Effective Date: 22 November 2024

## **BASIC CRUISING STANDARD**

## Standard Description

This is one of the entry level Standards in the series of Sail Canada Standards on sailing keelboats and on cruising. It develops the student's ability to take command of and operate (with assistance of competent crew) an auxiliary powered sailing vessel, by day, in light to moderate conditions. Basic boating skills are developed under sail and power with a focus on operation of the vessel as both crew and skipper. Individuals with minimal practical on water experience should consider completing the Start Keelboat Sailing Standard before attempting for this training.

Sailing for Life La voile pour la vie

A course leading to this Standard introduces the operation of a cruising keelboat both as a powered vessel and as a sailboat. Terminology used in describing the boat and on water activities is taught and used throughout the course. Practical topics under power include simple maneuvering skills as well as departure from and return to dock. Basic sailing skills are developed including sail selection, the use and positioning of sails to provide propulsion, and the operation of the vessel with crew. Required and recommended safety equipment is discussed as is the handling of emergencies that might be encountered while day sailing. The basic rules for avoiding collision with other vessels are explained and this information is applied during the practical sessions. The meaning of weather forecasts is clarified and the impact of weather on vessel operation, crew behavior, and on water activities is discussed. The curriculum includes an elementary introduction to the Canadian navigation system and to the basic use of charts and tide and current tables.

The program may be offered in a day sailing or live aboard format. It is envisioned that the day sailing format will be taught in not less than 28 hours of which at least 18 hours should be devoted to practical sessions on water. In a live-aboard format program leading to this Standard may be offered over a period of 4 or more days. A challenge of the standard may be accomplished in a minimum of 4 hours afloat plus completion of the written examination.

# **Objective**

To be able to cruise safely in familiar waters as both skipper and crew of a sloop rigged keelboat of 6 to 10 meters with an outboard or inboard motor in moderate wind and sea conditions by day. The focus of this standard is on the development of basic sailing and seamanship skills as well the knowledge needed to make the decisions expected of a skipper.

### **Prerequisites**

None.

## Ashore Knowledge

#### Section I: Terms and Definitions

The candidate must be able to:

1. Identify and describe the following:

Hull and keel Gooseneck

Boomvang and topping lift Bow, beam and stern Fenders Shackles and fairleads Deck, cabin and companion way Cleats and winches Rudder and tiller/wheel Pulpit and pushpit Cockpit and self-bailing cockpit Stanchions and lifelines Gudgeons and pintles Main, jib and storm jib Mast and boom Genoa and spinnaker Spreader Head, tack and clew Shrouds and stays Luff, foot and leech Tangs and turnbuckles Battens, hanks and slides Chainplates Cringles and reef points Running rigging Standing rigging Roller and jiffy/slab reefing Sheets and halyards Outhaul and cunningham Telltales

Spring and breast lines Roller furling 2. Describe the following with the aid of diagrams:

Ahead, abeam and astern, forward and aft;



3. Define and be able to identify these terms from a diagram:

Port Underway
Starboard No way
Windward In irons
Leeward Beating

Tacking Sailing by the lee

Gybing Running
Close Hauled On a tack
Port tack Luffing (of sail)
Starboard tack Heading up
Leeway Bearing away
Wash Wake

Reaching (Close, beam and broad)

#### Section II: Gear and Equipment

The candidate must be able to:

- 4. List from memory:
  - a) The Transport Canada required items for the candidate's boat (as per the *Small Vessel Regulations* and the *International Regulations for Prevention of Collision at Sea (Collision Regulations*)),
  - b) The recommendations for care and maintenance of PFDs, life jackets and other Transport Canada required safety equipment,
  - c) The recommended method of testing for buoyancy in a PFD;
- 5. Describe:
  - a) The reasons for keeping gear and equipment stowed in assigned places in a cruising boat,
  - b) The basic maintenance and frequency of maintenance of a recreational boat and its equipment so that it is capable of functioning at all times for the planned passage,
  - c) The minimum items recommended for a waterproof emergency kit.

