

# Heat Management System 2006

*Race committees are recommended to read the rules of this system in conjunction with the HMS 2006 Advice Notes that are part of this document.*

## 1 GENERAL PROCEDURES THAT APPLY TO ANY RACE

### 1.1 Numbers and Size of Heats

- (a) The number of boats scheduled to sail in a heat shall not exceed 20, except in Race 1 for an entry of 81-84 when 21 boats may be scheduled.
- (b) When sufficient number of boats withdraw from, or return to the event, the Race Committee may alter the size of any heat and/or the number of heats in a race. This shall be announced, confirmed in writing, by posting on the Fleet Board section of the Official Notice Board, before the start of the next race.

### 1.2 Order of Heats

Heats in each race shall be sailed in reverse alphabetical order.

### 1.3 Withdrawn Boats

- (a) A boat will be withdrawn from those scheduled to sail by the race committee, either after being recorded as DNC in the lowest heat or when she reaches the lowest heat after being recorded as DNC in the previous heat of that race.
- (b) A withdrawn boat will be recorded as DNC.
- (c) A withdrawn boat shall obtain permission to sail from the race committee who will add her to those scheduled to sail in the lowest heat. After obtaining permission she may re-join the racing at any time.

### 1.4 Protests

- (a) Protests involving the place of a boat that may be promoted or requests for redress which may result in a boat being promoted due to its place being adjusted as in 1.6(b), shall be heard before the start of the next heat.
- (b) Protests or requests for redress involving boats which may be placed in a lower heat by the division of the fleet for the next race shall be heard before that division.

### 1.5 Redress

- (a) Decisions on redress shall be made in accordance with RRS 64.2.
- (b) In all races the finishing place of a boat may only be adjusted if the boat was on the last leg of the course when the incident occurred.
- (c) Should it be necessary to calculate a boat's average score, her Race 1 score shall be excluded.
- (d) Except where 1.5(b) applies in Race 1, requests for redress under E5.5 (e) and (f) may only be made in Race 2 or following races.

### 1.6 Exception to Sailing Instructions' 'Breaking of Ties'

When a tie between two or more boats is to be broken in Race 2 or following races, Race 1 scores shall be excluded.

## 2 PROCEDURES THAT APPLY TO RACE 1

### 2.1 Division of the Fleet

The event shall start with one race in which the fleet (all boats in the event), is divided into heats of approximately equal sizes. Each heat shall be seeded to contain boats of mixed ability. Where the ability of some boats is unknown their selection shall be at random.

## **2.2 Time Out Limit**

As an exception to the Sailing Instructions, for Race 1 only there shall be no Time Out Limit. All boats shall be allowed to *finish*, provided that they had started before the leading boat in their heat had *finished* in accordance with RRS 28.1.

## **2.3 Order of Finishing Places for Race 1**

Each heat shall be treated as a separate race. *Finishing* places shall be changed so that boats recorded as DNF, RAF, OCS, DNS, DNC, BFD, DSQ, DNE or DGM shall be placed in this order at the bottom of the heat. The order of finishing places of boats shall comply with RRS A6.

## **2.4 Scoring of Race 1**

Scoring shall be as RRS A4 Low Point Scoring System except RRS A4.2 is replaced by: "All other boats shall be scored one point more than the number of boats scheduled to sail in the largest heat of Race 1."

# **3 PROCEDURES THAT APPLY AFTER RACE 1**

## **3.1 Division of the Fleet for Race 2**

The finishing places in the Race 1 heats are used to create an order of finishing places for the fleet with all the heat winners followed by all the second placed boats and so on. This order of finishing places is divided into heats with the number of boats in each heat as shown in the SCHEDULE FOR RACE 2.

## **3.2 Promotion**

Except in Heat A, the four highest placed boats in each heat shall sail in the next heat.

