STARTING A RACE IN TEN EASY STEPS:

- Set out the flags
- Check the wind direction
- Check the hooter and clock are working
- Decide your course but don't display it yet. (Make sure there is at least one good beat)
- Decide how many laps for each fleet
- Set the start line
- Decide if the fleets are OK to start together or separately
- Display your course and laps
- Start the clock and flag sequence.
- Fill in the Race Control Sheet.

DURING THE RACE

- Record the times for each boat as it completes a lap. At least record order if not possible to record times;
- Re-site the finish line if necessary
- Note any changes in the wind direction and prepare a new course for the second race if needed.

SHORTENING THE COURSE

If wind, time or light is running out, be prepared to shorten the course. Raise code flag Sierra with the corresponding class flag as the lead boat in the fleet approaches the final mark in the course. The flags should be accompanied with two sound signals. The boats finish after rounding the last mark and sailing across the finish line.

Occasionally, usually as a result of the wind switching off completely, you might have to finish the race in the middle of a lap. Raise the code flag T with the corresponding class flag as the lead boat in the fleet approaches **any** mark in the course. The boats finish after rounding **that** mark and sailing across the finish line.
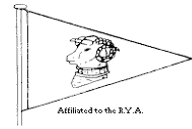
ENDING THE RACE

- Make sure you can clearly see the boats as they cross the finish line from the tower.
- Record the time of each boat crossing the finish line. Make sure you've got help if it's busy.
- A sound signal accompanies each boat correctly completing the course.
- Adjust the times according to the handicap and publish the results.
- Set up for the next race – start on time.

IF IN ANY DOUBT PLEASE ASK FOR ADVICE

Below are full instructions and a suggested order of operations to ensure successful execution of Huddersfield Sailing Club's (HSC) racing programme. The document in its entirety is aimed at the novice race officer. The bold type is intended to be an aide memoir to the more seasoned officer and should be used in conjunction with the HSC Sailing Instructions (SI's). Please ask Training Co-ordinator or other experienced sailors for advice if you are unsure.

1   PREPARATION

1.1   Race officers should allow approximately 40 minutes preparation time before the start of the race.

1.2   **Set out the flags** as shown in the diagram below. Don't forget the triangular club pennant, flown on the central pole to indicate that racing is in progress.

1.3   Plug in and **check the hooter and clock are working** (three short blasts, both on the button and foot pedal so as not to cause confusion with normal race signals). Bring the loud hailer up into the tower and check it is working.

1.4   **Determine the wind direction**. If you have time, try and work out if the wind is steady, tending to swing progressively in one direction, or just shift back and forth.

1.5   **Plan your course**. This **must** contain one, and ideally two, **upwind legs** (beats) crossing a full width or diagonal of the pond. **This will also be the start – finish leg.** Keep it simple to begin with. You must **display the course** on the rack **before the** 5 **minute signal,** but not too early. If the wind swings drastically, you might need a rethink. **See section 8, Course Setting, for more advice on how to set a good course.**

1.6   Display the course on the rack outside on the tower. **It is important to make sure you have eliminated any loops** from the course. Use the course board downstairs or sketch the course on the back of the race sheet to help decide which marks should be rounded to port and which should be rounded to starboard. **Please ask for help if you are in any way unsure**.

1.7   **Set the number of laps for each fleet**. Make your best estimate for the appropriate number of laps for each fleet, but go for more laps rather than less, as the course can be shortened (section 4). To get the most sailing time out of the race, whilst also running to time, **aim for a 35 minute race for the faster boats**. As a rough guide; a five or six mark course, in moderate wind strength, will need a five lap race for Romeo Fleet and four laps for Zulu Fleet. **Review the number of laps set before starting the next race. See 3.3**

1.8   **Set the start line so that the first leg is a beat**. This should be as close to 90° to the wind direction as possible, allow sufficient room for the number of boats racing to manoeuvre behind the line, and leave a good distance between start line and first mark. There are two basic methods of setting a start line.

