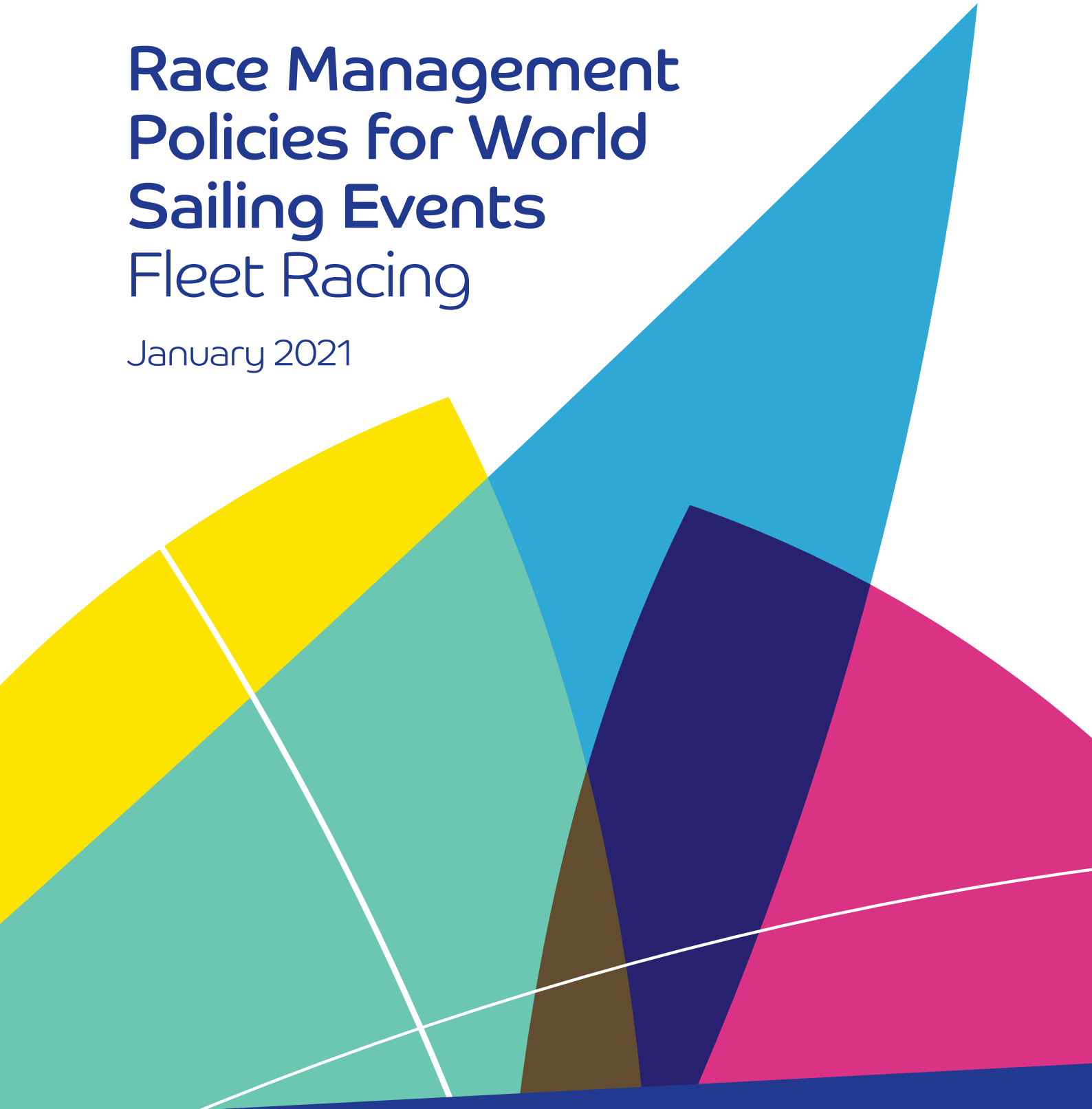
Race Management Policies for World Sailing Events

Fleet Racing

January 2021



sport / nature / technology

World Sailing

Changes in this version

Criteria for heat mitigation added as Clause 23.

Suggested sailing instruction wording to change meaning of race signals AP/H and N/H when possible environmental factors require immediate evacuation from the water. Clause 24

World Sailing RACE MANAGEMENT POLICIES FOR THE OLYMPICS and World Sailing EVENTS
FLEET RACING[1]

Please note that these policies are guidelines to the Race Management Team. Failure to observe these guidelines are not grounds for redress.

