

ISLAND BARN RESERVOIR SAILING CLUB



RACE OFFICERS GUIDE 2013-14

Please tell Richard Barker (Sailing Secretary) about any errors in this guide.

One page quick guide 2013-14

COURSE

- Make the course length appropriate to the wind strength
- Aim for at least three laps
- Always set more in case the wind increases
- Shorten course to get correct race length
Unless you have timed the partial laps and like doing lots of arithmetic
ONLY SHORTEN TO WHOLE LAPS because slower boats will probably do fewer laps
- Make the first beat as long as you reasonably can.
- **Dead RUNs are important.**
 - RUNs give asymmetries tactical choices about which side
 - RUNs and beats are the overtaking lanes on the course
Getting the run dead downwind is slightly **more** important than getting the beat exactly upwind (so long as the beat still has substantial requirements for both tacks) - broad reaches are processions
- Aim to always have a BEAT (first leg), and at least one beam reach, and a DEAD RUN. Often this means multiple reaches so you can have a beat and a run.
- Don't be afraid to ask for feedback after the first race or after the first B2B race

START

- Use Committee boat unless a good reason not to...
 - Inner distance is not compulsory but ...
 - Bank starts need room behind the line
(use inner distance to give room)
- Line should be long enough for boats to spread
- Aim for line perpendicular to the wind, ideally marginal port bias (port end marginally upwind)

FINISH

- **Finish at the end of whole laps unless you time partial laps**
Slower boats will probably do two laps to fast boats three
- **Finish should be OUTSIDE the last mark at perpendicular to the last leg**
- **Normally hoist shorten course when leading boat is at previous mark**
Once you shorten EVERY BOAT FINISHES NEXT TIME IT CROSSES THE LINE. You can shorten individual classes if you know your flags but it is rarely sensible. If there are boats spread all the way round the course just shorten when the boat you want to finish now is the next to get to the line.

Usually you will be able to let fast boats through then shorten before slower boats get near the line.

IBRSC Race Officer's Guide

1.	<i>Before You Begin</i>	4
2.	<i>Time Critical Operations</i>	4
3.	<i>Race Entry & Results Sheets</i>	4
4.	<i>The Course</i>	5
5.	<i>Changing the Course</i>	6
6.	<i>Class Racing</i>	7
6.1	What You Need	Error! Bookmark not defined.
7.	<i>Handicap Racing</i>	8
7.1	Handicap Calculations	8
8.	<i>Pursuit Races</i>	9
8.1	What You Need	9
9.	<i>The Start Line</i>	10
10.	<i>Postponement of the Start</i>	10
11.	<i>Shortening Course</i>	11
12.	<i>Instructions For Radios</i>	12
13.	<i>How to run a Wednesday Evening</i>	Error! Bookmark not defined.
13.1	Opening Up	Error! Bookmark not defined.
13.2	To get the safety boats out	Error! Bookmark not defined.
13.3	To run the race	Error! Bookmark not defined.
13.4	Other Duties	Error! Bookmark not defined.
13.5	Closing Up	Error! Bookmark not defined.

BEFORE You BEGIN

Remember that time is your biggest enemy. If you aren't organized, and keeping a constant watch on the time then things will run away from you. Everything takes longer to do than you think, except that last lap when you were thinking about finishing, and now they've got to do another because you didn't shorten course in time. *Ideally you are reading this the week BEFORE you are on duty.*

- a) AT THE VERY LEAST... **HAVE YOU READ THE QUICK GUIDE?**
- b) Have you got the latest sailing instructions - Club racing or Open Meetings?
- c) Do you know the race type and start time? see Sailing Programme - remember Pursuits once a month in the Summer.
- d) Do you know the weather forecast ? If not ring it up.
- e) **Have you synchronized your watch with the club clock.** This is a highly accurate radio controlled clock and is always absolutely correct. YOU MUST NOT START EARLY.

TIME CRITICAL OPERATIONS

- a) Arrive early enough that you can be in the middle of the reservoir in a safety boat checking the wind direction 45 minutes before the start time. The wind always looks a different direction when you are on the water.(Failing that check the burgees on boats in the upper park both sides of the clubhouse)
- b) Set the course no later than 30 minutes before the start time.
- c) Set the start line at least 10 minutes before the start time.
- d) Don't let the first race go on too long. It takes at least ten minutes to finish all the boats, so finish the first one a bit early to take account of this,
- e) Try very hard to make sure the second race starts on time. You know how much it irritates you if it is late. Do unto others as you would be done to. NEVER start early.

