


Procedure Name:	BOAT PROCEDURE	 <p>coast mountain college</p>
Approved By:	Board of Governors	
Approval Date:	April 14, 2023	
Next Scheduled Renewal Date:	March 2024	
Procedure Holder:	VP, Corporate	
Operational Lead:	Director, Facility and Ancillary Services	
Procedure Number:	FAC-007P	

BOAT PROCEDURE

1.00 PURPOSE

- 1.1 This procedure establishes guidelines governing the safe use of boats operated by Coast Mountain College (CMTN) and its community. The intent is to optimize the safe and efficient use of all boat operations by CMTN.

2.00 ACKNOWLEDGEMENT

- 2.1 CMTN gratefully acknowledges Bamfield Marine Sciences Centre for granting permission to base this policy on their Boat Policy.

3.00 APPENDICES

- 3.1 Appendix A: Operator Assessment Form
- 3.2 Appendix B: Na Malsga Aks Operation Protocols
- 3.3 Appendix C: Sea Lemon Operation Protocols
- 3.4 Appendix D: Na Malsga Aks and Sea Lemon (DFO) Mileage/Fuel/Boat Log Sheet
- 3.5 Appendix E: CMTN Boat Trip Attendance Sheet
- 3.6 Appendix F: Na Malsga Aks/Sea Lemon (DFO) Sign-out/Sign-in Procedure
- 3.7 Appendix G: Na Malsga Aks (formerly Honey Bee) Stability Test
- 3.8 Appendix H: Marine First Aid Kit Contents
- 3.9 Appendix I: Boat Trip Safety Information Form
- 3.10 Appendix J: Treating Hypothermia
- 3.11 Appendix K: Firefighting Procedure
- 3.12 Appendix L: Boat Refuelling Procedure
- 3.13 Appendix M: Boat Passenger Daily Trip Orientation
- 3.14 **Note:** These appendices have also been included in the *CMTN Boat Manual*. Whenever one of the appendices is updated, its counterpart in the manual also needs to be updated, as do the copies that are provided to the boat operator. When updating, include the date of the update to ensure that the latest version is being used.

4.00 DEFINITIONS

- 4.1 **College Community:** Students, applicants, alumni, visitors, employees, contractors, sub-contractors, volunteers, agents, and members of the Board of Governors of the College.
- 4.2 **College-Related Activities:** Any activity occurring on College grounds or as part of an educational program or administrative action, including online or distance education; practicums, field education, off-site training, or work terms required by a program of study at the College; and College-endorsed activities and events.
- 4.3 **Student:** An individual who is registered in a course or program at the College, including individuals registered in a course or program as a result of a partnership (e.g., dual credit).
- 4.4 **Supervisor:** Any employee who is responsible for the safety and wellbeing of the College community. For the purpose of this policy only, this includes but is not limited to College Coordinators, Supervisors, Managerial Positions, and Instructors; specifically, Program Coordinator, Academic Head, Facilities Director, or Dean.
- 4.5 **User Department:** The department conducting educational programming or administrative action, including field education, or off-site training required by a program of study at CMTN; and activities/events that require the use of a boat and that are endorsed by the Facilities Director.

5.00 ROLES AND RESPONSIBILITIES

- 5.1 **Boat Operator:** The person responsible for checking out, operating, checking in, and mooring the boat. This person has confirmed boat certifications with the Facilities Physical Asset Management Coordinator.
- 5.2 **Campus Administrative Officer (CAO) or Designate:** The person responsible for assigning boat keys and fuel cards, and for notifying the Facilities Physical Asset Management Coordinator, the Facilities Director, or the Program Dean when a boat is overdue.
- 5.3 **Collaborative Administrative Team (CAT):** The administrative team overseeing academic and non-academic operations of the College.
- 5.4 **Facilities Physical Asset Management Coordinator:** The person responsible for boat registration, licensing, and certification.
- 5.5 **Facilities Physical Asset Management Group:** The Facilities Physical Asset Management Coordinator in collaboration with the Prince Rupert Field/Lab Technician. Responsible for maintaining boats and keeping up-to-date with regulations.
- 5.6 **Prince Rupert Field/Lab Technician:** The person responsible for assisting in the preparation and set-up of labs and field courses; a member of the Facilities Physical Asset Management Group.

