Guide to being a Race Officer

What do I need : Setting a Course : Light System / Flag System :Recording

What do I need

Keys / Codes

Race box code	:	Same as changing rooms
Instruments Switch	:	Rear wall of race box
Fuel Store Key	:	In the key box in middle shed
Marina Gate Code	:	Found in the top of the kegs for the safety boats
Ramp Gates Code	:	Same as the car park
Winch Box Code		Same as Changing rooms
Emergency Coastguard	:	999

Race Officer has overall authority over event and is to coordinate Rescue boats on water to recover persons and boats. Support boat crew have authority to call off race/expedition if conditions on sea deteriorate.

Winch operator – role mostly filled by new members or inexperienced sailors who may need advice and support. The main purpose is the safety of members coming ashore early during or following a race. To ensure that they are ok and seek assistance if required. If necessary please train on hand held radio, located in charger base in bosun shed rear wall by white rib. Arrange winch training with a sailor who is already trained or ask them to be spotter for sailors to use winch.
There is a separate sheet of instructions for the winch operator to take a photo with their phone in the race box.

Other Duties:

1. The Ramp : Is for boat access only and should be kept shut when not in use by the boats. The gates and padlocks have been put in place due to concerns that members or the general public will use the ramp as general access and slip. Public Pedestrian, pram or wheelchair access is via the steps or concrete ramp or public access beyond the boat park.
2. Remove, or find help to remove the ramp gates. The code is the same as the Race Box code.
3. Find a qualified winch trainer to give instruction, if none available then they act as spotter at ridge of beach when winching in progress.
4. Training for hand held radio Club channel CH37a / CH N1 or M1
   Names : winchoperator = Beach / Race Box = Arrow
   Ark = Ark / Grey Rib = Grey Rib / Orange Rib = orange rib
5. Assist with putting out and putting away the safety cones either side of the beach matting
6. Assist with taking the trolleys from sailors and putting above the waterline.
7. Retrieving the trolleys as required.

Other Info

VHF radios are fitted to rescue boats for ability to communicate for assistance. Handhelds also on larger dinghies. Instructions for use are clearly labelled in the race box.

Club working channel is CH37A or N1 or M1 depending on make of radio

Newhaven Marina is CH12

Coastguard/ Lifeboat CH16 or CH67

Seaford Life Guards : Channel 0, 12, 16 monitored, then generally go to channel 67 for two way conversation

Port Control on (01273) 752625 or 752641

First Aid box located in Members Kitchen and on wall of Bosun shed

Paperwork and Gadgets needed

1. Signing on sheet : Found in the Race Box, Put by wet entrance for competitors to sign on
2. Results sheets : In the Race Box , **Don't forget to note actual start time for each fleet**
3. Starting system : Lights or Flags
4. Clock
5. Horn/ loud hailer : Attach outside to the 2 bolts on the corner of the race box. Put the plug through the Side of the race box and plug into socket. Do not change settings on amplifier, red light shows power.
6. Transit pole : Found near bottom of ramp
   Line up with Signal Mast (Traingle on Race Box) and ODM (Outer Distance Mark. (Always set on or behind ODM)
7. Winch Cones : Spread both sides of the winch rope and track as a Hazard warning.
   Found with beach transit pole
8. Radio : Do not change frequency unless emergency call.
   Arrow = Race box
   Ark, Grey Rib, Orange Rib
9. Flags : Club Burgee top of mast back of race box
   Red Ensign – in marked cubby hole for gaff on mast back of race box.
   Green – marks to starboard flag or Red – marks to port flag
   All other flags in the pigeon holes in the race box. If used, please roll and Replace. (Red crate of duplicate flags for Ark)
10. No. of laps board : Put up board top right of window, if you are using it.
11. letters of Course : Along the top of the window put up the letters indicating the course
12. Race Log : Complete and file a Race Officer Report Sheet if required.
    Anything that goes amiss or isn't working
13. Electronic Race Instructions. : Gives full operating instructions for the light starting system. Control

Please read sailing instructions for race details and flags to use.
Generally, 2 starts setup on system, Cats first start, monohull dinghies second, and keelboats 1 min later.
Communicate with keelboat over radio if over line.
If less than 3 cats then One start is allowed.
There are prompt / advice sheets all around the Race Box to give extra assistance #
#

Procedure

1. Contact all personal two weeks before, put names and duties on WhatsApp Race community, take photo from duty man page or screen shot phone for reference on day. Make sure all rib crews know to turn up by 9am.
2. Put up club burgee and red Ensign (Ensign on Gaff, cleat behind roof door), remove shutters.
3. Give winch operator VHF radio and duty description sheet (VHF charger at back of race box))

- Arrange winch training and explain role, ask one of the trained sailors to do this if you don't know.

4. Discuss course with Support Boat crews so they know where they are going when they leave harbour, and can lay course from west. (See course suggestions section)
5. Write up course on white board, marks to port/starboard, Tide time and if applicable time of briefing, photo on WhatsApp for offshore vessels. If committee boat start
6. Put out signing on sheet
7. Put out horn
8. Put up course letters without covering start sequence lights
9. Put up port or starboard flag as appropriate.
10. Put up number of laps
11. Set start sequence on control box
12. Instruct & support Boat Crew to lay marks as per course
13. Get beach-master or ARO to set transit on beach, (transit should be on or just behind ODM)
14. Carry out briefing, an hour before 1st start if necessary.
15. Communicate course over radio with keelboats if there are any that request info.
16. At correct time begin start sequence.
17. On record sheet note all names off duty members. Actual start times of all races.
18. Take times of each lap
19. Put up course if required
20. Use voice recorder for finish sequence to allow records to be corrected if recorder can't keep up.
21. Sound finish horn
22. Calculate finish positions and pin to board next to wet entrance.
23. WhatsApp a picture of the signing on sheet and results to the Recorder via NSSC Sailor group.
24. Complete a boat hire form to note which hire boats have been used and by who. Pin with race results.