#### Section III: Safety

The candidate must be able to:

- 6. a) Describe the purpose of a safety harness and dangers of improper attachment in a cruising boat,
  - b) State the purpose of pulpits and lifelines;
- 7. Identify the required navigation lights for:
  - a) A vessel under sail, under power, and at anchor and describe the angles of each,
  - b) An unpowered vessel less than 6 meters in length;
- 8. Demonstrate an understanding of cold water shock and cold incapacitation including:
  - a) Their signs and symptoms,
  - b) The impacts of these conditions,
  - c) Possible actions and treatment to reduce or mitigate and manage these effects and increase survival times;
- 9. Demonstrate an understanding of hypothermia including:
  - a) The signs and symptoms and the major areas of heat loss to the body,
  - b) Steps for prevention,
  - c) Treatment for mild and severe hypothermia,
  - d) The actions to be taken by one or more individuals in cold water to increase survival time;
- 10. Define what carbon monoxide poisoning is including:
  - a) The signs and symptoms,
  - b) Steps for prevention,
  - c) Treatment for;
- 11. Describe the precautions taken to prevent undue magnetic influences to the vessel's compass;
- 12. Describe the common sources of fire and explosion and list the methods for preventing such occurrences and actions to be taken in the event of an onboard fire;
- 13. Describe safe refueling procedures;
- 14. Identify the two scuba diving flags;
- 15. Describe/list:
  - a) The danger involved in re-charging batteries,
  - b) How to safely launch flares,
  - c) The types of signals used to indicate distress,
  - d) The actions to be taken in case of a capsize;
- 16. Describe the uses, capabilities and limitations of a yacht radar reflector;





- 17. State the dangers of overhead power lines;
- 18. Describe:
  - a) Reasons for filing a float plan and who the plan should be filed with,
  - b) Items of important information which should be included in a float plan,
  - c) Reasons for completing a pre-departure checklist.

### Section IV: Rules of the Road and Canadian Regulations

The candidate must be able to:

- 19. Demonstrate knowledge of the Collisions Regulations:
  - a) Describe the application of and how to comply with rules 5 to 10,
  - b) Apply Collision Regulations Rules 11 to 17 by means of diagrams;
- 20. Identify and describe the following:

Pleasure craft Power driven vessel

Sailing vessel Recommended gross load capacity

Compliance notice / Capacity plate Recommended safe limit of engine power

- 21. Identify:
  - a) Four considerations in determining the safe speed to operate a vessel,
  - b) The actions and precautions to be taken in restricted visibility,
  - c) Responsibilities when operating in a commercial traffic lane;
- 22. Demonstrate knowledge of regulations applying to boaters as follows:
  - a) Identify the minimum required publications for operating a 10 meter pleasure vessel in unfamiliar waters,
  - b) Describe the guidelines for licensing and how a license number must be marked on a vessel,
  - c) Identify the principal acts and regulations that a pleasure craft operator should be knowledgeable about and the areas covered by each including:

Canada Shipping Act (2001) Small Vessel Regulations Contraventions Act
Vessel Operation Restriction Regulations The Criminal Code of Canada Collision Regulations
Competency of Operators of Pleasure Craft Regulations

#### Section V: Weather

The candidate must be able to:

- 23. State three sources of marine weather information;
- 24. Interpret the marine weather forecast applicable to the area of operation, and describe how to apply the information as follows:
  - a) Determine whether it is safe to set sail in the candidate's boat,
  - b) Decide what changes are forecast for the next six hours and what expect these should have on the day's planned activities,
  - c) Identify the wind speeds associated with:

Light winds Moderate winds Strong winds
Strong wind warning Gale warning Storm warning

25. Describe local weather hazards, how they can be identified, the normal warning time available, and the actions to be taken to reduce/avoid effects.

#### Section VI: Duties of the Skipper and Crew

The candidate must be able to:

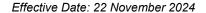
26. List the main responsibilities of the skipper and crew as listed below:

#### Skipper:

- a) Safety of crew and boat,
- b) Briefing on location and operation of lifesaving and other safety equipment prior to getting underway,
- c) Assigning duties,
- d) Instruction in the safe use of the boat's equipment while underway,
- e) Obligations on observing an accident or vessel in distress,
- f) Actions to demonstrate respect for other boaters and other's property,

#### Crew:

- a) Obey skipper,
- b) Assist skipper.