RACE ENTRY & RESULTS SHEETS

Race entry is by transferring a race card into the entry rack. Unless you know by sight, *or the entrant has told you*, you have to assume that the entrant is as named on the card - sometimes more than one member uses the same boat. If a competitor has failed to enter, you must treat them as an entrant during the race, but record the non-entry on the race sheet. The competitor has the chance to enter after the race by paying a fine into the club charity box. If he chooses not to pay the fine then he is no longer classed as an entrant and scores DNC (did not compete)

Fill in the race sheet as fully as possible. This makes it immeasurably easier for the series scorers. Just entering boat numbers without a name is not good enough. Also, make sure you show the DATE and CORRECT SERIES. Is it Sunday AM Class first race, second race, lunchtime handicap, etc?

THE COURSE

Diagrams showing suggested courses for different wind directions are at the rear of the book.

- 1) The first leg should be the longest reasonable beat and the first mark should be left to port. Show the start and the finish on the clubhouse diagram and **always display the course board at the start line NOT outside the clubhouse.**
- 2) *You do not need to include mark F (those of you who have been members for many years may remember that this was one required. It is no longer needed). If F naturally fits into the course it is nice for spectators and it can be convenient to keep control of lap positions. Do NOT finish at F unless that is the end of the lap. Only shorten to whole laps unless you have timed the partial laps carefully. If you feel you really must plan to do partial laps you have to time the partial laps and there is a calculation sheet in this guide. In general a much fairer result is given by sticking to whole laps.*
- 3) Make the course an appropriate length lap for the wind strength. You want at least three laps so the slower boats can do one lap less. If your course is so long that the fastest boats only do two laps you may have to wait a long time for the slowest to finish, better to do more laps of a shorter course.
- 4) Make sure that the finishing line is crossed clearly from the direction of the last mark. You cannot have a 'hook' finish. Use the Committee boat and finish after complete laps. **Set the committee boat on the OUTSIDE of the last mark at right angles to the course from the previous mark – so the finisher crosses the line passing the last mark on the same side as on previous laps without having to turn round the mark.**
- 5) You do not need an inner distance mark - it is very difficult to get it exactly on the line and will cause trouble if it drifts over the line which is defined as between the post and the OUTER distance. Show what you are using on the diagram.
- 6) The course you choose will only be a good one if you check the wind direction on the water using a burgee in a stopped committee boat. **You need to do this in time to set the course at least 30 minutes before the first start.**
- 7) Make sure you have a good first beat and a dead run in the course. Normally also include a beam reach or two to make sure you get a good run. Runs are important tactically for asymmetrics and are challenging for single handers. Generally runs and beats are passing opportunities, broad reaches are processions. If anything a dead run is more important than an exact upwind leg (so long as the beat still needs plenty of time on each tack)

CHANGING THE COURSE

Once you have put the course up in the clubhouse, you must assume that someone has seen it and will use it. If you now need to change the course because the wind direction has changed, you must do the following as described in Sailing Instruction 9:

Fly Flag "N" (chequered blue and white) WITH three HOOTS at the clubhouse if you are not yet at the start line, AND when reaching the start line (which may not be where you originally hoped to start). The flag means "this race and its course are abandoned - gather in the start area for new instructions". Have someone in the race box informally lower Flag "N" without a hoot some 5 minutes before the start - control has passed to you at the line now where you display the new course with an ORANGE shape in the course board. Lower Flag N with one hoot one minute before the new start sequence (no earlier than the advertised start time) and then proceed with the normal sequence. Keep the new course displayed with the orange shape for at least 2 minutes after the last start, so late-comers can still see it.

N.B. If you really want to abandon racing, fly "N" over "A" = all racing abandoned for today.

CLASS RACING

- All the Class flags as shown on the current start list.
- Preparatory flag (Blue Peter - white square in blue surround)
- X flag nailed to staff for individual recall (Blue cross on white background).
- General Recall flag (yellow triangle within blue surround)
- Postponement flag (red and white vertical stripes - triangular)
- Flag N to change course before start (chequered blue and white)
- Watch which must the same one used for finishing - don't let it wander off on a rescue boat crew's wrist!
- Sound signal and back up.
- Course board at start line with correct numbers and port/starboard colours, take other numbers and orange shape in case of changes.
- Either have someone in the clubhouse note positions on first lap or do that yourself in the committee boat. **PLEASE ALWAYS NOTE LAP POSITIONS – *It can be invaluable if you get confused later, also sailors like to see how things changed during the race.***

Race times are as on the notice board and in the “Quick Guide to Starting Procedure Flags and Sound Signals”

HANDICAP RACING

The warning flag is "H" (White/Red vertical) followed by P (white square on blue background) 2 minutes later - both lowered at the start.