## **3.3 Order of Finishing Places for the next race**

The race *finishing* order from the first boat in Heat A to the last boat in the lowest heat shall be modified as follows:

- (a) The *finishing* place of a promoted boat in any lower heat of the same race shall be ignored.
- (b) Boats recorded as DNF, RAF, OCS, DNS, DNC, BFD, DSQ, DNE or DGM shall be put in this order in the lowest places in the heat in which they were scheduled to sail.
- (c) All other boats shall then be put in consecutive order within the heat in which they were scheduled to sail, according to their *finishing* places.
- (d) The finishing places of boats shall comply with RRS A6 within each heat only.

## **3.4 Scoring of Race 2 and Following Races**

Scoring shall be from the Order of Finishing Places for each race using the RRS A4 Low Point Scoring System except RRS A4.2 is replaced by:

- (a) Boats recorded as DNF, RAF, OCS, DNS or DNC shall score one more point than the last boat in their heat would have scored if all boats scheduled to sail in the heat had *finished* correctly.
- (b) DNC boats removed from those scheduled to sail and boats recorded as BFD, DSQ, DNE or DGM shall score one more point than the last boat in the lowest heat would have scored if all the boats competing in the event had *finished* correctly.

## **3.5 Division of the Fleet for Race 3 and Following Races**

Boats shall be divided into heats according to the Order of Finishing Places in the previous race, with the number of boats in each heat as shown in the SCHEDULE for RACE 3 and FOLLOWING RACES.

## SCHEDULE for RACE 2 ONLY

No. of BOAT	2 HEATS	3 HEATS A B C	4 HEATS A B C D	5 HEATS					No. of BOATS
				A	B	C	D	E	
12	4 8			15	15	10	10	19	69
13	4 9			15	15	10	10	20	70
14	4 10			15	15	15	10	16	71
15	6 9			15	15	15	10	17	72
16	6 10			15	15	15	10	18	73
17	6 11			15	15	15	10	19	74
18	6 12	6 6 6		15	15	15	10	20	75
19	8 11	6 6 7		15	15	15	15	16	76
20	8 12	6 6 8		15	15	15	15	17	77
21	8 13	6 6 9		15	15	15	15	18	78
22	8 14	6 6 10		15	15	15	15	19	79
23	10 13	6 6 11		15	15	15	15	20	80
24	10 14	6 6 12	8 4 4 8	16	16	16	16	17	*81
25	10 15	9 6 10	8 4 4 9	16	16	16	16	18	*82
26	10 16	9 6 11	8 4 4 10	16	16	16	16	19	*83
27	12 15	9 6 12	8 4 4 11	16	16	16	16	20	*84
28	12 16	9 9 10	8 4 4 12	*See HMS Advice notes for 81-84					
29	12 17	9 9 11	8 8 4 9						
30	12 18	9 9 12	8 8 4 10						
31	14 17	9 9 13	8 8 4 11						
32	14 18	9 9 14	8 8 4 12		A	B	C	D	E
33	14 19	9 9 15	8 8 8 9						
34	14 20	12 9 13	8 8 8 10	5	5	5	5	14	34
35	16 19	12 9 14	8 8 8 11	5	5	5	5	15	35
36	16 20	12 9 15	8 8 8 12	10	5	5	5	11	36
37		12 12 13	8 8 8 13	10	5	5	5	12	37
38		12 12 14	8 8 8 14	10	5	5	5	13	38
39		12 12 15	8 8 8 15	10	5	5	5	14	39
40		12 12 16	8 8 8 16	10	5	5	5	15	40
41		12 12 17	12 8 8 13	10	10	5	5	11	41
42		12 12 18	12 8 8 14	10	10	5	5	12	42
43		15 12 16	12 8 8 15	10	10	5	5	13	43
44		15 12 17	12 8 8 16	10	10	5	5	14	44
45		15 12 18	12 12 8 13	10	10	5	5	15	45
46		15 15 16	12 12 8 14	10	10	10	5	11	46
47		15 15 17	12 12 8 15	10	10	10	5	12	47
48		15 15 18	12 12 8 16	10	10	10	5	13	48
49		15 15 19	12 12 12 13	10	10	10	5	14	49
50		15 15 20	12 12 12 14	10	10	10	5	15	50
51		18 15 18	12 12 12 15	10	10	10	10	11	51
52		18 15 19	12 12 12 16	10	10	10	10	12	52
53			12 12 12 17	10	10	10	10	13	53
54			12 12 12 18	10	10	10	10	14	54
55			12 12 12 19	10	10	10	10	15	55
56			12 12 12 20	10	10	10	10	16	56
57			16 12 12 17	10	10	10	10	17	57
58			16 12 12 18	10	10	10	10	18	58
59			16 12 12 19	10	10	10	10	19	59
60			16 12 12 20	10	10	10	10	20	60
61			16 16 12 17	15	10	10	10	16	61
62			16 16 12 18	15	10	10	10	17	62
63			16 16 12 19	15	10	10	10	18	63
64			16 16 12 20	15	10	10	10	19	64
65			16 16 16 17	15	10	10	10	20	65
66			16 16 16 18	15	15	10	10	16	66
67			16 16 16 19	15	15	10	10	17	67
68			16 16 16 20	15	15	10	10	18	68