### Section VII: Seamanship

The candidate must be able to:

- 27. Describe the sequence of sail reduction as wind speed increases;
- 28. Describe the danger of a lee shore;
- 29. Understand the use of a Canadian Hydrographic chart of the local area as follows:

#### Describe:

- a) A chart,
- b) Aids to Navigation;

#### Read:

- a) Depth of water,
- b) Distance scale,
- c) Buoys and their significance,
- d) Types of bottom (sand, rock, mud and clay),
- e) Under water/surface hazards: kelp, cable, rock, shoals, cribs, wrecks, currents,
- f) Light symbols,
- g) Beacons;
- 30. Use of Tide and Current Tables to find:
  - a) Times and heights of tides at reference ports,
  - b) Direction and rate of current at reference stations;
- 31. Describe:
  - a) The features of a secure anchorage,
  - b) The holding characteristics of commonly used anchors,
  - c) Suitable rode makeup and handling,
  - d) Scope requirements when anchoring for lunch, overnight and rough weather;
- 32. Describe the immediate action to be taken for the following circumstances:
  - a) Springing a leak,

f) Dragging anchor,

b) Steering fails,

g) Running aground,

c) Grounding at anchor,

h) Broken halyard,

d) Fouled propeller,

i) Fire;

- e) Standing rigging fails,
- 33. Describe the one commonly accepted use for each of the following knots, bends and hitches:
  - a) Figure Eight,
- d) Bowline,
- b) Reef Knot,
- e) Clove Hitch,
- c) Double Sheet Bend,
- f) Round Turn & Two Half Hitches;
- 34. Describe the use of the VHF radio for receiving weather reports and making emergency calls.

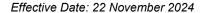
### Afloat Skills

(18 hours minimum) Recommended vessel should be a 6 - 10 metre, sloop rigged keelboat with an outboard or inboard engine.

#### Section VIII: Preliminaries

The candidate must be able to:

- 1. Demonstrate the use of safety equipment including the following:
  - a) while on land, a correct method of putting on a personal flotation device when in the water;
  - b) the correct use of a heaving line.
- 2. Carry out a check of the vessel's gear and equipment and demonstrate use and care of onboard equipment in accordance with:
  - a) Transport Canada requirements;
  - b) The Sail Canada Cruising Boat Checklist recommendations.
- 3. Prepare the vessel and all aboard including:
  - a) obtain, interpret and apply a weather forecast;
  - b) complete a crew briefing;
  - c) confirm that the vessel and crew are fit for the planned activities.
- 4. Select and bend on (if required), check and stow / secure or furl sails;
- 5. Coil a line (two methods perfect, figure eight) and secure (three methods temporary, sea-coil, pull-through);
- 6. Properly stow lines and fenders;
- 7. Demonstrate safe winch techniques with particular emphasis on:





- a) Possible high loads on the winch and prevention of excessive strain on sheet/halyard,
- b) How to avoid over riding turns (and how to clear),
- c) Position of hands/fingers,
- d) Fitting and removal of winch handles.

### Section IX: Manoeuvring Under Power

The candidate must be able to:

- 8. Start auxiliary engine on vessel and as skipper and crew depart from dock observing commonly accepted safety practices;
- 9. Come to a full stop with *stem (bow)* one half boat length away from a buoy using reverse. (The objective of this manoeuvre is to know how much distance is required to bring a vessel to a full stop. Vessel is to be kept on a straight course while the manoeuvre is being carried out);
- 10. Manoeuvre and stop a vessel under power to a position alongside and parallel to a dock, portside-to and starboardside-to, not more than two feet off without the aid of lines, without the stern passing a given mark at any time during the manoeuvre;
- 11. Apply Rules 5 through 18 of the Collision Regulations as applied to a vessel under power;
- 12. Set an anchor under power in water more than three meters in depth, so as not to drag when tested under engine power at half-throttle astern;
- 13. Raise anchor with the boat ready and get under way.