-    **Transit start.** An extension o f a line between a **green** (or red) and white striped pole and the plain **white pole on the front of the tower**. A transit start is the preferred starting method for club racing due to its relative simplicity and because it is possible for a Race Officer working alone to determine whether any boats are On Course Side (OCS) at the start. This is not possible when a line start is used.

-    **Line start.** Set the start **between two marks on the water** when is not possible to achieve an unbiased line, or a sufficiently long first leg for the conditions, with a conventional transit start. It is important to set the correct mark. A line start is normally used in club racing only when the wind is in the south, to southwest.

    Often you can keep your start line and use it for the finish, but for a number of reasons it might be necessary to move it. **See 3.4.**

1.9   Decide if you are going to start both **fleets together or separately**. If the water is crowded because there are lots of boats in each fleet, start them separately. If not, start them together. Either way you need to set the lap number for each fleet (get advice if you are not sure).

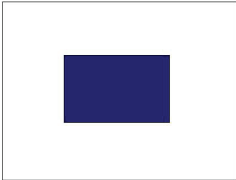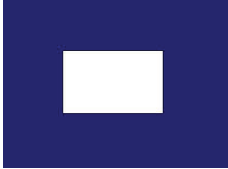**IF IN ANY DOUBT PLEASE ASK FOR ADVICE**
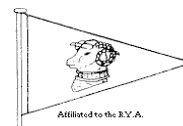
2 STARTING

Besides the club pennant, four main flags are used to control the race. Set them out as below:

SIERRA	CENTRAL POLE CLUB PENNANT	ROMEO	PAPA	ZULU
Shorten Course		Classes with a PY less then 1200	Blue Peter	Mirrors, Herons and Toppers

2.1 Once the course and start line are set; **start the clock**. Sound signals are automatic – see starting procedure sheet. Strictly **the flags start the race** but it is important that the sound signal coincides with the visual signals. .

2.2 Fill in the Race Control Sheet. Besides the Class, Sail number, Helm (and crew), **it is essential** you fill in all the information required on the sheet so that the Sailing Secretary can process the series results. Sample provided. There is a register of boats and helms in the tower, usually pinned to the wall.

2.3 Keep an eye on the time.

2.4 You'll be busy during the last few seconds before the start. If you have an assistant make sure you each know what the other is doing. Either way a number of things have to happen at about the same time.
- Arrange yourself and the flag halyards so that you can sight the start line properly.
- Strike the correct flags and operate the hooter simultaneously at the start.
- If any boat that is over at the start signal, the race officer should hail the "CLASS" and "SAIL NUMBER" of the offender and "OVER;" accompanied by one long sound signal. Hail them "CLEAR" when they have returned and **completely** re-crossed the line. A boat must restart if **any part** of its hull, crew or equipment is over the line (or On Course Side OCS) at the start. **Please don't hesitate to hail any boat that is over the start line even slightly.**

2.5 **IF YOU NEED TO START AGAIN,** hoist code flag N (November) with three clear sound signals. This allows you to start again. **See Flag sequence**
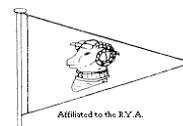
3 DURING THE RACE

Watch for anyone in difficulty, particularly on windy or cold days. If you feel someone is in trouble, make three long sound signals and direct the rest of the fleet towards whoever needs assistance. This effectively abandons the race.

3.1 Relax, but **don't lose track of the race**. You should keep an eye out for any change of leader and record their positions at the end of each lap (easiest to do as the fleet rounds the final mark in the course). There is provision on the race sheet to record each boats elapsed time as they begin a new lap. This could get you out of a heated discussion if you do lose track.

3.2 **Keep your course under review for the next race**. Is the fleet struggling to round a sheltered mark? Is there a nasty dead run to eliminate? Is the number of laps correct? Did you get the loops out? In strong winds, are there any gybes near the bank? Is the breeze easing or freshening? In particular, **pay attention to the upwind legs**. Do they remain plumb towards the end of the race? Overtaking is extremely difficult and frustrating to helms when the beats get too one sided or turn into close fetches.