25. Complete log book. Kept on window desk. Who was there, any problems, breakages etc.
26. Put beach master radio back on charger, take in horn and replace shutters.

22. Wait for support boats to come back make sure all car park passes and boat keys are returned
23. *Lock up race box and roof door. Also check bosun shed before leaving. Also ensure West gate locked. If leaving early make sure locking up passed over to someone else*. **DONT ASSUME IT WILL HAPPEN**

Race Position Calculations

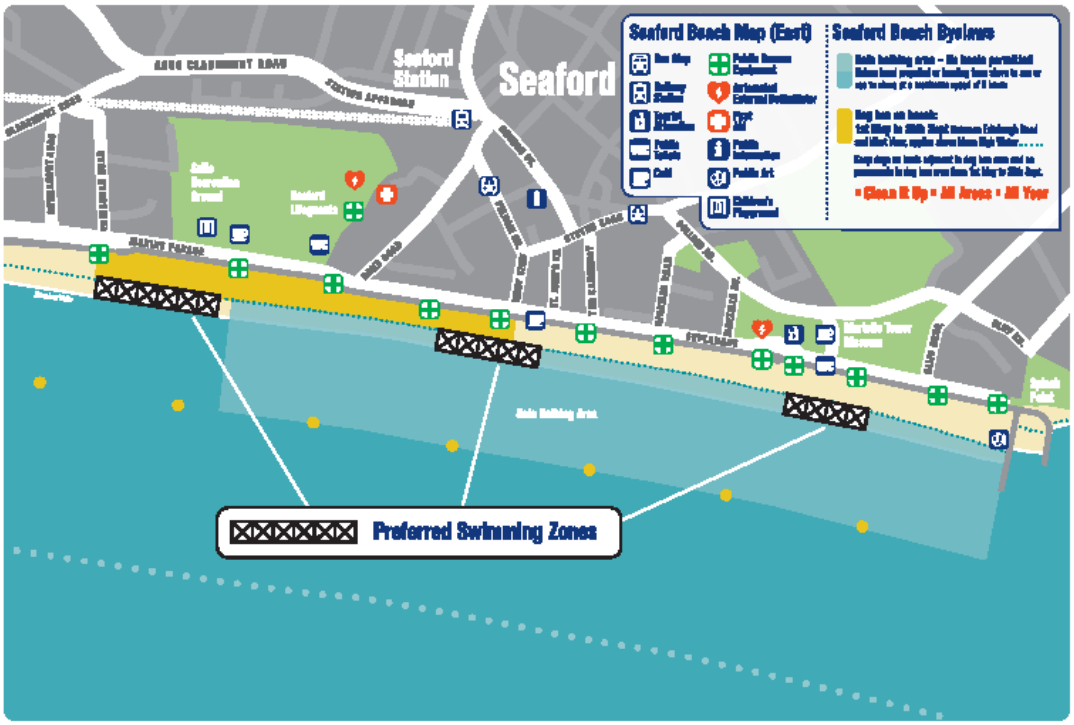
Get Elapsed time (in seconds)
Divide by handicap number (Numbers found in Race Box)
Divide by number of laps then Multiply by 1000

SETTING THE COURSE

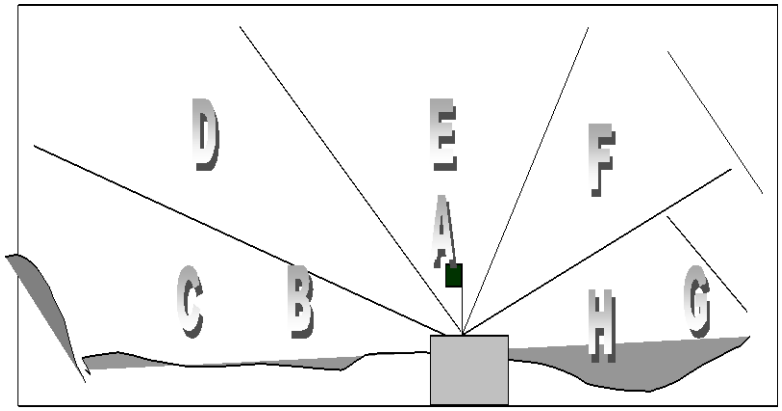
No Go areas

There is a wave buoy which is unmarked and unlit and mainly subsurface (50°45.995'N 0°4.589'E) approximately inline with a transit from the West harbour arm running parallel to beach and straight out from clubhouse.

Note no boats allowed in safe swim area from Salts to east breakwater



Nominal position of bouys



Laying mark F

Westerly mark of course should not be set inside port channel, if mark laying boat can see into port beyond visitor berth when laying mark F they are too far West.

ODM A mark should always be on transit or coures side of transit, i.e. boats cross transit before the ODM is passed.

