

Blackwater Yacht Racing Association

Race Committee Instructions

as amended January 13, 2007

I. **Purpose:** The Race Committee is the single most important component of a successful sailboat racing program. Tremendous responsibility and discretion is vested in the Race Committee and considerable effort, physical and mental, is required to do a good job. Sometimes the hard work is rewarded with criticism from competitors who have real or imagined complaints. The outcome of a race, regatta, or whole series may turn on the conduct of the Race Committee. One of the benefits of the BYRA policy of rotating race committee duty among the competing boats is that each boat gets to experience the pressure and frustration of being a race committee and will consequently be more tolerant and patient of the others who serve. Race Committee is a very difficult job and must be taken seriously.

II. **Experience:** Some BYRA members have served as Race Committee many times and are knowledgeable and experienced, but everyone has a "first time" when the likelihood of confusion and mistakes are the greatest. The first time Race Committee should be thoroughly prepared by reading all of the pertinent rules and guidelines and by consulting with the Fleet Captain and other experienced members well prior to race day to review and confirm the duties and to become familiar with the materials, equipment and the operation of the Committee Boat. It is very helpful to serve as an assistant on a Race Committee before being in charge, but if that is not possible; finding an assistant with experience is very advisable. There are many members of BYRA (or former members) who are not active competitors, but who have valuable experience and who are willing to help.

III. **Appointment and Service:** The Race Committee schedule is set and coordinated by the Fleet Captain. Assignments are made by boat. Based on the number of boats in the BYRA fleet, no boat should be assigned as Race Committee more than once per year for a series race. The assigned boat may not compete in the assigned race, but the assigned boat will be credited with a completed series race scored as the average of the boat's best four actual finishes in that series.

The assigned boat is responsible for serving as scheduled, or for making a satisfactory substitution if the boat cannot serve. Boats may "swap" assignments with another boat, but the Fleet Captain must be notified of any change. The Fleet Captain is not responsible for finding a substitute if the assigned boat cannot serve. Failure to serve or arrange for an appropriate substitute when scheduled, will disqualify the boat from series competition. The assigned boat may include other persons on the Race Committee as they may desire.

IV. **SUGGESTIONS AND RECOMMENDATIONS:** The following are practical guidelines for conducting and scoring a race:

A. **Pre-Race Day Preparation:**

1. Review BYRA Race Committee instructions, BYRA Sailing Instructions, BYRA "Fundamentals of Sailboat Racing", Racing Rules of Sailing.
2. Start watching long-range weather forecasts for the race day.
3. Consult with Fleet Captain about any questions or uncertainties. Consult with Fleet Captain to confirm service and to discuss anticipated weather and course options. Arrange to meet with Fleet Captain at 9:00 a.m. (or two hours prior to the Skipper's meeting) on the race day.
4. The Committee for the second race of a two race day should meet with the first Race Committee at this same time and consult with the first Race Committee to make compatible plans for both races.
5. Confirm availability and participation of other members of your committee
6. Consult with Charles Manning regarding operation and use of Race Committee pontoon and chase boats.
7. If serving on a two-race day, consult with the other Race Committee to coordinate plans and intentions.
8. Begin planning for gourmet food and beverages on Committee Boat

B. Race Day – Pre-Race:

1. Check weather conditions and forecasts.
2. Arrive at PPYC at 9:00 a.m. and consult with Fleet Captain (and other Race Committee, where appropriate) about weather conditions and possible courses.
3. Assemble and prepare materials for Skipper's meeting, registration sheets for all divisions, pens, clipboards, course descriptions, etc.
4. Confirm availability and readiness of equipment, anchors and lines, flags, buoys, radios, fenders, work gloves, binoculars, cooler, foul weather gear, etc.
5. Review checklist and instructions for Committee Boat operation (posted on steering column) and bring Committee Boat around to dock by clubhouse. Check and load race equipment (don't forget gourmet food and beverages).

C. Course Selection:

1. Consult with Fleet Captain and Commodore about plans for course selection for all fleets.
2. Always try to set course so that mark roundings are "to port" when possible.
3. If wind is steady and a course can be determined before the Skipper's Meeting, dispatch other Race Committee members in chase boat to place orange balls if feasible.