1. Definitions

1.1 **Principal Race Officer** – a World Sailing Race Officer appointed by World Sailing responsible for the conduct of racing on all course areas**.**

1.2 **World Sailing Race Officer** – an International Race Officer approved or appointed by World Sailing.

1.3 **World Sailing Course Representative** – a World Sailing Race Officer appointed by World Sailing responsible for the conduct of racing on a course area.

1.4 **Course Race Officer –** a race officer appointed by the Organizing Authority. The Course Race Officer is responsible for managing the race management team for an assigned course area.

1.5 **Race Management Team –** the Principal Race Officer, World Sailing Race Officers, Course Race Officers and all on-the-water volunteers responsible for managing racing.

1.6 Attachment 1 outlines the respective roles of the Principal Race Officer, the World Sailing Race Officer, Course Representative and the Course Race Officer.

1.7 "Will" means the intentions of the race management team.

2. General Principles

2.1 The role of the race management team is to conduct the races and to facilitate racing as directed by the organizing authority as required by the rules.

2.2 These policies are applicable for any course and any target time. Creation of different courses is to be encouraged.

2.3 A shortage of time or completed races is not a basis for variance from these policies.

2.4 The operator of a race management team vessel will promptly advise the Course Race Officer if he/she believes his/her vessel has substantially affected one or more boats racing.

3. Times/Timing/Changes In Schedule

3.1 Times will be based on GPS time. The starting sequence will begin on an exact minute - hh:mm:00

3.2 Starts will not be delayed for competitors to reach the race area if they could have arrived with reasonable diligence.

3.3 To alert boats that a race or sequence of races will start soon, the orange starting line flag(s) will be displayed (with one sound signal) at least five minutes before a warning signal is displayed.

3.4 The orange starting line flags(s) will be removed (with no sound signal) four minutes after the starting signal unless the race management team intends to make the warning signal for the next fleet to start within ten minutes of the previous start.

[1]The World Sailing Secretariat will use these policies, with revisions as appropriate, for other events.

3.5 The race management team will use the entire day if necessary, to complete the schedule. Postponement of racing to another day will be co-ordinated with the different course areas.

3.6 If the weather forecast suggests it is unlikely that racing will be possible on an upcoming day (too much or too little wind) the schedule may be changed to sail more races in a day. The number of races sailed will not become more than one race ahead of schedule and any change will be notified on the day before it is to take effect.

4. Decision to Race

4.1 The race will be started at the scheduled time if the wind conditions and visibility are within the parameters outlined in these policies. Waiting for 'better' conditions may be unfair and will be avoided.

4.2 The race management team will not wait for the wind to 'stabilize'. Competitors can compete in "shifty" conditions.

4.3 The start may be postponed if a major wind shift is expected based on a known pattern or other reliable information (example: sea breeze can be seen in the distance and is expected to fill in). Otherwise, the race management team will start the race. The wind shift may not occur, the course can be corrected, or the shift may occur after the race is completed.

4.4 Wind will be measured from drifting boats.

4.5 Average wind speed will be determined over a five-minute period.

4.6 Races will not be started in less than an average of 5 knots of wind established over the entire course area. This lower limit may be higher if there is strong current in the racing area.

4.7 Races will not be started in more than an average of 25 knots. For the 49er and 49er FX classes this upper limit is approximately 2 to 5 knots less in heavy seas and/or gusty winds. These limits may also vary for all classes depending upon sea conditions, current and rapid changes in velocity.

4.8 Races will not be started if reduced visibility prevents the race management team from sighting the starting line and identifying premature starters. The fact that the first mark cannot be seen from the starting area is not, in and of itself, a reason to postpone racing.

4.9 Where possible the race management team will postpone ashore (AP, or AP/Numerical pennant) or send competitors ashore (AP/H) if current weather conditions that are not suitable for racing are likely to continue.

4.10 For windsurfers, a maximum of 3 races per day will be sailed irrespective of planing conditions.

4.11 When racing back to back, the interval between the finish line closure and the new warning signal for that group will normally not be less than 5 minutes (10 minutes for windsurfers). This may be varied according to conditions.