Hints and tips on course

The course is dependent on wind direction and to some extent tide.

The simplest course is a triangle with the start on an up wind leg ideally, ideally no bias on the line. That's to say the start line is perpendicular to the wind.

Start / Finish line

Don't forget that RYA rules state you start the race using a transit, but finish the race on a line straight to the ODM buoy. Try to get bias on the line so that the fleet do not bunch at one end, this is difficult unless the wind is along shore but a good amount of bias can be set and it then does not disadvantage those trying to keep out of trouble too much. Transit should be set on or just behind the start mark

Only use three starts if more than 3 Cats first followed by more than 3 dinghies and then more than 3 keelboats. This is done for safety reasons. So usually there will be two starts Cats followed by monohulls.

For safety reasons the keelboats (usually just Squibs) start 1 minute after the monohulls using the radio only. No sound signals. So to tell them if they are over line using the VHF radio.

Ask the rescue boat to drop the ODM and then position the transit to line up with the ODM**.**

Courses

This is obviously down to you but things strongly recommended not to do are:-

- Don't use a single mark for two separate legs of a course it causes confusion
- Don't set a running start you can't see the sail numbers as they cross the line so recording becomes impossible.
- Don't set a mark such that boats have to swing through more than 180 degrees
- Don't set a sausage that uses the start finish line you will get confused on number of laps sailed and shortening course with this will confuse everyone!

Both of these can be dangerous as boats can end up crossing from opposite directions and rules get a bit complicated! (A keel boat will probably win the argument!)

Things to do:-

- Make sure there is a beat
- Try and reduce bias on the start line
- Lay a mark such that when the boats cross the line the sail numbers are clearly visible some time before, otherwise you will have trouble recording results
- If in doubt keep it simple

Boat Crew advice

Advise on course before they go means things get laid more quickly.

If they can lay marks from West to East, then that saves them going around the bay multiple times. So get them to call in once they have left harbour no after they have motored across the bay.

It's much easier for Rib to recover marks than Ark. If you only have one rescue boat it should always be a Rib.

Results and when to shorten course

Don't forget to put the start time on the results sheet for each start.

If possible always record times for each lap, so if there is any confusion after the race, checks of previous lap times can often save you a lot of hassle. And if there is a protest because someone has missed a mark the lap time is a great bit of evidence. Also allows easy estimation of times for redress.

Most importantly it allows you to estimate the number of laps for the race duration typically 40 mins, and when you need to put up the shortened course signal. The slowest boats (topper and squib) will probably be your limiting factor. If doing two races back to back, then you ideally want to minimise the wait time for the rest of the fleet so it's better to have a shorter first race of the timing is awkward. You can always then have a longer second race.

If you want to work out the results at the end of each race, please do. Follow the formula at the bottom of the timing sheet, and remember to scale up the time for any boat doing less laps than the leaders.
If you don't want to do the results on the day, that's absolutely fine. In both cases please get the original timing sheets and signing on sheet to the recorder as soon as possible.

Racing can be pretty hectic. Having longer laps gives you a bit more time in between boats crossing the line, but you need the fast boats to do at least 2 laps so the slowest boat can get round in under 40mins.
Ideally, you should record the times of each boat on each lap, but if there are lots of boats crossing at the same time it is okay just to record that they have finished that lap with a tick.
Please use voice recorder at least on last lap then you can always review it if team can't keep up.

Other factors

Always concentrate, the weather can change quickly and means you have to think ahead so you can gauge the finish time.

Its important to have reviewed the sailing instructions as this gives start information as well as rules specific to NSSC.

Don't race in the dark, (We can't find the marks!) Squibs do not have Navigation lights and it can take them a good 30 minutes to get back to berths.

If the wind gets less than 4Knots shorten coarse as it just becomes a lottery as to who wins. If you are in the middle of a spring tide then that's a 4- 5 knot impact on the over ground speed

If the beat is into tide, boats will want to tack close to the shore. If it's a nice day there may be lots of swimmers particularly to the East of the club, so try and set course where the majority of the beat is to the West.

Again consider the tide, if its springs and mid tide time, then 5 knots is probably running, so with a 5 knot wind, a beat is just not going to happen. You can always shorten to a mark of the course and use a rescue boat to finish everyone. However, this is not possible if more than 1 lap has already been done by some competitors. In that case we have a rule in the sailing instructions that covers the situation.

Also the race completion time is limited to 25 minutes after first boat has crossed line. So once that time is up then all boats not finished are recorded DNF and you can send the rescue boats to tow them in!

If wind gets up and more than 2 boats are capsized at any time consider shortening the course, every one is probably exhausted.

If electronic start system fails switch to flags get ARO to do flags. Refer to sailing instructions for fleet flags

Committee boat Races.

