 748-1333
- Personal emergency contacts:

#### Fail to Report Response Protocol

If a worker does not advise a colleague or supervisor that they have returned by the time indicated, the following procedure shall be used:



- The colleague or supervisor will attempt to contact the worker using the contact information provided (cell phone or home number if available). If unsuccessful after 15 minutes, the emergency contact will be notified. Managers/supervisors will follow step 3 below).
- 2. If the worker cannot be reached:
  - The Supervisor will contact the OPP with overdue worker information and pertinent details and assist OPP with responding to the situation.
  - Management staff will send Trent staff or an OPP officer to the location where the Trent vehicle was last reported as parked.
  - If the vehicle is parked at the launch location, the manager will accept this as confirmation of an overdue or missing worker and the OPP will start a search immediately (the OPP may not respond unless Trent supervisor can confirm that a worker is overdue or missing).
  - All simple solutions (phone calls to locate the worker) should be exhausted before escalating to involve other agencies in expensive or time-consuming efforts.
- 3. OPP have provincial responsibility for search and rescue under the Police Services Act including involvement by the Federal Government (Coast Guard) if necessary. Note: While staff may know the area and circumstances better than the OPP, any physical effort by Trent staff to locate an overdue worker must be with the knowledge and approval of the OPP.

# Person overboard

Procedure for when an occupant of your vessel falls overboard during a voyage with three or more employees:

- Whoever sees the victim fall overboard shouts "MAN OVERBOARD!" at the top of their voice(s) and points to the victim.
- The spotter(s) continues to point to the victim until the vessel reaches the victim. It is vital that spotters do not take their eyes off the victim at any time and that they continue to point throughout.
- Throw a life-ring or other buoyant device to help mark their position in the water and that can be used to keep them afloat.
- Operator Turn stern (propeller) away from victim by turning the wheel towards the side the victim went overboard and proceed in direction indicated by spotter.
- Sound the Morse signal "Oscar" (three long blasts on the vessel's whistle or horn) or otherwise alert other vessels in the vicinity so that they can help and do not endanger the victim (e.g. using VHF radio).
- Make a slow, powered approach into the wind, reducing to dead slow as you approach the victim.
- Stop the engine when the victim is grasped
- If there are significant swells, use the heaving line or lifebuoy to avoid the vessel coming down on the victim.
- When alongside the victim in the water, assist them aboard the vessel as carefully as possible to avoid injury to them.

Be prepared to provide first-aid to the victim recovered from the water if required. Fulfill reporting requirements.

Procedure in the event that the only other occupant of your vessel falls overboard:

• Reduce vessel speed.



- Throw a life-ring or other buoyant device to help mark their position in the water and that can be used to keep them afloat.
- Sound the Morse signal "Oscar" (three long blasts on the vessel's whistle or horn) or otherwise alert other vessels in the vicinity so that they can help and do not endanger the victim (e.g. using VHF radio).
- Make a slow, powered approach into the wind, reducing to dead slow as you approach the victim.
- If there are significant swells, use the heaving line or lifebuoy to avoid the vessel coming down on the victim.
- When alongside the victim in the water, stop the engine. Assist them aboard the vessel as carefully as possible to avoid injury.

Be prepared to provide first-aid to the person recovered from the water if required. Fulfill reporting requirements.

#### Sinking Vessel

- Report Mayday by radio, if available
- Sound SOS by whistle or horn
- Engage any emergency location equipment if available (e.g. EPIRB, Spot or InReach units)
- Stay calm
- Stay with the boat
- Stay as dry as possible
- Stay as still as possible in cold water to conserve body heat
- Assume the Heat Escape Lessening Position (HELP) if alone or the Huddle position if you are in a group

#### Injury

In the event of any injury, first aid is to be provided and the Supervisor advised. If the injury is severe, follow established methods of communication and seek medical aid immediately.