5. Courses

5.1 The race management team will attempt to set the longest possible first leg within the constraints of the course area and the target time.

5.2 The course length will be laid to give the first boat of each fleet the best chance of achieving the target time.

5.3 For trapezoid courses, the length of the reaching leg between Marks 1 and 2 will be approximately two-thirds of the length of leg 1.

5.4 The reaching leg angle 110° off the wind for windsurfers and boats without spinnakers or 120° of the wind for the boats with spinnakers.

5.5 Gates will be approximately 10 hull lengths wide, laid square to the sailing wind. Variations in width and angle may be appropriate to adjust for current or other prevailing conditions. Laser range finders will be used to determine the width of gates.

5.6 Usually leeward gate Marks 4p/4s will be laid after the start (last start of the sequence in case of multiple fleets). In deep water or strong current Marks 4p/4s may be laid before the start.

5.7 When only one gate mark is laid, that mark shall be rounded to port. A suitable sailing instruction is: "If only one gate mark is in position, that mark shall be rounded to port."

5.8 For windsurfers, the race management team may use a slalom immediately before the finish when planing conditions exist. If a slalom is used, the target time for that portion of the course will be 2 minutes maximum.

5.9 For windsurfer medal races in planing conditions the course will have a reaching start and a reaching finish.

6. Starting Line

6.1 Windward starting lines will generally be laid square to the median sailing wind. Current, favoured side of the course, expected wind shifts and other variables may justify variation from this guideline.

6.2 When there is a gate mark directly above the starting line it will be laid approximately 0.05 nm above the starting line.

6.3 The table below is a guide to the length of the starting line for fleet races. Use similar multipliers for other classes. A larger multiplier may be used in strong winds or heavy seas.

Class	Boat Length	Multiplying factor
RS:X Men	2.86	1.5 to 3
RS:X Women	2.86	1.5 to 3
Finn	4.54	1.5
Laser	4.24	1.5
Laser Radial	4.24	1.5
470 Men	4.7	1.5
470 Women	4.7	1.5
49er	4.9	2
49erFX	4.9	2
Nacra 17	5.25	2

Starting line length = number of boats x boat length x Multiplying factor.

6.4 For medal races the starting line length should be approximately 100 metres for all classes except the Nacra 17 which should be approximately 150 metres.

6.5 Laser range finders and/or GPS will be used to determine starting line lengths.

7. Starting procedure

7.1 For events where there is live Media coverage, the Sailing World Cup and Olympic Games the numerical starting system in Attachment 2 will be used for all starts. Otherwise RRS Rule 26 will be used.

8. Sighting the Line/Timing/Signalling/Recording

8.1 The race management team will sight the starting line from each end.

8.2 When World Sailing race officer(s) are appointed they will sight the starting line with another member of the race management team.

8.3 Each line sighter will use a hand-held voice recording device and record, without stopping, from at least 90 seconds before the starting signal until after anything of interest after the start. A commentary of anything of interest will be recorded (such as boats getting close to the line, bunching, etc.).

8.4 If tapes are used, they will be labelled and preserved until after the conclusion of the entire event. If digital recorders are used, each day's recording will be saved and indexed for easy retrieval.

8.5 In no circumstances will an individual recall be signalled later than 5 seconds after the starting signal.

8.6 The race management team will not signal an individual recall and then a general recall.

8.7 Competitors who have been scored OCS, UFD or BFD, and their coaches, may listen to the voice recording(s) of the applicable start(s). A time and location for doing so each day will be posted on the Official Notice Board.

8.8 Where possible video recordings will be made of the start. These videos will be made available for competitors to review.

9. Calling OCS

9.1 The race management team will not permit a race to continue if it believes that unidentified boats were over early.

9.2 If the race management team is satisfied that all boats over the line have been identified, an Individual Recall will be signalled.

9.3 Except after a black flag general recall (when the requirements of RRS 30.4 will be met), sail number of boats recorded as OCS, UFD or BFD will be posted on the start boat after boats have rounded mark 1 for the first time, or, in the case of more than one fleet on the same course, after the last fleet of that sequence of starts has rounded mark 1 for the first time. (Note use the sailing instruction to allow country codes or bow numbers when these are used as boat identification).

10. Postponing A Race During The Starting Procedure

10.1 The race management team will postpone the race during the starting procedure if the mean wind shifts more than 10 degrees or in the event other influences cause boats to bunch at one end of the start line. In rapid oscillations, the race management team will endeavour to lay a starting line based on the mean oscillations expected.