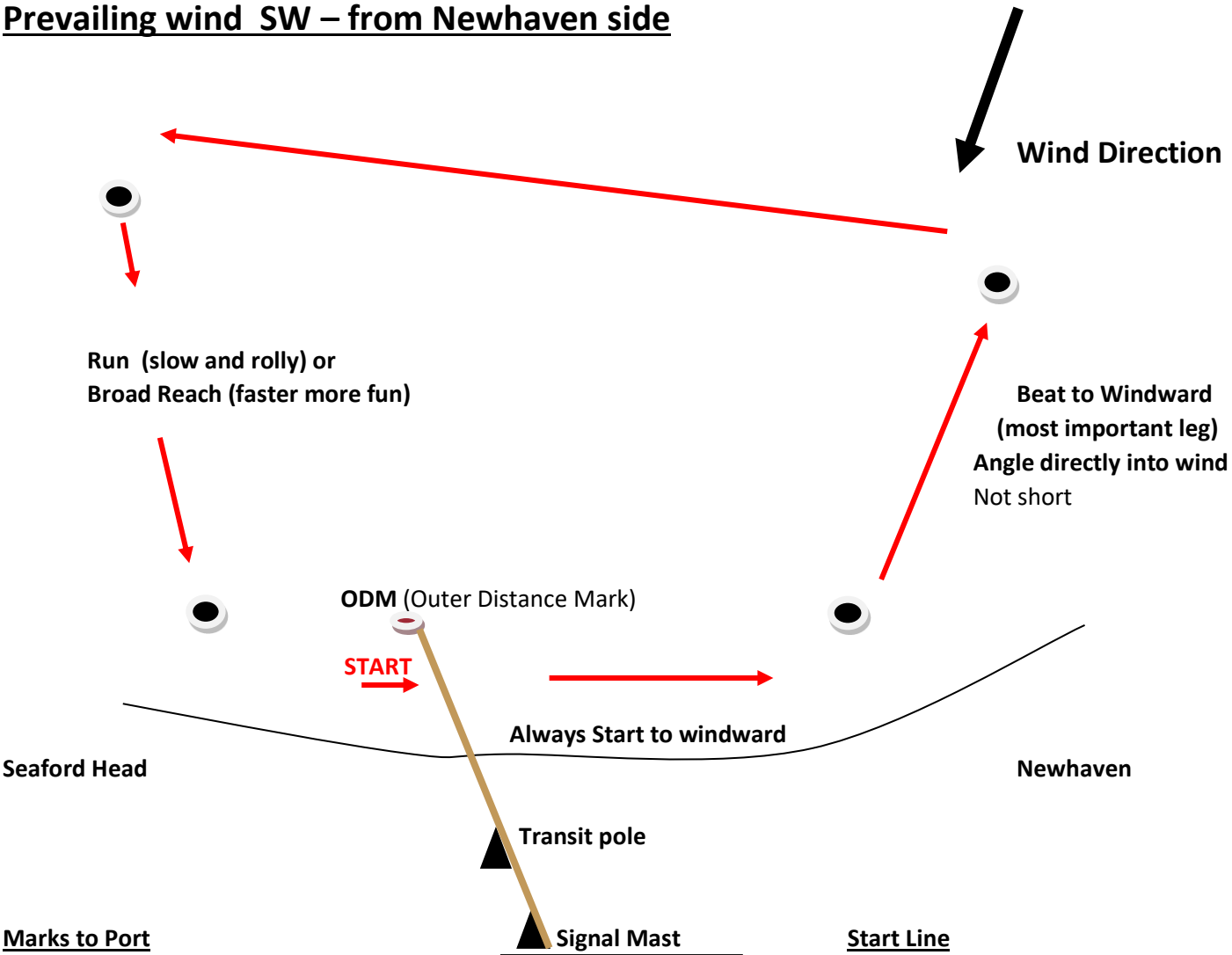
Orange flag On station ready to commence start sequence

Blue flag On station ready to finish race

Having 1 minute between starts allows for time to consider raising X flag or for a general recall, so suggest you do that if inexperienced and not many helpers on Ark. See flags latter for what's needed to run race. Add to white board to avoid confusion.

