

## 1. Personal Equipment

Members of the Race Committee (R/C) should be expected to provide their own personal equipment: clothing (including a hat), life jacket, and sunscreen. In addition, members of R/C should provide their own clipboard (including paper and pencils/pens), a watch, and a copy of the Racing Rules of Sailing. Every member of R/C should be supplied with a copy of the Notice of Race and the Sailing Instructions.

## 2. Race Committee Equipment

The Race Officer / Principal Race Officer – through the Host Organizing Committee – has the responsibility of arranging for all of the equipment needed to conduct the race(s). The following guidelines will help in selecting appropriate equipment, suitable for the event. There are several simple rules to follow:

- 1) Plan ahead. Do not start gathering equipment the night before, that is the time for last minute checks.
- 2) Redundancy is good. So is simplicity.
- 3) Will the size, shape, and sound of the equipment be easily seen, recognized, and heard, by the competitors?
- 4) Be practical.

### a) Boats:

Suitable for the size of fleets, local conditions, and distance from shore. Relatively small, well equipped, highly maneuverable “runabouts” make better R/C vessels than large sailboats, although one such vessel serves well as a Signal/Mother boat – which should be clearly identified by some type of flag, which can be lowered once the Signal Boat is on station and the fleet assembled. The fewer the flags, the more obvious the necessary ones become. Remember Rule 4. And don’t run out of gas, Rule 2.

All boats must meet the minimum requirements of the Safe Boating Guide, including a First Aid Kit.

### b) Other Equipment:

#### i) Sounds:

Signal Boat (minimum requirements):

- A propane cannon (with extra propane canisters, and batteries) for long Start Lines.
- Air horns (with extra canisters) for short Start Lines. Remember Rules 2 & 3.

*Minimum is an Air Horn. Do not try to start an Ontario Sailing event with a whistle, although you may use one as a courtesy device on the Finish Line.*

Pin and Mark Set Boat(s) (minimum requirements):

- A whistle – for signaling a Missing Mark, a Shortened Course, and a Change of Course.

#### ii) Visual Signals:

Signal Boat (minimum requirements):

- Class Flags: An individual flag for each class on the course. Numeral pennants are acceptable. White flags with class sail insignia are better. Remember Rule 3.
- Prep Flags: Code “P”, “I”, “Z”, and Black.
- Other Flags: AP, First Substitute, Code “A”, “H”, “L”, “N”, “S”, “V”, “X”.
- Other: A “White Board” and ample supply of “Dry Erase” Black Marker Pens - used to post the course and BFD’s. Size depends on the application of Rule 3.

*Note 1: Home Depot sells 8’ x 10’ sheets of “White Board”. Cut to size, and protect the edges with Duct Tape.*

*Note 2: If you don’t know what a BFD is, read RRS 30.3 and A 11.*

**ii) Visual Signals (cont'd):**

Pin Boat (minimum requirements):

- Other Flags: Code “C”, “M”, “S”, “V”.

*Note 3: A long pole is best for displaying these flags. One pole, with a suitable method of quickly attaching the flag is required (unless there is a mast with halyard on the boat). One pole for each flag is better.*

*Note 4: Handy but not required: First Substitute, Code “N” – used to retrieve large fleets.*

- Other: A “White Board” and ample supply of “Dry Erase” Black Marker Pens - used to post a Change of Course.

Mark Set Boat(s) (minimum requirements):

- Other Flags: Code “C”, “M”, “S”. See also Note 3 & 4.

- Other: A “White Board” and ample supply of “Dry Erase” Black Marker Pens - used to post a Change of Course.

*Note 5: If there is no Pin Boat, then all of the flags required for the Pin Boat must be on the Signal Boat, and the Signal Boat must be capable of maneuvering to signal a Missing Mark, a Shortened Course, and a Change of Course.*

*Note 6: While it is true that a trapezoid course does not lend itself to being changed while a race is in progress, it is not difficult to do a downwind course change on the last leg for those sailing on both the inner and outer portions of the course. Therefore all R/C's should be equipped and prepared to do course changes when conditions warrant.*

**iii) Timing:**

Each boat should have more than one watch, and a least one person on each boat should know how to set these watches. All watches used by the R/C should be set to GPS time.

**iv) Line Judge:**

When long Start Lines are used, both the Signal Boat and the Pin Boat must be equipped with binoculars for identifying competitors who are OCS.

**v) Recording:**

There is a long list of forms that are used in conducting races. A well equipped R/C will have an ample supply of each. In a pinch, lots of good old blank paper will suffice. It is not the form, but the information collected, that is important. With that in mind, there is one form that is essential, and that is an Entry List. Do not attempt to conduct a race, unless you know who is on your race course. Remember that the first rule of R/C is safety – come back with the same number of competitors that you started with. You cannot do that if you don't know what you started with, or who is missing.