#### Section X: Handling Under Sail

The candidate must be able to:

- 14. Set the basic sails while under power, at anchor, or mooring (head to wind, hoist mainsail first), set appropriate luff tensions, and flake halyards;
- 15. Apply Rules 5 through 18 of the Collision Regulations as applied to a vessel under sail;
- 16. Act as skipper and crew while demonstrating the proper techniques of beating, reaching and running; tacking and gybing; heading up, bearing away, luffing and heaving to; using the following commands and responses:

  <u>Commands</u>

  <u>Responses</u>

  <u>Alert</u>

"Head Up"

"Bear Away"

"Ease Sheets"

"Harden Sheets"

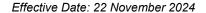
"Ready About"

"Ready"

"Helms-a-Lee"

- "Ready to Gybe" "Ready" "Gybe-Ho"

  17. Demonstrate, as skipper and crew, the management of the sail plan for different wind conditions and points of sail while keeping the vessel under control, either at the helm or controlling the sails by:
  - a) Reefing and shaking out the reef in the mainsail,
  - b) Reefing and shaking out the reef, or changing the headsail,
  - c) Easing or hardening sheets to achieve sail trim appropriate for the point of sail and conditions;
- 18. Demonstrate the skipper and crew action/commands from the time a member of the crew falls overboard without warning, until the crew is safely recovered. Consider the crew overboard is wearing a PFD and able to assist him/herself. Include the following minimum actions:
  - a) Sound alarm "Crew Overboard!",
  - b) Deploy marker and buoyant object(s),
  - c) Appoint and maintain a look out,
  - d) Triangle method of return (under sail),
  - e) Describe at least two methods of getting a person out of the water and back aboard;
- 19. In response to a Crew Overboard situation, both assisted and unassisted, bring the vessel into irons. Start the engine, lower or furl sails as required to gain control of the vessel, ensuring on-board control of all lines, and manoeuvre the vessel under power for a successful Crew Overboard recovery;
  - <u>Note</u>: Both Performance Objectives (PO's) 18 and 19 above must be completed in reasonable time without losing sight of the victim or marker in the water. For these manoeuvres the crew can consist of three or more, but the student is to describe the actions to be taken if one member of a two-person crew falls overboard also, with the vessel under sail.
- 20. Lower or furl sails while under power or at anchor or a mooring.





### Section XI: Making Fast and Snugging Down

The candidate must be able to:

- 21. Secure a vessel to a dock using appropriate dock lines to prevent excessive movement and set out fenders correctly;
- 22 .Stop auxiliary engine and secure when departing vessel for night, observing commonly accepted safety practices;
- 23. Tie the following knots, bends and hitches within 30 seconds each:
  - a) Figure Eight,
- e) Clove Hitch,
- b) Reef Knot,
- f) Round Turn and Two Half Hitches,
- c) Double Sheet Bend,
- g) Belay a line to a cleat

d) Bowline,

## **Outcomes and Evaluation**

Candidates are expected to demonstrate the ability to safely operate the vessel in daytime in moderate conditions as both skipper and crew. These capabilities will be evaluated as part of the practical sessions. Candidate theory knowledge will be evaluated using a closed book written exam. For certification a 70% mark on this written exam is required. On successful completion of the practical sessions and the theory exam students will be awarded the Sail Canada Basic Cruising Standard. On award of this certification, candidates may apply for a Pleasure Craft Operator Card without requirement for completing any additional examination.

### Additional Notes

This Standard covers an extensive suite of practical skill and theoretical knowledge. Students who have completed the Sail Canada Start Keelboat Sailing Standard or who have previous sailing experience will find that experience beneficial to their experience in achieving this Standard. Practical sessions are typically offered on keelboats in the 6-10 metre range. Training is typically conducted with 3 or 4 students and the instructor on board. Some schools or clubs may offer programs leading to this Standard on larger vessels and may offer training times in excess of 27 hours.

# Physical Requirements for Candidates

These training sessions will require short periods of moderate upper body exertion, and a moderate level of arm strength. Participants will have the opportunity to experience sun, wind, spray, rain, and temperatures consistent with the time of year they take part in this activity. When underway the vessel may exhibit irregular motion due to wind and waves and temperatures may be cooler than on land. Participants will be expected to learn and demonstrate skills and perform tasks while the vessel is at the dock, at anchor, and when the vessel is underway. In a day sailing format, vessels will be underway for varying periods of time (up to 8 hours), during daylight, in light to moderate wind and sea conditions. These sessions are suitable for most fitness levels and will provide a good body core workout.

Participants taking programs offered in "live aboard cruise and learn" formats may also be subject to conditions normally associated with the Intermediate Cruising Standard.

#### Resource Material

Sail Canada Basic Cruising Skills by Gillian West

Sail Canada Basic Cruising Afloat Skills Rubric