


General Boating Knowledge – Part 1

“Common Sense before leaving shore”



- 
- <https://www.youtube.com/watch?v=OuLPmn4fo08>
 - <https://www.facebook.com/watch/?v=10155410553412058>
 - https://www.reddit.com/r/AbruptChaos/comments/11lzmax/t_his_persons_fishing_trip_was_changed_in_an/

Safety Check

- Engines work, battery charged, trailer tires/lights, drain plug, oil levels, nav lights, bilge pump, etc
- Safety equipment
 - Life jackets for everyone on board
 - Flares, radio, chart plotter
- Other Stuff...
 - Water, food, clothing, BAIT...



My Experiences over 40years... ☹️

Fuel

Rule of thumb;

- 1/3 there
- 1/3 back
- 1/3 spare.
- FRESH GAS!!!



***Know how much fuel you use!!!

Marine Weather Conditions

- VHF weather channel (WX)
- Environment Canada website
- WindyTV



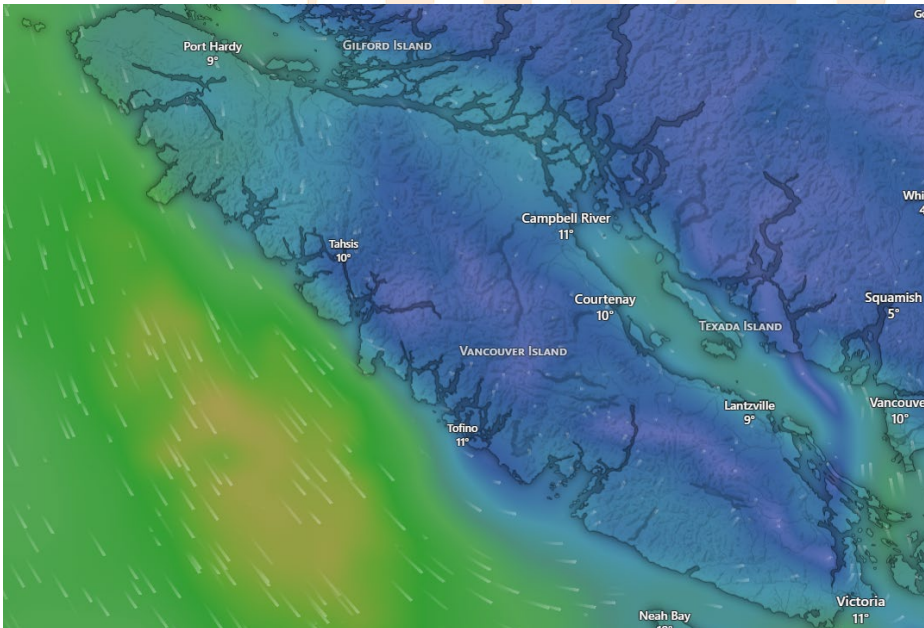
 Government of Canada
Gouvernement du Canada

[Canada.ca](#) > [Weather information](#) > [Marine](#) > [Marine Forecasts](#)

Find a location

Marine Weather for: Pacific - South Coast

Click on the coloured marine region for which you would like the marine forecast or latest w



Trip Plans

Give a responsible person;

- verbally where you are going and time back (short trips)
- in writing where you are going, route you are following and when you will be coming back (long trips).
- Changed with Satellite now...

Trip Plan

Filing a Trip Plan before you head out is a recommended procedure. The Trip Plan should be left with a responsible person and updated as the trip progresses and plans change to avoid

unnecessary search and rescue emergency calls. An up-to-date Trip Plan can aid in search and rescue efforts if they are needed.

Trip Plan

Owner's Name _____ Tel. Number _____ Cell Phone _____
Owner's Address _____
Vessel Name and Number _____ Power ____ Sail ____
Size & Type _____ Colour: Hull _____ Deck _____ Cabin _____
Type of Engine _____ Other Distinguishing Features _____
Radio Channels Monitored HF _____ VHF _____ MF _____
Safety Equipment On Board: Life Raft (colour) _____ Dinghy (colour) _____
Number & Type of Flares, _____ & Lifejackets / PFDs _____
Other _____
Search & Rescue Phone Number _____
Date of Departure _____ Time of Departure _____ Estimated Arrival _____
Leaving From _____ Heading To _____ Proposed Route _____
Stop Over _____ Stop Over _____ Stop Over _____
Number of Persons on Board _____ Other _____

