

To: Race Course Setup and Committee Boat Volunteers
From: LKSC Race Committee

Here is some important information that will help you in your Course Setup and Committee Boat tasks. We appreciate your contributing your time and expertise so that we can have a fun racing season.

While the details are provided in the following pages, there are some key points to emphasize:

- These are **Fun** races in order to help us become better at handling our boat under a variety of conditions and situations, and also to enjoy the social interactions with our fellow sailors. Thus the emphasis is on safety and friendly interactions between boats.
- The following setup and committee boat equipment is in Susan Sylvester's boat house (location given below):
 - 4 buoys
 - Signal flags and flag stand
 - Waterproof box containing:
 - Clipboard with pen
 - highlighter pen
 - supply of Race Committee Data Sheets
 - digital timer
 - Kestrel wind-speed meter (including manual)
 - Megaphone with horn and siren

Be sure to consult the complete committee boat check list is given below in Section 2.

- If you have questions or would like some help the first time that you serve, call Harmon Ray (877-0694) or Dan Zarnstorff (873-0366).

Race Administration Guidelines

These guidelines are for those volunteers who administer the races by performing course setup, and Committee Boat duties.

For 2004, there are 30 races scheduled, so that 30 volunteers are needed for course setup and Committee boat duties. *This means each person who is active in the club should plan to volunteer for this task 2-3 times this season.* To volunteer, go to the LKSC web site (www.lksc.org) and sign up. The names of the volunteers scheduled for each race are maintained on the Race Calendar page of the website. Obviously, if there are no volunteers for a particular race, that race will be cancelled.

For each race we need volunteers for

- course set up (powerboat)
- committee boat (powerboat)

Usually the same person performs the setup and committee boat duties for each race. However, if desired, it is possible to separate that function into two volunteers; in this case a sailor can set up the course and also sail in the race if the committee boat function is handled by another volunteer (who may not necessarily be a sailor). For those volunteers who have not done Course Setup or Committee Boat tasks before, there are several people ready to go out with them the first time to provide guidance. Contact or email an experienced club member or contact Harmon Ray (877-0694) or Dan Zarnstorff (873-0366).

1. Course Setup Tasks

This task should be completed at least 30 minutes before the race begins so that sailors who want to test the course have time to do that before the race. It's helpful to have some sailing experience for those volunteers who set up the course. Race setup consists of making a go/no-go decision based on weather conditions, selecting the course (usually O2 -- Olympic 2-lap or W2 -- windward 2-lap if there are light winds), setting the buoys and, if time permits, having one of the sailors spot-check the course. The goal is to have the fastest boats do the 2 laps inside 40 minutes and all boats complete the course within an hour. If the course is too short, the windward buoy can be moved or the lap count can be changed to three.

Go/No-go Decision

Safety first! Races are called off for reasons such as: (a) there's no wind; (b) thunderstorms or yellow cells on the radar coming our way during the 3 hour period beginning at setup time; (c) it's raining during setup time or the race; or, (d) there are severe winds causing many whitecaps. Most club members will not show up to sail if there is a wind above 15 knots. The Go/No-go decision should be posted on the website two hours before race if there is a clear decision at that time. If uncertain weather conditions create the possibility of canceling the race, the decision can be delayed until one hour before the starting time. Deciding if weather is acceptable on race day can be a difficult decision. Feel free to call on other sailors for advice. To post your decision on the web site, go to the Forum section on the website and enter the decision and/or call Alan Carlson at 873-0557 or at his cell phone 516-8544.

The Course

The maximum sailing area of the lake used in our races can be visualized as a "wide diamond shape" with the starting line at the base of the diamond, the windward mark at the top of the diamond and the potential sailing area within the left and right edges of the diamond. The course should be set up wide enough so that boats sailing to the windward mark can be on either a port or starboard tack without encountering wind shadow from shore; thus the windward side of the course should lie more than 1/3 mile away from shore and from the sunken island north of Barber's Bay (which is indicated by three white warning markers). Also the course should always be in water deeper than 10 feet; this is needed to allow keel boats (some draw 5 feet or more) to race and to avoid weed growth which only disappears when the water depth is at least 8 feet. It is recommended that if there are light winds, then the W1 or W2 course shown in Section 6 should be chosen. Otherwise the Olympic course O2 is recommended. On race day, the Committee Boat Official should go the LKSC website (www.lksc.org) and select Race Day. Using the tools, choose the course layout based on the wind direction and speed; then post your choice as instructed so that the sailors know where to find the race course.

Start/Finish Gate

The start/finish gate consists of two orange buoys downwind and perpendicular to the wind. They should be "a football field length" apart, (~ 300 feet) to reduce congestion at race starts. It usually takes a couple of tries on the second buoy to get the starting line perpendicular to the wind. Sometimes it's easiest to layout the whole course then finish by placing the final start/finish buoy.