4. If a course is selected which has not been previously measured for distance, that distance must be carefully measured and determined as it is an essential element of corrected time calculations. The G.P.S. must be used to validate the distance for any "new" course.
5. If wind is light (5 knots or less) try to set a course in the channel where wind is expected (wind S or SSE – Bull Run; wind W or E – Blackwater; wind N or E – Roanoke).
6. If wind is light, use a short course with laps and with a "gate" so that race may be easily shortened, if necessary.
7. If wind is heavy (15 knots plus), or conditions are threatening, use a short course with laps and with a "gate" so that boats can be kept in sight and the race shortened, if necessary.
8. If wind is steady and moderate (5 – 15 knots) consider a "road course", which has been previously measured and published.
9. If there will be more than one race on the same day, the first race should be relatively short depending on the conditions.

D. Skippers' Meeting:

1. Start Skippers' meeting promptly as scheduled, introduce Race Committee.
2. Describe course if conditions allow the course to be confirmed at this time.
3. Announce the order of starts for all fleets. Announce recall procedure, and whether or not the one minute rule and around the ends rule applies, and whether any other special condition applies (such as mandatory life jackets). Announce the use of an advance warning signal that the sequence is about to start (i.e. 3 blasts on the horn 1 minute prior to the first flag).
4. Remind the Skippers that a starting fleet has priority over the starting line area and the non-starting fleet(s) should keep clear.
5. Review flags, timing sequence, recall procedures, and any other special announcements. Specifically identify the class flag for each class for the starting sequence. (See paragraph F) In order to race a boat must display sail numbers.
6. Announce the time for beginning the starting sequence, which should ideally be no more than one hour from the start of the Skippers' meeting. While it is generally desirable for the fleets to assemble on the water, if the conditions are extreme, i.e. no wind, very light or flukie wind, or extreme wind (22+) or dangerous conditions (lightning), the Race Committee may direct the skippers to stand by on land until conditions are resolved.

E. Race – Pre-Start:

1. Based on the intended course, set the starting line. The starting line should not be too short. Try to allow at least 20 feet per boat in the starting fleet.
2. Ideally the Race Committee will have the use of a "chase boat" so the Committee Boat can be set securely and the chase boat can place the pin for the appropriate angle and distance for the starting line.
3. It is advisable to watch the wind for several minutes to determine shifts before placing the pin. The line should be as square as reasonably practical, but no line is perfect. Much good racing time can be wasted while "chasing" an oscillating wind when trying to set the line. The main goal is to get the race going promptly with the best reasonably practicable line. The farther the line is from the first mark, the less important the squareness of the line becomes.
4. Avoid setting the line where either end is near land, an obstruction or shallow water. There should be adequate water behind and beside the line for the boats to maneuver prior to starting.
5. Try to avoid anchoring the committee boat in very deep (more than 50 feet) water.

F. Starting Sequence:

1. At least three persons should constitute the Race Committee and have specific assigned duties:
 - (1) Timer and horn,
 - (2) flag person (and time recorder),
 - (3) line watcher (both start and finish),
 - (4) someone should be designated as the "Skipper" in charge of the Race Committee
2. Do a practice drill or "dry run" starting sequence to ensure that the timing watches are ready, and that everyone will be coordinated with the proper flags at the proper time.
3. The timer should have a primary "stop watch" and a backup if possible. A "count down" timer works best for the starting sequence, but the timer should ensure that there is a specific timing device which begins at the start of the race. Again, a backup timer is very desirable, since accurate timekeeping is of such vital importance. Consult with Fleet Captain about operation of timers.
4. No race sequence should be started unless there is consistent wind of at least 3 knots or, in the judgment of the race committee in consultation with the Fleet Captain, boats are able to maintain enough headway that a race could be successfully completed. No race sequence should be started if the consistent wind exceeds 22 knots or if gusts exceed 30 knots. The race should be postponed until the winds are at an acceptable speed. The postponement flag will be flown during the postponement and the horn will be sounded two times for each postponement. If

the wind does not build to a consistent 3 knots or decrease to less than a consistent 22 knots within two hours of the scheduled starting time for the starting sequence, the race shall be abandoned and reset for a makeup day. Abandonment is signaled by three sounds of the horn and displaying the abandonment flag.

5. When it is determined that the 3 knot rule or the 22 knot rule have been satisfied, the Race Committee should ensure that all boats are ready to start the sequence by sounding the warning that the starting sequence is about to begin.