3.3 **Confirm that you have set the correct number of laps** to allow suitable race duration by noting the lap time of the lead boat in each fleet. Multiply this by the number of laps set to estimate the total elapsed time for the race. This will give you an early indication of whether you'll need to shorten the course or add laps before the next race starts.

3.4 **Set finish line**. You might want it to be different from the start line if:
- You are alone and can't see down the line whilst also watching the race timer.
- The wind has shifted. Ideally the finish line should also be at 90º to the wind direction.

IF IN ANY DOUBT PLEASE ASK FOR ADVICE

4   SHORTENING THE COURSE

You might decide to shorten the course if the race threatens to overrun for one of the following reasons: Falling wind strength, too many laps set, or failing light. You should also shorten the course if the current race is going to overrun and delay the rest of the afternoons programme.

4.1   Procedure:

As the leading boat in each fleet approaches the **last mark in the course**, raise the shorten course (Sierra) and applicable class flag with two clear sound signals.

4.2   Code flag T

If the wind dies completely, shorten the course as above but using the Code flag T instead of Sierra. This directs the fleet to sail to **whichever mark the lead boat will round next** and then straight to the finish line. **See Flag Sequence.**

5   FINISHING

A boat finishes when any part of its hull, crew or equipment in its normal position, crosses the finishing line in the direction of the course from the last mark.

5.1   **Get an assistant** to help you if it's busy or if the fleet is close together as they approach the finish.

5.2   As a boat starts the final leg of the course you need to **get into a position** where you can sight the finish line.

5.3   **Record the time of each boat as it crosses the line.** A sound signal should accompany the boats that finish the course correctly.

5.4   If a boat infringes a rule near the finish line, any penalty turns must be completed before the boat crosses the line to finish and it's time is recorded.

6   AFTER THE RACE

Make sure any course changes are made and the start line is reset if you moved it for the finish. **Start the next race on time.**

7   HANDICAPPING AND SCORING

7.1   Adjust the finishing times using either the calculator or adjustment tables, being careful to **select the correct Yardstick** for the boat. Single-handed Mirrors and Herons have a different handicap to when they are crewed. Lasers have three different handicaps for Standard, Radials and 4.7 rigs. Note: All Lasers will be assumed to carry the **full rig** handicap unless you are told otherwise by the helm PRIOR to the preparatory signal.

7.2   Each boat scores points equivalent to their finishing position; i.e.: **First boat = 1 point**, second boat = 2 points and so on.

7.3   Boats that are over the line at the start and fail to restart correctly should be marked as OCS (on course side). Boats that retire should be marked as RTD, Boats that are off their moorings and in the vicinity of the start line at the 5 minute preparatory signal, but which do not complete the race shall rank as a starter and be classified as retired.

7.4   If a boat is the solitary starter in its fleet, it may race with the other fleet. It will be awarded the points associated with its finishing position when its result is handicapped against that fleet. The solitary boat, and a boat in the main fleet, will therefore receive the same number of points. (Ask).

If a boat:	Points Awarded	Classified
Starts and retires	**6** OR the number of boats to start the race plus **1** whichever is greater.	DNF – Did Not Finish RAF – Retired After Finish
Is disqualified	**26** OR the number of boats to start the race plus **1** whichever is greater.	DSQ – Disqualified After Protest
Is over at start and fails to restart correctly	**6** OR the number of boats to start the race plus **1** whichever is greater.	OCS – On Course Side at start

7.5   Enter the "classified" abbreviation in the comments column of the Race Control Sheet.

7.6   Remember to post the race sheet with adjusted times in the appropriate slot on the galley wall. The sailing secretary collects the sheets are from here and will enter them into the series results.

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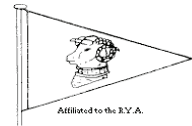
8   SETTING A COURSE

8.1   Before setting your course, you need to answer a number of questions:

- **What is the wind direction?** You need to determine this accurately before you start. The best things to check are; the small orange direction indicator at the top of the central flagpole; the ripples on the water; the **hoisted** flags; the indicator in the race officers bench and any flapping sails **not in the lee of the clubhouse**. **Get out of the habit of looking at the windmill.**

- **How shifty is the wind?** Try to assess if the wind is steady, tending to swing progressively in one direction, or just shift back and forth. Take a moment to check the wind direction every so often before deciding on your course.

