

Race Officer Manual - Essential Principles

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This manual for ROs is based upon the ISAF Race Management Manual and the RYA training course for Race Officers, with content amended to suit Radio Sailing, and adapted from the IOMICA Race Management Manual.

1. INTRODUCTION

Satisfaction to all competitors is perhaps the most difficult objective to achieve in an event. It is in this area that considerable judgment and experience is required. The vagaries of wind and weather will usually cause difficulties for the Race Officer, and frustrate competitors. However, the effect of these can be reduced with foresight and by following the detailed planning and procedures advocated in this Manual.

2. PRINCIPLES

2.1. General

Because radio controlled boats are unmanned, competitors may require assistance in noticing contact with buoys or other boats. At club and national events, a system of 'observing' is used. There should be one Observer per four boats in the heat, plus a "roving" or "senior" Observer if the Observer Marshall does not himself take on this role. Each Observer is given a *numbered notebook*, which identifies the *section of the fleet* to which he or she is expected to pay primary attention. Ideally, the notebook has diagrams which illustrate this. The roving or senior Observer does not have a Section, but instead provides back-up for any Section where contacts look likely or contacts have been called.

The major control mechanism for a radio sailing fleet event is usually the fleet control board. This provides two major functions: the heat composition, i.e the list of boats in each heat, for the currently scheduled race, and the frequency allocation of each boat.

A competitors' briefing is expected at events at National level and above.

2.2. The Course

To ensure fair competition (see RRS 2), the Race Committee must set fair starting lines, courses, and finishing lines. All mark roundings, where the rounding could be either way, should be consistently port or starboard. Port-hand roundings are preferred at a windward mark.

Marks used for a change of course (i.e. rounding marks) should be of a different shape or colour or have some distinguishing mark such as a coloured (or black) band or sleeve from marks which identify the start, the finish, or under-water obstacles. Because of factors involving the physiology of the human eye, red marks are not recommended. It is common to number the marks for easy identification. When the number used is of the same dimensions as the sail number for the class being sailed, it immediately becomes obvious when any mark has been set too far away – its number cannot be reliably read. This is important, because it also means that a sail number will not be reliably read, leading to increased frustration by sailors wishing to protest, and increased rule flouting by sailors exploiting the poor visibility.

Heat duration

A course should be set, and the number of laps determined, so that the racing in each heat takes around 12 to 15 minutes. The "seeding" race, Race 1, may be longer, perhaps up to 20 minutes.

Start line length and direction

The starting line should be from 1.3 to 1.5 times the sum of the lengths of the boats in the largest heat. For light conditions, the value of 1.3 should be adequate. In heavy or variable wind, even the value of 1.5 might not be sufficient.

The starting line should, at least initially, be laid with approximately 5 degrees of bias favouring the port end. For this the Race Officer needs a wind vane with an 85 degrees sighting device, or ensures the pin end is approximately 2 boat lengths to windward for every 20 boat lengths of the start line. During the course of the event, it will become obvious to the RO if one end or other of the line is considered favoured by the competitors. The Race Officer should

observe how the fleet reacts to the bias on his first starting line and adjust as required for subsequent starts. It must be emphasised that the RO should carefully observe competitor behaviour at the start and, regardless of what the wind vane or other indicator devices might thereafter be showing, continually re-adjust the line bias until the competitors spread themselves relatively evenly along the start line. This establishes a fair starting line.

Windward-leeward courses

It is becoming increasingly common to set a windward-leeward course, and indeed this course is currently favoured by IOMICA for international IOM events. On such a course, a leeward gate should be set, the marks about 8 boat lengths apart, and a windward offset mark should be set, the offset mark approximately 8 boat lengths to port of the windward mark.

The finishing line

While the starting line is set approximately at 85 degrees to the wind, the finishing line is generally set at 90 degrees to the direction to the last mark of the course (RRS definition of *finish*). On many occasions this will also be at 90 degrees to the wind direction but this is not necessarily so.

Adjusting a Course for Wind Changes

Usually, a change of course is not necessary with wind shifts of 5-15°. Start to change the course (i.e. new positions of windward, gybe, and leeward marks) when the wind shift is 20° or more. But be ready to adjust the starting line bias if the wind shifts by more than 10 degrees. Because competitors may expect to have 12 heats a day at least, there is a need to strike an appropriate balance between the time taken to revise the course and the time lost to racing.

Once set, the course must be shown on the course board. Experience has shown that the course should not be “explained” by the RO. The course board should, indeed must, speak for itself. If competitors remain puzzled or confused after consulting the course board, it needs to be improved or corrected. Experience has also shown that the course to be sailed should not be “illustrated” on the course board with drawings or line connecting marks or showing the rhumb lines. Instead, the board should simply state the course as a list of lines and marks, for each mark whether they should be passed on port or starboard, and whether they are “rounding” marks. The course board must be positioned so that it is visible to competitors while they are racing. This can be an onerous requirement, and considerable care might need to be given to satisfying it.