Please be aware of which boats are starting in the various handicap fleets or else you will get the elapsed times wrong. **ONLY SHORTEN TO WHOLE LAPS unless you time the partial laps very carefully (not recommended).**

Please time ALL the boats in the Handicap Class and place them within their own groups. Remember that even though there may sometimes be separate starts (Anniversary, Wed, Open Series in the winter) in handicap races you need to time everyone.

In general it is safest is to time everyone – even in class races the sailors often like to see by how much they beat or were beaten by someone.

You will nearly always have to finish the slowest boat Toppers etc. one lap early (you can stop any part of the Handicap classes early) **Stick to complete laps – finish at the end of a lap.** Don't fall into the trap of finishing at F and having to make a hurried guess that the first leg from start to F was "about 60%" - this is inadequate when we often see handicap results within seconds.

If in doubt, stop the leading boats early so that the last boat has plenty of time to finish.

Once you shorten course ALL boats finish next time the cross the line (even if others in their class are doing an extra lap – the sailing instructions are very clear on this – *mark the finish on the sheet showing the number of laps completed*).

Handicap Calculations

Elapsed time = (Finish time) **minus** (start time) in seconds.

Make sure you are using the correct start time for the boat concerned, allowing for the two minute intervals on Sunday a.m. etc.

Corrected time = Elapsed time in seconds x 1000

Portsmouth Number

PURSUIT RACES

You set a course which need not include F and you do not show a finishing line. It is better to set short legs, especially two short beats rather than one long one in light winds. This will reduce the time that boats have to sail after time limit. In the SUMMER we do 75 minutes. In the WINTER we do 60 minutes.

What You Need

- Flag H, Flag P, X Flag on stick for individual recalls
- Watch, Hooter and back-up, Postponement Flag
- NUMBER BOARDS - make sure they are all there so you can show all start numbers including 11 and 22 .

The starting procedure is shown in the Pursuit Sailing Instructions.

For the finish get every team member on the water in as many committee boats as possible, with pen and paper and hooters each. At the very least station boats at nearest marks behind the leader. Don't follow the leader if he is obviously clear ahead - shout to him to finish when he hears the hooter. Concentrate on the next group of boats and stop by the mark ahead of them to form a proper finishing line (no hook finishes!). Sound a long hoot the hooter at 75 (60 in winter) minutes. Have the other team boats at previous marks.

Boats will be finished at the latest as they arrive at the next mark after the hooter. If the leading bunch have just started a beat then the Committee Boat can lay a finish line part way along the beat. See the Pursuit Race Sailing Instructions for more details. ***If possible Committee boats should drive back down the fleet and finish boats by hooter on the move on offwind legs.*** The handicaps are only accurate at the finish time it isn't fair on the slower boats to wait several minutes for them to reach a mark and be overtaken by faster boats. Be careful with asymmetries - they may be tacking downwind so this method won't work without great care. In light winds, it is possible to finish boats on the beat because once a boat has crossed ahead of one on the opposite tack after the hoot, the ahead boat has beaten the behind one. Remember there is no more time for lucky wind shifts or puffs to redress the situation ! Any commonsense decisions of this sort are better than letting boats beat on for 10 minutes after the hoot to the next mark.

THE START LINE

The normal start line is from the committee boat (starboard end) to the outer distance mark. You can if appropriate use the clubhouse line or the bank but it is much harder to get a fair line with sufficient room for manoeuvre behind the line from club or bank. It has to be at right angles to the wind - if anything try to make the PORT end marginally upwind (port bias). Set the line with a burgee **on the water** - on the bank is misleading and will give a bad line. Lay the outer distance first and ensure that the middle of the line is roughly dead downwind from the first mark, does not have a mark in the middle of it and that you have allowed plenty of room behind the line away from pontoons, the shore, water pipes etc.

Make the line long enough for the biggest class (Laser or Solo?) - too long is better than too short. Remember that an afternoon handicap of 20 + boats will need a longer line than the one left over from the morning .

Our Sailing Instructions do not require an inner distance mark so think whether you really need one. The course board must of course show what you are using.

POSTPONEMENT OF THE START

If it becomes necessary to postpone the start of the race from the advertised or programme starting time:

Raise code flag "AP" (Answering Pennant) RED AND WHITE VERTICAL STRIPES with two long sound signals. If there is time, announce new start time in clubhouse and/or by paper on diagram.

If you raise "AP" at the clubhouse, also raise it at the start line when set up. The clubhouse flag can be lowered informally without sound signal, and the start line flag becomes the controlling one. Lower it ONE MINUTE before the start of the new start sequence i.e. 5 minutes before the first start and one minute before the first warning flag.

There is no set delay time signalled by flag AP - it is up to the Race Officer's convenience.

SHORTENING COURSE

Shorten only to complete laps. Try to give the lead boat some notice, traditionally shorten when the lead boat is at the previous mark. Once you shorten EVERYONE finishes – no-one can do an extra lap.

