

INTERMEDIATE CRUISING STANDARD (Bareboat Skipper - Sail)

OBJECTIVE

To be able to cruise safely in familiar waters as both skipper and crew of a sailing yacht of 8 to 12 meters in moderate wind and sea conditions by day. The standard emphasizes on-the-water skills at a level acceptable for bare boat chartering for extended cruises in coastal waters.

PREREQUISITES

Basic Cruising Standard.

It is recommended that the student have a recognized first aid certificate, a VHF radio operator's certificate and have completed the CYA Coastal Navigation Standard.

Note: To maximize the likelihood of successfully completing the Intermediate Cruising Standard, a student should:

- a) Have experience as skipper of at least ten day sails (or equivalent),
- b) Have applied the knowledge and practiced the skills in the Basic Cruising Standard,
- c) Be able to consistently demonstrate the skills learned in the Basic Cruising Standard.

ASHORE KNOWLEDGE

Section I: Planning

The candidate must be able to:

1. State the fuel tank capacity and range of the candidate's boat and list what factors could affect the range of the boat under power;
2. State the water capacity of the selected boat and the minimum daily water requirements of a person;
3. Describe water distribution systems with multiple tanks and various styles of pumps;
4. State the causes, prevention and cures for seasickness as well as the impact seasickness has on the effectiveness of the crew;
5. List the appropriate clothing for cruising and describe how its choice is related to safety and comfort;
6. Discuss menu planning and relate it to suitability for the day's activities;
7. List the minimum contents of a first aid kit for a one week cruise in familiar waters as recommended by the CYA;
8. Know the spare engine parts one might deem prudent for a one week cruise in familiar waters;
9. Know the minimum set of tools required for a one week cruise in local waters;
10. Identify the documents required and the procedures to be followed when:
 - a) Proceeding to the USA,
 - b) Returning to Canada from the USA.

Section II: Living Afloat & Boat Systems

The candidate must be able to:

11. Discuss galley procedures in order to minimize the danger of fire, scalding or other galley accidents;
12. Describe the common cooking systems (stoves and fuels) with respect to safety, convenience, speed of cooking and costs;
13. Discuss the common types of cabin heaters with respect to safety, convenience and cost;
14. Describe the principal elements of the 120V and 12V vessel systems, their use, and considerations for proper battery management;
15. Describe refrigeration system types and state two ways to conserve power when a vessel is equipped with an electric refrigeration system;
16. Describe the safe operation of an anchor windlass including appropriate vessel handling while using this equipment;
17. Differentiate between various sail handling systems and discuss handling and operational considerations of a particular combination of systems including furling systems (foresail, mainsail in mast, mainsail in boom) and mainsail flaking systems.

Section III: Weather

The candidate must be able to:

18. Describe the effect of local heating and cooling of land and water as related to wind and cloud formation;
19. Identify conditions likely to lead to fog.

Section IV: Seamanship

The candidate must be able to:

20. Describe the proper installation of a radar reflector;
21. Describe the complete actions to be taken for the following:
 - a) Springing a leak,
 - b) Steering fails,
 - c) Grounding,
 - d) Fouling a propeller,
 - e) Collision with another vessel,
 - f) Fire;
22. Describe how the vessel should be handled and what remedial action should be taken when the following emergencies occur while under power:
 - a) The engine fails in an anchorage too crowded to permit safe sailing,
 - b) The engine fails in a busy channel;
23. Describe in detail two methods of getting a crew overboard back aboard;
24. Describe the information required and the procedures to be followed when tying a boat to a fixed dock in local tidal conditions;
25. State two factors to be considered before allowing anyone to go swimming while the boat is at anchor;
26. Describe how to secure the boat with an anchor on the bow or stern and the other end made fast to dock or shore;
27. Describe the procedures and dangers when using a breast anchor to hold a boat away from a dock or wharf;
28. Describe the methods of rafting at anchor and dangers involved;
29. Describe three methods of recovering fouled anchors;
30. Describe three methods to prevent the dinghy from bumping the boat's hull when snugging down for the night;
31. Describe handling considerations and differences between an inflatable dinghy, a rigid inflatable boat (RIB) and a rigid dingy;
32. Describe precautions for safe handling of an outboard motor for the tender and actions to take in the event of accidental submersion;
33. Describe the proper operating procedures for the head and holding tank, list the precautions necessary to prevent malfunction and identify issues relating to holding tank capacity;
34. Describe a seamanlike method of preparing a boat in order that it may be left at the dock or on a mooring for a period of a week or more without crew;
35. Describe the skipper's responsibilities and actions for the following common courtesies and customs of the yachting community:
 - a) Permission to board,
 - b) Permission and entitlement to come alongside,
 - c) Courtesy in crossing adjacent boats when rafted,
 - d) Rights of first boat at an anchorage,
 - e) Keeping clear of boats racing (even though cruising boats may be the stand on vessel),
 - f) Flag etiquette:
 - (i) National Flag,
 - (ii) Courtesy flag,
 - (iii) Burgee / house flag,
 - g) Offering assistance to other yachts in trouble;
36. Describe the characteristics, limitations and uses of the following rope:
 - a) Polypropylene,
 - b) Dacron,
 - c) Nylon,
 - d) High modulus fibres.