10.2 The race management team will consider postponing the start for any of the following reasons:

(a) a drifting mark,

(b) a significant error in the timing of signals,

(c) other boats interfering with the competing boats,

(d) inappropriate starting line length or angle,

(e) the positions boats are taking on the starting line indicate a line bias in the minds of the competitors,

(f) a reduction in visibility preventing the race management team from sighting the starting line or identifying premature starters,

(g) a change of the conditions for flag O, and

(h) other factors that might affect the fairness of the race.

10.3 If the race management team considers that adjusting the starting line is unlikely to improve the chances of fair start then the start will be allowed to continue.

10.4 For a postponement that the race management team anticipates will be longer than ten minutes, the orange starting line flag(s) will be removed (with no sound signal), and then displayed (with one sound signal) at least five minutes prior to the warning signal.

11. General Recall

11.1 When the race management team is not satisfied that all boats over early (or that have broken RRS 30.3 or 30.4) have been identified, a General Recall will be signalled.

11.2 If a race management error is discovered after the starting signal (e.g., timing), the race management team may abandon the race (by using flag N). In these circumstances, the race management team will not signal a general recall.

11.3 When using RRS 30.3, if a general recall would result from unidentified boats on the course side of the starting line early in the minute prior to the starting signal, a postponement will be signalled immediately. If the race management team is satisfied that the starting line was fair then the next start will use RRS 30.4.

12. Starting Penalties (Flags U, I, Z and Black Flag)

12.1 Flag I (RRS 30.1) and Flag Z (RRS 30.2) will not be used.

12.2 Flag P will be used for the first attempt of fleet race of 10 or less entries. For fleet races of more than 10 entries RRS 30.3 will be used for the first start

12.3 In the event the start has been postponed, or a General Recall has been caused by the length or angle of the starting line, the race management team will adjust the starting line and make another attempt using the same preparatory signal.

12.4 If the race management team is satisfied that a General Recall was not the result of the starting line, it will use the black flag for each subsequent attempt.

12.5 An important principle followed by the race management team is that the black flag will only be used when general recalls are caused by the boats themselves, or rapid oscillations of the wind, and not by actions of the race management team.

12.6 The race management team will make every effort to signal a postponement in the event of any problems with the starting line.

13. Shortening The Course

13.1 Races will not be shortened using RRS 32.

13.2 Reducing the length of a leg, even the final leg, may be done by using a minus sign as specified in RRS 33.

14. Abandonment

14.1 On the first half of the first leg, the race management team may abandon in the event of a major, persistent, wind shift (more than 25 degrees). After that, the race management team will let the race continue if it is able to adjust to the changed conditions.

14.2 Visibility: The race management team will consider abandoning a race if it is satisfied that a reduction in visibility affects its ability to safely manage racing. The fact that boats cannot see the next mark from the prior mark is not, in and of itself, reason to abandon the race.

14.3 Collapse of wind: The race management team may abandon the race when it is unlikely that the leading boat will complete the course within the overall time limit given the wind conditions at that point in time.

14.4 The race management team may abandon the race when a new wind has caused the fleet to invert.

14.5 Once a race has been started, the race management team will not abandon the race simply because the average wind speed increases beyond the stated limits. The race management team will consider abandoning the race if it is unable to safely manage racing.

14.6 The race management team will make every effort to ensure that other vessels do not interfere with racing. The race management team will consider abandoning the race if it determines that an outside influence has made the race unfair.

15. Adjusting The Course To A New Wind Speed Or Direction

15.1 Change in wind direction:

(a) With a persistent wind shift of 10° or less the course will not be changed unless necessary to adjust for current or to provide a square run.

(b) Between 10° and 15° consideration will be given to adjusting the course to the new wind provided that the race management team is confident that the shift is likely to persist.

(c) With a persistent wind shift of more than 15°, the race management team will attempt to change the course to the new wind.

(d) With a persistent wind shift of more than 45°, the race management team will consider its influence on the race. Under these circumstances, the race management team may either change the course or abandon the race.

(e) Frequent and violent oscillations: Under these circumstances the race management team may not be able to adjust the course sufficiently or quickly enough to maintain a race of the required standard. In this case the race may be abandoned.