6. The following sequence shall be used:

- Prior to sequence: fly the "come within hail" flag
- One minute prior to sequence: douse "come within hail" flag and sound horn
- 5 minutes to start: hoist class flag and sound horn
- 4 minutes to start: hoist "blue shape" flag (white square on blue flag) and sound horn
- 1 minute to start: douse blue shape flag and sound horn
- Start: douse class flag and sound horn

7. At the start of the sequence (5 minutes to start): (a) The timer should audibly count down from ten – "ten, nine, eight...three, two, one, "UP", at which moment the flag person sharply raises the class flag and the horn is simultaneously sounded. (b) As the time nears 4 minutes to start, the timer should count down so the flag person can sharply raise the blue shape flag at exactly 4 minutes to go. (c) As the time nears 1 minute to start, the timer should count down so the flag person can sharply drop the blue shape flag at exactly one minute to go. (d) As the starting moment nears, the timer should audibly count down the last thirty seconds and the flag person will sharply drop the class flag as the timer says "Start", and the horn is simultaneously sounded. The line watcher is watching the line to determine if anyone is over early. The flags must be raised and dropped precisely on time since the flags control if there is a discrepancy with the horn.

G. Recalls:

1. Individual – if one or more boats are over early and all boats over early can be identified, the Committee should promptly: (1) display the individual recall flag "X", and (2) sound the horn once, and (3) make a reasonable effort to hail the subject boats to confirm that they are "over early", but remember, it is the responsibility of each boat to determine if they were over early when the individual recall flag "X" has been raised.

2. General – if more boats are over early than the line watcher can fairly identify, the Committee should promptly: (1) raise the general recall flag, and (2) sound the horn two times, and (3) immediately begin a five minute starting sequence by raising the blue flag (with horn sound), lowering the blue flag with one minute to go, and

raising the red flag (with horn sound) to start. The Committee may, however, direct the recalled fleet to wait for another fleet to start.

3. In the event of a second general recall, the Committee may, as a last resort, announce and impose a "black flag" or disqualification penalty on any boat over early on the subsequent start

H. During the Race:

1. Monitor the competing boats with the chase boat, particularly in harsh weather to determine if any boat is in distress, or in light air to determine if the race needs to be shortened.

2. Always have at least one person on the Committee Boat to monitor the timing devices and the radio.

I. Shortened Course – the course may be shortened at any turning mark prior to the lead boat passing such mark. Skippers will be notified by the display of the "shortened course – S" flag, two sounds at the horn, and hailed, if possible, as to the fact that the course has been shortened. This may be done from the chase boat where feasible. If the wind is light or heavy, committees are encouraged to set a short course and to use a "gate" to facilitate shortening, if necessary.

1. The course should be shortened (if possible) if it appears that the conditions are harsh and getting harsher, to the extent that the safety of the fleet would be jeopardized, or when it appears that the wind is dying and the race will be either unduly prolonged or that the "three hour rule" will not be satisfied.

2. 3 Hour Rule – If at least one boat in the class (Spinnaker or Cruising) has not finished a race within 3 hours of the start, the race for that class will be abandoned and rescheduled.

J. Finish:

1. If the finish line has been changed from the starting line, the finish line should be conspicuous and as square to the last mark as possible.

2. The recording of the order of finish and exact time for each boat is critical. Often the corrected time results in positions determined by one or two seconds.

3. The line watcher should audibly call "Over" and give the sail number as the bow of each finishing boat touches the finish line. The timer should call the exact time for each boat as it finishes, and the person designated as time recorder (usually the flag person) should record the exact time on the proper form. When the first boat in each class crosses the finish line, the Committee should sound the horn once.

K. Post-Race:

1. Calculate corrected times and order of finish. Begin this process while waiting for last boats to finish.
2. Review the proper entries on scoring sheets. Double check scoring calculations, preferably by another person, or on the computer. Double check actual distance of race if not a pre-measured course.
3. Verify G.P.S. validation of any course which has not been pre-measured.
4. Pick up all marks after the last boat has passed. The chase boat can begin picking up the marks behind the last boat, even though the race is not finished.
5. Give race results to the Fleet Captain and report notice of any protest to the Fleet Captain or Commodore.
6. Return marks, shapes, timers, buoys, radios and any other and any other equipment to the appropriate storage locations. Return Race Committee Boat to proper slip, and secure all covers. Report any problems with the equipment or committee Boat to the Fleet Captain.

V. **SCORING:**

A. Handicaps: Based on their corrected times, the boats are awarded the number of points equal to their finishing position (first place - 1 point, second place - 2 points, etc.) Study the examples which follow for calculations.