6.00 SCOPE AND APPLICATION

- 6.1 This procedure applies to all members of the CMTN community authorized by the Facilities Director to operate a College boat.
- 6.2 The Facilities Physical Asset Management Coordinator directs and gives prior authorization for all boat operations, including operations by CMTN users (students, instructors, researchers, authorized visitors, field trip groups, and employees). The

Coordinator keeps a list of authorized personnel with boat certifications and shares it with the Campus Administrative Officer.

- 6.3 At the beginning of each course during which a boat will be used, the students are required to complete Appendix I: Boat Trip Safety Information Form and return it to the instructor for filing on the Boat Planning SharePoint site.
- 6.4 Before operating a CMTN boat, the Operator must complete the operator assessment form (Appendix A) and the mileage/fuel/boat log sheet (Appendix D).
- 6.5 The Operator is responsible for completing the following documents as they pertain to the trip:
 - a) the boat operation protocols form (Appendix B for Na Malsga Aks; Appendix C for Sea Lemon)
 - b) the expense (mileage/fuel/boat log) sheet (Appendix D)
 - c) the boat trip attendance sheet (Appendix E).

7.00 PROCEDURE STATEMENT

This procedure is to be followed when checking out, operating, checking in, maintaining, servicing, and mooring CMTN boats.

8.00 BOAT CLASSIFICATIONS

- 8.1 CMTN boats belong to the following classes:
 - a) Canoe, kayak, or rowboat – a boat small enough to be propelled by oar or paddle
 - b) Vessel – an ocean-going vessel powered by a motor, specifically, the Na Malsga Aks¹ (The Story the Water Tells) – a 27' aluminum-hulled boat, the Sea Lemon² a 19' ft Department of Fisheries and Oceans (DFO) vessel on long-term lease, and any other vessel acquired by CMTN.

9.00 TRIP CATEGORIES

- 9.1 Operator competency will be assessed within the context of the following trip categories:
 - a) Departing and returning from Rushbrook Floats and conducting teaching exercises within the harbor area.
 - b) Departing from Rushbrook and travelling to locations with a dock (e.g., Dodge Cove, Airport Ferry Dock, and nearby Indigenous villages).
 - c) Travelling and operating in areas of Oona River, Porcher Island, Lucy Island, Stephens Island, and Melville Island. Requires long crossings where weather can change and anchoring is required. Students may be offloaded at a dock (e.g., Oona River) or brought ashore via a tender for day or overnight stays.
 - d) Travelling and operating in the dark (from dusk to dawn).

10.00 BOAT USAGE – AUTHORIZATION

- 10.1 Boats may be used for teaching, training, research, fishing (program- and research-related, following the CMTN animal care and use policy), scientific charter, and transport.

¹ When purchased, the boat name was Honey Bee. CMTN, with local Indigenous input, has renamed the vessel Na Malsga Aks (The Story the Water Tells).

² Name is in progress. May change.

- 10.2 For each boat trip, all persons embarking on the trip must sign the boat trip attendance sheet (Appendix E) when the boat is signed out. The forms are uploaded to the Boat Planning Sharepoint site prior to departure.
- 10.3 Boats may be used at any time for a medical emergency with authorization by a member of the Collaborative Administrative Team (CAT).
- 10.4 Guests are only allowed on CMTN boats with prior authorization of the CAT.
- 10.5 Boats will not be used for conducting illegal activities, including but not limited to:
 - a) transporting illegal goods
 - b) fishing or catching unauthorized marine life
 - c) dropping unauthorized material into the sea.
- 10.6 Persons from the College community must apply for authorization to operate the CMTN vessels.
- 10.7 Once authorization is obtained, the Operator must provide the Facilities Physical Asset Management Coordinator with a copy of the following certificates, which are kept in the Operator's file. The Operator must also keep a copy aboard the vessel:
 - a) Small Vessel Operator Proficiency (SVOP)
 - b) Small Domestic Vessel Basic Safety (SDV-BS; formerly MED A3)
 - c) Restricted Operator Certificate Marine (ROC-M) Radio Licence
 - d) Marine Basic First Aid (MBFA) valid for 3 years
 - e) completed Boat Operator Assessment form (Appendix A)
 - f) any additional certifications required by authorities having jurisdiction.