(f) Changes in current or a difference in the angle of the current relative to the wind may justify variations from these guidelines.

15.2 Changes in length of legs

(a) The race management team will attempt to minimize the number of changes in leg length to achieve target times. In general, changes in length will only be made if it appears that the time for the first finisher will be more than 20% outside the target time.

(b) Change in leg lengths will not be made to reduce a leg to less than 50% or increase a leg to more than 150% of original leg length.

(c) Changes in current may justify variations from these guidelines.

15.3 When changing the direction of the next leg (RRS 33) a red rectangle or a green triangle and the compass bearing to the next mark will be displayed. (No compass bearing for windsurfers)

16. RRS 42 – ‘Off’ and ‘Restored’

16.1 The wind speed limits will be as stated in the relevant class rules.

16.2 To avoid constantly turning off and restoring RRS 42 the race management team will make a change, (or display flag O at the start), only if it is satisfied that wind speed is likely to remain over or under the specified wind speed over the entire course area. Once Flag O has been displayed with the warning signal, the race management team should consider a postponement if the wind becomes less than the specified limit before the start. Appendix P5.2(b)

16.3 The race management team will advise the jury team on the course well before a signal is displayed. If the race management team is unable to advise the jury, it will make no change.

17. Finishing Line/Finishing Procedures

17.1 For trapezoid courses, the finishing line will be set 0.15 NM from the mark 3 gate.

17.2 For LG and LR races the distance of finishing line for the mark 4 gate will be as in the table.

Wind Strength	4 -12 knots	12 knots plus
Dinghy classes	0.05 NM	0.1 NM
Skiffs and Boards	0.1 NM	0.15 NM

17.3 The finishing line will be laid before the first boat begins the final leg.

17.4 The finishing line will be between staffs displaying blue flags when the line is between race committee boats at each end, or between a staff displaying a blue flag and the nearby finishing buoy.

17.5 The blue flags will be displayed (with no sound signal) as the first boat rounds:

(a) Mark 2 for the final time in the case of trapezoid courses; or

(b) Mark 1 for windward-leeward courses; or

(c) Mark 4p/4s gate for windward finishes.

17.6 In the case of a late course change for the final leg, the blue flag will be displayed as soon as possible after the finishing line has been laid.

17.7 The finishing line will be approximately 50 metres (75 metres for 49er, 49erFX and Nacra 17) in length, set square to the direction from the last mark for reaching finishes (square to the sailing wind for upwind or downwind finishes). Laser range finders will be used to establish the length of the finishing line.

17.8 The blue flag(s) will be removed (with no sound signal) upon the earlier of: (i) expiration of the time limit, or (ii) Immediately after the last boat finishes.

17.9 There will be two line sighters on each finish boat. Whenever practical, at least one of the line sighters on the finish boat(s) will be a World Sailing Race Officer.

17.10 Each line sighter will use a hand-held recording device to record the order of finish.

17.11 If tapes are used, they will be labelled and kept until after the end of the entire event. If digital recorders are used, each day's recording will be saved and indexed for easy retrieval.

17.12 A written record of the finishing order will also be maintained by each finish boat.

17.13 Competitors and coaches may listen to the voice recording(s) and review the written records of their finishes. A time and location for doing so each day will be posted on the Official Notice Board.

18. Requests for Redress

18.1 If the race management team believes it may have made error affecting the outcome of the race for which redress may be available, it may request redress for the potentially affected boat(s).

The race management team will consider requesting redress for a boat if it is satisfied that that boat's score has been made significantly worse by the actions of an official boat.

19. Race Committee Protests

19.1 Since the primary responsibility for protesting breaches of the rules rests with Competitors, the race management team will not normally protest a boat.