2.3. The Heat

The Start

In general, starts should only be delayed if a fair course cannot be set. This takes judgement, but “light wind” is in itself not a sufficient reason for delay. There should not be a delay because competitors are late to their heat. There may be a significant change in wind strength between heats, and competitors may wish to change sails. The start should only be delayed to allow this for the four newly-promoted boats from the previous heat. The Sailing Instructions (or agreement from all competitors at the briefing) should provide for an appropriate time limit.

RRS E3.5 prescribes the starting sequence from the Warning Signal to the starting signal. It is a two-minute sequence, do not use some other sequence.

At the start signal, the RO sights the line (the **course** side of the starting marks, RRS E3.7) to determine whether to:

- be satisfied that there is a clear start;
- call an Individual Recall for any identified boats on the course side of the starting line (applies when no Starting Penalty or the I Flag Rule is in force); or
- order a General Recall.

The RO may use an old technique to sight the line in the moments before the start – hold a clip-board or similar size piece of card to one eye, close the other eye, and position the card against the line so that the course side is clearly visible, while the body of boats approaching the line is completely obscured. This is an effective way of detecting OCS in an otherwise rather hectic few seconds.

Unfair Course and Abandoning the Start

The “rule of thumb” is that the (start to a) heat should be abandoned if the leading boat can lay the windward mark without any need to tack.

Some ROs feel that, in an OCS situation, a General Recall should always be signalled unless all OCS boats can be identified. There is no rule requiring this; in fact, the contrary is true. The RO must weigh up the pros and cons of allowing perhaps one or two offenders to escape against the penalty that a General Recall may impose upon a large number of competitors who made a good start. Every effort should be made to identify at least the principal offenders and to apply the Individual Recall procedure to them. By identifying most boats on the course side and

using an Individual Recall signal to bring them back, a salutary lesson is conveyed to the fleet and, at the same time, those starting correctly are rewarded.

During the race

Note that RRS E3.10 explicitly removes the ability of the RO to abandon a heat because of lack of wind (but provides for abandonment due to thunderstorms). For other problems (apart from those specified in RRS 32.1), no specific guidelines can be given as to when to abandon and re-sail a heat and when to continue. Once a heat has started every effort should be made to achieve a finish.

The Finish

The finish line is the **course** side of the finishing marks (RRS E3.7). The instant the first boat finishes, sound a clearly recognisable signal (e.g. an air-horn blast or a whistle), so that the other competitors have a time reference to the first finish. Record the hour, minute and seconds, and calculate the time-out limit for the remainder of the fleet. Have one stop watch to time the heat, and another, preferably a countdown timer, for counting the time-out. An audible end of time on the countdown timer prevents discussion or debate and allows the line to be watched without looking at the equipment.

Every boat must be recorded as she finishes, regardless of whether it is alleged that she may not have sailed the correct course. ISAF CASE 80 makes it clear that, without a hearing, a boat may not be penalised for failing to sail the course. It is always possible that the hearing decides the boat did indeed sail the correct course, and if her finish was not recorded then the Race Committee has made a serious error.

Starting the next heat

The next heat shall start as soon as practicable after the completion of the previous heat. This applies equally if the next heat is the start of the next race. There is normally no reason to delay the start of a heat simply because it is the start of the next race.

Note that RRS E5.3 gives a competitor time to submit a protest after the end of a heat, and in particular there is a time limit for the communication of an “intention” to protest. This should be taken to mean that the ***next heat shall not start before the time limit for communication of an “intention” is reached.*** For smaller events, it may be desirable to reduce this time limit by an appropriate Sailing Instruction (or agreement from all competitors at the briefing).

Results

The current results, as of the race most recently finished, should always be available on the official notice board. It is unsatisfactory if competitors are not kept up to date of their current position and are not able to check that their finishing positions have been correctly recorded. Worse is the possibility that local competitors may obtain knowledge of their positions through familiarity with the Race Committee or scoring personnel when such knowledge is not freely available to other competitors. The result sheet will be the official source of information and, in terms of the rules, is all that is required. However, it may well be regarded as a desirable courtesy to inform any OCS boats or other disqualified competitors in person, giving them ample time to consider their rights to request redress.

Errors by the Race Committee

A time will come when the RO or members of the Race Committee make an error. A common error in radio sailing with heats, for example, is to fail to schedule the correct boats in a heat. In such circumstances, the Race Committee should NOT attempt to “fix” its error by, for example, declaring the heat or race abandoned. Instead, it should immediately seek the assistance of the protest committee or jury by initiating a request for redress for the boat(s) concerned under RRS 60.2(b), or by asking the boat(s) concerned to submit requests for redress under RRS 60.1(b).