11.00 GENERAL USE

- 11.1 Booking a boat for use is done through an online calendar held by the Campus Administration Officer.
- 11.2 All boats must be checked out from the Campus Administrative Officer or Facilities Physical Asset Management Coordinator for each trip, and the hours of use specified. The boats are intended to be used between sunrise and sunset, with exceptions preauthorized by the Facilities Director. See Appendix F for sign-out/sign-in procedure.
- 11.3 In the planned or unplanned absence of the Campus Administrative Officer, the Campus Manager alerts the Dean of UC, Sciences, Humanities, and Health to assign a designate for oversight of boat keys, fueling cards, and notifications if a boat is overdue.
- 11.4 The Operator must operate the vessel in compliance with Transport Canada guidelines or risk being charged under the Criminal Code, Canada Shipping Act, and the Contraventions Act.
- 11.5 Use of the boats is not permitted in:
 - a) gale force winds or greater, with the exception of in-harbor use where the harbor provides shelter from the wind and waves. In this situation boat use is at the discretion of the operator
 - b) seas with waves of two metres or greater.
- 11.6 Boat use in strong wind conditions is at the operator's discretion and should be supported by forecasted conditions from weather apps like Windfinder.com or Windy.com, as well as government and local forecasts.

- 11.7 When operating in the Prince Rupert Harbour or in shipping lanes, in addition to visual monitoring, the Boat Operator must monitor VHF Channel 16 and AIS/radar aids for all marine traffic.
- 11.8 When mooring a boat the Operator must be prepared for vessel inspections.
- 11.9 Boat use restrictions:
 - a) Use of Na Malsga Aks is restricted to March 1st to October 31st.
 - b) Use of The Sea Lemon is restricted to March 1st to November 15th, weather permitting.
- 11.10 A boat policy and procedures orientation is to be conducted with Boat Operators and related staff before boat-related activities commence with students for every academic year. This must include a review of the firefighting procedure (Appendix K).

12.00 EXCEPTIONS

- 12.1 Certain research activities require operation at dusk and dawn. These operations must have prior approval of the Facilities Director and a safety plan must be submitted. The Operator must be qualified to use radar, electronic charts, and marine lights.
- 12.2 The Operator must submit proof of experience operating in the dark and submit documentation to the Facilities Physical Asset Management Coordinator. This documentation is kept in the Operator's file.
- 12.3 The boat may be checked out for use on holidays, weekends, and between 1630 and 0830 on weekdays with preauthorization of the Facilities Director. The Operator must arrange a check-out/check-in procedure with the Facilities Physical Asset Management Coordinator.
- 12.4 Use of both Sea Lemon and Na Malsga Aks is restricted to sheltered or near-Coastal Class 2 waters. Beaching of Na Malsga Aks is not allowed; beaching of Sea Lemon is allowed.

13.00 USE OF CMTN CANOES, KAYAKS AND ROWBOATS

- 13.1 These boats are only to be used between sunrise and sunset.
- 13.2 For use on holidays, weekends, and between 1630 and 0830 weekdays a check-out/check-in procedure must be arranged with the Facilities Physical Asset Management Coordinator and the Facilities Director must provide preauthorization.
- 13.3 Transport Canada-approved personal flotation devices (PFDs) must be worn and zipped up during use at all times while in the boat.
- 13.4 A bailer, whistle, and buoyant heaving line must be present.
- 13.5 These boats are not to be used in fog or low visibility conditions.

14.00 USE OF CMTN VESSELS

- 14.1 CMTN vessels refers to Na Malsga Aks, Sea Lemon (DFO boat), and any other vessel acquired by CMTN.
- 14.2 These vessels are only for use by researchers, instructors, graduate students, and research assistants unless prior permission is granted by the Facilities Director.
- 14.3 Maximum capacity is based on vessel certification and/or stability tests:

- a) Na Malsga Aks – maximum 12 passengers, including crew (Appendix G).
- b) Sea Lemon (DFO Boat) – maximum 6 passengers, including crew, in sheltered waters (Prince Rupert Harbour); 4 passengers, including crew, beyond Metlakatla and the entrances to the Prince Rupert Harbour.