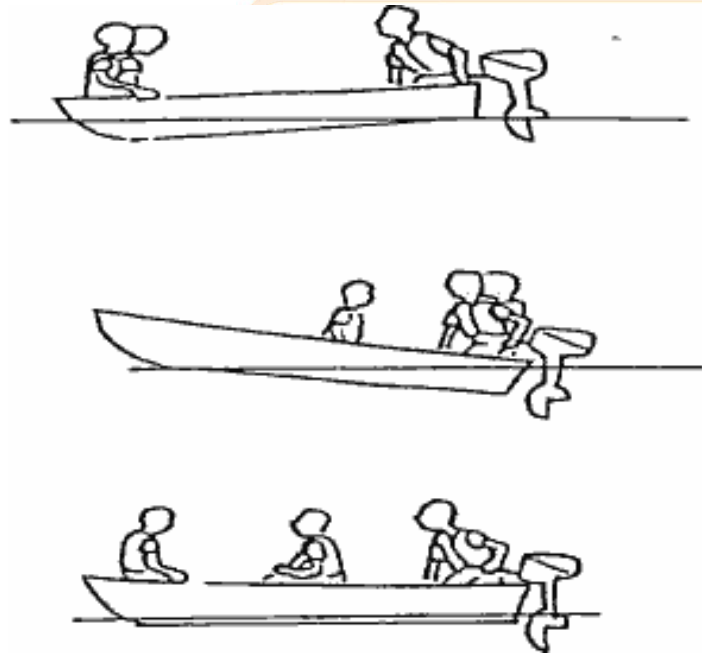
Inform Guests

- Give a basic tour of the boat (safety equipment located, life jackets, how to operate it, etc)
- If you are the only one that knows your boat... what happens if you are incapacitated?



Loading A Small Boat

- Distribute the weight evenly, especially in small boats



Steps to Filling Gas (Inboard fuel tanks)

1. Secure boat
2. Turn engine off
3. Get people ashore
4. Extinguish open flames
5. No smoking
6. Electrical equipment off
7. Ports and hatches closed
8. Portable tanks ashore
9. Hole nozzle **AGAINST** filler pipe to prevent sparks
10. Don't overfill
11. Wipe spillage
12. Open up ports and hatches and run blower for at least 4 minutes (Inboard engines)
13. Smell for fumes



PRE-DEPARTURE CHECKLIST

Be prepared for the unexpected. Check this list before every trip.

Lifejackets and PFDs – Wear Them!

- . Carry a Canadian-approved lifejacket or PFD of the proper size, for each person on board.
- . Make sure they are in good condition (check the zippers, buckles, fabric, seams, etc.).

Operator Competency – Are You Ready to Head Out on the Water?

- . Take a boating safety course.
- . Always carry your Pleasure Craft Operator Card or other proof of competency on board.

Weather – Check and Monitor the Marine Weather Forecast

Sail Plan – File Your Plan Before Heading Out

- . Use the sample [sail plan](#) in this guide.
- . Tell a person you trust where you are going and when you will be back.

Safety Equipment – Required by Law and Essential for Safety

- . See equipment required for your boat.
- . Make sure all equipment is on board, in good working order and easy to reach.
- . Carry a first aid kit, basic tools and spare parts.

Charts, Compass and Local Hazards – Know Where You Are at All Times

- . Make sure you are aware of all local hazards, water levels and tides.

Fuel – Check Your Tank and Remember:

- . 1/3 to go, 1/3 to return, 1/3 reserve .

Boat Condition – Should Your Boat Leave the Dock?

- . Check the hull for cracks or other damage.
- . Check the electrical, fuel, propulsion and cooling systems.
- . Make sure the throttle and steering work well.
- . Check the oil.
- . Check all hoses and lines for leaks or cracks, and replace if necessary.
- . Make sure all clamps and belts are secure and in good shape.
- . Inspect, clean and replace spark plugs if necessary.
- . Check and change oil and water filters if needed.
- . Check the battery's charge.
- . Make sure the drainage plug is in place.
- . Carry spare plugs for all through hull fittings.
- . Make sure the load on your boat (gear and people) is well distributed.
- . Run the blowers for four minutes before starting the engine(s) and check for airflow.