For heats other than the lowest, the number of boats 'scheduled to sail' shall include promoted boats from lower heats, in addition to the numbers given in this schedule. This schedule may be extended in a similar pattern of fleet division within the maximum fleet size of 84 boats and 5 heats. Please note that the pattern of fleet division for 81 to 84 boats is non-standard and shall not be extended.

\*See HMS 2006 Advice Notes.

**Now go to the SCHEDULE for RACE 3 and FOLLOWING RACES!**

## SCHEDULE for RACE 3 and FOLLOWING RACES

No. of BOATS	2 HEATS	3 HEATS A B C	4 HEATS A B C D	5 HEATS A B C D E	No. of BOATS
12	4 8			13 13 13 13 17	69
13	5 8			14 13 13 13 17	70
14	5 9			14 14 13 13 17	71
15	6 9			14 14 14 13 17	72
16	6 10			14 14 14 14 17	73
17	7 10			14 14 14 14 18	74
18	7 11	5 5 8		15 14 14 14 18	75
19	8 11	5 5 9		15 15 14 14 18	76
20	8 12	6 5 9		15 15 15 14 18	77
21	9 12	6 6 9		15 15 15 15 18	78
22	9 13	6 6 10		15 15 15 15 19	79
23	10 13	7 6 10		16 15 15 15 19	80
24	10 14	7 7 10	5 5 5 9	16 16 15 15 19	81
25	11 14	7 7 11	6 5 5 9	16 16 16 15 19	82
26	11 15	8 7 11	6 6 5 9	16 16 16 16 19	83
27	12 15	8 8 11	6 6 6 9	16 16 16 16 20	84
28	12 16	8 8 12	6 6 6 10		
29	13 16	9 8 12	7 6 6 10		
30	13 17	9 9 12	7 7 6 10		
31	14 17	9 9 13	7 7 7 10		
32	14 18	10 9 13	7 7 7 11	A B C D E	
33	15 18	10 10 13	8 7 7 11		
34	15 19	10 10 14	8 8 7 11	6 6 6 6 10	34
35	16 19	11 10 14	8 8 8 11	7 6 6 6 10	35
36	16 20	11 11 14	8 8 8 12	7 7 6 6 10	36
37		11 11 15	9 8 8 12	7 7 7 6 10	37
38		12 11 15	9 9 8 12	7 7 7 7 10	38
39		12 12 15	9 9 9 12	7 7 7 7 11	39
40		12 12 16	9 9 9 13	8 7 7 7 11	40
41		13 12 16	10 9 9 13	8 8 7 7 11	41
42		13 13 16	10 10 9 13	8 8 8 7 11	42
43		13 13 17	10 10 10 13	8 8 8 8 11	43
44		14 13 17	10 10 10 14	8 8 8 8 12	44
45		14 14 17	11 10 10 14	9 8 8 8 12	45
46		14 14 18	11 11 10 14	9 9 8 8 12	46
47		15 14 18	11 11 11 14	9 9 9 8 12	47
48		15 15 18	11 11 11 15	9 9 9 9 12	48
49		15 15 19	12 11 11 15	9 9 9 9 13	49
50		16 15 19	12 12 11 15	10 9 9 9 13	50
51		16 16 19	12 12 12 15	10 10 9 9 13	51
52		16 16 20	12 12 12 16	10 10 10 9 13	52
53			13 12 12 16	10 10 10 10 13	53
54			13 13 12 16	10 10 10 10 14	54
55			13 13 13 16	11 10 10 10 14	55
56			13 13 13 17	11 11 10 10 14	56
57			14 13 13 17	11 11 11 10 14	57
58			14 14 13 17	11 11 11 11 14	58
59			14 14 14 17	11 11 11 11 16	59
60			14 14 14 18	12 11 11 11 16	60
61			15 14 14 18	12 12 11 11 15	61
62			15 15 14 18	12 12 12 11 15	62
63			15 15 15 18	12 12 12 12 15	63
64			15 15 15 19	12 12 12 12 16	64
65			16 15 15 19	13 12 12 12 16	65
66			16 16 15 19	13 13 12 12 16	66
67			16 16 16 19	13 13 13 12 16	67
68			16 16 16 20	13 13 13 13 16	68

