

Appendix Seven: Race Management Procedures

RACE MANAGEMENT PROCEDURES

These procedures are established to provide guidance to the Committee Boat or Racing Officer of the Day (ROD) in running races for the OPCYC. They are applicable for both Cup and Club races run by the OPCYC, and are subject to modification by the permanent Race Committee or Rear Commodore for Racing.

1. ENSURE THAT YOU HAVE THE REQUIRED EQUIPMENT

- Flags and shapes
- Drop marks for the finish line for Yankee Station Races, or drop marks for Pointer Rallies on Hampton Flats. (or ensure that another boat has taken responsibility to put the marks in)
- Course marking panels (one for each course to be set)
- GPS (You provide)
or Count-Down Clock or stop watch with second hand (You provide)
- Horn or gun (You provide)
- Operational VHF radio (You provide)
- Suitable Anchor and at least 100 ft of rode (You provide)
- Adequate crew (You provide)

2. ESTABLISH THE RACE COURSE

- In conjunction with the Rear Commodore for Racing or the Race Captain, or in their absence, another member of the Permanent Race Committee, select the course from among those listed in Appendix 6, (Yankee Station) 7, (Pointer Rallies) or 9. (Hampton Flats) Tentative pre-selection may be done with the Rear Commodore for Racing or Race Captain by cellular telephone before arrival at the start area or by VHF Radio on channel 72 (or 68) after departure for the start area.

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- The racing rendezvous point is normally Mark "Y" (daymark R"2").
- For Pointer Rallies, The racing rendezvous point is CCV Hampton Roads Mark "A" (R"4") off the mouth of Hampton creek.
- For races on the Hampton Flats, the rendezvous will also be CCV Hampton Roads Mark "A" (R"4") off the mouth of Hampton creek.
- The start location for Cup Races will be as directed by the sponsoring yacht club.
- Be on station not later than 0930 hours. This is important.

Course Direction

The course will be selected based upon wind direction. The first leg should normally be directly upwind, the second and third legs reaching and running (in either order), and the last leg directly upwind. **A close reach is not the same as a windward leg.** In some cases, it will not be possible to set a course with the first leg upwind. In this event, one of the subsequent legs must be **directly** upwind. You will note that each of the courses listed under each different wind direction satisfies this requirement.

Course Length

Set the length of the course based on the existing and predicted wind strength. The "A" courses are the shortest, the "B" courses are intermediate, and the "C" and "D" courses are the longest. As a rough rule of thumb, use the following:

- For light winds of 1-6 knots, use an "A" course
- For medium winds of 7-11 knots, use a "B" or "C" course

Appendix Seven: Race Management Procedures

For stronger winds of 12-17 knots, use a "C" or "D" course

For even stronger winds of 17 + knots, use a "B" or "A" course

Races will not normally be started in over 25 knots (31MPH) of wind.

3. DISPLAY THE RACE COURSES SELECTED

- Fly the RC pennant. To save time, you can put this up while you are on the way out to the start.
- Set up course marking panels on side of the boat by 0945, so racers can plan their starts and course strategy. Put them up as early as possible, but if there is a question about the course because of light or variable wind, wait until you are sure what course will be used. *Note: if you change the course after it has been posted, you must fly the "Come Within Hail" flag with multiple sound signals when you post the new course. If you change the course after the starting sequence has begun, you must restart the start sequence from the beginning. See paragraph 11, "Recalls and Postponements."*

4. SET THE START LINE

a) Location of the RC boat relative to the start mark

The Committee Boat should normally be on the Starboard end of the start line, so as to have the "**Pin to Port**" when looking toward the direction of the first mark. The placement of the *starting* line is independent of where the *finish* line is to be placed. The start line is defined as a straight line between the top of the "Pin", or fixed mark, and an orange flag on the Race Committee boat. In the absence of an orange flag on the RC boat, the start line shall be a line between the fixed mark and the mainmast of the RC boat.