- **How strong is the wind?** Wind strength is recorded, according to the Beaufort Scale, on the race sheet. (Ask for assistance in filling this in if you're unsure). You need to consider how strong the wind is before you set your course. If the wind is light, set fewer laps. In stronger winds, ask yourself if you have too many gybes in the course and are they likely to leave everyone in a heap on the bank. For the sailors, a broad reach is preferable to a dead run in strengthening winds, however, the course is the same for everyone and you should not hesitate to set a run in the course (take advice from the participants in very high winds).

- **How many boats racing?** With an increasing number of boats on the water you must be careful to avoid different legs of your course conflicting. If you have two parallel upwind legs, e.g. 7-3 and 8-2 you need to be careful that none of the boats sail 8-3 or 7-2 without realising. Recording every lap time will help you spot this later if you miss it on the water. You might wish to avoid parallel legs like this when there is a big fleet.

- **What is the range of ability?** Will all the participants cope with the course you set? In particular in high winds, are there any inexperienced crews who are likely to damage their boats or themselves because of an inappropriate feature of the course? (For example a sharp turn into a gybe against the leeward banking).

- **Do you have an assistant available?** Will you cope with the number of boats given the course you've set?

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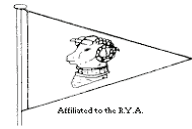
8.2   Now you know which way the wind is blowing, write down two marks that are directly upwind/downwind of each other. Try and choose the two furthest apart. For example:
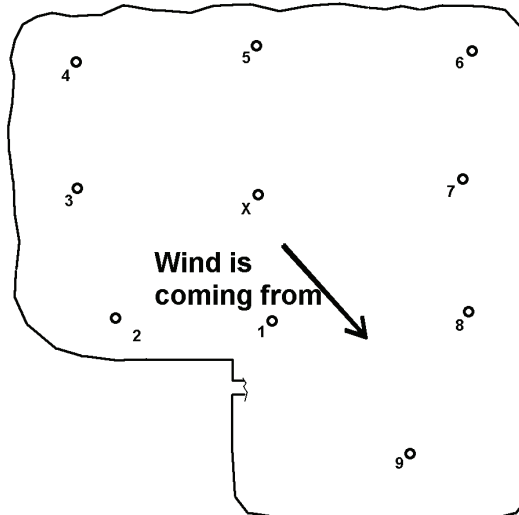
9 to 4.
This will be your first beat, so you'll actually display 4 as the first mark in the course and 9 as the last. The start line will be somewhere in between the first and last mark of the course and at 90° to a straight line between the two. Each course should include at least one of these.

Choose a parallel leg to put in as your second beat later in the course. For example 5 and 7.

It doesn't matter which 'windward legs you choose but if you can, make sure that they are not too near to each other and that they will make the boats use as much of the reservoir as possible to avoid conflict.

It is best to have the windward leg as the joining leg between the end and beginning of your course. Take the first pair of marks that you thought of and write them down as the last and first marks of your course. Make the mark furthest away from where the wind is blowing from, the last mark of your course and make the mark most upwind (nearest where the wind is coming from) the first mark of your course. So if your marks are 4 and 9 as in the diagram above the course will start to look like:

4……………………**9**

We have made the boats sail straight into the wind between the last mark of the course and the first. This is important (but not essential) as it spreads the boats out and gives them the opportunity to overtake. This is also useful at the start of the race to make sure that the boats do not all get to the first mark at the same time where they may not be room to get round.

Having decided on the first and last marks of your course you can add another pair of windward leg marks anywhere in the middle. For example:

4…….**75**…...**9**

8.3   Finally you can join up the windward legs with reaches and runs – for example, **4 6 2 7 5 3 9**

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