Windward Buoy

From the starting line determine wind direction and note a spot on shore that corresponds to that direction. Then motor towards that spot in an attempt to set a 40-minute course. This distance is normally 3/4 of a mile to 1 mile depending entirely on wind speed. With experience, one can judge the course by how big a distant buoy appears. The course is too long if the distant buoy is not readily noticed when scanning the horizon. It's too short if the distant buoy is very apparent. If a GPS device is available, it can be used to set the distance precisely.

4th Buoy

If an O2 course is chosen, then a 4th buoy is set up to the left of the windward buoy when viewed from the start/finish line. It is reasonable to have that buoy form a 90 degree (right) triangle where the other buoys are the long side (hypotenuse).

Buoy Anchor Rope

To avoid sailboats getting tangled in the buoy anchor rope, we should have only 5 or 10 extra feet of rope more than the water depth. Thus, in 25' of water, we should use about 30' of anchor rope. Even if you have a depth gauge, it's easier just to drop the anchor, wait for it to hit bottom, then quickly tie it off to an extra 5 or 10 feet. To retrieve the buoys later, leaving a 5-foot tail of loose rope works well.

Course Check

If available, it is good to have a sailboat out early to check the course during setup. If a sailor sails the first leg, he/she can help determine that (a) the first mark is true windward and (b) that the first leg can be sailed in approximately 8 to 9 minutes for an O2 course, or 10 minutes for a W2 course.

Wind Shift

In the half hour between setup and the race, a significant wind shift can occur. That can affect both the direction and length of the course. One needs to use judgment to see if it's worth trying to correct the course as race time nears.

Equipment Storage

Racing equipment is normally stored in Susan Sylvester's boathouse. Her boathouse is located west of the Stoughton Country Club ; it is the 9th house. To the east is a white boathouse with two lifeguard rings placed on the iron railing on top. Her boathouse is gray with a wooden railing and some wind flags on top. To the west of her is a red double boathouse with living quarters on top. She has a pier with the "L" to the east and a bench on top. Her house is brown. The boathouse door will be open or unlocked. The only equipment needed for setup itself is 3 or 4 buoys with anchors, but the plastic box (with digital clock, clipboard with race committee data sheet, and wind-speed meter), as well as flags, flag stands and megaphone are needed in the committee boat to run the race.

2. Committee Boat Tasks

The committee boat needs to be in the starting area 15 minutes before start time (6:15 PM for Thursdays, 3:45 PM for Sundays/Holidays). The committee boat should locate itself lined up with the start/finish buoys so it can avoid being in the way of boats positioning themselves for a start as well as boats that pass through the starting gate when the race begins.

Committee Boat checklist:

- flags & flag stand (see Equipment Storage for storage location)
- megaphone (see Equipment Storage for storage location)
- info on starting sequence , course layout (this document)
- clipboard /Race Committee Data Sheet (see Equipment Storage)
- wind-speed meter (see Equipment Storage)
- watch with seconds display (a digital timer is available in Equipment Storage)
- floating boat cushion, life preservers
- boat ladder (to pull someone out of the water)
- 50' tow rope (to tow boats home if no-wind)
- blanket (to warm someone pulled out of the water)
- Cell phone in case of emergencies

Although the many simultaneous tasks of the committee boat during start and finish can sometimes be handled by one very-well-organized person, it is much easier if there are two people in the boat sharing the tasks. The committee boat is responsible for informing the racers which course is being used (O2 or W2; see Section 7), starting the race (see starting sequence in Section 6), and completing the Race Committee Data Sheet (see sample in Section 8) showing those boats in the race including their starting and finishing times, and order of finish. If all boats are to start at the same time, then only one start time need be recorded. However, if two wave starts are used, the committee boat must start boats at different times and the start times for Group A and Group B recorded. Using the wind-speed meter, wind-speeds at the beginning, middle, and end of the race should be recorded. Otherwise, before the race and again after the race, call 249-0615 and listen for the wind speed in knots from Dane County Airport. Convert to MPH by the formula: MPH=1.15*Knots. Leave the completed Race Committee Data Sheet on the clipboard at the end of the race and return it to Equipment Storage.

Sometimes in high winds and deep water, it is hard to prevent the committee boat anchor from drifting. In this case, it may be necessary to use the motor to hold the committee boat in position during the start, intermediate mark rounding, and finish. Be aware that at the intermediate mark, the sailboats have the right to round either starting line buoy, and may choose to round the buoy towards the committee boat, so keep clear of them.

Generally, the buoys are left out until the last boats leave the course. Some sailors want to do an extra lap for fun and they are welcome to do that as long as they stay away from other racers. It's the responsibility of the committee boat to return the equipment to Susan's boathouse. Also, winds routinely die down and the committee boat should stay out until it is clear that boats are able to sail home. A water ski rope makes a fine towrope. Also, if the megaphone battery is getting weak, or if some of the equipment is damaged, call Harmon Ray (877-0694) or Dan Zarnstorff (873-0366).