Section V: Navigation & Passage Planning

The candidate must be able to:

37. Convert direction from true to magnetic to compass;
38. Convert direction from compass to magnetic to true;
39. Determine speed, time and distance when two are known;

40. Determine estimated time of arrival (ETA) and revised ETA.

AFLOAT SKILLS

Boat should be 8 to 12 meters long, sloop rigged with an inboard engine.

The candidate must be able to:

1. Perform routine daily and weekly maintenance procedures on engine;
2. Check all CYA recommended equipment aboard regarding its stowage and condition;
3. Sail a vessel of the given size as both skipper and crew:
 - a) On all points of sail, tacking, gybing, and sailing to weather efficiently,
 - b) Execute a series of tacks from close hauled to close hauled (six in ten minutes) using appropriate commands, without oversteering or losing boat speed unduly,
 - c) Execute a series of gybes while running (six in ten minutes) using appropriate commands, without losing control of the boom or steering,
 - d) Using the appropriate commands for all turns and changes of tack, assume any point of sail as directed and adjust sails and trim appropriately within a maximum of three minutes,
 - e) Sail a close hauled course (within 5 degrees) with sails set, keeping foresail telltales flying efficiently and boat moving well for a five minute period,
 - f) Sail a compass course with sails set properly, with no land references for a minimum of five minutes,
 - g) Demonstrate appropriate use of the mainsail traveler and foresail cars;
4. Manoeuvre the boat under power in a minimum space;
5. Reef the main sail while underway in an efficient manner;
6. Stop the bow of the boat within 4 feet of a fixed marker in various wind and sea conditions while under power in order to pick up a buoy;
7. Dock with stern or bow to dock or shore using a bow or stern anchor;
8. Apply Rules 1 through 19, 40 and 45 of the *Collision Regulations*;
9. Demonstrate the use of a spring line to spring a vessel off of and on to a dock;
10. Demonstrate basic use of the VHF marine radio, including Safety, Distress and Urgency calling procedures;
11. Check out that all systems on boat are in working order; engine, stove, electronics, sails, hull, deck hardware etc.;
12. Prepare a suitable hot meal aboard the vessel while in harbour, demonstrating suitable choice of food and drink and economy of resources;
13. Demonstrate suitable methods and precautions while towing a dinghy;
14. Demonstrate how to take soundings using electronic and manual methods;
15. Demonstrate the 'triangle method' and one alternative method (i.e. quick stop, fast return, life sling, etc.) of returning to a crew overboard in daytime in moderate winds safely and efficiently within three minutes using appropriate communications, commands and a spotter;
16. Identify sources of navigation information and local knowledge;
17. Lay off a course and determine compass heading and Estimated Time of Arrival (ETA) (assuming no current or leeway);
18. Plot and determine your position using deduced reckoning (DR) methodology;
19. Read a chart and identify corresponding landmarks and aids to navigation;
20. Take a fix using visual bearings;
21. Determine the depth above or below chart datum and apply;
22. Pilot a vessel into unfamiliar harbour or anchorage by day using charts and publications and application of passage planning techniques;
23. Throw a heaving line to a target a distance of ten meters away, coming within two meters in three times out of five attempts;
24. Tie a rolling hitch;
25. Obtain and interpret the Marine forecast;
26. Act as skipper and as responsible crew on a live-aboard cruise of at least 48 hours;

27. With specific reference to the vessels engine;
- a. Identify and describe the function of the following engine systems:
 - (i) Ignition and Electrical
 - (ii) Fuel
 - (iii) Propulsion
 - (iv) Cooling,
 - (v) Lubrication,
 - b. Describe the basic engine troubleshooting procedures to follow when:
 - (i) The engine cooling water fails to flow,
 - (ii) The engine fails to turn over sufficiently when starting,
 - (iii) The engine overheats;
 - c. Describe the dangers of excessive engine cranking.

ENDORSEMENTS

Flying Sails

1. Pack, set, hoist, fly, gybe and douse a cruising spinnaker;
2. Describe the advantages of, and demonstrate the use of a whisker pole for sailing downwind with genoa;

Marlinspike Seamanship

3. Make an eye splice in laid line;
4. Whip a line