Below are some additions suggestions for courses

Prevailing wind SW – from Newhaven side



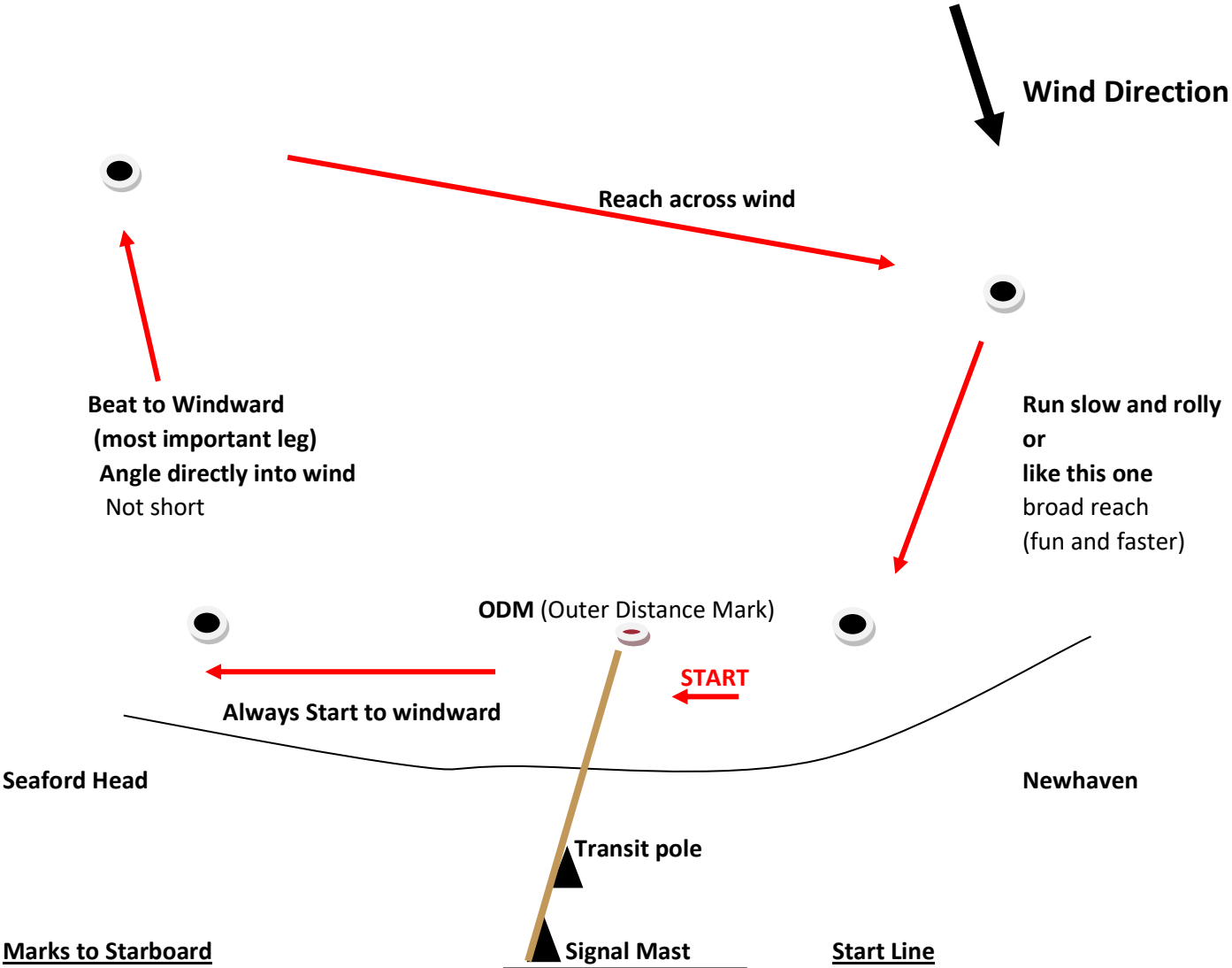
Marks to Port
Mark rounding rules are more straight forward if marks are left to port.

Start Line
Positioned as much as possible to reduce bias .

Wind coming from Newhaven side – start westwards, as per diagram

Ideal start line	:	**Perpendicular (right angle) to the wind**
Influences on this start line	:	**starting inshore, boats have to sail closer to the wind and are therefore slower than those further out.**
To reduce this bias	:	**Angle line further back by moving the transit pole West**
Last buoy before the Finish Line	:	**in line with finish mark, lines the fleet up and makes recording times easier a reasonable distance makes recording times easier**
ODM (Outer Distance Mark)	:	**usually known as A and marks the outer end of the start line**

SSE – Wind from Seaford Head Side



Marks to Starboard

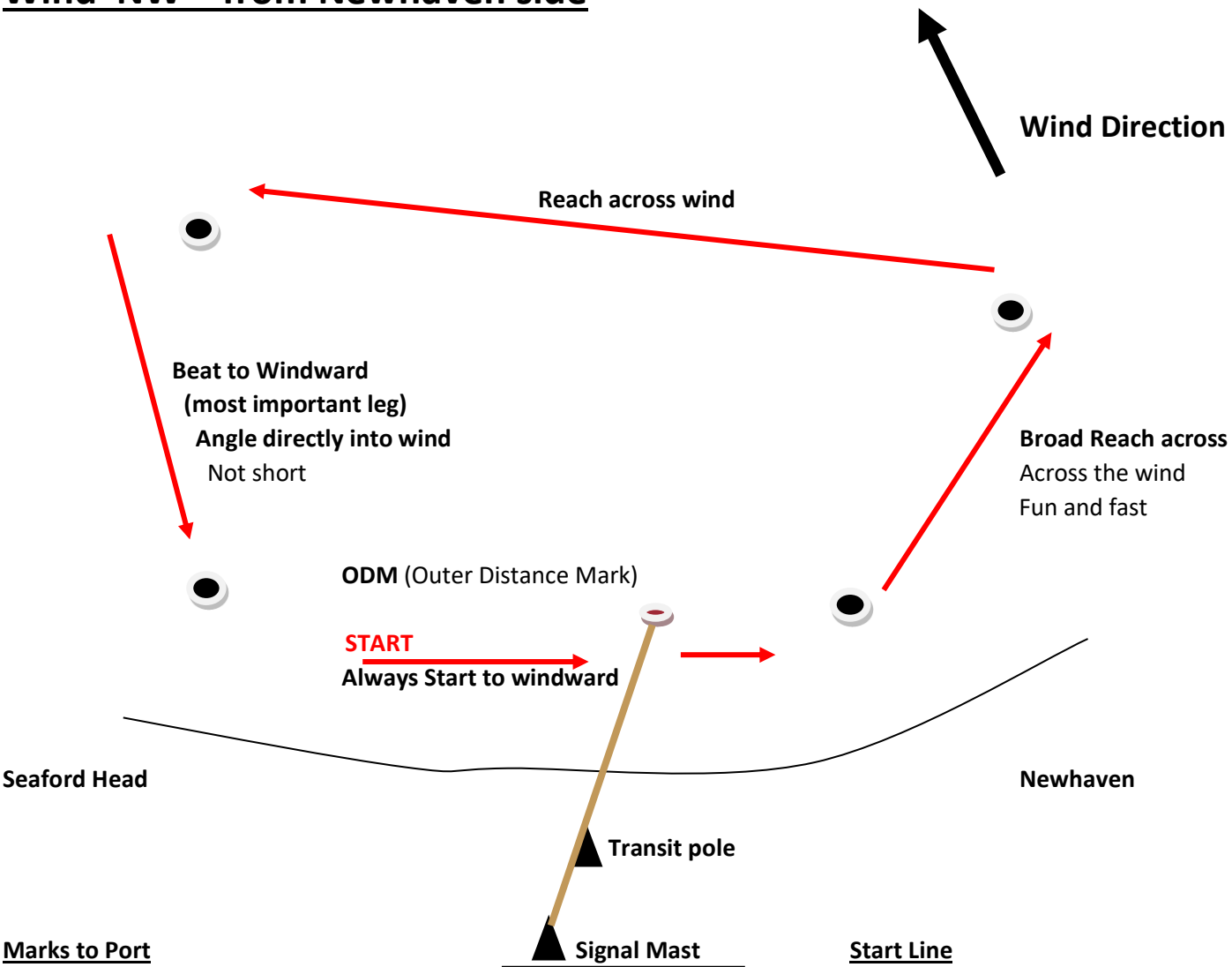
Windward Mark rounding rules are more complicated than if marks are left to port.