Safety Briefing – You Are Legally Responsible for Your Guests

- . Show everyone where you keep the safety equipment and explain how to use it.
- . Make sure the communication equipment works and everyone knows how to use it.

General Boating Knowledge Part 2

“Common Sense on the water”

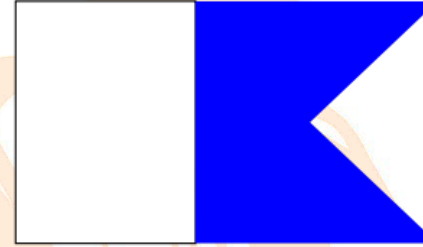
HIGHLAND

WOODWORKING



Divers in Water

- Boat must display Blue & White International Flag “A” (Alpha)
- When divers are in the water a Red with Diagonal White striped buoy is used to locate the area where they are.
- **AVOID/STAY CLEAR!!**



Speed Limits

- Close to shore 10 km/h - slow
- Narrow river, canals, harbours – slow



Towing Someone (Wakeboard, Tubing, Skiing)

- Minimum 2 people in boat
(1 driver, 1 spotter)
- **WATCH FOR OTHERS** around you!!!



Getting help – if needed

- Wave arms
- Flares
- VHF radio (channel 16)
- cell phone (only in populated areas)
- Satellite now



Helping Others



- Legally you must stop to help others.
- Only exception – putting yourself at risk.

Accidents (Reporting)

- You stop, give name and address, and offer assistance.
- Report it to the police



Poor weather/Fog

SLOW DOWN! life jackets on, lights on and switch to full fuel tank



Capsizing/Sinking



Radio for help if possible (mayday 3 times – name, description, location, problem), life jackets on, stay with boat if possible

Engine Failure

- #1 cause – no fuel
- poor maintenance
- overheating – faulty impeller or debris over water intake



General Boating Knowledge – Part 3

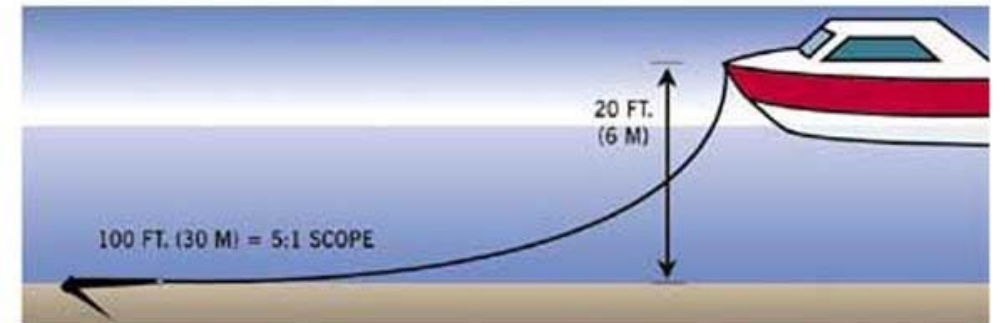
“Common Sense on the water”

Continued

HIGHLAND

WOODWORKING

Anchoring



Attach to a secure place on the bow (cleat) and NEVER to the side of a boat or stern, especially in swell or current as you could capsize it. A general rule is a scope of 5:1 and up to 10:1 in rough water or high current area.

Hypothermia

- happens when you are wet (don't have to fall into water)
- early sign – shivering, slurred speech
- intermediate signs – weak pulse, irrational, lack of coordination
- final – weak/absent pulse, loss of consciousness
- treatment – shelter from cold, dry clothes, warm slowly. No HOT liquids or alcohol.
(cardiac arrest, shock, burns, more heat loss)



H.E.L.P.

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Heat Exhaustion/Stroke

Heat Exhaustion

ACT FAST

- Move to a cooler area
- Loosen clothing
- Sip cool water
- Seek medical help if symptoms don't improve

Dizziness

Thirst

Heavy Sweating

Nausea

Weakness



Heat Stroke

ACT FAST

CALL 911

- Move person to a cooler area
- Loosen clothing and remove extra layers
- Cool with water or ice

Confusion

Dizziness

Becomes Unconscious

Heat exhaustion can lead to heat stroke.