14.4 The boats must be signed out by the Facilities Physical Asset Management Coordinator.

14.5 Overdue boats will be allowed one half-hour before search and rescue (SAR) procedures are initiated. In the event of an overdue vessel, the phone tree is initiated as follows:

- CMTN Security Cell (250-615-9894)
- Jordan Linteris (Facilities) Cell (250-615-9894)
- Jason Dunham (Security) Cell (250-615-7605)
- Michael Doyle (VP Corporate Services) Cell (250-641-0574)
- Dean of UC, Sciences and Health (250-641-2654)

In the event that search and rescue need to be contacted:

- Call 1-800-567-5111, #727 on a cell phone
- OR use channel 16 on a VHF radio.

15.00 SAFETY

15.1 Safety is clearly outlined in the boat manual and follows Transport Canada regulations. Topics covered include:

- a) Licensing requirements
- b) Certifications
- c) Safety equipment
- d) Automatic identification system (AIS) on vessels
- e) First aid supplies
- f) Boat passenger daily trip orientation
- g) Communication procedures
- h) Personal conduct
- i) Safety orientation
- j) Hypothermia (see Appendix J: Treating Hypothermia)
- k) Trip contingencies
- l) Mooring
- m) Maintenance
- n) Reporting an incident.

See also Appendix H: Marine First Aid Contents.

15.2 Operation in fog or low visibility conditions requires competency in radar navigation and the use of electronic charts. Marine lights must be enabled.

16.00 RELEVANT LINKS & RESOURCES

16.1 [CMTN Boat Policy](#)

16.2 [CMTN Boat Manual](#)

17.00 HISTORY

Created/Revised/ Reviewed	Date	Author's Name and Role	Approved By
Created	January 2023	Kris Thickett – Physical Asset Management	Board of Governors

Appendix A: Operator Assessment Form (7 March 2023)

If the answer to any of the questions is **No**, the operator must be accompanied by a certified and knowledgeable operator when using the boat.

	Question	Yes	No
1.	Does the Operator have experience operating a marine motor vessel?		
	If yes, what size? _____ Operator must have experience with 19-27 ft motor vessels.		
2.	Is the Operator familiar with the area in which the boat will be operated or has operated similar boats in other North Coast areas?		
3.	Is the Operator familiar with ocean weather conditions, and how they vary throughout the year?		
4.	Is the Operator experienced in interpreting marine weather forecasts?		
5.	Has the Operator had a safety and equipment orientation session on the vessel?		
6.	Is the Operator familiar with:		
	- refuelling?		
	- engine room exhaust procedures?		
	- chart reading?		
	- use of the radar?		
7.	Is the Operator competent with docking and departure of large boats in confined moorage locations?		
8.	Does the Operator have authorization that verifies certification from the Facilities Physical Asset Management Coordinator?		

Appendix B: Na Malsga Aks Operation Protocols (7 March 2023)**Prior to Departure**

	Action	Done
1.	Check the weather.	
2.	Turn on radio 10 minutes before departure to monitor channel 16.	
3.	Turn on and check GPS/depth sounder.	
4.	Rig lifeline.	
5.	Turn on Garmin inReach and check for battery life.	
6.	Check that throw line is at least 15 m.	
7.	Inspect fire safety items: <ul style="list-style-type: none"> - designated fire bucket (ensure not used for other things) - fire blanket - fire extinguisher. 	
8.	Check fluid levels: <ul style="list-style-type: none"> - gas - oil in main engine and kicker - engine coolant - leg oil - diesel heater fuel. 	
9.	Check for leaks.	
10.	Check functionality of bilge (especially for long trips).	
11.	Check props for fouling (e.g., seaweed and other debris).	
12.	Verify that life jackets, AED, first aid bag, throw ropes, ladder, flares, fire extinguisher, and other safety equipment are in place and accessible.	
13.	Check expiry dates on safety equipment (e.g., flares, first aid items).	
14.	Check navigation lights.	
15.	Ensure that only 12 passengers will board.	