- Tape recorders, with extra tapes and batteries. At least one of each on each boat.

**vi) Marks and Ground Tackle:**

Both of these pieces of equipment must be suited to the conditions. The two most frequent problems are improper marks and unsuitable ground tackle. Inflatable marks are required for all Ontario Sailing events – flags on poles are only to be used as Start / Finish Marks.

There are very few places in Ontario where a combination of 8 lb “Danforth” anchors, and sufficient ¼ inch braided line (minimum scope 2 to 1), will not hold a mark in place. Using 16 lb anchors, chain, and ½ inch line, is unnecessary, expensive, awkward, and therefore unsafe. If more than 100 feet of anchor rode is required, an “anchor yanker” can be used. If you don’t know what an “anchor yanker” is, and you might need one, arrange to take the Mark Set Course. No, on second thought, take the course anyway.

**vii) Other Required Equipment:**

As a bare minimum, each boat must be equipped with a suitable compass that works, and that is protected from magnetic interference at all times.

VHF Radios. Each boat must be equipped with at least one, fully charged, VHF radio. Permanently mounted radios are highly recommended. There should also be a mobile phone on one of the boats – with a list of emergency numbers.

At least the Mark Set boat must be equipped with a GPS, and have on board someone who is familiar with its operation. Setting marks with a GPS in one hand, and the instruction book in the other, is poor race management.

A Wind Wand. One on each boat. A piece of wool, epoxy glued to a shish kabob skewer is a great piece of equipment.

If the Race Officer is not familiar with the essential class rules, they should have a copy of them on board.

Sufficient bottled water for the weather conditions. Yes, food is nice too. You might not get the R/C to return the next day if you don’t provide lunch, but few R/C members will starve during one day on the water.

- Duct Tape. No R/C should be without at least one roll.

**viii) Bells and Whistles:**

There is a lot of equipment that is handy, but not mandatory:

- A wind speed indicator.
- Cable ties – those little plastic strips that you get to use once.
- Charts. Especially if you are operating in unfamiliar waters.
- Course Calculators. For when your math fails you.
- Ear protection. For use with a propane cannon. Ear muffs for when it is cold is something else again.
- Bolt cutters. For removing broken rigging – on your boat or a competitors.
- A knife and/or tool kit. A “leatherman”, or reasonable facsimile thereof, belongs in every personal equipment bag.
- Loud Hailer
- Zip Loc bags. For transferring copies of race results (either on paper or on tape).

**Race Committee – Equipment – Checklist  
Minimum Required Equipment**

Item	Signal Boat	✓	Pin Boat	✓	Mark Set Boat	✓
<b>Sounds</b>						
Propane Canon Extra canisters, batteries	Yes					
Air Horn(s) Extra canisters	Yes				Nice	
Whistle(s) – Fox 40's	Yes		Yes		Yes	
<b>Visual Signals</b>						
Class Flags	Yes				Nice	
Code: "P", "I", "Z", "Black"	Yes					
"AP"	Yes					
1 <sup>st</sup> Sub, Code "N"	Yes		Nice			
"A", "H", "L", "V", "X"	Yes					
"V"			Yes			
"C", "M", "S"			Yes		Yes	
<i>Note: If there is no Pin boat, then "C", "M" &amp; "S" must be on Signal Boat</i>						
White Board & Markers	Yes		Yes		Yes	
<b>Timing</b>						
2 (Two) Watches	Yes		Yes		Yes	
<b>Line Judge</b>						
Binoculars (long line)	Yes		Yes			
<b>Recording</b>						
Tape Recorder	Yes		Yes		Yes	
Tapes & Batteries	Yes		Yes		Yes	
Forms:						
Entry List	Yes					
Mark Rounding	Yes		Yes		Yes	
Results	Yes		Yes		Yes	
<b>Marks and Ground Tackle</b>						
Inflatable Marks			Yes		Yes	
Start / Finish Pin			Yes		Yes	
Anchors + Spares <i>Does <b>Not</b> include boat's anchor</i>			Yes		Yes	
Lots of anchor rode			Yes		Yes	
Anchor Yanker			Nice		Nice	
<b>Other</b>						
Compass	Yes		Yes		Yes	
VHF Radio	Yes		Yes		Yes	
GPS	Nice		Nice		Yes	
Wind Wand	Yes		Yes		Yes	
Class Rules	Yes					
Water	Yes		Yes		Yes	
Lunches	Nice		Nice		Nice	