For heats other than the lowest, the number of boats 'scheduled to sail' shall include promoted boats from the lower heats, in addition to the numbers given in this schedule. This schedule may be extended in a similar pattern of fleet division within the maximum fleet size of 84 boats and 5 heats. The number of boats 'scheduled to sail' in the lowest heat may vary from the numbers scheduled, to allow for withdrawn boats or the return of withdrawn boats.

# HEAT MANAGEMENT SYSTEM 2006

## Advice to Competitors and Race Committee

### Introduction

Originally conceived by Peter Stollery, this heat system produces a close simulation of a fleet race, in which all boats sail together. In this radio racing system the fleet is divided into no more than 5 heats.

In the first race, the heats are seeded to contain boats of mixed ability. The results allow the formation of heats with boats of similar ability, which provides good quality racing.

In the following races, starting at the bottom heat, the four leading boats of each heat are promoted to and immediately sail in the next highest heat. This is repeated until every heat has sailed, allowing every boat, from whichever heat she started, the opportunity to improve her overall position and the chance to win every race.

Normally, when the Race Committee divides the fleet at the end of a race based on the Order of Finishing Places, boats that are not promoted stay in their heat and the bottom four go down to the next lowest heat. However, there are exceptions to this, for example between Races 2 and 3 and where the fleet numbers reduce.

### General advice

**Read HMS carefully** before you start - most queries can be avoided. Don't attempt to learn all of HMS by heart - it's much better to remember the main headings, which will lead you to the detailed information.

Always have several copies available at Race Control and one on the finishing line.

**Follow the procedures exactly** - they are designed for the smooth running of your event.

HMS is often loosely described as "four up at the end of each **heat** and four down at the end of each **race**". You must **not** think of HMS in this way! "Four up" at the end of each heat may be right, but at the end of each race the fleet is divided, or rearranged if you like, using the RACE SCHEDULES.

One example is between Race 2 and Race 3 for some fleet sizes, because in Race 2 the numbers in each heat must be divisible by the number of heats, whereas in the following races heats are approximately the same size. Another example is when a lot of boats withdraw from racing it may be possible for the race committee to reduce the number of heats.

#### Fleet or ticket board

Each boat has a 'ticket' that can be moved from heat to heat on the Fleet Board section of the Official Notice Board to display the current progress of the race. At the end of a race and after the division of the fleet into heats for the next race, the location of the tickets will indicate in which heats boats will be racing in the next race. It is essential that

**competitors pay attention to this Fleet Board** from time to time and after the division of the fleet at the beginning of every race.

### Advice for the Race Committee

#### Major differences from the previous HMS 2002:

New or changed abbreviations related to RRS 2005-2008 Appendix A that will apply to HMS, include:

- DNE – disqualification (other than DGM) not excludable under rule 89.3(b) and
- DGM - Disqualification under RRS 69.1(b)(2); not excludable.