3. Patrol Boats

For weekend events, we may be able to recruit additional patrol boats for help with the races (particularly from Memorial Day through Labor Day). In the past, there have been a number of unpleasant experiences on busy weekends that included stolen buoys, jet skis using the buoys as targets, and boat traffic on the course. During the time between setup and the start of the race, it is difficult for the committee boat to monitor the course, clear boat traffic and start the race. Patrol boats should check in with the committee boat and take a position(s) at the upwind mark(s) to help control powerboat and jet ski traffic.

4. Emergency

In case of emergency, **911** is the only number one needs to call for help. With a lake emergency, this will be routed to the Stoughton Fire Department or Stoughton EMS. If personnel are being brought to shore, the Stoughton Country Club pier or Halverson's pier is an easily identifiable area to meet the Fire Department or EMS personnel. Also, lakeshore addresses for 911 calls are being implemented this year and should be used if visibly posted on piers.

5. Committee Boat Loan

If a volunteer does not own a powerboat and has difficulty borrowing a powerboat to use for the committee boat, email Rob Sherman at rsherman@Kraft.com to see if his boat is available.

6. Starting Sequence

For these fun races, the Committee Boat Official may choose to have only one start or to have a two wave start with Group B going first followed by Group A 6 minutes later. Here is the starting sequence for the two wave race with approximate times for each step. In the case of a single wave start, just eliminate the second start.

<u>Time</u>	<u>Flag Change</u>	<u>Sound</u>	<u>Action</u>
			<u>Attention</u>
11 min ahead of start	LKSC BURGEE UP	None	The <i>LKSC Burgee Flag</i> identifies the committee boat and is a call to assemble behind the starting line. It is <i>up</i> for approximately 5 minutes, but may be extended or shortened at the discretion of the starter. Normally, no more than an extra 5 minutes will be given for boats hurrying to the course. If available, a course indication flag will be flown too.
~ 6 min before start	BURGEE DOWN	None	Approximately 6 minutes until race starts. Boats are expected to clear the racecourse.
			<u>Warning Group B</u>
5 min (exactly) before start	RED FLAG UP	Horn	<i>Red Flag up</i> is the 5 minute time mark (not the horn). The Red Flag remains <i>up</i> until the start.
			<u>Preparatory Group B</u>
4 min before start	BLUE FLAG UP	Horn	<i>Blue Flag up</i> is the 4 minute time mark (not the horn). This is the <u>preparatory</u> flag. The <i>Red Flag</i> remains <i>up</i> also.
3 min before start		3 Horns (optional)	3 minute time mark, sounded at the discretion of the starter. The <i>horn</i> is the mark.
2 min before start		2 Horns (optional)	2 minute time mark, sounded at the discretion of the starter. The <i>horn</i> is the mark.
1 min before start	BLUE FLAG DOWN	Long Horn	<i>Blue Flag down</i> is the 1 minute time mark, and the horn sounds later. If a megaphone is available, the starter may choose to call out intervals such as 45 seconds, 30 seconds, and 15 seconds.
			<u>Starting Signal Group B</u>
Group B Start	RED FLAG DOWN	Horn	<i>Red Flag down</i> is the starting signal, and the horn sounds later. All flags are down during the race.

(The Group B Start is the beginning of the 6 minute countdown to the start of Group A)

Warning Group A

5 min (exactly) before start **RED FLAG UP** **Horn** *Red Flag up* is the 5 minute time mark (not the horn). The Red Flag remains *up* until the start.

Preparatory Group A

4 min before start **BLUE FLAG UP** **Horn** *Blue Flag up* is the 4 minute time mark (not the horn). This is the preparatory flag. The *Red Flag* remains *up* also.

3 min before start **3 Horns (optional)** 3 minute time mark, sounded at the discretion of the starter. The *horn* is the mark.

2 min before start **2 Horns (optional)** 2 minute time mark, sounded at the discretion of the starter. The *horn* is the mark.

1 min before start **BLUE FLAG DOWN** **Long Horn** *Blue Flag down* is the 1 minute time mark, and the horn sounds later. If a megaphone is available, the starter may choose to call out intervals such as 45 seconds, 30 seconds, and 15 seconds.

Starting Signal Group A

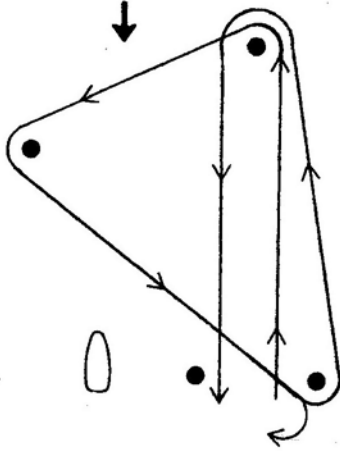
Group A Start **RED FLAG DOWN** **Horn** *Red Flag down* is the starting signal, and the horn sounds later. All flags are down during the race.

Suspension

BURGEE BACK UP **siren** *LKSC Burgee up* again indicates race suspension due to weather or some other safety issue.

7. Course Layout

O2 - Olympic Course, 2 Laps



W2 - Windward/Leeward Course, 2 Laps

