

BASIC KEELBOAT RACING STANDARD

Course Description

This standard is the second keelboat racing standard that is part of the Sail Canada Learn to Cruise and Power training system. The standard will prepare candidates for a role as skipper or crew in a club white sail racing environment. The focus of this standard is on racing rules knowledge and practical application of rules, terminology and procedures used on keelboats on the race course. Practical sessions include practice and coaching on maintaining boat speed, interaction with other vessels on the race course and the role of officials as well as the application of the Racing Rules of Sailing.

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 16 hours should be devoted to practical sessions on water. In a live aboard format the course may be offered over a period of 4 or more days. A challenge of the standard may be accomplished in a minimum of 6 hours afloat plus completion of the written examination.

Objective

To be able to participate in local club white sail (non spinnaker) races as skipper, helm and crew, of a sloop rigged keelboat of 6 to 12 meters with an outboard or inboard motor in 5 - 20 knots (not gusting over 25 knots) of wind by day, with sufficient understanding of the racing rules, race management procedures, and tactics to successfully complete the race in an enjoyable manner.

Prerequisites

Requirements prior to taking the standard:

- Introduction to Keelboat Racing Standard,
- Pleasure Craft Operator Card (PCOC).

Requirements for Certification:

- ROC(M) VHF with DSC endorsement.

Note: As a minimum this standard will be adjusted as required every four years to maintain synchronization with the current Racing Rules of Sailing (RRS).

Ashore Knowledge

Section I: Sails and Boat Setup

The candidate must be able to:

1. Name and identify the listed elements of the standing rigging and describe the procedure to dock tune the mast including the effects of tension adjustments to the standing rigging on both mast head and fractional rigs;
 - Mast Rake
 - Mast Pre-bend
 - Mast Step
 - Mast Partners
2. Name and describe the following as used to induce angle of attack, slot adjustment, twist and leech symmetry of sails:

Backstay	Main sheet
Boomvang/Kicker	Mast Bend
Cunningham	Headsail sheet leads
Outhaul	Telltails / ticklers
Halyards	Traveller
Leech lines	In haulers
Out haulers	Draft depth and location
Preset marks on equipment	
3. Identify the a typical sail cross over plan according to wind speeds and wave conditions;

Section II: Racing Rules & Race Management

The candidate must be able to:

4. Demonstrate a basic understanding of the International Sailing Federation (ISAF) Racing Rules of Sailing (RRS) as they apply to a competitor. Specifically the Introduction, Parts 2 (Section C and D), 3 & 4 including all ISAF rule updates and Sail Canada (SC) prescriptions;
5. Identify and explain the meanings and use of Race Committee Signals (RRS Race Signals):
 - a) Postponement Signals,
 - b) Abandonment Signals,
 - c) Change the Next Leg Signals,
 - d) Other Signals;
6. Describe the purpose of Notice of Race (NOR's) and Sailing Instructions (SI's);
7. Describe the penalties and competitors responsibilities associated with:
 - a) Recalls (RRS 29),
 - b) Starting Penalties (RRS 30);
8. Describe the roles of the parties involved in a protest hearing:

Protest Chair	Jury Member
Protestor	Protestee
Witness	Interested Party
9. Describe the steps that occur during a protest hearing (RRS Part 5, Section B);
10. Describe the difference between a protest, redress and arbitration;
11. Describe considerations when using navigation marks as marks of the course;
12. Describe how to identify and react to non racing boats when they enter into the race area;
13. Describe what to do when there is no committee boat present at a finish line;
14. Define the difference between one-design and handicap racing;
15. Understand the use of the locally used handicapping system;
16. Understand the low point scoring system;

Section III: Strategy and Tactics

The candidate must be able to:

17. Describe the factors to be considered when formulating a game plan for a race;
18. Describe how to determine the favoured end of the start and finish lines;
19. Describe how to determine the favoured side of the course;
20. Describe how current would affect outcomes for:
 - a) Formulating a game plan for a race,
 - b) Determining the favoured end of the start and finish line,
 - c) Determining the favoured side of the course;
21. Describe the use of wind shifts, oscillating or persistent and the terms “header” and “lift”;
22. Describe tactics:
 - a) To protect a lead,
 - b) To overtake a competitor, and
 - c) To slow another competitor down;
23. Explain the reasons for "ducking", "crossing" or "lee bowing" a competitor;
24. Explain the difference between a tactical and a seaman-like mark rounding and when they would be used.

Afloat Skills

It is recommended that participants have been able to participate in at least 2 races as part of this level.

Section IV: Seamanship

The candidate must be able to:

1. Act as skipper, helm 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:

Commands	Responses	Alert
“Head Up”		
“Bear Away”		
“Ease Sheets”		
“Tighten Sheets”		

- | | | | |
|--|-----------------|---------|---------------|
| | “Ready About” | “Ready” | “Helms-a-Lee” |
| | “Ready to Gybe” | “Ready” | “Gybe-ho” |
2. Demonstrate the skipper, helm 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;
 3. Rig and use a whisker pole and/or an outboard headsail fairlead;

Section V: Manoeuvring Under Power

The candidate must be able to:

4. Start and stop auxiliary engine on vessel, observing commonly accepted safety practices;
5. Manoeuvre and stop a vessel under power to a position alongside and parallel to a dock, portside-to and starboard side-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;
6. Apply Rules 5 through 18 of the *Collision Regulations* as applied to a vessel under power;

Section VI: Racing Situations

The candidate must be able to:

7. Demonstrate proper sail selection and shape adjustment appropriate to the prevailing conditions;
8. Correctly identify the favoured end of the start line;
9. Formulate and apply a starting strategy;
10. Demonstrate appropriate sail trim and boat balance for the prevailing conditions on each leg of the course;
11. Demonstrate tactical mark roundings;
12. Apply an understanding of the Rules as they relate to boat on boat situations which occur during the race;
13. Accurately assess crossings with range and bearing;
14. Perform the appropriate exoneration (as per RRS 44.1 & 44.2) following:
 - a) hitting a mark,
 - b) fouling another competitor;
15. Demonstrate appropriate reaction to wind shifts;
16. Correctly identification the favoured end of the finish line.

Outcomes and Evaluation

Candidates sailing ability, knowledge and application of racing rules and strategy as well as vessel handling skills will be coached and evaluated throughout the training session. In addition to successful completion of the practical course candidates will be required to complete a closed book written exam that covers theoretical knowledge relevant to this standard. In order to complete certification a mark of 70% is required on the examination.

Additional Notes

This standard should provide the candidate the opportunity to participate in keelboat racing at the club level. In addition to the development of understanding and application of the RRS and determination of effective strategies, candidates will be coached on and provided the opportunity to work on the development and maintenance of boat speed.

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 courses in “live aboard cruise and learn” formats may also be subject to conditions normally associated with the Intermediate Cruising standard.

Resource Material

Listed alphabetically by title.

2013 - 2016 The Rules in Practice, Bryan Willis
Getting Started in Sailboat Racing, Adam Cort and Richard Stearns
Illustrated Sail & Rig Tuning, Ivar Dedkan
Performance Racing Tactics , Bill Gladstone, North U.
Performance Sailing and Racing, Steve Colgate
Racing Rules 2013 – 2016 Companion, Bryan Willis
Racing Trim, Bill Gladstone, North U.
Tactics, Rodney Pattison
The Racing Rules of Sailing (including Sail Canada prescriptions) 2013 – 2016
Understanding the Racing Rules of Sailing Through 2016, Dave Perry