

The Race Committee’s dual goal is to provide fair and safe races each time they go out. To that end, these best practices should enable all Race Committee members to meet this objective.

1) Race Management Best Practices

a) Signals

i) Using the autohoot:

- (1) 3-minute cycle – (continues until turned off)
- (2) Set toggle switch on side of system to 3 minute start setting (RR26)
- (3) Turning on and off – single knob on top
- (4) Manual horn operation - large red button on top
- (5) Understanding the horn sounding

(a) 1 minute pre warning - 4 short horns	Sounds at 1:41
(b) 3 minutes out – normal horn (raise class flag)	Sounds at 1:42
(c) 2 minutes out – normal horn (raise prep flag on roof)	Sounds at 1:43
(d) 1 minute out – long horn for prep (drop prep flag on roof)	Sounds at 1:44
(e) Start – normal horn (raise new class flag, drop old class flag)	Sounds at 1:45

ii) Flags

- (1) These are the primary timing – you can run a race without horns, not without flags. If horns are not working, use a whistle in their place.
- (2) Raise flags smartly
 - (a) The RRS official start signals are the visual signal, not the horn.
 - (b) Signal person must raise flag crisply
- (3) Sequence – Class flag, Prep flag up, Prep flag down, new class flag up & old class flag down

iii) Signaling the course

- (1) Course style – Olympic, Triangle, WLW, X Course
- (2) Laps - 1, 2, 3, or 4
- (3) Use of the colored number placards – only required for the X Course
- (4) Changing the course and laps for other fleets
 - (a) Must be flying between old start flag and the prep flag (one minute window). Make an announcement over the PA system.
 - (b) If you need more time to adjust the course or starting line, halt the start sequence by turning off the autohoot system and don’t raise the next class flag until you are ready. The AP flag is not to be flown.
- (5) Line open vs. closed
 - (a) Good line placement can eliminate this issue
 - (b) Our SI’s indicate the line is closed while other fleets are starting. On a short racecourse, poor line placement can result in lap traffic passing through this area. The best solution is to set the starting line behind or off to the side of the leeward end of the course.

iv) Postponement – AP pennant

- (1) When hoisting AP, sound 2 horns
- (2) In harbor:
 - (a) Minimum 30 minutes mandatory time before warning gun.
- (3) On water:
 - (a) No minimum time
 - (b) Flag comes down 1 minute before signaling the first start (simultaneously with turning on autohoot)

- b) Mark setting
 - i) Anchor should go in water first and line should be fed – make certain anchor is aground before setting the mark overboard. Don't hurry the drop of the mark.
 - ii) All marks will drift downwind from their anchor-preplan for positioning
 - iii) Ground tackle on the bottom of the mark needs to be turned down in the water
 - iv) The largest orange tetrahedron is intended to be the weather mark.
 - v) If RC vessels are staged properly around the course, they should be able to monitor mark placement and be in position to correct drift if it occurs.
 - (1) The Pink Lady should be central to the course, in a location to reach a vessel in distress
- c) Course setting
 - i) Weather mark – straight upwind as best as possible.
 - (1) Use the largest tetrahedron
 - (2) Stay sufficiently away from shore to minimize shore effect on the wind at the mark. (look for wind lines as much as the number of feet from the shore)
 - (3) Monitor the wind shifts, target placement with enough water on either side of the mark that the mark can be approached safely from port or starboard.
 - (4) Ideally place this mark first, and then align the rest of the course from here.
 - (a) Use your weather mark boat to assist with course alignment
 - (b) Remember that the wind direction may be different on different sections of the lake
 - (5) Offset mark – (only used on a WLW course)
 - (a) Set 2-3 boat lengths to the port side of the weather leg, and slightly down wind
 - (i) Monitor the shifts – boats should not have to beat to weather to lay this mark
 - (6) In subsequent races after the first race, you may need to reposition the weather mark. From the committee boat position, strive to set the weather mark in the middle of the wind shift range. (There is always a range on Cowan)
 - ii) Leeward mark
 - (1) WLW course:
 - (a) If course is a WLW, we use a gate system. Two marks placed approximately 6-7 boat lengths apart.
 - (i) Technically, the distance should be sufficient to allow for 3 boat length circles around each mark without overlap
 - (ii) Functionally, on Cowan we do not always have that much space to work with
 - (iii) A wide gate placement exaggerates any error with regard to being square to the wind.
 - (b) Gate marks must be square to the wind.
 - (c) Gate marks require tending – an out-of-square gate resulting from wind shifts has an exaggerated effect on the racing course. Monitor the roundings by the fleet as a clue to proper placement.
 - (i) Per RRS and US Sailing guidance, one end of the gate can be adjusted during a race without being considered a course change.
 - (ii) If mark adjustment is appropriate, do so at a time when boats are not close enough that they would need to alter course.
 - (2) Triangle or Olympic course
 - (a) This will be a single mark placed dead downwind from the weather mark
 - (b) Strive for placement in the middle of the wind shift range
 - iii) Jibing mark (for triangle or Olympic course)
 - (a) Set windward mark as above, no offset mark.
 - (b) Set leeward mark as above, single mark (no gate)
 - (c) Set jibing mark in a position that supports spinnaker / whisker pole use.