Start Line

Positioned as much as possible to reduce bias .

Wind coming from Seaford Head side – start eastwards, as per diagram

Wind NW – from Newhaven side

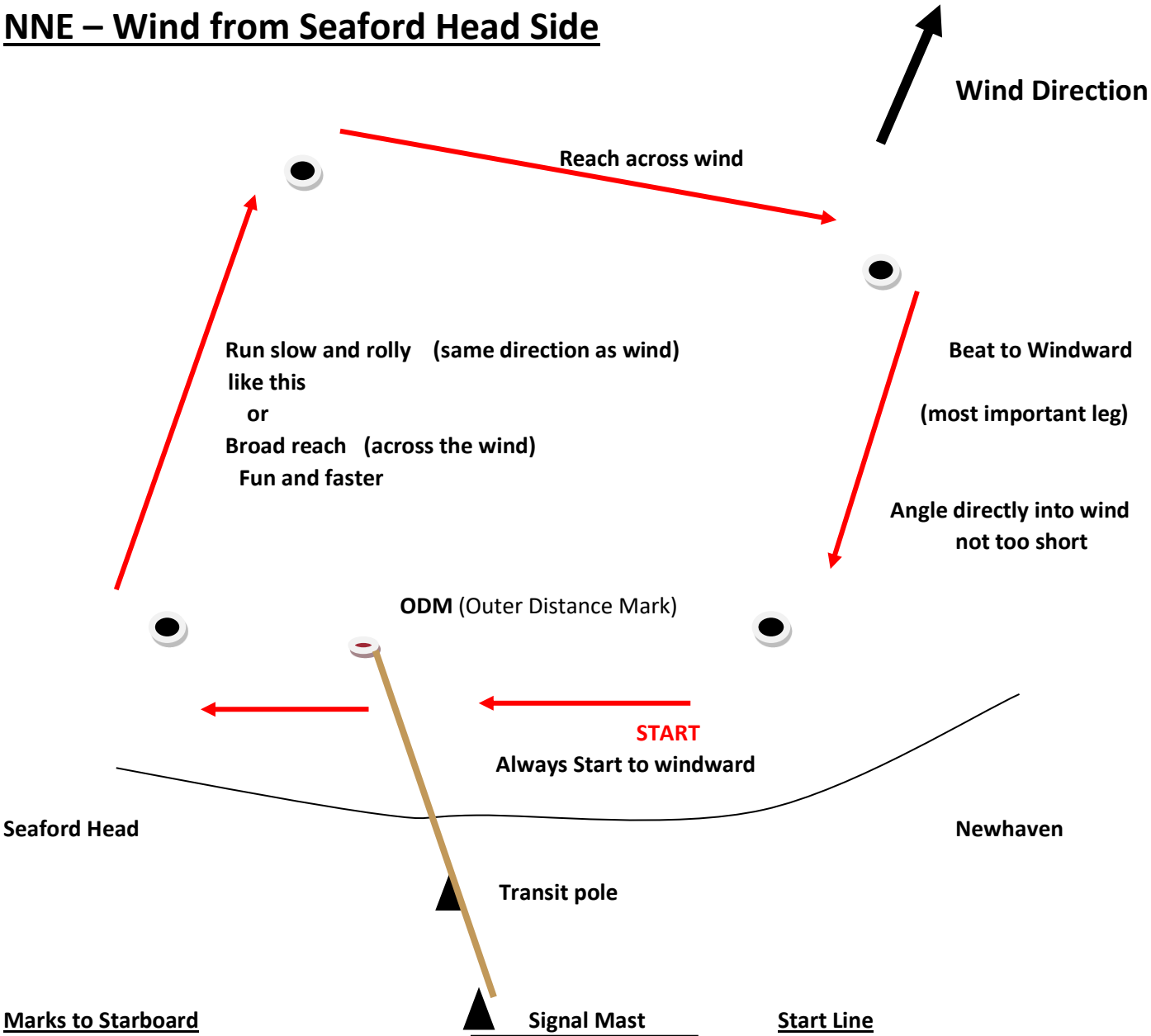


Marks to Port
Mark rounding rules are more straight forward if marks are left to port.