19.2 The race management team may protest a boat in the following circumstances:

(a) A breach of a sailing instruction that may not be protested by another boat;

(b) An apparent breach of good sportsmanship (RRS 2);

(c) Failing to take a penalty after knowingly touching a mark, but not protesting another boat (does not apply for windsurfers);

(d) Failing to sail the course (RRS 28)

20. GPS

20.1 All race management boats (signal, pin, finish and mark boats) will be equipped with a GPS.

20.2 All GPS units will be set up to display as follows:

(a) Distance in nautical miles (nm)

(b) Time to local time zone in 24 hour format

(c) Compass bearing in magnetic

(d) Latitude and Longitude in degrees, minutes and decimal minutes (example: 39° 27.928 North, 034° 17.464 East)

(e) Map Datum WGS 84

21. Hand Signals

To assist safety vessels the following signals should be used

I require assistance
Wave an open palm on an outstretched arm

I am "OK" and do not require assistance
Make an open "O" by placing hand on head

22. Using support boats to assist with safety.

The standard wording for sailing instructions to require support boats to assist with safety is: “When the race committee displays flag V with repetitive sounds, all official and support boats shall monitor the race committee radio channel for that racing area for search and rescue instructions. The race committee will announce ‘Flag Victor’ using the designated VHF Channel.”

23 Heat Mitigation and Rest Periods

The Wet Bulb Globe Temperature (WBGT) is a type of apparent temperature, a measure of the heat stress in direct sunlight, which takes into account: temperature, humidity, wind speed, sun angle and cloud cover (solar radiation).

Where excessive heat may be an issue the following guidelines will be followed.

WBGT measurements will be taken every 20 minutes on the race committee signal vessel, in a position 2m clear of reflective surfaces (deck, mast, structures, water surface, etc) , exposed to the true wind and uninterrupted by shade, whenever heat is considered to be an Issue.

- When measurements are below 29° the rest period between races will normally be approximately 10 minutes. That is, from the last finisher to the display of the orange flag for the next race.
- For WBGT measurements between 29° and 32° the rest period will be increased to approximately 20 minutes, with a minimum of 10 minutes recommended.
- For WBGT measurements 32° or above racing will be suspended and sailors most likely sent ashore unless, from observations (building sea breeze, expected cloud cover etc) an imminent decline in the temperature is expected.

24 Environmental Factors

Where environmental factors (Lightning, sudden storms, etc) require immediate evacuation of the racing area(s) to the shore the following amendment will be made in the sailing instructions.

When Flags AP over H or N over H are displayed from a Race Committee vessel, all boats shall immediately return ashore and will wait there for further signals. (This changes race signals AP over H and N over H.)

Attachment 1 – The Roles of World Sailing Race Officers

The World Sailing Race Officer

The IOC Olympic Charter states that the international federations are responsible for the technical control and direction of their sports (Olympic Charter Rule 57).

World Sailing Race Officers will work closely with the Course Race Officers appointed by the Organizing Authority. World Sailing Race Officers will be available to attend redress hearings as a witness for the Race Committee.

The Principal Race Officer shall serve as the lead World Sailing Race Officer, and is responsible for racing on all course areas.

The Course Race Officer

The Course Race Officers are responsible for managing their race management teams and conducting the races.

The Course Race Officers are responsible for the management of all safety procedures.

A Course Race Officer will not take action in relation to any of the following matters (whether or not altered by the Sailing Instructions) without the approval of the World Sailing Course Representative for that course area:

(a) Postponement (RRS 27.3);
(b) Course selection, location, configuration and race duration;
(c) Whether a starting line is to be moved or adjusted (RRS 27.2);
(d) Starting line decisions (OCS and recalls (RRS 29), starting penalties (Black Flag - RRS 30));
(e) Changing Course/moving marks - adjusting the course to a new wind strength or direction (RRS 33);
(f) Abandoning (RRS 27.3, 32 and 35);
(g) RRS 42 “turning off” and “restoring”. (Item 16)
(h) Determination of finishing position (Item 17)
(i) Corrections due to scoring errors (RRS 90.3(c));
(j) Requesting redress on behalf of a boat (Item 18);
(k) Protesting a boat (Item 19).
(l) Imposing a penalty (RRS 90.3, A5);
(m) Amending the Sailing Instructions or Notice of Race;
(n) Racing areas to be used; and
(o) Schedule.

World Sailing Course Representatives may initiate action in relation to these matters, in which case the Course Race Officer will be governed by the World Sailing Course Representative’s decision. World Sailing Course Representatives may also initiate action if she/he is satisfied that the racing is not being conducted according to the rules, or for any other reason directly affecting the safety or fairness of the competition.

Attachment 2 – Suitable wording for the starting system in the sailing instructions.

12 THE START

12.1 The starting line will be between a staff displaying an orange flag on the race committee vessel at the starboard end and either

12.1.1 the course side of the port-end inflatable starting mark, or

12.1.2 a staff displaying an orange flag on the race committee vessel at the port end.