b) Start Line Length

The length of the start line should be approximately 1¼ times the combined length of all the boats in the largest class entered. For example, if there are 15 boats, and the average boat length is 30 feet long, make the line

$$15 \times 30 \times 1\frac{1}{4} = 563 \text{ ft (170 m) long.}$$

To measure this distance accurately, make a timed run at a known speed in knots. Distance (in hundreds of feet) divided by Knots of speed = time to run the line from fixed mark to R/C boat location.

$$5.63 \text{ hundred feet} \div 5 \text{ Knots} = 1.13 \text{ minutes} = 1 \text{ minute, 8 sec.}$$

If in doubt, set the line at about 180 meters. Too long a line will allow the racers to "barge" on the line without having to worry about other racers with the right of way. This doesn't require them to learn how to start properly. Too short a line crowds the racers into a small patch of water, increasing the likelihood of collisions and protests. $30 \times 1.25 \div 5 \div 100 = 0.075$

Distance to motor at 5 knots = 0.075 X No. boats

Distance to motor at 4 knots = 0.094 X No. boats

c) Angling the Start Line

Anchor the committee boat *so that it is upwind and/or up current of a line through the start mark perpendicular to the wind direction.* From this position, you can adjust the angle of the starting line by letting out more scope, without the need to move and re-anchor. Let out scope to make the line as square to the wind as possible. *Assuming this is a standard course with the first leg directly upwind, make the start line square to the direction of the wind, not to the direction to the first mark.* In the special case where the first leg is not an upwind leg, make the line square to the direction to the first mark.

5. CHECK OFF RACERS

For dedicated R/C boats that will be on station for the duration of the race, log each yacht's name on a blank Race Results Form. Yachts should check in with the Committee Boat by sailing past on the outside of the starting line, while staying clear of yachts whose start sequence has begun.

Appendix Seven: Race Management Procedures

6. ESTABLISH THE FINISHING LINE

The finish mark will normally be the same mark as the starting mark. The finish line will normally be between the finishing mark and drop mark as follows:

The finish line shall be set up on an imaginary line projecting from the fixed mark at right angles to the rhumb line of the last leg of the course so that racers approaching the finish line on the last leg will see the "**Pin to Port**". (The fixed mark should be on the port side of boats approaching to finish.) The finish line should be much shorter than the start line. Make it wide enough for at least 4 boats to cross simultaneously.

a) Cup Races and Club Races with a dedicated Non-Racing Committee Boat.

For Cup Races and for Club Races in which a dedicated Race Committee Boat has been designated (a power yacht or non-racing sailboat) the RC Boat will remain on station and will reposition as required to set up the finish line as described above.

b) Club Races with a Racing Officer of the Day (ROD)

Before the Race Committee boat starts, the RC will place a drop mark to establish the finish line between the finishing mark and the drop mark as described above. When finishing in the absence of an RC boat, the finish line is a line between the top of the fixed mark and the center of the drop mark.

c) Pointer Rallies:

For Pointer Rallies, the finish line will always be the starting line.

Note to racers:

Even if you think the drop mark is on the "wrong" side of the mark, the finish line is between the permanent mark and the drop mark.

7. Starting the Race

The 5-Minute horn and Class Flag should go off/be raised precisely at 0955 hours. The Class Flag should be dropped precisely at 1000. Yachts arriving late will be allowed to start, but will not receive any time adjustment. The only good reason for delaying the start is if you are waiting for the wind to build from a calm, or for equipment malfunction or breakdown on the committee boat.

STARTING SYSTEM COUNTDOWN SEQUENCE:

(US Sailing RRS 26 method)

<u>Time</u>	<u>Event</u>	<u>Signal/Sound</u>
30 min before start (0930)	RC On Station	RC Flag(s)
15 min before start (0945)	Course Posted	Multiple horn blasts
5 min before start (0955)	Warning	Class Flag(s); 1 Horn blast
4 min before start (0956)	Preparatory	Blue flag or P, I, Z, Z with I, or black flag; 1 Horn blast
1 min before start (0959)	1 minute	Prep Flag or shape down; 1 long Horn blast
Start (1000)	Start	Class flag down; 1 Horn blast

(Class Flags are shown in Appendix Five. Be sure you know your class flag, as well as the meaning of P, I, Z, and black flags)

Times shall be taken from the visual signal; the absence of a sound signal shall be disregarded.