Start Line
Positioned as much as possible to reduce bias .

Wind coming from Newhaven side – start westwards, as per diagram

NNE – Wind from Seaford Head Side



Marks to Starboard

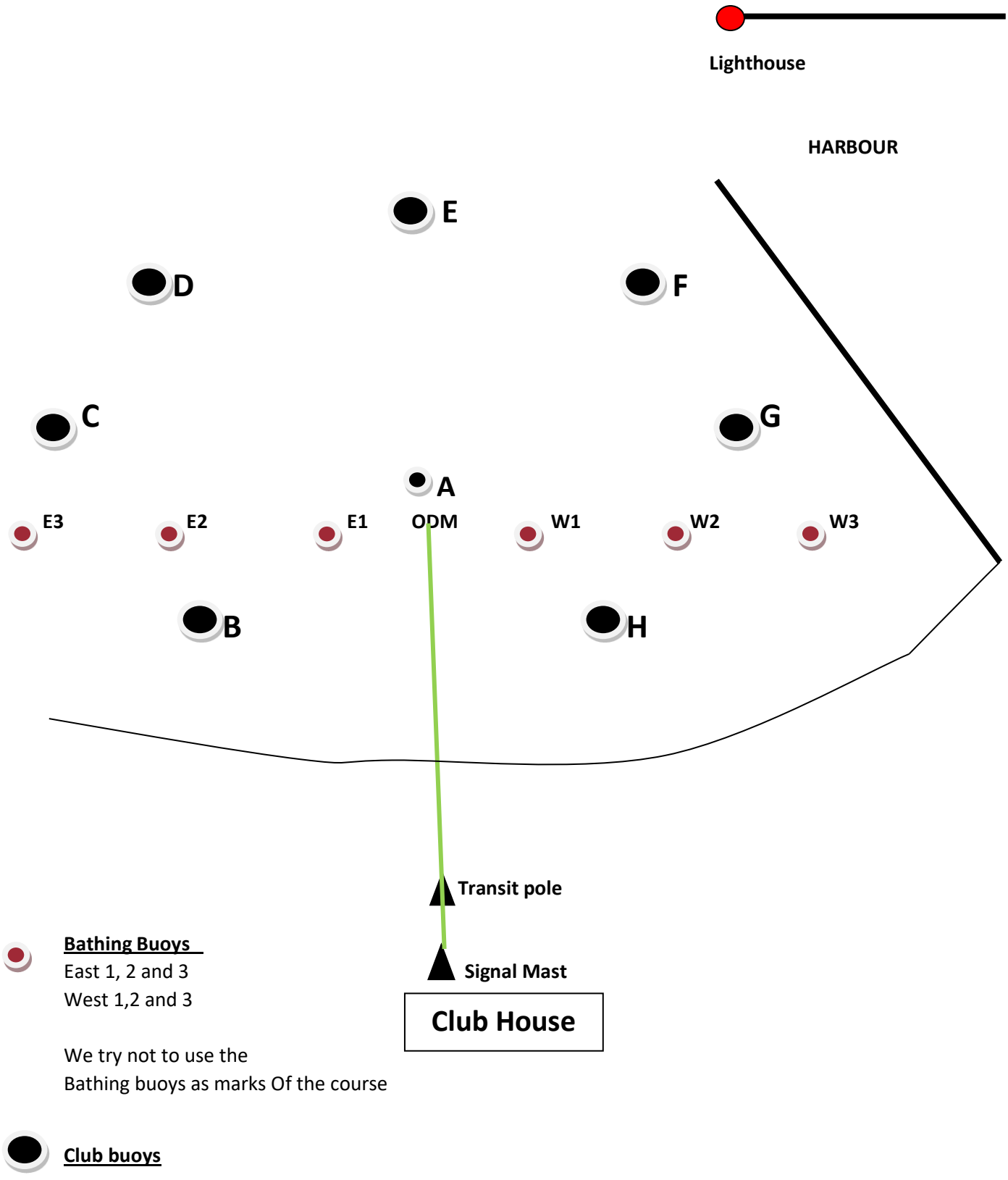
Windward Mark rounding rules are more complicated than if marks are left to port.

Start Line

Positioned as much as possible to reduce bias .