Removed from HMS into the SIs are:

- Time Limit for the first boat to *finish* (30 minutes) is applicable to the last heat of the day only,
- A simplified Time Out Limit of 5 minutes extended as necessary until 4 boats remain racing, then places on the water
- Excluded scores (discards) - reduced intervals in multiples of 4,
- Breaking of ties – a simplified system without anomalies,
- There is no redress for entanglement (except on last leg of course) or radio interference in Race 1,

One-heat races now don't need any reference to HMS.

#### Heat numbers and number of boats in the heats

**RACE 1** - look at the heat numbers in the race schedules to get an idea of the options for the number of heats that could be used. The number of heats in any race shall be as few as possible, taking into account the local conditions and the resources available (size of sailing water, layout of course, visibility from the control area, frequency allocation, number of observers, etc). The number of heats that you choose should be the same for Races 1 and 2, unless there are exceptional circumstances with a lot of withdrawn boats etc and in the special case of 81-84 boat entries. In the latter there will be only 4 heats of 20 or 21 boats in Race 1, which divide into Race 2 heats A-D of 16 with the remainder in Heat E. See 'special' table below.

Being in A Heat in Race 1, does not imply any higher status than being in E Heat as each heat shall contain a mixture of skipper ability. Seeding of skipper ability is ESSENTIAL. Make an effort to find any available information about skipper ability like the results of previous similar events, DM rankings, the seeding of skippers on entry forms etc and envisage an order of likely results and divide into Race 1 heats. Where skipper ability is unknown selection at random can be done in several ways. If in doubt one method for selecting the order of the boats remaining after the seeding is recommended.

The remaining unseeded boats can be given an order by sorting alphabetically according to their national letters and within the national letters according to the ascending sail numbers. This order will be sorted into the heats in the order A,B,C,D,E,E,D,C,B,A and so on.

**RACE 2** - In the RACE SCHEDULES, the numbers given in the higher heats (A, B, etc) will eventually have the promoted boats from the lower heats added to them to make up the number "scheduled to sail".

It is most important that the numbers of boats in the '*SCHEDULE for RACE 2 ONLY*' are followed exactly. This is because the numbers in all the heats, except the lowest heat, **must** be divisible by the number of heats in Race1, so that no tie breaking is necessary. In the tables below the bold horizontal lines divide the order of finishing places for Race 1, with A1 being the first boat in Heat A, B1 being the first boat in Heat B etc. The left-hand table is an example of the '**normal**' division of the fleet up to 80 boats, ie with all the heats divided in a similar way. In this case, they contain 3 boats from each Race 1 heat. Please also note that entry numbers of 81-84 are a '**special**' case and the Race 1 results are divided into 5 heats using the right-hand table, which is shown for the worst case of 84 boats. For 83 boats omit D21 from Heat E; for 82 boats omit D21 and C21; for 81 boats omit D21, C21 and B21.

Division for Race 2 with 80 boats	Race 1 'order of finishing places' : A1 is first boat in Heat A and so on				
<b>Race 2 Heat A</b>	A1	B1	C1	D1	E1
	A2	B2	C2	D2	E2
	A3	B3	C3	D3	E3
<b>Race 2 Heat B</b>	A4	B4	C4	D4	E4
	A5	B5	C5	D5	E5
	A6	B6	C6	D6	E6
<b>Race 2 Heat C</b>	A7	B7	C7	D7	E7
	A8	B8	C8	D8	E8
	A9	B9	C9	D9	E9
<b>Race 2 Heat D</b>	A10	B10	C10	D10	E10
	A11	B11	C11	D11	E11
	A12	B12	C12	D12	E12
<b>Race 2 Heat E</b>	A13	B13	C13	D13	E13
	A14	B14	C14	D14	E14
	A15	B15	C15	D15	E15
	A16	B16	C16	D16	E16
	A17	B17	C17	D17	E17