#### **Reportable Marine Occurrence**

Contact Supervisor immediately

Fire

- If it is safe to do so, use the portable fire extinguisher on the vessel
- If it is safe to do so, remove any fuels from the area of the fire
- Provide first aid, as required
- Notify your PCU and your Supervisor of the incident and arrange for alternate transportation or pick-up, if required

#### Severe weather

- Turn on navigation lights
- Reduce speed to best handle water conditions
- Secure cargo
- Make sure deck drains are open and free of obstructions
- Inform supervisor or PCU of severe weather status
- Head for nearest point of refuge
- Try to direct the bow of your vessel into the waves at approximately a 45-degree angle
- If your engine fails, deploy the drift sock (emergency communications may be required)



# Navigating in limited visibility (night or fog)

- Turn on navigation lights
- Be even more conservative when checking the weather. If a small craft warning is issued, for example, do not go on the water.
- Operate at reduced speed
- It is mandatory to make a waypoint using the GPS unit that will allow you to find your way back to the launch.
- Operator is to be familiar with all local hazards, navigation features, etc.



# Appendix C: Pre-Departure Checklists

An inspection must be completed on vessels before and after each use. This resource can be adapted to fit local requirements. Report issues and/or damage to the Supervisor immediately. DO NOT use equipment if a safety issue has been identified.

Tow Vehicle and Trailer Checklist				
Item	Description	Checked		
Tires	Check to ensure all tires are properly inflated and in good condition (including the spare tires) and the wheel lugs are tight			
Hitch	Ensure the hitch on the trailer and ball and hitch on the tow vehicle are the correct and matching sizes, ensure the hitch is properly engaged and in good working order. Ensure the engaged hitch has a "safety pin" installed to ensure the hitch cannot accidentally be opened. Ensure the ball is securely attached to the tow vehicle hitch. Ensure the hitch is securely attached to the tow vehicle.			
Safety Chains	Safety chains are required and the clips (not S hooks) must meet the tow weight requirements for the trailer. Chains must be clipped in a cross (X) fashion to the vehicle hitch.			
Signal Lights	Ensure the signal light's connection is working properly by testing the turn signal, brake lights and running lights (mandatory for any dusk to dawn driving). Ensure all bulbs light.			
Motor	Ensure the attached motor is secure and safety chain or device is properly attached. Ensure the motor is in the transportation appropriate position			
Loose Equipment	Ensure that there is no loose equipment in the boat. All equipment in the boat must be fastened and secured so that it cannot be "thrown" from the boat while travelling or in the event of an accident.			
Boat	Ensure the Boat is properly secured to the trailer including all tie downs and that a safety chain is attached at the winch as well.			
First Aid Kit	A first aid kit should accompany the boat			
Tools	Some small tools such as a screwdriver and hammer may be useful in the event of breakdown			
Other				
Vessel Pre-Dep	Vessel Pre-Departure Checklist			
Item	Description	Check		



Hull	Check to ensure the Hull of the boat is in good conditions, look for cracks, holes etc Ensure the Hull plug is in position before launching.	
Fuel	Ensure you have adequate fuel, use the 1/3 rule: 1/3 out, 1/3 in and 1/3 reserve. Ensure the motor is in good working condition and gas lines and tanks are in good condition (no cracks in transfer lines).	
Safety Equipment	Ensure all the safety equipment is present.	
Life jackets or PFDs	Dept. Of Transport Canada approved Life jacket or PFD for each person on board.	
Signaling device	Whistle or Horn	
Manual propelling device	Paddle or oar or an anchor with 15 m of rope or chain	
Bailer or hand pump	Bailer or hand pump to remove water from boat if necessary	
Buoyant heaving line	A buoyant heaving line 15 m in length is required	
Navigation Lights	Navigation Lights are require is craft is used between sunset and sunrise or during periods of reduced visibility	
Fire Extinguisher*	A fire exitinguisher is required for any inboard motor, or fixed fuel tank or any boat with an electrical system	
Waterproof Flashlight	A waterproof flashlight or 3 Canadian approved flares (AB or C)	
Vessel License	If the vessel is outfitted with any motor of 10 hp or more then the vessel must have a license and be properly marked. Operator should also carry a copy of the license.	
Weather Forecast	Verify the weather forecast and ensure it is safe to be on the water.	
Notification	Ensure someone knows where you are going and what time to expect you to return.	



	Communication       Bring some kind of communcation device to call for help         device       should it be required.		
Pos	Post Trip		
	Inspection completed- document and report damages		
	All garbage/ debris removed		

CHANGES TRACKING		
DETAILS OF CHANGES	DATE CHANGED	