- d) Setting the starting line
 - i) Leave enough room for a broad and deep starting area. There must be maneuvering room behind the line for the starting fleet, especially for a starboard approach to the starting line, and sufficient space behind them for other fleets to pass without interfering.
 - ii) Line must be square to the wind
 - (1) Watch for the shift range, and set for the middle of the shift
 - (2) Slightly favor the pin end to pull starters away from the Committee Boat
 - iii) Line length
 - (1) Needs to be 1.5 times the number of boat lengths racing
 - (2) Set for the largest fleet on the water
 - iv) Placement with respect to the leeward mark:
 - (1) Ideally the line should be behind and to the side of the leeward mark
 - (a) The goal is to keep lap traffic out of the starting sequence
 - (b) We want to avoid creating a scenario where there are significant right-of-way conflicts for a fleet that has just left the line and other fleets approaching and leaving the leeward mark.
 - (c) Mark placement is only part of the consideration – consider the path that vessels will take in approaching and leaving the rounding mark.
 - v) Recommended mark setting procedure for starting line and for gate mark:
 - (1) From appropriate length but downwind of the pin position drive slowly windward.
 - (2) Trail the mark overboard and aft of the johnboat.
 - (3) Crew holds the anchor until signaled by committee boat
 - (4) Upon signal, drop the anchor (do not throw).
- e) Setting the finish line
 - i) Line must be square to the previous leg of the course.
 - (1) The actual wind direction is not a consideration in placement of the finish pin.
 - ii) Line should be shorter than starting line – ideally 4-5 boat lengths
 - iii) When anchoring the finish boat, always drop the anchor well upwind and drift back into position.
 - iv) Finish line should be mark favored – in other words, the finish boat should be upwind of the finish mark. This will eliminate conflict with the lay line for other boats still racing around the mark.
 - v) Set a flag in the finish boat.
 - vi) Finish boat should be in position with anchor set as leaders are midway up the finish leg. Set the finish flag when finishing boats are within several tacks of finishing. The timing of the flag hoist should be balanced with other vessels still rounding the mark, but not on their finish leg.
- f) Sighting lines and calling boats over a line
 - i) Racing is judged from the course side of the mark.
 - (1) Starting line: a boat has entered the course when its bow (or forward most part in a normal use) passes the straight line between the front of the committee boat signal mast and the course side (front) of the starting pin.
 - (2) Finish line: a boat has completed the course when its bow (or forward most part in a normal use) passes the straight line between the back of the finish flag mast and the course side (back) of the mark.
 - (3) Common error: calling boats over a line by their mast position. RC staff must call boats based upon their bow or forward most part in a normal use. i.e. a chute can be the first thing over, but must be flying in a normal position for the vessel on that point of sail.
 - (4) It is useful to have another crew member on the finish boat alert the spotter to approaching boats and to monitor the big picture. One person should call out the sail

numbers while a second person records them in the sequence they are called out, regardless of the fleet.

- g) Shorten course
 - i) Shorten course flag (S flag)
 - ii) Shorten course audible signal (2 horns, sounded by the vessel flying the S flag.)
 - iii) The finish boat must signal the course change.
 - iv) A shorten course can be signaled as boats approach the new finish mark. Rule 32.2 states “The shortened course shall be signaled before the first boat crosses the finishing line.” Whenever possible we should ‘telegraph’ our intent as soon practical.
 - v) A windward-leeward race must consist of at least two legs. An Olympic or triangle race must consist of at least three legs. If less than the minimum, the race should be abandoned.
 - vi) Finish is between the finish boat and the nearest mark of the course. Per 32.2, the finish shall be between the Staff flying the S flag and the nearest mark of the course, or at a gate, between the gate marks.
 - (1) No other vessel on RC can fly the S flag
 - vii) In a multi-fleet, multi heat race like our Sunday races, you must repeatedly signal the course change as fleets approach the new finish line.
 - viii) There is NO HAIL REQUIRED at the previous mark.
 - (1) There is no reason NOT to hail vessels in advance of the finish leg, but only the finish boat can fly the S flag and sound the associated horns.
 - ix) Managing downwind shorten course with a gate
 - (1) Finish is between the gates.
 - (2) Finish boat must anchor at one end and outside of the gate.