Start-up

4	Action	Done
1.	Check that leg is in the down position.	
2.	Turn main electrical switch from OFF to BOTH (up).	
3.	Turn on fuel line to kicker.	
4.	Turn on engine compartment blowers. Wait a minimum of 4 minutes before starting main engine.	
5.	Run kicker first to ensure back-up motor is operational (easier to hear).	

After Startup

	Action	Done
1.	Set fuel consumption meter back to zero; power up navigation and radio systems.	
2.	Scroll through engine diagnostics meter to check temperature, oil pressure, etc.	
3.	Call 1-866-291-4640 to alert of departure.	
4.	When in motion, ensure that entrance/exit is not blocked.	

During Operation

	Action	Done
1.	Keep watch on fuel consumption gauge. Operate vessel at about 18 knots and 10-11 gallons per hour.	
2.	Adjust leg trim and trim tabs for smooth running and best fuel consumption.	
3.	Keep on lookout for marine traffic. Not all vessels show up on the AIS system.	

Anchoring

	Action	Done
1.	Allow a short amount of chain loose. Have second person loosen anchor from REST position. Ensure good communication and that the drum is not operated while that person is near the winch.	
2.	Note current tidal position and depth, allowing sufficient scope on the chain/rope to handle tidal fluctuations and potential area of swing.	
3.	Call 1-866-291-4640 to alert of safe return.	

Shutdown

	Action	Done
1.	Ensure that bow, stern, and midship lines are secure, with fenders properly placed between the vessel and the dock or tie-up boat.	
2.	Turn off fuel line to kicker.	
3.	Power down navigation system before turning off main electrical system.	
4.	Note fuel consumption from the gauge and record amount and purpose of use.	
5.	Ensure all deck equipment is stowed away.	
6.	Ensure windows are fully closed and catches are engaged.	
7.	If diesel heater has been running, turn off first and allow to go through its cool-down cycle before turning off the electrical system.	
8.	Turn off main electrical system.	
9.	Lock back door and ensure tender cable lock is in position.	

Appendix C: Sea Lemon Operation Protocols (7 March 2023)**Prior to Departure**

	Action	Done
1.	Check the weather.	
2.	Turn on radio 10 minutes before departure to monitor channel 16.	
3.	Turn on and check GPS/depth sounder.	
4.	Rig lifeline.	
5.	Turn on Garmin inReach and check for battery life.	
6.	Check that throw line is at least 15 m.	
7.	Inspect fire safety items: <ul style="list-style-type: none"> - designated fire bucket (ensure not used for other things) - fire blanket - fire extinguisher. 	
8.	Check fluid levels: <ul style="list-style-type: none"> - gas - oil levels in main engine and kicker - fuel for diesel heater - fluid for trim tabs. 	
9.	Check for leaks.	
10.	Check functionality of bilge (especially for long trips).	
11.	Check props for fouling (e.g., seaweed and other debris).	
12.	Verify all safety equipment is present, easily accessible, and in good working condition.	
13.	Check expiry dates on safety equipment (flares, first aid supplies, fire extinguisher, etc.).	
14.	Check navigation lights.	
15.	Ensure that only 6 passengers will board.	

Startup

	Action	Done
1.	Turn on battery switch.	
2.	Start kicker and verify cooling system operation (water stream exiting from motor). Once verified, shut off and trim motor up.	
3.	Start main engine and verify cooling system operation. (Same as above.) Allow motor to warm up while checking remaining items.	

4.	Turn on navigation equipment.	
5.	Ensure all operator certification and required boat documents are on board.	
6.	Call 1-866-291-4640 to alert of departure.	
7.	When in motion, ensure that entrance/exit is not blocked.	

During Operation

	Action	Done
1.	Monitor gauge for system alarms (e.g., overheating).	
2.	Adjust leg trim and trim tabs for smooth running and best fuel economy.	
3.	Keep on lookout for marine traffic and other water hazards (e.g., floats, logs, kelp).	

Anchoring

This will require a practical demonstration from an experienced operator.

	Action	Done
1.	When securely anchored, call 1-866-291-4640 to alert of safe return.	

Shutdown

	Action	Done
1.	Ensure that bow, stern, and midship lines are secure, with fenders properly placed between the vessel and the dock or tie-up boat.	
2.	Power down navigation and electronics.	
3.	Ensure all deck equipment is stowed away.	
4.	If diesel heater has been running, turn off first and allow to go through cool-down cycle.	
5.	Turn off main battery switch.	
6.	Lock door.	