B. Did Not Finish or Start:

1. Boats that started, but Did Not Finish (DNF) will receive the score equal to the total number of boats in the race plus one.
2. Disqualified (DSQ) boats receive the score equal to the total number of boats in the race plus one.
3. Did not start: Boats that were not in attendance on race day will receive no points for that race and the race will not count toward series qualification. If a boat was present and signed up for a race but did not start (DNS) she will receive a score equal to the total number of boats registered in a series plus one point, or the number of boats in the race plus two, whichever is higher, and that race will count toward series qualification.

C. Race Committee Score: Boats serving as Race Committee for a series race receive the score for that race which is the average of the best four (4) actual finishes for that boat for that series, or the best 3 finishes if the series has 5 or less races.

When calculating the fleet championship points, boats serving as Race Committee for a regatta receive the score for each race of the regatta they serve as Race Committee which is the average of the races counted for the Spring and Fall series. This is typically 5 Spring and 5 Fall for a total of 10 races to be averaged.

D. Ties:

1. Tie Based on Time: If two boats finish a race with exactly the same corrected time, the points for the place for which the two boats tied and for the place immediately below, shall be added together and divided equally. If two boats are exactly tied on corrected time they will each receive the score for the two subject positions, divided by 2 (Example: two boats tied for third; $3+4=7$ divided by 2 = 3.5)

2. Tie Based on Scores:

(a) When two or more boats are tied based on addition of scores the tie shall be broken in favor of the boat which has qualified for the series.

(b) If a tie still remains, the tie shall be broken in favor of the boat with the highest places: (Example: Boat A - 1, 2, 2, 4, 5 = 14; Boat B - 1, 2, 3, 3, 5 = 14; Boat A wins because Boat A has higher finishes than Boat B.)

(c) If a tie remains, the last race sailed by the tied boats shall be used for the purpose of resolving the tie. (Example: Boat A - 2, 3, 1 = 6; Boat B - 1, 2, 3 = 6, Boat A wins because of higher finish in last race)

E. Scoring Calculation:

While waiting for the boats to finish, determine the course length and fill in the handicaps (HCP) for the boats on the score sheet. Handicap allowance can be computed at this point. Once the boats start finishing, write down the exact elapsed time, then when you have time, convert the elapsed time in hour:minute:second to minutes. Then subtract the elapsed time in minutes from the HCP allowance. See examples:

Example A:

Course – 9.5 Nautical Miles

Skipper	Sail Number	Class	HCP	Elapsed HCP Time	Corrected Allowance
Speedy 161.56	9726	Cat. 22	260	(3:22:44)	41.17
				202.73 min.	

The Calculations:

- 3(hours):22(minutes):44(seconds) = $180 (3 \times 60) + 22 + (44 - 60) = 202.73$ minutes
- (Course in Nautical Miles Divided by 60) x HCP = Allowance
 $(9.5 \text{ divided by } 60) \times 260 = 41.17$

3. Elapsed Time – HCP Allowance = Corrected Time
 $202.73 - 41.17 = 161.56$

Example B:

Course D – 7.82 Nautical Miles

Boat Type	Handicap	Elapsed Handicap Time	Allowance	Corrected
Hunter 25 125.10	225	2 hr.34min.25sec (=154 min.42)	29.32	
Olson 30 62.01	101	1hr.15min10sec (=75.17)	13.16	

1. Hunter 25

$$\begin{array}{r}
 2 \text{ hrs } 34 \text{ min } 25 \text{ sec} = \\
 2 \times 60 = 120 \text{ min} \\
 + 34 \text{ min} \\
 + .42 (25-60) \\
 \hline
 \end{array}$$

$$154.42 = 154 \text{ min.}42$$

Olson 30

$$\begin{array}{r}
 1 \text{ hr } 15 \text{ min } 10 \text{ sec} = \\
 1 \times 60 = 60 \text{ min} \\
 + 15 \text{ min} \\
 + .17 (10-60) \\
 \hline
 \end{array}$$

$$75.17 = 75 \text{ min.}17$$

2. $7.82 \text{ Nau. Miles } \times .130 = .130 \times 225 \text{ (Handicap all.)} = 29.25 \text{ (Hunter 25)}$
 $7.82 \text{ Nau. Miles } \times .130 = .130 \times 101 \text{ (Handicap all.)} = 13.16 \text{ (Olson 30)}$
3. $154.42 \text{ (Elapsed time)} - 29.32 \text{ (Handicap all.)} = 125.10 \text{ Cor. Time -}$
 Hunter 25
 $75.17 \text{ (Elapsed time)} - 13.16 \text{ (Handicap all.)} = 62.01 \text{ Cor. Time -}$
 Olson 30