Appendix Seven: Race Management Procedures

NOTE: since all classes start together in all OPCYC club races, the class flag for all OPCYC club races will be a single flag "A" for "All," like this:



All Classes (A) Flag

Whenever possible, GPS time should be used for all signals. If you use a GPS, be sure to align the antenna so it gets good reception and the time it shows will be accurate. A colored shape has the same meaning as a colored flag. Shapes are often used during starts because, unlike flags, they are equally visible from all angles. The use of a horn or gun will supplement the flags/shapes. Times shall be taken from the visual signal; the absence of a sound signal shall be disregarded. Flags/shapes must be raised and lowered *briskly and exactly* as designated above. It is imperative that the sequence be followed precisely, especially insofar as the flags/shapes are concerned. (This includes the *lowering* of flags/shapes) If this sequence is followed exactly, racers will have multiple opportunities to set watches or timers. If it is not followed precisely, it will create confusion by throwing the timing off. Every second is critical to yachts fighting for position at the start. Racers expect the starting sequence to be run flawlessly. The skipper of the R/C Boat must remember that the actual starting line is a line between the center of the start mark *and the staff of the orange flag on the committee boat.* (If no orange flag is present, the end of the start line is the mainmast of the committee boat.) The skipper of the R/C Boat is responsible to ensure that a member of the R/C is positioned so as to observe whether anyone is over early at the start, and to collect the precise elapsed time of each finishing yacht.

Some clubs may still be using the old "10-minute" starting system. This system is shown below for informational purposes, but will not normally be used for any races started by OPCYC.

"Old" Starting System (2001 and earlier)

<u>Time</u>	<u>Event</u>	<u>Signal/Sound</u>
30 min before start (0930)	R/C on station	RC Flag
15 min before start (0945)	Attention/Course Posted	multiple horn blasts
10 min before start (0950)	Warning	White or Yellow flag or shape /Horn
6 min before start (0954)		drop White or Yellow flag or shape (no sound)
5 min before start (0955)	Preparatory	Blue Flag or shape/Horn
1 min before start (0959)		drop Blue Flag or shape (no sound)
Start (1000)	Start	Red Flag or shape/Horn

8. "CHASE STARTS"

In a "Chase Start" race, yachts are awarded their handicap time (including cruising and spinnaker adjustments, if any) at the *beginning* of a race, rather than having their handicap subtracted from their elapsed time after the race is over. The slowest boat will start first, and the fastest boat starts last. Each yacht will be notified of the course length and handicap before the start. The yacht with the largest handicap will start at the first starting signal. Each of the other yachts will start at a time after the starting signal corresponding to the difference between her handicap and the handicap of the slowest yacht.

Appendix Seven: Race Management Procedures

EXAMPLE:

Example Course Length:		8 Nautical Miles
"Slowpoke"	(PHRF 260)	260 X 8 NM = 2080 sec handicap
"Molasses"	(PHRF 240)	240 X 8 NM = 1920 sec handicap
"Middle Ground"	(PHRF 216)	216 X 8 NM = 1728 sec handicap
"Median"	(PHRF 194)	194 X 8 NM = 1552 sec handicap
"Speedster"	(PHRF 164)	164 X 8 NM = 1312 sec handicap
"Red-Hot Comet"	(PHRF 120)	120 X 8 NM = 960 sec handicap

Slowpoke starts at the starting signal at 10:00 AM.

Molasses owes Slowpoke 2080-1920 =160 seconds, (2 min 40 sec) so she starts at 10:02:40. Middle Ground owes Slowpoke 2080-1728 = 352 seconds, (5 minutes and 52 seconds) so Middle ground's start time is 10:05:52 Median owes Slowpoke 2080 - 1552 = 528 seconds = 8 minutes and 48 seconds, so Median starts at 10:08:48 Likewise, Speedster starts at 10:12:48, and Red Hot Comet starts at 10:18:40.