Wind coming from Seaford Head side – start eastwards, as per diagram

THE BAY AND AREA THE BUOYS SHOULD BE POSITIONED



Bathing Buoys
East 1, 2 and 3
West 1,2 and 3

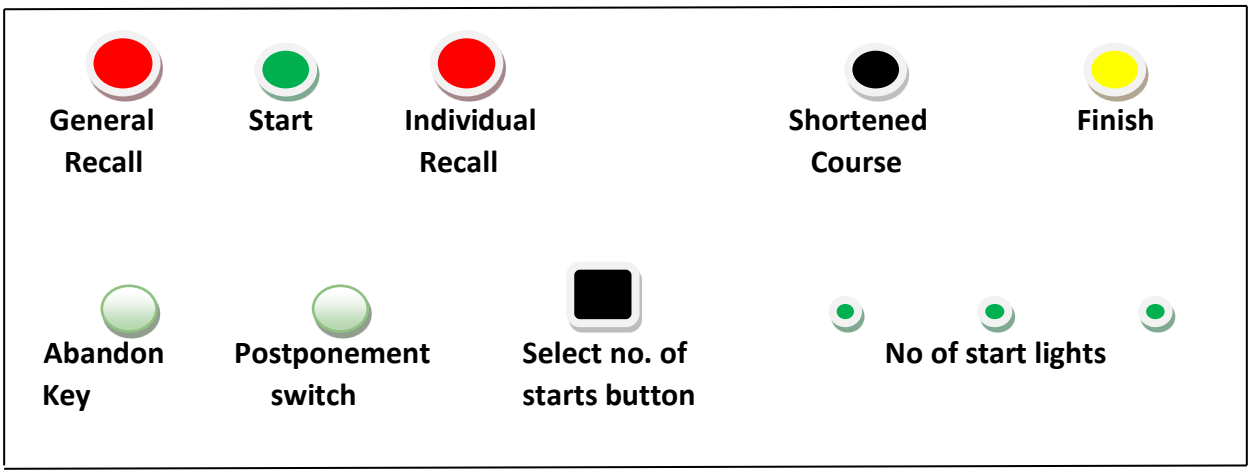
We try not to use the
Bathing buoys as marks Of the course

Club buoys

LIGHT STARTING SYSTEM

In the race box there is a detailed breakdown of how to use the starting system.
The power to the start system is automatically on when the Isolating Switch to the race box is turned on.

Control Panel



Start Procedure : If everything goes according to plan

Start line is in line with the railing triangle and the transit triangle on the beach. Once the ODM is laid let it settle and then move either triangle to align with ODM or just in-front.
Remember that the published start time is that of first race so for 10:30 start the sequence starts at 10:25.

Press the square black button to lelect number of starts – you can only do 3 starts max with this system.
Once = 1 start, one green light
Twice = 2 starts, two green lights
Thrice = 3 starts, three green lights
If you've pressed the black button too many times keep pressing it to reduce the number of starts

5 minutes prior to start time press the green start button to begin the horn and light sequence
Horn + 1 light = 5 mins
Horn + 2 lights = 4 mins
Horn + 1 light = 1 min
Horn + lights off = GO

For Postponement, Single recall, General Recall - see next page

Finish Procedure :

Press Yellow finish button as each boat crosses the finish line
For shortened course – see next page

Reset Button

This is located on lefthand side of console. Use this to setup second race.

POSTPONEMENT BUTTON

Flick the postponement switch - 2 horn signals and red flashing light on the handrail
To end postponement flick switch back – 1 horn signal and light stops flashing.

SHORTENED COURSE

The Lead Boat rounds the last mark before the finish line.
Press the black shortened course button
- 2 sound signals and light in the bottom corner

Finish the Lead Boat as it passes the Finish Line
Continue to finish all other boats following lead boat.

Optional (if feeling kind to slower boats which is often needed to minimise wait time for boats when running back to back races)
Once shortened course signals have been made, finish all boats as they cross the finish line whether in front of or behind the Lead Boat.

INDIVIDUAL RECALL (for 1 or 2 boats over the line)

Press Individual Recall button within 10 seconds of the start
(RYA rules say 'Promptly after start) 10 seconds is due to the way our system is wired.)
Light flashes
Use the loud hailer to call out sail numbers of those over the line.
You can tell them when they are clear to start.

GENERAL RECALL

Press General Recall button within 10 seconds of the start
All lights will flash and there will be 3 sound signals
Allow lights to flash for about a minute
Send rib to notify lead boats.
Reset system using the paperclip and Reset button in the side of the unit.
Begin the Start Procedure from scratch again for the remaining number of starts.

GENERAL

It is up to each helm to decide whether they and their boat are able to cope with the conditions, and it is entirely their decision whether to sail or not. This is in the fundamental rules of sailing and accepted world-wide, as is the requirement for competitors to give assistance to anyone in trouble. This applies to racing at Seaford, Piddinghoe, Weymouth, Cowes and every other venue around the world.

World Sailing RRS 2021-2024
Part 1
FUNDAMENTAL RULES

1.1 Helping Those in Danger
A boat or competitor shall give all possible help to any person or vessel in danger

4 DECISION TO RACE
The responsibility for a boat's decision to participate in a race or to continue racing is theres alone.

FLAG STARTING SYSTEM

MAIN FLAGS NEEDED

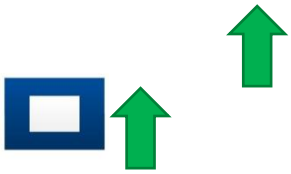
Class Flags	:	See Class List in sailing instructions
Blue Peter	:	P
Recall Flag (1 boat over the line)	:	X
General Recall (Many boats over the line)	:	1st Sub
Postponement (Answering Pennant)	:	AP
Abandonment	:	N
Shortened Course	:	S

START SEQUENCE

The start sequence is **5-4-1-Go**. Then repeat for each start with **1 minute between starts**.

The flag sequence is:

5-minute Class flag up



4-minute P flag up

1-minute P flag down

Start Class flag down

1 OR 2 BOATS OVER THE LINE

If one or two boats are over the line, make a second sound signal and hoist the 'X' flag. Call out the sail numbers or names of those over the line, more to stop the innocent returning by mistake but also to give a fair chance for the miscreants to return and start correctly.

MANY BOATS OVER THE LINE

If something goes horribly wrong or there are too many over the line to count, put up the first substitute flag with two extra sound signals. Take it down one minute before you start the sequence again.