12.2 A buoy may be attached to the race committee starting boat anchor line just below keel depth. Boats shall not pass between this buoy and the race committee starting boat at any time. This buoy is part of the race committee starting boat ground tackle. [DP]

12.3 When a starting sequence is in progress, boats whose warning signal has not been made shall avoid the starting area. The starting area is defined as a rectangle 50 meters from the starting line and marks in all directions. [DP]

12.4 RRS 26 and Preparatory Signals in Race Signals are deleted. Races will be started using the following signals. Times shall be taken from the display of visual signals. This changes RRS 26 and Race Signals.

Minutes before starting signal	Visual signal displayed	Visual signal removed	Sound Signal	Means
10+	Orange starting line flag		one	Attention signal race will start soon
6	Class flag P or starting penalty if required (U, or Black) Rule 42 (flag O if applicable)		No sound	Class to start and applicable rules
5	White flag with the number 5		One	Warning signal
4	Blue flag with the number 4	White flag	One	Preparatory Signal
3	Pink flag with number 3	Blue flag	One	Three minutes
2	Red flag with number 2	Pink flag	One	Two minutes
1	Yellow flag with number 1	Red flag	One long sound	One minute
0	Green flag	Yellow flag	One	Start signal
+1		Green flag and Class Flag, P, U or Black and O)	No sound	

12.6 To alert boats that a race or sequence of races will begin soon, the orange starting line flag will be displayed with one sound at least five minutes before a warning signal is made.

Attachment 3 - Items pertaining only to medal races.

A3 1 The first attempt at a start will use Flag P. That is, no starting penalty imposed.

A3.2 Add 12.7 to the Sailing instruction about starting.

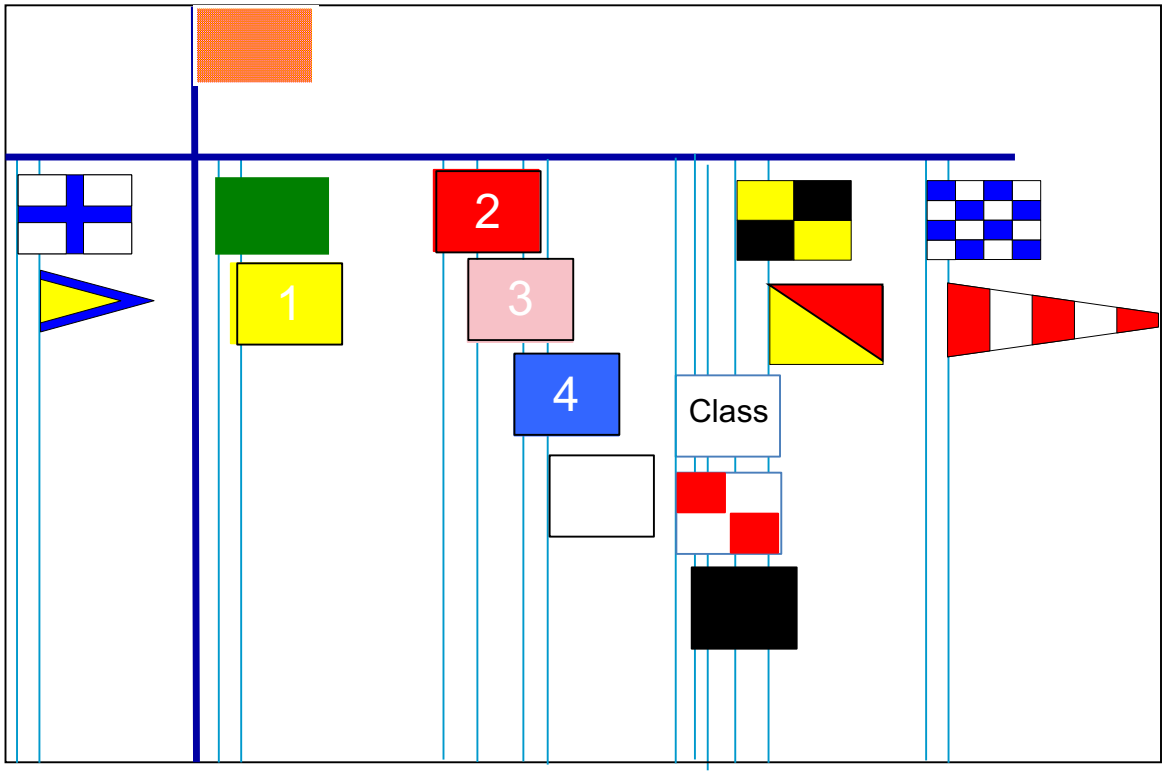
12.7 Starting sequence for medal races.