You don't have to do the math. *The Scoring Sub-committee shall normally post a list of registered yachts, with their sail numbers and handicap ratings and start times, on the OPCYC web site prior to the race.* Here's how such a start list might look:

<u>Course 3G 8 NM</u>	<u>Handicap</u>	<u>Start Time</u>
Slowpoke	260	10:00:00
Molasses	240	10:02:40
Middle ground	216	10:05:52
Median	194	10:08:48
Speedster	164	10:12:48
Red Hot Comet	120	10:18:40

Any yacht crossing the starting line before her start time will be called "over early" by the Committee boat and must return and restart properly. After the start, all yachts are racing "boat-for-boat" within their class. Whichever yacht crosses the finish line first is the winner, followed by the second place yacht, etc.

The initial starting signals for "chase starts" are identical to normal race starts as described in paragraph 7 above. In order to provide a clear indication of the official clock, a sound signal shall be made every 5 minutes after the initial start. This sequence will be repeated until the last (fastest) yacht starts. No flags or shapes will be displayed after completion of the initial countdown sequence other than the RC flag and the orange flag. GPS time shall be used for chase start races.

9. OLYMPIC COURSES

As an exception to the normal Yankee Station format, Olympic Courses may be set when there is a dedicated Committee Boat available. Any of the Olympic courses shown may be used. However, courses "O," "R," and "T" are the only ones with a reaching leg, and are preferred for our club, with our wide variety of boat types. Of these, "R" is the easiest to set up, since the start and finish are at the same location. Course "R" is also the most widely used. When an Olympic course is used, the course board will display code flag "O" (yellow/red). This will be followed by a letter indicating which of the Olympic courses is to be sailed. If a red number appears immediately after the letter, e.g., "P 2" this means that the race consists of two laps. If there is no number, it means that the race is once around as shown on the chart. The distance and magnetic bearing to the first mark will be shown to the right. (or below)

Example:

P 2 1.78 215
 (red)↑ ↑(black)↑ code flag "O" ↑

Appendix Seven: Race Management Procedures



Olympic (O) Flag

Note that code flag "O" will be shown for any Olympic course, whether it is course T, R, O, P, or L. The example shown above indicates that Olympic course "P" has been selected, and it is 1.78 nautical miles at a magnetic azimuth of 215° to the first mark. Because it is "**P2**," not just "P", this means that you will sail two complete laps. The overall course length for this course is 1.78 NM upwind to the first mark, 1.78 NM back downwind to the leeward mark, times two laps = 7.12 NM long.

10. POINTER RALLIES

A "Pointer Rally" is a mini-series of three races held on a very short course. The result of all races sailed in a single Pointer Rally will be scored as one race in the Yankee Station series. Each race in a Pointer Rally shall be approximately 2 nautical miles long, and shall be set up in a form similar to an Olympic course "R". (The only difference is that for a Pointer Rally, the start line is the same as the finish line.) One "Pointer Rally" will normally be included in each series of six or more races. No course board is required for a Pointer Rally since the course is already designated.

The following procedure will lay out an Olympic course "R" course that is exactly 1.99 NM long:

Setting the course for Pointer Rallies:

Go to the windward mark of the course (see Appendix 7 for details)

- Proceed to the upwind mark of the course.
- Check the wind direction.

Establish the drop mark at the starting line of the course

- Go 50 m directly upwind of the upwind mark and turn back downwind. Motor at 4 knots directly downwind, with your Windex pointed directly astern, leaving the upwind mark to starboard. Continue to motor directly downwind, and start a stopwatch as you pass the base mark.
- Note the compass heading you are on as you motor downwind. (Write it down.) Add 135 degrees to this heading and write it down. This will be your next heading after dropping a mark.
- When you have motored for 6 minutes 45 seconds at 4 knots, you will have traveled 0.45 NM downwind from the upwind mark. Drop a floating mark off your starboard side and immediately turn 135 degrees to starboard, restarting the stopwatch and coming up on the second heading you have written down. Motor on this new heading for 4 minutes and 48 seconds at 4 knots.