Division for Race 2 with 84 boats	Race 1 'order of finishing places' : NOTE: ONLY 4 HEATS IN RACE 1			
<b>Race 2 Heat A</b>	A1	B1	C1	D1
	A2	B2	C2	D2
	A3	B3	C3	D3
	A4	B4	C4	D4
<b>Race 2 heat B</b>	A5	B5	C5	D5
	A6	B6	C6	D6
	A7	B7	C7	D7
	A8	B8	C8	D8
<b>Race 2 Heat C</b>	A9	B9	C9	D9
	A10	B10	C10	D10
	A11	B11	C11	D11
	A12	B12	C12	D12
<b>Race 2 Heat D</b>	A13	B13	C13	D13
	A14	B14	C14	D14
	A15	B15	C15	D15
	A16	B16	C16	D16
<b>Race 2 Heat E</b>	A17	B17	C17	D17
	A18	B18	C18	D18
	A19	B19	C19	D19
	A20	B20	C20	D20
	A21	B21	C21	D21

**RACE 3 and following races** - after Race 2, the '**SCHEDULE for RACE 3 and FOLLOWING RACES** is different because it makes the numbers in each heat as equal as possible, which is one of the objectives of HMS, with any larger numbers of boats scheduled to sail in A heat. *After you have used the 'SCHEDULE for RACE 2 ONLY' please turn to the next SCHEDULE so that you don't use this one again!!!*

#### Fleet or ticket board

This is essential to quickly demonstrate the progress of the race without the use of a computer by using the 'Heat Records Sheets' marked up by hand by the start and finishing line judges. After checking any changes to the finishing order, by OCS, RAF etc **move boats up** from the heat below to determine the boats in the next heat. Arrange the 'tickets' in the correct finishing order after each heat has finished. This can save a lot of time when rearrangement is necessary due to boats dropping out or a DSQ, as confirmation with the paperwork can then be handled very quickly indeed. After the division of the fleet for the next race the information about the boats in each heat can be marked up by hand directly from the Fleet Board onto the Heat Record Sheets.

#### Advice for line judges (and observers/umpires judging places on the water)

As the boats manoeuvre before the start check that they are all there. Record any that are not as DNC. At the first windward mark check the boats again. Any missing may be DNS. Record any OCS on the Heat Record Sheet. At the finish you should record the sail number every time a boat crosses the line. It may do so more than once; after taking a penalty for example. Sort out later, with advice from umpires and observers, which is the proper finish.

When several boats may not *finish* within the Time Out Limit, it is most likely to occur in very light winds and you should be able to see it coming and have plenty of time to prepare and discuss the progress of the race with observers/umpires etc. In particular it is a good idea to take an order of the last 6 boats at the final mark or against some other marker as an order to refer to if there is any doubt about placing the last 4 at the end of the Time Out Limit. Note that in Race 1 there is no Time Out Limit.

When the first boat in the heat *finishes* **record the time of finishing**. Initially other boats now have 5 minutes in which to *finish*. If the 5 minute Time Out Limit runs out and there are still boats *racing*, check with the observers and if you

haven't already done so, make a note of those still *racing* that are OCS or did not comply with the 'round the ends' rule, or have not sailed the correct course as rule 28.

Of the remainder, if there are 4 boats or fewer still racing on the water, immediately record their places on the water in conjunction with the umpires/observers as if they had *finished* at that point.

If there are more than 4 still racing on the water, the Time Out Limit is extended until only 4 boats remain *racing* on the water. At that point record their places on the water as above. All other boats not accounted for may be as noted below and recorded as such:

- OCS or DNC
- DNS, that did not start other than OCS and DNC; you probably have those noted at the first windward mark,
- Those that have not completed the course properly as RRS 28; observers can help to identify them,
- DNF did not finish; by pulling out from the heat due to a problem of some sort; in the rescue boat etc.

Please make sure that the correct abbreviations in A11 are used. Just marking RET is not sufficient. The definitions are shown on the Heat Record Sheet.

### Withdrawn boats

The Race Committee will automatically withdraw boats from those scheduled to sail either, when in the bottom heat they have been DNC once or, when they have reached the bottom heat having been DNC in the heat above. Once withdrawn a boat **must** seek permission to return to racing. When boats are withdrawn it is not necessary to re-schedule to a different fleet size if this is likely to be or is fluctuating, until there is a significant change to the numbers in the lowest heat. This flexibility is given at the bottom of Schedule 3. The score for withdrawn boats is total entry + 1.