2) Safety Best Practices

- a) Weather monitoring
 - i) Use the lightning detector
 - (1) Portable radios, some cell phones, some electronic cameras will generate false signals on this device. It works by detecting static electricity in the air!
 - ii) If you have smart phones on board, monitor weather with weather apps and lightning detectors.
 - iii) Periodically check weather band on radio
- b) Lightning inside of 9 miles is a definitive risk, Clear the lake.
 - i) Lightning within 9 horizontal miles can travel and is functionally in range – regardless of the movement of the associated storm cell,
- c) Wind strength – from a safety perspective . . .
 - i) The Race Committee has the to determine if fair and safe races can be conducted in current conditions.
 - ii) If the Race Committee determines that racing will take place, ultimately, the Racing Rules of Sailing - Rule 4 stipulates “The responsibility for a boat’s decision to participate in a race or to continue racing is hers alone.”
- d) Rescue
 - i) Racing Rules of Sailing - Rule 1 requires any “boat or competitor to give all possible help to any person or vessel in danger.” Ohio law and our horsepower exemption also require us to provide assistance. If any vessel on the lake displays an orange distress flag, a safety vessel is required to respond.

- ii) In the event of a situation that requires assistance, Race Committee personnel need to determine the amount of aid that is appropriate for the situation, and render that aid without consideration of a race in progress.
- iii) The rescue and safety of people comes first.
- e) Vessels and staffing
 - i) The lack of a full compliment of motorized vessels does not preclude us from conducting races on that day.
 - ii) Two able-bodied staff should be assigned to all CLSA motor vessels to be fully capable of effecting rescue as required.
- f) Life jacket rule
 - i) Life jackets are recommended for all boaters afloat
 - ii) If the RC deems it appropriate to hoist signal flag Y indicating life jackets are required for all competitors, all RC and safety vessel operators shall also don life jackets.
 - (1) Considerations:
 - (a) Cold air temperature
 - (b) Cold water temperature
 - (c) Air instability – gusts, shifts
 - (d) Any combination of the above

3) Pre-Race Best Practices

- a) 1-week reminder
 - i) Chair of PRC will send out an email via ClubExpress
 - ii) Chair for the day should send a separate email one week in advance:
 - (1) Contact your RC team and remind them of their duty
 - (2) If they will be unable to attend, ask them to tell you who will be their substitute
 - (3) Tell them what time to meet you (recommend 12:00 at the vessels)

All remaining steps are for day-of-duty:

- b) Vessels
 - i) Use check lists to rig all vessels
 - ii) Verify fuel levels
 - iii) Start the pump to insure it operates as expected
 - iv) Make certain all safety items are at-the-ready
 - v) Signal flags must be moved to the finish boat
 - vi) Clipboard and writing utensils on finish boat
 - vii) All boats must be radio equipped
- c) Staffing assignments
 - i) Not everyone is good at all tasks. Members and chair should talk about what they have done before, what they are good at, and what their preferences are for the day
 - ii) At least one person with strong skills must be on each vessel. Staff should be assigned where their strengths will benefit the operation
 - iii) New members and inexperienced staff should be partnered with someone with strong skills to facilitate learning.
- d) Radio
 - i) This is our only networking tool on the course
 - ii) All radios should be on channel 68 for primary race duty. (channel 69 for youth operations)
 - iii) RC vessel needs a second radio on board

- iv) Radio protocol is simple- remember . . . Hey you, it's me!
 - (1) Key mike, then speak clearly 2 inches away from face of radio.
 - (2) Do not shout; speak slowly.
 - (3) When you have completed your message, let go of the mike and listen for the response.
- v) PRC should tell each vessel their hailing name
 - (1) "Race Committee", "Pink Lady", "Finish Boat", "Mark Boat"
- e) Talk through the preplan for the race
 - i) Do this on shore, not afloat
 - ii) Review duty assignments of each vessel
 - iii) Review the planned course, and course alternatives
 - iv) Discuss mark moving assignments if needed
 - v) Review station keeping positions during the race for each vessel
- f) Rescue mode
 - i) Review which vessel goes first
 - ii) Discuss team work on the water – for many capsizes both the Pink Lady and a johnboat may be required if the boat is not righted quickly
 - iii) When in rescue mode, all staff should wear PFD's.