Heat stroke can cause death or permanent disability if emergency treatment is not given.

Basic Navigation Equipment

- Compass, paper charts – most basic and can't fail
- Depth sounder, gps, chart plotter, cellphone app. However, electronics **CAN AND DO fail** (dead battery, blown fuse, electrical short, corroded wires, overheat behind window, etc)



Understanding Wind Speeds

Light	1 – 21 km	up to 11 knots
Moderate	22 – 36 km	12 - 19 knots
Strong	37 – 62km	20 – 33knots = small craft warning *
Gale	63 – 87km	34 – 47 knots = Gale warning *
Storm	89 – 117km	48 – 63 knots = Storm warning *
Hurricane	over 117km	over 63 knots = Hurricane warning*



Note: the last 3 are announced on all weather announcements



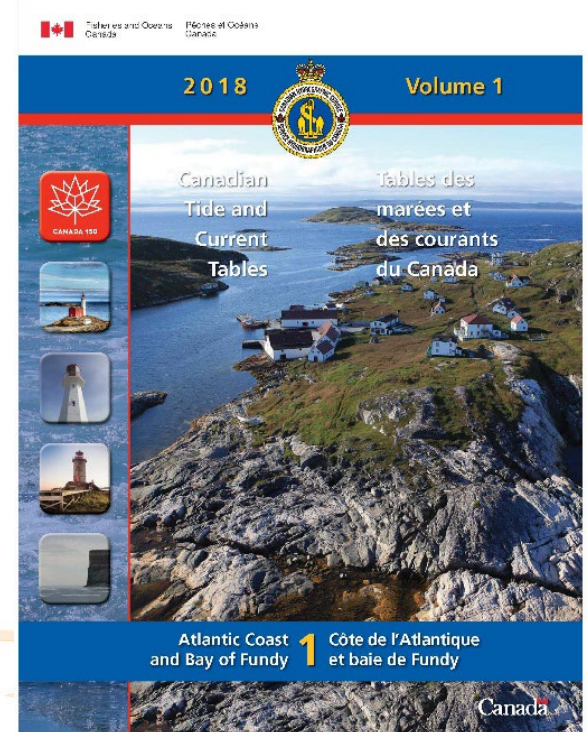
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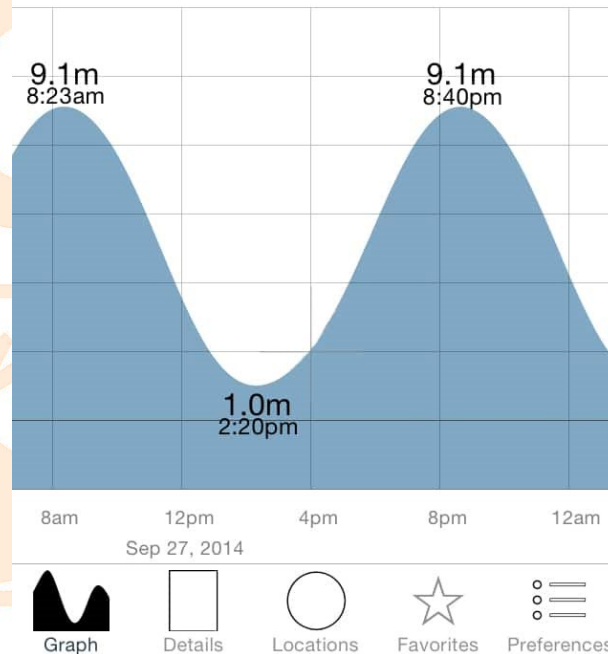


Know your Tides

- Tides change based on the gravitational pull of the moon and sun, resulting in two high and two low tides every 24 hours and 50 minutes, typically 12 hours and 25 minutes apart.



<https://www.tides.gc.ca/en/stations/07965>



Running aground

- Check the people onboard to make sure no one is injured.
- Assess what damage that might have occurred.
- Does your Bilge work??
- KNOW YOUR TIDES, BUOYS and have a chart!!