Appendix D: Na Malsga Aks and Sea Lemon (DFO) Mileage/Fuel/Boat Log Sheet (7 March 2023)

Date	Vessel	Destination	Course/Purpose	Instructor	Engine Hours	Mileage	Litres	Cost	Code	Authorization	Comments

Appendix E: CMTN Boat Trip Attendance Sheet (7 March 2023)

All persons on board the CMTN boat for the trip indicated must be listed on this attendance sheet.

Boat Type/Name: _____ Destination: _____ Date: _____

Purpose of Trip: _____ Departure Time: _____ Est Return Time _____

Name (Printed)	Role (e.g., Operator; Student)	Signature

Appendix F: Na Malsga Aks/Sea Lemon (DFO) Sign-out/Sign-in Procedure (7 March 2023)

Boat Type/Name: _____ Destination: _____ Date: _____

Purpose of Trip: _____ Departure Time: _____ Est Return Time _____

No.	Action	Done
1.	Submit to Field/Lab Technician the following appendices prior to key issue: <ul style="list-style-type: none"> - Boat Trip Attendance (E) - Boat Trip Participant Contact Information Sheet (I). These forms must be added to the boat SharePoint site prior to departure.	
2.	Sign out keys from Campus Administrative Officer (Prince Rupert Campus).	
3.	Pick up the following appendices from Field/Lab Technician: <ul style="list-style-type: none"> - Operator Assessment Form (A) - Boat Operation Protocols – first-time user must read and initial (B or C) - Boat Mileage/Fuel/Boat Log (D). 	
4.	Fill out the following appendices: <ul style="list-style-type: none"> - Operator Assessment Form (A) - Boat Mileage/Fuel/Boat Log (D). 	
5.	Immediately prior to leaving, call the check-in service at 1-866-291-4640. Provide the contact person with the following information: <ul style="list-style-type: none"> - Full Name - Contact Numbers (cell, office, home) - Time of Departure - Estimated Length of Departure. 	
6.	Immediately upon arrival, call the check-in service at 1-866-291-4640 to verify confirmation of safe return.	
7.	When done, return keys to Campus Administrative Officer.	
8.	Return boat mileage/fuel/boat log form and receipts, and operator assessment form to Field/Lab Technician.	
9.	Field/Lab Technician inputs information from the form into the database.	
10.	Field/Lab Technician sends receipts and boat mileage/fuel/boat log to the Administrative Assistant to the Program Dean twice a month.	

Appendix G: Na Malsga Aks (formerly Honey Bee) Stability Test (7 March 2023)

Record of Stability Assessment

Vessel Particulars

Vessel Name <u>HONEY BEE</u>	Official Number <u>6K 13274</u>
Date <u>OCT 15 2021</u>	Location <u>RUSHPROCKE, PRINCE RUPERT</u>
L - Length Overallmetres <u>8.23</u>	Weight Required for Assessment
B - Breadth metres <u>2.90</u>	Max crew <u>2</u> x 75 kg = <u>150</u> kg
F - distance from waterline at mid-length to top of gunwale (open vessel) or deck (fully decked vessel)metres <u>0.78</u>	Max passengers <u>10</u> x 75 kg = <u>750</u> kg
Lowest Downflooding Opening (describe) <u>TOP OF GUNWALE</u> <u>OPEN DECK VESSEL</u>	Divers equipment <u>—</u> x 36 kg = <u>—</u> kg
	Maximum cargo <u>—</u> kg
	Total weight <u>900</u> kg

Assessment Details: Vessel Assessed as: Fully Decked/ Open (select one)

Note: Assessments are considered valid only when operating in waves not exceeding 2 metres if fully decked, 1.2 metres if open.