Fly code flag "S" with two sound signals at the finishing line, which should be at the end of a lap in club racing. It may be the race box if you started at F or more usually the committee boat. If you do finish at a mark with the committee boat, make sure that your line is crossed as it would have been by boats rounding the mark on previous laps and that the line is roughly at right angles to the course from the previous mark. **That means Committee boat OUTSIDE the mark, roughly at right angles to the course from the previous mark.**

The rule about boats not re-crossing the line also applies when finishing at a mark - not all competitors realize this.

If finishing at F when boats coming across the reservoir use the committee boat to give a sensible line angle (right angles to course from previous mark). Do NOT make people have to round the mark to finish. Using the race box is fine if coming from 9, 1 or 2, just about OK from 3 or 8.

The simple "Flag S" means:

All boats finish the next time they pass through the finish line after the first boat to be finished. The first boat to be finished does not have to be the fleet leader, although it is best if it is the leading boat of its type in the fleet. This means handicap fleets will often have boats sailing different numbers of laps, and it is essential that race officers understand the implications of this. Even class races can have boats doing a different number of laps, but try to time your shorten course signal to give the first finishers time to react (it may pay to sail to the outer end of the line) and where possible for all class boats to do the same number of laps. Your goal though is to have everyone finish at roughly similar times so you can start the next race on-time (and so everyone has a fair chance at getting the last pastry at lunch).

If you do not shorten, fly a BLUE flag at the finish line (but simpler to always fly S even if that is the full number of laps).

SHORTENING COURSE NOT AT THE END OF A LAP

The faster boats almost certainly do more laps than the slower boats. If you do not do complete laps this is what you must do. (*It's a pain so we strongly recommend whole laps*). You do not need to use mark F nor finish at F – we stopped that years ago, but if you insist...

1. BE SURE TO TAKE ACCURATE START TIMES. (It is not necessary for all boats to start together, providing start times are noted for each group)
2. **Be sure to take the times of any boats that might possibly do fewer laps than the fastest at your proposed finish mark (probably F) on the FIRST lap. THIS IS CRUCIAL.**
3. ENSURE YOU NOTE NUMBER OF LAPS COMPLETED BY ALL BOATS Note: we define a lap as being completed **each** time a boat passes F, regardless of the fact that Lap 1 will probably be shorter than the other laps.
4. TAKE FINISHING TIME OF ALL BOATS.
5. CALCULATE **EQUIVALENT** ELAPSED TIMES FOR ALL BOATS, as described below
6. CALCULATE CORRECTED TIMES FOR ALL BOATS

The equivalent elapsed time calculation for a typical slow boat:

Label times as follows:

T1 = Start time of slow boat (eg Topper) (time shown on watch)
T2 = Time slow boat passes F for first time (time shown on watch)
T3 = Time of finish of slow boat (time shown on watch)
Ns = No of laps completed by slow boat (inc lap1)
Nf = No of laps completed by fastest boat(s) (inc lap 1)

First, calculate average lap time (Av.Lp.Tm) for slow boat:

$$\text{Av.Lp.Tm} = \frac{\text{T3} - \text{T2}}{\text{Ns} - 1}$$

$$\text{Ns} - 1$$

Then calculate elapsed time equivalent to time of fastest boat: Eq.EI.Tm.

$$\text{Eq.EI.Tm} = \text{Av.Lp.Tm.} \times (\text{Nf}-1) \text{ (seconds)} + (\text{T2} - \text{T1}) \text{ (in seconds)}$$

Now calculate corrected time using handicap in normal way.

This calculation needs to be done for every boat not completing the same number of laps as fastest boat.

The corrected time for boats completing the same number of laps as the fastest boat is simply worked out by dividing total elapsed time by the handicap (and multiplying by 1000) in the normal way

INSTRUCTIONS FOR RADIOS

- 1) The radios will be found EITHER plugged into chargers on the tea bar counter, in the committee room OR ready for use in the race box. If the former, unplug charger leads - plug in remote speaker/microphone into one radio. This will be used in safety boat under waterproof clothing with speaker/mic. led out to be clipped on clothing .
- 2) Turn on using knob on top of radio - turn it about 3/4 of full range to ensure adequate volume in safety boat.
- 3) Race box radio - press switch on left hand side (lower button) to talk.
- 4) Safety boat radio - press switch on speaker/mic to talk (switch on radio is inactive).
- 5) At the end of the day IF radios have been used - return radios to charger position and plug in leads. Make sure that chargers are still connected to time switch in clock socket. ALL OTHER SOCKETS ARE NO GOOD - they get turned off by you via the key switches as you leave on locking up.
- 6) If radios have not been used leave as found in race box.
- 7) Practice well before any activities