### Scoring after redress

If 'average points for the event' are awarded for redress in a heat a score cannot be properly awarded until the end of the event. RDG should be placed in the appropriate "box" for that boat's score. Only the score for the boat given redress is adjusted. The scores of the adjacent boats and the boats below are not altered.

### Scoring example with a 16 boat entry and manual results sheet

The Heat Record Sheet, on the last page of this advice note, has spaces for *finishing* times of the heat, columns for the boats 'scheduled to sail', the *finishing* order, comments and a full description of the RRS A11 abbreviations. The example, which is applicable to all heats except in Race 1, shows the continuity of the sequence of points for those who have *finished* correctly and includes those who may have been recorded DNF etc. Note that boats placed in lower heats shall be scored as if boats recorded as DNF, RAF, OCS, DNS, DNC, BFD, DSQ, DNE and DGM in higher heats had *finished* correctly. The boat having Redress given (RDG) in this case - 'average points at the end of the event', is clearly marked - she would have scored 7 points otherwise. The scores can be simply transferred to the computer or master score sheet. If a manual score sheet is used, listing the boats in Sail Number Order can speed up the process.

Heat A finishing order		
Order	Comment	(score)
A1		1
A2		2
A3		3
A4	DSQ	17
A5		4
A6		5
A7		6
A8	Redress	RDG
A9	DNF	11
A10	DNC	11

Heat B finishing order		
Order	Comment	(score)
B1 -	to Heat A	
B2 -	to Heat A	
B3 -	to Heat A	
B4 -	to Heat A	
B5		11
B6		12
B7	DSQ	17
B8		13
B9		14
B10		15

The example continues with the **ORDER OF FINISHING PLACES** for boats "scheduled to sail" in the next race.

**Heat B** - A8, A9, A10, B5, B6, B8, B9, B10, A4, B7

**Heat A** - A1, A2, A3, A5, A6, A7

### Frequencies

In large events there may be frequency conflicts within the fleet. Using the same frequency for competitors at each end of the fleet will go a long way to keeping the flow of the event going.

But also keep your eye on the top six boats in the lower heats as they are entering the final stages of the heat and check their frequencies against those of the boats in the next heat. If there is a likely conflict then change the frequencies of the boats preparing to sail so that time is not wasted between heats.

# Heat Record Sheet

<b>Start time</b>	<b>Time of 1<sup>st</sup> boat to finish</b>	HOUR	MIN	SEC	<b>Race Heat</b>
Wind, weather etc	<b>Time of last boat to finish</b>				

<b>Boats 'scheduled to sail'</b> ..... ..... <b>boats should be sailing in this heat. List all the sail numbers</b>		<b>Check boats before start of heat</b>	<b>Finishing places</b> <b>SAIL NUMBER</b>		<b>OCS, DNC, DNS, DNF, etc or after the finish</b> <b>RAF, DSQ etc</b>	<b>'Order of finishing places'</b>	<b>Score</b>
1			<b>1</b>				1
2			<b>2</b>				2
3			<b>3</b>				3
4			<b>4</b>				4
5			<b>5</b>				5
6			<b>6</b>				6
7			<b>7</b>				7
8			<b>8</b>				8
9			<b>9</b>				9
10			<b>10</b>				10
11			<b>11</b>				11
12			<b>12</b>				12
13			<b>13</b>				13
14			<b>14</b>				14
15			<b>15</b>				15
16			<b>16</b>				16
17			<b>17</b>				17
18			<b>18</b>				18
19			<b>19</b>				19
20			<b>20</b>				20

**Abbreviations for the finishing line judges:**

Please record 'lettered' finishing places correctly

**OCS** - on the course side of the starting line at the starting signal, did not return and so failed to start,

**DNC** - did not come to the starting area,

**DNS** - that did not start other than OCS and DNC,

**DNF** - did not finish,

Did not complete the course properly as RRS 28.

Copy and reduce this to A5 or use at A4

<b>Observers:</b>	<b>Umpires:</b>
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