		As Measured (metres)	Evaluation Criteria (from Appendix 2)
Downflooding Height		<u>0.78</u>	More than <u>0.75</u> metres
Residual Downflooding Height		<u>0.71</u>	More than <u>0.31</u> metres
Offset Heel Angle			
Measuring tape method: Centreline to gunwale: Gunwale to waterline (vertical) Gunwale to waterline (offset to port) Gunwale to waterline (offset to stbd)	Pendulum method: Pendulum length : Plumb bob travel (offset to port) Plumb bob travel (offset to stbd)	<u>1.45</u> <u>0.76</u> <u>0.04</u> <u>0.07</u>	Measurements converted to degrees ¹ Port <u>2</u> ° Stbd <u>3</u> ° Less than <u>12.5</u> °

¹See next section "Converting to degrees"

Assessment carried out by: Geoffrey P. Gould Signature: 

Multi-deck vessels: Vertical distribution of equivalent passengers:
 Main Deck ____ Upper Deck ____ Flybridge ____

Quality Marine Surveyors Ltd.
 316 Prince Rupert Blvd,
 Prince Rupert, B.C. V8J 4E1
 Tel (250) 624-3755
 Cell (250) 600-7630

Appendix H: Marine First Aid Kit Contents (7 March 2023)

Each marine first aid kit must contain:

- an up-to-date first aid manual or up-to-date first aid instructions, in English and French
- 48 doses of analgesic medication of a non-narcotic type
- six safety pins or one roll of adhesive first-aid tape
- one pair of bandage scissors or safety scissors
- one resuscitation face shield
- two pairs of examination gloves
- 10 applications of antiseptic preparations
- 12 applications of burn preparations
- 20 adhesive plasters in assorted sizes
- 10 sterile compression bandages in assorted sizes
- 4 metres of elastic bandage
- two sterile gauze compresses
- two triangular bandages
- blankets for hypothermia
- a waterproof list of the contents, in English and French.

<https://tc.canada.ca/en/marine-transportation/marine-safety/appendix-3>

Supplies used from the First Aid Kit must be replaced immediately and monitored for expiration dates for replacement by the Field/Lab Technician.

Appendix I: Boat Trip Safety Information Form (7 March 2023)

Note: This information is to be collected from students at the beginning of the course.

Name: _____ Student No. (if applicable): _____

Address: _____

City: _____ Postal Code: _____

Home Phone No.: _____ Cell Phone No: _____

Email Address: _____

Emergency Contact #1: _____

Email Address: _____ Cell Phone No.: _____

Address: _____ City: _____

Home Phone No.: _____ Work Phone No: _____

Emergency Contact #2: _____

Email Address: _____ Cell Phone No.: _____

Address: _____ City: _____

Home Phone No.: _____ Work Phone No: _____

Family Physician: _____ Phone No.: _____

BC Health Care No.: _____

Are there any medical conditions or concerns that we should be aware of? If so, please note them:

Please list any allergies: _____

I hereby give consent for Emergency Medical Treatment and permission is given to contact emergency contacts if necessary. All information will remain confidential.

Signature

Date

Appendix J: Treating Hypothermia (7 March 2023)

Signs and symptoms of hypothermia usually develop slowly and may include:

- shivering, though this may stop as body temperature drops
- slurred speech or mumbling
- slow, shallow breathing
- weak pulse
- clumsiness or lack of coordination
- drowsiness or very low energy
- confusion or memory loss
- loss of consciousness

If you suspect someone has hypothermia, call 911 or your local emergency number. Then immediately take these steps:

1.	Gently move the person out of the cold. <ul style="list-style-type: none">- If going indoors isn't possible, protect the person from the wind, especially around the neck and head.- Insulate the person from the cold ground.
2.	Gently remove wet clothing. <ul style="list-style-type: none">- Replace wet things with warm, dry coats or blankets.- Turn on heater.
3.	If further warming is needed, do so gradually. <ul style="list-style-type: none">- For example, apply warm, dry compresses to the centre of the body — neck, chest, and groin.- If available, use an electric blanket.- If using a hot water bottle or a chemical hot pack, wrap it in a towel before applying.
4.	Offer the person warm, sweet, nonalcoholic drinks.
5.	Begin CPR if the person shows no signs of life, such as breathing, coughing, or movement.

Caution

- Do not rewarm the person too quickly, such as with a heating lamp or hot bath.
- Don't attempt to warm the arms and legs. Heating or massaging the limbs of someone in this condition can stress the heart and lungs.
- Don't give the person alcohol or cigarettes. Alcohol hinders the rewarming process and tobacco products interfere with circulation that is needed for rewarming.