Minutes before starting signal	Visual signal displayed	Visual signal removed	Sound Signal	Means
8+	Orange starting line flag		one	Attention signal race will start soon
4	Class flag P or starting penalty if required (U, or Black) RRS 42 (flag O if applicable)			Class to start and applicable rules
3	Pink flag with number 3		One	Warning Signal
2	Red flag with number 2	Pink flag	One	Preparatory Signal
1	Yellow flag with number 1	Red flag	One long sound	One minute
0	Green flag	Yellow flag	One	Start signal
+1		Green flag and Class Flag, P, or U or Black and O)	No sound	

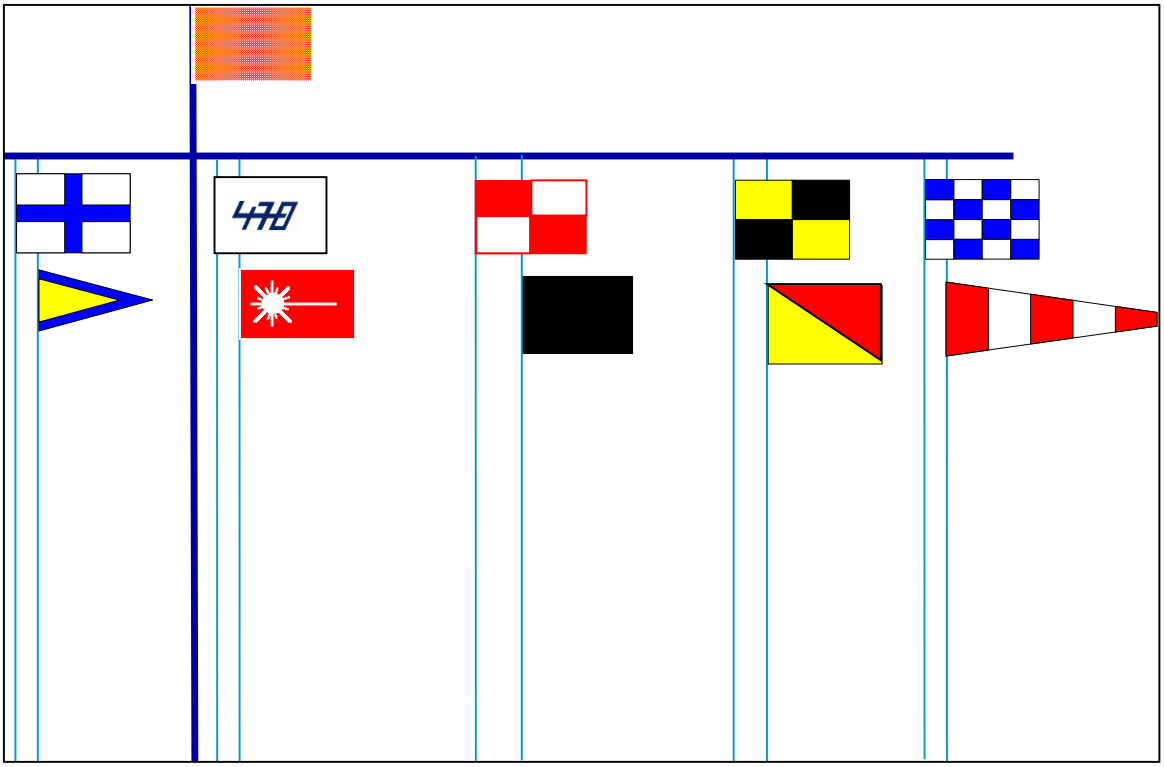
A3.3 During races, when redress is not available, the race management team will abandon the race if it is satisfied that the actions of the race management team, the organising authority or a vessel not racing, have affected the fairness of the race.

Attachment 4 – Flag Lay Out on the Committee Signal Boat

Flags ‘Grouped’ (halyards close to each other), All flags displayed at the top of the hoist.



To the bow



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