VHF Radio

- **Restricted Operator Certificate (Marine) - ROC-M**
Needed for ANYONE using a radio



PHONETIC ALPHABET

A	ALPHA	N	NOVEMBER
B	BRAVO	O	OSCAR
C	CHARLIE	P	PAPA
D	DELTA	Q	QUEBEC
E	ECHO	R	ROMEO
F	FOXTROT	S	SIERRA
G	GOLF	T	TANGO
H	HOTEL	U	UNIFORM
I	INDIA	V	VICTOR
J	JULIET	W	WHISKEY
K	KILO	X	X-RAY
L	LIMA	Y	YANKEE
M	MIKE	Z	ZULU

MAYDAY (grave/imminent danger)

PAN-PAN (urgent, non-life-threatening situations)

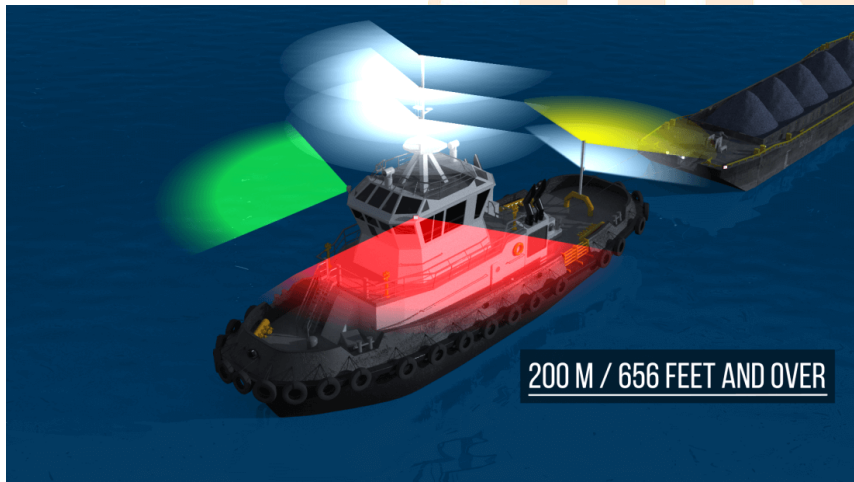
SÉCURITÉ (safety information).

These are vital for notifying authorities and nearby vessels of distress or safety hazards (BIG log in the water).

Navigation Lights

- Government/Police boats have a Blue Flashing Light to identify itself
- All around white light for anchoring
- Towing Vessel Lights

<https://aceboater.com/navigation-lights-boat-situation>



Power-Driven vessels

Power-driven vessel < 50m. long.

A power-driven vessel < 12m. long may use an all-round light instead of masthead light/stemlight.

Towing & Pushing

A vessel towing behind shows a yellow towing light, and two masthead lights in a vertical line.

If the tow is longer than 200m., then 3 masthead lights are shown.

Pushing ahead

Towing alongside

Sailing

Sailing vessels < 20m. long may show a tricolour, but not with other lights.

When motor sailing you must declare yourself as a power-driven vessel.

Fishing

Trawlers show green over white all-round lights. The masthead light is optional for vessels < 50m.

Fishing vessels other than trawlers show red over white all-round lights. A masthead light is not shown.

Restricted Ability to Manoeuvre

Clear to pass

Obstructed

Small dive boats show flag 'alpha'

Dredgers & dive boats

Constrained by Draught

Not Under Command

Mine clearance

keep 1000m clear!

Pilot

Anchor

Vessels < 50m. may show only one white light.

Aground

(also shows anchor lights)

RulesMaster The easy way to learn the nautical 'Rules of the Road'

www.rulesmaster.com

Sound Signals



- **One short blast** - I intend to change course to starboard
- **Two short blasts** - I intend to change course to port.
- **Three short Blasts** – I am backing up (astern propulsion)
- Five Short Blasts – Danger, collision, unsafe
- **One Long Blast** – I intend to depart
- Where have you heard some of these??



Carbon Monoxide Gas

- Produced from any gas burning appliance or engine. Can be fatal in a confined and enclosed space.
- **Symptoms**
 - fatigue
 - nausea
 - headaches
 - dizziness or fainting
 - vomiting



Radar Reflector

- Used on boats that are built of mostly non-metallic materials
- Sometimes cannot be used due to impracticality



Muffler

Every boat equipped with a motor other than a stock (unmodified) outboard engine must have a muffler and use it while operating within five nautical miles (9.26 km) of shore