Appendix K: Firefighting Procedure (7 March 2023)

In the event of a fire:

No.	Action	Done
1.	Advise crew and passengers to remain calm. - Be prepared to disembark vessel if necessary.	
2.	Use extinguisher to control fire.	
3.	Send out distress signal.	
4.	If possible, position vessel so fire is downwind.	
5.	If fire is in engine space: - Shut off motor, fuel supply, and power supply. - Close ventilation to engine space. - Use extinguishers in fire extinguishing ports.	
6.	Report incident.	

Appendix L: Refuelling Procedure (7 March 2023)**DO NOT SMOKE**

No.	Action	Done
1.	Check that the dispensing point is equipped with appropriate firefighting appliances.	
2.	Put all passengers ashore and clear any refueling equipment.	
3.	Turn off all pilot lights.	
4.	Cut off electric power at main switch.	
5.	Close all hatches and openings to prevent fumes getting into the hull and bilge.	
6.	Turn off all mobile phones.	
7.	Place a discharge bucket under air/overflow pipe and close scuppers in case of overflow.	
8.	Have a cloth at hand to catch any spills – one for the filler hose and one to monitor airflow from the fuel tank vent. - Have sawdust/oil spill equipment ready.	
9.	When refuelling, do not start the dispenser until the outlet nozzle is inserted in the tank. - Hold the nozzle open by hand only – do not lock or jam the trigger of the dispenser in the open position.	
10.	Keep the hose touching the filler neck at all times during refueling to prevent static sparks.	
11.	Carefully monitor the filling rate to avoid overfilling. - Use your hand where possible to check for air escaping from the vent. - When the tank is nearly full, you will feel a distinct increase in airflow, which is the signal to stop filling.	
12.	Do not remove the filter hose until the fuel flow has stopped.	
13.	Lift the hose to drain all remaining fuel into the tank	
14.	Thoroughly clean up all surface spills with an absorbent cloth.	
15.	If fuel has spilled into the bilges, pump the bilges manually into sealed containers or pump ashore. - Leave boat wide open for at least 30 minutes to vent.	
16.	When completely satisfied that the boat is free of fumes, start the blower and let it run for four minutes – more if that's the manufacturer's recommendation.	
17.	Start the engine before allowing passengers to board.	
18.	Properly dispose of absorbent cloths, sawdust, or other fuel-soaked items.	

Appendix M: Boat Passenger Daily Trip Orientation (7 March 2023)

No.	Action	Done
1.	Advise students of slip and fall hazards on the dock and the ramp going to the dock: <ul style="list-style-type: none"> - boarding and debarking hazards (e.g., falling between dock and boat, preparation for movement of boat while boarding) - how to use the life ring. 	
2.	Advise students to wear a personal flotation device (PFD) at all times. <ul style="list-style-type: none"> - Explain the difference between a PFD and a life jacket. 	
3.	In the event of an emergency, Solas lifejackets are to be worn. <ul style="list-style-type: none"> - Demonstrate how the Solas life jacket is worn and how the pea-less whistle is used. 	
4.	Familiarize students with the location of safety gear located in marked cabinets: <ul style="list-style-type: none"> - first aid kit and automated external defibrillator (AED) - location of: <ul style="list-style-type: none"> o emergency exits at port and starboard windows o tender as an emergency life raft o flares and how to use them o fire extinguisher and PASS (pull, aim, squeeze, sweep) o tools for repairs - switch to operate anchor should the boat require immediate immobilization. 	
5.	Explain how to <ul style="list-style-type: none"> - use the VHF (very high frequency) radio - use the DSC (digital selective calling) switch - determine the vessel's position (latitude and longitude). 	
6.	Advise students to remain in their assigned seats or locations to maintain stability until advised by the crew to move.	
7.	Reconfirm passenger and crew list and provide to field/lab technician or designate before leaving the dock.	
8.	Advise students to pay attention to ropes and cables which present tripping hazards or potential entanglement.	
9.	Identify location of knee switch for the side winch and danger of activating it if students don't realize where it is.	
10.	Advise of general trip itinerary, timing, and expected conditions.	
11.	Instruct students in the use of marine head (toilet) operation.	