Establish the "wing" or reach drop mark

- After you have motored for exactly 4 minutes and 48 seconds at 4 knots on the second heading, you will have traveled 0.32 NM from the drop mark at the start line. Drop the second mark here. You will be midway between the windward mark and the drop mark at the start line. The windward mark will be 45 degrees to starboard of directly upwind, and the finish drop mark will be 45 degrees to port of directly downwind.

Establish the starting line

- Return to the downwind drop mark, this time leaving the mark to port, and make a 45 degree left turn after passing it, so you are motoring perpendicular to the line between the start mark and the windward mark.
- Measure the length of the start line IAW para 4 b) above. Distance to motor at 4 knots = 0.094 X the number of boats.
- Turn your boat directly upwind, motor directly upwind 50 ft and drop an anchor.

Appendix Seven: Race Management Procedures

- Back down to set the anchor, and let out scope to make sure that the start line is exactly perpendicular to the direction to the upwind mark.

11. RECALLS and POSTPONEMENTS

In any race, should one or more yachts cross the starting line early, the Committee Boat will immediately fly code flag X and make one sound signal.



Individual Recall (X) Flag

The Committee Boat will (as a courtesy) call out the sail number(s) or yacht name(s) identifying the offender(s). If the offending yacht does not respond, call them on VHF 72 (VHF 68 alternate). Boats cited for starting early shall restart by recrossing the start line in the direction of the race start, but must remain clear of all other yachts until restarted. Skippers are responsible to ensure that they have made a clean start. Not hearing the recall is no excuse. If there are a great many yachts over early, the R/C has the option to call a **General Recall**. For a general recall, a "first substitute" (yellow triangle on blue field) will be used, with two sound signals. Again, the flag is the official notice in the event of misfires, etc.



First Substitute Flag

If the wind suddenly shifts direction radically or dies completely in the middle of the starting sequence, or in the event of a mistake in the starting procedure, you should **postpone** the race, by displaying the postponement signal (red and white vertical stripes).



Postponement Flag

The start sequence will begin (from the beginning) again one minute after the postponement flag is lowered. *You may postpone a race at any time prior to the starting signal.*

12. FINISH TIMES AND RECORD KEEPING

There are two methods of establishing and recording elapsed times of the racing yachts:

Cup races

For Cup Races and some Club Races such as Pointer Rallies, a dedicated Race Committee boat will establish the race course, start the race, and take the finishing times of all yachts. The Race Committee will call the finish time of each boat to the Scoring Committee for calculation of corrected time and finishing position. The Scoring Committee will adjust the finishing positions as necessary following the resolution of any protests.

Club Races

For those Club Races where no dedicated Committee Boat is available, the first yacht will finish between the drop mark and the permanent mark, recording her own finish time using GPS time if possible. She will

Appendix Seven: Race Management Procedures

then anchor as close to the drop mark as possible. She will then collect the finish times for all other yachts, again using GPS time if possible. *The first yacht to finish is responsible for taking and recording the finishing times of all yachts racing.* This yacht should remain on station until the last yacht has crossed the finish line or the established race time duration has elapsed (normally 4 hours from start – 1400 hours). This yacht will retrieve the drop mark before returning to home station. Finishing times will be provided to the scoring committee by cell phone or radio as soon as possible so that the results may be computed on the water. If the finishing yacht does not plan to return to Ft. Monroe, she may transfer her duties to a yacht that finishes behind her and provide that yacht with recorded times by radio, cell phone, lap top or message handoff.

Since the Racing Officer of the Day (ROD) starts the race, her start time will be different from all the others. After all other yachts have started, the ROD shall weigh anchor, drop a drop mark IAW para 6 above to establish a finish line, and start, recording her own start time for delivery to the scoring committee. This procedure will allow the ROD to compete in the race. A racing yacht's time begins with the starting flag and ends when crossing the finish line. Time starts when the class flag goes down, not when a yacht crosses the start line. As a single exception, the ROD boat's time will start when she crosses the line. The ROD should use GPS time to start the race and record his own start time if possible.

13. RACE ADJUDICATION

The Rear Commodore for Racing is the final adjudicator during race operations from course establishment to finish. In his absence, the Race Captain or a member of the Permanent Race committee will act in his stead.